Proceeding of International Joint Conference on UNESA
Homepage: https://proceeding.unesa.ac.id/index.php/pijcu
ISSN: 3032-3762

PIJCU, Vol. 2, No. 2, June 2025
Page XX-XX
© 2025 PIJCU:
Proceeding of International Joint Conference on UNESA

From Digital Technology to Society: Algospeak and Communication Styles on Social Media in The Era of Artificial Intelligence (AI)

Hishamudin Isam[1*]
[1*] Universiti Utara Malaysia, Malaysia

ABSTRACT

Keywords:
Algospeak
Social Media
Communication
Artificial Intelligence
(AI)
Censorship and
Freedom of Expression
Linguistic Adaptation
in Digital Technology

In the era of artificial intelligence (AI), digital technology has revolutionized how society communicates, especially on social media platforms. A notable emerging phenomenon is algospeak, which involves the use of modified language to avoid censorship by platform algorithms, such as those on TikTok and Instagram. Algospeak enables users to discuss sensitive topics like mental health or political issues without facing restrictions. This phenomenon illustrates how users adapt to the strict regulations imposed by digital technology. However, algospeak presents a dilemma regarding the accurate transmission of information. The use of veiled language can lead to misunderstandings among users who are unfamiliar with specific codes, complicating clear communication. This situation challenges the balance between censorship and freedom of expression in the digital realm. In this context, linguists have a vital role in analyzing the evolution of algospeak and collaborating with platform operators to develop algorithms that better understand language context and nuances. With a more inclusive approach, linguists can help social media platforms create systems that not only filter inappropriate content but also preserve openness in communication. Ultimately, algospeak reflects users' linguistic creativity in adapting to digital technology, offering both challenges and opportunities for enhancing the online communication ecosystem in this AIdriven era.

INTRODUCTION

In the era of artificial intelligence (AI) and digital content surveillance, online language usage has increasingly adapted to circumvent algorithmic censorship. "Algospeak," a blend of "algorithm" and "speak," refers to the phenomenon where social media users modify or replace certain words with codes or alternative terms to evade detection by platform moderation algorithms. This phenomenon has emerged as a response to automated censorship of content that is deemed sensitive or in violation of community guidelines (Gillespie, 2018).

Aloise (2024) describes algospeak as a form of "sub-language" developed by users to substitute words or phrases that might be targeted or restricted by algorithms. Content moderation algorithms, designed to limit the spread of misinformation and hate speech, often hinder discussions around sensitive yet significant topics. Consequently, users resort to veiled language to ensure their messages are not blocked by platforms, thus fostering a layered style of communication online.

In addressing this issue, Lorenz (2022) observes that algospeak has reshaped the evolution of language in real-time on platforms such as TikTok. Here, users often replace specific words with terms that are undetectable by algorithms, such as using "unalive" instead of "death" to avoid automatic censorship. Similarly, Kreuz (2023) notes that algospeak enables social media users to adapt their language when discussing sensitive topics, allowing them to build communities and provide therapeutic spaces for sharing personal experiences.

Proceeding of International Joint Conference on UNESA
Homepage: https://proceeding.unesa.ac.id/index.php/pijcu
ISSN: 3032-3762

PIJCU, Vol. 2, No. 2, June 2025
Page XX-XX
© 2025 PIJCU:
Proceeding of International Joint Conference on UNESA

From Digital Technology to Society: Algospeak and Communication Styles on Social Media in The Era of Artificial Intelligence (AI)

The rise of algospeak not only highlights the creativity of users in navigating censorship but also raises significant concerns regarding freedom of expression and the ability of platforms to manage public discourse. A study by Language Log (2023) suggests that algospeak can create "echo chambers" where only those familiar with the codes can engage in discussions, thus restricting the openness of discourse to a broader audience. This suggests that while algospeak facilitates the expression of ideas, it also presents challenges, such as potential misunderstandings and a growing communication gap between those who understand the codes and those who do not.

