

CHALLENGES AND INNOVATIONS IN MODERN PHILOLOGY: BALANCING TRADITION AND TECHNOLOGY

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Annotation: This article explores the current challenges in modern philology, examining the impact of technological advancements, globalization, and outdated educational practices. It draws on five scholarly works to address key issues in the field. Kalandarov and Ermatova (2023) discuss how globalization and digital technologies are influencing linguistic research and the need for new methods in philology. Zhiembayeva, Mussakhanov, and Alimgazinova (2023) highlight the challenges of literary translation, particularly in preserving cultural meaning. Riemenschneider and Frank (2023) look at how artificial intelligence is reshaping the analysis of classical texts, with a focus on large language models. Cowen-Breen et al. (2023) showcase the practical use of AI in Greek philology with their “Logion” model. Finally, Zharylgapov (2021) critiques outdated teaching methods in literature education and calls for necessary reforms. This article brings together these diverse perspectives to offer a deeper understanding of the evolving nature of philology and its future challenges.

Key words: *Philology, Traditional Methods, Teaching Practices, Literary Translation, Computational Linguistics, Artificial Intelligence (AI), Machine Learning, Classical Languages, Cultural Context, Technology Integration*

Annotatsiya: Ushbu maqola zamonaviy filologiyaning hozirgi muammolarini o'rganadi, texnologik yutuqlar, globalizatsiya va eskirgan ta'lim amaliyotlarining ta'sirini ko'rib chiqadi. Maqola, sohaning asosiy muammolarini yoritish uchun beshta ilmiy ishga tayanadi. Kalandarov va Ermatova (2023) globalizatsiya va raqamli texnologiyalar lingvistik tadqiqotlarga qanday ta'sir ko'rsatishini va filologiyada yangi metodlarning zarurligini muhokama qiladilar. Zhiembayeva, Mussakhanov va Alimgazinova (2023) adabiy tarjima muammolarini, ayniqsa madaniy ma'noning saqlanishidagi qiyinchiliklarni ta'kidlaydilar. Riemenschneider va Frank (2023) sun'iy intellektning klassik matnlarni tahlil qilishni qanday o'zgartirayotganini, ayniqsa katta til modellari orqali, o'rganadilar. Cowen-Breen va boshqalar (2023) yunon filologiyasida sun'iy intellektni amaliy qo'llashni “Logion” modeli orqali namoyish etadilar. Nihoyat, Zharylgapov (2021) adabiyot ta'limidagi eskirgan o'qitish usullarini tanqid qilib, islohotlar zarurligini ta'kidlaydi. Ushbu maqola filologiyaning rivojlanayotgan tabiati va kelajakdagi muammolarini chuqurroq tushunishga yordam beradi.

Kalit soʻzlar: *Filologiya, An'anaviy metodlar, Ta'lim amaliyotlari, Adabiy tarjima, Hisoblash lingvistikasi, Sun'iy intellekt (SI), Mashina o'rganish, Klassik tillar, Madaniy kontekst, Texnologiya integratsiyasi*

Introduction

Philology, traditionally defined as the study of language in historical texts, has long been concerned with the structure, development, and interpretation of languages. Rooted in classical linguistics and literature, its scope spans across multiple disciplines, including literary analysis, translation, and cultural studies. Traditionally, philologists have worked with written texts, focusing on ancient or classical languages, interpreting their meanings and preserving linguistic heritage.

In the 21st century, however, the field of philology is facing new challenges and opportunities. The rapid advancement of technology, particularly in areas such as computational linguistics and artificial intelligence (AI), is reshaping how philologists approach language research. Additionally, globalization has led to an increased need for more inclusive and diverse linguistic approaches, as well as a reevaluation of how cultural texts are represented and taught in modern classrooms. These shifts make the study of contemporary philology more complex and multifaceted than ever before.

This article seeks to explore the main problems facing modern philology, including the limitations of traditional methodologies, the influence of technology, and the role of AI in transforming language research. By reviewing recent literature, the study will examine how these changes are impacting both the academic study of philology and its practical applications in education and translation.

