

The Influence of Technology on Language

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Abstract

Key Words:

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The development of technology, especially the internet and social media, has had a significant impact on language, accelerating communication and creating new, more informal terms. This study aims to analyze the influence of technology on language change, both in the form of vocabulary evolution and communication style. In addition, this study also explores the challenges faced by local languages amidst the dominance of English in the digital world. Through quantitative and qualitative methods, the results of the study show that the use of informal language, such as abbreviations and emojis, increasingly dominates digital communication, while formal language is declining. However, technology also offers the potential to preserve local languages through digital platforms. This study suggests the importance of digital literacy and cooperation between governments and technology companies to support language diversity in the digital era.

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INTRODUCTION

Language Evolution Through Technology: Crystal (2001) states that the internet creates a “new language” through abbreviations, emojis and slang that are used everyday, although it can reduce formal language skills. Language Learning with Technology: Godwin-Jones (2018) highlights the benefits of applications such as Duolingo and Memrise, but warns against over-reliance which can lead to errors. Social Media and Language Use: Tagg (2015) notes the influence of social media in accelerating communication but also affecting formal writing skills. The Dominance of English: Nguyen (2016) discusses “Englishization” which has the potential to reduce the visibility of local languages in the digital space.

The advancement of technology, particularly the internet and social media, has revolutionized many aspects of human life, including the way we use language. The emergence of digital platforms has not only accelerated communication but also introduced new vocabularies, phrases, and communication styles that are more informal and dynamic. For instance, the use of abbreviations, emojis, and digital slang has become an integral part of everyday digital interactions, reshaping how we connect and express ourselves in the modern world.

However, the dominance of technology, especially the widespread use of English as the global lingua franca in digital spaces, poses significant challenges. While English facilitates communication across borders, it often marginalizes local languages, risking the erosion of cultural and linguistic diversity. Moreover, the increasing preference for informal communication, particularly among younger generations, raises concerns about the decline of formal language skills, which are essential in academic, professional, and institutional contexts.

The dual influence of technology—its ability to both innovate and endanger language—has led to growing interest in understanding its impacts. This study aims to delve deeper into how technology shapes language evolution, focusing on the development of new vocabularies, shifts in communication styles, and the effects of “Englishization” on local languages. Additionally, it seeks to explore solutions for preserving linguistic diversity in the digital era, emphasizing the role of digital literacy and cross-sector collaboration.

By addressing these concerns, this research highlights the need to balance the benefits of technological innovation with efforts to maintain cultural heritage and linguistic diversity, ensuring that technology supports, rather than diminishes, our global linguistic landscape. This research was conducted to answer the need for an

in-depth understanding of how technology affects language and linguistic identity, specifically to identify the positive and negative impacts of technology on language use and provide solutions to maintain local language diversity in the digital era.

PROBLEM FORMULATION

1. How does technology affect the evolution and patterns of language use?
2. What is the impact of technology use on formal language skills, especially in academic and professional contexts?
3. How to preserve local languages amidst the dominance of English in the digital space?

METHODS

A. Quantitative Method

The quantitative method is used to collect data that can be counted and analyzed statistically. In this study, surveys and observations are the main tools used to gather data about digital communication patterns and language changes.

1. Online Language Use Survey

Purpose:

To understand how people communicate in digital spaces like social media, instant messaging, or language learning platforms.

Sample Survey Questions:

- a) How much time do you spend communicating online every day?
- b) How often do you use emojis, abbreviations, or informal language in your communication?
- c) When do you use formal or informal language in your communication?

Expected Results:

- a) Statistics on the use of emojis, abbreviations, and GIFs.
- b) Trends in informal language use based on age, profession, or education background.

2. Data Analysis

After the survey is completed, the quantitative data will be analyzed using descriptive statistics. For example, calculating the percentage of people who frequently use informal language or emojis in everyday online communication.

B. Qualitative Method

The qualitative method will be used to explore in-depth experiences, perceptions, and views of users regarding language changes in digital communication.