This paper aims to provide an in-depth exploration of the phenomenon of algospeak as a communication style on social media in the AI era, and to examine the social and cultural implications arising from the use of language that has been adapted to bypass algorithmic censorship.

RESULTS AND DISCUSSION
DIGITAL TECHNOLOGY AND SOCIETY

In an era of rapidly advancing digital technology, communication styles within society have undergone significant transformations. As Crystal (2006) notes, while social interactions once primarily took place face-to-face, digital technology has now enabled communication without geographical constraints through various social media platforms and messaging apps. Platforms like WhatsApp, Facebook, Instagram, X (formerly known as Twitter), and TikTok have become the preferred means for sharing information, experiences, and opinions. This shift has transformed how people interact, moving from in-person conversations to concise text and multimedia messages, making communication more immediate and efficient (Danet & Herring, 2007).

The evolution of these communication styles has been marked by several interesting phenomena, beginning with leetspeak. Leetspeak emerged as a creative and exclusive form of communication among early online communities, often serving as a way to obscure meanings within certain groups (Thurlow & Mroczek, 2011). From there, this evolution gave rise to algospeak—a form of language intentionally altered or coded to evade censorship or restrictions imposed by social media platform algorithms (Garg, 2022). Users create new terms or modify the spelling of sensitive words to prevent their content from being deleted or blocked. For instance, they might use "unalive" instead of "death." Algospeak reflects how digital users adapt their communication to navigate algorithmic controls while still ensuring their messages are understood within specific communities.

Leetspeak and algospeak exemplify how technological advancements have shaped new styles of communication in the digital age. Each has a unique background and purpose, yet they share a common strategy of modifying language. Leetspeak emerged in the 1980s as an alternative form of expression among cyber communities, especially hackers and gamers as a way to establish identity and evade detection by authorities or basic censorship systems (Kreuz, 2023). It represents a form of linguistic adaptation aimed at creating exclusivity and group identity. In contrast, algospeak is a modern adaptation to algorithmic censorship by social media platforms such as Facebook, X, TikTok, and

Proceeding of International Joint Conference on UNESA
Homepage: https://proceeding.unesa.ac.id/index.php/pijcu
ISSN: 3032-3762

PIJCU, Vol. 2, No. 2, June 2025
Page XX-XX
© 2025 PIJCU:
Proceeding of International Joint Conference on UNESA

From Digital Technology to Society: Algospeak and Communication Styles on Social Media in The Era of Artificial Intelligence (AI)

Instagram (Lorenz, 2022). Users develop alternative terms to prevent their content from being automatically filtered out by increasingly sophisticated moderation algorithms.

Both leetspeak and algospeak demonstrate the creativity of users in overcoming linguistic constraints imposed by technology. Leetspeak employs numbers and symbols to replace letters, such as transforming "leet" into "1337," while algospeak uses alternative spellings or synonyms to circumvent algorithmic censorship (Lorenz, 2022). While leetspeak is often used to signify identity within specific groups, algospeak is more adaptive, aimed at facilitating communication in environments governed by algorithms (Aloise, 2024). This highlights how users employ linguistic strategies to overcome barriers, whether those barriers are human or algorithmic. Both examples underscore the human capacity to adapt and modify language for specific purposes, whether to establish exclusivity or to evade restrictions. Algospeak and leetspeak illustrate how digital language serves not just as a communication tool, but also as a means of adapting to the constraints imposed by technology and censorship.

However, alongside these benefits comes the challenge of preserving the human element in communication. According to Cho and Kim (2021), the digital age is often associated with a diminished ability to interpret emotions and context in conversations, as many non-verbal cues such as body language and tone of voice are difficult to convey through text. This can lead to misunderstandings and ambiguity in daily interactions. Additionally, the use of symbols and emojis as substitutes for facial expressions in the virtual world reflects a shift towards a more visual and simplified approach to communication. As such, effective communication in the age of artificial intelligence (AI) requires quick adaptation, where individuals must be skilled in selecting appropriate platforms and understanding digital etiquette to ensure their messages are conveyed effectively. These changes demonstrate that digital technology not only transforms how we communicate but also reshapes the social and cultural dynamics of communication in modern society.

