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LINGUISTIC AND COMMUNICATIVE FEATURES OF ENGLISH DISCOURSE IN THE FIELD OF INFORMATION TECHNOLOGIES

The article examines the linguistic, pragmatic and sociocommunicative features of English in the technical field of information technology, which is a leader in today's globalised information space. A comprehensive analysis of the linguistic characteristics of English-language IT discourse, which is at the intersection of technical, scientific and business communication, is conducted. Considerable attention is paid to issues of terminology, structural and semantic features of professional texts, as well as communicative and pragmatic strategies that ensure the effectiveness of professional interaction in the digital environment. The article emphasises that IT discourse is a dynamic and hybrid phenomenon that combines the precision and standardisation of scientific and technical style with the adaptability and informality of everyday digital communication. It has been established that one of the key features of IT discourse is a high level of terminological density, reflecting the complexity of technological processes and the need for clear, unambiguous communication of information. At the same time, this discourse actively uses metaphorical models that help explain abstract technical terms using familiar concepts, which facilitates mutual understanding between specialists and users. The main focus is on the influence of the global status of English as the lingua franca of the technological community, which leads to the unification of terminological systems, the standardisation of professional communication and the facilitation of international knowledge exchange. The author emphasises that contemporary IT discourse goes beyond traditional linguistic analysis, as it also includes cognitive, social, and cultural dimensions that shape a new digital linguistic consciousness. It is concluded that research into the interaction between language, technology and communication is extremely important for understanding the transformations of the modern professional environment. Further research could look at the evolution of IT terminology, uncover the neurocognitive mechanisms of digital communication, and determine the role of the English language in shaping the new professional identity of people in the digital age.

Key words: English-language IT discourse, communicative features, linguistic characteristics, professional communication, information technology terminology.

Statement of the problem. The current information society is not only characterised by the fast technological progress but also by the development of a new linguistic environment in which English has become the central global tool of professional and intercultural communication. In the context of digitalisation and technological integration, the English language has become not only a means of knowledge transmission but also the main factor in the formation of the professional identity of IT specialists.

The emergence and rapid development of a special type of professional communication – an English IT discourse – determines the need for its

philological understanding, identifying its linguistic and communication features, as well as analysing cognitive and socio-cultural factors influencing its formation.

The relevance of this topic is determined by the fact that English in the field of IT is no longer just a “technical code” – it has become a dynamic system reflecting professional culture, innovative processes, and global trends of the digital age. The specificity of the IT discourse is manifested in the close interaction between language, thought, and human technological activity, where each element of terminology, metaphors, and syntax carries not only informational but also cognitive load.

In this connection, the study of the linguistic and communicative features of the IT discourse helps not only to deepen the understanding of the professional language but also to discover the patterns of the development of modern English as a language of science, technology, and innovation.

Analysis of recent research and publications.

The extent of research on this issue has attracted a lot of attention not only of foreign but also of local researchers. The works of J. Swales, M. Halliday, T. van Dijk, and N. Fairclough are the main sources for the analysis of professional and scientific discourse from the viewpoint of pragmatics and sociolinguistics.[3] The special contribution to the linguistic research of information technologies made the works of S. Gaines, C. Baker, L. Bowen, and co-authors who consider the specification of the technical terminology, the cognitive models in the digital environment, and the processes of metaphorizing in the language of technologies.

The question of professional and scientific-technological discourse in the works of E. Kubryakova, T. Dobrosklonskaya, M. Kozhina, M. Krysina, where the cognitive and functional parameters of professional communication, characteristics of the translation and functioning of terms in different branches of knowledge are analyzed, has been in the focus of domestic linguistics.

Despite the ample scientific material available, a systematic study of the English IT discourse as a self-contained phenomenon at the intersection of linguistics, cognitology, and sociocommunication is still insufficiently developed. Existing works primarily describe the terminological or structural-semantic side, while the discursive and pragmatic characteristics that reflect the specificity of professional interaction in the IT environment are only fragmentarily studied. In particular, the relationship between linguistic means, digital communication formats (forums, chats, corporate platforms, documentation, API interfaces), and cultural codes of the professional community is given little attention.

Moreover, the present situation related to globalization, the expansion of the English-speaking digital space, and the active implementation of artificial intelligence, raises the question of new forms of professional discourse. Today, communication in the field of IT is acquiring the features of multimodality and interactivity, which necessitates a revision of traditional philological approaches and the development of new methods of professional language analysis.

Therefore, the study of linguistic and communicative aspects of the English IT discourse is timely and

scientifically significant. It helps to clarify the conceptual apparatus of professional linguistics, deepen the understanding of the role of English in the formation of digital culture, and promote the development of interdisciplinary connections between philology, cognitive sciences, and information technology.

Task statement. The article's goal is to identify and systematically describe the main linguistics and communication features of the English discourse in the domain of information technologies and to determine the factors influencing its formation and operation.

