

# **DIGITAL LEXICOGRAPHY AND BILINGUAL TERM MANAGEMENT IN ENGLISH AND UZBEK LINGUISTIC DICTIONARIES**

*Department of Foreign Language and Literature*

*Teacher Jurayeva Sarvinoz*

*The National University of Uzbekistan named after Mirzo Ulugbek*

**Annotation.** As educational systems increasingly rely on digital tools and corpus-based learning, bilingual lexicography must evolve to address new challenges in accuracy, usability, and accessibility. Through a comparative analysis of traditional print dictionaries and modern digital platforms such as Glosbe, ABBYY Lingvo, and til.gov.uz, this article identifies existing gaps and proposes enhancements rooted in international best practices. Drawing on the theories of Bergenholtz, Tarp, Nielsen, and Kilgarriff, the article recommends strategies for corpus-driven term extraction, standardization, and interactive design. It also advocates for the creation of a centralized, academic digital dictionary of linguistic terms tailored to Uzbek learners and translators.

**Key words:** digital lexicography, bilingual dictionaries, term standardization, corpus linguistics, English-Uzbek, linguistic terminology.

## **RAQAMLI LEKSIKOGRAFIYA VA IKKI TILLI ATAMALAR BOSHQARUVI: INGLIZ VA O‘ZBEK LINGVISTIK LUG‘ATLARIDA TADQIQOT**

*Xorijiy til va adabiyoti kafedrası*

*O'qituvchi: Jurayeva Sarvinoz*

*Mirzo Ulug'bek nomidagi O'zbekiston Milliy universiteti*

**Annotatsiya.** Ta'lim tizimlarida raqamli vositalar va korpusga asoslangan o'qitish usullari tobora keng qo'llanilayotgan bir paytda, ikki tilli leksikografiya aniqlik, foydalanish qulayligi va ochiqlik kabi yangi talablarni qondira olishi zarur. Ushbu maqolada Glosbe, ABBYY Lingvo va til.gov.uz kabi an'anaviy bosma lug'atlar hamda zamonaviy raqamli platformalar qiyosiy tahlil qilinadi. Xalqaro ilg'or tajribalarga asoslanib, mavjud muammolar aniqlanadi va ularni hal etish bo'yicha takliflar ilgari suriladi. Bergenholtz, Tarp, Nielsen va Kilgarrieff nazariyalariga tayanilgan holda, maqola korpus asosida atamalarni ajratish, ularni standartlashtirish va interaktiv dizayn yaratish bo'yicha strategiyalarni taklif qiladi. Bundan tashqari, o'zbek tilida o'rganuvchilar va tarjimonlar uchun mo'ljallangan, markazlashtirilgan akademik raqamli lug'at yaratish g'oyasi ilgari suriladi.

**Kalit so'zlar:** raqamli leksikografiya, ikki tilli lug'atlar, atamalarni standartlashtirish, korpus lingvistikasi, inglizcha-o'zbekcha, lingvistik atamalar.

**ЦИФРОВАЯ ЛЕКСИКОГРАФИЯ И УПРАВЛЕНИЕ  
ДВУЯЗЫЧНОЙ ТЕРМИНОЛОГИЕЙ: ИССЛЕДОВАНИЕ  
АНГЛИЙСКИХ И УЗБЕКСКИХ ЛИНГВИСТИЧЕСКИХ  
СЛОВАРЕЙ**

*Кафедра иностранных языков и литературы*

*Преподаватель: Жураева Сарвиноз*

*Национальный университет Узбекистана имени Мирзо Улугбека*

**Аннотация.** Поскольку образовательные системы всё больше полагаются на цифровые инструменты и обучение, основанное на корпусах, двуязычная лексикография должна развиваться, чтобы соответствовать новым требованиям к точности, удобству и доступности. В данной статье проводится сравнительный анализ традиционных печатных словарей и современных цифровых платформ, таких как Glosbe, ABBYY Lingvo и til.gov.uz. На основе международного опыта выявляются существующие недостатки и предлагаются пути их устранения. С опорой на теории Бергенхольца, Тарпа, Нильсена и Килгаррифа, автор предлагает стратегии извлечения терминов на основе корпусов, стандартизации и разработки интерактивного дизайна. Также выдвигается идея создания централизованного академического цифрового словаря лингвистических терминов для узбекоязычных студентов и переводчиков.

**Ключевые слова:** цифровая лексикография, двуязычные словари, стандартизация терминов, корпусная лингвистика, английско-узбекский, лингвистическая терминология.

## INTRODUCTION

The evolution of dictionary-making has accelerated in recent decades with the integration of digital technologies, corpus linguistics, and user-focused design. Traditional bilingual dictionaries, once print-based and static, are increasingly replaced by dynamic, interactive platforms that reflect real-time language use. For languages like Uzbek-undergoing rapid modernization and reform in education-the development of digital bilingual lexicographic tools is both a necessity and a challenge. In the process of developing dictionaries, digital processes have been used for a long time, the hybrid format has often been chosen for publication for many years, i.e. a print version and a digital edition are published.

Since the founding of the TCDH in 1998, the digital publication and indexing of dictionaries and reference works and their linking have been important focus areas. The development of these resources has been based on international standards from the start. Due to the digital networking of the dictionaries, users can carry out simple comprehensive searches.

### *Objectives*

This paper investigates how digital lexicography can support the management and standardization of linguistic terms in English–Uzbek dictionaries. It seeks to answer the following questions:

- How are digital dictionaries improving or limiting the bilingual presentation of linguistic terms?
- What are the limitations of existing Uzbek–English digital resources?