ALGOSPEAK AND SOCIAL MEDIA

The advancement of digital technology has led to the creation of sophisticated algorithms that can detect and filter out the use of sensitive words flagged by various social media platforms. These algorithms are designed to limit the spread of content that might violate community guidelines, such as discussions around controversial or sensitive topics. As a result, a new phenomenon known as "algospeak" has emerged, where users deliberately modify language to avoid detection. This practice allows users to discuss sensitive topics, such as mental health issues, social justice, or political discourse without the risk of their content being blocked or removed (Kreuz, 2023). By creating alternative terms or using symbols and coded language, users are able to bypass algorithmic filters while still sharing their messages.

In an article published by Forbes, Tellez (2023) notes that more than one-third of social media users now rely on modified symbols and phrases to discuss topics that might otherwise be censored by algorithms. This widespread adoption of algospeak suggests that users have become increasingly aware of the limitations imposed by content

Proceeding of International Joint Conference on UNESA
Homepage: https://proceeding.unesa.ac.id/index.php/pijcu
ISSN: 3032-3762

PIJCU, Vol. 2, No. 2, June 2025
Page XX-XX
© 2025 PIJCU:
Proceeding of International Joint Conference on UNESA

From Digital Technology to Society: Algospeak and Communication Styles on Social Media in The Era of Artificial Intelligence (AI)

moderation systems and are actively seeking ways to maintain the visibility of their posts. The use of algospeak has thus become a strategic tool for online communities, allowing them to continue engaging in important conversations without fear of automatic content removal. This adaptation demonstrates how users have adjusted their communication styles to thrive within the confines of digital platforms, ensuring that essential discussions remain accessible despite the restrictive nature of algorithmic oversight.

However, while algospeak enables users to navigate the complexities of content moderation, it also presents new challenges for online communication. One such challenge is the potential for misunderstanding among users who are not familiar with the coded terms being used. For instance, users who are unaware of specific algospeak terms may struggle to understand the full context of a discussion, leading to confusion or misinterpretation. This can hinder the effectiveness of communication and potentially isolate those who are not part of the in-group that understands the modified language. Additionally, the reliance on algospeak can create an environment where the true meaning of messages is obscured, making it more difficult for online platforms to assess the intent behind user posts accurately.

The rise of algospeak ultimately highlights the dynamic relationship between censorship technology and user creativity. It underscores the tension between maintaining a safe and regulated online space and preserving freedom of expression. Social media platforms have become intricate landscapes where users must constantly adapt their language to ensure their voices are heard. This adaptation reflects the resilience and resourcefulness of online communities, as they navigate the ever-changing landscape of digital communication. Algospeak, therefore, is not just a linguistic workaround; it is a testament to the evolving strategies that users employ to balance the constraints of algorithmic moderation with their desire to participate in open and meaningful conversations. As digital platforms continue to develop more sophisticated content moderation systems, the interplay between user adaptation and algorithmic control will remain a key aspect of the ongoing dialogue about the future of free speech online.

THE DILEMMA OF ALGOSPEAK DISSEMINATION

The emergence of "algospeak," a form of modified language used to evade censorship algorithms on social media platforms, has become a noteworthy phenomenon in the digital age. Algospeak represents a creative adaptation by users to overcome the challenges posed by automated censorship systems, which often struggle to interpret nuanced contexts. The central dilemma surrounding the use of algospeak revolves around balancing freedom of expression with user protection, each presenting both positive and negative implications for the digital community.

On one hand, algospeak enables users to express themselves more freely, particularly when discussing topics that might otherwise be restricted by algorithmic filters (Gillespie, 2018). This includes discussions on vital issues such as human rights, political criticism, and gender identity, which algorithms often mistakenly categorize as violations of community guidelines. Noble (2018) highlights that these algorithmic systems can harbour biases rooted in skewed data, leading to unjust censorship of content from

Proceeding of International Joint Conference on UNESA
Homepage: https://proceeding.unesa.ac.id/index.php/pijcu
ISSN: 3032-3762

PIJCU, Vol. 2, No. 2, June 2025
Page XX-XX
© 2025 PIJCU:
Proceeding of International Joint Conference on UNESA

From Digital Technology to Society: Algospeak and Communication Styles on Social Media in The Era of Artificial Intelligence (AI)

marginalized groups or minority voices. Through the use of algospeak, users can avoid being "wrongly flagged," thus creating a space where critical conversations can occur without fear of removal or suppression.

