UDC 811.111:811.131.1:001.4(045)

DOI https://doi.org/10.32782/2522-4077-2023-206-9

## CROSS-CULTURAL PARALLELS IN THE TERMINOLOGY SYSTEMS OF ENGLISH AND ITALIAN

## КРОСКУЛЬТУРНІ ПАРАЛЕЛІ В ТЕРМІНОЛОГІЧНИХ СИСТЕМАХ АНГЛІЙСЬКОЇ ТА ІТАЛІЙСЬКОЇ МОВ

Lebedieva S.L., orcid.org/0000-0001-5281-0759

Senior Lecturer at the Department of Philology and Translation Kyiv National University of Technologies and Design

Language contacts arising as a result of interaction between peoples are a significant factor in changing their linguistic and cultural community. Language faces new realities that cannot always be reflected by its internal resources. New words appear, including those coming from other languages, irrelevant ones disappear, and those that already exist may be reinterpreted.

The terminological system, on the one hand, is more stable compared to the commonly used lexicon, on the other hand, the globalization of modern processes of society and the relentless development of computer-mediated multimodal communication create prerequisites for increasing the number of borrowed terms.

Specificity of concepts of the material and inner world of representatives of different ethnic groups, their way of thinking, cultural and mental features influence the forming mechanisms of the scientific terminology diversity. The formal side of the word activates in the recipient the meanings necessary in a given narrowly focused communication situation

Terminological vocabulary has a special expressiveness, facilitates communication in a specialized, and often highly specialized field of knowledge. Terms in different languages gravitate towards unification, maximum unambiguity and internationalization.

Linguistic loyalty, which allows borrowed terms to penetrate, is related to the greater social significance of the experience of the language community that stands out in its development and has an important impact on cultural and social trends, shaping not only national but also global trends.

Latin language is the foundation and starting point in the field of terminological vocabulary. English has undergone several waves of interaction with Latin, first directly and then through French. More than half of the English terminological vocabulary is made up of Latin words. Italian, on the other hand, is the closest heir to Latin, primarily in terms of vocabulary.

At this stage of the development of science, when English language has become the lingua franca of international scientific communication, English terminology is gaining more and more space in the world scientific vocabulary.

Key words: loan word, lexical borrowing, language contact, terminology, donor language, recipient language.

Мовні контакти, що виникають у результаті взаємодії між народами, є суттєвим чинником зміни їхньої мовної та культурної спільноти. Мова стикається з новими реаліями, які не завжди вдається відобразити, користуючись внутрішніми ресурсами. З'являються нові слова, в тому числі з інших мов, зникають неактуальні, а ті, що вже існують, можуть бути переосмислені.

Термінологічна система, з одного боку, є більш стійкою порівняно із загальновживаною лексикою, з іншого боку, глобалізація сучасних процесів життя суспільства та невпинний розвиток комп'ютерноопосередкованої мультимодальної комунікації створюють передумови для збільшення кількості запозичених термінів.

Специфіка уявлень про матеріальний і внутрішній світ представників різних етносів, їхній спосіб мислення, культурні та ментальні особливості впливають на механізми формування різноманіття наукової термінології. Формальний бік слова активізує в реципієнта смисли, необхідні в такій вузькоспеціальній комунікативній ситуації.

Термінологічна лексика має особливу виразність, полегшує комунікацію у спеціалізованій, а часто вузькоспеціалізованій галузі знань. Терміни в різних мовах тяжіють до уніфікованості, максимальної однозначності та інтернаціоналізації.

Мовна лояльність, що дає змогу проникати запозиченим термінам, пов'язана з більшою соціальною значущістю досвіду тієї мовної спільноти, яка виділяється у своєму розвитку і має важливий вплив на культурні та соціальні тенденції, формуючи не тільки національні, а й глобальні тренди.

