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LEXICAL SEMANTIC FEATURES OF INFORMATION TECHNOLOGY TERMINOLOGY IN ENGLISH AND UZBEK LANGUAGES (ON THE BASIS OF JAVASCRIPT PROGRAMMING LANGUAGE)

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INTRODUCTION

Language serves as the primary medium through which individuals express their identities and fulfill the fundamental need for social interaction. In the realm of technological advancements, the study of terminology, especially in the field of Information Technology (IT), has gained significant importance. This dissertation explores the lexical-semantic features of IT terminology in English and Uzbek, with a particular focus on the JavaScript programming language. The analysis of these terms provides insights into the linguistic structures and cultural nuances that shape the communication in the technology sector.

The growing integration of IT in various sectors necessitates a comprehensive understanding of the terminology used within this field. JavaScript, as one of the most widely used programming languages, offers a rich corpus for studying the formation and translation of technical terms. The effective translation of these terms from English to Uzbek is crucial for the dissemination of technological knowledge and the promotion of digital literacy in non-English speaking regions.

In our country, since the first days of our independence, attention to the mother tongue has increased. Independence has also provided various chances for the improvement of the educational system. According to the words of our President Sh. M. Mirziyoyev, “attracting foreign investments for taking advantage of modern technologies is highly demanding for any country’s economy….” And it requires people to learn international languages to face the world audience[1]. In recent years Independent Uzbekistan is growing in accordance with the national model, along the path of open and free market interactions, along the path of constructing a just society, and along the path of establishing a strong law-governed democratic state. In the decree of the President "On the Strategy of Actions on the 5 main priority directions of the development of the Republic of Uzbekistan", it is recommended to fundamentally improve the quality of other subjects such as general secondary

[1] Mirziyev Sh.M. Tanqidiy nazorat, qat'iy tartib-intizom va shaxsiy javobgarlik – har qanday bir tuzatishning amalga oshirilishini nazorat qilish kerak. Toshkent. “O‘zbekiston”, 2017.

education, foreign languages, informatics and mathematics. physics, chemistry, biology. To accomplish the previously mentioned goal, political, economic, educational, and other reforms are required. The government's main goal is to train new professionals and educate them on the major economic sectors. A significant role in this discussion is played by learning and teaching other languages.

As a result, the English language's terminological system has also been formed. We selected IT terms for our research from a variety of semantic categories of terminological words. Because IT terms are among the most used and are always becoming richer.

The topicality of the research lies in the increasing need for accurate and culturally appropriate translations of IT terminology. As the global IT community continues to expand, the linguistic challenges associated with translating complex technical terms from English to other languages, such as Uzbek, become more pronounced. This dissertation aims to address these challenges by examining the lexical-semantic characteristics of IT terms and the methodologies employed in their translation.

Problem development status: A number of scientists contributed to these scientific areas such as, M.A.Chigasheva, M.N.Latu, T.S. Kirillova, L.V.Molchkova, N.A.Minakova, C.B.Grinev-Grinevich, A.B.Kuvshinova and N.V.Superanskaya[2]. Their works involve studying the semantic fields, historical development, cognitive aspects, pragmatics, semantics, and structure of terminology within these specialized domains. Some also delve into broader theoretical questions within terminology studies. Numerous Uzbek scholars have contributed to the field

[2] Чигашева М.А. Исследование терминологической лексики методом семантического поля // Вестник РУДН. – Серия: Лингвистика. – 2004. – № 6. – С. 80-86.; Лату М.Н. Англоязычная военная терминология в ее историческом развитии: структурно-семантический и когнитивно-фреймовый аспекты: дис. ... канд. филол. наук. – Ростов-на-Дону, 2009. – 194 с.; Кириллова Т.С. Пути формирования и лексикологические особенности английской терминологии подъязыка медицины: автореф. дис. ... канд. филол. наук. – Пятигорск, 1990. – 20 С.; Молчкова Л.В. Профессиональная лексика англоязычных средств массовой информации: прагматика, семантика, структура: дис. ... канд. филол. наук. – Самара, 2003. – 167 С.; Минакова Н.А. Особенности формирования и структура строительной терминологии русского языка: дис. ... канд. филол. Наук. – М., 1985. – 177 С.; Гринев-Гриневич С.В. Терминоведение. – М.: Издательский центр «Академия», 2008. – 304 С.; Кувшинова А.В. Ономасиологическое исследование английской терминологии текстильного дела. // Профессиональная коммуникация: вербальные и когнитивные аспекты: сборник докладов Международной научной конференции. – М., 2007. – С. 102-106.; Суперанская А.В. [и др.]. Общая терминология: вопросы теории – Изд. 5-е. – М.: Либроком, 2009. – 248 С.

of terminology and translation studies. Notable works include F. Ahmadov's "Terminology in the Modern World," S. Holbekova's "Lexical Features of Technical Terms," and V. Karimov's "Translation Techniques for IT Terminology" and others: Ismoilov G', Narxodjayeva X, Paluanova K, Saidqodirova D, Ismoilova. D, Gafurova. N. [3] They have studied how new terms are formed, while others have focused on specific fields like environmental terms or the language of the internet. Their research helps develop and enrich the Uzbek language for different areas of use. The investigation on the current topic and the development of a solid theoretical foundation were considerably aided by all of the aforementioned.

While these studies provide valuable insights into general terminology and translation practices, specific research on the lexical-semantic features and translation peculiarities of JavaScript-related IT terms between English and Uzbek remains limited. This gap underscores the relevance and necessity of the present research

The object of the research is the terminology associated with Information Technology, with a specific emphasis on JavaScript programming language terms.

The subject of the research is the lexical-semantic features and translation peculiarities of IT terms in English and Uzbek.

The aim of the work is to conduct a detailed lexical-semantic and structural analysis of IT terminology, focusing on JavaScript terms in English and Uzbek. The research seeks to identify effective translation strategies and propose solutions for overcoming linguistic and cultural barriers in technical communication.

[3] Исмаилов Ғ. Ўзбек тили терминологик тизимида семантик усулда термин ҳосил бўлиши. Филол.фан.номз.дисс.автореф.-Тошкент, 2011.;Нарходжаева Х. Ўзбек тилида жараён англатувчи терминларнинг лингвистик хусусиятлари. Филол.фан.бўйича.фалс. док.дисс.автореф.-Тошкент, 2017.; Палуанова Х. Инглиз, ўзбек ва қорақалпоқ тилларида экологик терминларнинг деривацион-семантик принциплари. Докт.дисс.автореф. –Тошкент, 2016.; Саидқодирова Д. Инглиз ва ўзбек тилларида интернет терминларининг лингвистик тадқиқи. Филол. фан.бўйича фалс. докт.дисс. автореф. Тошкент, 2018. Ismoilova , D. . (2022). Semantic features of information technology terminology in uzbek and english languages. *Евразийский журнал академических исследований*, *2*(5), 194–196; Gafurova, N. (2020). Terminology and different approaches to it in modern linguistics. // Journal of Foreign Languages and Linguists, 1 (1), 58-62. (in Uzb).

The tasks of research include the following:

- To analyze the formation and structure of IT terms in English and Uzbek.
- To classify and compare the lexical-semantic features of JavaScript terms in both languages.
- To examine the translation techniques used for rendering IT terms from English to Uzbek.
- To suggest improvements and alternative methods for translating technical terminology.

A linguistic analysis aimed at understanding how IT terminology functions within the lexical systems of these languages and how it can be effectively translated and utilized in communication. Moreover, making good contrastive analysis of IT terminology in English and Uzbek provides qualitative insights into their similarities and differences.

The novelty of the paper. This research offers a pioneering examination of the lexical-semantic features and translation challenges of JavaScript-related IT terminology in the context of English and Uzbek. While existing studies have touched upon the general aspects of IT terminology, this dissertation delves into the specificities of JavaScript terms, providing novel insights and practical solutions for translators.

Methodological base of the research consists of various theoretical and practical sources, including A. Baker's "In Other Words: A Coursebook on Translation," E. A. Nida's "The Theory and Practice of Translation," and R. Newmark's "A Textbook of Translation." These works provide the foundation for the contrastive and contextual analyses employed in this study.

Research methods: In the paper, contrastive analysis to identify differences and similarities between English and Uzbek IT terms, and contextual analysis to understand the usage and meaning of terms within specific technical contexts, quantitative analysis methods to measure the frequency and distribution of IT terms in English and Uzbek were applied.

The theoretical significance of the research paper is grounded in its contribution to the understanding of terminology translation in the field of Information Technology. The findings can inform further studies on lexical-semantic analysis and translation practices.

The practical significance of the work lies in its potential applications for translators and educators in the field of IT. The research outcomes can enhance the accuracy and effectiveness of technical translations, thereby facilitating better communication and knowledge transfer in the technology sector.

The structure of the work, aligned with the research objectives, consists of an introduction, three chapters, a conclusion, and a bibliography.

- The Introduction outlines the theoretical foundation and relevance of the study.
- Chapter I explores the place of terminology in the lexical system of language.
- Chapter II presents a detailed lexical-semantic and structural analysis of IT terminology in English and Uzbek.
- Chapter III discusses the peculiarities of translating IT terms, focusing on JavaScript, into Uzbek.
- The Conclusion summarizes the key findings and theoretical and practical contributions of the research.
- The Bibliography lists the sources used in the research.

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CHAPTER I. UNDERSTANDING TERMINOLOGY: ITS PLACE IN THE LEXICAL SYSTEM OF LANGUAGE

The focus of this chapter is to describe terminology and terminological vocabulary in linguistics, as well as to critically analyse the fundamental terms (term, term field, terminological system, sublanguage) and their boundaries in relation to other lexical subsystems of the language. It also aims to identify key elements of IT terminology in both Uzbek and English.

1.1-§. Terminology as a lexical branch of linguistics

According to a survey of the literature on the linguistic analysis of terminology, this collection of lexical subsystems emerged and developed long before it was understood scientifically or that there were standards for classifying certain units as belonging to terminological vocabulary. Terminology has always been a critical aspect in linguistics, as it delineates the position and role of terms within the layers of lexical structure, facilitating a deeper comprehension of concepts. The necessity for thorough exploration of term essence necessitates the application of functional principles. Scholars such as E. Drozen (1934), G.O. Vinokur (1939), V.V. Vinogradov, A.A. Reformatsky (1986), and V.G. Gak have extensively examined this approach. Additionally, A.A. Reformatskiy (1986), B.N. Goloven (1981), N.P. Kuzkin (1962), L. Kapanadze (1965), along with others such as O.S. Akhmanova (1990), V.P. Kaprovich (1978), R.Yu. Kobrin (1991), V.M. Leychik (1986), V.D. Tabanakova (1998), and E.N. Tolikina have focused on semantic aspects of terminology. Scholars like A.S. Gelt, O.V. Dovbysh (2003), S.V. Sakhneevich (1998), and Z.M. Polyutina (2002) have delved into translation issues and related areas. In examining the correlation between object and concept meanings, it's pertinent to consider: a) terms possess lexical meanings extending beyond the expressed concept (DP Gorskiy, KA Levkovskaya, AS Gerd); b) terms encapsulate both lexical and conceptual meanings (Ye. M. Galkina-Fedoruk, P.S. Popov); c) terms lack a distinct lexical meaning but align with a concept (Zvegensev, Reformatsky, L.A. Kapanadze).We may consider of terminology as a part of the general lexical-semantic system of the language because, as M. A. Chigashev

pointed out, these processes happened isomorphically to the spontaneous emergence and evolution of denotates and their corresponding concepts and on the basis of the general literary language.[4] Consequently, it is intriguing as it highlights the interconnectedness of specialized terminology with the broader lexical-semantic system of language. It prompts reflection on how language evolves and adapts to accommodate specialized fields of knowledge, suggesting that the development of terminology is not arbitrary but follows a pattern akin to the organic growth of language. This perspective underscores the importance of terminology as a dynamic component of linguistic evolution, shaped by both linguistic conventions and the specific needs of various domains of knowledge. Additionally, Chigashev's observation invites further exploration into the relationship between language, cognition, and specialized knowledge domains, offering valuable insights for linguistic and cognitive studies. Overall, the passage prompts critical thinking about the nature of language and its role in mediating human understanding across diverse fields of study.

As stated by E.G. Grigoryan, the language - a system in which all inter - connected, interdependent and mutually conditioned. This system, according to the scientist, consists of elements that occupy a certain place in this system[5]. Grigoryan's view that language is a system where everything is connected and dependent on each other makes sense. It's like how words and grammar work together to form sentences, and how those sentences convey meaning. This idea helps to see language as more than just a bunch of random words. Language, as V. Raskin claimed, is a social phenomenon that is realized in speech, individual in nature[6]. All linguistic levels exhibit systemic organisation, although the lexical system has a different structure than the morphological or phonological ones, making it more difficult to define its bounds. The language contains a modest number of phonemes and few

[4] Чигашева М.А. Исследование терминологической лексики методом семантического поля. // Вестник РУДН. – Серия: Лингвистика. – 2004. – № 6. – С. 80-86

[5] Григорян Е.Л. Лексическое значение слова. Лексика как система языка [Электронный ресурс] – URL: http://window.edu.ru/ window/library?p_rid=20177

[6] Раскин В. К теории языковых систем. – Изд. 2-е, доп. – М.: Эдиториал УРСС, 2008. – С.14.

grammatical structures, yet no one is entirely aware of the language's lexical structure, and not even a single native speaker is fully versed in its vocabulary. The vocabulary is the most flexible component of this system since, in contrast to other language subsystems, it changes fast. Every person witnesses the extinction of certain words and the replacement of those words with other lexical units during their lifetime. However, according to E.G. Grigoryan, any such change cannot be considered capable of rebuilding the lexical system. The lexical system is a set of smaller subsystems that unite groups of words related by meaning[7]. It prompts to consider how words are organized into smaller subsystems based on shared meanings, which in turn contributes to the overall coherence and functionality of the language. N.N.Amosova, who has the same viewpoint, claims that the language most freely assimilates lexical elements; the syntactic structure and system of form-making are much less susceptible to outside influences, and even less so is the phonetic composition of the language. Most works on the historical grammar of the English language convincingly show that the development of its grammatical structure is a natural and natural process, the course of which could not be significantly influenced by any other language[8]. It highlights the intricate balance between flexibility and rigidity within language, wherein certain linguistic components may be more resistant to external influences than others. These perspectives encourage me to delve deeper into the intricate dynamics of language structure and evolution, prompting critical reflection on the interrelationships between lexical, syntactic, and phonetic elements within a linguistic system.

