

LINGUISTIC ASPECTS OF INFORMATION TERMS IN ENGLISH AND UZBEK

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Abstract: This paper explores the linguistic aspects of information-related terminology in English and Uzbek, analyzing their lexical, morphological, syntactic, and semantic characteristics. English, a Germanic language, predominantly derives its information terms from Latin and Greek, while Uzbek, a Turkic language, incorporates native, Arabic, Persian, and Russian borrowings. Morphologically, English employs affixation and compounding, whereas Uzbek relies on agglutination and suffixation. Syntactically, English prefers analytical structures with prepositions, while Uzbek uses postpositions and suffixes to convey similar meanings. Semantically, English differentiates between *data*, *information*, and *knowledge*, while Uzbek primarily uses *axborot* and *ma'lumot*. This comparative analysis highlights structural and conceptual differences, contributing to a better understanding of cross-linguistic communication in the digital era.

Key Words: Information terminology, English, Uzbek, lexical analysis, morphology, syntax, semantics, agglutination, cross-linguistic communication.

Annotatsiya: Ushbu maqolada ingliz va o'zbek tillarida axborot bilan bog'liq terminologiyaning lingvistik jihatlari o'rganilib, ularning leksik, morfologik, sintaktik va semantik xususiyatlari tahlil qilinadi. Ingliz tili, german tili, asosan, o'z ma'lumot atamalarini lotin va yunon tillaridan oladi, o'zbek, turkiy til esa mahalliy, Arab, fors va rus qarzlarini o'z ichiga oladi. Morfologik jihatdan ingliz tili affiksatsiya va iboradan foydalanadi, o'zbek tili esa aglutinatsiya va qo'shimchaga tayanadi. Sintaktik jihatdan ingliz tili predlogli analitik konstruktsiyalarni afzal ko'radi, o'zbek tili esa o'xshash ma'nolarni etkazish uchun postpozitsiyalar va qo'shimchalardan foydalanadi. Semantik jihatdan ingliz tili ma'lumotlar, ma'lumotlar va bilimlarni ajratib turadi, o'zbek tili esa asosan tez aylanish va ma'lumotdan foydalanadi. Ushbu qiyosiy tahlil raqamli asrda tillararo aloqani yaxshiroq tushunishga yordam beradigan tarkibiy va kontseptual farqlarni ochib beradi.

Kalit so'zlar: axborot terminologiyasi, ingliz tili, o'zbek tili, leksik tahlil, morfologiya, sintaksis, semantika, aglutinatsiya, tillararo aloqa.

Introduction

Information plays a crucial role in human communication, knowledge dissemination, and technological advancements. The way different languages conceptualize and structure information-related terms reflects their unique linguistic and cultural perspectives. English, a Germanic language, and Uzbek, a Turkic language, belong to distinct language families, which influence their lexical, morphological, and syntactic structures in significant ways.

In English, most information-related terms are derived from Latin and Greek, while Uzbek incorporates a mix of native Turkic words and borrowings from Arabic, Persian, and Russian. The structural differences between these languages affect how information is expressed, categorized, and utilized in communication. English primarily relies on analytical structures, compounding, and affixation, whereas Uzbek follows an agglutinative pattern with extensive suffixation.

This study aims to compare and contrast the linguistic features of information-related terminology in English and Uzbek. By examining their lexical, morphological, syntactic, and semantic aspects, the paper sheds light on the structural and conceptual differences between the two languages. Understanding these distinctions is essential for effective translation, cross-linguistic research, and the development of multilingual information systems in an increasingly digitalized world.

The first company in Uzbekistan that provided email services was created in 1992. Already in 1994, the first Internet providers appeared in Uzbekistan, which provided the entire range of Internet services, including the World Wide Web, and citizens of our country had the opportunity not only to visit foreign sites, but also to create their own Internet resources. On April 29, 1995, the national domain “sch” was registered and a domain appeared on the Internet map that directly relates to our independent state. Over the past decades, the “computer gap” characteristic of the CIS countries has been rapidly overcome [1].