Латинська мова  $\epsilon$  фундаментом і відправною точкою в галузі термінологічної лексики. Англійська зазнала кілька хвиль взаємодії з латинською, спочатку безпосередньо, а потім через французьку мову. Більше половини англійської термінологічної лексики складається з латинських слів. Своєю чергою італійська мова, з іншого боку,  $\epsilon$  найближчою спадкоємицею латини, насамперед у плані лексики.

На цьому етапі розвитку науки, коли англійська мова  $\epsilon$  lingua franca міжнародного наукового спілкування, англійська термінологія завойову $\epsilon$  дедалі більше місця у світовому науковому словнику.

**Ключові слова:** запозичення, лексичне запозичення, мовний контакт, термінологія, мова-донор, мова-реципієнт.

**Problem statement.** Acceleration of communication processes associated with the emergence of new knowledge in various fields as well as modern computer-mediated communication significantly increase the amount of borrowed terminological vocabulary. The active borrowing of foreign words generates the necessity to analyze the appropriateness of their use, given that terminological systems are designed to facilitate and streamline interaction in the scientific community. A word as a reproducible unit of language manifests its meaning in a particular speech act and can be ambiguously interpreted in different contexts.

Correct mutual understanding between specialists from different countries directly depends on the quality and selectivity of constantly updated national terminology systems, its maximum unambiguity and accuracy.

The study of the nature and logic of the development of terminological systems of the languages, which are not closely related, such as Italian and English, allows to state the general socio-cultural regularities of the linguistic image of the world. Further comparative researches of interlingual communication contribute to more effective interaction within the international community in scientific and technical fields.

Analysis of recent studies and publications. Questions of meaning and significance, diachronic and synchronic processes in language have been the focus of attention of Charles Sanders Peirce, Ferdinand de Saussure [1], Juri Lotman, Émile Benveniste, Umberto Eco, Bruno Migliorini [2], Tullio De Mauro [3].

Uriel Weinreich [4], Einar Haugen, Philip P. Durkin [5], Donald M. Ayers [6], Horace G. Danner [7], John Ayto [8], O. Potebnia, V. Manakin [9] have devoted their works to the study of interlingual relationships, borrowing of words as a historical and socio-cultural phenomenon affecting various levels of language. They studied the conditions contributing to the arrival of a new word in the recipient language, analyzed the depth and stages of assimilation of a new lexicon, worked on the classification of borrowings, divided them into spheres of application.

The studies of Eugen Wüster, Rita Temmerman, Gabriele Sauberer, Margaret Rogers are significant in the context of studying the development of terminological clusters in a language. Their studies show the dependence of the intensity of introduction, amount and adaptability of borrowed lexical units on the extra-linguistic background, the ability of the recipient language to assimilate new words, as well as ways to overcome structural differences.

**Purpose of the study.** The aim of the study is to comparatively analyze the phenomenon of borrowing terms in English and Italian languages, to identify similar mechanisms of diachronic development, the influence of socio-cultural realities on the peculiarities of distribution and adaptation of terminological vocabulary, to consider the trends of modern terminological borrowing associated with the accelerated development of technical means of communication.

**Presenting the main material.** The evolutionary transformation of languages is largely determined by sociocultural processes occurring inside and outside language collectives. Just as language plays an important role in creating the social and cultural characteristics of its speakers, speakers and

writers importantly influence its development. Linguocultural changes cover different language communities and dynamically affect primarily the vocabulary composition of a language. Being the main instrument of nomination of elements of reality, the word realizes itself in interpretation, in a particular speech situation. As a linguistic sign, it is a key means of communication. The choice of a lexeme depends on the profession, age, background and other characteristics of the speaker or writer, as well as the context (colloquial, scientific, expressively colored, etc.) in which its meaning is realized. The lexical system is the most open, multidimensional and sensitive to changes.