Nevertheless, alongside these advantages, algospeak introduces significant challenges that cannot be ignored. A key issue lies in the platforms' difficulty in distinguishing between users who genuinely need a space for free expression and those who exploit algospeak for harmful purposes (Matamoros-Fernandez, 2017). For example, individuals propagating hate speech or spreading misinformation can also leverage algospeak to bypass detection. This can lead to an increased spread of false information, making it more difficult for social media platforms to identify and manage such content effectively. Furthermore, the use of algospeak raises concerns about transparency in communication. Algospeak creates a coded form of language that is often only understood by specific groups, making it less accessible to the general public, particularly new users who may not be familiar with the cultural nuances or coded language employed. Gillespie (2018) warns that this exclusivity can alienate some users, effectively turning social media platforms into spaces reserved for those who can decipher the "hidden language." This dynamic can deepen communication gaps between users, undermining the inclusivity that social media platforms are designed to promote.

Moreover, the widespread use of algospeak complicates efforts by platforms to maintain a safe and effective environment for all users. Algorithms are designed to monitor and manage content that could pose risks to community safety. However, when users employ algospeak to evade detection, these mechanisms become less effective. The dilemma, therefore, lies in how platforms can strike a balance between safeguarding users and preserving their freedom of speech. As Matamoros-Fernandez (2017) notes, overly stringent censorship can leave users feeling marginalized and deprived of the opportunity to address important issues, while overly lenient moderation can allow harmful content to proliferate unchecked.

In conclusion, the challenges posed by algospeak on social media platforms represent a multifaceted issue that extends beyond technical considerations of how algorithms operate. It involves social and ethical dimensions that demand a careful balance between protecting freedom of expression and ensuring online safety. Addressing these challenges requires further research, including efforts to refine algorithms for better contextual understanding and the development of balanced policies that promote inclusivity while safeguarding user safety.

THE ROLE OF LINGUISTS IN ADDRESSING ALGOSPEAK ISSUES
Linguists play a vital role in deepening the understanding of the algospeak phenomenon, helping to tackle its associated challenges, and contributing to a more effective and inclusive digital communication environment.

Analysis and Documentation of Language Variations
One of the primary roles of linguists in addressing algospeak is to analyse and document the variations in language that users adopt. These variations, used by online communities

Proceeding of International Joint Conference on UNESA
Homepage: https://proceeding.unesa.ac.id/index.php/pijcu
ISSN: 3032-3762

PIJCU, Vol. 2, No. 2, June 2025
Page XX-XX
© 2025 PIJCU:
Proceeding of International Joint Conference on UNESA

From Digital Technology to Society: Algospeak and Communication Styles on Social Media in The Era of Artificial Intelligence (AI)

to create algospeak, are highly dynamic and frequently shift in response to social contexts and evolving algorithmic regulations.

Bucholtz and Hall (2005) suggest that language serves as a form of social identity, and the use of algospeak demonstrates users' adaptability in challenging scenarios, such as navigating algorithmic censorship. Linguists can systematically document these changes, providing not only valuable academic insights but also crucial knowledge for technology developers and policymakers to understand how language evolves within diverse online communities.

Collaboration in Developing More Inclusive Algorithms
Linguists are also key collaborators in the creation of more inclusive and effective algorithms. Current automated filtering systems often rely on keyword matching techniques, which are limited in their ability to recognize linguistic nuances and broader social contexts. Noble (2018) highlights that algorithms designed to identify undesirable content often carry inherent biases, which can disproportionately affect marginalized communities.

