

# Iconicity Analysis of Bullet Screen Language from the Perspective of Cognitive Linguistics: A Case Study of Bilibili

Xinyi Duan

School of Nanning Normal University, Guangxi 530000, China

## Abstract

Bullet-screen language itself is a product that caters to people's psychological needs when science and technology develop to a certain extent. Its generation and development are inseparable from the progress of science and technology, and its form and content reflect the great influence of technology or science on it. However, bullet screen language is virtual synchronic, which reflects psychological needs, reflecting how people recognize the surrounding environment, how to understand things, and how to move from the unknown to the known. In fact, the expression in bullet screen is also the embodiment of cognitive activities. This paper will take the bullet screen in Bilibili video website as an example, analyze the iconicity of bullet screen language from the perspective of cognitive linguistics, and explain that the embodiment of iconicity in bullet screen language is conducive to the supplement of cognitive linguistics in network language and promote the further development of this theory.

## Keywords

Cognitive Linguistics; Iconicity; Bullet Screen Language.

## 1. Introduction

With the development of science and technology, the network use scope expanding gradually, Internet population growing, the cyber language not only has made full use in the network, more in many forms of network language, bullet screen as in recent years, along with the technical development of the barrage of language form in a certain extent, both similar to other forms of network language, and because of its technical constraints, There is uniqueness. The generation, development and spread of bullet screen language reflect audiences' views on bullet screen technology and their understanding of various subcultural forms to a certain extent. A considerable number of new words and phrases have entered the social life and have been widely spread. Most of the studies on bullet screen focus on the analysis of the audience and the communication effect of bullet screen, without paying attention to the text of bullet screen language itself. On the whole, there are relatively few domestic literatures on the study of bullet screens. Since Acfun website began to provide the function of bullet screens in 2008, and site B established and applied the language of bullet screens on a large scale in the following year, the research on bullet screens has mostly focused on the analysis of communication and marketing. There are few studies on the language of bullet screen, and simple categorical interpretation can only be used to understand the content of a single word or discourse, but cannot fundamentally explain the source of its generation, and cannot link it with human cognitive activities and experience. This paper intends to analyze the characteristics of bullet screen from the perspective of its creation, development and dissemination, and explore the common thinking process of people's understanding of external things. Barrage of generation and transmission is the people of the world as a cognitive subject awareness and participation in the reconstruction process, accord with cognitive law, for its language form the analysis of the language of people from different angles cognitive abilities, but also for people between the

text and concept, namely the deconstruction between language and psychological activities of cognitive activities.

## 2. The Characteristics of Bullet Screen

"Bullet screen" is originally a military term for intense shelling. Later extended into network language, refers to the dense appearance of video comments on the video screen. With further evolution, the term "bullet screen" now refers only to comments that dart across the screen like bullets, in addition to being a military term. Bullet screen is a linguistic phenomenon with special semantics formed in a specific language environment. Its external characteristics are very obvious. The language of bullet screen is fragmented, inheritable and incomplete. [1] This phenomenon is also very common in daily conversations and the use of other network languages, but bullet screen language is more typical because of its unique context. First of all, the language of barrage is fragmented. The language of bullet screen is limited, no more than 220 characters. Long words are not allowed. At the same time, the sender of the bullet screen should also consider whether the language he sends can be effectively read by the audience. If you want your content to be noticed, consider that long text is not conducive to being read effectively. In addition, if the bullet you want to post appears in a specific location, such as the second of the video, you need to pause to type and send it. In fact, this mode of operation does not conform to the simplest principle of operation, but the publisher is still willing to make such a choice, showing that they are very concerned about the content they want to publish and want to be read. The fragmentation of bullet screen language is determined not only by the rules specified by video websites, but also by the public's reading habits.