Multiple functions that a word can perform (nominative, communicative, expressive, organizational and connecting, aesthetic, etc.) are the reason for the lack of unambiguity of its interpretation. Semiotics considers words as signs, which correlate with meaning and sense of a word and are connected with the process of their interpretation in a concrete speech situation or a concrete group of people. The nature of terminological vocabulary seems to be multidirectional. A term as a word enters the language system, has grammatical features, pronunciation, spelling and is subject to syntactic rules related to its use in a sentence. On the other hand, it has the features of an element of a semiotic system, which implies a stable meaning accepted in a certain highly specialized community.

A term, as an element of a particular semiotic system, is a specialized symbol that is used to denote and describe specific concepts or objects within a particular discipline or field. It is an important part of effective communication and knowledge sharing in science, technical fields and other branches of knowledge. In the context of information technology, terms can be part of formalized notation systems such as programming languages, data standards and databases.

The group of users operating with special vocabulary in a particular field of knowledge sets the criteria of vocabulary formation. Specialization of its meaning, relative precision and unambiguity in comparison with words of wide use are common for terminological vocabulary. Such vocabulary can be more or less understandable to untrained communicators, can be narrowly specialized for a particular field of knowledge or be interdisciplinary.

The study of the sociolinguistic nature of a term helps to understand the nature and peculiarities of the functioning of terminological vocabulary in different languages. Borrowings from other languages are a widespread way to introduce new terms into the vocabulary. They are a part of the historical process of mastering the culture of other nations, their technical and scientific achievements.

The common features in the terminological system of English and Italian are appropriate to consider in diachronic dynamics. Deep roots in Latin, subsequent linguistic and cultural influences have led to the presence of similar analogous terms, despite significant phonetic and grammatical differences.

Historical events dating from the 1st century BC to the 5th century AD set the stage for the fundamental influence of Latin on modern English and Italian. The Roman settlements that arose as a result of the exploration of new territories, both on the Apennine Peninsula and beyond, brought their own customs, traditions and language.

In turn, colloquial Latin as early as the 2nd century BC readily accepted Greek borrowings, which is not the case with literary archaic Latin, which preferred to adhere to a high style.

After the fall of the Roman Empire, the spoken Latin language long remained dominant over the languages of the local population and barbarian conquerors in the former territories of the empire.

Colloquial and literary Latin did not follow parallel paths. The language of everyday communication merged into the local ones and became an important factor in their development. Literary Latin remained a language of religious and scientific knowledge, although it was phonetically influenced by the recipient languages.

Latin received a powerful impetus to spread during the Renaissance, when it became necessary to refer to the humanistic traditions of antiquity and, consequently, to classical scientific and literary works. A phenomenal result for a language that had no people speaking it, given the fact that even today Latin continues to be the most significant source of international terminological vocabulary,

Arrived in Britain in 1066 with the Norman conquerors, the French language left a deep mark in the history of the English language, remaining dominant for almost 300 years. "If one language is endowed with prestige, the bilingual is likely to use what are identifiable loanwords from it as a means of displaying the social status which its knowledge symbolizes" [4, p. 59–60].

Later on, new words came into English as a result of interaction with the language communities of the colonies of the British Empire, starting from the 17th century. Linguistic contact with the languages of the Americas, Asia, Africa and Oceania brought into English mostly words naming objects and phenomena that have no analogues in English, for example, *guarana*, *coconut*, *bamboo*, *pyjamas*.

The colonial and post-colonial periods in the history of the English language were not distinguished by an abundance of borrowed terms. English colonists, as representatives of an economically more developed society, historically possessing a superior baggage of cultural and material values, as well as scientific knowledge, influenced the socio-cultural development of the colonies, introducing their historical experience and value systems. In spite of the many countries influenced by Great Britain, scientific terminology was in most cases based on European languages.

