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STRUCTURAL FEATURES OF COMPUTER SOFTWARE TERMS IN ENGLISH LINGUISTICS

INGLIZ TILSHUNOSLIGIDA KOMPYUTER DASTURIY TA'MINOT ATAMALARINING TUZILISH XUSUSIYATLARI

ОСОБЕННОСТИ СТРУКТУРЫ ТЕРМИНОВ КОМПЬЮТЕРНОГО ПРОГРАММНОГО ОБЕСПЕЧЕНИЯ НА АНГЛИЙСКОМ ЯЗЫКЕ

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Abstract

This article is about computer software terms in English and Uzbek, their origin, and their use. In modern English linguistics, technological terms are widely studied and large and serious research has been conducted on this theme. However, great deals of new terms are emerging in computer science every day. The terminology itself is considered one of the youngest sciences. It is enriching with the help of combining two or more words to create a new term, adding new meaning to a term or word, and acquiring new words from other foreign languages.

Annotatsiya

Ushbu maqolada ingliz tilida kompyuter dasturlari atamalari, ularning kelib chiqishi va qo'llanilishi haqida so'z boradi. Hozirgi ingliz tilshunosligida texnologik atamalar keng o'rganilib, bu mavzuda katta va jiddiy izlanishlar olib borildi. Biroq, har kuni kompyuter fanida juda ko'p yangi atamalar paydo bo'ladi. Terminologiyaning o'zi eng yosh fanlardan biri hisoblanadi. U ikki yoki undan ko'p so'zlarni qo'shib yangi termin hosil qilish, so'z yoki terminga yangi ma'no qo'shish, boshqa tillardan yangi so'zlar o'zlashtirish yo'llari bilan boyib bormoqda.

Аннотация

Эта статья посвящена терминам компьютерного программного обеспечения на английском языке, их происхождению и употреблению. В современном английском языкознании технологические термины широко изучаются и по этой теме проведены большие и серьезные исследования. Однако каждый день в информатике появляется множество новых терминов. Сама терминология считается одной из самых молодых наук. Это обогащение с помощью объединения двух или более слов для создания нового термина, добавления нового значения термину или слову и приобретения новых слов из других иностранных языков.

Key words: *English linguistics, terminology, software terms, word formation, special language, affixation, derivative, compound terms, simple terms, complex terms, abbreviations.*

Kalit so'zlar: *Ingliz tilshunosligi, terminologiya, dasturiy atamalar, so'z yasalishi, maxsus til, affiksatsiya, hosila, qo'shma atamalar, sodda atamalar, murakkab atamalar, qisqartmalar.*

Ключевые слова: *Английском языкознание, терминология, программные термины, словообразование, специальный язык, аффиксация, производные, сложные термины, простые термины, сложные термины, аббревиатуры.*

INTRODUCTION

Nowadays computers seem to be performing all the deeds in our life as they process information and display it almost instantly. However, it does not necessarily mean that computing machines are smart, they can not do anything without step-by-step instructions written especially for them by programmers. These instructions are called programs or software. A person who is new in tech cannot understand most of the acronyms, and jargon that is being used in conversations around him. There are software terms that we hear and use nearly every day without difficulties and terms that make us google frantically every time we hear someone say them. (e.g. 'CTA' or 'CTO') This article is devoted to analyzing the structural features of software terms in English linguistics.

LITERATURE REVIEW

In this study, the structural features of computer software terms in English and Uzbek languages were examined and plenty of literature and materials were analyzed. Terms are believed to have one meaning in one sphere. Contrary to this belief, Justeson and Katz state that terms may have more than one connotation in various fields of knowledge as they can be understood differently. According to Valeontis and Mantzari, terminology has two meanings:

1. It is considered a special field of lexicology, a collection of terms and concepts related to a certain science, technology, and manufacturing area;

2. Branch of linguistics studying terms.

In particular, Aitchison notes special terminology is composed in a particular language when a specific field or science is exceptionally developed. Kizil states that changes in the field of terminology occur as a result of linguistic and extralinguistic elements. Linguistic elements mean alterations in the vocabulary of the language. Extralinguistic factors mean changes in the daily life of humans, and rapid development in the spheres of science, and technology. Extralinguistic elements that affect the progress of computer terminology include the computerization of the world community, the creation of the internet sphere and cyberspace, and also the process of globalization.