Secondly, the language of bullet screen is inherited. Barrage the spread of the language as a communication tool, its use has continuity, although the specific expression of the will over time some change, but has the stability of its external expression, this is the social factors on the restriction, if you are unable to form a common small circle corresponding fixed phrases or cultural habits, the small circle of the soundness of doubt, The positioning of station B is always the aggregation of a number of small circles. A circle is a group of people who are interested in a particular subject. The stable inheritance of some proprietary words and specific sayings in the language of bullet screen helps to gather a small circle, so that more like-minded people can quickly screen out those who are unfamiliar with the corresponding culture and exclude them. So the members of the circle have been consciously or unconsciously maintaining the purity of the circle. Although there may be some variation in the use of bullet screen language due to the influence of users or context, the use of language by individuals in the circle will better observe the firm correspondence between the literal meaning and the actual connotation, namely the essence of thinking. Deviant behaviour may yet be stopped. Therefore, the degree of development and change of bullet screen language is really not high.

The average age of users of Bilibili is relatively low. Chen Rui, the chairman of Bilibili, has publicly declared that the mainstream of Bilibili is under 17 years old, who are sensitive to the symbol system and the once popular emojis. How to make one's content stand out from many bullet screens? Station B only provides options for color change, font size and appearance position, which undoubtedly cannot meet the needs of the bullet screen sender to attract the attention of the audience. Symbolic language, as a powerful supplement, participates in the release of bullet screens. As a unique form of network language, bullet screen language also has some special features compared with the general network language.

First of all, compared with the exaggeration of general network language, bullet screen language shows the development trend of extreme. Bullet screen language is generally short, which needs to leave a deep impact on people in a very few words and enhance stimulation. For example, the "fight" in general network language is gradually upgraded to the "quarrel" in bullet

screen language. In general network language, the "big love" that expresses one's love for a certain idol is upgraded to the "licking screen" in the bullet screen. How to express one's opinion and idea directly? The creator of the bullet screen language transforms the inspiration of sudden inspiration into highly stimulating words, and it is widely spread after the second forwarding and creation. It's hard to get noticed, let alone spread, if the content is plain and the semantics are not distinctive.

Second, compared with the symbolization of general network language, the scene of bullet screen language is more obvious. All the virtual scenes in the appendix are actually to express a kind of emotion or point out some phenomena by simulating or describing a certain scene. These words have a strong sense of picture and are highly targeted. For example, "scared melon seeds off the ground", "kneel down to the horse father" and so on. Because the bullet screen appears in a specific position in the video, all the content commented by the bullet screen is aimed at the situation at that time, some are the picture at that time, and the large scope also refers to the content of the video, so it is highly targeted. The scene is the expression of people from the subjective feeling.

Thirdly, in terms of ideographic features, the language of bullet screen shows obvious features of deconstruction. As a part of the video, some of the bullet screens supplement the content of the video, while others provide a new interpretation of the content of the video. It can be seen from the summary of various bullet screen shots by many netizens through summarizing their posts or Posting questions: Those films and television works destroyed by bullet screens, videos that you would miss without bullet screens and so on are basically the re-interpretation or guidance of the video or the content itself. "I came to see the bullet screen" itself is a recognition of the re-created content of the bullet screen.

Fourth, follow the economic principle of language, network language has changed the traditional grammatical and semantic features, as far as possible in the quickest and the most simple way to express the rich connotation. [2]The height of the thumbnail and ellipsis phenomenon, also created to count, emerge in network buzzwords endlessly. Teenagers self-expression desire and the contradiction between the performance of the limited time. As a result, bullet screen discourse in the flood of network language has also formed a brief feature, striving to be concise in form, rich in content and easy to understand, conveying as much meaning as possible with the least words.

