

The Social Impact of the Evolution of Internet Language: A Critical Discourse Analysis of Popular Internet Language

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Abstract: This article aims to explore the evolution of Internet slang and its impact on social communication. By using crawler technology, we collect a large amount of usage data on Internet terms from major social media platforms. This study focuses on analyzing the acceptance of Internet terms among different user groups, the impact of Internet terms on traditional languages, and the future trends of Internet terms. We used quantitative analysis (such as frequency analysis and trend analysis) and qualitative analysis (such as content analysis and discourse analysis) methods to gain a deeper understanding of the socio-cultural meaning and impact of online terms. Research has found that the use of Internet slang is more common among young users and shows specific popular trends over time. At the same time, Internet slang has had a profound impact on traditional language and culture, triggering extensive public discussions on language purity and cultural inheritance. Finally, this article predicts the future development trend of Internet terminology and discusses how to adapt to the changes brought about by Internet terminology while maintaining traditional language norms.

1. Introduction

1.1 Research background and purpose

The rapid development and widespread use of Internet slang reflects the evolution of society, culture and technology. Internet slang in social media and online communities particularly shows this. This study aims to analyze how the evolution of Internet lingo affects sociocultural structures and explore its impact on personal identity and social interaction. Studying the social impact of Internet slang can not only help us better understand the characteristics of contemporary social communication, but also provide a new perspective for understanding cultural diversity in the context of globalization. As an emerging language form, Internet slang is unique in that it crosses the geographical and cultural boundaries of traditional languages and forms a global communication method ^[1]. The evolution of Internet slang and its social impact have been hot topics in the fields of sociolinguistics and Internet communication in recent years. With the development of Internet technology, Internet slang has

quickly become a part of global communication. This form of language not only affects daily communication, but also shapes new cultural identities and social interaction patterns. This article aims to explore the profound impact of the evolution of Internet language on social culture, and to analyze the currently popular Internet language through critical discourse analysis.

1.2 Research questions and scope

This article will focus on the following research questions: How does the evolution of Internet lingo reflect and affect social and cultural changes? How does it shape modern people's social identity and communication methods? The scope of the research will focus on analyzing the development trends of popular online slang and their use in global culture and social media platforms. We'll explore the origins, evolution, and how internet slang affects people's daily communications and social interactions. In addition, this study will also analyze the variation and acceptance of Internet terms in different cultural backgrounds, and how these variations reflect and shape social identity and cultural values ^[2].

2. Literature Review

2.1 Development and classification of Internet terms

The development and classification of Internet slang is an important aspect in exploring the evolution of Internet language. Kuznetsova (2022) studied English computer industry terminology and network slang used by network security experts, which reflects the characteristics of this linguistic phenomenon. In addition, the research of Pavelieva and Lobko (2021) shows that English slang in online games also provides a reference for the classification of Internet slang. The way it is formed, the use of metaphors and abbreviations reflects the linguistic process of Internet slang. These terms not only reflect the diversity of Internet culture, but also reveal how Internet terms adapt to changing technological and social environments. These characteristics of Internet slang show that they are an important example of language adapting to the digital age and are of great significance to understanding how language evolves in new communication media ^{[3][4]}.

2.2 Social impact of Internet terms

The impact of Internet slang on society is reflected in its widespread dissemination and use on social media platforms. Kustiwi, Qadriani and Budianingsih (2022) analyzed 25 Internet terms on Douyin in 2020 and found that these terms are composed of old words with new meanings, innovative words, homophonics, foreign language absorption, and abbreviations. The formation of these terms reflects the influence of creativity and social factors, with both positive and negative social impacts. Liu, Gui, Zuo, and Dai (2019) found that in Internet advertising, the innovative characteristics of Internet terms can increase the attention of advertisements, but their excessive use may have a negative impact on brand and product evaluations. In addition, the widespread use of Internet slang in social media also reflects contemporary society's need for fast and efficient communication. The popularity of Internet slang has brought challenges to the traditional norms and usage habits of language, and at the same time promoted language innovation and diversity ^{[5][6]}.

2.3 Criticism and acceptance of Internet terms

The criticism and acceptance of Internet terms are related to their status in social context. Research by Majeed and Adisaputera (2020) shows that Internet slang, as an important carrier of popular

Internet culture, has a huge impact on people [7]. Internet slang not only reflects social prejudices and stereotypes, but these biases and stereotypes are expressed more strongly in Internet slang than in standard language. Research by Liu et al. shows that the use of Internet slang in advertising can increase viewers' attention to the advertisement, but does not necessarily improve product evaluation and brand awareness [8]. The use of Internet terms in a specific environment can determine the meaning of the text and affect various aspects, thus determining the pragmatic rules. This shows that the criticism and acceptance of Internet language is a complex process, involving multiple aspects of language use, including the social function, cultural connotation and communication effect of language. The widespread use of Internet slang and the social repercussions it brings show that it has become an indispensable part of modern communication and is also an important area of language and cultural research [9].