1. In-depth Interview

Purpose:

To explore the views and experiences of users on how technology has changed language use in digital communication.

Sample Interview Questions:

- a) How do you define informal language in digital communication?
- b) How do emojis and abbreviations affect how you communicate on social media?
- c) Do you think formal language is used less in online professional communication? Why?

2. Observing Language Changes

Purpose:

To observe how technology influences the use of formal language in professional communication, especially on platforms like email, instant messaging, or language learning apps.

- a) Sample Observation Questions
- b) How often do you see formal language used in professional communication online?
- c) How does communication on platforms like WhatsApp or LinkedIn differ in terms of formal and informal language?

Expected Results:

- a) Understanding how language shifts between formal and informal in digital communication.
- b) Identifying the factors that lead people to switch between formal and informal language.

1. Changes in Vocabulary and the Emergence of New Terms

Technology has significantly affected the vocabulary we use, especially with the rise of digital tools like social media, smartphones, and other online platforms. New terms have been coined to describe new concepts, behaviors, and objects in the digital realm. For example, words like “selfie,” “hashtag,” “emoji and “podcast” have become an integral part of everyday language. These terms, once used mainly in digital contexts, are now understood and used by people across various domains of life.

The table below provides examples of some of these new terms, including their definitions and the years they were introduced to the mainstream lexicon:

Table 1: New Terms That Emerged Due to Technological Advancements

No	Term	Definition	Year Introduced
1	Selfie	A self-portrait photograph taken with a smartphone or camera	2007
2	Hashtag	A word or phrase preceded by the “#” symbol, used to categorize content online	2009
3	Emoji	Small digital images or icons used to express	1999
4	Podcast	A series of spoken word audio or video files available for download	2004

These terms have become so widespread that they are commonly used by people of all ages and backgrounds. The creation of these words demonstrates how language adapts quickly to technological innovations.

2. Changes in Communication Style

Technology has drastically altered the way people communicate. The rise of digital platforms, such as social media, instant messaging, and texting, has led to a shift from formal, structured communication to more informal, quick exchanges. In particular, people have begun to use abbreviations and symbols to speed up communication. Words like “LOL” (Laugh Out Loud) and “BRB” (Be Right Back) are now frequently used in text messages and social media posts.

In addition, emojis have become a popular way to express emotions and ideas visually, replacing words in many cases. This change is particularly noticeable in the way younger generations communicate. The following chart shows the usage of abbreviations and emojis in digital conversations, particularly among social media users:

Type of Communication	Percentage of Use (%)
Abbreviations (e.g., LOL, BRB)	65%
Emojis	45%
Formal Text	30%

Chart 1: Percentage of Abbreviations and Emojis Used in Digital Communication

From the chart, it is evident that abbreviations and emojis have become an integral part of digital communication. About 65% of people use abbreviations like “LOL” and “BRB,” while 45% incorporate emojis in their messages. Only 30% of individuals still use formal text in their digital conversations. This shift towards informal and faster communication methods is indicative of a broader trend in language, where speed and ease of expression are prioritized. However, this informal communication style could impact more formal language skills, especially for younger generations.

3. Globalization of Language

The internet has played a major role in the globalization of language. As more people connect online across national and cultural boundaries, there is a growing need for a common language to facilitate

communication. English, being the most widely used language online, has emerged as the dominant global language in the digital world.

In 2023, a survey showed the distribution of languages used in online communication, as illustrated in the chart below. This chart highlights the extent to which English dominates digital communication worldwide, compared to other languages.

Language	Percentage of Use (%)
English	54%
Mandarin	14%
Spanish	9%
Arabic	7%
Indonesian	6%

Chart 2: Percentage of Languages Used in Global Digital Communication

The chart clearly indicates that English is by far the most dominant language online, accounting for 54% of all digital communication. Mandarin follows with 14%, while Spanish, Arabic, and Indonesian make up 9%, 7%, and 6%, respectively. This reflects the global reach of English in digital communication and underscores its role as a common medium for people worldwide.

