

THE FUNCTION AND INFLUENCE OF TERMINOLOGY IN SCIENTIFIC AND PROFESSIONAL COMMUNICATION

Lola Mannobova

*Lecturer, Department of English Language Teaching Methodology,
Samarkand State Institute of Foreign Languages*

Abstract: *Terminology plays a crucial role in scientific and professional communication, ensuring clarity, precision, and consistency in the expression of specialized knowledge. This article explores the historical development of terminology, its theoretical foundations, and its functional, cognitive, and communicative aspects. Special emphasis is placed on English and Uzbek terminological systems, including their historical evolution and role in scientific discourse. The study also highlights the influence of globalization, technological advancement, and social needs on the development of terminological systems. Findings suggest that terminology is not merely a linguistic tool but a fundamental instrument for the advancement and dissemination of knowledge.*

Keywords: *terminology, term, scientific discourse, communication, Uzbek language, English language*

Аннотация: *Терминология играет ключевую роль в научной и профессиональной коммуникации, обеспечивая точность и ясность передачи специализированных знаний. В статье рассматриваются историческое развитие терминологии, ее теоретические основы, а также функциональные, когнитивные и коммуникативные аспекты. Особое внимание уделено английской и узбекской терминологическим системам, их роли в научном дискурсе и влиянию глобализации, технологического прогресса и социальных потребностей на развитие терминологии.*

Ключевые слова: *терминология, термин, научная коммуникация*

Annotatsiya: *Terminologiya ilmiy va kasbiy muloqotda muhim ahamiyatga ega bo'lib, maxsus bilimlarni aniq va tushunarli ifodalashga xizmat qiladi. Ushbu maqolada terminologiyaning tarixiy rivoji, nazariy asoslari, shuningdek, funksional, kognitiv va kommunikativ jihatlari tahlil qilinadi. Ingliz va o'zbek terminologik tizimlarining roli, globalizatsiya, texnologik taraqqiyot va ijtimoiy ehtiyojlarning terminologiya shakllanishiga ta'siri ham ko'rib chiqiladi.*

Kalit so'zlar: *terminologiya, termin, ilmiy muloqot, kommunikatsiya, o'zbek tili, ingliz tili*

INTRODUCTION

Language evolves in tandem with human society, reflecting cultural, scientific, and technological changes.

One of the most critical components of language in specialized fields is terminology, which allows precise and standardized communication of complex concepts.

Both English and Uzbek demonstrate the evolution of terminology under different historical, linguistic, and social conditions. English terminology has achieved global recognition, while Uzbek terminology, though historically rich, continues to adapt under both internal linguistic development and external influences.

Historical Development of Terminology

The study of terminology has deep historical roots. In Uzbek linguistic history, terms can be traced to ancient Turkic texts such as the Avesto and Orkhon Inscriptions. Throughout centuries, Uzbek terminology evolved through interactions with Persian, Sanskrit, Sogdian, and Chinese, as well as via intralinguistic developments within the Uzbek literary language.

Classical authors such as Alisher Navoi, Lutfiy, Atoyi, Sakkokiy, Sayfi Saroyi, and Mashrab contributed significantly to the enrichment of Uzbek terminology through poetry, prose, and scientific writing.

Navoi's correspondence and poetic letters also exhibit the influence of Persian-Tajik terms on the Uzbek lexicon, demonstrating extralinguistic factors in terminology formation.

In English, terminology emerged as a response to the rapid expansion of knowledge, technology, and communication during the 18th century. According to Rey (1995), terminology initially developed due to both spontaneous practical needs and theoretical motivations connected to the birth of science. Only in the 20th century did it acquire a formal scientific orientation while being recognized as socially important.

Theoretical Foundations of Terminology

Terminology as a scientific discipline emerged relatively late, although terms themselves have existed since ancient times.

Scholars define terminology in multiple ways, emphasizing its functional, cognitive, and communicative roles (Danilenko, 1977; Whewell, 1967; Gak, 1972).

Modern approaches to terminology include:

- Prescriptive (standardization): ensuring uniform use of terms in scientific and professional contexts.
- Descriptive (usage-based): examining how terms are actually used in practice.
- Cognitive (concept-oriented): studying how terms organize knowledge and concepts in the human mind.

As Rey (1995) notes, the initial development of terminology was driven both by practical needs, similar to technological advancements, and theoretical considerations, such as the rise of scientific thought. By the 18th century, terminology had become a necessary tool to manage the increasing complexity of knowledge, communication, and technology, and by the 20th century, it gained formal recognition as a scientific discipline.

Functions of Terminology

Terminology serves multiple essential functions:

1. Functional (Nominative) Function: Terms name and classify concepts precisely, ensuring clarity and standardization within a specific domain. For example,

photosynthesis in biology or inflation in economics represents a fixed, recognized concept.

2. Cognitive Function: Terms help organize knowledge and conceptual systems, facilitating understanding and learning. They are not mere words but structured units of thought. Terms such as gravity or noun enable individuals to classify and comprehend complex ideas.

3. Communicative Function: Terms enable efficient communication between specialists, eliminating ambiguity. In professional fields like medicine, engineering, or finance, the use of standardized terms such as diagnosis, algorithm, or asset ensures clarity and accuracy.

These functions together demonstrate that terminology is both a linguistic tool and a fundamental instrument for the dissemination and application of knowledge.

Terminology in Uzbek and English Contexts

Uzbek terminology has been shaped over centuries through historical, social, and cultural influences. Early texts, classical literature, and intercultural contact contributed to its richness.

In contrast, English terminology developed rapidly during the scientific revolution, benefiting from global dissemination and standardization, which facilitated international scientific communication. Both systems highlight the interplay between linguistic structure, social needs, and scientific development.

Globalization and technological progress have strengthened the role of English terminology worldwide. Many languages, including Uzbek, adopt English terms to align with international scientific and technical developments. However, balancing foreign influence with native lexical growth remains a challenge for maintaining linguistic identity and developing standardized local terminology.

Conclusion

Terminology is a vital element of scientific and professional communication, reflecting the historical development of knowledge and enabling precise, efficient information exchange.

Functional, cognitive, and communicative roles of terms demonstrate their importance in naming, conceptualizing, and transmitting knowledge. English terminology holds global prominence, whereas Uzbek terminology continues to evolve dynamically through historical, social, and intercultural influences.

The development of standardized, conceptually sound terminological systems is essential for scientific advancement, professional communication, and the preservation of linguistic identity.

REFERENCES:

1. Abdunazarovna, M. L., et al. (2024). Termin va uning o'ziga xos xususiyatlari. Interdiscipline Innovation and Scientific Research Conference, 3(26), 22-27.
2. Danilenko, V. P. (1977). Terminologiya i nauchnyy yazyk. Moscow: Nauka.

3. Hojiyev, A. (2002). O'zbek tilshunosligi terminlari izohi. Tashkent.
 4. Rahmatullayev, Sh. (2010). O'zbek tilining izohli lug'ati. Tashkent.
 5. Dadaboyev, B. (2019). Terminologiya asoslari. Tashkent.
 6. Rey, A. (1995). Essays on Terminology. Amsterdam: John Benjamins Publishing Company.
- Crystal, D. (2003). English as a Global Language. Cambridge: Cambridge University Press.