# TIL VA MADANIYAT

# KOMPYUTER LINGVISTIKASI

2024 Vol. 1 (6)

www.compling.tsuull.uz

# **O'ZBEKISTON**

**TIL VA MADANIYAT** 

# KOMPYUTER LINGVISTIKASI

2024 Vol. 1 (6)

compling.tsuull.uz

Alisher Navoiy nomidagi Toshkent davlat oʻzbek tili va adabiyoti universiteti

Bosh muharrir: Botir Elov

Bosh muharrir oʻrinbosari: Shahlo Hamroyeva Mas'ul kotib: Oqila Abdullayeva

### Tahrir kengashi

Shuhrat Sirojiddinov (O'zbekiston), Eshref Adali (Turkiya), [Viktor Zaxarov] (Rossiya), Vladimir Benko (Slovakiya), Ayrat Gatiatullin (Tataristan), Rinat Gilmullin (Tataristan), Murat Oʻrxun (Turkiya), Suyun Karimov (Oʻzbekiston), Abduvali Qarshiyev (Oʻzbekiston), Muxammadjon Musayev (Oʻzbekiston), Kamoliddin Shukurov (Oʻzbekiston), Oʻtkir Hamdamov (Oʻzbekiston), Tal'at Zuparov (Oʻzbekiston), Bahodir Moʻminov (Oʻzbekiston), Faxriddin Nurullayev (Oʻzbekiston), Zulxumor Xolmanova (Oʻzbekiston), Muqaddas Abdurahmonova (Oʻzbekiston), Habibulla Madatov (Oʻzbekiston), Azizaxon Raxmanova (Oʻzbekiston), Ruhillo Alayev (Oʻzbekiston), Rasuljon Atamuratov (Oʻzbekiston), Malika Abdullayeva (Oʻzbekiston), Mannon Ochilov (Oʻzbekiston), Xolisa Axmedova (Oʻzbekiston), Zilola Xusainova (Oʻzbekiston).

### Jurnal haqida ma'lumot

"Oʻzbekiston: til va madaniyat. Kompyuter lingvistikasi" seriyasi — Oliy attestatsiya komissiyasi ilmiy nashrlar roʻyxatidagi "Oʻzbekiston: til va madaniyat" akademik jurnalining ilovasi hisoblanib, unda professor-oʻqituvchilar, doktorantlar, stajor-tadqiqotchilar, mustaqil izlanuvchilar, magistrantlarning kompyuter lingvistikasi, jumladan, tabiiy tilga ishlov berish (NLP), oʻzbek tilining formal grammatikasi, korpus lingvistikasi, mashina tarjimasi, nutqni qayta ishlash tizimlari, intellektual tizimlar, kompyuter leksikografiyasi hamda lingvistik ontologiyalar kabi sohalarga oid tadqiqotlari nashr qilinadi.

Jurnal ilovasi bir yilda toʻrt marta chop etiladi.

Oʻzbek, turk, rus va ingliz tillarida yozilgan maqolalar qabul qilinadi.

Jurnalda kitoblarga yozilgan taqrizlar, adabiyotlar sharhi, konferensiyalar hisobotlari va tadqiqot loyihalari natijalari ham eʻlon qilinadi.

Mualliflar fikri tahririyat nugtayi nazaridan farq qilishi mumkin.

"Oʻzbekiston: til va madaniyat. Kompyuter lingvistikasi" seriyasi 2023-yildan chiqa boshlagan.

Alisher Navoiy nomidagi Toshkent davlat oʻzbek tili va adabiyoti universiteti. Oʻzbekiston, Toshkent, Yakkasaroy tumani, Yusuf Xos Hojib koʻchasi, 103-uy.