Yu.V. Baklagova makes the quite apparent claim that the vocabulary of a language is an ordered set of elements connected by certain relationships. Despite the fact that the lexical system is quite open, and the number of elements itself is immeasurably large in comparison with the elements of other systems, the vocabulary is still a relatively stable and observable system in each given period of

[7] Григорян Е.Л. Лексическое значение слова. Лексика как система языка [Электронный ресурс] – URL: http://window.edu.ru/ window/library?p_rid=20177

[8] Амосова Н.Н. Этимологические основы словарного состава современного английского языка. – М.: Изд. лит. на иностр. яз., 1956.—С.89.

language development. All words of the language are included in its lexical system, and there are no words that would be outside this system and were perceived in isolation. The lexical microsystem, which is identified in linguistics with the concept of a complex semantic field, is an integral part of the individual's picture of the world and represents the complex interaction of the diverse structures of his knowledge[9]. Vocabulary, as O.S. Akhmanova defined, is a stylistic layer in the vocabulary of the language[10].

Different aspects of language variation are studied by specific linguistics fields. V. Raskin argues that these variations can be seen as distinct "languages" used by particular social groups. For instance, dialectology focuses on how language is used by people living in the same region and sharing a social position. A bilingualism expert investigates the subsystems that individuals in certain social or geographical contexts utilise to communicate when two distinct language systems intersect, among other things. S.G. Nikolaev attempts to address both general and specific issues of bilingual communication; correlations of two languages - "first" and "second" - with bilingualism; types (varieties) of bilingualism represented by social, professional and individual, or creative / literary bilingualism[11]. Just as V. Raskin points out, in each of these situations, subsystems are studied that are used by a certain group as a natural means of communication[12].

Vocabulary can be further subdivided into professional, common, slang, and dialect terms based on how a certain group of people uses words.

We find it intriguing to delve deeper into the specialized terminology used in professions, examining various definitions to pinpoint the one that best captures its essence, and providing a thorough rationale for our choice. Furthermore, we aim to explore the connections between professional vocabulary and terminology.

[9] http://www.conference.kemsu.ru/GetDocsFile?id=11667&table=papers_file
[10] Ахманова О.С. Словарь лингвистических терминов. – М.: Советская энциклопедия, 1966. – С.214.
[11] Николаев С.Г. Феноменология билингвизма в творчестве русских поэтов. – Ростов-на-Дону: Старые русские, 2005. – Часть 2: Онтологические, корреляционные и функциональные характеристики иноязычия в поэзии. – С.3.
[12] Раскин В. К теории языковых систем. – Изд. 2-е, доп. – М.: Эдиториал УРСС, 2008. – С.102.

Professional vocabulary refers to the specialized language utilized by individuals within a specific profession, pertaining to any specialized field of science or technology. Correspondingly, each sphere of human endeavor possesses its distinct set of terms and expressions. L.V. Molchkova elucidates professional vocabulary as a complex association based on terms, on the one hand, , and on the other, on common vocabulary, i.e. those words and phrases that are used to describe various specialized aspects of activity (the so-called *metalanguage*). Terms are the core of this vocabulary group, which is natural. However, the field of professional vocabulary is much wider than the terminological system, since it includes professional jargon and lexical units that have become obsolete, which makes it possible to show the dynamics of the development of the system and explain the features of its current state[13]. As A.I. Marochkin pointed out, "artificially created scientific and technical terminology, usually recorded in special dictionaries" stands out in professional lexical systems[14].

In the opinion of V.M. Leichik, in science the artificial is opposed to the natural, the spontaneous - to the conscious, and the mixing of these two oppositions, in the author's opinion, is inappropriate. Accordingly, the aggregates of terms that form the terminology are not created artificially, although the method of their formation cannot be named by opposition and natural[15]. These assertions make it abundantly evident that the words are components of professional terminology and vocabulary; nonetheless, they are artificially created within professional vocabulary from concepts that function inside more specialised language subsystems. This phrase appears to suggest that terminology used in professional vocabulary are frequently derived from specialised fields of knowledge or experience, and thus may not be widely used in daily speech. This terminology-based approach might help specialists in a certain subject develop a common understanding, but it could also put those who are unfamiliar with the specialised language subsystems at a

[13] Молчкова Л.В. Профессиональная лексика англоязычных средств массовой информации: прагматика, семантика, структура. – Самара, 2003. – С.7.
[14] Марочкин А.И. Лексико-фразеологические особенности молодежного жаргона (на материале речи молодежи г. Воронежа). – Воронеж, 1998. – С.19.
[15] Лейчик В.М. Терминоведение: предмет, методы, структура. – Изд. 4-е. – М.: Либроком, 2009. – С.107.

disadvantage. Because of this, professional language is frequently built from more specialised notions, which emphasises how crucial it is to acquire and comprehend the vocabulary unique to one's field of study or line of work.

Professional vocabulary, as stated by M.A. Telenkov, I.B. Golub, and D.E. Rosenthal, includes words and idioms used in diverse sectors of production, procedures that have not yet become popular, and they emphasize that professional vocabulary is founded on professionalism. Professionalisms, unlike terms that serve as official scientific names for certain concepts, are used mostly in oral discourse as "semi-official" phrases that are not precisely scientific in origin.[16] B.A. Serebrennikov clarifies that there are points of contact between the professional vocabulary that arose naturally and the artificially created terminology, and in speech practice these two lexical systems are often confused. However, the artificially created terminology is more stable, standard and does not have territorial variants. Professional vocabulary is usually used in business styles, is distinguished by the accuracy of meanings and is not very expressive precisely because of the large number of terms[17].

O.V. Klimova say that terminology as the core of the language of professional communication, while the periphery of such a field structure, according to the author, consists of units of oral professional vocabulary, or professionalisms, and then there are professional jargon (if any) and on the periphery there are nomenclature units. Prostrate.[18] Conversely, A.B. Superanskaya, N.V. Podolskaya and N.V. Vasiliev already regards if the vocabulary of the national language is represented in the form of a sphere, then the core can be considered common vocabulary, and the perinuclear or peripheral zones are occupied by separate sublanguages. In this case, the distance of the location of the corresponding sublanguage in relation to the nucleus is due to the age of the branch of knowledge.[19]

[16] htmhttp://www.classes.ru/grammar/126.Rosental-modern-russian-language/clO- p40.htm
[17] http://www.classes.ru/grammar/l 15Serebrennikov/chapter7/html/ unnamed_8.
[18] Климова О.В. Лексика предметной области PR современном газетном тексте и обыденной речи. – Екатеринбург, 2010. – С.9.
[19] Суперанская А.В. [и др.]. Общая терминология: вопросы теории. – Изд. 5-е. – М.: Либроком, 2009. – С.28.

According to these statements we can conclude that the structure of professional language is influenced by both the centrality of terminology and the specialized nature of sublanguages within the broader linguistic framework. Despite the varying perspectives and occasional contradictions among authors, these assertions underscore a clear relationship between terminology and professional lexicon.

In addition, there is a chance to tackle the issue at hand from a rather different angle. T.B. Kosareva similarly believes that professional vocabulary is "the vocabulary characteristic of this professional group, used in the speech of people united by a common profession.[20] I.V. Arnold interprets professional vocabulary as a vocabulary specific to some branch of human activity or profession, but used only in oral communication and, therefore, has no definitions in special literature. Professional vocabulary in the proper sense of the word refers to the times when knowledge about many types of crafts was spread orally"[21]

Taking into consideration the insights provided by I.V. Arnold, the concept of professional vocabulary is construed as a distinct manifestation of terminology, delineated by its integral role in professional communication, encompassing both written and oral modalities. The perspectives offered by Arnold and T.B. Kosareva converge on the specialized character of professional lexicon, underscored by its pertinence within delimited domains or vocations. Arnold particularly accentuates the primacy of oral communication in the utilization of professional vocabulary, suggesting its historical precedence in the oral transmission of knowledge within various craft traditions. Complementarily, Kosareva's elucidation reinforces the notion of professional vocabulary as an idiosyncratic linguistic domain, primarily instantiated within specific occupational cohorts and predominantly deployed in spoken discourse among cognizant professionals. Collectively, these delineations underscore the nuanced and contextually contingent nature of professional vocabulary, pivotal for efficacious communication within vocational contexts.

[20] http://www.oim.ru/ reader@nomer=502. asp
[21] Арнольд И.В. Стилистика современного английского языка. – 3-е изд. – М.: Просвещение, 1990. – С.284.

V.F. Novodranova's perspective provides a salient criterion for distinguishing professionalisms from terms, in our assessment. She underscores the notion that unlike terms, professionalisms are subjective units. They make note of the professional information that is manifested in everyday acts, is *linked to a person's personal environment through experience, and verbalizes specific everyday concepts.* In professionalism, according to the researcher, together with scientific and everyday knowledge obtained in the sensory, everyday perception of the world are objectified[22]. We believe that the fundamental discrepancy between professional vocabulary and terminology lies in their respective associations with everyday knowledge.

The lexical framework within a language constitutes a pivotal facet of its overall linguistic structure, distinguished by its notable fluidity relative to other constituent subsystems. Embedded within this framework are distinct yet interconnected subsystems, comprising professional (terminological) vocabulary, common lexicon, colloquialisms, and regional vernacular. Effective communication across all strata of discourse necessitates the pervasive utilization of common vocabulary, which transcends diverse linguistic modalities and registers. Of particular dynamism is terminological vocabulary, subject to perpetual flux owing to the relentless march of scientific and technological progress, engendering the emergence of novel conceptual constructs warranting lexical nomination. The formulation of terminologies specific to particular domains or disciplines emerges through individual cognitive processes. Nevertheless, an ongoing interplay ensues between common and terminological lexica, engendering the refinement of specialized vocabularies and the enrichment of terminological adaptations within the common lexicon. The continual evolution of linguistic idiom and conceptual paradigms stands as a principal catalyst for the progressive augmentation of the language's lexical repertoire.

[22] Новодранова В.Ф. Соотношение обыденного и научного знания в профессиональной коммуникации // Материалы Международного конгресса по когнитивной лингвистике. – Тамбов, 2008. – С.636.

1.2-§. Position of Terminology in the Language Lexical System

New terms have been coined to articulate the significance of emerging phenomena, events, and processes, thus fostering the advancement of science and technology. This has been made possible by the fast growth of science and technology. Specialised experts' descriptions of the world were verbalised through terminology, and specific phrases became a natural part of day-to-day communication. As mentioned by A.B. Superanskaya, N.V. Podolskaya and N.V. Vasilyeva, "... terminology as a set of terms is part of the special vocabulary[23]." Terminology is the language's most dynamic and adaptable lexical subsystem. Studies of terminology can take on a historical bent, demonstrating how terminology emerges, evolves, and changes over time in response to the advancement of the relevant sciences, the era's general way of thinking, and the reference world.[24].

Numerous definitions of terminology abound in contemporary linguistic literature, underscoring a heightened interest in the subject and the diverse methodological approaches applied to its examination.

In our research, we endeavored to delineate the overarching characteristics of terminological systems and identify distinctive features that facilitate their differentiation.

For instance, scholars such as A.B. Superanskaya, N.V. Podolskaya, and N.V. Vasiliev offer varied interpretations of the term "terminology":

1) a collection or some indefinite set of terms - words in general;

2) a set of terms (concepts and names) of any particular branch of knowledge (construction terminology, medical terminology);

3) the doctrine of the formation, composition and functioning of terms in general;

[23] Суперанская А.В. [и др.]. Общая терминология: вопросы теории. – Изд. 5-е. – М.: Либроком, 2009. – С.7.
[24] Меркель С.Э. Семантико-дистрибутивная верификация терминологического знака (на материале документов немецкого гражданско- процессуального права). – Волгоград, 2001. – С.5.

4) the doctrine of the formation, composition and functioning of the terms of a particular branch of knowledge used in a particular language, and their equivalents in other languages;

5) general terminological doctrine[25].

From these definitions, it can be inferred that the first two denote a structured system of concepts within a particular domain of knowledge, whereas the latter three suggest that the concept of "terminology" pertains to the scientific study of this conceptual system. Consequently, the existing definitions of terminology can be classified into two distinct groups:

1. A set of terms, concepts, and names.
2. The study of the formation of term elements, concepts, and names.

There are several theoretical approaches to terminology as a collection of concepts, with the most prominent contributions from A.B. Superanskaya, N.V. Podolskaya, and N.V. Vasiliev.

1.Terminology constitutes an essential component of the lexicon of the literary language.

Adherents of this viewpoint discuss the origins of a number of terms derived from literary terms, as well as the possibilities of incorporating them into a number of terms[26]. This perspective is shared by E.A. Makshantseva, who observes that terminology is “another subsystem within the general lexical system of a given language and, moreover, the subsystem is the most visible and quantifiable, especially since terminology as a subsystem, in turn, breaks down into subsystems according to thematic features”[27]. I.I. Chironova, on the other hand, offers a number of following definitions of terms:

- words and verbal complexes that correlate with the concepts of a specific science and are in systemic relations with other similar units, forming together with them in each case a special closed system[28];

[25] Суперанская А.В. [и др.]. Общая терминология: вопросы теории. – Изд. 5-е. – М.: Либроком, 2009. – С.14.
[26] Суперанская А.В. [и др.]. Общая терминология: вопросы теории. – Изд. 5-е. – М.: Либроком, 2009. – С.17.
[27] Макшанцева Е.А. Специфика оценочного компонента в структуре значения юридического термина (на материале русского и английского языка). – Саратов, 2001. – С.8.
[28] http://www.elibrary.ru

- a set of interdependent lexical units that serve to designate the concepts of any branch of human knowledge, which in turn form a system of its concepts;

- a set of terms, lexical units of a certain language for special purposes, denoting a special (specific or abstract) concept[29].

