प्राकृतविद्या (Prakritvidya)
VOL. 55 /ISSUE 1 /2022
Jan - Jun 2022

Language Change in the Digital Age: The Impact of Social Media, Internet Communication and Emerging Technologies

Jolly Sachdeva

Abstract

Language is a dynamic social system that continuously changes in response to cultural, technological, economic and social developments. The emergence of the internet and digital communication has accelerated several processes of linguistic change by creating new environments in which people produce, exchange and interpret language. Social networking sites, instant messaging, email, blogs, online forums and mobile communication have introduced new forms of vocabulary, abbreviations, spelling practices, discourse conventions and multimodal expression. The development of digital technologies has also changed the relationship between written and spoken language, producing communication forms that combine characteristics of both. This paper examines the impact of social media, internet communication and emerging technologies on language change, with particular attention to vocabulary, grammar, spelling, punctuation, discourse, identity, multilingualism and language variation. Research conducted before and during 2017 indicates that digital communication does not simply cause the deterioration of traditional language. Instead, users develop flexible linguistic practices appropriate to different communicative contexts. Tagliamonte et al. found that young people were capable of moving between different internet registers while maintaining stable linguistic patterns, challenging claims that online communication necessarily represents grammatical decline. Computational research has additionally demonstrated that large-scale social media data can reveal language change as it occurs, allowing researchers to observe the emergence and diffusion of linguistic forms across online networks. The paper argues that digital communication should therefore be understood not as a destructive force acting upon language but as a powerful sociolinguistic environment in which existing processes of innovation, variation, borrowing, identity construction and semantic change become more visible and potentially more rapid.

Keywords: Language Change, Digital Communication, Social Media, Internet Linguistics, Sociolinguistics, Internet Language, Linguistic Variation, Social Networking, Digital Literacy, Emerging Technologies

Introduction

Language has never been a static phenomenon. Every living language changes over time as speakers introduce new words, modify existing meanings, adopt expressions from other languages and develop new ways of communicating. Changes in vocabulary, pronunciation, grammar, spelling and discourse are natural characteristics of linguistic development. Historical transformations in language have been influenced by migration, trade, political change, cultural contact, education, mass media and technological innovation. In the contemporary period, the internet and digital communication have become particularly influential environments for linguistic interaction.

The expansion of digital communication has created forms of interaction that differ substantially from traditional face-to-face conversation and conventional writing. Email, text messaging, online discussion forums, blogs, social networking platforms and instant messaging enable individuals to communicate rapidly across geographical boundaries. Digital communication is often written but conversational in character. Users may compose messages quickly, omit conventional punctuation, employ abbreviations, use emojis or combine words with images and other visual symbols. Consequently, digital communication has generated a distinctive set of linguistic practices that challenge traditional distinctions between speech and writing.

The development of social networking has intensified these developments. Platforms such as Facebook and Twitter have provided users with public and semi-public spaces in which linguistic expressions can circulate rapidly among large networks. A newly created word or expression may move from a small community into a much larger population within a relatively short period. Digital communication therefore provides conditions in which linguistic innovation can be observed on a scale that was difficult to achieve using traditional sociolinguistic methods.

The relationship between technology and language has nevertheless generated considerable controversy. Critics frequently argue that abbreviations, informal spelling, emojis and simplified punctuation are damaging grammar and literacy. Such arguments often assume that there is a single correct form of language and that deviations from formal written conventions represent linguistic decline. Linguistic research provides a more complex perspective. A major study of North American youth examined a 179,000-word corpus drawn from email, instant messaging and mobile texting and found that young users were not simply abandoning grammar. Instead, they demonstrated the ability to navigate multiple registers and adapt their language to different communicative contexts.

The central purpose of this paper is to examine how digital communication contributes to language change. It focuses on social media, internet-based interaction, emerging technological practices and their effects on vocabulary, grammar, spelling, punctuation,

discourse and multilingual communication. It also considers the implications of digital language for identity, social relationships, education and linguistic diversity. The discussion treats language change as a sociolinguistic process rather than as a simple conflict between traditional and modern forms.