**E-mail:** kompling@navoiy-uni.uz **Website:** compling.tsuull.uz

Alisher Navo'i Tashkent State University of the Uzbek Language and Literature

Chief editor: Botir Elov

Deputy editor-in-chief: Shahlo Hamroyeva Responsible secretary: Oqila Abdullayeva

### Editorial board

Shukhrat Sirojiddinov (Uzbekiston), Eshref Adali (Turkiye), [Viktor Zakharov] (Russia), Vladimir Benko (Slovakia), Ayrat Gatiatullin (Tataristan), Rinat Gilmullin (Tataristan), Murat Orhun (Turkey), Suyun Karimov (Uzbekistan), Abduvali Karshiyev (Uzbekistan), Mukhammadjon Musayev (Uzbekistan), Kamoliddin Shukurov (Uzbekistan), Oʻtkir Hamdamov (Uzbekistan), Tal'at Zuparov (Uzbekistan), Bahadir Moʻminov (Uzbekistan), Fakhriddin Nurullayev (Uzbekistan), Zulkhumor Kholmanova (Uzbekistan), Muqaddas Abdurakhmonova (Uzbekistan), Habibulla Madatov (Uzbekistan), Azizakhan Raxmanova (Uzbekiston), Ruhillo Alayev (Uzbekistan), Rasuljon Atamuratov (Uzbekistan), Malika Abdullayeva (Uzbekistan), Mannon Ochilov (Uzbekistan), Kholisa Akhmedova (Uzbekistan), Zilola Khusainova (Uzbekistan).

### Information about the magazine

"Uzbekistan: language and culture. "Computer Linguistics" series is an appendix of the academic journal "Uzbekistan: Language and Culture" in the list of scientific publications of the Higher Attestation Commission, in which computer linguistics, including natural language processing (NLP) of professors-teachers, doctoral students, intern-researchers, independent researchers, master's students, researches related to formal grammar of the Uzbek language, corpus linguistics, machine translation, speech processing systems, intelligent systems, computer lexicography and linguistic ontologies are published.

The magazine supplement is published four times a year.

Articles written in Uzbek, Turkish, Russian and English languages are accepted.

The journal also publishes book reviews, literature reviews, conference reports, and research project results.

The opinion of the authors may differ from the editorial point of view.

"Uzbekistan: language and culture. "Computer Linguistics" series has been published since 2023.

Tashkent State University of Uzbek Language and Literature named after Alisher Navoi. Yusuf Khos Hajib street, 103, Yakkasaray district, Tashkent, Uzbekistan.

**E-mail:** kompling@navoiy-uni.uz **Website:** compling.tsuull.uz

# MUNDARIJA

Firuza Nurova	
Jahon kompyuter lingvistikasida bir necha soʻz-shakldan iborat	
leksemalarga ishlov berish tajribasi haqida	6
Iqbola Xolmonova	
Oʻzbek-turk parallel korpusi uchun matnlar tokenizatsiyasi	
masalasi	21
III GUI GUI	
Botir Elov, Shahlo Hamroyeva, Marjona Hamroqulova	
· · · · · · · · · · · · · · · · · · ·	22
Nlpda semantik teglash usullari	32
Oqila Abdullayeva	
Oʻzbek tili matnlarida sintaktik teg va teglash masalasi	46
Aziza Raxmanova	
Modern methods of teaching the linguistic basics of the	
uzbek and english languages	58
Nargiza Shamiyeva	
The main principals of creating a bilingual thesaurus for the	
uzbek language	66
uzbek tunguuge	00
Zarnigar Vhavatova	
Zarnigor Khayatova	
Uzbek paraphrasing software: how your words get a makeover	70
(without losing their meaning!)	/8

# **CONTENT**

Firuza Nurova	
About the experience of processing lexemes consisting of several word	
forms in world computer linguistics	.19
Iqbola Xolmonova	
The issue of text tokenization for the uzbek-turkish parallel	
corpus	.31
Botir Elov, Shahlo Hamroyeva, Marjona Hamroqulova	
Semantic tagging methods in nlp	.44
Ogila Abdullayeva	
The issue of syntactic tags and tagging in uzbek language texts	.56
Azizaxon Raxmanova	
Oʻzbek va ingliz tillarining lingvistik asoslarini oʻqitishning	
zamonaviy metodlari	.64
Nargiza Shamiyeva	
O'zbek tili uchun bilingval tezaurus yaratishning asosiy tamoyillari	.76
Zarnigor Xayatova	
Oʻzbekcha parafrazlash dasturi: sizning soʻzlaringiz qanday oʻzgaradi?	
(ma'noni sanlagan holda)	85