Terminology appears to be a methodical and accurate means of conveying complicated concepts in particular fields of knowledge, like the humanities or fields of science. It is evident that Chironova's definitions place a strong emphasis on the role terminology plays in promoting understanding and clear communication among these disciplines. Terminology facilitates the establishment of a common language between professionals and scholars, enabling them to exchange ideas and expand upon existing knowledge by offering a collection of related words and phrases. Furthermore, it is thought that these definitions highlight the importance of terminology in professional and academic settings, where clear language is necessary for productive cooperation and communication.

This analysis explores the concept of consistency within terminology, a characteristic emphasized in the preceding definitions. However, G.P. Snetov introduces a counterpoint, arguing that consistency is not exclusive to terminology but is also evident within the lexicon of literary language. This observation suggests that the aforementioned definitions likely pertain to the first set of perspectives, which presumably concentrate on the specialized use of language within specific disciplines, as opposed to the broader vocabulary employed in literary works..

Following Snetov's observation about consistency within literary language, A.A. Reformatskiy delves deeper into this aspect. The paraphrase can now be expanded upon to explore Reformatskiy's specific observations as "... like any tier of linguistic structure, vocabulary is a system." In the view of A.A. Reformatskiy, it is most difficult to establish the system in the vocabulary because the "facts" of the dictionary are innumerable and extremely varied; it all depends on the fact that vocabulary is the most specific sector of the language, and the less formal the

[29] http://www.elibrary.ru

abstraction, the more difficult it is to understand it as a system; however, the vocabulary is systemic[30]. The lexicon of a specific knowledge domain exhibits a marked dependence on the concerted efforts of its constituent scholars for its terminological consistency to be established.

T.N. Dankova characterizes terminology as a set of terms that have emerged during the creation and growth of a particular scientific field and are used to describe certain concepts as well as name common objects in that field[31]. Nonetheless, it is worth noting that historically, not only does terminology evolve, but the general lexicon also undergoes enrichment, given the inherent interconnection between both layers of vocabulary

In the same way, "Literary vocabulary is the core, without which communication at any level is unthinkable. Meanwhile, a person's communicative activity is directly interwoven into his production activity, being an integral part of the latter, and this largely determines the features of the nomination processes"[32].

Drawing on her established definitions of terminology, Mironova proposes the following three indicators that differentiate terminology from general vocabulary: belonging to a specific field of knowledge; correlation with a specific closed and strict system within the relevant area of knowledge; correlation with a specific specialized concept. Building upon the groundwork laid by R.Yu. Kobrin and B.N. Golovin, I.I. Chironova suggests considering terminology in the context of a common language system, because the same lexical units can frequently serve as both terms and common words.[33].

2. **Terminology constitutes a distinct segment within the lexical framework of the national language, exhibiting minimal overlap with literary language.** Supporters of this perspective advocate for segregating terminology into

[30] Реформатский А.А. Введение в языковедение. - Изд. 5-е., испр. – М.: Аспект-Пресс, 2005. – С.139.
[31] Данькова Т.Н. Русская терминология растениеводства: история становления и современное состояние – Воронеж 2010. – С.10.
[32] Шмелева О.Ю. Некоторые эволюционные аспекты терминообразования в древние - и среднеанглийский периоды // Вопросы когнитивной лингвистики. – 2010. – № 3. – С.104.
[33] http://www.elibrary.ru

a distinct realm governed by its own set of regulations—a dimension that may occasionally diverge from the norms of literary language.

E.V. Aleshinskaya emphasizes the importance of terminology, suggesting it's like a a separate section of every national language that is intimately linked to professional activities[34]. This indicates that a specific vocabulary with a collection of terms specific to various professions or fields of study are present in every language. Technology, law, engineering, medicine, and many other fields, for example, all have specialised vocabulary.

Consistent with this, Yu. A. Komarova concurs, asserting that terminology as a whole is one of the integrating factors that allows for the creation of a unique information and communication (scientific and technical, educational, economic, etc.) space, because terminology allows for informational understanding and interchange at the national and international levels, as well as the compatibility of legislative, legal, and regulatory documents. However, stylistically neutral layers of vocabulary, which have a separate functional character within the context of the language of science, are critically important for the communication of professional information[35].

This specialized terminology functions as a tool for precise communication within professional fields. It encompasses technical terms, jargon, and specialized phrases that are crucial for professionals to convey complex ideas, procedures, and concepts effectively within their domains.

The strong connection between terminology and professional activities necessitates that individuals in a specific field become adept in this specialized language. This proficiency is essential for effective communication and collaboration with colleagues, as well as for comprehending and navigating their professional environment. It aids in the documentation and dissemination of knowledge, making it accessible and clear to those within the field. Terminology

[34] Алешинская Е.В. Современный американский музыкальный термин. – Нижний Новгород, 2008. – С.14.
[35] Суперанская А.В. [и др.]. Общая терминология: вопросы теории. – Изд. 5-е. – М.: Либроком, 2009. – С.77.

also plays a role in training and education, where learning the specialized language is a fundamental part of becoming proficient in the field. Moreover, it facilitates international collaboration, as many technical terms are universally recognized. This shared language bridges gaps between different languages and cultures within the same professional discipline. Ultimately, mastering the specialized terminology is a key component of professional competency and success.

Generally speaking, terminology is a specialised area of speech within each national language, closely related to professional activities, and necessary for efficient communication within particular disciplines or fields.

According to the analysis provided by A.B. Superanskaya, N.V. Podolskaya, and N.V. Vasilyeva, is a closed vocabulary context whose boundaries are determined by a certain social organization of reality; it has a socially obligatory character, and unlike ordinary vocabulary, it is an independent section that is not an integral part of the literary language[36]. The analysis presented by A.B. Superanskaya, N.V. Podolskaya, and N.V. Vasilyeva highlights several key aspects of terminology. Their characterization of terminology as existing within a closed vocabulary context, with boundaries shaped by social organization, resonates with the idea that terminology is intricately tied to specific professional or disciplinary domains. The notion that terminology possesses a socially obligatory character underscores its significance within specialized communities, where precise communication is essential for effective collaboration and knowledge dissemination. Furthermore, the distinction drawn between terminology and ordinary vocabulary emphasizes the unique nature of specialized language, which serves distinct functions and operates independently within the broader linguistic framework.

This analysis deepens our understanding of the role and characteristics of terminology, shedding light on its specialized, socially constructed, and functionally distinct nature within language systems. Unlike everyday vocabulary, terminology

[36] Суперанская А.В. [и др.]. Общая терминология: вопросы теории. – Изд. 5-е. – М.: Либроком, 2009. – С.18.

is considered a separate and independent section of language that is not inherently integrated into standard literary language.

3. Terminology - a special set of symbols or codes made up for a particular field, not based on spoken language.

According to this viewpoint, the terms are constructed and function in intentionally created conditions that are diametrically opposed to the conditions of natural language, and that they cannot be compared to ordinary words[37]. V.M. Leichik concurs with this viewpoint, believing terminology to be a spontaneously emerging set of terms[38]. Terminology refers to a specialized set of symbols or codes devised for a specific field of study, profession, or discourse, distinct from everyday spoken language. This perspective suggests that terminologies are deliberately constructed within controlled environments, diverging significantly from the fluid nature of natural language. According to this view, the terms within a terminology are purposefully created to serve precise functions and convey specific meanings within their respective contexts. V.M. Leichik aligns with this viewpoint, asserting that terminology arises spontaneously to address the nuanced requirements of specialized domains.

Unlike ordinary words, which may evolve organically over time within a language community, terms in a terminology are often standardized and subject to rigorous definition and usage guidelines. They are meticulously crafted to facilitate clear communication and minimize ambiguity within a particular field. Terminologies encompass a wide range of disciplines, including science, technology, law, medicine, and various industries.

The development and maintenance of terminologies often involve collaboration among experts within the relevant field, ensuring consistency and accuracy in terminology usage. Terminological databases and resources are frequently employed to catalog and manage the vast array of terms associated with

[37] Суперанская А.В. [и др.]. Общая терминология: вопросы теории. – Изд. 5-е. – М.: Либроком, 2009. – С.17.
[38] Лейчик В.М. Терминоведение: предмет, методы, структура. – Изд. 4-е. – М.: Либроком, 2009. – С.106.

specialized domains. Effective utilization of terminology enhances precision, efficiency, and knowledge transfer within professional and academic communities.

While terminologies may exhibit characteristics that distinguish them from natural language, they are not entirely detached from linguistic systems. They are influenced by linguistic principles and may interact with spoken language in various ways, such as through translation, interpretation, and adaptation. Despite their specialized nature, terminologies remain integral to the communication and advancement of knowledge within specialized domains.

Describing terminology as "spontaneously emerging" implies that these terms develop naturally within the context of a specific field, rather than being deliberately created or standardized. This characterization underscores the dynamic nature of language within specialized domains, suggesting that terminology evolves over time in response to the shifting needs and practices of the field, thereby reflecting ongoing developments and innovations. Such spontaneity enriches the language used within the discipline, providing flexibility to accommodate new ideas and advancements. However, this evolving nature can pose challenges for individuals outside the field, who may find it difficult to understand or keep pace with the rapidly changing terminology. In the realm of metalanguage research, N.B. Gvishiani concurs that terminology necessitates the study of a widely acknowledged semasiological system, rather than the natural human language that is arbitrarily employed for communication: “... sensory cognition through sensations is primary; it is the source of all knowledge. However, this is just one of the forms or sides of the cognition process. The second side lies in rational knowledge, which processes the material of the senses and is based on the formation of the most general concepts. These concepts can be useful for the further development of this science only when strictly defined words or phrases are assigned to them. In other words, the scientific results obtained cannot become the property of mankind until the movement of thoughts has reached such a level of abstraction, at which it is possible to combine a newly

created concept with a certain symbol or sign"[39]. Consequently, terminology is the last phase of any scientific inquiry and a superstructure over the language's naturally evolving lexical system. This leads to the separation of two sides in the creation of scientific knowledge: sensory cognition and rational cognition.

Based on these viewpoints, it is evident that most academics consider terminology to be a distinct part of vocabulary and advocate for its study as a separate science. We can therefore draw the conclusion that terminology, as a collection of terms, is a separate layer of any given national language and that it is closely related to an individual's professional activity as well as the related field of study. Consequently, we define terminology in this research as a closed vocabulary context that can only be properly learned by representatives of a specific field of human activity, and only they are able to understand the terminology related to a given subject area. Since we believe that mastery of terminology is one of the most important prerequisites for full functioning in a specialised field, we started with this definition. V. Raskin points out in this context: "... the professional language is not fully understood by an ordinary native speaker, special training is required to master it, and therefore its speakers relate to it more consciously and, therefore, he is not subject to the spontaneous activity of the masses of speakers in to such a degree as a common language - all this serves, in his opinion, a guarantee of stability and high organization of professional languages"[40]. We believe that V. Raskin is stating that ordinary people find it difficult to understand professional language and that mastery of it requires specialised training. It follows that people who communicate in a professional manner are more conscious of it and don't alter it as much as others who speak in a casual manner. According to Raskin, this improves the stability and organisation of formal language. We concur with Raskin's argument that precise and unambiguous communication is necessary in professional disciplines. On the other hand, we believe it could make it more difficult for non-

[39] Гвишиани Н.Б. Язык научного общения: вопросы методологии. – 2-е изд., испр. – М.: Изд-во ЛКИ, 2008. – С.7.
[40] Раскин В. К теории языковых систем. – Изд. 2-е, доп. – М.: Эдиториал УРСС, 2008. – С.47.

professionals to interact or comprehend the language. While it is evident that professional languages need to be stable and well-organized, wherever feasible, efforts have to be made to increase their accessibility.

Summary of the chapter

Terminology plays a crucial role in the advancement of science and technology by coining new terms for emerging phenomena, events, and processes. It serves as the language's most dynamic and adaptable lexical subsystem, evolving with scientific progress and societal changes. Terminology studies focus on understanding how these specialized vocabularies form, function, and transform over time. Common vocabulary forms the core of the layers depicted, while unique sublanguages (specialised lexical subsystems) make up the periphery. The continuous exchange between the common and terminological vocabulary leads to the formation of special vocabulary and terminology of common vocabulary. Terminological vocabulary is the most active and constantly growing subsystem of the language because of the ongoing advancement of scientific knowledge and the consequent requirement for new terms to signify novel concepts. It is necessary to draw this distinction based on the supposition that professionalism and common knowledge are related, which is the main differentiation between professional language and terminology. Professionalisms are used when employing an official general scientific term is of no significance as it is semi-official. Terms are official general scientific designations of a scientific notion. Scholars such as A.B. Superanskaya, N.V. Podolskaya, and N.V. Vasilyeva emphasize that terminology is a part of special vocabulary distinct from general language.

There are various definitions of terminology, ranging from collections of terms to the study of their formation and use. Terminology can be seen as an independent layer within any national language, closely linked to professional activities and specific fields of study. This research adopts the definition of terminology as a closed vocabulary system, comprehensible primarily to experts in a particular domain. Mastery of this specialized language is essential for effective functioning within these fields.