Digital Communication as a New Linguistic Environment

The internet has created a new communicative environment in which written language can be produced with the speed and informality traditionally associated with speech. Conventional writing usually involves greater planning, editing and attention to formal conventions. Face-to-face conversation, by contrast, is immediate and interactive. Digital communication occupies an intermediate position. A text message or social media post is written, but it may contain conversational vocabulary, shortened forms, emotional expressions and rapid turn-taking.

This combination has encouraged the development of what can be described as digitally mediated registers. Users select linguistic forms according to the technological platform, audience and communicative purpose. An academic email may follow relatively formal conventions, whereas a private message between friends may use abbreviations and informal spelling. A public social media post may combine standard language with hashtags, emojis, hyperlinks and internet-specific vocabulary. Therefore, digital communication does not create one single form of "internet language"; rather, it produces a collection of registers adapted to different situations.

Research on social media language has demonstrated the value of these digital environments for understanding human communication. Kern and colleagues observed that social media language provides researchers with opportunities to study language-related behaviour on an unprecedented scale, while also presenting methodological challenges associated with interpreting large quantities of naturally occurring online communication. Digital communication thus represents both an object of linguistic study and a new methodological resource for sociolinguists.

The internet has also increased the visibility of language variation. In traditional research, linguistic variation may require extensive interviews, recordings and fieldwork. Online platforms produce enormous quantities of naturally occurring text. Researchers can therefore examine differences between age groups, geographical communities, social networks and linguistic varieties using large datasets. Computational approaches have demonstrated that language change can be investigated through millions of social media interactions, providing evidence about how linguistic innovations spread between users.

Vocabulary and the Emergence of New Words

Vocabulary is among the most visible areas of language change associated with digital communication. Technological developments have introduced terms related to

computers, networking, mobile devices and online interaction. Words such as "blog," "tweet," "hashtag," "selfie," "viral," "emoji" and "unfriend" illustrate how technological environments can generate or popularize new lexical items.

The emergence of new vocabulary reflects more than technological invention. Words develop because speakers need efficient ways to describe new experiences. Once a technological practice becomes socially important, linguistic resources are required to represent it. Social media can accelerate this process because new words are distributed rapidly through networks of users. Research on lexical emergence in American social media used a multi-billion-word corpus of tweets to identify newly emerging word forms, demonstrating the potential of online data for studying vocabulary change quantitatively.

Digital communication also encourages semantic change. Existing words may acquire new meanings or become associated with new social practices. The word "follow," for example, has a meaning in ordinary language but has developed a specialized meaning within social media environments. Similarly, words associated with physical actions can acquire digital meanings. Computational research conducted before 2017 demonstrated that semantic change can reflect both general linguistic drift and broader cultural transformation associated with technological and social developments.

The rapid spread of vocabulary through social media can also influence the relationship between local and global language varieties. An expression developed in one online community may be encountered by users in distant geographical locations. This creates opportunities for borrowing and lexical diffusion across communities. However, the adoption of new vocabulary is not automatic. Users selectively adopt expressions that are meaningful, fashionable, humorous, socially valuable or useful for constructing identity.

Abbreviations, Short Forms and Digital Spelling

One of the most recognizable characteristics of digital communication is the use of abbreviations and shortened forms. Expressions such as "LOL," "OMG," "BRB" and "BTW" emerged as convenient ways of communicating quickly. Mobile texting historically encouraged brevity because of technological limitations and the effort associated with typing. Although many abbreviations originated in particular online environments, some have entered broader popular usage.

The use of abbreviated forms is often interpreted as evidence of declining literacy. Linguistic research, however, suggests that the situation is more complex. Tagliamonte and colleagues examined acronyms, short forms and initialisms alongside other linguistic features and found that internet language demonstrated variation across registers without indicating a general collapse of grammatical competence. Young users were able to move between different communicative styles depending on context.

Digital spelling practices similarly reflect communicative choices. Users may intentionally omit letters, repeat characters, use phonetic spellings or alter capitalization.

Such forms can communicate emotion, informality or group membership. For example, repeated letters may indicate emphasis, while unusual capitalization can express excitement or irony. These practices show that spelling in digital environments can acquire pragmatic functions beyond simply representing pronunciation.

