

УДК 81'27:004.738.5:81'373.612.2

DOI: 10.18524/2307-4604.2025.1(54).338553

HACKER SLANG: EVOLUTION, DEFINITIONS, AND SOCIOLINGUISTIC FUNCTIONS

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Hacker slang is a specialized form of informal language that developed within technical and digital subcultures, particularly among programmers and computing enthusiasts since the 1960s. Originating in environments like the Massachusetts Institute of Technology (MIT), this unique lexicon reflects both the technical ingenuity and playful spirit of early hacker communities. Drawing on foundational sources such as the Jargon File and key works in sociolinguistics, this article explores the origins, evolution, and functions of hacker slang as a distinct linguistic register.

Slang is generally understood as informal, creative, and often provocative language used by specific social groups to express identity, emotion, and group solidarity. Hacker slang builds on these qualities, employing abbreviation, symbol substitution, wordplay, and novel word formations to enable precise technical communication while simultaneously reinforcing community identity. Terms such as “hack”, “leet”, and “pwn” exemplify how language in these subcultures blends technical reference with social meaning.

The study also examines how hacker slang has migrated from underground circles into mainstream technology discourse. Words that were once obscure or playful are now widely recognized in IT, cybersecurity, and popular media. This shift illustrates broader linguistic processes such as semantic change, lexical innovation, and social indexing. Understanding hacker slang thus contributes to a richer view of how language evolves in tandem with technology and how digital communities shape modern communication.

Key words: *hacker slang, Sociolinguistics, digital subcultures, language evolution, semantic shift, technical language, computer science language.*

ХАКЕРСЬКИЙ СЛЕНГ: ЕВОЛЮЦІЯ, ВИЗНАЧЕННЯ ТА СОЦІОЛІНГВІСТИЧНІ ФУНКЦІЇ

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Хакерський сленг — це спеціалізована форма неформальної мови, що сформувалася в технічних і цифрових субкультурах, зокрема серед програмістів і ентузіастів комп'ютерних технологій, починаючи з 1960-х років. Цей унікальний

лексикон виник у середовищах на зразок Массачусетського технологічного інституту (MIT) і відображає як технічну винахідливість, так і грайливий дух перших хакерських спільнот. Спираючись на основні джерела, такі як *The Jargon File*, а також ключові праці з соціолінгвістики, стаття досліджує походження, еволюцію та функції хакерського сленгу як окремого мовного реєстру.

Сленг зазвичай розуміється як неформальна, креативна й часто провокативна мова, яку використовують певні соціальні групи для вираження ідентичності, емоцій та групової солідарності. Хакерський сленг ґрунтується на цих характеристиках, застосовуючи абревіатури, заміну символів, гру слів та нові словотворення для точного технічного спілкування й одночасного зміцнення спільнотної ідентичності. Такі терміни, як «hack», «leet» і «rwn», ілюструють, як мова цих субкультур поєднує технічне значення з соціальним змістом.

У статті також розглядається, як хакерський сленг перейшов із вузькоспеціалізованого вжитку до загального технічного дискурсу. Слова, які раніше були мало відомими або жартівливими, тепер широко використовуються в ІТ, кібербезпеці та популярних медіа. Ця трансформація ілюструє ширші мовні процеси, зокрема семантичні зрушення, лексичні інновації та соціальну індексацію. Дослідження хакерського сленгу сприяє глибшому розумінню того, як мова розвивається разом із технологіями, і як цифрові спільноти впливають на сучасну комунікацію.

Ключові слова: хакерський сленг, соціолінгвістика, цифрові субкультури, еволюція мови, семантичне зрушення, технічна мова, мова комп'ютерних наук.

Introduction. This article offers a comprehensive analysis of hacker slang as a dynamic linguistic phenomenon that bridges technical innovation and social identity within digital subcultures. Unlike prior works that focus solely on technical jargon or sociolinguistic theory, this study integrates historical perspectives, semantic shifts, and subcultural language features to reveal how hacker slang evolves both internally and in interaction with mainstream discourse. It also highlights practical implications for IT education, suggesting sociolinguistic awareness as a valuable skill for future technology professionals. This research employs a qualitative literature review method, drawing primarily on seminal hacker lexicons such as *the Jargon File*, alongside academic linguistic and technological sources. The study analyzes key slang terms and their semantic developments to illustrate sociolinguistic phenomena like language change and group identity construction. It also synthesizes examples from online hacker communities and historical documentation to trace the evolution of hacker language from subculture to mainstream use.