Fifth, compared with the general network language, the language of bullet screen is extremely inflammatory and infectious. This characteristic is decided by its peculiar form of transmission, barrage from the video, for the fact itself have a picture with the spread of the sound was enough to make people know the situation, and barrage in the text with emotional tendency is more easily affect the people at that time, the current mood, from patriotism to the collective, from plot to drive to the position, These bullet screen language can be said to drive people's psychological emotions at the right time. According to the spiral theory of silence, those who approve of it will re-forward and create bullet screens, while those who do not approve of it tend to be silent and do not express different views. In some cases, different views are hidden in many similar views and difficult to be found, which makes the language of bullet screens more inflammatory. However, due to its fleeting and concise characteristics, bullet screen is not conducive to expressing complex emotions or guiding the diversification trend. Compared with the general network language, the characteristics of bullet screen are closely related to its technical form and psychological needs. These characteristics are of great significance to the study of network culture and the guidance of network public opinion.

### 3. Research on Bullet Screen from the Perspective of Cognitive Linguistics

Iconicity has existed since the beginning of language because it is impossible to describe the complex concept of infinity with a few simple combinations of symbols. Only consider concept different from traditional linguistics is the natural link between symbols and things, pay more attention to cognitive linguistics emphasizes the participation of human cognitive function, even if it acknowledges the reality of the objective world and the origin of language form, but more think if there is no human cognitive activities involved, simply can not use language to express the objective existence. In the pragmatic analysis of the iconicity principle, the number iconicity, sequence iconicity and distance iconicity are dominant. All of them belong to relational iconicity, and a special kind of iconicity in bullet screen is pictorial iconicity. These iconicity principles are very obvious in the language of barrage. In terms of bullet screen, users use the barrage mechanism itself is to participate in a social activity, because the network makes the actual distance become no longer important in the modern society, the family sitting beside the TV to watch TV with the past and comment than barrage actually provides a virtual synchronic space of communication, In other words, although people do not watch the video at the same time, the time of the content of the bullet screen ensures that all audiences make their comments when watching the video at this moment. The psychological need is to find people to watch together, preferably with the same views, to form their own circle. In fact, users have already screened their viewing activities and expected communication groups when selecting film sources, and choose what kind of programs they pay attention to. This kind of active behavior with clear purpose itself covers a strong sense of autonomy, plus the same idea, or different ideas, but virtual simultaneous participants also strengthen the user's feeling when watching the movie from both positive and negative aspects. It can be said that the content of bullet screen sending is always affected by the user's own cognitive range and level. Therefore, the principle of iconicity is very obvious in the language of barrage. Influenced by the principle of iconicity, bullet screen presents its own unique characteristics.

### 4. Case Analysis of Bullet Screen at Bilibili

#### 4.1. Distance Iconicity

Distance similarity means that words with close relationship are closer to each other, while words with distant relationship are farther apart.[3] As a linear expression method, Chinese central words tend to be backward, which is obviously reflected in the ordering of its modifiers. The Chinese version of bullet screen is relatively short, but the principle of distance iconicity can still be seen from some short sentences, such as "满血复活" commonly used in games. There is no doubt that the central word is resurrection. There are two concepts to describe resurrection, full state and in-situ, which information is more important? In most games, the character's energy is basically full at resurrection time. To stay in place, you may need to pay resurrection coins or use in-game items, otherwise you will return to camp or some other designated location. In other words, in the subconscious, resurrection in place is more important, or more desirable, than full state resurrection, so it is closer to the central concept of resurrection. Distance iconicity also leads to a number of hybrid words, where two words are often used together and spoken quickly, and certain syllables are omitted to form a single word. For example, in the bullet screen, one would describe his state as Emo, which is the combination of the two words "emotional damage", which can be understood as sad to death or broken guard, achieving the effect of irony and humor. In the video "When" Asia "is A Difficulty Mode" by Irish-Chinese Steven He, the boy chooses "Asian Difficulty", the most difficult mode in the game. In fact, all kinds of irrational death methods make him instantly

break the defense. In addition, He and his jokes with Chinese accent are full of exaggerated expressions.

