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REBOOTING MEANING: SEMANTICS AND TRANSLATION OF COMPUTER SLANG IN THE DIGITAL AGE

Summary. The article investigates the semantics of computer slang and the challenges it presents in translation, particularly into Ukrainian. It focuses on the linguistic transformations occurring under the influence of digital communication and the growing role of online interaction in shaping modern vocabulary. In the digital age, English has undergone substantial lexical and semantic innovation, leading to the emergence of computer slang as a dynamic system of abbreviations, acronyms, and neologisms that reflect technological advancement and social change. The study examines the semantic mechanisms driving the formation of computer slang and the difficulties this poses for cross-linguistic transfer. The fluid, creative, and context-dependent nature of such expressions often complicates conventional translation methods, requiring translators to balance literal meaning with pragmatic and cultural relevance.

At the present stage of linguistic evolution, slang plays a vital role in the continuous enrichment and diversification of the lexicon, reflecting both linguistic creativity and social dynamics. Its adaptability and expressive potential make it an essential component of modern communication, capable of capturing new concepts, attitudes, and technological phenomena with precision and immediacy. The integration of computer technologies into everyday life has fostered the emergence of a specialized subset of slang that mirrors the rapid pace of digital innovation and the communicative habits of online communities. This subset is characterized by informality, brevity, high frequency of use, and emotional intensity, which together contribute to the efficiency, interactivity, and accessibility of digital discourse. Moreover, computer slang functions as a marker of group identity and belonging within virtual environments, reinforcing in-group solidarity while simultaneously highlighting generational and cultural distinctions. Its constant renewal not only reflects the evolving nature of digital culture but also demonstrates the capacity of language to adapt dynamically to technological and social change.

The translation of computer slang extends beyond linguistic equivalence, demanding sensitivity to cultural, contextual, and functional aspects. Direct translation rarely conveys the nuances, humor, or social resonance inherent in slang expressions. Therefore, successful translation strategies include localization, contextual adaptation, and creative reformulation to preserve meaning, tone, and communicative effectiveness for the target audience.

Key words: slang, meaning, translation strategy, technical terms, localization.

Formulation of the Problem. In today's rapidly advancing digital era, language is continuously evolving to accommodate and reflect the transformative influence of technology. One of the most significant linguistic developments in this context is the emergence and widespread use of *computer slang* a collection of informal expressions, abbreviations, and specialized terms that have become pervasive in online communication, programming culture, gaming communities, and other digital domains.

This phenomenon has been widely discussed in the field of linguistics and digital communication studies. David Crystal (2001, 2011) has extensively explored how the internet is shaping modern English, noting that digital communication fosters new lexical items and usage patterns [1-2]. Similarly, Gretchen McCulloch (2019), in her book *Because Internet*, examines how internet users have developed distinct language norms, including slang, that reflect the sociolinguistic dynamics of digital communities [3].

The **aim** of this article is to determine the linguistic status of computer slang its place within the structure of language and speech, the mechanisms underlying its formation, and the interplay between systemic (language-wide) and occasional (context-specific) processes that influence its development. A key feature of computer slang is its hybrid nature: it synthesizes elements from all four recognized categories of non-standard vocabulary, colloquial speech, jargon, argot, and vulgarisms, thereby forming a unique and dynamic subsystem within contemporary language.

Analysis of recent research and publications. At the current stage of linguistic evolution, slang serves as a significant source for the enrichment of vocabulary. Due to its inherently dynamic nature, slang undergoes rapid transformation, thereby necessitating continuous and meticulous scholarly attention as factor that underscores the relevance of investigating this topic. Additionally, the widespread integration of computer technologies into professional and personal domains has led to the emergence

of a distinct subset of slang. This variety is characterized by features such as a conversational tone, frequent usage, and heightened expressivity, all of which contribute to more accessible and efficient communication.

Slang may be regarded as a variant of spoken language imbued with emotionally charged elements that typically fall outside the norms of standard or literary language. In this regard, the perspective of L. Stavytska (2005) is particularly noteworthy. The scholar defines slang as "a variety of spoken language that society evaluates as distinctly unofficial ('colloquial,' 'familiar,' 'confidential')" [4]. Furthermore, L. Stavytska (2005) offers a distinction among the closely related concepts of argot, jargon, and slang, categorizing them respectively as closed, semi-open, and open linguistic systems [4]. These forms of non-standard vocabulary each exhibit unique characteristics. Argot is generally recognized as a secretive and deliberately obscure language, while jargon and slang differ primarily in terms of their expressiveness and the permeability of their lexical boundaries. The overlap between these categories creates ambiguity, leading to ongoing scholarly debate and the absence of a unified definition for each term.

