EVOLUTION OF COMPUTER LEXIS: A LOOK AT NEOLOGISMS 2019-2023

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The rapid advancement of technology over the past few years has led to an explosion of new terms relating to computers, the Internet, artificial intelligence, and digital culture. As researchers note, "human beings live in a permanent state of flux" [1, 17], and thus, an analysis of recently coined words in this field provides valuable insight into how language evolves to describe new concepts, the word formation processes involved, and key technology trends that are shaping society.

Methodology

To compile this analysis, we utilized scholarly articles, blogs, and reputable databases from 2019 to 2023, including peer-reviewed journals and credible websites specializing in linguistics, business, marketing, and technology trends. Over 200 new words from reliable sources such as Fast Company, Journal of Language and Social Psychology, Cambridge Dictionary Blog, The Verge, and HubSpot Marketing Blog formed the selection of case studies and provided insights into the dynamics of language change and cultural adaptation.

Word Formation Processes

Several main word formation processes can be observed in the neologisms:

Compounding: Combining two existing words to create a new term like "nanolearning", "meatspace", or "finfluencer". This reflects how new technological innovations often integrate multiple existing concepts.

Blending: Blending parts of words to form a new term e.g. "infodemic", "phygital", "smishing", "friendsumé". It efficiently merges meanings allowing for concise and catchy new terms.

Affixation: Adding common prefixes and suffixes to base words, for example "cyberflashing", "to memeify', "algospeak", "abandonware". Affixes like cyber, and - ware have become productive means to describe technology-related concepts. Standard morphological creativity thrives with suffixes like -ify, -ize, -esque, as in "algorithmicize," "gamify," "TikTok-esque."

Shortening: Shortening longer phrases e.g. "sponcon" from sponsored content, "inapp" from in-application. Shorter forms suit the compressed nature of social media communication, allowing for quick formation of condensed but meaningful terms. Acronyms and abbreviations abound, reflecting online linguistic economy, like "NFT," "OLED," "FOLO."

Semantic change: Existing words take on new technology-related meanings e.g. "troll", "stream", "booting". Semantic shifts allow new concepts to be explained via familiar terms.

Pun Formation: Playful puns feature in some computer neologisms, like "password child," "zoombombing," and "zumping." Puns add color, show creativity, and aid memorability.

Metaphorical Usage: Figurative language abounds through terms like "digital nutrition," "voice cloning," and "human cloud." Metaphors make new concepts more accessible to the public.

These patterns reflect some conventional methods for creating new words and meanings to describe technological innovations and their impacts. They demonstrate language's fundamental flexibility and generative power.

Key Trends

Several dominant trends can be identified:

AI and automation

Terms like "machine learning" have become mainstream, and new phrases describe AI's expanding capabilities. Several observations can be made about how this trend manifests in neologisms:

1. Anthropomorphism abounds in AI phrases: terms like "digital campfire", "digital nutrition", and "digital vellum" metaphorically attribute human qualities to technology, while the now-famous term "to hallucinate" refers to AI giving erroneous or gratuitous answers, presenting them as if true and factual. This reflects society's fascination with technology mimicking or augmenting human cognition. Even the rhetoric of AI as "disruptive" or "revolutionary" conveys it as an autonomous force.

2. Hype vs reality: hyperbolic phrases like "quantum supremacy" or "general AI" reinforce the perception of AI as inevitably surpassing human abilities. More measured terms like 'narrow AI' or 'machine learning' better capture current practical progress in specialized applications. Linguistic choices affect perceptions.

3. Anxiety and ethics: neologisms like "robotaxi" or "computer doping" highlight questions around AI's social impacts and pitfalls. Debates rage about regulating AI's influence on transport, healthcare, law enforcement. Artificial intelligence is mockingly named "stochastic parrot", as it cannot comprehend the things it says. The recent neologism "p(doom)" ironically denotes the idea that AI is going to be the demise of the humanity. The language reflects aspirations as well as fears:

The term that began as a half-serious inside joke on tech message boards to describe the odds that AI destroys humankind, has broken into the mainstream. The buzzword is **p(doom)**, and it provides both AI experts and average know-nothings a common scale to describe where they stand on the question of whether AI is going to kill us. (fastcompany.com, 7 December 2023).

Overall, AI discourse embodies society's ambivalent outlook - excitement tempered by caution. As experts advise developing AI responsibly, language will continue evolving to frame technology as enhancing human potential rather than replacing us. The terminology mirrors our complex relationship with increasingly "intelligent" machines.

Internet culture/social media

With social media's rising ubiquity, many neologisms center on its usage and impact. Words like "finfluencer," and "zumping" reflect technology's role in

commerce, identity, and relationships. Other terms like "sadfishing" and "aesthetic spam" reveal how social platforms shape behavior and communication, both online and offline. The popularity of words like "BookTok" and "anti-haul" also reveal how social media creates and spreads niche subcultures that unite people across geographic boundaries.

The ability to carefully curate one's image and broadcasts fosters distinct presentation tactics. Neologisms like "to memeify" and "to shitpost" also showcase social media's role in reinventing humor and entertainment through user-generated content powered by algorithms.

Platform-specific terms like "sub-tweeting," "Whexit," and "TikTot" demonstrate the cultural footprint of leading sites like Twitter, WhatsApp, and TikTok. The emergence of platform-centric language reflects both the diversification of social media as well as each platform's unique features and user base. It also signals social media's power to shape bigger culture, relationships, and discourse.