DISCUSSION

It is known that any particular branch of human pursuit has its terminology. Terminology is a special field of linguistics that studies specialized terms and their meanings.

Before talking about terminology, let's give definitions to the concepts of terms and words. The term is a word or compound word that is used to name a concept that is completely formal, accepted, and legitimized in a particular sphere. With the aid of terms, people can easily and accurately express the content and implied meaning of the objects. Clarifying the difference between words and terms is a complicated issue. A word is a letter or a collection of letters that have a specific meaning when uttered or written and they can be used in everyday speech. On the other hand, terms are used in specific languages. They may have single words: linguistics, etymology, hardware; or can consist of several words: graphical user interface, central processing unit, and others.

For instance, as it has various meanings, the term drive is equal to different terms in Uzbek: haydamoq(for vehicles), intilish(in psychology), drayver(computer science), zarba(for games played with ball).

The end of the XX century is defined by scientific and technological development. As the consequence, the number of terms in different branches of knowledge increased relatively. As most of the inventions in the field of Information technologies are created in the US, they are typically denominated in English. Computer software terms are one of the most enthralling and least explored spheres from the linguistic view. As we know computer science is considered to be relatively young and it is developing rapidly. As we know a lot of phrases and terms had a different meanings in the past. The term software also expressed "woolen or cotton fabrics" in the late XIX century. However, computer science has gained another coinage from the 1960s and nowadays it is used to express a set of computer programs and is associated with data and documentation. From the morphological view, terms can be simple, complex, compound terms, and abbreviations.

Simple terms consist of one word with or without affixes. For instance, recycle, data, engine, and so on. Simple terms are divided into 2groups:

1. Root terms- the terms that are formed from a single root: child, cousin, uncle(relationship); door, sofa(furniture), fine, punishment, right(juridical)

2. Derivative terms- terms that are formed by adding word formation affixes to root terms: carpentry, criminal, witness, and others.

Compound terms are formed by connecting two or more simple independent terms. According to their structure compound terms are subdivided into 4 types:

1. Proper compound terms consisting of two stems: postman, and output.

2. Compound terms where at least one of the stems has an affix: operating system, video adapter, and others.

3. Compound terms where one of the components is clipped: IP number, h-bag.

Complex terms are made up by joining one simple stem with one or more derivational affixes: programmer, suddenly.

Abbreviations are shortened forms of phrases or words. They may be acronyms, initialisms, contractions or shortenings, or clipped forms.

Initialisms are formed from the first letters of a group of words and each letter is pronounced separately: ASAP, CEO, FAQ, and others.

Acronyms are formed in the same way as initialisms, meaning from the first letters of a group of words. But the utterance is quite different, as we pronounce acronyms as one word: UNICEF, NASA, GIF, and others. If the first letters of the full form are written in capital letters, initialisms, and acronyms are always written with capital letters.

In contractions, some letters of the word are omitted to make the word shorter. In writing contractions, the apostrophe is used. This phenomenon mainly happens with verbs in English: we'll- we will, can't-can not, she'd've-she would have, and so on.

Clipped forms are very common in English and they are formed by omitting one or more syllables of the word without changes to its meaning: doc, lab, temp, etc.

As mentioned above, derivative terms are formed by adding affixes to root terms. The process of affixation can be done in three ways:

1. Prefixation
2. Suffixation
3. Prefical-suffixal

Prefixation is the process of adding prefixes to the beginning of a word to change its meaning or value. For instance, as the prefix, mega means “one million”, a megabyte is equal to eight million bits of data. The most widely used computer prefixes are cyber-, e-, tele, inter-, hyper, re-, de-, and others. (For example, interface, hyperlink, reboot, deselect, e-commerce, reformat, cybersecurity, and so on.)