Computerization and “internalization”, in addition to extralinguistic ones, have significant linguistic aspects. These include: the specifics of the process of borrowing computer vocabulary and Internet vocabulary; methods of entering lexemes and component nominations of a given layer of vocabulary into oral and written texts; differentiation of general and terminological vocabulary of a given layer of borrowings; problems of translation and adaptation of English Internet vocabulary; the formation of appropriate terminology and specific slang, characteristic primarily of the younger generation.

Literature review

To date, serious research has been carried out in Russia and Uzbekistan on the problems of the formation, development and functioning of Internet terms works by O.V. Voron, L.K. Kondratyukov, V.A. Khomyakov, P.V. Likholtov, M.S. Shumailova, V.A. Sudotseva, O. Kaushina, R. Danierova, Ch. Makhkamova, etc.

However, there is no comparison of Internet terminological subsystems in English and Uzbek in the linguistic literature.

In the field of computer vocabulary, a distinction is made between the terminological component, which is subject to codification and mandatory lexicographic description, and the colloquial component, which, like all layers of colloquial speech, is characterized by ease, situationally, spontaneity, a certain automatism, and at the same time a focus on expression.

B.T. Umarov noted that “in the linguistic system we have a certain social value, something uniform and universally binding for all members of a given social group. But, like society, language is in constant flux” [2]. This is clearly confirmed by the latest wave of borrowings in the Uzbek language in terms of English Internet vocabulary.

Results and Discussion

“Borrowing is an element of a foreign language (word, morpheme, syntactic construction, etc.), transferred from one language to another as a result of linguistic contacts, as well as the very process of transition of elements of one language to another... Borrowings adapt to the system of the borrowing language and often they are so absorbed that the foreign origin of such words is not felt by native speakers of this language and is discovered only with the help of etymological analysis. These are, for example, the old Turkisms in language: “bashmak”, “vataga”, “Cossack”. Unlike fully acquired borrowings, the so-called foreign words retain traces of their foreign origin in the form of sound, spelling, grammatical and semantic features that are alien to the original words. Foreign words relate mainly to special branches of knowledge or production (for example, “hippology” - the science of horses). Sometimes they denote concepts characteristic of foreign peoples or countries (ethnographies, regionalisms, exoticisms). Words of this kind are usually interpreted in special dictionaries of foreign words, some of them are included in general dictionaries. At the first stages, borrowed words of a foreign language can be used in texts borrowing language as foreign inclusions, preserving their foreign appearance, and if they (usually as a manifestation of fashion) receive more or less regular use, then they are called barbarisms” [3]. The above quote, focused on the usual, “classical” type of borrowing, convincingly shows how unusual the process of borrowing Internet vocabulary was. Strictly speaking, it is impossible to equate computer vocabulary with Internet vocabulary. However, communication via the Internet is carried out primarily with the help of computers, currently it is a single system, therefore, as working terms, we use both of the above phrases as equivalent.

As a result of socio-economic transformations in the CIS countries in the last decades of the twentieth century, a new powerful wave of borrowings from English manifested itself in the so-called “terminological explosion” (definition by L.B. Tkacheva). It was at this time that Internet terminology developed at an unprecedented pace, when the main composition of this terminological system was formed. However, this is characteristic not only of Internet vocabulary, but

also of the entire array of borrowings since the late 80s. XX century “During the period of socioeconomic reforms, the relationship between original and borrowed vocabulary becomes a subject of keen interest not only for linguists, but also for the entire population; it is natural that the processes of borrowing are studied especially actively, often from different positions, with different evaluative attitudes than before” [4]. It has now become indisputable that the vocabulary in question, together with the vocabulary of the Internet, represents a special, relatively closed subsystem

The conditions for borrowing all these layers of vocabulary in the era of change and breaking all stereotypes of consciousness, economics, education, and everyday life were the same, but the borrowing and assimilation of computer vocabulary (Internet vocabulary) differs in significant features. This is, first of all, the formation, along with terminological vocabulary, of a kind of computer slang, partly borrowed from the English language, partly formed in the recipient language. The boom of English borrowings in Uzbek language requires both theoretical understanding and active lexicographic normalization [5].

Information is a fundamental concept in human communication, and its linguistic representation varies across languages. English and Uzbek, belonging to different language families—Germanic and Turkic, respectively—exhibit unique linguistic features in their information-related terminology. This paper explores the linguistic aspects of information terms in English and Uzbek, focusing on their lexical, morphological, and syntactic characteristics.