This does not mean that conventional spelling has disappeared. Users generally distinguish between contexts. Formal academic writing, professional communication and official documents continue to require standardized spelling and grammar. Digital users therefore demonstrate what can be called register awareness: they modify language according to audience and communicative purpose.

Grammar and Punctuation in Online Communication

Grammar is another area in which digital communication has generated debate. Some observers argue that texting and social media encourage incomplete sentences, missing punctuation and simplified grammatical structures. Yet language used in informal digital communication should not necessarily be evaluated according to the standards of formal academic writing.

Digital messages are often produced under conditions of speed and interaction. Users may omit subjects, punctuation marks or words that can be understood from context. Similar forms of ellipsis occur in ordinary speech. Digital communication therefore demonstrates that users are capable of adapting grammar to communicative circumstances.

Punctuation has also acquired new pragmatic functions online. A period at the end of a short informal message can sometimes appear more formal or emotionally distant than the same message without a period. Multiple exclamation marks can signal enthusiasm, while repeated question marks may indicate surprise or disbelief. These practices demonstrate that punctuation can function as a resource for expressing social and emotional meaning.

The development of emojis has expanded this process further. Emojis provide visual symbols that can supplement or replace words and punctuation. They may express emotion, attitude, humour or pragmatic meaning. Rather than eliminating language, emojis often operate alongside language and help users compensate for the absence of facial expression and vocal intonation in text-based communication.

Social Media, Identity and Community

Language is closely connected with identity. Individuals use linguistic choices to communicate age, social background, geographical affiliation, professional identity and membership in particular communities. Social media provides extensive opportunities for identity construction because users can choose particular words, expressions, spellings and styles for public presentation.

Research on social media has shown that online language contributes to the construction and maintenance of communities. The literature on social media language includes research examining identity, audience design, language choice, youth communication and multilingual practices across platforms such as Facebook and Twitter. Digital communities can therefore function as linguistic communities in which users develop shared expressions and conventions.

Online networks can also influence the diffusion of linguistic innovations. Computational research examining Twitter data found evidence that linguistic change can be understood partly as a form of social influence. The study reported complex social diffusion for phonetic spellings and internet abbreviations and found that stronger social ties could be particularly important channels of linguistic influence. This finding is important because it demonstrates that digital language change remains fundamentally social. Technology provides the communication infrastructure, but people determine which forms spread through their interactions.

Social media also makes linguistic identity more flexible. Individuals may participate simultaneously in several communities and adapt their language accordingly. A person can use formal language at work, regional expressions with family and internet slang with friends. Digital environments increase opportunities for such code-switching because users interact with different audiences across multiple platforms.

Multilingualism and Language Contact

The internet has significantly expanded opportunities for contact between speakers of different languages. Digital communication allows users to interact internationally without requiring physical travel. As a consequence, multilingualism, code-switching and language mixing have become prominent features of online communication.

English has historically occupied a particularly influential position in internet communication because of its early dominance in computing, science, business and international communication. However, the internet has increasingly become multilingual. Users employ Spanish, Arabic, Chinese, Hindi and numerous other languages online, while multilingual speakers frequently combine languages in a single conversation.

Social media can influence cultural orientation as well as linguistic practices. A 2017 study examining social networking in Spanish and English found that language choice on social networking sites could produce different effects on users' cultural orientations and perceptions. This demonstrates that digital language choice is not merely a technical decision; it can also be connected to cultural identity.

Digital communication can also provide opportunities for minority language communities. Online platforms allow speakers of less widely represented languages to create content, communicate with one another and maintain cultural connections across

geographical distances. At the same time, languages with fewer digital resources may face disadvantages because fewer texts, language tools and technological resources are available for them.

The development of digital communication therefore has contradictory implications for linguistic diversity. It can support minority languages by connecting dispersed speakers, but it can also reinforce dominant languages if technological infrastructures and online content remain concentrated in a small number of major languages.

Internet Slang and Youth Language

Young people are frequently presented as the primary agents of internet language change. Youth communities often experiment with new vocabulary, abbreviations, memes and forms of linguistic play. Such innovations may spread beyond youth communities when they are adopted by older speakers, media organizations and commercial institutions.