ISSN 2181-922X 66-77

# THE MAIN PRINCIPALS OF CREATING A BILIN-GUAL THESAURUS FOR THE UZBEK LANGUAGE

## Nargiza Shamiyeva<sup>1</sup>

**Abstract.** This article explores the intricate process of creating a bilingual thesaurus, a linguistic resource that transcends language barriers to enrich information access. The methodology involves two primary approaches: building from the bottom up and combining existing thesauri. The former entails constructing a new thesaurus by either starting with one language and adding others or simultaneously incorporating multiple languages. In contrast, the latter involves merging or linking existing thesauri, emphasizing seamless integration for improved indexing and retrieval.

This article also presents a comprehensive guide to the creation of a bilingual thesaurus for the Uzbek language. Drawing upon insights from lexicography, linguistics, and language technology, the article outlines the key steps involved in compiling a bilingual thesaurus that facilitates cross-cultural communication, language learning, and translation tasks. The process begins with lexical data collection, where a wide range of lexical information is gathered from reliable sources, including dictionaries, lexicons, corpora, and linguistic databases. Semantic analysis follows, involving the examination of meanings and relationships between words in Uzbek and their equivalents in another language, typically English. Translation accuracy and semantic integrity are ensured through meticulous attention to detail and consultation with language experts. Thesaurus entries are then created, organizing words, synonyms, and related terms in a hierarchical structure. The development of a user-friendly digital platform is emphasized to enhance accessibility and usability for language learners and researchers.

**Keywords:** bilingual thesaurus, multiple languages, approaches, combining existing thesauri.

### Introduction

In the vast landscape of language, where words are the building blocks of communication, the thesaurus emerges as a vital tool that goes beyond the confines of a simple reference book. It plays a crucial role in language development, enriching our vocabulary,

E-pochta: shamieva.nargiza2024@gmail.com

ORCID: 0009-0002-9723-3080

<sup>&</sup>lt;sup>1</sup>Shamiyeva Nargiza Abdusattarovna – National University of Uzbekistan PhD-student of Comparative Study of Literature, Comparative Linguistics and Translation Studies, Teacher of Foreign languages faculty.

fostering linguistic precision, and enabling nuanced expression. This brief overview aims to delve into the significance of thesauri in shaping the way we understand and use language.

Language is a dynamic and ever-evolving entity, reflecting the myriad experiences, cultures, and thoughts of its speakers. However, the lexicon of any language is finite, and words often fall short in encapsulating the full spectrum of human expression. Here, the thesaurus steps in as a linguistic guide, offering an extensive array of synonyms and related terms that allow speakers and writers to navigate the rich tapestry of language with finesse.

One of the primary functions of a thesaurus is to expand the vocabulary of its users. By presenting a plethora of synonyms for a given word, it encourages individuals to explore alternative expressions, promoting linguistic diversity and creativity. This process is particularly valuable for writers, helping them avoid monotony in their prose and enhancing the depth and variety of their written works.

Moreover, the thesaurus contributes to linguistic precision. It assists users in selecting the most fitting word for a particular context, nuancing the meaning to align with the intended message. This precision is crucial in various domains, including literature, academia, and professional communication, where subtle distinctions in meaning can profoundly influence understanding.

Lykke Nielsen has categorized the topics and literature associated with building a thesaurus into various aspects. These include the concept of thesaurus, general writings on thesaurus construction, different approaches to constructing a thesaurus, gathering terms and concepts, defining and forming concepts, organizing concepts, and automatic thesaurus construction. [Lykke Nielsen, Marianne 2002. 57-74]

While Nielsen's study does not focus on the general process of constructing a thesaurus, it acknowledges the need for some basic background information on how a thesaurus is typically created. However, other details related to thesaurus construction are considered irrelevant for the framework of this study.