Slang is a dynamic linguistic phenomenon that plays a vital role in expressing identity, emotion, and social affiliation (Yule, 2020). Often viewed

as a marker of group membership, slang reflects shared values, humor, and cultural experiences within communities (Eble, 1996). Among various forms of slang, hacker slang stands out as a specialized subset developed within technical and digital subcultures. Emerging from the early days of computer science at institutions such as the Massachusetts Institute of Technology (MIT), hacker slang exemplifies how language innovation is driven by technological contexts and subcultural identity (Raymond, 2003). This article explores the evolution, definitions, and sociolinguistic functions of hacker slang, drawing on seminal sources like the *Jargon File* and academic literature.

The aim of the article is to explore hacker slang as a type of language that mixes technical terms with subcultural identity in digital communities. It looks at how this slang has developed over time, what its main features are, and how it functions socially and linguistically. The article also shows how hacker slang influences communication, group identity, and the way language and technology interact in both hacker culture and wider society.

Results and discussion. Slang is broadly recognized as informal, non-standard vocabulary used by specific communities. Dictionaries consistently describe slang as highly informal language, typically spoken rather than written, and associated with particular social groups. For example, the *Cambridge Dictionary* (Cambridge Dictionary, n.d.) defines slang as “very informal language that is usually spoken rather than written, used especially by particular groups of people.” The *Oxford English Dictionary* (Oxford English Dictionary, n.d.) emphasizes its context-specific usage, while the *Merriam-Webster Dictionary* highlights slang’s coinages and unconventional expressions (Merriam-Webster Dictionary, n.d.). Similarly, the *Collins English Dictionary* notes that slang is used among people sharing common interests (Collins English Dictionary, n.d.). Yule further characterizes slang as “very informal language variety” that can include “new and sometimes not polite words” and is generally avoided in formal speech or writing (Yule, 2020: 259).

From a sociolinguistic perspective, slang exhibits fluid boundaries between formal and informal varieties (Eble, 1996; Green, 2014). Androutsopoulos (2014) discusses the internal heterogeneity of slang, where distinct lexical repertoires emerge within subgroups, reinforcing social identities and group solidarity. Partridge (2006) observes that slang varieties may differ as much from each other as they do from the standard language. This diversity underscores slang’s complexity as a social and linguistic phenomenon.

For this study, slang is defined as “informal, often playful or provocative language used by particular groups to express identity, emotion, or in-group belonging” (Yule, 2020).

Slang is typically casual, creative, and highly expressive, serving important social functions within communities (Eble, 1996). It often employs innovative word-formation processes such as blending, clipping, and borrowing to create novel terms (Green, 2014), for example, “slurping squares”/“munching squares” — blend of action + shape creating evocative terms for graphics hacks (Wikipedia) or “mung” — originally recursive acronym “*Mung Until No Good*,” blending “**mung**” + acronymic play; “*slurp*” — clipped from “*slurp in*,” used to describe reading an entire file into memory (The Hacker’s Dictionary, 1983). Hackers borrow English technical terms and adapt them across languages—in creative, sometimes humorous ways: German: *mount* → *mounten* → *gemountet*; *grep* → *grepen* → *gegrept*. They also enjoy creating surreal wordplay using overgeneralization and novel suffixes e.g. “**winnitude**”, “**lassitude**”, “**crufititude**”, “**lameitude**” adding “-itude” onto any noun for comic effect. Beyond their literal meanings, slang terms frequently carry connotative or affective meanings that communicate attitude, humor, or social stance.

Notably, slang is rarely found in formal communication contexts like academic writing or official documents, instead flourishing in everyday conversation, online forums, and subcultural spaces (Crystal, 2001). Its rapid evolution is driven by cultural shifts and technological advancements, with new terms emerging, spreading, and either fading or becoming mainstream (Partridge, 2006; Yule, 2020).