While jargon is considered a broader concept than slang, the latter lacks a clearly defined structure of usage within particular social groups. Slang is typically more widely disseminated and often reflects the lived experiences, values, and behavioral motivations of specific communities. It is frequently associated with youth culture and tends to be used more among socially proximate individuals rather than in interactions with strangers. The defining feature of slang, as noted by scholars, lies in its functional and register-specific nature, marked by a degree of linguistic informality and lowering of register [5].

The lexicon of computing, as part of this broader phenomenon, is a highly dynamic and adaptive system effectively a "living organism" that evolves in response to the rapid advancements of digital technologies [6]. As previously noted, the boundary between spoken language and slang remains fluid, facilitating the mutual transfer of lexemes and the acquisition of associated emotional and pragmatic connotations. This view aligns with the observations of I. Devterov (2010), who asserts that spoken language increasingly contributes colloquial, slang, and dialectal elements as well as syntactic features to written digital discourse to a much greater extent than to traditional print media. Conversely, elements of slang also continue to penetrate spoken language, further blurring the boundaries between registers [7].

The study is closely tied to the continuous evolution of computer technologies and the specialized vocabulary that emerges to articulate new digital concepts and phenomena. The development of this vocabulary reflects broader changes in communication practices and language use within technologically mediated environments. Notable contributions to the analysis of interactive communication and its linguistic components have been made by scholars such as H. Pocheptsov, B. Goodman, P. Lykholytov, I. Shchur, V. Ryugemer, among others, whose work has laid the foundation for understanding language in the context of digital interaction.

In the contemporary world, characterized by the rapid advancement of microprocessor and information technologies, the field of computing continues to be a major driver of lexical innovation. Notably, English remains the dominant source language for the creation and dissemination of terminology in the domains of information technology and digital communication.

Over time, many technical terms from the once closed, professional vocabulary of programmers and developers have transitioned into everyday usage. Alongside this diffusion, a distinct layer of computer slang has emerged marked by informality, expressiveness, and adaptability. This slang reflects the social and communicative practices of digital users and serves as a linguistic response to the speed and informality of online interactions.

This phenomenon necessitates a sequential approach to research, comprising two primary stages: 1) the documentation of the emergence of English-language computer terms and their transfer into the recipient language and 2) the examination of the processes through which these terms evolve into computer slang within the recipient linguistic context.

The rapid expansion of the information technology (IT) sector can be clearly observed through periodicals and digital platforms that report on developments in the global computer technology market. Almost weekly, innovations are introduced and labeled predominantly in English demonstrating the dominance of English as the lingua franca of technological advancement. Many of these terms are incorporated into other languages due to their classification as general professional terminology, widely used by IT specialists across national and linguistic boundaries. This process serves to bridge cultural and lexical gaps, gradually integrating a large number of English-language items into the everyday vocabulary of an increasingly broad user base [8].

A critical factor in the development of computer slang is the varying degrees of English language proficiency among users. While users of IT systems routinely engage with English-based terminology, many do not fully grasp its correct pronunciation or meaning. As a result, these terms are often misread, adapted phonetically, and ultimately integrated into the local language in written or spoken form. This phenomenon reflects a broader process of linguistic nativization, where borrowed lexical items are transformed to fit the phonetic, morphological, and syntactic norms of the host language.

In light of this, we propose a preliminary classification of computer slang based on the method of lexical formation, with particular focus on how English terms are adapted into the recipient language system. This typology captures the majority of slang vocabulary currently in use:

1. Full Calque (Complete Borrowing of Form and Content). This involves the direct borrowing of both the phonetic form and the semantic content of an English term device → девайс (a technical apparatus or tool).

2. Semi-Calque (Partial Borrowing). The form or the content of the original term is borrowed, but not both. This includes translational calques (semantic borrowing) or phonetic calques application → аплікуха (informal term for software application).

3. Semantic Shift (Meaning Change of Standard Vocabulary), existing words in the recipient language are assigned new meanings based on their English equivalents connect → конектитися (to establish a digital connection); program → програмуватися (to engage in programming); click → клікати (to press a mouse button) [9].

The widespread adoption of such slang terms, especially among younger demographics, is often motivated by a desire to align with Western particularly American cultural and technological

norms. This trend highlights the sociolinguistic dimension of slang usage, wherein language functions as a marker of identity, status, and group affiliation.

Notably, Ukrainian computer slang exhibits significant variation in pronunciation and orthography. For instance:

– VGA (Video Graphics Array) appears as вега, вежеа, or even вагон in slang usage.