By working with engineers and data scientists, linguists can help ensure that algorithms are better equipped to understand linguistic elements such as metaphors, figurative speech, and dialectal variations. For example, terms like "unalive" used instead of "suicide" illustrate how users attempt to bypass filters that might not fully understand the actual intent behind discussions, such as those intended for education or mental health advocacy. With the expertise of linguists, algorithms can be trained to interpret context more accurately and to reduce potential biases.

Education and Awareness for Users
Linguists also play a crucial role in educating the public about the use of algospeak and its impact on communication and transparency in social media. Crystal (2011) emphasizes the importance of linguistic awareness in the digital age, where users need to understand how their language choices can affect the reception and interpretation of their messages. This awareness can empower users to navigate social media platforms more effectively while fostering a more responsible use of language.

Educational initiatives could include seminars, workshops, or online courses that explain how algorithms operate and why certain terms are filtered out. By understanding the logic behind algorithmic decisions, users can make more informed language choices and avoid using algospeak that may lead to misunderstandings or the spread of inaccurate information.

Shaping Policy and Ethical Guidelines
Linguists are also instrumental in shaping policies and ethical guidelines to ensure that social media platforms strike a balance between freedom of speech and user safety. The challenge in the context of algospeak is to create a framework where algorithms are not so restrictive that they unfairly censor legitimate content, while also not so permissive that they allow harmful content to spread. O'Neil (2016) points out that algorithms

Proceeding of International Joint Conference on UNESA
Homepage: https://proceeding.unesa.ac.id/index.php/pijcu
ISSN: 3032-3762

PIJCU, Vol. 2, No. 2, June 2025
Page XX-XX
© 2025 PIJCU:
Proceeding of International Joint Conference on UNESA

From Digital Technology to Society: Algospeak and Communication Styles on Social Media in The Era of Artificial Intelligence (AI)

developed without sufficient contextual understanding can lead to biased and unfair outcomes. Linguists can offer valuable insights to policymakers, helping to create fairer guidelines that prioritize understanding the context and intent behind language use.

Enhancing Understanding of Identity and Dynamics in Online Communities

Linguists also contribute to understanding how algospeak shape's identity and dynamics within online communities. The use of algospeak often involves elements of collective identity, where only those familiar with specific codes can fully participate in community discussions. Bucholtz and Hall (2005) highlight that language is a fundamental tool for identity formation, and within the context of social media, the use of algospeak often signifies membership in particular groups or movements.

Understanding this dynamic is essential, as it provides insights into how language controls access to information and how it influences the experiences of new users on social platforms. Linguists can study how these language patterns facilitate or hinder communication, and how they shape power structures within digital communities. This knowledge can help platform developers create a more inclusive environment that promotes engagement while reducing barriers to participation.

Therefore, the role of linguists in addressing algospeak is both essential and multifaceted. They not only provide critical insights through the analysis and documentation of language variations but also contribute significantly to the development of more advanced and inclusive algorithms. Additionally, linguists are vital in educating users, shaping ethical policies, and understanding the identities and dynamics of online communities. Their involvement helps to strike a better balance between freedom of expression and user safety on social media, fostering a digital environment that is more secure, fair, and inclusive.

CONCLUSION

In conclusion, the evolution of digital technology and artificial intelligence (AI) has significantly transformed the way people communicate on social media, with algospeak emerging as a notable example. Users on platforms like TikTok and Instagram often employ modified terms to circumvent algorithmic censorship, enabling them to discuss sensitive topics without the risk of their content being blocked. This adaptation demonstrates society's ability to adjust to strict technological regulations while ensuring that important messages continue to reach a broader audience.

However, while algospeak facilitates more open communication, it also presents certain challenges. A key issue is the potential for misunderstandings and confusion among users who may not be familiar with the new codes or terminology being used. This can impede the clear transmission of messages and highlights the need for all parties to understand the changing dynamics of digital communication. As a result, it is essential to balance the need for content moderation with the protection of free speech on social media.