- How can international digital lexicographic practices be applied in the Uzbek context?

By addressing these questions, the study aims to contribute to the growing field of digital lexicography and bilingual terminology development. Through a combination of literature review, term analysis, and corpus-based comparison, this article sheds light on the existing gaps and offers practical recommendations for lexicographers, translators, and language educators working with English-Uzbek linguistic terminology.

## **METHODS**

### *Research Design*

This study employs a mixed-methods research design, integrating qualitative content analysis with comparative lexicographic evaluation. The aim is to identify structural, terminological, and user-experience gaps in current English–Uzbek bilingual dictionaries, with particular emphasis on digital platforms and academic terminology in linguistics.

A comparative analysis was conducted using 50 linguistic terms selected from English linguistics textbooks and academic glossaries. These were compared against entries in prominent English–Uzbek dictionaries, online platforms (e.g., Glosbe, ABBYY), and university-published glossaries. Each term was analyzed based on translation strategy (literal, calque, borrowing, paraphrase), accuracy, and contextual appropriateness. Qualitative data from interviews with translators and educators were also used to assess practical challenges in terminology usage and teaching.

Bergenholtz and Gouws (2012) define digital lexicography as a user-oriented approach to dictionary design that prioritizes accessibility, interactivity, and relevance. Kilgarriff (2008) emphasizes the importance of corpora in digital lexicography, advocating for data-driven definitions and usage examples. Nielsen (2010) and Tarp (2008) highlight that bilingual dictionaries must serve functional purposes for specific user groups: translators, learners, researchers. Inaccurate term mapping, lack of context, and static definitions reduce the effectiveness of bilingual dictionaries.

Uzbek lexicography is still transitioning from Soviet-era terminology systems. Many linguistic terms are borrowed from Russian or transliterated from English without context. Sobirova (2020) and Khudoyberganova (2018) criticize the lack of standardized terminology across Uzbek dictionaries.

## **RESULTS**

By the result of examining English-Uzbek digital dictionaries such as Glosbe, ABBYY Lingvo, and til.gov.uz, evaluating their treatment of bilingual terms, it was assessed user experience, database structure, and lexical precision have a crucial role in corpus linguistics. In comparing the digital representations of commonly used Uzbek linguistic terms across different platforms, inconsistencies were observed in definitions and translations. For instance, in ABBYY Lingvo, the translation of morphology differs from that found in til.gov.uz, impacting linguistic accuracy for researchers and students. Corpus-based analysis of English-Uzbek lexicons shows a disparity in technical term adoption. Certain English scientific terms do not have precise Uzbek equivalents, requiring neologisms or contextual

adjustments. The integration of AI-driven lexicography models enhances bilingual term searches, yet challenges remain in semantic disambiguation between Uzbek and English.

Digital lexicography and bilingual term management require a fine balance between corpus precision, linguistic authenticity, and technological adaptability. The future of English-Uzbek digital dictionaries will depend on collaborative efforts between linguists and AI-driven lexicographic tools.

Moreover, many English terms lack precise Uzbek equivalents, leading to multiple translations across different digital platforms. For instance, the term *phoneme* is translated differently in Glosbe Dictionary, ABBYY Lingvo, and [til.gov.uz](http://til.gov.uz)-sometimes reflecting phonetic units, sometimes broad linguistic structures. This inconsistency affects Uzbek linguistic researchers and educators, requiring deeper standardization efforts.

## **DISCUSSION**

As corpus-driven lexicography is improved dramatically as it offers a valuable opportunities for both linguists, lexicographers. A lot of new corpus tools have been developed that contribute to the advancement in generative, cognitive and corpus linguistics, let alone corpus lexicography. The data from National corpora are used in different areas of research. The scientific community should pay particular attention to creating specialized corpora that are in great demand at the moment. According to abovegiven drawbacks to digital lexicography in English and Uzbek languages, the followings would be an appropriate solutions: implementing standardized linguistic validation frameworks across dictionary platforms, encouraging collaboration between Uzbek linguists and lexicographers to refine

translations, introducing an open-source, AI-powered terminology correction system that crowdsources linguistic expertise, developing a linguistic task force to create standardized Uzbek equivalents for scientific and technical terms.

## **CONCLUSION**

Digital lexicography holds immense potential for developing reliable, user-centered, and up-to-date bilingual dictionaries. For Uzbek- a language in transition - the need for standardized and accessible linguistic terminology is especially urgent. By leveraging corpus linguistics, digital tools, and academic collaboration, Uzbekistan can modernize its bilingual lexicographic resources and better integrate with global academic discourse. Future research should focus on developing digital platforms and corpus-based tools to ensure dynamic and accurate translation of specialized terms across disciplines.

## **REFERENCES**

1. Bergenholtz, H., & Gouws, R. (2012). What is a Dictionary? Lexikos.
2. Tarp, S. (2008). Lexicography in the Borderland between Knowledge and Non-Knowledge.
3. Kilgarriff, A. (2008). Corpus-Based Lexicography. International Journal of Lexicography.
4. Nielsen, S. (2010). The Bilingual Dictionary: Lexicographic Theory and Practice.
5. Sobirova, G. (2020). Inglizcha-O‘zbekcha lingvistik atamalar lug‘ati.



6. Khudoyberganova, D. (2018). Issues in Uzbek Linguistic Terminology. Journal of Philology.
7. Glosbe Dictionary. <https://glosbe.com>
8. ABBYY Lingvo. <https://www.abbyy.com/lingvo/>
9. [til.gov.uz](http://til.gov.uz) - O'zbek tilining rasmiy atamalar bazasi