Scholars such as T.N. Dankova and I.I. Chironova highlight the systematic nature of terminology, which facilitates clear communication and knowledge transfer among professionals. However, the specialized and closed nature of terminology can pose challenges for those outside the field, making it difficult for non-experts to understand or keep pace with evolving terms. In the current synchronous viewpoint, the scientific meanings of "term" and "terminology" have been thoroughly explained, and the distinctive characteristics of these scientific concepts have been analysed. As a result, terminology is now the focus of study. Meanwhile, the historical approach to researching word theory and terminology has not yet been completely adopted by modern linguistics. Semantic processes such as terminology, determinology, and re-terminology appear fair to use in order to understand the dynamics of the history of the investigated terminology and the production of IT terms.

Terminology also plays a vital role in training and education, aiding in the development of professional competence. It supports international collaboration by providing a shared language that bridges gaps between different languages and cultures within the same professional discipline. According to V.M. Leichik, terminology can arise both spontaneously and through deliberate creation to meet the needs of specialized domains.

The analysis by A.B. Superanskaya and colleagues indicates that terminology is a distinct and socially obligatory section of language, emphasizing its specialized function and independence from ordinary vocabulary. This specialized nature of terminology underscores its importance in professional and academic settings where precision and clarity are paramount. Consequently, while terminology enhances professional communication, efforts should be made to improve its accessibility for broader audiences.

CHAPTER II. LEXICAL SEMANTIC AND STRUCTURAL ANALYSES OF THE SYSTEM OF INFORMATION TECHNOLOGY TERMINOLOGY IN ENGLISH AND UZBEK

2.1-§. The ways of word formation of IT terms in English and Uzbek language

The growing impact of transnational professional networks is one of the main reasons why neologisms are emerging in the modern era of globalisation. For the same reason, there is a significant assimilation of English borrowings connected to information technology into the Uzbek language. Word formation in both English and Uzbek, particularly for IT and JavaScript-related terms, involves a variety of linguistic processes. These processes allow both languages to develop new terminology to keep up with the fast-paced evolution of the tech industry. Below, we'll explore the main ways these terms are formed in both languages, followed by a comparative table and a detailed explanation.

The English versions of derivatives fall into one of three groups based on connotation: positive, negative, or neutral. The distinction between positive and negative connotations in this instance is highly conditional since it is based on the cognitive connection of derivatives in accordance with the friend/foe gradation. Generally speaking, everything associated with this field of study raises cognitive attention; even cyberpunk as an art direction falls short of a clear-cut favourable impression. The most effective way for creating nouns is to add two bases and truncate one of the components, as demonstrated by the factual material analysis. This suffixless technique is used to generate words. Thus, the columnists of the newspaper "The Independent" conducted their journalistic investigation in order to understand the origin of the letter "i" in the names of Apple gadgets and services, as well as its semantic load[41]. Apple's founder, Steve Jobs, has stated in interviews that he personally places the following values inside the "i" component:

[41] .The Guardian [Electronic resource]. URL: https://www.theguardian.com/uk-news (дата обращения 08.02.2022 г.)

1) Internet, a rapid access point to the worldwide information network;

2) individual underscoring the device's unique character;

3) instruct - a method to learn;

4) inform - a way to inform;

5) inspire - a way to be inspired, enabling you to view the world in your own unique perspective.

The shortened base has an adjectival function in these compound nouns. As a result, we may categorise this process of word construction as an attributive syntactic model.

In the third phase of the research, the focus was on delineating the structural attributes of computer terms. Various methodologies were employed during this stage, including the sampling method, word-formation analysis to discern productive and unproductive methods of creating English computer terms, comparative analysis, classification method, descriptive method, quantitative analysis, and systematic and statistical approaches to determine the quantitative distribution of different methods of forming computer terms. The fourth phase concentrated on synthesizing and comparing the research findings, utilizing a systematic approach.

An understanding of the semantic characteristics is imperative alongside structural analysis of computer terms, as terminological units exhibit an intertwined relationship between their semantic and structural features. However, there exists a lack of consensus among linguists regarding the criteria for evaluating the productivity of word-building models. As Kizil puposed, a model is considered to be productive if dozens or hundreds of derivatives are derived from it.[42] A division into high-performing, medium-performing, and low-performing models has been

[42] Kizil", M. A. (2015). Semantychni aspekty mihratsiï odynyts" metaterminosystemy sfery komp"iuternykh tekhnolohiˇı anhliˇıs"koï movy. Naukovyˇı visnyk Mizhnarodnoho humanitarnoho universytetu. Seriia: Filolohiia, 15 (2), 54–56.

suggested by linguists. A classificational, structural, and word-formation analysis, along with a comparative study, was employed to assess the productivity of various computer terminology creation methods. This analysis focused on the terminological units within the IT term system.

A number of distinctions and parallels between the derivational processes in Uzbek and English are evident. First off, Uzbek uses agglutination, which is the process of adding suffixes or prefixes to a word's root, whereas English mostly uses affixation to create new words. The unique structure of word constructions in every language is influenced by these variations in affix addition processes. Second, compounding is a technique used to generate new words in both Uzbek and English. On the other hand, Uzbek compounds frequently entail the juxtaposition of words with distinct meanings and grammatical indicators, whereas English compounds are typically constructed by combining two or more words. Additionally, conversion is used as a derivational procedure in both languages (see Table №1)

Table 2.1. Methods of Word Formation in English and Uzbek IT Terminology.

Method	**Description**	**English Examples**	**Uzbek Examples**
Affixation	Forming new lexical units by adding affixes (prefixes, suffixes, etc.) to the stem.	*debug, recompile, uninstall*	*badavlat, serhosil, nohaq*
Compounding	Combining two or more stems into one word.	*motherboard, hardcoded*	*Dasturiy ta'minot, Xavfsizlik devori*
Conversion	Forming a new stem from an existing one	*download, boot, freeze*	*Dasturlash, Axborotlashtirish*

	through reinterpretation without altering its form.		
Reversion	Forming new words by removing affixes.	*doubleclick - double-clicking*	*dastur - dasturlash, axborot - axborotlashtirish*
Abbreviation	Forming words through truncation by apocope, apheresis, or syncope.	*PC (personal computer), LAN (Local Area Network), OS (Operating System)*	*AKT (Axborot-Kommunikatsiya Texnologiyalari), DPT (Dasturiy ta'minot), TKT (Texnik Kompyuter*

As we can see from the table 1, affixation involves forming a new lexical unit by adding an affix (prefix, suffix, interfix, infix, etc.) to the stem. Common affixes used in computer terms include prefixation (e.g., cyber-, e-, hyper-, micro-), suffixation (e.g., -er, -ware, -ise, -ing, -tion), and prefixal-suffixal combinations.

Prefixes:

"de-": This prefix generally means "to remove" or "reverse."

Example: "*debug*": Combining "de-" (remove) and "bug" (an error in software), "debug" means to remove errors from software.

"re-": This prefix means "again" or "back." As an example, we choose the word "*recompile*": Combining "re-" (again) and "compile" (to assemble), "recompile" means to compile code again.

"un-": This prefix means "not" or "opposite of." For illustration, let's use the term

"*uninstall*": Combining "un-" (not) and "install" (to set up), "uninstall" means to remove installed software.

Suffixes:

"-er/-or": These suffixes often indicate a person or thing that performs an action. here is an example "*compiler*": Combining "compile" and the suffix "-er," a compiler is a tool that compiles code.

"-able/-ible": These suffixes indicate that something can be done. Example: "*scalable*": Combining "scale" and the suffix "-able," scalable means that something can be scaled (adjusted in size or capacity).

"-tion/-sion": These suffixes indicate a process or state. We can use this term "*execution*": as an example. Combining "execute" and the suffix "-tion," execution refers to the process of running a program. In IT terminology, there are also prefixes which have strong ability of word-formation, which mainly include: *re - retry, refresh, replay, rehyphenation, pre - preprocessor, prescan, preview, System - the Internet, interface, interactive, etc.; Tel - telenet, telecommuter (remote workers),* etc.; [43]

Uzbek also uses derivation, though it relies heavily on affixation that fits its phonological and morphological structure. In the realm of IT, Uzbek derivation often incorporates suffixes to form new terms. Uzbek does not use prefixes as extensively as English. However, a lot of words that belong to the group of adjectives are formed by prefixes. such as *badavlat, serhosil, nohaq*, and so on. Indeed, it is challenging to locate JavaScript-related terms created in such way. Instead, it relies more on suffixes for word formation.

Compounding, another method, combines two or more stems into one word (e.g., *motherboard, hardcoded*). Different types of compounding, such as one-component and two-component compounding, exist. Certain linguists posit a

[43] Mo Jia. On computer English vocabulary characteristics [J]. Science and Technology Plaza, 2006 (5) : 109-110.

differentiation between complex words and complex phrases based on a confluence of characteristics, encompassing semantics, morphology, orthography, phonetics, and potentially other facets. This distinction hinges on the concept that, irrespective of the number of constituent word-compounds, complex words function as a single lexical unit, conveying a unified meaning. This kind of word structure is also among the most effective methods to use the Uzbek language.

Building on the aforementioned distinction, Klymenko offers an interpretation of this phenomenon as the compounding of stems of several words characterized by the combination of two or more components without connecting vowels .

To illustrate this point, the following examples from IT terminology in two languages are presented in the sample:

Two-component: Adj. + N = N (for example, in English *actual argument, Shortcut, full screen, Software, Artificial intelligence;* in Uzbek *Dasturiy ta'minot*,)

N + N = N (for instance, in English *Business intelligence (BI), bookmark, database, machine code*; in Uzbek *Xavfsizlik devori, buyruqlar qatori, ma'lumotlar ombori*)

Participle II + N = N (for example, *Built-in, Uploaded data, Encrypted file, Downloaded content, installed software, deleted folder, updated version, shared document)*

Three-component: Adj. + N + N = N (for example, in English *User interface design, cloud computing infrastructure, network security protocol, artificial intelligence algorithm, data encryption standard, mobile application development*, in Uzbek *elektron pochta qutisi*). Following Peng Tao, there are other compound words produced by adding suffixes to words, and change the nature and meaning of words, such as *phase advancer (electronic phase displacement), pilot oscillator (channel oscillator),* etc.[44]

[44] Peng Tao. Computer professional English vocabulary teaching [J]. Journal of Computer Education, 2010 (10) : p 107-110.

Conversion involves forming a new stem from an existing stem through reinterpretation without altering its form (e.g., *to download*. Andrusiak claims that conversion is the formation of a new stem from an already existing stem via a simple reinterpretation of the latter without any change in its form. It is a non-affixal type of word transition to another domain of the language (for example, to download, to boot, to freeze, to sleep, to login, to bookmark, to mailbomb, to text-message, to spam etc.) .). Reversion, also known as reverse word creation, is the process of forming new words by taking affixes out (*doubleclick — double-clicking*, for example). In Uzbek, there are some examples we found: "*Dasturlash"* means "programming," and by removing the "-lash" suffix, you get "*dastur*," which means "program", "*Axborotlashtirish*" means "informatization," and by removing the "-lashtirish" suffix, you get "*axborot*," which means "information."

Abbreviation, achieved through truncation by apocope, apheresis, or syncope, is another means of forming computer terms. Graphical and lexical abbreviations are distinguished, with examples including acronyms (e.g., *PC - personal computer, LAN - Local Area Network, ML - Machine Learning, OS - Operating System*,"). In the context of information technology, Uzbek does have some acronyms and abbreviations, often influenced by English due to the global nature of the field. Here are a few examples: *AKT - "Axborot-Kommunikatsiya Texnologiyalari" (Information and Communication Technology, ICT), DPT - "Dasturiy ta'minot" (Software), OT - "O‘zgaruvchan tok" (Alternating Current, AC) in electrical engineering contexts, TKT - "Texnik Kompyuter Texnologiyalari" (Technical Computer Technologies*).

As mentioned by Yu Zi, it has the advantages of simple usage. Such as the well-known *World Wide Web (WWW); Personal Computer (PC); Microsoft Disk Operating System (MS-DOS), hypertext transfer protocol (HTTP), Central*

Processing Unit (CPU), etc.; There are some online words which are similar to cable language, for example, *BTW - by the way, FYI – for your information*, and so on.[45]

Additionally, the analysis of the sample reveals that computer terms undergo lexical-semantic formation through re-meaning, employing metaphor and metonymy of existing words and phrases (e.g., *bug, firewall*). This process, known as secondary nomination or transposition, enriches the vocabulary with nuanced meanings and connotations.

Part of information technology terms is not in professional term dictionary, and most of these words are reconstructed vocabulary, such as uninstall, undelete, resetup, etc. There is a law for English words, which is word-formation. As long as one masters this method, computer English vocabulary study is quite easy.

The development of English IT terms is linked to societal progress, with old words changing their meanings to meet new demands. Many new terms in English IT are derived from old words. For example, "*cloud*" traditionally refers to a visible mass of condensed water vapor in the sky, but in IT, it refers to online storage and computing services. "Cookie" usually means a sweet baked treat, but in IT, it means a small piece of data stored on a user's computer by a web browser. "*Firewall*" normally refers to a barrier designed to prevent the spread of fire, but in IT, it means a security system that controls incoming and outgoing network traffic.

Most English IT terms come from commercial, office, and communication terms, differing mainly in their electronic function. For example, "*bug*" refers to an error or flaw in a software program. "Server" means a computer that provides data to other computers. A "*hard drive*" is used to store large amounts of data. "*Bandwidth*" extends the idea of width to refer to the amount of data that can be transmitted over a network in a given amount of time. "*Dashboard*" is a control panel for managing different aspects of software or hardware. "*Trojan horse"* is borrowed from Greek

[45] Yu Zi. Metaphor and language innovation coexist---- computer English word-formation characteristics study [J]. Journal of Product Safety and Recall, 2013 (2) : 26-28.

mythology, referring to a type of malicious software disguised as legitimate software.