The guidelines for constructing a thesaurus generally prioritize standards set by ISO (the International Organization for Standardization/ It is an independent, non-governmental international organization that develops and publishes standards to ensure the quality, safety, and efficiency of products, services, and systems across various industries worldwide), as they are authoritative

bodies in the Uzbek field. These standards serve as a relevant reference for making comparisons with empirical data. The study also examines Uzbek guidebooks to address issues related to equivalence.

According to Hjørland, thesauri predominantly serve as domain-specific vocabularies, and the process of designing them can be viewed as a form of implicit domain analysis. He goes on to assert that information indexing and retrieval are inherently specific to particular domains. Despite this, mainstream Information Science (IS) has largely overlooked the diverse demands that different domains place on systems for organizing and retrieving studies. [Hjørland, Birger, 2002. 58(4)]

Hjørland suggests that a more focused examination of various domains could render the field more realistic and its methodologies more applicable in different contexts. Collaborative efforts with other fields, such as the production of specialized classifications and thesauri, epistemological and critical investigations, as well as terminological studies in Language for Special Purposes (LSP) and discourse studies, could enhance the relevance of research in this domain.

In our globalized world, the need for effective communication across linguistic boundaries has become increasingly evident. Bilingual resources, which encompass a wide range of materials and tools available in two languages, play a pivotal role in fostering linguistic diversity and understanding. This article explores the importance of bilingual resources, shedding light on their impact on language development, cultural exchange, and cross-cultural understanding.

# Main part

In the face of globalization, many languages are at risk of extinction. Bilingual resources contribute to the preservation of endangered languages by providing a platform for documentation, education, and dissemination. This preservation effort is essential for maintaining linguistic diversity, preventing the loss of cultural knowledge embedded in these languages.

A bilingual thesaurus is a valuable tool for individuals who are fluent in more than one language or for those who are learning a new language. It provides an extensive collection of words and phrases in two languages, along with their synonyms and antonyms, allowing users to expand their vocabulary and improve their language skills. Creating a bilingual thesaurus involves several key steps, including compiling a comprehensive list of words and their equivalents in both languages, organizing the entries effectively,

and ensuring accuracy and consistency throughout the thesaurus. [Bethesda: NISO, 2005]

Compiling Word Entries. The first step in creating a bilingual thesaurus is to compile a list of word entries in both languages. This involves identifying common words and phrases in each language and determining their corresponding equivalents in the other language. It is essential to consider variations in meaning, context, and usage to ensure that the entries accurately reflect the nuances of each language.

Organizing Entries. Once the word entries have been compiled, they need to be organized effectively within the thesaurus. This typically involves categorizing words based on their meanings and relationships, such as grouping synonyms together and differentiating between various senses of a word. In a bilingual thesaurus, it is important to maintain consistency in organization across both languages to facilitate easy navigation for users.

Ensuring Accuracy and Consistency. Accuracy and consistency are crucial aspects of creating a bilingual thesaurus. Each word entry must be thoroughly researched and validated to ensure that its equivalent in the other language is precise and appropriate. Additionally, consistency in formatting, style, and presentation should be maintained throughout the thesaurus to provide a cohesive user experience.

Incorporating Cultural Considerations. When creating a bilingual thesaurus, it is important to consider cultural nuances and regional variations that may impact language usage. Words and expressions may have different connotations or levels of formality across different cultures, so it is essential to account for these factors when selecting and presenting word entries.

Leveraging Technology. Advancements in technology have significantly facilitated the creation of bilingual thesauri. Automated translation tools, linguistic databases, and natural language processing algorithms can streamline the process of compiling word entries and verifying their equivalents in different languages. These technological resources can enhance efficiency while maintaining high standards of accuracy.

User-Friendly Interface. A well-designed user interface is essential for a bilingual thesaurus to be accessible and user-friendly. Clear navigation features, search functionalities, and cross-referencing tools can enhance the usability of the thesaurus, enabling users to easily locate relevant words and expand their language proficiency.

Top 3 Authoritative Sources Used:

Oxford University Press: The Oxford University Press is renowned for its authoritative language resources, including dictionaries and thesauri. Their expertise in linguistic research and language reference materials makes them a highly reliable source for information on creating bilingual thesauri.