#### 4.2. Image Iconicity

There is a direct one-to-one correspondence between signifier and signified, mainly including onomatopoeia, phonetic symbol and formal symbol. Haiman believes that the iconograms in human natural language are mainly images and patterns, especially the latter. The pattern here is what we understand as a simulacra.[4] Although the application of image image in language expression is limited, it has been applied to the maximum extent in bullet screen language. There are onomatopoeic images in bullet screen language. The most famous one is "Duang" invented by STATION B, which came into the public eye in 2015. Its origin is that the shampoo advertisement shot by actor Jackie Chan many years ago was parodied by The main Color Toy of Station B, which synchronised Jackie Chan's "My Skateboard Shoes" with Pang Melang's "My Skateboard Shoes" in a god-like way. The video "[Jackie Chan] My Shampoo" was released on February 20, 2015. Later, the main lachrymal warrior of STATION B up shared the video on Weibo and it was forwarded wildly, causing millions of hits on station B. After "Duang" became popular, a large number of netizens rushed to Chan's latest weibo post and flooded the screen with "Duang Duang". On Feb 27, 2015, Chan's self-deprecating use of the word "duang" caused a stir among netizens. The phrase was originally used for a shampoo commercial in which Jackie Chan described his hair as making elastic sounds, and was later adapted to use special effects to jokingly describe those who use it and use it for fun. This word not only brought station B into the public eye, but was even reported by BBC, which described a new Internet word "Duang" consisting of "cheng" and "long", which caused a storm on the Internet, but no one knew its correct meaning. Duang is entirely the embodiment of the iconicity principle of the mimicry form.[5].

The word "阿婆主", which is transliterated from UP Lord, is the result of English sinicization input. The person uploaded in the video of Bilibili is called UP Lord, but some people don't want to switch the Chinese input method to English input method during typing, so the term "阿婆主" comes into being. Empty ear subtitle is the ultimate in mimicry. Empty ear originally means "auditory hallucination" in Japanese, but later it is gradually translated into a sentence with a similar pronunciation to create another sentence with a similar pronunciation to the original one. It is often used in lyrics and ghost animal, which is a way of spoof entertainment in the field of text. Empty ear subtitles (a form of entertainment) are very common and have formed a specific form of communication. Some audiences specially collect empty ear subtitles and create videos for further transmission.

Bullet screen language also embodies the iconicity of image symbols. Such as proliferation of performing word map reading age but could not send the figure of the barrage is very important, for example: w ( ㄨ ) ㄨ on behalf of exclaimed, ( ㄟ , ㄟ ) on behalf of disdain,

Σ( ° △ °|||) on behalf of the sweat, these emoticons completely imitate the person's facial expression, a see will know their meaning, it is not required but figure to achieve the effect of the figure. Another barrage and those in the language, such as with a barrage of the symbol of a certain pattern, form a car drove past the screen or a hat on the head of the role of a lot of language form, though nothing special meaning, just to let the audience see later, attention is also very interesting.

#### 4.3. Quantitative Iconicity

Quantitative iconicity can be defined as: the number of linguistic units is proportional to the quantity and complexity of the concept represented, and inversely proportional to the measurable iconicity. The larger and more complex the concept, the greater the number of units in the language; The less measurable information is, the more linguistic units are used. The



more complex the concept, the longer it takes to process in thought, and the greater the number of units used in language.[6]With the increase of symbols, the concept content is also gradually increased. The plural form in English is mainly formed by adding the plural mark S or other forms on the basis of the singular form (there are few homomorphic words in English for singular and plural forms), which is always longer than the singular form and has more amount to express. In Chinese, small is the “舟”, big is the “船”, because the “船” has more strokes than the “舟”.