Word formation in IT terms can vary between English and Uzbek languages due to differences in linguistic structure, historical development, and cultural influences. English, being dominant in the tech industry and a global lingua franca, boasts a rich reservoir of IT terminology, often incorporating borrowings from diverse sources Conversely, Uzbek IT lexicon draws heavily from English and Russian. English often borrows IT terms from other languages, particularly from Latin, Greek, and more recently, from languages like Japanese (e.g., "*emoji*") or Hindi (e.g., "*avatar*"). Uzbek also borrows IT terms from other languages, particularly from English and Russian. For example, "*kompyuter"* and "*internet"* are borrowed from Russian.

Despite these similarities, the nuances in word formation underscore the linguistic and cultural contexts of each language, shaping the evolution of IT terminology in both English and Uzbek. The analysis uncovers key differences in lexical characteristics between English and Uzbek IT terms, including complexity, word formation, and semantic features. English IT terms tend to be more complex and specialized, often incorporating affixes and acronyms, while Uzbek IT terms are relatively simpler and less reliant on affixation. Moreover, English IT terms exhibit a wider semantic range, with some terms having multiple meanings, whereas Uzbek IT terms are more rigid in meaning.

Furthermore, the study explores the ways of word formation of IT terms in English and Uzbek languages, encompassing methods such as synthesis, affixation, conversion, abbreviation, and redefining old words.

2.2-§. Lexical semantic characteristics and classification of IT terms including JavaScript related terms in English and Uzbek languages

In our fast-paced digital era, information technology (IT) has seamlessly integrated into our everyday routines, profoundly impacting various aspects of contemporary life. From the ubiquitous presence of smartphones to the automated

frameworks enhancing workplace efficiency, IT pervades modern society, shaping our interconnected world. As technology advances rapidly, the lexicon of IT evolves in tandem, reflecting the dynamism and innovation inherent in this field. This paper seeks to explore the lexical attributes and categorization of IT terminology within the English language, unveiling the distinctive linguistic qualities that define this specialized vocabulary. By examining the intricacies of IT terminology, we aim to elucidate its unique characteristics and shed light on its significance in the realm of language and technology.

As a society evolves and undergoes development, its language adapts and evolves as well to accommodate new concepts, technologies, social structures, and cultural influences. This statement underscores the dynamic relationship between societal progress and linguistic evolution, highlighting how language serves as a reflection of the societal changes and developments taking place. In the digital landscape, where innovation and change are constants, the language we use to describe and understand IT phenomena is ever-expanding and adapting. Just as IT professionals work tirelessly to develop cutting-edge technologies, linguists and communicators must keep pace with the rapid influx of new words, concepts, and acronyms that define the IT sector. This dynamic lexicon not only reflects the evolution of technology but also serves as a testament to human creativity and adaptability. In his monograph on the terminological lexicon of the Russian language, V.P. Danilenko, who examined a number of scholarly publications in the area throughout specific eras, provides 19 definitions reflecting the notion of "term," which generates a distinctive complexity. As per his statement: “all the definitions of the concept of the term are found in almost every study of the special lexicon, and only a small part of the definitions”.[46] The concept of the term is extensively explored in various studies of specialized language, with a wide array of definitions encompassing its nuances. However, only a fraction of these definitions is typically included or referenced in such studies. This finding implies that the idea is

[46] Danilenko V. P. Russian terminology / V. P. Danilenko. – M.: Nauka, 1977. 246 p.

ambiguous and open to interpretation, reflecting the intricacy of specialised fields and language. It also shows how difficult it is to fully define and capture concepts in specialised lexicons.

JavaScript, as a programming language, contains terms and concepts that may not directly translate into other languages. This is particularly true for terms that are deeply rooted in programming principles, such as variables, functions, objects, and methods. For example, translating the term "variable" into languages with different grammatical structures may require careful consideration to ensure clarity and correctness. Additionally, some languages may lack direct equivalents for certain programming constructs, leading to the adoption of alternative terms or explanations. JavaScript, like any other programming language, has a specialized vocabulary comprising technical terms and jargon specific to the field of software development.

As we journey through the intricate terrain of IT terminology, especially JavaScript related terms, we will uncover the neologisms that encapsulate emerging technologies, explore the borrowed words and phrases that connect us globally, decode the cryptic acronyms that streamline communication, and examine the compound terms that paint vivid pictures of complex processes. We'll also dissect the fascinating semantic shifts that occur when words transform in meaning within the IT context, demonstrating the malleability and fluidity of language in this domain. Here's a table summarizing the key points about different JavaScript concepts, emphasizing their lexical and semantic features:

Table 2.2. Lexical and Semantic Features of Key JavaScript Programming Concepts

Term	**Lexical Feature**	**Semantic Feature**
Concept	Noun	Represents an abstract idea or general notion in IT.

Variables	Noun	Represents a storage location paired with a symbolic name, containing a value.
Functions	Noun	A block of organized, reusable code that performs a single action.
Arrays	Noun	A collection of elements identified by an index or key.
Objects	Noun	Instances of classes containing data (attributes/properties) and code (methods).
Callbacks	Noun	A function passed as an argument to another function, invoked to complete a routine or action.
DOM	Noun	A programming interface for web documents, representing the page so programs can change it.
Events	Noun	Actions or occurrences in a system that can be responded to by the program.
Promises	Noun	Represents the eventual completion or failure of an asynchronous operation and its result.
Closures	Noun	A function retaining access to its lexical scope even when executed outside that scope.
AJAX	Acronym	A set of web development techniques for creating asynchronous web applications.
ES6	Abbreviation	The sixth edition of the ECMAScript language specification with new features for JavaScript.
JavaScript	Noun	A high-level, often just-in-time compiled, multi-paradigm programming language.
ECMAScript	Noun	A scripting language specification on which JavaScript is based.
Node.js	Noun	An open-source, cross-platform, back-end JavaScript runtime environment.

NPM	Abbreviation	The package manager for the Node.js platform, managing dependencies and conflicts.
Front-end	Adjective	Refers to the client side of an application, what users experience directly.
Back-end	Adjective	Refers to the server side, handling communication between the database and the client.
JSON	Abbreviation	A lightweight data interchange format easy for humans to read/write and machines to parse/generate.
RESTful API	Abbreviation	An API design following the principles of Representational State Transfer, using HTTP requests.
SPA	Abbreviation	A web application that dynamically rewrites the current page instead of loading new pages.
TypeScript	Noun	A strongly typed programming language that builds on JavaScript for better tooling at scale.
Webpack	Noun	An open-source JavaScript module bundler for bundling JavaScript files for usage in a browser.
Babel	Noun	A JavaScript compiler enabling the use of ES6+ syntax and polyfilling for compatibility with older environments.

From a linguistic perspective, the terminology used in IT demonstrates fascinating lexical and semantic characteristics that highlight the specialized language of this field. Lexically, many of these terms function as nouns, reflecting their role in identifying concrete and abstract entities within programming and web development. For instance, terms like "Variables," "Functions," and "Objects" serve as nouns that encapsulate key concepts fundamental to coding and software architecture. These terms have specific, well-defined meanings within the IT

lexicon, illustrating the precision and clarity necessary for effective technical communication.

Semantically, each term carries a distinct meaning that aligns with its function in the technological context. Terms such as "DOM" (Document Object Model) and "AJAX" (Asynchronous JavaScript and XML) are acronyms, which often signify complex processes or systems in a condensed form, making the language more efficient and specialized. The term "Closures" exemplifies how a single word can convey a complex programming concept involving the retention of scope in functions, essential for understanding functional programming paradigms.

The use of abbreviations and acronyms like "ES6" (ECMAScript 6) and "JSON" (JavaScript Object Notation) further illustrates the need for brevity and precision in IT language, enabling quick and effective communication among professionals. These terms not only identify specific versions or types of technologies but also carry connotations of advancement and modernization within the field. Additionally, the distinction between front-end and back-end, described as adjectives, underscores the division of labor and specialization in web development, highlighting the different roles and responsibilities in creating and maintaining web applications.

Moreover, terms such as "Promises" and "Callbacks" reflect the asynchronous nature of modern programming, where operations may not complete immediately, requiring developers to handle future values or functions executed later. This semantic complexity is crucial for understanding how modern web applications maintain responsiveness and efficiency. The introduction of terms like "TypeScript" and "Webpack" indicates the evolving landscape of programming languages and tools, where new innovations continuously enhance developer productivity and code maintainability.

In summary, the lexical items in IT terminology are predominantly nouns, reflecting the field's focus on identifying and managing distinct entities and concepts. Semantically, these terms encapsulate intricate ideas and processes, often

using abbreviations and acronyms for efficiency. This specialized vocabulary enables precise, clear, and effective communication among IT professionals, facilitating the development and maintenance of complex technological systems.

The table organizes these programming concepts lexically and semantically, providing a comprehensive linguistic framework that underpins the development of robust, scalable, and interactive web applications.

Furthermore, we will venture into the world of classification, where IT terms can be organized into distinct categories, each representing a critical aspect of the IT ecosystem. As N.A.Baskarov claimed, "The people of current world need well-organized, systematic and meaningful terms. In order to fulfill this crucial task linguists should acquire not only general linguistic awareness, but also specific skills of terminology.[47] This categorization enables us to better navigate the labyrinth of IT jargon, making it more accessible to both industry insiders and those looking to understand and harness the power of technology. Research indicates that the majority of basic and derived terms in IT technologies are created through a reinterpretation of everyday language words. Methods for the nomination, at the use of which the form of lexical units does not change, but only a change in their values happens, are called semantic ones[48]. Additionally, V.S.Vinogradov also emphasizes a semantic way to the nomination, when common word becomes the name of a scientific or technical concept by rethinking, metaphorization of one or more of its values[49]

IT terminology exhibits several distinctive lexical characteristics, making it a fascinating subject of study for linguists and IT professionals alike. IT is characterized by the constant creation of new words and phrases, a linguistic

[47] Baskakov N. A. Turkish language – M: Restored publishing literature, 1960- 242p.

[48] Gaiduk M. Language Changes in Modern English under Computerisation Impact // Computer Science and Information Technologies, 2009:Fourth International Scientific and Technical Conference, 15–17 October 2009, Lviv, Ukraine.

[49] Vinogradov, V. V Word formation in its relation to grammar and lexicology // Selected works. ResearchonRussiangrammar.ML : Uchpedgiz, 1975. — 186 p.

phenomenon often referred to as neologisms. These neologisms serve as the vocabulary of innovation, emerging organically from the ever-evolving realm of technology. They are the linguistic footprints of progress, formed to encapsulate and describe the intricacies of emerging technologies and concepts.

The analysis of the English and Uzbek corpora revealed several similarities and differences in the IT terminology used in the two languages. Firstly, both languages have adopted and integrated foreign IT terms into their vocabulary, such as "*software," "database," and "network*." This is not surprising given that IT is a global field with many foreign borrowings. However, there are also notable differences in the frequency of use, semantic range, and linguistic features of IT terms.

In terms of frequency of use, English IT terms are generally more frequent in the corpus than Uzbek IT terms. This is likely due to the fact that English is the lingua franca of IT and is used widely in international contexts. For example, the English term "*server*" appears much more frequently in the corpus than the Uzbek equivalent "*server*." Similarly, the English term "*database*" is more frequent than the Uzbek term "*ma'lumotlar bazasi*." Another difference is the semantic range of certain IT terms. In some cases, the English term has a broader semantic range than its Uzbek equivalent. For example, the English term "*data*" can refer to any type of information, while the Uzbek equivalent "*ma'lumotlar*" is more specific and refers to factual information. This suggests that English IT terms may be more flexible and adaptable than their Uzbek equivalents. There are also linguistic differences between the two languages in terms of the structure and morphology of IT terms. For example, English IT terms often consist of multiple words that are compounded together, such as "*cloud computing" and "machine learnin*g."

In contrast, Uzbek IT terms tend to be more morphologically complex and are often formed by adding prefixes or suffixes to existing words. For example, the Uzbek term "*yuklash*" (upload) is formed by adding the suffix "-lash" to the verb stem "yuk." The findings of this study have important implications for language

learners, translators, and IT professionals working in cross-cultural contexts. Firstly, language learners who are interested in IT should be aware of the similarities and differences between English and Uzbek IT terminology. This can help them to better understand and communicate about IT concepts in both languages. Secondly, translators who work with IT texts should be familiar with the vocabulary and linguistic features of both English and Uzbek IT terminology, in order to accurately and effectively translate between the two languages. Finally, IT professionals who work in cross-cultural contexts should be aware of the linguistic and cultural differences between English and Uzbek IT terminology, in order to effectively communicate and collaborate with colleagues and clients from different linguistic backgrounds.

According to the above ideas, it is possible to say that the discussed passage highlights the importance of semantic methods for nomination, where the form of lexical units remains constant, but their meanings undergo a change. Moreover, V.S. Vinogradov emphasizes the significance of the semantic approach in naming scientific or technical concepts. This involves transforming common words into the names of these concepts through rethinking and metaphorization of their values. It suggests that language can be adapted to meet the evolving needs of various fields, such as science and technology, by creatively using existing words. The semantic method appears to be a flexible and efficient way to introduce new terms without altering the structure of language. All things considered, we think that comprehending and using semantic approaches for nomination might improve communication and creativity in specialised fields.

Summary of the chapter

This chapter explores the lexical and semantic characteristics and classification of IT terms in English and Uzbek languages, emphasizing how these terms reflect the rapid advancements in technology and the interconnected nature of our global society V.P. Danilenko's work on the terminological lexicon highlights the complexity and diversity of definitions for the term "term," reflecting the challenges

of fully capturing specialized concepts in language. JavaScript, as a programming language, presents unique translation challenges due to its specialized vocabulary, emphasizing the need for a deep understanding of both programming concepts and the target language's technical terms. The chapter also delves into the classification of IT terms, organizing them into categories that represent critical aspects of the IT ecosystem. N.A. Baskarov's assertion on the necessity of well-organized, systematic, and meaningful terms for effective communication in IT is highlighted. Semantic methods for nomination, where the form of lexical units remains unchanged but their meanings evolve, are crucial for adapting language to new scientific and technical concepts.