When nations are at different points of development within the same historical plane, the influx of borrowed words is often influenced by those societies that are more actively developing. They bring in terms that serve the most advanced areas of society. In the post-colonial development of many countries, English continues to be actively used. "The process of decolonization mostly did not weaken English, perhaps surprisingly. Rather than removing English from the local linguistic scene, as a sign of former oppression and foreign dominance, in very many young postcolonial nations its role even became strengthened" [10, p. 45].

Italian is a direct descendant of Latin, so its vocabulary is rich in terms rooted in Latin. For example, *induzione, generatore, piramide, iniezione, bacillo*. Before the unification in 1861, there were separate states on the territory of Italy, the language of which "...distanced from their Latin roots, depending on the geographical location was intensely influenced by French, Spanish, Arabic or German languages" [11, p. 209]. For example, the words *tariffa, algoritmo, cifra, zero* came from Arabic, *maggioranza, concorrenza, costituzione, conto corrente, esportare* – from French, *embargo* – from Spanish.

Some scientific terms were formed by giving new meaning to already existing common words. For example, the formalization of the meaning of the word "model" in scientific and engineering disciplines occurred in the 19th century with the development of mathematical models and theories. The concept of "atom" as an indivisible particle, used in antiquity, received its scientific understanding in the 20th century with the development of atomic and nuclear physics. The term "ecosystem" began to be actively used in a scientific context in the middle of the 20th century, when ecology became a separate scientific discipline.

Noteworthy are borrowed words that have been creatively reinterpreted by the recipient language and exported, in turn, to other languages. An example of such a transformation is the word "marketing". Historically, the Latin word "mercatus" was borrowed into French "marchiet" and from there came into English "market". As a result of creative reinterpretation, the word "marketing" is part of the modern dictionary of English international economic terms.

At the end of the 20th century, the spread of English language has significantly increased: from 700 million speakers in the eighties of the 20th century to 2.3 billion [12, p. 115]. Modern English is a tool linking different societies in an increasingly connected world.

The deepening of globalization processes, accompanied by the accelerated development of computer-mediated multimodal communication technologies, requires a lingua franca, which English has become. Such countries as the United States, Great Britain, Canada, Australia and others, where English has the status of an official language, are important economic powers and have contributed in no small measure to the fact that English has become the main language of international communication. The borrowings it offers are not associated with a single native speaker, but with a whole

group of peoples who give the language new words. The representatives of these nations are not only numerous, but they are also the lawmakers in the vast majority of scientific fields, the holders of the most advanced scientific knowledge and technologies.

A combination of historical, socio-cultural and economic factors has led to the dominant position of English in modern international communication and its position as the primary donor of new terms.

Intense technological development in areas such as biotechnology and genomics, quantum technologies, renewable energy, nanotechnology, artificial intelligence, climate change research and sustainable development suggest the creation of new terms.

Borrowed terms often come and become fixed in the recipient language, adapting to its phonetic-grammatical peculiarities. In the example "Il 15 febbraio 2001 furono pubblicati i primi risultati del sequenziamento del genoma umano..." [13] the English term genome is borrowed by the Italian, taking into account the features of Italian noun endings.

One way of adapting new terms is literal translation or calque. For example, the English term STEM cells is translated into Italian as cellule staminali, sustainable development as sviluppo sostenibile, machine learning as apprendimento automatico, greenhouse gases as gas serra, brand loyalty as fedeltà alla marca.

Often a language takes the words of the donor language and adapts them to its phonetic-grammatical system. The following structural types of borrowings seem to be the most common among Italian terminological borrowings:

derivatives – photosynthesis / fotosintesi, painkillers / painkillers, biodiversity / biodiversità, nanoparticles / nanoparticelle;

abbreviations – DNA (deoxyribonucleic acid / acido deossiribonucleico), MRI magnetic resonance imaging / risonanza magnetica, RGB (red, green, blu / rosso, verde e blu), CMYK (cyan, magenta, yellow and key (black) / ciano, magenta, giallo e nero);

collocations – palliative care / cure palliative, genetic engineering / ingegneria genetica, quantum computer / computer quantistico, cross-selling / vendita incrociata, cash flow / flusso di cassa.