Lexical Analysis

In English, information-related terms are largely derived from Latin and Greek origins, such as *information*, *data*, *knowledge*, *communication*, and *technology*. Uzbek, on the other hand, incorporates native Turkic words alongside borrowed terms from Arabic, Persian, and Russian. Common Uzbek equivalents include *ma'lumot* (information), *bilim* (knowledge), *axborot* (news, data), and *texnologiya* (technology).

Morphological Features

English primarily uses affixation and compounding to form new information-related terms. For example:

- *Inform* → *Information* (derivation)
- *Cyber* + *security* → *Cybersecurity* (compounding)
- Uzbek morphology relies on suffixation and agglutination:
- *Bil* (know) → *Bilim* (knowledge) → *Bilimdon* (knowledgeable)
- *Axborot* (information) → *Axborotnoma* (informational bulletin)
- **Syntactic Patterns**
- English prefers analytical structures with prepositions, such as:
- *Access to information*
- *Processing of data*

Uzbek, being an agglutinative language, expresses similar meanings through suffixes and postpositions:

- *Ma'lumotga kirish* (lit. "to information entry")
- *Ma'lumotni qayta ishlash* (lit. "data processing")

Semantic and Pragmatic Considerations

The concept of *information* in Uzbek encompasses both *axborot* (structured data, news) and *ma'lumot* (general knowledge, facts). English uses *information* broadly, while differentiating *data* (raw facts) and *knowledge* (processed information). The pragmatic use of information terms also varies, with Uzbek favoring formal and honorific expressions in official communication.

Despite sharing common technological influences, English and Uzbek differ in their linguistic representation of information terms. English relies on analytical and compounding structures, while Uzbek follows agglutinative patterns with rich suffixation. Understanding these differences enhances cross-linguistic communication and translation in the digital age.

The dictionaries "English-Uzbek Dictionary of Abbreviations of Telecommunications Terms" and "English -Uzbek Explanatory Dictionary of Terms for Operating Information Technology Systems" published in Uzbekistan reflect the richness of the new terminological layer of the Uzbek languages, as well as certain difficulties in the formation of new terms. The second of these dictionaries contains more than 2000 lexemes and compound nominations related to computer vocabulary. This is a very significant number, considering that the vocabulary of a regular newspaper is approximately 5,000 words. Nevertheless, lexicographic developments on Internet vocabulary are clearly not enough.

Of course, not all Internet users master the entire wealth of the new subsystem of vocabulary in the Uzbek languages, but the very fact of borrowing and assimilating such a huge lexical layer over the course of approximately one decade has no analogues in the history of language contacts.

In the practice of using computer vocabulary, certain mixtures of languages are observed, and in such manifestations that have not been noted before: the use in one text for example, journalistic of both assimilated and non-assimilated lexemes in written or oral form. For example: "Dad does not part with his laptop, filling the space on all sorts of fronts - from the banal ICQ to Skype" [6].

In relation to unassimilated lexemes, the traditional term "barbarisms" is applicable, however, from our point of view, it is more appropriate to call them English inclusions. Despite the fact that the lexemes of this layer of borrowings entered the Uzbek languages quite recently, the formation of certain paradigms is observed, for example, laptop - laptop - portable computer.

In the process of borrowing a foreign language lexeme, significant transformations of the semantic structure can occur in comparison with the donor language. An interesting example of this process is the lexeme *hacker* in Uzbek languages. Its first meaning in these languages was "computer pirate, hacker - computer hacker". In English, this word is polysemantic; 9 meanings are recorded:

- 1) practical programmer;

- 2) a person who knows how to write non-trivial programs;
- 3) a programmer who can work very quickly;
- 4) a passionate system engineer;
- 5) a specialist in a specific system;
- 6) an expert in any field;
- 7) a person who likes to act bypassing any rules and restrictions;
- 8) computer hacker; 9) a keen programmer.

Thus, only the 7th and 8th meanings of this lexeme in English have negative connotations, and in the Uzbek languages this lexeme is acquired in a narrow, special, and clearly pejorative meaning, however, in youth jargon a positive use of this lexeme is possible : "Well, you're a real hacker" meaning "a passionate or skilled programmer" [7].