Historically, many words once classified as slang in the mid-20th century have been assimilated into everyday language, reflecting evolving social attitudes towards informal speech (Green, 2014). We can illustrate this trend with the following examples:

1. “**Bug**”. Early computing engineers (e.g., Grace Hopper in 1947) used “*bug*” to describe flaws or glitches in systems. Now it is also widely used in non-technical contexts (e.g. “*There’s a bug in my phone*”) (Green, 2014; Ceruzzi, 2003).

2. “**Crash**”. It was used as a slang among early programmers to describe systems suddenly stopping or failing. Now it is commonly used outside IT technologies (e.g., “*My phone crashed*,” “*The website crashed*”) (Green, 2014).

3. “**Cloud**”. It was initially used for representing abstracted storage/processing; visualized as a cloud diagram in network maps. Now it is ubiquitous

across digital services (“*Save it to the cloud*”, “*I don’t have the file on my laptop—it’s in the cloud*”) and many more. (Green, 2014; Raymond, 2003).

This ongoing transformation illustrates the permeability of the boundary between slang and colloquial language.

Hacker slang developed during the 1960s and 1970s in early computing communities, particularly at MIT, where pioneering programmers crafted a distinctive lexicon that mirrored their technical expertise and subcultural values (Raymond, 2003). The term “*hack*” was originally used to describe a clever or innovative technical solution, reflecting the creative and playful spirit of the early hacker community (Levy, 1984).

The *Jargon File*, a comprehensive glossary of hacker slang compiled by figures such as Eric S. Raymond, captures this unique lexicon and the hacker philosophy of curiosity, mastery, and humor (Raymond, 2003; Thomas, 2002). Hacker slang is characterized by brevity, frequent abbreviations, and symbolic forms. A well-known example of hacker slang is “*leet*” (also written as *1337*), which comes from the word “*elite*”. In “*leet speak*”, letters are replaced with numbers or symbols that resemble them in appearance—for example, “E” is written as “3” and “T” as “7”. This form of writing was originally used by hackers and gamers to demonstrate technical ability and to mark their identity as part of a specific subculture. It also functioned as a playful method to avoid detection by outsiders, such as moderators or authorities, while highlighting the creative and exclusive nature of hacker culture. (Raymond, 2003). The term “*pwn*”, which originated as a typing mistake of the word “*own*”, illustrates the hacker community’s inventive use of language and its way of signaling membership within the group. (Thurlow & Brown, 2003).

Beyond communication, hacker slang functions as a social marker that fosters group solidarity while maintaining exclusivity, as its complexity and ambiguity often exclude outsiders (Thurlow & Brown, 2003).

Further we would like to illustrate some cases of semantic shift within hacker slang. The term “*hack*” provides a clear example. Originally emerging at institutions such as MIT during the 1960s, “*hack*” referred to an ingenious, elegant technical solution—often improvised to operate within hardware or software constraints (Levy, 1984:42). These clever programming ideas reflected the hacker community’s emphasis on creativity and problem-solving.

By the 1980s, the meaning of “*hack*” began to change. Influenced by media coverage and growing concerns about computer security, the term

started to be associated with unauthorized access or breaking into systems (Thomas, 2002). This shift reflected a broader change in how society viewed computer users. However, the original meaning—focused on skill and creativity—has remained within technical communities. Today, academic and professional discussions often use terms like “*ethical hacking*” or “*penetration testing*” to highlight hacking as a legitimate and valuable activity (Raymond, 2003). This change in meaning—where “*hack*” has both technical and illegal meanings—shows how hacker slang can develop in different directions. It reflects how language in subcultures is shaped by both the community’s own values and the way society talks about them.