Cambridge University Press: Cambridge University Press is a leading publisher of educational and reference materials, with a strong focus on language learning and linguistics. Their scholarly publications provide valuable insights into multilingual resources and lexical databases.

Merriam-Webster: Merriam-Webster is a trusted provider of language-related content, offering comprehensive dictionaries and lexical resources. Their expertise in English-language reference materials contributes to their authority in guiding the creation of bilingual thesaurus.

The development of bilingual thesaurus encompasses three distinct approaches, each offering unique methodologies and challenges: [Schott, 2006]

# 1. Building a New Thesaurus from the Bottom Up

a. Starting with One Language and Adding Another Language or Languages

In this approach, the development begins with a thesaurus in one language, and additional languages are subsequently integrated. This method involves expanding the thesaurus's scope to include equivalents in the additional language(s). The aim is to create a comprehensive resource that captures the semantic relationships and nuances in both languages.

b. Starting with More Than One Language Simultaneously

Alternatively, developers may choose to initiate the process with more than one language concurrently. This simultaneous approach involves constructing the thesaurus with equal emphasis on each language, ensuring a balanced representation. The challenge lies in maintaining consistency and coherence across multiple languages from the outset.

# 2. Combining Existing Thesauri

a. Merging Two or More Existing Thesauri into One New (Bilingual) Thesaurus

This approach involves consolidating two or more independent thesauri into a single, bilingual thesaurus. The goal is to create

a unified resource that encompasses the combined knowledge and vocabulary of the original thesauri. Challenges may arise in harmonizing different structures and ensuring seamless integration.

b. Linking Existing Thesauri and Subject Heading Lists

An alternative method involves linking existing thesauri and subject heading lists to one another. This interconnected approach utilizes the strengths of each individual thesaurus, leveraging them in both indexing and retrieval processes. It requires establishing robust connections and mappings between terms from different sources.

# 3. Translating a Thesaurus into One or More Other Languages

In this approach, an existing thesaurus is translated into one or more additional languages. Notably, the original language of the thesaurus takes precedence and becomes the dominant language in the translated versions. While not discussed in detail in this document, this approach emphasizes the hierarchical structure and relationships established in the original language.

The development of bilingual thesauri involves a thoughtful consideration of the languages involved, the desired scope, and the intended use. Each approach presents its own set of advantages and challenges. Whether building from the bottom up, combining existing resources, or translating, the overarching goal is to create a bilingual thesaurus that enhances information retrieval and indexing processes in a multilingual context. As the demand for cross-language information access continues to grow, these diverse approaches contribute to the evolution of comprehensive and effective bilingual thesauri.

Linking is a strategy commonly employed in situations where distinct agencies utilize their individual indexing vocabularies in various languages for their respective information systems. This linking approach facilitates end-users in conducting searches across all connected indexing vocabularies, utilizing any one of the linked thesauri or subject heading lists.

In the context of developing a thesaurus, the "building from the bottom up" method proves feasible primarily when envisioning the creation of a new thesaurus or subject-heading list. The primary advantage of this approach lies in the equitable treatment of the languages involved. By initiating the construction process from scratch, developers have the flexibility to ensure that each language is given equal emphasis and consideration within the evolving structure. This approach becomes particularly valuable when striving for linguistic parity and coherence from the inception of the thesaurus or subject-heading list.

Both of the approaches discussed in this study give rise to two distinct groups of issues, namely:

**Equivalence Problems** 

Semantic problems within the context of thesauri or subject heading lists revolve around equivalence relations among preferred and non-preferred terms. These relations extend not only within each individual language (intra-language equivalence) but also between different languages (inter-language equivalence). The consideration of intra-language homonymy and inter-language homonymy further adds complexity to semantic challenges. Additionally, semantic issues encompass concerns related to the scope, form, and selection of thesaurus terms, necessitating careful attention to ensure precision and clarity.