In order to achieve the goal, the following tasks are set:

1. Analyse structural-semantic features of English IT discourse;
2. Describe the terminological system and cognitive models underlying the technological vocabulary;
3. Identify pragmatic and communicative strategies used in the professional communication of IT specialists;
4. Examine the role of metaphor, cliché and collocations in the formation of semantic relations in IT discourse;
5. Reveal the impact of globalisation and digital technologies on the development of professional English communication.

Outline of the main material of the study. Modern English in the field of information technology is a dynamic system that reflects the complex interrelation between language, thought, and the technological development of society. Its linguistic specifics are influenced by numerous factors: the professional orientation, the requirement of accuracy and brevity of the statement, the intercultural nature of communication, as well as the influence of digital communication forms, such as online documentation, program interfaces, and technical forums.

One of the main features of the IT discourse is the elaborated and constantly updated terminological system. The IT terminology is characterised by a high density of borrowings, metaphoricity, and a trend towards nominative economy. A major part of the vocabulary is borrowed from English without translation by other languages, which emphasises the dominant position of English as a global language of technology (*e.g.: server, firewall, cloud, framework, token, script*).

There are active processes of term-formation within the English system itself: affixation (*reboot, upload, download, encrypt*), compounding (*database, smartphone, blockchain*), abbreviation (*CPU, AI, UI/UX, API*), as well as semantic reinterpretation of

common words (*mouse, bug, crash, root*). This process illustrates the high degree of cognitive adaptability of the English language which is capable of very fast mastering of new concepts and creating linguistic markers to designate technological realities.

The metaphoric potential of the IT-vocabulary is a matter that deserves special attention. Most of the terms are of a metaphoric origin, which reflects the transfer of concepts from the physical or social world into the virtual one. For instance, words like *virus, firewall, cookie, cloud, architecture, traffic* were on the whole related to biology, construction, or physics, but they have been rethought and have become a part of the digital worldview. Such metaphors do not only make the understanding of complex technical processes easier, but also they help in cognitive categorisation of the new reality.

As for the structural and syntactic features, the syntax of IT discourse is focused on the task of maximum accuracy and saving of speech means. In technical texts, instructions, and documentation, simple and compound sentences dominate, and ambiguous and emotionally colored expressions are avoided. Typical are short, concise sentences with neutral modality.

The description of the procedures and algorithms significantly involves the use of infinitive and imperative constructions, as well as the passive voice (*"The system is initialised automatically"*). The latter one ensures objectivity and impersonality of the presentation, which is in line with the functional style of technical writing.

Research and investigative texts that are part of the set of IT texts, use, on the contrary, the nominative style typical of academic English: a large number of verbal nouns (implementation, configuration, validation), terminological phrases, and parenthetical constructions, which contribute to the coherence of the argument. At the same time, there is a tendency towards lexico-grammatical standardisation, which facilitates the unification of professional documentation at the international level.

Another characteristic feature is the very high frequency of the complex phrases with the adjectives and nouns in the preposition: *network security protocol, data storage system, machine learning algorithm, cloud-based application*. Such structural compression reflects the specificity of English analytical grammar and meets the requirements of accuracy in professional communication.

IT-discourse semantics is subordinated to the principles of conceptual accuracy and technological relevance. The meanings of the terms in this field are of a context-dependent nature: the word *port* may stand

for a *hardware connector, a network channel, or a process of transferring a program to another platform*. Therefore, polysemy in the IT discourse is not a sign of vagueness – on the contrary, it reflects the multilayeredness of the technological processes.

A great deal of importance is placed on semantic compression – the ability to convey a large volume of information with minimal means. For instance, abbreviations (RAM, LAN, GPU, JSON) become carriers of entire conceptual blocks. This is the cognitive saving of the language of technology, where each element carries a clear functional load.

From the point of view of pragmatics, the IT discourse shows a focus on the following features: efficiency, cooperation, and mutual understanding. A special speech culture is formed in professional communities, where clarity, politeness, and competence are valued. Here language is not only a means of conveying information but also a tool for forming a professional reputation.

It's of great importance to describe the metaphoricisation, which plays a central role in the semantic space formation of IT-discourse. According to the classification of J. Lakoff and M. Johnson, technological metaphors can be referred to the category of conceptual ones, since they form a holistic system of representations of the digital world. For example, the metaphor *THE COMPUTER AS A HUMAN* is noticeable in the expressions *the computer understands, recognizes, decides*, and the metaphor *THE INTERNET AS A SPACE* – in the lexemes *website, homepage, navigation, address, domain* [2].

Not only do metaphors facilitate the comprehension of abstract processes, but also create cognitive scenarios through which a person perceives digital reality. In this sense, the language of IT is not just reflecting, but constructing the technological picture of the world.

An additional significant feature is the worldwide nature of English-language IT discourse. One of its functions is that of a lingua franca in such areas as international projects, documentation, and professional communities. Consequently, there is a standardisation of terminology and grammatical structures as well as the creation of a single communication style that is understandable to people from different cultures.