Research challenges the idea that young people's internet language represents linguistic decline. Tagliamonte and colleagues found that young users demonstrated competence across multiple registers rather than simply replacing standard language with internet slang. Their study concluded that users were capable of navigating complex new written registers.

This suggests that internet slang should be interpreted as a form of linguistic creativity. Young people use language to create humour, establish group identity and distinguish themselves from other generations. Some expressions disappear quickly, while others become established parts of mainstream language. Social media increases the speed at which such expressions can be created, shared and evaluated.

The spread of slang is also influenced by online communities and social networks. A linguistic innovation becomes successful when enough users recognize, understand and reproduce it. Digital platforms therefore provide an environment in which linguistic experimentation can occur at a large scale.

Emerging Technologies and the Future of Language

The influence of technology on language extends beyond social media. Speech recognition, predictive text, machine translation, automated spelling correction and natural language processing systems increasingly interact with human communication. Although many of these technologies were still developing rapidly by 2017, they were already changing how people wrote and interacted with digital devices.

Predictive text and autocorrect systems can influence users' lexical and grammatical choices by suggesting particular forms. Translation software facilitates communication across languages but may also privilege standardized forms of language. Speech recognition systems require computational models capable of interpreting accents, dialects and different patterns of pronunciation. These technologies therefore interact directly with linguistic variation.

The development of computational linguistics has also created new possibilities for observing language change. Researchers can analyze millions of online messages and identify patterns that would be difficult to observe manually. Social media data can reveal emerging words, shifts in meaning and differences between demographic groups. Research on African-American English, for example, showed that existing language identification and parsing technologies could perform less effectively on dialectal social media language than on language associated with white speakers, illustrating the importance of recognizing linguistic diversity when designing computational systems.

Technology can therefore influence language in two directions. First, people adapt language to technological environments. Second, technological systems can influence which linguistic forms are recognized, suggested or promoted. This reciprocal relationship is likely to become increasingly important as computational systems become more deeply integrated into communication.

Implications for Education and Literacy

Digital language has important implications for education. Schools traditionally emphasize standardized spelling, grammar and formal writing. Students, however, increasingly communicate through digital platforms where different conventions apply. The challenge for education is therefore not to reject digital language but to teach students when and how different linguistic registers should be used.

Digital literacy should include the ability to distinguish between informal and formal communication. Students should understand that abbreviations and informal punctuation may be appropriate in private messages but inappropriate in academic essays. The ability to move between registers is an important component of effective communication.

Research on social media language suggests that digital communication can also support language learning and sociopragmatic development. Social media provides learners with opportunities to observe authentic language use, participate in interaction and experiment with different communicative strategies. Such environments can therefore complement formal classroom instruction.

At the same time, educators must recognize the potential problems associated with excessive reliance on informal digital language. Students need strong foundations in reading, writing and critical interpretation. Digital communication should supplement rather than replace these abilities.

Challenges and Concerns

Although digital communication provides many opportunities for linguistic innovation, it also presents challenges. One concern is the speed of language change. Rapid circulation of new expressions can make communication difficult across generations or between

communities. Older users may not understand emerging slang, abbreviations or cultural references.

Another concern is the dominance of commercially powerful platforms. The design of digital platforms can influence how language is used. Character limits, interface structures, search functions and algorithmic systems can encourage particular forms of expression. Communication is therefore shaped not only by users but also by technological infrastructures.

Privacy is another issue in the study of digital language. Social media provides enormous quantities of linguistic data, but researchers must consider whether users expect their public or semi-public communication to be used for research. Ethical approaches to data collection are essential.

Finally, linguistic inequality remains a significant concern. Digital technologies do not support all languages equally. Languages with extensive digital resources are more likely to benefit from advanced computational tools. Ensuring that technological development supports linguistic diversity is therefore an important future priority.

Conclusion

Language change in the digital age is a complex process resulting from the interaction of technology, society and human creativity. Social media, texting, email, online communities and emerging digital technologies have created new contexts for communication and encouraged innovations in vocabulary, spelling, punctuation, discourse and multilingual expression. These developments have made language more visible as a rapidly changing social phenomenon.