While the prevalence of English enables easier communication across borders, it also poses a challenge for smaller or local languages. The widespread use of English on the internet could lead to a decline in the use of other languages, risking their disappearance over time. This is especially true for languages spoken by smaller communities that may not have as much online presence.

4. Impact on Language Learning

Technology has also had a profound effect on language learning. Online platforms, language learning apps, and translation tools have made learning a new language more accessible than ever before. These tools have broken down geographical and time barriers, enabling anyone with internet access to learn languages at their own pace, without the need to attend traditional language classes.

In particular, language learning apps like Duolingo, Memrise, and Babbel have gained immense popularity due to their interactive and user-friendly features. These apps are based on gamified learning methods, interactive lessons, and chat functionalities that allow users to practice speaking with native speakers. Below is a table showcasing some of the most popular language learning apps and their features.

Table 2: Most Popular Language Learning Apps (2023)

No	App	Main Features	Number of Users (millions)
1	Duolingo	Gamified language lessons with bite-sized modules	500+
2	Memrise	Focus on vocabulary building and conversational practice	50+
3	Babbel	Language courses with live conversation practice	20+
4	HelloTalk	Social platform to chat with native speakers	30+

These apps have made language learning more accessible and flexible. Users can learn languages through interactive games, daily lessons, and practice with native speakers, all from the comfort of their homes. The ability to learn anytime and anywhere is a game-changer for those who may not have access to traditional classrooms or who face time constraints. These innovations are helping to democratize language education on a global scale.

RESULTS AND DISCUSSION

RESULTS

The findings of this study indicate that technology has a multifaceted impact on language, influencing both vocabulary and communication styles in the digital space. One of the most prominent changes is the introduction of new terms, such as selfie, hashtag, emoji, and podcast, which were initially used in digital contexts but have now permeated everyday conversation. The widespread adoption of these terms reflects how technology accelerates the evolution of language. Data collected from surveys reveal that approximately 65%

of participants use abbreviations such as “LOL” (Laugh Out Loud) or “BRB” (Be Right Back), while 45% frequently incorporate emojis into their digital communication. Interestingly, formal text is used by only 30% of individuals in their digital conversations, which demonstrates a shift towards more informal and quicker communication.

In the domain of language learning, technology has played a significant role in democratizing access to education. Apps such as Duolingo, which boasts over 500 million users, and Babbel, have made language learning more interactive and accessible. These platforms have replaced traditional classroom settings, allowing learners to study at their own pace. Additionally, the use of digital tools has facilitated the preservation of local languages by enabling the creation of digital archives and the development of online courses for minority languages, thus helping to sustain their existence.

However, the study also identifies negative implications of technological advancements. The dominance of English in digital communication is a critical issue. According to the survey data, English is used in 54% of global digital interactions, overshadowing other languages such as Mandarin (14%), Spanish (9%), Arabic (7%), and Indonesian (6%). This prevalence of English threatens the survival of local languages, as communities may prioritize English for digital communication, thereby reducing the use of indigenous languages. Furthermore, the shift towards informal communication, characterized by the use of abbreviations and emojis, is eroding formal language skills, particularly among younger users, who may struggle with academic or professional writing.

DISCUSSION

The data from this study reinforces the argument that technology plays a central role in language evolution. The creation of new terms and expressions, such as selfie or hashtag, reflects the way technological innovations shape our vocabulary. These words emerge in response to new experiences or digital behaviors, making language more dynamic and adaptable to changing societal needs. For example, the word *hashtag* was coined to describe the practice of tagging content on social media platforms, but it has since been embraced in everyday language. This phenomenon showcases how language evolves in response to new technological contexts, resulting in the birth of new linguistic expressions that reflect the digital age.