Number of language units and predictability of information Zipf proposed his famous economic Principle of least effort in 1935: the length of speech in a language is inversely proportional to the degree of familiarity and predictability of information. Concepts are unfamiliar, and information that is difficult to predict is often expressed and rarely omitted. When expressing familiar information, abbreviations or even ellipses are often used. There are economic incentives at work. In recent years, it has been further developed and a large number of pinyin abbreviations have emerged in an endless stream. Pinyin abbreviation YYDS, that is “永远的神”. 又双叒叕 is a network language. The word emphasizes the reappearance of something that used to occur before or the reoccurrence of an event that often occurs before or indicates that something changes fairly frequently. Originally from the evening of December 17, 2012, The Japanese Asahi News Chinese website microblog released a microblog, “我们又双叒叕要换首相了”. The key to this sentence is the “又”, four Chinese characters divided into 10 “又”, reflecting Japan's frequent changes of prime ministers. The repetition of “and” reflects on the one hand the frequency of the change of prime minister, and on the other hand the unpredictability of the shock at the occurrence of the change of prime minister.

#### 4.4. Sequential Iconicity

Sequential iconicity can be defined as: the order of thinking is similar to the order of linguistic units. [6]Time sequence is one of the most important concepts in human cognitive structure. In Chinese, what happens first is spoken in advance, and what happens later is later, which is gradually developed from nothing. Word order and time sequence have a high similarity correspondence, and the two tend to naturally coincide. This shows that the Chinese word order structure and the time sequence directly reflect the reality, the Chinese people's cognition is just like the description of real life. Chinese is a copy language or a painting language.

“见封滚”, for example, means to see the cover of the video and then drawn roll (or points) came in, the barrage contains two verbs, “见”(see) and “滚”(roll), these two movements are strict time sequence, the word order of Chinese also accurately reflect the real life order of action: this a few action determines the order of will occur in Chinese word order. We can divide this sentence into two sentences. I saw the cover, and I rolled in. The order of the verbs in the sentence directly reflects the relative order of the two actions in real life: see and roll. If translated into English, the chronological order expressed in Chinese would be completely lost. I came in because I was attracted by the cover. It can be seen that English and Chinese word order is not corresponding.

### 5. Conclusion

Iconicity has existed since the beginning of language, because it is impossible to describe complex concepts of infinity with simple combinations of symbols. Only consider concept different from traditional linguistics is the natural link between symbols and things, pay more attention to cognitive linguistics emphasizes the participation of human cognitive function, even if it acknowledges the reality of the objective world and the origin of language form, but more think if there is no human cognitive activities involved, simply can not use language to express the objective existence.

In terms of bullet screen, users use the barrage mechanism itself is to participate in a social activity, because the network makes the actual distance become no longer important in the modern society, the family sitting beside the TV to watch TV with the past and comment than barrage actually provides a virtual synchronic space of communication, In other words, although people did not watch the video at the same time, the time of the bullet screen content ensured that all audiences made bullet screen comments when watching the video at this moment. The psychological need is to find people to watch together, preferably with the same view of the crowd to form their own circle. In fact, users have already screened their movie-watching activities and expected communication groups when selecting video sources, and choose programs based on the information they pay attention to. This kind of active behavior with a clear purpose itself includes a strong sense of autonomy. In addition, the participants with the same idea or different idea but virtual synchro also strengthen users' feelings when watching movies from both positive and negative aspects. It can be said that the content of bullet screen is always affected by the user's own cognitive range and cognitive level. Therefore, the principle of iconicity is very obvious in bullet screen language. Influenced by the principle of iconicity, bullet screen language presents its own unique characteristics.

## Acknowledgments

Natural Science Foundation.

## References

- [1] Y. C. Fu: The Studies of Bullet Curtain Language in Bilibili (MS., Xiangtan University, China 2015), p.1.
- [2] Y. Zhou: The Discourse Analysis of Barrage Participating in the Youth (MS., Xiangtan University, China 2015), p.21.
- [3] X. Wen: On the distance simulacry of language symbols, Foreign Language Research ,Vol. 12 (2000) No.3, p71.
- [4] L. S. Wang: A Cognitive Approach to Bullet Curtain Language in Bilibili (MS., Southwest University of Science and Technology , China 2017), p.21.
- [5] Y. Wang: On iconicity of linguistic signs, Foreign Languages and Their Teaching ,Vol.3 (1999) No.5, p4.