– The verb глючити or глюкати (to malfunction or behave erratically) is derived from the English word glitch.

– Operating systems such as DR-DOS are referenced in slang as дурдос or ирдос.

These variations often reflect either an approximation of the original English pronunciation or a Ukrainianized transliteration. Regardless of the method, the resulting forms are stylized to conform to the norms of informal spoken Ukrainian, demonstrating the naturalization of foreign lexical items into everyday speech.

In the modern era, computer technologies occupy a central role across all domains of human activity. It is difficult to imagine any area of contemporary life or professional practice that is not influenced by the use of computers, laptops, or digital infrastructure. Consequently, the growth of computer technologies has led to the emergence of a specialized subset of vocabulary computer slang used predominantly by IT professionals, but increasingly by the general public.

Slang, in this context, consists of jargon-like expressions originating within specific professions or social groups. As these expressions enter the broader linguistic system, they acquire distinct emotional and expressive connotations, often functioning to signal informality, group identity, or subcultural affiliation.

Susan Herring (2007) has emphasized that computer-mediated discourse gives rise to linguistic creativity and convergence, where slang becomes a tool for community building and identity signaling [8].

The semantics of computer slang are marked by several distinctive features, which reflect the dynamic, adaptive, and socially embedded nature of digital communication. These features not only differentiate computer slang from standard language but also highlight its linguistic significance in the context of global information exchange and online interaction.

1. Polysemy and Semantic Shift.

Computer slang is characterized by a high degree of semantic plasticity, whereby existing words acquire new, often metaphorical or technical meanings. This process known as semantic shift allows familiar terms to be repurposed in ways that meet the conceptual needs of digital environments.

For instance, the word "cloud" traditionally refers to a meteorological phenomenon. In computer terminology, however, cloud now denotes a virtual infrastructure that enables remote data storage and processing commonly referred to as cloud computing. Similarly, the term "mouse", once associated solely with a small rodent, now predominantly refers to a computer input device.

Linguist Jean Aitchison (2012) emphasizes that such semantic shifts are a natural outcome of language evolution, particularly in environments characterized by intense lexical borrowing and rapid technological change. In the digital sphere, meanings evolve quickly, and terms are frequently recontextualized based on usage, leading to polysemy where a single form carries multiple meanings depending on context "bug": from 'insect' to 'software error',

"virus": from biological pathogen to malicious software, "firewall": from a physical fire barrier to a network security system [10].

2. Economy of Expression

The digital medium favors brevity and efficiency, giving rise to a lexicon rich in abbreviations, acronyms, and initialisms. This tendency reflects the constraints of text-based communication, especially in earlier internet platforms such as chatrooms, forums, and SMS, where character limits encouraged shortened forms, IMO – "in my opinion", IDK – "I don't know", BRB – "be right back", TL;DR – "too long; didn't read".

Naomi Baron (2008), in her work Always On, argues that the push for linguistic economy in digital communication arises from both technological constraints (e.g., character limits, typing speed) and social norms (e.g., the desire for informal and rapid interaction). This results in the pragmatic simplification of language, often at the expense of grammatical and syntactic complexity [11].

Additionally, emojis, memes, and GIFs increasingly act as non-verbal substitutes for language, further enhancing this economy of expression by conveying complex emotional or situational meaning through compact symbols.

3. Context Dependence.

The meaning of many slang terms is highly context-sensitive, requiring shared knowledge between communicators for accurate interpretation. In digital communication, where cues such as tone, body language, and facial expression are absent, context becomes paramount.

For instance, the term "crash" may signify: a software malfunction (e.g., "the system crashed."); a personal breakdown (e.g., "After finals, I crashed."), a social intrusion (e.g., "He crashed the party.")

Danet and Herring (2007) highlight that computer-mediated discourse often relies on implicit knowledge and intertextual references, making it semantically dense and layered. This context dependence fosters in-group language where meanings are negotiated in real-time and often inaccessible to outsiders [12].

Furthermore, platform-specific jargon (e.g., Reddit's "OP" for "original poster" or TikTok's "For You Page"/FYP) reinforces this dependency, as the same term can have different meanings across platforms.

4. Innovation and Creativity.

A defining characteristic of computer slang is its lexical innovation, driven by the creativity of online communities. The internet provides a bottom-up model of language development, where new expressions are coined, popularized, and disseminated by users rather than language authorities.

Examples of such neologisms include:

− Doomscrolling – the act of compulsively scrolling through negative news.

− Ghosting – abruptly ending all communication without explanation.

− Lag – delay in response time, typically in online gaming or streaming.

− Noob – a novice or inexperienced user, derived from "newbie."