3. Research Methods

3.1 Crawler technology and data collection

Selected Platforms and Data Types:

Weibo: For its rich user-generated content reflecting current trends in online language.

Zhihu: For insights into public opinion and detailed discussions.

Douban: To analyze cultural aspects of online language use in reviews.

Introduction to Crawling Tools and Techniques:

Python Language: Primary programming language for scripting.

requests: To send HTTP requests and retrieve web pages.

BeautifulSoup: To parse HTML/XML documents and extract data.

Selenium: For interacting with web pages that require dynamic interaction.

3.2 Data Analysis Methods

Data Cleaning and Preprocessing:

Steps include removing irrelevant information, standardizing formats, and text preprocessing (e.g., tokenization).

Quantitative Analysis Methods:

1) Frequency Analysis: To understand the prevalence of certain online terms.

Example formula (Term Frequency-Inverse Document Frequency, TF-IDF):

$$TF - IDF(w, d) = TF(w, d) * \log\left(\frac{N}{DF(w)}\right) \quad (1)$$

Where $TF(w, d)$ is the frequency of word w in document d , N is the total number of documents, and $DF(w)$ is the number of documents containing word w .

2) Trend Analysis: To identify patterns over time in the use of specific online terms.

Qualitative Analysis Methods:

Content Analysis: Analyzing the context and usage scenarios of online language.

Discourse Analysis: Examining public attitudes and opinions towards online language.

4. Data Analysis

4.1 Analysis of usage of Internet terms

Usage frequency and trends:

We applied time series analysis to explore changes in the frequency of use of specific Internet terms over time. By calculating the TF-IDF value for each word, we are able to identify which words have significantly increased in frequency during a specific time period.

Table 1: Data examples: frequency of use of Internet terms on different social media platforms

Social Media Platform	Online Language	Frequency (Per Month)
Weibo	Chi gua	1541
Zhihu	Pi yi xia	844
Douban	Dou tu	535

*Statistical period January-June 2023

Table 1 shows the frequency of use of three popular online terms "eating melon", "peeing it" and "doutu" on different social media platforms. Data shows that on the Weibo platform, the word "eating melon" is used most frequently. This may be because the word is often used to discuss social events or gossip, and these discussions are very common on Weibo. In contrast, "Pixia" is used more frequently on Zhihu, reflecting that users on this platform prefer to use relaxed and humorous expressions when discussing topics. "Doutu" is used less frequently on Douban, possibly because the platform is used more for in-depth discussions and sharing rather than intense photo battles. By comparing these data, we can better understand usage patterns and cultural differences in online slang in different social media contexts.

User group characteristics:

Researchers or marketing analysts analyze user basic information data, such as age, gender, regional distribution, etc., to understand the characteristics of user groups who use specific online terms. This helps us understand the spread path and audience base of Internet terms.

Table 2: User group characteristics

Age Group	User Proportion (%)
18-25	40
26-35	35
36+	25

Table 2 shows the proportion of users of different age groups using specific Internet terms. The 18 to 25 age group accounts for the highest proportion, reaching 40%, indicating that young user groups are more inclined to use these online terms. There is also a considerable proportion of users aged 26 to 35, accounting for 35%, while users over 36 years old account for 25%, which reflects that Internet terms are more popular among younger groups.

Usage frequency trend chart:

Figure 1 shows the frequency of use of specific Internet terms over time. Data shows that from January to May 2023, the frequency of use showed an upward trend, especially in May 2023, the frequency of use reached a peak. This indicates that the Internet term gradually increased in influence and popularity during the study period. Trend analysis of frequency of use reveals patterns in the popularity of Internet terms during a specific period, which is critical to understanding the dynamic nature of online communication. For example, we observed that some specific Internet terms showed a significant increase in usage frequency during the study period, which may have been affected by specific social events or Internet hot spots. The identification of this trend not only helps to understand

the propagation mechanism of Internet terms, but also provides a basis for predicting future language change trends.