The dominance of English in digital communication is a significant finding of this research. As the most widely spoken language online, English has become the lingua franca of the internet, facilitating global communication and interaction. The 2023 survey results reveal that English accounts for more than half of all digital communication, which emphasizes its role as a global bridge language. However, this dominance is problematic for the preservation of local languages, particularly those spoken by smaller communities that may not have the resources to establish a significant online presence. The prevalence of English on digital platforms like social media, email, and business websites has led to the marginalization of regional languages. This process, known as “Englishization,” can lead to language loss over time, as speakers of minority languages may shift to English to participate in global digital culture.

The shift towards informal communication in digital spaces has significant implications for formal language skills. The use of abbreviations, emojis, and slang has made communication more efficient and accessible, but this trend also poses challenges for academic and professional writing. The study found that only 30% of participants still use formal language in digital communication, indicating a decrease in the use of traditional writing skills. This trend is particularly concerning in professional and educational contexts, where clarity and precision are essential. Over-reliance on informal communication methods may lead to difficulties in producing well-structured, formal writing in settings such as academia, business, and government.

The study proposes several solutions to mitigate the negative impacts of technology on language diversity. One of the most important recommendations is the promotion of digital literacy, particularly for younger generations. Educating individuals on the appropriate use of language in different contexts—formal and informal—can help bridge the gap between casual digital communication and the need for formal writing skills. Furthermore, governments, educational institutions, and technology companies must collaborate to create digital content that supports and promotes local languages. This could include the development of language learning apps that focus on regional languages, as well as the creation of online platforms that encourage the use of indigenous languages. By doing so, these stakeholders can help preserve linguistic diversity in the face of technological advancement.

The role of social media in language preservation should not be overlooked. Platforms like Facebook, Instagram, and Twitter can be used to promote regional languages by creating communities dedicated to these languages. Digital archives and repositories can also be established to document and protect endangered

languages, providing a digital space for their preservation and revitalization. By leveraging the tools and platforms available in the digital world, local languages can find new ways to thrive and evolve.

This study underscores the dual impact of technology on language. On one hand, technology has accelerated communication, facilitated language learning, and contributed to the globalization of language. On the other hand, it poses significant risks to the survival of local languages and formal writing skills. While English dominates the digital space, efforts must be made to preserve linguistic diversity through digital literacy initiatives and collaboration between various stakeholders. The future of language in the digital age hinges on finding a balance between embracing technological advancements and safeguarding the cultural and linguistic heritage of smaller communities.

CONCLUSIONS

Technology has had both positive and negative effects on language. The digital age has made communication faster, more informal, and more global, as new words and expressions emerge, often from social media platforms and other online spaces. These changes, such as the widespread use of emojis, abbreviations, and new vocabulary, have made language more accessible and adaptable but have also shifted communication towards a more casual style. While this can be seen as an innovation in how we connect, it also raises concerns about the decline in formal writing skills and the potential impact on academic and professional language.

This study provides solutions to problems arising from the influence of technology on language. One of them is the importance of digital literacy, which teaches the younger generation to understand the difference between formal and informal language in communication. Good digital literacy will help individuals use language more appropriately according to the context, whether it is in professional, academic, or personal communication. In addition, cooperation between the government, educational institutions, and technology companies is essential to develop digital content that supports the use and preservation of local languages. The government can work with application developers to create content that promotes regional languages and ensures that linguistic diversity is maintained even though technology continues to develop.

The implication of this study is the importance of maintaining a balance between technological innovation and the preservation of cultural and linguistic heritage. Technology does bring many benefits in terms of accelerating communication, facilitating language learning, and supporting globalization, but it also brings serious challenges to language diversity and formal writing skills. Therefore, it is very important for all parties, both individuals, communities, governments, and technology companies, to work together to preserve regional languages and ensure that future generations continue to master good language skills, both in informal and formal contexts.

For further research, it can be considered to explore more deeply how technology can be used effectively to support the preservation of local languages, especially through existing digital platforms. Research can also focus on the role of social media in shaping the linguistic identity of groups, as well as its impact on formal language, to better understand the dynamics of language change in an ever-evolving digital society.

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