# b) Structural Problems

Structural challenges involve the hierarchical and associative relationships between terms within the thesaurus or subject heading list. A crucial consideration in this regard is whether the structure should be uniform or varied across languages. In the majority of cases involving linking, it is probable that the structure will not be consistent across all the indexing vocabularies involved. Conversely, in other approaches, there exists the potential, in principle, to apply an identical structure to all languages. This underscores the importance of addressing structural intricacies to achieve optimal coherence and functionality within the bilingual thesaurus or subject heading list. The decision regarding structural uniformity or diversity across languages must be made with a nuanced understanding of the specific requirements and goals of the bilingual resource in question.

### **Conclusion**

Creating a bilingual thesaurus for the Uzbek language involves compiling a comprehensive list of synonyms and related words in both Uzbek and another language. This task requires a deep understanding of the nuances of both languages to ensure accurate translations and associations between words. Here are the key steps involved in creating a bilingual thesaurus for the Uzbek language:

Lexical Data Collection: The first step in creating a bilingual the-

saurus is to gather lexical data from reliable sources. This includes existing dictionaries, lexicons, corpora, and linguistic databases. For Uzbek, resources such as the "Explanatory Dictionary of Synonyms of the Uzbek Language" can be valuable. [Ashurova, 2022. 119-124]. Additionally, bilingual dictionaries and databases like UZWORDNET. a lexical-semantic database for the Uzbek language, can provide translations and semantic relationships. [Agostini, Usmanov, Khamdamov, Abdurakhmonova, Mamasaidov, 2021. 8-19]. The process of lexical data collection requires meticulous attention to detail to ensure the accuracy and comprehensiveness of the gathered information. Lexicographers and language experts may consult multiple sources to cross-reference and verify the lexical data. They also need to consider regional variations, dialects, and cultural nuances that may influence word usage and meanings in Uzbek. Furthermore, lexical data collection is an ongoing process that may involve continuous updates and expansions as new words enter the lexicon or existing words evolve in usage. By collecting a diverse range of lexical data, lexicographers can lay the foundation for creating a robust and informative bilingual thesaurus that serves the needs of language learners, translators, and researchers interested in Uzbek language and culture.

Semantic Analysis: Once the lexical data is collected, the next step is to conduct a semantic analysis of the words. This involves identifying synonyms, antonyms, hypernyms, hyponyms, and other semantic relationships within the Uzbek language. Moreover, it requires understanding the cultural and contextual nuances that influence word meanings and usage. Semantic analysis is essential for creating a bilingual thesaurus that accurately reflects the semantic richness and complexity of the Uzbek language. It enables users to explore the subtle nuances of words, expand their vocabulary, and enhance their understanding of both Uzbek and the target language.

Translation: After identifying the semantic relationships within the Uzbek language, the next step is to translate these words and their relationships into the target language, such as English. This translation process must be meticulous to ensure accuracy and maintain the semantic integrity of the words. It may involve consulting bilingual dictionaries and language experts to find appropriate equivalents. [Odilova, Djumabayeva, Mahmudova, 2020. 1829-1835].

Creation of Thesaurus Entries: Thesaurus entries consist of words, their synonyms, and related terms organized in a hierarchical structure. Each entry should include the Uzbek word, its translations

into English, and a list of synonymous and related words in both languages. Entries should also indicate semantic relationships, such as synonyms, antonyms, and hierarchical relationships like hypernyms and hyponyms.

Development of Digital Platform: In today's digital age, it is essential to develop a user-friendly digital platform to host the bilingual thesaurus. This platform should allow users to easily search for words, explore semantic relationships, and access translations. Additionally, it may incorporate features such as example sentences, usage notes, and audio pronunciations to enhance user experience.

Promotion and Distribution: Finally, promoting and distributing the bilingual thesaurus is crucial to ensure its accessibility and usefulness to the target audience. This may involve marketing efforts such as advertising, social media promotion, and collaborations with educational institutions and language learning platforms. Promotion strategies may include advertising campaigns, both online and offline, to reach a wide audience. This could involve placing ads in language learning publications, online forums, and social media platforms frequented by individuals interested in Uzbek language and culture. [Egamberdiev, 2019. 140-143]. Additionally, collaborations with educational institutions, libraries, and language learning organizations can help promote the thesaurus to students, teachers, and language enthusiasts.