Traditional Methodological Challenges: A major challenge in modern philology is the outdated teaching practices and the translation difficulties that continue to affect the field. These issues are thoroughly discussed by both Zharylgapov (2021) and Zhienbayeva, Mussakhanov, and Alimgazinova (2023). Zharylgapov (2021) critiques how many educational institutions continue to rely on traditional methods in teaching national literature. He points out that these outdated approaches often fail to engage students with the full complexity of literature and language studies in today's globalized world. Traditional methods tend to focus on a narrow range of canonical texts, neglecting the importance of more diverse, interdisciplinary, and cross-cultural perspectives. This limits students' ability to truly understand literature in its modern context and reduces their exposure to the rich variety of global literary traditions. Similarly, Zhienbayeva, Mussakhanov, and Alimgazinova (2023) discuss the problems in literary translation. They highlight how traditional translation practices often struggle to convey the cultural meanings embedded in the original text. Translating literature is not just about language; it's about carrying over cultural nuances, historical context, and emotional subtleties. Traditional translation methods often fall short, resulting in misrepresentations or a loss of key cultural

elements. This issue is especially evident when translating national literature for international audiences, where important cultural references can get lost or distorted. These gaps in translation not only affect the accuracy of the text but also diminish its ability to fully communicate the richness of its cultural identity. Both Zharylgapov and Zhienbayeva et al. emphasize the limitations of traditional methods in teaching and translating literature. By sticking to old, rigid frameworks, philology risks becoming disconnected from the realities of today's world, where understanding diverse cultures and languages is crucial. Modern philology needs to embrace more flexible, inclusive approaches that reflect the ever-evolving nature of language and its global context.

Impact of Technology: The rapid advancement of technology has significantly impacted language research in philology. Kalandarov and Ermatova (2023) explore how computational linguistics is reshaping the field, offering new tools and methods for linguistic analysis. Traditional philological approaches, which often rely heavily on manual analysis of texts, are being complemented or even replaced by digital technologies. These tools allow for more efficient processing of large corpora, enabling philologists to conduct research that was once unimaginable in scale or speed. However, while these digital methods offer numerous advantages, they also present challenges. Kalandarov and Ermatova (2023) highlight that computational methods may sometimes overlook the nuances of language that traditional approaches can capture. For instance, digital tools might fail to account for the deeper cultural and contextual layers of a text, which are crucial in philological work. This creates a tension between the accuracy and depth offered by traditional philology and the speed and scalability of modern technology.

AI and Machine Learning in Philology: Artificial Intelligence (AI) and Machine Learning (ML) are transforming philology, particularly in the study of ancient and classical languages. Cowen-Breen et al. (2023) highlight the application of AI in Greek philology through the "Logion" model, which uses machine learning to analyze and interpret Greek texts. This innovative approach allows philologists to analyze vast amounts of ancient texts more efficiently, uncovering patterns and connections that might otherwise go unnoticed. Similarly, Riemenschneider and Frank (2023) explore how large language models (LLMs) are revolutionizing classical philology by offering tools for deep text analysis and interpretation. AI models can now generate insights into classical languages, provide translations, and even assist in the restoration of damaged texts. However, both studies also note that while AI offers substantial advancements in speed and accuracy, it has limitations in understanding the cultural context and nuances of ancient languages. AI may struggle with interpretations that require a deep understanding of historical and cultural contexts, which human scholars are better equipped to address.

Synthesis of Issues: The challenges facing modern philology are deeply interconnected. One key issue is the resistance to technological integration in

traditional methods. As discussed in previous sections, many philologists continue to rely on outdated teaching and translation practices, despite the availability of advanced tools and technologies. This creates a divide between traditional, human-centered methods and the increasing presence of digital technologies and AI in the field. While computational linguistics and machine learning offer great potential for expanding research capabilities, they are not without limitations. Traditional approaches, as highlighted by Zharylgapov (2021) and Zhienbayeva et al. (2023), continue to hold value, particularly when it comes to understanding cultural context and preserving the nuances of language that technology cannot fully capture. The challenge, therefore, lies in striking a balance between the richness of traditional philology and the efficiency of modern technologies. These issues underscore the need for an interdisciplinary approach that combines the strengths of both human expertise and technological innovation in philology.

Conclusion

Modern philology faces numerous challenges, from the persistence of outdated teaching methods and translation issues to the integration of technology and AI. Traditional approaches in literature education and translation, as highlighted by Zharylgapov (2021) and Zhienbayeva et al. (2023), struggle to keep up with the demands of a globalized world. At the same time, technological advancements, including computational linguistics and AI, offer new opportunities for efficiency and innovation, as discussed by Kalandarov and Ermatova (2023) and Riemenschneider and Frank (2023). However, these technologies also bring limitations, particularly in capturing the cultural depth and nuances of language that traditional philology excels at. The future of philology lies in bridging the gap between traditional human-centered methods and modern technological innovations. An interdisciplinary approach that combines both will likely provide the most comprehensive solutions, ensuring that philology continues to evolve and adapt to the challenges of the 21st century.

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