Murray D. (2000) and other scholars of digital sociolinguistics observe that online environments function as discursive laboratories, where users creatively manipulate language to express identity, sarcasm, solidarity, or critique. These neologisms often spread virally and, in many cases, transition from internet slang to mainstream language [13].

In this sense, computer slang acts as a barometer of digital culture, reflecting social trends, technological shifts, and generational attitudes.

5. **Blending and Morphological Play** *(Additional Feature).*

Another prominent semantic feature is morphological innovation particularly through blending, compounding, and suffixation. New words are often created by fusing two or more existing morphemes.

− *Clickbait* (click + bait): misleading content designed to attract clicks.

− *Netizen* (internet + citizen): a user actively engaged in online communities.

− *Phablet* (phone + tablet): a hybrid mobile device.

These blends often serve descriptive, humorous, or ironic purposes and reveal a high degree of **wordplay** that aligns with internet culture's informal tone and rhetorical agility.

6. Translingual Influence and Localization *(Additional Feature).* In non-English-speaking contexts, the semantic landscape of computer slang is shaped by borrowing, calquing, and phonetic adaptation. These processes result in a hybridized lexicon where English-based digital terms are integrated into local language systems, often with modified meanings.

− *девайс* (from "device") – used as a general term for gadgets.

− *глючити* (from "glitch") – to behave erratically or malfunction.

− *клікати* (from "click") – to press a mouse button.

This hybrid slang reflects sociolinguistic dynamics, including language prestige, globalization, and cultural identification, particularly among youth. It also demonstrates the transcultural mobility of digital terminology and its adaptability across linguistic boundaries.

The translation of computer slang presents a range of complex challenges that go beyond conventional linguistic transfer. Due to its informal, innovative, and context-specific nature, computer slang frequently resists straightforward translation. The following issues are among the most prominent:

1. Cultural Specificity

A significant number of computer slang terms are deeply embedded in Anglo-American digital culture, and thus often lack direct lexical or cultural equivalents in other languages. Such terms may reference pop culture, humor, technological practices, or social norms unfamiliar to speakers of the target language. As Baker M. (1992) observes, culture-bound expressions pose a notable difficulty for translators, who must either find culturally resonant analogues or opt for paraphrastic strategies that risk diluting the original meaning or tone [14].

2. Rapid Obsolescence

Computer slang evolves at an exceptional pace, often rendering terms obsolete within months. As a result, translators struggle to maintain currency and relevance, especially in professional or educational contexts where accuracy and contemporaneity are critical. House J. (2015) highlights the necessity for translators to remain socio-culturally and temporally aware, particularly when dealing with texts shaped by fast-moving digital environments [9].

3. Untranslatability of Wordplay and Puns

Many computer slang terms rely on idiomatic, metaphorical, or humorous constructions, which are often untranslatable without a loss of nuance. For example, the use of "404" originally an HTTP error code has acquired metaphorical meaning as "not found" or "absent-minded" in colloquial usage. Newmark P. (1988) recommends functional equivalence as a solution in such cases;

however, this often entails sacrificing semantic precision or cultural connotation in favor of communicative impact [15].

4. Hybrid and Code-Mixed Forms

In multilingual digital spaces, users often engage in code-mixing and hybridization, blending English computer slang with local linguistic elements. These hybrid forms reflect local identity, digital fluency, and linguistic innovation, but complicate translation efforts. According to Appel R. & Muysken P. (2005), code-switching in such contexts demands deep cultural and linguistic competence, as the translator must navigate not only language structures but also the socio-pragmatic functions embedded within mixed discourse [16].

The study of computer slang has far-reaching implications for linguistic theory, applied linguistics, and sociolinguistics. It represents a living example of how language responds to technological, cultural, and communicative shifts in real time. Key implications include:

• *Real-Time Language Change*

Computer slang allows researchers to observe lexical innovation and semantic shift as they occur, providing valuable data on the processes of language change, borrowing, and adaptation in digital contexts.

• *Technological Determinism and Linguistic Structure*

The influence of digital technologies on language is not merely lexical; it extends to syntax, pragmatics, discourse structure, and even graphological conventions. Digital tools and interfaces shape how language is produced, perceived, and transmitted.

• *Challenges to Traditional Lexicography and Translation*

The ephemeral and informal nature of computer slang challenges the norms of dictionary compilation and standardized translation practices. It calls for new methodologies that are more agile, context-aware, and inclusive of non-standard forms.

• *Digital Literacy and Semantic Interpretation*

Understanding and correctly interpreting computer slang increasingly requires digital literacy awareness of digital culture, platforms, memes, and community-specific references. This highlights the semiotic complexity of modern communication, which combines text, image, sound, and interactivity.