Another case is with the term “**phreak**” that comes from combining “*phone*” and “*freak*”, and it refers to people who explored and experimented with telephone systems, especially in the 1960s and 1970s. According to *The Jargon File*, phreaking was “the art and science of cracking the phone network,” often done to make free long-distance calls. Early “*phreakers*” saw this as a fun and clever challenge, not as theft. They discovered how the phone network worked by studying the system’s tones—like the famous 2600 Hz signal—and even built devices called “blue boxes” that let them control calls. Over time, however, as more people learned these tricks, some began using them for illegal purposes, such as stealing phone card numbers. This change caused a divide in the community between those who were curious and those who were breaking the law. Even though phone systems later changed and tools like blue boxes became outdated, some early “*phreakers*” kept practicing as a way to honour the creativity of the original culture.

Many hacker slang terms have transitioned from subcultural sector usage to mainstream technical and popular discourse. For example:

- “**root**” was originally a Unix term for the “*superuser*” with full access to a system, but today it generally means having complete control over a computer or device (Raymond, 2003);

- “**script kiddie**” started as an insult for beginners who used ready-made hacking tools without really understanding them. Now, it’s a common term in cybersecurity to describe unskilled attackers (Jargon File, n.d.);

- “**exploit**” used to be a hacker term for code that takes advantage of security flaws. Today, it’s widely used in both tech and media to describe attacks on software weaknesses (Jargon File, n.d.);

- “**Botnet**” means a group of infected computers secretly controlled by someone, usually for harmful purposes. It’s now a standard word in discussions about internet security (TechTerms, n.d.).

These examples show how the line between slang and formal technical terms is often blurred, highlighting how new words created in subcultures can influence official language (Yule, 2020).

Before 1970, specific mechanisms of jargon formation — termed “*jargonification*” — were identified within hacker and technical cultures. These included verb doubling, sound-alike slang, the ‘-P’ suffix convention, overgeneralization, spoken inarticulations, and anthropomorphization. While verb doubling, overgeneralization, anthropomorphization, and spoken inarticulations have become widespread, sound-alike slang remains mostly confined to institutions like MIT, and the ‘-P’ suffix is predominantly used among Lisp programmers (Raymond, 2003). Here are some examples in accordance with the above mentioned:

- **Verb Doubling:** repeating a verb for emphasis, as in “*hack-hack*,” to show ongoing action. This reflects natural speech patterns and persistence (The Jargon File, n.d.).

- **Sound-Alike Slang:** creating playful words that sound like others, such as “*frob*” from “*froblicate*”, common in academic hacker groups like MIT (The Jargon File, n.d.).

- **‘-P’ Suffix:** in Lisp programming, functions ending with *-p* (e.g., “*evenp*”) indicate a true/false test, marking function type within that environment (Steele, 1990).

- **Overgeneralization:** broadening a word’s meaning, like “*bug*”, which moved from meaning a hardware insect fault to any system error (Levy, 1984).

- **Spoken Inarticulations:** use of filler sounds like *um* or *er* to show hesitation or pacing, common in hacker and tech conversations (Crystal, 2001).

- **Anthropomorphization:** giving human traits to machines, such as saying a computer “hangs” or a program “cries,” to make technical issues easier to understand (Baron, 2008).

Conclusion. Hacker slang shows how special communities create new language to serve both technical and social needs. It helps people communicate quickly and clearly using abbreviations, while also building a sense of group identity and culture (Crystal, 2001; Thurlow & Brown, 2003). When hacker slang becomes part of common technical language, it reflects larger social language changes, new word creation, and how language signals social belonging (Yule, 2020).

Studying hacker slang improves our understanding of how digital subcultures influence language change, showing the close relationship be-

tween technology, society, and communication. This research benefits linguistics and fields like computer science by revealing how language shapes community identity and technical practices (Crystal, 2001; Levy, 1984).

Future research could examine variations within hacker slang, such as differences across groups, locations, or skill levels. This might involve analyzing real-time language from online forums, coding communities, and cybersecurity groups to track linguistic trends (The Jargon File, n.d.; Raymond, 2003). In practice, this research can be applied in IT and cybersecurity education by creating courses on the sociolinguistics of hacker language to help students grasp cultural and communication aspects of their field, assigning projects where students study hacker communities to connect language research with technology use.

By linking linguistic study with IT education, future research can offer a fuller understanding of technology's social side and better prepare students for their professional environments.

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Стаття надійшла до редакції 08.04.2025 року