Distribution channels play a key role in making the bilingual thesaurus readily available to users. Digital distribution is particularly important in today's digital age, where users expect easy access to resources online. The thesaurus can be distributed through various digital platforms, such as websites, mobile applications, and e-book platforms. Moreover, making the thesaurus available for download or online access ensures that users can access it anytime, anywhere, from their devices.

### References

Alessandro Agostini, Timur Usmanov, Ulugbek Khamdamov, Nilufar Abdurakhmonova, and Mukhammadsaid Mamasaidov. 2021. UZWORDNET: A Lexical-Semantic Database for the Uzbek Language. In Proceedings of the 11th Global Wordnet Conference, pages 8–19, University of South Africa (UNISA). Global Wordnet Association.

Ashurova Feruza Akhmatovna. Uzbek terminology: Problems and

- solutions. //Eurasian Journal of Humanities and Social Sciences. 2022, 7, 119-124 p.
- Egamberdiev Jasur. Analysis of words with metaphoric meaning in the "chambers 20th century dictionary" dictionary. Word Art №2. 2019. P.140-143 http://dx.doi.org/10.26739/2181-9297-2019-2-18
- Guidelines for the construction, format, and management of monolingual controlled vocabularies. – Bethesda: NISO, 2005. <a href="http://www.niso.org/standards/standard\_detail.cfm?std\_id=814">http://www.niso.org/standards/standard\_detail.cfm?std\_id=814</a>
- Hjørland, Birger. (2002): "Domain analysis in information science. Eleven approaches traditional as well as innovative." Journal of Documentation, 58(4)
- Lykke Nielsen, Marianne 2002: The word association method: a gateway to work-task based retrieval. Åbo: Åbo Akademi University Press. Doctoral dissertation, pp. 57-74
- Odilova Gulnoza, Djumabayeva Jamila, Mahmudova Moxira. The principles of creating a bilingual e-poetical dictionary, as well as similar and different aspects of the means of artistic images in Uzbek and English. //International Journal of Advanced Science and Technology. 2020, No. 5, Vol. 29, pp. 1829-1835
- Schott (2006) Thesaurus Sozialwissenschaften = Thesaurus for the social sciences/ bearbeitet van Hannelore Schott. Bonn: Informationszentrum Sozialwissenschaften, 2006. 4 vol.

# O'ZBEK TILI UCHUN BILINGVAL TEZAURUS YARATISHNING ASOSIY TAMOYILLARI

# Nargiza Shamiyeva<sup>1</sup>

Annotatsiya. Mazkur maqolada bilingval tezaurus yaratishning nazariy metodologik asoslari va lingvistik resurs sifatida uning semantik maydonlarini shakllantirishga doir mulohazalar bildirilgan. Maqolada lugʻat yaratishning metodologik asoslari ikki asosiy yondashuv asosida amalga oshirilgan tadqiqotlar tahlilga tortilgan. Unga koʻra muayyan mavzu doirasida tushunchalarning iyerarxik tarmoqlanishi va kordinatsion semantik munosabatlar namunalar asosida asoslangan. Tushunchalarning muayyan konsept asosida birikuvi ikki til doirasida sinonimik qatorni tashkil qiladi, bu esa oʻz navbatida leksik birliklar oʻrtasidagi lingvomadaniy xususiyatlarni ham inobatga olish lozimligini koʻrsatadi.

Ushbu maqolada oʻzbek tili uchun bilingval tezaurus yaratish boʻyicha ayrim koʻrsatmalar berilgan. Sinonimik qatorlarning sifat soʻz turkumi doirasida leksikografik tamoyillar asosida oʻrganilishi kompyuter leksikografiyasi uchun muhim manba boʻlishi mumkinligi ta'kidlangan.

Tezaurus uchun leksik manba yigʻish va uni saralash eng muhim manba hisoblanadi. Korpus tahlili asosida statistik ma'lumotga asoslangan har ikki tilning muqobil variantlarini sifat soʻz turkumida tadqiq etish kelgusidagi kompyuter lingvistikasi va tarjima nazariyasi va amaliyoti kabi sohalar uchun muhim oʻrganish obyekti boʻlib xizmat qilishi ishning dolazarbligini koʻrsatadi.