The evidence available before 2017 does not support the simplistic claim that digital communication is destroying language. Research on young people's internet communication demonstrates that users can move effectively between different registers and that informal digital language does not necessarily indicate grammatical decline. Instead, digital communication provides additional linguistic resources that users employ according to audience, purpose and context.

Social media has also transformed the study of language itself. Researchers can now examine enormous quantities of naturally occurring communication and observe linguistic innovations as they spread through social networks. Computational research has shown that online networks can provide important evidence about social influence, lexical emergence and language change.

The future of language will therefore not be determined by technology alone. Human speakers remain the central agents of linguistic change, while digital technologies provide new environments in which language can develop, circulate and acquire meaning. The most appropriate response to digital language is not to regard it as a threat to traditional

language but to understand it as another stage in the continuing evolution of human communication. Education should encourage students to master both formal and digital registers, while researchers and technology developers should recognize linguistic diversity and avoid treating standardized language as the only legitimate form. Digital communication ultimately demonstrates a fundamental characteristic of language: it changes because human societies change.

References

Androutsopoulos, J. (Ed.). (2014). *Mediatization and Sociolinguistic Change*. Berlin: De Gruyter Mouton.

Baron, N. S. (1998). Letters by phone or speech by other means: The linguistics of email. *Language & Communication, 18*(2), 133–170.

Crystal, D. (2006). *Language and the Internet* (2nd ed.). Cambridge: Cambridge University Press.

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

Grieve, J., Nini, A., & Guo, D. (2016). Analyzing lexical emergence in Modern American English online. *English Language & Linguistics, 21*(1), 1–26. The study used a multi-billion-word Twitter corpus to investigate newly emerging word forms.

Hamilton, W. L., Leskovec, J., & Jurafsky, D. (2016). Cultural shift or linguistic drift? Comparing two computational measures of semantic change. *Proceedings of EMNLP 2016*, 2116–2121.

Kern, M. L., Park, G., Eichstaedt, J. C., Schwartz, H. A., Sap, M., Smith, L. K., & Ungar, L. H. (2016). Gaining insights from social media language: Methodologies and challenges. *Psychological Methods, 21*(4), 507–525.

Lantz-Andersson, A. (2017). Language play in a second language: Social media as contexts for emerging sociopragmatic competence. *Education and Information Technologies*.

Li, C., & Liu, J. (2017). Effects of using social networking sites in different languages: Does Spanish or English make a difference? *Computers in Human Behavior, 74*, 257–264.

Lim, H., & Fussell, S. R. (2017). Making sense of foreign language posts in social media. *Proceedings of the ACM on Human-Computer Interaction, 1*(CSCW), Article 69, 1–16.

Sharma, D. (2017). Scalar effects of social networks on language variation. *Language Variation and Change, 29*(3), 393–420.

Tagg, C. (2015). *Exploring Digital Communication: Language in Action*. London: Routledge. The work examines digital language and literacy, internet-mediated reading and writing, and the social dimensions of online communication.

Tagg, C., & Seargeant, P. (2014). Audience design and language choice in the construction and maintenance of translocal communities on social network sites. In J. Androutsopoulos (Ed.), *Mediatization and Sociolinguistic Change*. Berlin: De Gruyter Mouton.

Tagliamonte, S. A., & Denis, D. (2008). Linguistic ruin? LOL! Instant messaging and teen language. *American Speech, 83*(1), 3–34.

Tagliamonte, S. A., Uscher, D., Kwok, L., & students from HUM199Y (2009–2010). (2016). So sick or so cool? The language of youth on the internet. *Language in Society, 45*(1), 1–32.

Zappavigna, M. (2012). *Discourse of Twitter and Social Media: How We Use Language to Create Affiliation on the Web*. London: Continuum.

Blodgett, S. L., Green, L., & O'Connor, B. (2016). Demographic dialectal variation in social media: A case study of African-American English. *Proceedings of EMNLP 2016*, 1119–1130.

Goel, R., Soni, S., Goyal, N., Paparrizos, J., Wallach, H., Diaz, F., & Eisenstein, J. (2016). The social dynamics of language change in online networks. *arXiv preprint arXiv:1609.02075*.