Suffixation is the way of creating new lexical units by adding suffixes to the end of the word. -less, -full, -s, -ed, and -ing is considered to be the most common suffixes in English. Adding suffixes to basic words can be derivational or inflectional. When the suffix we are adding to a word can change its word class, the process is called **derivational**. For instance, if we add ‘-er’ to the end of the word ‘work’, the verb ‘to work’ changes its class to the noun ‘worker’. Most terms and words are formed in this way. Some examples of computer software terms with derivational suffixes include:

- Analyst (changes the verb *analyze* to a noun)
- Contextual (changes the noun *context* to an adjective)
- Recognition (changes the verb *recognize* to a noun recognition)

If the suffixes change only the word form, not the word class, they are called inflectional suffixes. These suffixes do not create new words. For instance, in words ‘laugh, laughs, laughing and laughed’, -s, -ing, and -ed are the inflectional suffixes. Inflectional suffixes perform the function of indicating grammatical relations such as number, gender, tenses, etc.

- Girl, girls.
- Lion, lioness.
- Talk, talks, talking, talked.
- Large, larger, largest.

We can see from the given samples that inflectional suffixes do not switch word classes or give them entirely new meanings.

According to Lieber, prefixal-suffixal or circumfixes are affixes that are added to the beginning and end of words to create a new lexeme from a base word. Example:

- Enlighten
- Incorrectly
- Excitement
- Impressive and so on.

In this research structural characteristics of software, terms were studied. The sampling method, word formation analysis, and comparative and classification methods were used to analyze them.

As mentioned above compound terms can form from the combination of two or more independent stems. They can be distinguished into two-component compounding and three-component compounding groups. Although they may have two or more components, they are considered to be one lexical unit and have one meaning.

Examples of two-stem computer software compound terms:

Adj+noun- *Open(adj)+office(n)- open office(noun)*

This term has two bases-open and office. The meanings of these stems are:

Open(adj) – (1) not closed or fastened; (2) ready to be used or ready to provide a service;

Office(n) – (1)a room or a part of a building, usually designed for working with computers, and phones sitting at tables. (2) A position of authority in organizations

The combination of two stems creates a new meaning:

OpenOffice is an open-source office suite designed to create and edit presentations, spreadsheets, graphics, databases, and documents. It is a direct competitor to other productivity applications like Microsoft Office.

Noun+noun- *Camel(n)+ case(n)-Camel Case(noun)*

This term has two bases-camel and case. The meaning of these stems are:

Camel(n)- a large animal usually lives in deserts with a long neck and two or more humps on its back;

Case(n)- (1) a particular situation; (2) a matter to be decided by a court; (3) a container or box to keep something in.

The combination of these two bases creates a new meaning:

CamelCase is the use of capital letters in phrases to separate the first word from the second one without using spaces. It is mostly used in web URLs. It is named like this because of the similarity between capital letters and the humps of camels on their back. F.e.: UserName, iPod, BirthDate, and so on.

Three-component:

Adj+n+n-Integrated(adj)+development(n)+environment(n)- Integrated Development Environment(noun).

This term has three components-integrated, development, and environment. The meanings of these stems are:

Integrated(adj)- combining two or more things in order to become more effective.

Development(n)- the process of someone or something becoming more advanced and developed.

Environment(n)- (1) the place (land, water, air) in which people, birds, or animals live; (2) the circumstances or conditions in which someone lives and works that influence how you feel.

These three components together mean:

Integrated Development Environment- is a software suite that developers use to write codes and test them. These development tools include features like syntax highlighting, text editing, controlling versions, and so on.

If you are new to the world of software, you are likely to encounter different acronyms, abbreviations, and initialisms. Software development has many abbreviations and they are being created every day. I tried to analyze some software acronyms. For example:

-S3 stands for Simple Storage System. It is a cloud storage system designed to provide storage space to store and recover any amount of information and data on the internet.

-SERP stands for Search Engine Results Page. Nearly everybody is familiar with the functioning of search engines. As soon as we enter the search query, it returns a results page. Search results can be on one page or continue to hundreds or thousands of entries. The most essential results are always on the first page. The list can go on.

CONCLUSION

Nowadays the English language is developing rapidly and dictionaries are being updated nearly every month. In this article, a detailed analysis of computer software vocabulary is demonstrated. The study also focused on frequently used types of word formation. Software terms are extensively changing from a narrow application to a frequent one. As a result of their structural analysis, we can see that the most productive ways of word formation are compounding, affixation, and abbreviation. Blending and conversion are considered to be less productive methods of word formation for computer software terms.

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