Analysis of these social media neologisms reveals complex, interrelated impacts spanning economics, identity, belonging, communication, art, and beyond. As social technologies continue evolving in leaps and bounds, we can expect associated language to document people's evolving behaviors, motivations, and experiences in these spaces. The cultural weight of these neologisms will likely only grow with social media's increasing centrality to modern life.

Remote Work

The rapid shift to remote work due to the COVID-19 pandemic led to an outpouring of new terms related to virtual collaboration, management, and work-life balance. These neologisms offer insight into how work is adapting to telecommuting environments and the subsequent cultural and social impacts.

Several terms showcase the prominence of videoconferencing for remote teams through words like "Zoomwear," and "zoombombing." The focus on clothing visible only through the webcam demonstrates how perceptions of professionalism and etiquette have adapted to virtual meetings. The phenomenon of "zoombombing" highlights not just internet trolling behavior migrating to videoconferencing but also the challenges of maintaining security and decorum in virtual spaces.

Other neologisms like "virtual commute," "tattleware," and "human cloud" showcase how traditional office routines and management techniques are being reinvented for the world of telework. Employers use new software to compensate for reduced in-person oversight, while concepts like virtual commutes help workers differentiate work and home environments. Terms like "microworker" and "ghost work" also reveal the global outsourcing of labor to anonymous individuals completing remote piecework online:

"Ghost work" is anthropologist Mary L. Gray's term for the invisible labor that powers our technology platforms. When Gray, a senior researcher at Microsoft Research, first arrived at the company, she learned that building artificial intelligence requires people to manage and clean up data to feed to the training algorithms. (theverge.com, 13 May 2019) Underlying all these neologisms are fundamental questions about how our social institutions and power structures adapt to a workplace untethered from physical presence and proximity. The cultural associations and connotations that these new remote work terms carry offer clues about the evolving virtual dynamics. Their emergence and longevity will depend on whether hybrid and fully remote work arrangements persist over time. But for now, these new words provide a linguistic snapshot of a distributed, digitized work paradigm taking shape in real-time. Their usage has flourished through social media, viral news, and meme culture, rapidly transmitting innovations in remote work language during an era of upheaval and transformation in the nature of labor.

Digital security Cybercrime is increasingly sophisticated, and new terms refer to emerging forms of hacking, scamming and digital harassment. With the growth of cyberspace, new threats have emerged, demanding innovative responses. Examples include "smishing," "fearware," and "infostealer," which underscore the ongoing battle against malicious actors and the potential of immersive environments.

Terms like "cyberflashing," "vampire device," and "juice jacking" highlight evolving digital threats to privacy and security. They signal increased risks. "Deplatforming," "content moderation," and "shadow bans" relate to policing online content and curbing abuse, hinting at ethical debates around censorship.

Future tech

Speculative phrases describe technologies on the horizon like quantum computing, VR and AR. Emerging technologies are propelling new tech language, as illustrated by words like "rollable," "quantum supremacy," and "epidermal VR." Neologisms like "voice cloning," "affective AI," and "decision intelligence" demonstrate the expansion of AI capabilities. Terms like "robotaxi," "smart city," and "Internet of Senses" envision tech's potential future societal impact.

The words "Internet of senses," "epidermal VR," and "affective AI" suggest a future with more immersive, emotive tech engaging multiple senses. Terms like "cryptocurrency," "metaverse," "NFTs," "Web3" envision emerging decentralized, blockchain-based online ecosystems and economies.

These neologisms provide insight into tech-driven societal shifts and reveal linguistic productivity. They also highlight digital security concerns and emerging future tech innovations. Tracking such terms can illuminate technological, cultural, ethical, and economic trends.

Sociolinguistic Aspects

Many of the new terms reflect changes in society and culture driven by advances in technology, such as "dexting," "finfluencer," and "BookTokker." They demonstrate how language adapts to new technologies, social media platforms, and online behaviors.

Certain neologisms reveal tensions around technology, like "bossware," "tattleware," and "fearware," which refer to invasive workplace surveillance and cybercrime exploiting fear. This highlights societal concerns about privacy, security, and tech ethics. Words like "phygital," "teletherapy," and "hyflex" show how the digital and physical are increasingly blended due to remote work/learning during the pandemic. They signal broader societal adaptation.

Terms like "ghost work," "microworker," and "human cloud" reflect the rise of online gig labor and crowdsourcing work. This points to precarious economic shifts and inequalities exacerbated by technologies.

The proliferation of neologisms around social media slang like "shitpost," "keysmash," and "sadfishing" reveals youth subcultures and ingroup identity creation occurring online.

These sociolinguistic dynamics illustrate how new technology language spreads through society, taking diverse forms and adaptations based on users and context.

Implications

Understanding the origins and implications of these newly minted terms provides insight into broader socioeconomic developments and offers a lens through which to examine the interplay between language, technology, and human behavior. Furthermore, tracking the evolution of these expressions allows researchers to anticipate future trends and identify emerging patterns in the rapidly shifting landscapes of language and culture.

Conclusion

This analysis reveals how the vocabulary of computer technology continues to rapidly expand and evolve, driven by innovation, usage, culture, and other sociolinguistic factors. New words and meanings illuminate emerging practices, capabilities, threats, and possibilities across the technology landscape. Understanding these neologisms provides insight into our ever-more digitally mediated existence, where new linguistic forms reflect new technological realities. Further research could examine computer lexis neologisms in specific cultural contexts for a more nuanced cross-cultural perspective. As technology progresses, we can expect its language to progress in tandem, reshaping communication and comprehension.

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