The analysis reveals similarities and differences between English and Uzbek IT terminology, noting that English terms are generally more frequent and have broader semantic ranges. English IT terms often consist of compounded words, while Uzbek terms are more morphologically complex, formed by adding prefixes or suffixes to existing words.. The chapter concludes that understanding and utilizing semantic approaches for nomination can enhance communication and creativity in specialized fields, reflecting the adaptability and evolution of language in response to technological advancements.

This chapter also examines the ways of word formation for IT terms in English and Uzbek languages, highlighting the influence of globalization on the emergence of neologisms. It reveals that the assimilation of English borrowings into Uzbek, particularly in IT, is significant. The chapter identifies various linguistic processes involved in the formation of new IT terminology in both languages.. The chapter also explores the structural attributes of computer terms through various methodologies, including word-formation analysis and comparative studies. Both languages use compounding, though the structures differ, with Uzbek compounds often juxtaposing words with distinct meanings. The chapter discusses the lexical-semantic formation of terms through metaphor and metonymy, enriching the vocabulary with nuanced meanings. It emphasizes the importance of understanding semantic characteristics

alongside structural analysis. Differences in linguistic structure, historical development, and cultural influences shape the evolution of IT terminology in both English and Uzbek. Despite similarities in word formation methods, the nuances in each language reflect their unique contexts, affecting the complexity and specialization of IT terms.

CHAPTER III. TRANSLATION PECULIARITIES OF ENGLISH INFORMATION TECHNOLOGY TERMINOLOGY INTO THE UZBEK LANGUAGE

3.1-§. The ways of translating the Java Script-related terms into Uzbek

Translation, in the words of Newmark, transfers an idea of the source language (SL) into the target language (TL)[50].Translating JavaScript-related terms can indeed present several challenges, primarily due to the nuances of programming languages, the technical nature of the terminology, and the need for precise and accurate translations to maintain the integrity of the code. In this extensive discussion, we'll explore these challenges in detail, examining various aspects such as linguistic differences, context sensitivity, cultural considerations, and the impact on software development and international collaboration.

According to Sattar Izwaini “The context and logical relation among terms seem also to play a role in the translation of LIT. In some cases, the translation ignores the actual coinage and looks at other terms related to the term in hand”[51]. Sattar Izwaini's observation highlights the complexity of translating terms within the field of Information Technology (IT). In IT, terms often have specific meanings and connotations that can vary depending on the context in which they are used. By emphasizing the importance of considering the context and logical relationships among terms, Izwaini suggests that translators should not rely solely on literal translations. Instead, they should delve deeper into the broader context in which the terms are situated and consider how they interact with other terms within that context. This approach ensures that the translation accurately reflects the intended meaning and usage of the terms within the field of Information Technology.

The translation of JavaScript-related terms into Uzbek is a critical aspect of localizing technical content for web development and IT education. As JavaScript continues to be a cornerstone of web technologies, ensuring that its terminology is

[50] NewMark, P. (1981). Approaches to Translation. Oxford and NewYork: Pergamon.
[51] Sattar Izwaini. A corpus-based study of the translation of IT terms. January 2005. P 88 https://www.researchgate.net/publication/320546551_Corpus-based_Study_of_IT_Terms

accessible to Uzbek speakers is essential. This involves addressing linguistic challenges and adapting terms to fit the Uzbek language structure and context. The methodologies employed in this translation process aim to preserve the technical accuracy and usability of the terms, facilitating a more inclusive and comprehensive learning environment for Uzbek-speaking developers and students. By examining these translation approaches, we can better understand how to effectively bridge the language gap in the rapidly evolving field of information technology. The translation of JavaScript-related terms into Uzbek involves various methodologies to ensure clarity and accuracy. The following table summarizes the various methods for translating JavaScript-related terms into Uzbek.

Table 3.1. Methods of Translating JavaScript Terms into Uzbek

Translation method	**Description**	**Examples**
Direct Translation	Converting English terms into their closest Uzbek equivalents without altering their original meanings.	*Function: "Funksiya"* *Variable:"O‘zgaruvchi"* *Object:"Obyekt"* *Boolean: "Mantiqiy"* *Loop: "Takrorlash"*
Transliteration	Converting words from the source language script into the target language script.	*JavaScript: "JavaScript"* *Framework: "Freymvork"*
Loanwords and Neologisms	Employing loanwords or newly coined terms when direct translations or transliterations are insufficient.	*Array: "Array" or "Massiv"* *Module: "Modul"* *Debugger: "Debagger"*
Contextual Translation	Interpreting the meaning of a term based on its use	*Scope: "Doira" for function scope*

	within a particular context.	*Scope: "Jihat" for project scope* *Node: "Tugun" in network context* *Thread: "Ip" in threading context*

The first approach is direct translation, as shown in Table 1 for terms like *'Function' (Funksiya*).. Without changing the original meaning of the phrases, direct translation entails translating English words into their closest equivalents in Uzbek. This method seeks the closest Uzbek equivalents for English terms while preserving their original meaning. Examples include "Function" becoming "Funksiya," "Variable" translating to "O‘zgaruvchi," and "Object" to "Obyekt." This method works well for established terms with clear Uzbek counterparts.

These translations are straightforward, maintaining the technical integrity of the original terms. However, not all JavaScript (JS) terms have direct Uzbek equivalents due to differences in linguistic structures and technological contexts.

However, direct translation can sometimes fall short. Transliteration is particularly useful when dealing with terms that lack direct translations or when the terms are proper nouns or brand names. Transliteration helps in retaining the original pronunciation and recognition of technical terms. This approach is often used for proper nouns or terms lacking direct equivalents, like "JavaScript" becoming "JavaScript" and "Framework" translating to "Freymvork."

While transliteration helps maintain recognition (e.g., 'JavaScript' as 'JavaScript'), loanwords and neologisms are necessary for new concepts (e.g., *'Array' as 'Array' or 'Massiv'*)."When direct translations or transliterations are insufficient, loanwords or newly coined terms (neologisms) are employed. This is common for concepts or technologies that are new to the Uzbek language environment. These terms may initially seem foreign but gradually become standardized through usage in technical documentation and education. Neologisms are newly coined terms

specific to the target language, such as "Modul" for "module" or "Debagger" for "debugger."

Finally, contextual translation plays a crucial role. It involves interpreting the meaning of a term based on its use within a particular context. This method ensures that the translated term fits appropriately within the technical framework of the language. For example: *Scope:* Depending on its use, it can be translated as "*Doira*" when referring to the scope of a function, or "*Jihat*" when discussing the scope of a project. By employing these various methods strategically, translators can effectively bridge the linguistic gap and ensure accurate and nuanced communication of JavaScript concepts in Uzbek.

Moreover, there are some other ways like the hybrid approach to translating JavaScript-related terms into Uzbek which is a method that combines transliteration and descriptive translation. This approach ensures that the technical terms remain recognizable to those familiar with JavaScript while providing clear explanations for Uzbek speakers, particularly those new to programming.

Definition and Purpose: The hybrid approach involves adapting the phonetic spelling of a term from English to Uzbek (transliteration) and pairing it with an explanation in Uzbek (descriptive translation). This dual strategy helps maintain the integrity of the original term while making its meaning accessible.

Advantages:

- **Recognition:** Retains the original technical term, aiding those already familiar with JavaScript.
- **Clarity:** Offers an explanation in Uzbek, ensuring that the concept is understood correctly.
- **Accessibility:** Makes it easier for beginners to learn programming concepts without getting confused by unfamiliar terminology.

Examples:

1. **Array:**
    - Transliteration: "Massiv"
    - Descriptive Translation: "ma'lumotlar to'plami" (data collection)

- Hybrid Translation: "Massiv (ma'lumotlar to'plami)"

2. **Function:**
    - Transliteration: "Funksiya"
    - Descriptive Translation: "amalni bajaruvchi kod"
    - Hybrid Translation: "Funksiya (amalni bajaruvchi kod)" (function - code that performs an operation)
3. **Object:**
    - Transliteration: "Ob'ekt"
    - Descriptive Translation: "xususiyatlar va usullarni saqlovchi tuzilma"
    - Hybrid Translation: "Ob'ekt (xususiyatlar va usullarni saqlovchi tuzilma)" (object - a structure that holds properties and methods)

Implementation: The hybrid approach can be effectively implemented in various domains:

- **Educational Materials:** Use hybrid terms in textbooks and online courses to facilitate learning.
- **Documentation:** Incorporate hybrid terms in software documentation and manuals to aid comprehension.
- **Software Interfaces:** Include hybrid translations in development environments and user interfaces to help users understand and navigate software tools efficiently.

Standardization

Standardization is the process of developing a consistent set of terms for use across educational materials, documentation, and software interfaces. This process ensures uniformity and ease of understanding, preventing confusion that might arise from multiple translations of the same term.

Process:

1. **Collaboration:**
    - Bring together linguists, educators, software developers, and industry experts.
    - Discuss and agree upon the most appropriate translations for key terms.

2. **Development:**
    - Create a glossary of standardized terms.
    - Ensure the glossary covers all essential JavaScript concepts.
3. **Review and Feedback:**
    - Test the standardized terms with target users (students, developers) to gather feedback.
    - Make adjustments based on usability and comprehension.
4. **Publication and Distribution:**
    - Publish the standardized glossary in print and digital formats.
    - Distribute it widely across educational institutions and software companies.
5. **Training and Adoption:**
    - Provide training sessions for educators and developers on the standardized terms.
    - Encourage adoption through workshops, seminars, and continuous support.

Examples of Standardized Terms:

1. **Variable:**
    - Standardized Term: "O'zgaruvchi"
    - Definition: "O'zgaruvchi (ma'lumotlarni saqlovchi belgi)" (variable - a symbol that holds data)
2. **Loop:**
    - Standardized Term: "Takrorlash"
    - Definition: "Takrorlash (kodni qayta-qayta bajarish)" (loop - repeatedly executing code)
3. **Event:**
    - Standardized Term: "Hodisa"
    - Definition: "Hodisa (dasturda sodir bo'lgan voqea)" (event - an occurrence within the program)

Benefits:

- **Consistency:** Ensures uniform use of terms, reducing confusion.
- **Efficiency:** Streamlines learning and development processes.
- **Integration:** Facilitates integration of Uzbek terminology into global programming practices.

By adopting both the hybrid approach and standardization, we can make JavaScript and other programming languages more accessible to Uzbek speakers. This dual strategy fosters a more inclusive and comprehensible learning environment, ensuring that technical education in Uzbekistan is both effective and aligned with global standards.

Translating programming terms also involves considering cultural differences and preferences. Some languages and regions may have established conventions for translating technical terms, while others may prefer transliterations or loanwords from English. Cultural sensitivity is particularly important when translating terms related to user interface elements, error messages, and documentation, as these directly impact the user experience and comprehension. Additionally, idiomatic expressions and metaphors used in programming documentation may require adaptation to resonate with the target audience.

The meaning of JavaScript terms often depends on their context within the code. For example, the word "function" can refer to a named block of code in JavaScript, but it can also have different meanings in natural language. Translators must carefully analyze the context in which these terms appear to ensure accurate translations. This context sensitivity extends to syntactical elements, such as operators, keywords, and punctuation marks, which may have different interpretations in various programming languages.

Choosing the right translation method for IT terms requires a balance between preserving meaning, cultural relevance, and maintaining technical accuracy. By utilizing a combination of these methods, translators can effectively bridge the linguistic gap and ensure clear communication in the ever-growing realm of IT.

Accurate translation of JavaScript terms is crucial for international software development projects involving multilingual teams or audiences. Inconsistent or

incorrect translations can lead to misunderstandings, errors in code implementation, and reduced productivity. Moreover, poorly translated documentation and user interfaces can hinder the adoption of software products in non-English-speaking markets, limiting their reach and impact. Therefore, investing in professional translation services or leveraging localization tools is essential for ensuring the quality and accessibility of software products across linguistic and cultural boundaries.

3.2-§ The peculiarities of translation of English IT terms including the Java Script terms into the Uzbek language

Translating JavaScript-related terms presents various challenges stemming from linguistic differences, technical complexity, context sensitivity, cultural considerations, and the impact on software development and international collaboration. Addressing these challenges requires a multidimensional approach that combines linguistic expertise, technical proficiency, cultural awareness, and effective communication strategies. By overcoming these challenges, developers and translators can ensure the accuracy, clarity, and accessibility of JavaScript codebases and software products for global audiences.

Below are some JavaScript-related terms along with their lexical semantic features:

Table 3.2. Comparison of JavaScript terms across English and Uzbek languages

WORDS	LEXICAL MEANING	SEMANTIC MEANING IN JAVASCRIPT	UZBEK EQUIVALENT
Alert	watchful and prompt to meet danger or emergency an *alert* guard - quick to perceive and act mentally *alert* - active, brisk elicited an *alert* response.[52]	The alert() method in JavaScript is used to display a virtual alert box. It is mostly used to give a warning message to the users.[53]	*Ogohlanti-rish* – ekranda maxsus oyna Ichida xabar chiqarib,to u yopilgunigacha navbatdagi kodlarning bajarilishini to'xtatib turadi[54]

[52] https://www.merriam-webster.com/dictionary/alert
[53] https://www.javatpoint.com/javascript-alert
[54] Javlon Abdullo - Mukammal dasturlash 2. JavaScript. - Toshnent: Akademnashr, 2022 - b 10

Array	to set or place in order[55]	It stores multiple values and elements in one variable.[56]	array bu bir necha hil qiymatlardan tashkil topgan malum bir ketma ketlikda joylashgan obyekt.
catch	to capture or seize especially after pursuit *catch* a thief	The *catch* statement allows you to define a block of code to be executed, if an error occurs in the try block.[57]	**catch** bloki – try blokidan so'ng kelib, xatolik yuz berganda bajariladigan kodni ishga tushiradi.
console. clear()	Clear- pure or easy to see through, with no marks or areas *clear glass*[58]	the clear() method clears the console.[59]	Konsolni tozalaydi[60]
null	*Null* means having no value; in other words *null* is zero, like if you put so little sugar in your coffee that it's practically *null*.[61]	null is an assignment value that represents no value or no object.	'hech narsa ' ma'nosini beruvchi yagona qiymat.[62]
console	a surface or device with controls f or electronic equipment, a vehicle, etc.: [63] "a yellow light flashes on the console".	In JavaScript, the console.log() method displays messages or variables in the browser's console.[64]	Yozilgan kodlarni to'gri ishlashini tekshirishda consol obyekti keng qo'llaniladi.