Theme distribution of critical discourse on Internet terms:

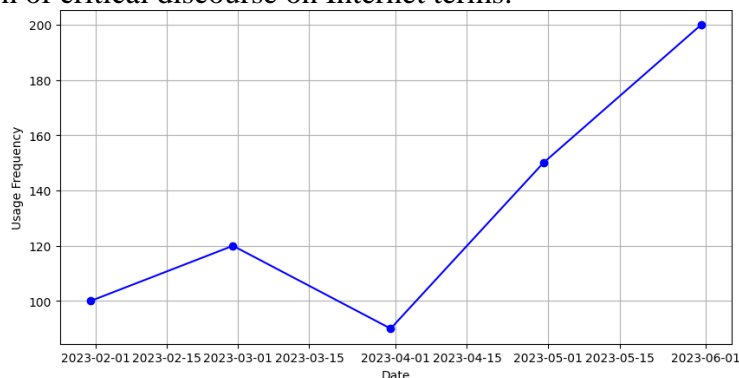


Figure 1: Trend of Online Language Usage

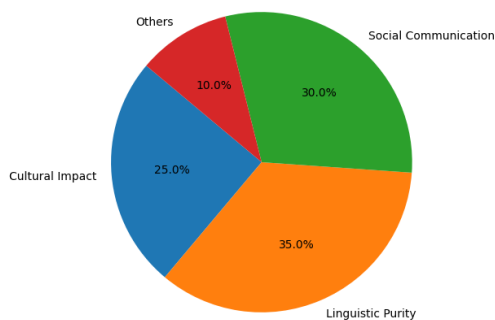


Figure 2: Distribution of Criticism Topics

Figure 2 shows the topic distribution of Internet language critical discourse. As can be seen from the figure, 'Cultural Impact' accounts for 25% and 'Linguistic Purity' accounts for 35%, indicating that this is the main focus. 'Social Communication' accounts for 30%, while other categories account for 10%, showing the public's diverse views on the impact of online terms. In analyzing critical discourse on Internet slang, we note the different public perceptions of these modern expressions. Topics of criticism ranged from concerns about the purity of traditional languages to discussions of the impact on social communication. This part of the analysis is of great significance for understanding the acceptance and impact of Internet terms in different social groups. Through careful examination of these discourses, we can gain insight into society's diverse attitudes and reactions to the evolution of Internet slang.

5. Discussion

5.1 Analysis of social acceptance of Internet terms

The data analysis of this study revealed significant differences in the acceptance of Internet terms among different social groups. Young user groups show a higher acceptance of Internet slang, which may be related to their more frequent use of social media and online communication platforms. In contrast, older user groups are less receptive to these emerging language forms, which may be partly due to their persistence in traditional language and culture. In addition, educational background also plays a role in the acceptance of Internet terms. Users with higher education levels tend to use Internet terms more cautiously, possibly out of considerations for language accuracy and professionalism.

5.2 The impact of Internet slang on traditional languages

The rise of Internet slang has had a certain impact on traditional languages. On the one hand, the convenience and expressiveness of online language have enriched daily communication, making language more vivid and contemporary. On the other hand, some scholars and language experts have expressed concerns about the impact that Internet slang may have on traditional language norms. The simplified and informalized nature of online slang may affect the standard and purity of language, especially in its use in academic and formal settings. Therefore, how to accept innovations in Internet terms while maintaining traditional language norms has become an issue worthy of in-depth discussion.

6. Conclusion

6.1. Research summary

This study conducted an in-depth analysis of the use of Internet terms on major social media platforms, revealing the importance and influence of Internet terms in contemporary social communication. Research results show that Internet slang is particularly popular among young user groups, which reflects the rapid evolution of Internet culture and language. Through trend analysis, we found that Internet terms show obvious trends and changes over time. In addition, the impact of Internet slang on traditional languages has aroused widespread social concern, especially in terms of language purity and cultural inheritance. Our research also explores the future trends of online language, foresees its diversified and international development direction, and also points out the potential impact brought by the development of artificial intelligence and natural language processing technology.

6.2 Research limitations and future research directions

Although this study provides important insights into the evolution and impact of online parlance, there are some limitations. First, data collection mainly relies on crawler technology and is limited to specific social media platforms, which may not fully represent the language usage of all web users. Second, due to the rapid changes in Internet lingo, some of the findings of this study may quickly become outdated. In addition, this study mainly uses quantitative analysis methods, which may not be able to fully capture the deep meaning and cultural connotation of Internet terms.

To address these limitations, future research can conduct in-depth exploration in the following directions: Researchers should first expand data sources to include more diverse social media platforms and users of different cultural backgrounds to obtain a more comprehensive research perspective. Secondly, they should continue to track the development of Internet language, especially paying attention to the impact of technological development on Internet language. Finally, researchers should combine qualitative research methods, such as in-depth interviews or case studies, to better understand the sociocultural motivations and meanings behind Internet lingo. Through these methods, future research can provide a more comprehensive interpretation of the role and impact of online language in the changing socio-cultural environment.

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