The terminological component of the Internet vocabulary is its most essential, semantically defined, "strict" part. Based on the functional principle, the following groups of Internet terms are distinguished:

The content of these sections is the same for all languages, but its linguistic support varies significantly, especially in languages of different systems, such as the Uzbek language. It is the subject of a separate linguistic study, as is the study of computer slang, the study of which is relevant not only in the linguistic itself, but also in the sociolinguistic aspect. Thus, the vocabulary of the Internet is not only a factor in significant changes in the entire modern civilization, but also a testing ground for testing existing linguistic concepts and forming new ones.

Within the framework of this study, the question of the relationship between the sublanguage of science and technology and the general literary language seems important. The sublanguage of science and technology arises and develops on the basis of the national common literary language. The relationship between the sublanguage of science and technology and the general literary language is usually considered as a relationship between a system and a subsystem i.e. as the relationship between the literary language and its functional variety - the sublanguage of science and technology [8].

Terms constitute the most regulated part of the vocabulary of a language, in a certain sense the most artificial, deliberately created and providing for regulation.

Internet terminology - the most significant, informative, codified part of the sublanguage of computer science and computer technology - has historically developed and developed precisely as a semantic variety of the sublanguage of computer science based on its terminology. At the same time, the Internet acquired its own individuality, becoming part of a single information structure, as a result of which some terminology experts involved in the sublanguage of information science and computer technology began to talk about the emergence of Internet terminology within this sublanguage [9].

As for the most key lexeme for this terminology system, the Internet, the English spelling of this word has been replaced by the Cyrillic spelling. In oral

speech, this word is more often used as a declension: Internet, Internet, etc., which indicates its complete assimilation by the Uzbek language and the peculiar duality of this lexeme: it is not only a term, but also words with meaning; LAN-Local Area Network - administration architecture - is a commonly used, and high-frequency, word. In Uzbek publications, the spelling of this word in Cyrillic also predominates.

Here are examples of the specifics of transferring Internet terms in the Uzbek language:

WWW (literally: “a web stretched throughout the world”) – to’r, o’rgimchak to’ri, umumjahon computer tarmog’i; butun jahon bo’yicha tarqalgan va telefon hamda optik tolali liniyalar, har qanday axborotni o’zaro al-masha oladigan katta miqdordagi computerlar majmui;

E-mail (Electronic mail) - electron quti;

E-mail address - electron quti manzili;

E-mail password - local tarmoqlari;

Virus - viruslar;

Firewall – qo’riqlash tizimi;

Virus searching programm - viruslarni izlovchi dastur;

Virus scanning - viruslarni tasvirga olish;

Virus diagnostics - viruslarni aniqlash;

Antivirus programs - antivirus dasturlari; Trojan Horse Virus - Trojan oti virusi; printable page - bosib chiqariladigan varoq.

Many English lexemes are included in the Uzbek language as direct borrowings, undergoing only phonetic and graphic assimilation:

L.P. Krysin calls non-assimilated lexical units, or barbarisms, barbarisms the initial stage of borrowing [10]. However, as a result of the latest wave of borrowings, this initial stage seems to be omitted; the lexeme is assimilated extremely quickly, and very often in the unassimilated form of web, www, Windows, Excel, Pentium, etc. The partially mastered borrowed word web is found quite often in the literature, but at this stage we find it difficult to say which spelling will be fixed in the language, since at this time both variants occur equally regularly. In general, it should be noted that the processes of mixing languages are currently extremely active, both in oral communication and in written form.

Conclusions

Of great interest are peculiar addition models in which the first component is an English graphic abbreviation, and the second is one of the borrowed and fully assimilated foreign language lexemes, for example: IP address, RTF file, HTML format, e-mail address. If the processes of computerization and the introduction of the Internet for most countries occurred in principle the same way, then in the linguistic aspect the assimilation of this vocabulary proceeded in accordance with the typological features of the given language. On the other hand, since the source of borrowing was the English language, a language of

predominantly analytical structure, then with a high degree of probability it is possible to predict the growth of the phenomena of analyticism in the Uzbek language.

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