The rise of digital language should not be viewed as the degradation of linguistic standards, but rather as the expansion of language into new multimodal and semiotic domains. The internet and digital culture have given rise to new forms of expression that are fluid, user-generated, and deeply context-dependent further emphasizing the need for linguists, educators, and translators to engage with this evolving linguistic frontier.

Conclusions and prospects for further exploration. Computer slang in English represents a dynamic and linguistically rich phenomenon that mirrors the rapid advancements of the digital era. As a product of constant innovation, it disrupts traditional semantic boundaries, challenges normative lexical frameworks, and introduces new complexities in the fields of translation and cross-cultural communication. Its vocabulary rooted in technological development, online discourse, and sociocultural trends functions not only as a communicative tool but also as a marker of digital identity and community affiliation.

The study of computer slang reveals the interconnectedness of language, technology, and culture, highlighting how digital environments foster novel forms of expression, semantic innovation, and pragmatic adaptation. As demonstrated, the translation of such slang poses unique challenges, including cultural specificity,

linguistic hybridity, and the transience of digital terminology. Addressing these issues requires an integrated approach that combines linguistic theory, sociolinguistic awareness, and adaptive translation strategies.

Ultimately, continued research in this field is crucial. As digital technologies continue to evolve, so too will the linguistic forms associated with them. Scholars, translators, educators, and lexicographers must remain attentive to these changes, recognizing that computer slang is not a peripheral or informal linguistic feature, but rather a central component of contemporary communication in the information age. Studying this evolving lexicon offers valuable insight into how language is shaped by technological affordances and how it, in turn, shapes our understanding of the digital world.

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Мелько Х., Рибачківська Л. Перезавантажуємо значення: семантика та переклад комп'ютерного сленгу в добу цифрових технологій

Анотація. У статті здійснено аналіз семантичних особливостей комп'ютерного сленгу та окреслено основні труднощі, що виникають під час його перекладу, зокрема на українську мову. Дослідження зосереджується на лінгвістичних трансформаціях, спричинених впливом цифрової комунікації, та на посиленні ролі онлайн-взаємодії у формуванні сучасного лексичного складу. У цифрову епоху англійська мова зазнала істотних лексико-семантичних змін, результатом яких стала поява комп'ютерного сленгу — мобільної, динамічної системи абревіатур, акронімів і неологізмів, що відображають технологічний прогрес, соціальні трансформації та нові форми комунікації. У роботі розглянуто семантичні механізми формування комп'ютерного сленгу та перекладознавчі проблеми, що виникають у процесі міжмовного відтворення таких одиниць. Зазначено, що плинний, контекстно залежний і креативний характер сленгових виразів ускладнює застосування традиційних перекладацьких підходів, вимагаючи від перекладача поєднання точності передачі значення з прагматичною та культурною релевантністю.

На сучасному етапі розвитку мови сленг відіграє вагому роль у процесах лексичного збагачення й диференціації, відображаючи мовну креативність, соціальну мобільність і культурну динаміку. Завдяки своїй адаптивності та експресивному потенціалу сленг стає важливим інструментом фіксації нових понять, явищ і комунікативних моделей. Інтеграція цифрових технологій у повсякденне життя зумовила появу окремої підгрупи сленгу, що репрезентує швидкі темпи технологічних інновацій і специфіку мовленнєвих практик онлайн-спільнот. Такий різновид відзначається неформальністю, стислістю, високою частотою вживання та емоційною виразністю, що підвищує ефективність, інтерактивність і доступність цифрового дискурсу. Водночас комп'ютерний сленг виконує соціолінгвістичну функцію маркування групової ідентичності, сприяючи згуртованості користувачів у віртуальних середовищах і водночас підкреслюючи поколіннєві та культурні відмінності. Його постійна динаміка не лише відображає еволюційний характер цифрової культури, але й демонструє здатність мови гнучко адаптуватися до технологічних і соціальних змін.

Переклад комп'ютерного сленгу виходить за межі традиційної лінгвістичної еквівалентності, потребуючи урахування культурних, контекстуальних і функціональних чинників. Дослівне відтворення таких одиниць часто не передає притаманних їм конотацій, гумору чи соціального підтексту. Тому ефективний переклад передбачає застосування стратегій локалізації, контекстуальної адаптації та творчого переформулювання, що забезпечують збереження змістової точності, стилістичної тональності та комунікативної адекватності для цільової аудиторії.

Ключові слова: сленг, значення, стратегія перекладу, технічні терміни, локалізація.