Modern English terms may not be translated and remain in their original form in Italian, for example, SMM (social media marketing), e-mail marketing, feedback, B2B (business-to-business), ecommerce. Some are partially translated as B2C (da business al cliente). In example "Scopri come entrare in contatto con nuovi clienti B2B e guidarli con successo all'acquisto" [14] the use of the original English term without modification is observed.

Many terms go beyond strictly professional area and are increasingly used in the common lexicon. This is especially true for vocabulary related to computer technology and socio-political realities, for example, *cookie*, *JPG*, *bar code*, *pixel*, *backup*, *banca dati*, *PDF*. Sometimes borrowings follow fashion or the desire to identify oneself with a prestigious group.

Conclusions. Diachronic comparison of language development makes it possible to observe the course of similar processes in distant languages, states the universality of some aspects of borrowing terminology. At the same time, modern globalization processes, economic and socio-cultural interaction, together with accompanying digitalization and modern methods of computer-mediated communication directly affect the language sphere of the collective.

The study of the dynamics and comparison of the development process of different languages through the linguocultural historical experience of their speakers provides the means for understanding the general trend, finding points of contact and parallel processes that help in practical language acquisition. Such knowledge facilitates learning, understanding the peculiarities of communication with representatives of different language collectives, mastering the skills of communication in highly specialized language communities. Comparative study of the terms of distant languages provides tools for analyzing the model of modern reality, the prospects for the development of terminological systems in a globalized society, the reasons and tendencies for the expansion of special scientific terminological tools.

## **REFERENCES:**

- 1. De Saussure F. Corso di linguistica generale. Introduzione, traduzione e commento di Tullio de Mauro. Bari : Laterza, 2005. 491 p.
  - 2. Migliorini B. Storia della lingua italiana, 12 ed. Milano: Bompiani, 2007. 761 p.
  - 3. De Mauro T. La fabbrica delle parole. Torino: Utet Libreria, 2005. 267 p
  - 4. Weinreich U. Languages in Contact: Findings and Problems. New York: Mouton, 1979, 148 p.
- 5. Durkin P. Borrowed Words: A History of Loanwords in English. Oxford: Oxford University Press, 2014. 512 p.
- 6. Ayers D.M. English Words from Latin and Greek Elements. Tucson: The University of Arizona Press, 1986. 290 p.
- 7. Danner H.G. A Thesaurus of English Word Roots. Lanham, Maryland : Rowman & Littlefield, 2014. 990 p.
- 8. Ayto J. Word Origins: The Hidden Histories of English Words from A to Z. London: A & C Black, 2006. 574 p.
- 9. Manakin V. Language and Cross-Cultural Communication. Kyiv : Academy Press, Alma-Mater, 2012. 285 p.
- 10. Schneider E.W. Postcolonial English: Varieties around the World. Cambridge: Cambridge University Press, 2007. 367 p.
- 11. Lebedieva S. Sociolinguistic features of permeation of Latin origin words into Ukrainian, English, and Italian. *Transcarpathian Philological Studies*, 2022. Vol. 21 (1). P. 206–211.
- 12. Crystal D. The Cambridge Encyclopedia of the English Language. 3rd ed. Cambridge: Cambridge University Press, 2019. 506 p. DOI: 10.1017/9781108528931.
- 13. Fronte M. Salute II sequenziamento del genoma umano, 20 anni fa. *Focus*. 2021 URL: https://www.focus.it/scienza/salute/il-sequenziamento-del-genoma-umano-20-anni-/ (Last accessed: 23.09.2023).
- 14. Giordano V. 10+ Strategie di vendita B2B efficaci. Cdweb B2B Digital Marketing. 2022. URL: https://www.cdweb.it/strategie-di-vendita-b2b/.