This table offers a comprehensive examination of the lexical and semantic dimensions of terms pertinent to JavaScript programming, elucidating both their linguistic evolution and technical applications. It provides illuminating insights into how terms like "Alert" and "Array" undergo semantic recontextualization within the

[55] https://www.merriam-webster.com/dictionary/array
[56] https://www.freecodecamp.org/news/how-to-declare-an-array-in-javascript-creating-an-array-in-js/#:~:text=In%20JavaScript%2C%20an%20array%20is,data%20types%20in%20one%20variable.
[57]https://www.w3schools.com/js/js_errors.asp#:~:text=The%20catch%20statement%20allows%20you,occurs%20in%20the%20try%20block.
[58] https://dictionary.cambridge.org/dictionary/english/clear
[59] https://www.w3schools.com/jsref/met_console_clear.asp
[60] Javlon Abdullo - Mukammal dasturlash 2. JavaScript. - Toshnent: Akademnashr, 2022 – b 140
[61]https://www.vocabulary.com/dictionary/null#:~:text=Null%20means%20having%20no%20value,it%20was%2C%20it's%20gone%20now.
[62] Javlon Abdullo - Mukammal dasturlash 2. JavaScript. - Toshnent: Akademnashr, 2022 – b 34
[63] https://dictionary.cambridge.org/dictionary/english/console
[64] https://www.programiz.com/javascript/console

realm of JavaScript, where they respectively denote the **alert()** method for cautionary messages and a data structure for storing multiple values.

From a linguistic point of view, the translation of IT terminology from English to Uzbek presents several challenges that stem from both lexical and semantic differences between the two languages. Lexically, many IT terms in English are borrowed directly from technical jargon or created through specialized processes such as abbreviation and acronym formation. For example, terms like "AJAX," "DOM," and "JSON" are acronyms that encapsulate complex technical processes. Translating these terms into Uzbek requires not only finding equivalent technical terms but also ensuring that these terms are understandable and retain their specific meanings.

Semantically, IT terms often have precise meanings that are crucial for programming and development. For instance, the term "alert" in everyday English refers to being watchful or quick to respond, but in JavaScript, it refers specifically to a method that displays a warning message to users. This shift in meaning poses a challenge for translators who must convey the exact functionality of the term within the context of programming. Similarly, the term "array" refers to a systematic arrangement of elements, while in programming, it refers to a data structure that holds multiple values. The challenge is to maintain the technical specificity while ensuring that the translated term is comprehensible to Uzbek-speaking developers.

Furthermore, the translation of terms like "await" and "promise" introduces additional complexity. In JavaScript, "await" is used to handle asynchronous operations, and "promise" is an object representing the eventual completion or failure of an asynchronous operation. These terms have no direct equivalents in everyday Uzbek, requiring translators to create or adapt terms that accurately reflect these concepts. Furthermore, the table provides valuable insights into the Uzbek equivalents of JavaScript terms, enhancing cross-cultural understanding and linguistic proficiency. For instance, it elucidates how terms like "Alert" correspond to "Ogohlantirish" in Uzbek, reflecting the translation of technical concepts into the

vernacular language. This intercultural dimension enriches the scholarly discourse on programming terminology, fostering a deeper appreciation for linguistic diversity and technological innovation. Overall, the table serves as a scholarly resource for researchers, educators, and practitioners, facilitating a nuanced understanding of the intricate relationship between language and programming within the domain of JavaScript.

Moreover, the table meticulously delineates the semantic adaptations observed in terms as a term "Boolean" presents a unique challenge as it originates from mathematical logic, representing true or false values. Translators must ensure that the translated term conveys this binary concept clearly and accurately.

Another layer of complexity is added by terms like "break," "continue," and "catch," which have everyday meanings in English but are used as specific commands in programming. The word "break" in English means to separate into parts, but in JavaScript, it is used to terminate a loop. The term "continue" means to persist in an action, while in programming, it skips the current iteration of a loop. Translating these commands into Uzbek requires careful consideration to preserve their technical meanings without causing confusion.

The use of terms like "document," "class," and "debugger" also highlights the importance of context in translation. The "document" object in JavaScript represents the web page, and translating this term requires an understanding of its role within the Document Object Model (DOM). The term "class" refers to a blueprint for creating objects, which may differ significantly from its everyday meaning related to groups or categories. The term "debugger" denotes a tool for finding and fixing bugs in code, which must be accurately conveyed to ensure effective communication among developers.

Translating IT terminology from English to Uzbek involves addressing both lexical and semantic challenges. Lexically, translators must deal with specialized jargon and abbreviations, while semantically, they must ensure that the technical

meanings are accurately conveyed. This requires a deep understanding of both the source and target languages, as well as the specific context in which these terms are used. The goal is to create translations that are both precise and accessible, enabling Uzbek-speaking developers to work effectively with these technical concepts.

While the JavaScript-related terms discussed are often borrowed across languages, including Uzbek, there are notable contrasts between English and Uzbek in terms of script, morphology, and adaptation. Here are some key contrastive features. English often uses compound words and acronyms to form technical terms. The structure and morphology may vary. Borrowed terms may adapt to Uzbek linguistic structures. Some terms may not be translated directly and are often borrowed as loanwords or transliterations. Borrowed terms may undergo adaptation to fit the phonetic and morphological patterns of Uzbek while retaining their original meanings. The semantic nuances of certain terms may be influenced by the English-speaking software development culture. While the core meanings are retained, there might be slight adaptations to align with the cultural and linguistic context of Uzbek-speaking developers. Constantly evolves with the introduction of new terms and concepts in the global tech community. The Uzbek language adapts to the growing needs of the local tech industry, possibly influencing the creation of new terms or adaptations. In English it is standardized spellings and pronunciations following English orthographic rules. Adherence to Uzbek orthographic rules, which may differ from English, especially in terms of pronunciation. In English constantly incorporates new technical vocabulary and expressions. In Uzbek it may adopt new terms but could also rely on existing linguistic structures to convey technological concepts.

Despite the challenges, there are ongoing efforts to bridge the language gap and make JS learning resources more accessible to Uzbek programmers:

- **Community-Driven Initiatives:** Uzbek developer communities are playing a vital role in creating online resources with translated JS terminology. These resources, often in the form of online glossaries, wikis, and forums, can be a

valuable starting point for Uzbek programmers. However, the consistency and accuracy of these translations can vary depending on the contributors' expertise.

- **Borrowed Terms and Transliteration:** In some cases, JS terms are adopted directly into Uzbek, using either the English pronunciation or Cyrillic transliteration. This approach can be a practical solution for terms that are already widely understood within the developer community. However, for beginners unfamiliar with English technical terms, this approach might not be effective.
- **Standardization Efforts:** Standardization of JS terminology in Uzbek is crucial for ensuring clarity and consistency in learning materials and communication within the developer community. Collaboration between Uzbek developers, educators, and industry professionals can lead to the creation of official Uzbek translations for JS terms. This would benefit both Uzbek programmers and those creating Uzbek-language learning resources.

The ongoing translation endeavors of JS terminology into Uzbek symbolize a concerted effort to enhance accessibility and inclusivity in technology for the Uzbek-speaking populace. This continual process exemplifies a dedication to breaking down linguistic barriers and nurturing indigenous proficiency in JavaScript development. Ultimately, the article underscores the significance of adaptability and localization in propelling technological advancements within diverse cultural landscapes like Uzbekistan.

In the context of collaborative software development projects, effective communication is paramount for coordinating efforts among team members from diverse linguistic backgrounds. Translating JavaScript-related terms accurately facilitates seamless collaboration by ensuring that all team members have a common understanding of the codebase and project requirements. This is especially relevant in open-source software communities where contributors and users span multiple

countries and languages. By providing clear and consistent translations, developers can enhance the accessibility and inclusivity of their projects, fostering a more diverse and vibrant community of contributors.

It's important to note that the adoption of Latin script in Uzbek, especially in technical fields, has led to a more direct borrowing of terms. However, the linguistic and cultural context of Uzbek can still influence the adaptation and usage of these borrowed terms. Additionally, the differences in phonetics and pronunciation patterns between the two languages can contribute to variations in the way terms are articulated. Borrowing from English to Uzbek is a dynamic process shaped by linguistic, cultural, and technological factors. The extent to which borrowed words are adapted depends on the linguistic context and the degree of integration into the daily life and communication of the Uzbek-speaking community.

Summary of the chapter.

The translation of Java Script-related terms into Uzbek involves various strategies and considerations. It requires a deep understanding of both languages' syntax, semantics, and cultural context to ensure accuracy and clarity. Some terms may have direct equivalents in Uzbek, while others may need adaptation or explanation to convey their meaning effectively. Translators often encounter challenges due to differences in linguistic structures and technical concepts between English and Uzbek. They must navigate these challenges while maintaining consistency and coherence in the translated text.

This chapter analyzes the complexities of translating JavaScript-related terms from English into Uzbek, highlighting challenges such as linguistic differences, technical precision, and contextual sensitivity. Newmark describes translation as the transfer of ideas from a source language (SL) to a target language (TL), a process that becomes particularly nuanced with technical terminology. Translating JavaScript terms involves not only linguistic conversion but also the adaptation of

concepts to fit the Uzbek language's structure and context, ensuring technical accuracy and usability.

In this chapter, we discuss various methodologies for translating JavaScript terms, such as direct translation, transliteration, loanwords, neologisms, and contextual translation

This chapter emphasizes that translating IT terminology requires considering cultural differences and preferences. Some regions may have established conventions, while others might prefer loanwords from English. Cultural sensitivity is crucial when translating user interface elements and documentation, directly impacting user experience and comprehension. Additionally, idiomatic expressions in programming documentation may need adaptation to resonate with the target audience.

Accurate translation of JavaScript terms is vital for international software development, avoiding misunderstandings and errors in code implementation. Consistent translations enhance productivity and the adoption of software products in non-English-speaking markets, making professional translation services and localization tools essential for global accessibility.

The second paragraph of this chapter discusses the specific challenges of translating IT terminology from English to Uzbek. Lexical and semantic differences, specialized jargon, and precise technical meanings pose significant challenges. Translators must ensure terms are both understandable and retain their specific meanings. For example, the term "alert" in English becomes "Ogohlantirish" in Uzbek, while "array" translates to "massiv," each requiring precise contextual understanding.

This chapter highlights the importance of context in translation, especially for terms like "document," "class," and "debugger," which have specific roles in programming. Effective translation requires a deep understanding of both languages

and their contexts to ensure technical accuracy and comprehensibility for Uzbek-speaking developers.

In summary, translating JavaScript-related terms from English to Uzbek involves addressing lexical and semantic challenges, cultural sensitivities, and contextual nuances. The goal is to create precise, accessible translations that enable effective communication and understanding in the technical domain.

Ultimately, effective translation of Java Script-related terms into Uzbek contributes to the accessibility and dissemination of IT knowledge within Uzbek-speaking communities.

CONCLUSION

The introduction sets the stage for the exploration of terminology in language development, particularly focusing on its significance within the realm of information technology (IT). It serves as a preamble to the subsequent chapters, highlighting the importance of terminology as a crucial element in language evolution and communication.

The 1 st chapter delves into the fundamental aspects of terminology within the broader context of language development. It examines terminology as a lexical aspect, emphasizing its role in shaping language structure and usage. Additionally, it analyzes the position of terminology within the lexical system of a language, providing insights into its organizational framework and linguistic significance.

The second chapter shifts the focus to the lexical semantic and structural analyses of information technology terminology in both English and Uzbek languages. It explores the characteristics and classification of IT terms, shedding light on their semantic nuances and linguistic categorization. Furthermore, it investigates the word formation processes of IT terms, examining how these terms are coined and integrated into the lexicon of each language.

In the 3rd chapter, the discussion revolves around the translation peculiarities encountered when rendering English IT terminology, including Java Script-related terms, into the Uzbek language. It explores the diverse strategies and challenges involved in translating technical terminology, emphasizing the need for linguistic expertise and cultural sensitivity. Additionally, it highlights the unique nuances and intricacies of translating Java Script-related terms, underscoring the importance of precision and accuracy in cross-linguistic communication.

In conclusion, the exploration of terminology in information technology and its translation into Uzbek contributes to both theoretical understanding and practical applications in language studies and professional practice. It underscores the intricate relationship between language, technology, and culture, highlighting the complexities involved in cross-cultural communication and knowledge transfer. Moreover, it emphasizes the importance of continuous research and collaboration in

advancing linguistic proficiency and facilitating effective communication in diverse linguistic contexts. Ultimately, the study serves as a testament to the dynamic nature of language and the evolving role of terminology in shaping human interaction and technological innovation.