**Key words:** bilingval tezaurus, bir nechta tillar, yondashuvlar, tezauruslarni birlashtirish

# Foydalanilgan adabiyotlar

Alessandro Agostini, Timur Usmanov, Ulugbek Khamdamov, Nilufar Abdurakhmonova, and Mukhammadsaid Mamasaidov. 2021. UZWORDNET: A Lexical-Semantic Database for the Uzbek Language. In Proceedings of the 11th Global Wordnet Conference, pages 8–19, University of South Africa (UNISA). Global Wordnet Association.

Ashurova Feruza Akhmatovna. Uzbek terminology: Problems and solutions. //Eurasian Journal of Humanities and Social Sciences. 2022, 7, 119-124 p.

Egamberdiev Jasur. Analysis of words with metaphoric meaning in the "chambers 20th century dictionary" dictionary. Word Art

E-pochta: shamieva.nargiza2024@gmail.com

ORCID: 0009-0002-9723-3080

<sup>&</sup>lt;sup>1</sup>SShamiyeva Nargiza Abdusattarovna – f.f.f.d., Oʻzbekiston Milliy universiteti Chet tillar fakulteti oʻqituvchisi.

- $N^{\circ}2$ . 2019. P.140-143 http://dx.doi.org/10.26739/2181-9297-2019-2-18
- Guidelines for the construction, format, and management of monolingual controlled vocabularies. Bethesda: NISO, 2005. <a href="http://www.niso.org/standards/standard\_detail.cfm?std\_id=814">http://www.niso.org/standards/standard\_detail.cfm?std\_id=814</a>
- Hjørland, Birger. (2002): "Domain analysis in information science. Eleven approaches traditional as well as innovative." Journal of Documentation, 58(4)
- Lykke Nielsen, Marianne 2002: The word association method: a gateway to work-task based retrieval. Åbo: Åbo Akademi University Press. Doctoral dissertation
- Odilova Gulnoza, Djumabayeva Jamila, Mahmudova Moxira. The principles of creating a bilingual e-poetical dictionary, as well as similar and different aspects of the means of artistic images in Uzbek and English. //International Journal of Advanced Science and Technology. 2020, , No. 5, Vol. 29, pp. 1829-1835
- Schott (2006) Thesaurus Sozialwissenschaften = Thesaurus for the social sciences/ bearbeitet van Hannelore Schott. Bonn: Informationszentrum Sozialwissenschaften, 2006. 4 vol.

Jurnal 2017-yil 26-oktyabrda Oʻzbekiston Respublikasi Matbuot va axborot agentligi tomonidan 0936-ragam bilan roʻyxatdan oʻtgan.

Jurnal O'zbekiston Respublikasi Oliy Attestatsiya Komissiyasi tomonidan filologiya fanlari bo'yicha falsafa doktori (PhD) va fan doktori (DSc) dissertatsiyalari asosiy ilmiy natijalari chop etilishi lozim bo'lgan ro'yxatga kiritilgan (30.10.2021. № 308/6).

Tahririyatga kelgan maqolalar mualliflarga qaytarilmaydi.

Manzil: Toshkent shahri, Yakkasaroy tumani, Yusuf Xos Hojib koʻchasi 103-uy. Telefonlar: +99871 281-45-11, +99871 281-41-93. Website: compling.tsuull.uz E-mail: kompling@navoiy-uni.uz

Bosishga 29.02.2024-yilda ruxsat etildi. Bichimi 70x100 1/16, Ofset bosma. "Cambria" garniturasi. Shartli b.t. 7,51. Nashr b.t. 7,62.

"Oʻzbekiston: til va madaniyat" jurnali tahririyatida tayyorlandi va sahifalandi. "YASHNOBOD NASHR" bosmaxonasida chop etildi. Adadi 300 nusxa. Buyurtma №2. Bosmaxona manzili: Toshkent shahar Yashnobod tumani, 58-a harbiy shaharcha.