Nevertheless, the transition to the global usage of English is accompanied by the phenomenon of semantic hybridisation when English elements merge with various national languages. This can be observed in borrowings, calques, and mixed codes of communication, e.g., in the Ukrainian IT-discourse: *debug*,

update, log in, feedback, task. In this way, English IT discourse becomes a model of linguistic influence and a means of cultural integration.

IT communication is a part of a worldwide and intercultural communication area, while English is the common language that links professionals from different linguistic and cultural backgrounds. This worldwide aspect has an effect on the use of language: the users of the language emphasise the features of the language such as clarity, neutrality, and politeness in order to avoid cross-cultural misunderstanding.

Moreover, the impact of English varieties used by non-native speakers leads to lexical borrowings, syntactic simplifications, and pragmatic changes that become the discourse new forms of linguistic diversity. This phenomenon is consistent with the major trend of English as a Global Language (EGL), where mutual intelligibility and efficiency are more important than native-like accuracy.

Therefore, English IT communication can be considered as a transnational communicative ecosystem that has the features of inclusivity, adaptability, and pragmatic tolerance. It is a model, on one hand, of worldwide technological and linguistic interaction integration and, on the other hand, a means for this integration to be global.

The investigation of linguistic aspects reveals that English IT discourse is highly innovative from a lexical and morphological standpoint. The terminology of the domain is very lively, and it keeps on growing in the number of its items by ceasing to borrow, compound, derive, and blend. Formations

and abbreviations like *cybersecurity*, *blockchain*, *cloud computing*, *AI*, *UX*, or *API* are the ones that best reflect the English language's adaptability, which is the one to describe the latest technological realities. This is in line with the metaphorical source of the majority of the IT terms – *firewall*, *bug*, *window*, *virus* – which is the cognitive continuum between the everyday and technical language. By the help of a metaphor, man experience is brought into the technological world thus very abstract digital concepts become more understandable and more familiar.

Morphologically the technology-related speech is a model of the English word-formation systems which are productive and economical. The word-formation processes of conversion (*to email*, *to text*, *to update*) and abbreviation are not merely linguistic economy but also communicative speed – very important in technologically high-paced environments. Such patterns confirm English as a language of innovation and operational clarity.

Conclusions. To conclude, English IT discourse is a landmark in the development of specialised communication which combines linguistic accuracy, technological mediation, and worldwide openness. It is, in fact, one of the means of professional communication, an intercultural exchange medium, and a mirror of human adaptation to the digitalised world. Ongoing research into this discourse is crucial to grasp more fully the role of language in technological advancement, digital learning, and cross-cultural communication in the 21st century.

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Ковальова К.О., Лесневська К.В., Швелідзе Л.Д. ЛІНГВІСТИЧНІ ТА КОМУНІКАТИВНІ ОСОБЛИВОСТІ АНГЛОМОВНОГО ДИСКУРСУ В СФЕРІ ІНФОРМАЦІЙНИХ ТЕХНОЛОГІЙ

У статті досліджуються мовні, прагматичні та соціокомунікативні особливості англійської мови в технічній сфері інформаційних технологій, яка є лідером у сучасному глобалізованому інформаційному просторі. Проведено комплексний аналіз лінгвістичних характеристик англійського ІТ-дискурсу, який є перехрестям технічної, наукової та ділової комунікації. Значна увага приділяється питанням терміноутворення, структурно-семантичним особливостям професійних текстів, а також комунікативним і прагматичним стратегіям, що забезпечують ефективність професійної взаємодії в цифровому середовищі. У статті підкреслюється, що ІТ-дискурс є динамічним і гібридним

явищем, що поєднує точність і стандартизацію науково-технічного стилю з адаптивністю та неформальністю повсякденного цифрового спілкування. Встановлено, що однією з ключових особливостей ІТ-дискурсу є високий рівень термінологічної цільності, що відображає складність технологічних процесів і необхідність чіткої, однозначної передачі інформації. Водночас у цьому дискурсі активно використовуються метафоричні моделі, які допомагають пояснити абстрактні технічні терміни за допомогою знайомих понять, що полегшує взаєморозуміння між фахівцями та користувачами. Основна увага приділяється впливу глобального статусу англійської мови як лінгва франка технологічної спільноти, що призводить до уніфікації термінологічних систем, стандартизації професійного спілкування та полегшення міжнародного обміну знаннями. Автор підкреслює, що сучасний ІТ-дискурс виходить за межі традиційного мовного аналізу, оскільки він також включає когнітивні, соціальні та культурні виміри, що формують нову цифрову мовну свідомість. Зроблено висновок, що дослідження взаємодії між мовою, технологіями та комунікацією є надзвичайно важливим для розуміння трансформацій сучасного професійного середовища. Подальші наукові дослідження можуть розглянути вивчення еволюції ІТ-термінології, розкриття нейрокогнітивних механізмів цифрової комунікації та визначення ролі англійської мови у формуванні нової професійної ідентичності людини цифрової епохи.

Ключові слова: англomовний ІТ-дискурс, комунікативні особливості, лінгвістичні характеристики, професійне спілкування, термінологія інформаційних технологій.