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18. http://www.techno- leader.ru/index.php?ukey=news&blog_id=60
19. http://www.merriam-webster.com

20. http://www.lib.tsu.ru/mminfo/000063105/347/image/ 347-015.pdf

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22.https://opensource.com/article/22/9/javascript-glossary

23.https://developer.mozilla.org/en-US/docs/Glossary/JavaScript

24.https://www.w3schools.com/js/js_reserved.asp

25. https://uzsmart.uz/kitoblar/view/6?lid=tmghotk80mv6sm1nn84n9mtgf4

26. http://www.lib.tsu.ru/mminfo/000063105/347/image/347-015 .pdf

27. http://www.dncran.ru/vestnik/3 5/Dorohova_Togunov.pdf

28. https://www.programiz.com

APPENDIX 1

Table 3.2. comparison of Javacript terms across English and Uzbek languages

WORDS	LEXICAL MEANING	SEMANTIC MEANING IN JAVASCRIPT	UZBEK EQUIVALENT
Alert	watchful and prompt to meet danger or emergency an *alert* guard - quick to perceive and act mentally *alert* - active, brisk elicited an *alert* response.[65]	The alert() method in JavaScript is used to display a virtual alert box. It is mostly used to give a warning message to the users.[66]	*Ogohlanti-rish* – ekranda maxsus oyna Ichida xabar chiqarib,to u yopilgunigacha navbatdagi kodlarning bajarilishini to'xtatib turadi[67]
Array	to set or place in order[68]	It stores multiple values and elements in one variable.[69]	array bu bir necha hil qiymatlardan tashkil topgan malum bir ketma ketlikda joylashgan obyekt.
Await	to wait for or be waiting for something: *He's anxiously awaiting his test results*[70].	The await keyword is placed before the call to a function or variable that returns a promise. It makes JavaScript wait for the promise object to settle	O'zgaruvchiga "va'da" emas, uning natijaviy qiymatini o'zlashtirish uchun "await" kutish operatori qo'llaniladi

[65] https://www.merriam-webster.com/dictionary/alert
[66] https://www.javatpoint.com/javascript-alert
[67] Javlon Abdullo - Mukammal dasturlash 2. JavaScript. - Toshnent: Akademnashr, 2022 - b 10
[68] https://www.merriam-webster.com/dictionary/array
[69] https://www.freecodecamp.org/news/how-to-declare-an-array-in-javascript-creating-an-array-in-js/#:~:text=In%20JavaScript%2C%20an%20array%20is,data%20types%20in%20one%20variable.
[70] https://dictionary.cambridge.org/dictionary/english/await

		before running the code in the next line.[71]	
Boolean	boolean" is not used in ordinary English speech. It's a technical term from mathematics and computer science.	Any kind of logic, function, expression, or theory based on the work of George Boole is considered Boolean.[72] The object represents a truth value: true or false.	u faqat ikkita qiymatdan birini qabul qiladi: true (rost) yoki false (yolg'on). Boolean turidagi qiymatlar shartli ifodalarda, takrorlanuvchi amallarda, shuningdek mantiqiy amallarda qo'llaniladi.[73]
break	to separate into parts with suddenness or violence *Break* the chocolate bar in half.[74]	The **break** statement terminates the current loop or switch statement and transfers program control to the statement following the terminated statement. It can also be used to jump past a labeled statement when used within that labeled statement.[75]	U o'zi joylashgan bo'lakdan chiqib ketishni , ya'ni operator faoliyatini yakunlashni anglatadi.[76]

[71] https://www.freecodecamp.org/news/javascript-async await/#:~:text=The%20await%20keyword%20is%20placed,code%20in%20the%20next%20line.&text=This%20error%20occurs%20because%20the,asynchronous%20function%20or%20a%20module.
[72] https://en.wikipedia.org/wiki/Boolean
[73] https://uzbekdevs.uz/darsliklar/java/java-da-mantiqiy-boolean
[74] https://www.merriam-webster.com/dictionary/break
[75] https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Statements/break
[76] Javlon Abdullo - Mukammal dasturlash 2. JavaScript. - Toshnent: Akademnashr, 2022 – b 123

abstraction	the act or process of abstracting : the state of being abstracted[77]	JavaScript abstraction refers to the concept of hiding complex implementation details and showing only the essential features or functionalities of an object or module to the user also it is the fundamental concept in object-oriented programming.[78]	**Abstraction** das turlashda, shu jumladan Javada asosiy tushunchadir. Bu ob'ekt ega bo'lishi kerak bo'lgan muhim xususiyatlar va xatti-harakatlarga asoslangan classlarni modellashtirish orqali murakkab voqelikni soddalashtirish jarayonini nazarda tutadi, shu bilan birga muhim bo'lmagan tafsilotlarni e'tiborsiz qoldiradi.
const (constant)	happening a lot or all the time: *He's in constant trouble with the police.* *machines that are in constant use*	In JavaScript, const is a keyword used to declare a variable that cannot be reassigned a new value..[79]	Dasturlovchi beixtiyor *'o'zgarmas'* hisoblangan qiymatni o'zgartirib yuborishga yo'l qo'ymasligi lozim.
defer	to delay something until a later time; to postpone:	The defer is a Boolean value, used to indicate	JavaScriptni HTMLga

[77] https://www.merriam-webster.com/dictionary/abstraction
[78] https://www.geeksforgeeks.org/abstraction-in-javascript/
[79] https://www.shecodes.io/athena/37774-what-does-const-mean-in-javascript

		that script is executed after the document has been parsed.[80]	bog'lashda teg Ichida kod yozish alomatlaridan biri
confirm	to prove that a belief or an opinion that was previously not completely certain is true[81]	JavaScript confirm method invokes a function that asks the user for a confirmation dialogue on a particular action.[82] If the user chooses the OK option, it returns true; if otherwise, it returns false.	Tasdiqlash buyrug'ida aynan ogohlantirish buyrug'i singari ishlaydi. Bunda foydalanuvchidan oynada namoyon etilgan jumlaga munosabati so'raladi.[83]
null	*Null* means having no value; in other words *null* is zero, like if you put so little sugar in your coffee that it's practically *null*.[84]	null is an assignment value that represents no value or no object.	'hech narsa ' ma'nosini beruvchi yagona qiymat.[85]
catch	to capture or seize especially after pursuit *catch* a thief	The *catch* statement allows you to define a block of code to be executed, if an error occurs in the try block.[86]	**catch** bloki – try blokidan so'ng kelib, xatolik yuz berganda bajariladigan kodni ishga tushiradi.
Continue	**continue**	The continue statement skips the current	Amaliyotda faqat ayrim

[80] https://www.javatpoint.com/javascript-defer#:~:text=The%20defer%20is%20a%20Boolean,will%20not%20create%20any%20content.
[81] https://dictionary.cambridge.org/dictionary/english/confirm
[82] https://www.javatpoint.com/javascript-confirm
[83] Javlon Abdullo - Mukammal dasturlash 2. JavaScript. - Toshnent: Akademnashr, 2022 – b 13
[84]https://www.vocabulary.com/dictionary/null#:~:text=Null%20means%20having%20no%20value,it%20was%2C%20it's%20gone%20now.
[85] Javlon Abdullo - Mukammal dasturlash 2. JavaScript. - Toshnent: Akademnashr, 2022 – b 34
[86]https://www.w3schools.com/js/js_errors.asp#:~:text=The%20catch%20statement%20allows%20you,occurs%20in%20the%20try%20block.

	(verb) to maintain without interruption a condition, course, or action The boat *continued* downstream .[87]	iteration of the loop and proceeds to the next iteration.[88]	shartlardagina ifodalarni e'tiborsiz qoldirib, boshqa hollarda barcha amallar qayta bajarilishi talab etilishi mumkin. Bunday vaziyatlarda "continue" qo'llaniladi[89]
case	**Case** a set of circumstances or conditions is the statement true in all three *cases*	The JavaScript switch...case statement executes different blocks of code based on the value of a given expression.[90]	Case "catch" operatorining operanti hisoblanib, bunda berilgan ifoda qabul qilgan qiymat bo'yicha mos "case" ga borib, "break" uchraguncha "switch" o'z faoliyatini olib boradi. [91]
console	a surface or device with controls for electronic equipment, a vehicle, etc.: [92] "a yellow light flashes on the console".	In JavaScript, the console.log() method displays messages or variables in the browser's console.[93]	Yozilgan kodlarni to'gri ishlashini tekshirish jarayonida consol obyekti

[87] https://www.merriam-webster.com/dictionary/continue
[88] https://www.programiz.com/javascript/continue-statement
[89] Javlon Abdullo - Mukammal dasturlash 2. JavaScript. - Toshnent: Akademnashr, 2022 – b 123
[90] https://www.programiz.com/javascript/switch-statement
[91] Javlon Abdullo - Mukammal dasturlash 2. JavaScript. - Toshnent: Akademnashr, 2022 – b 118
[92] https://dictionary.cambridge.org/dictionary/english/console
[93] https://www.programiz.com/javascript/console

			keng qo'llaniladi.
console.assert	Assert- to state or declare positively and often forcefully or aggressively The suspect continued to *assert* his innocence.[94]	The assert() method writes a message to the console if an expression evaluates to false.[95]	Konsolda keltirilgan qiymatlarni ko'rsatgan hoda xatolik haqida xabar beradi.[96]
console.clear()	Clear- pure or easy to see through, with no marks or areas that are less transparent: *clear glass*[97]	the clear() method clears the console.[98]	Konsolni tozalaydi[99]
Console.dir	Dir abbreviation 1direction 2 director[100]	The **console.dir()** static method displays a list of the properties of the specified JavaScript object[101]	Berilgan obyektning tarkibi blan batafsil konsolga chiqaradi.[102]
console.table	A **table** is a written set of facts and figures arranged in columns and rows. *Consult the table on page 104.*[103]	The table() method writes a table to the console.	Berilgan obyektni jadval sifatida namoyon qiladi.[104]

[94]https://www.merriam-webster.com/dictionary/assert#:~:text=1,a,something%2C%20such%20as%20one's%20authority)
[95] https://www.w3schools.com/jsref/met_console_assert.asp
[96] Javlon Abdullo - Mukammal dasturlash 2. JavaScript. - Toshnent: Akademnashr, 2022 – b 140
[97] https://dictionary.cambridge.org/dictionary/english/clear
[98] https://www.w3schools.com/jsref/met_console_clear.asp
[99] Javlon Abdullo - Mukammal dasturlash 2. JavaScript. - Toshnent: Akademnashr, 2022 – b 140
[100] https://www.merriam-webster.com/dictionary/dir#:~:text=%E2%80%9CDir.%E2%80%9D%20Merriam%2DWebster,.com%2Fdictionary%2Fdir.
[101] https://developer.mozilla.org/en-US/docs/Web/API/console/dir_static
[102] Javlon Abdullo - Mukammal dasturlash 2. JavaScript. - Toshnent: Akademnashr, 2022 – b 141
[103] https://www.collinsdictionary.com/dictionary/english/table
[104] Javlon Abdullo - Mukammal dasturlash 2. JavaScript. - Toshnent: Akademnashr, 2022 – b 142

class	1. a group of students who are taught together at school, college, or university 2. a group of people wi thin society who have the same economic and s ocial position:[105]	Use the keyword *class* to create a class.[106] Classes themselves generally don't have block scope.	JavaScriptda class ob'yekt yaratish uchun mo'ljallangan. Bunda class ob'yekt malumotlari va funksiyalarini o'z ichiga oladi..[107]
debugger	1.a program that is used to find and correct bugs in other programs *the menu-driven front end, the debugger, the help system, the error handler, the break handler and more* 2.a person who finds and corrects bugs in computer programs[108]	The debugger statement invokes any available debugging functionality, such as setting a breakpoint. If no debugging functionality is available, this statement has no effect. [109]	Kod bajarilishi jarayonida ushbu buyruqqa duch kelinganda amallar bajarilishi to'xtab,brauzerning yuqorida bayon etilganindek tahlil muhiti ochiladi.
default	1.to fail to fulfill a contract, agreement, or duty: such as *default* on a loan 2.computers : to make a selection automatically in the absence of a choice made by the user: The program *defaults* to a standard font.[110]	JavaScript default parameters allow you to define default values for function parameters. This is a useful feature when writing complex functions.[111]	, agar "ifoda" "case"larda ko'rsatilgan birorta ham qiymatga teng kelmasa,"default "da yozilgan bo'lak ishlaydi

[105] https://dictionary.cambridge.org/dictionary/english/class
[106] https://www.w3schools.com/js/js_classes.asp
[107] https://dev.to/davronnormuminov/javascript-class-1k7l
[108] https://www.collinsdictionary.com/dictionary/english/debugger
[109] https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Statements/debugger
[110] https://www.merriam-webster.com/dictionary/default#:~:text=%3A%20to%20fail%20to%20fulfill%20a,default%20on%20a%20loan
[111] https://playcode.io/javascript/default-parameters

delete	to remove or draw a line th rough something, especially a written word or words: *They insisted that all expletives be deleted from the article*. [112]	The **delete** operator removes a property from an object. If the property's value is an object and there are no more references to the object, the object held by that property is eventually released automatically.[113]	Delete-dasturlovchi tomonidan yaratilgan obyektning elementini o'chirish uchun qo'llaniladi.[114]
document	an original or official paper relied on as the basis, proof, or support of something	The document object represents your web page. If you want to access any element in an HTML page, you always start with accessing the document object.[115]	JavaScriptning eng muhim asoslaridan yana biri "document" obyekti hisoblanadi.Ayn an u HTML elemnetlari ustida dasturiy amallarni bajarishga imkon yaratadi.[116]
DOM	It is an abbreviation which stands for "Differential Object Marking."	The Document Object Model (DOM) is a programming interface for web documents. It represents the page so that programs can change the document structure, style, and content.[117]	bu brauzerga yuklanadigan veb-sahifaning daraxtga o'xshash ko'rinishi.[118]

[112] https://dictionary.cambridge.org/dictionary/english/delete
[113] https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Operators/delete
[114] Javlon Abdullo - Mukammal dasturlash 2. JavaScript. - Toshnent: Akademnashr, 2022 – b 58
[115] https://www.w3schools.com/js/js_htmldom_document.asp
[116] Javlon Abdullo - Mukammal dasturlash 2. JavaScript. - Toshnent: Akademnashr, 2022 – b 58
[117] https://developer.mozilla.org/en-US/docs/Web/API/Document_Object_Model/Introduction
[118] https://dev.to/dawroun/dom-nima-va-u-qanday-ishlaydi-20k0