Proceeding of International Joint Conference on UNESA

Homepage: https://proceeding.unesa.ac.id/index.php/pijcu

ISSN: 3032-3762

PIJCU, Vol. 2, No. 2, June 2025

Page XX-XX

© 2025 PIJCU:

Proceeding of International Joint Conference on UNESA

From Digital Technology to Society: Algospeak and Communication Styles on Social Media in The Era of Artificial Intelligence (AI)

Therefore, it is vital for social media platforms to re-evaluate their content moderation strategies in collaboration with linguists and technology experts. Such collaboration can help develop algorithms that are more attuned to the context and subtleties of language used by users. With a more balanced approach, freedom of expression can be preserved without compromising the safety of online communities, thereby fostering a more inclusive and secure communication ecosystem in the age of artificial intelligence.

REFERENCES

Aloise, A. (2024). Algospeak: Jailbreaking the Marketplace of Ideas. Vanderbilt Journal of Entertainment and Technology Law. Retrieved from https://www.vanderbilt.edu

Bucholtz, M., & Hall, K. (2005). Identity and Interaction: A Sociocultural Linguistic Approach. Discourse Studies, 7(4-5), 585-614. https://doi.org/10.1177/1461445605054407

Cho, W., & Kim, S. (2021). Google-trickers, yaminjeongeum, and leetspeak: An empirical taxonomy for intentionally noisy user-generated text. Dalam Proceedings of the Seventh

Workshop on Noisy User-generated Text (W-NUT 2021). https://www.researchgate.net/publication/357383946

Crystal, D. (2006). Language and the Internet. Cambridge University Press.

Crystal, D. (2011). Internet Linguistics: A Student Guide. Routledge.

Danet, B., & Herring, S. C. (2007). The multilingual Internet: Language, culture, and communication online. Oxford University Press.

Garg, M. (2022). Evaluation of leet speak on password strength and security. International Journal of Scientific Research in Science and Technology, 9(5), 410-422.

Gillespie, T. (2018). Custodians of the Internet: Platforms, content moderation, and the hidden decisions that shape social media. Yale University Press.

Kreuz, R. J. (2023). What is 'Algospeak'? Inside the Newest Version of Linguistic Subterfuge. The Conversation. Retrieved from https://theconversation.com

Language Log. (2023). Algospeak. University of Pennsylvania. Retrieved from https://languagelog.ldc.upenn.edu

Lorenz, T. (2022). Internet 'Algospeak' is Changing Our Language in Real Time. The Washington Post. Retrieved from https://www.washingtonpost.com/technology/2022/04/08/algospeak-tiktok-le-dollarbean

Matamoros-Fernandez, A. (2017). Platformed racism: The mediation and circulation of an Australian race-based controversy on Twitter, Facebook and YouTube. Information, Communication & Society, 20(6), 930-946. https://doi.org/10.1080/1369118X.2017.1293130

Noble, S. U. (2018). Algorithms of oppression: How search engines reinforce racism. New York University Press.

Noble, S. U. (2018). Algorithms of Oppression: How Search Engines Reinforce Racism. New York University Press.

O'Neil, C. (2016). Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy. Crown Publishing Group.

Stewart, E. (2023). The Rise of Algospeak on TikTok and Instagram. Vox. Retrieved from https://www.vox.com

From Digital Technology to Society: Algospeak and Communication Styles on Social Media in The Era of Artificial Intelligence (AI)

Tellez, A. (2023). 'Mascara,' 'Unalive,' 'Corn': What Common Social Media Algospeak Words Actually Mean. Forbes. Retrieved from https://www.forbes.com/sites/anthonytellez/2023/01/31/mascara-unalive-corn-whatcommon-social-media-algospeak-words-actually-mean

Thurlow, C., & Mroczek, K. (2011). Digital discourse: Language in the new media. Oxford University Press.

Proceeding of International Joint Conference on UNESA
Homepage: https://proceeding.unesa.ac.id/index.php/pijcu
ISSN: 3032-3762

PIJCU, Vol. 2, No. 2, June 2025
Page XX-XX
© 2025 PIJCU:
Proceeding of International Joint Conference on UNESA