

Visual Grammar in Practice: Analyzing Discourses with Words and Images of Covid-19 Pandemic in China

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Abstract

After the outbreak of COVID-19, people in China created many discourses with words and images to describe the situation of China in COVID-19. The combination of images and words promoted the understanding of the discourses. Multimodal discourse analysis has developed rapidly in the past two decades with the application of it to the analysis of multimodal discourses such as advertisements, posters, and movies. However, there are few studies on the multimodal discourses of COVID-19. Based on the visual grammar proposed by Kress and Leeuwen, this paper classifies and analyzes the discourses with words and images collected during the COVID-19 pandemic in China. The purpose of this study is to see how to construct and interpret the meaning of discourses with words and images of COVID-19 in China and how the images and words in discourses are related. The study has shown that the meaning of discourses with words and images of COVID-19 in China are constructed through three aspects: representative meaning, interactive meaning and compositional meaning. The images and words in multimodal discourses work together to achieve the overall interpretation of multimodal discourses.

Keywords

Discourses with words and images; Multimodal discourse analysis; Visual grammar; Covid-19 pandemic.

1. Introduction

At the beginning of 2020, the outbreak of COVID-19 pandemic severely affected people's lives. The pandemic reduced people's chances of face-to-face communication, so the public switched to online platforms for remote communication. With the frequent online communication, the public also began to choose other ways to communicate in addition to language. With the help of the network platform, people have created many discourses of COVID-19 that includes words and images. People not only used these discourses to express their true feelings, but also provided a new way to express their status during the pandemic. Meanwhile, these discourses promoted the spread and popularization of measures to prevent the pandemic, such as wearing a mask, washing your hands frequently, etc. These multimodal discourses with words and images had unique characteristics, which promoted people's interpretation of these multimodal discourses.

Based on Halliday's three major meta-functions of language, Kress and Leeuwen (1996) proposed a social semiotic analysis method of multimodal discourse—visual grammar, with reproductive meaning, interactive meaning, and compositional meaning as the main analysis framework, for analyzing multimodality. This analysis method is widely used in multimodal discourses such as advertisements (Li, 2013), picture books (Feng, 2015) and traffic signs (Zhang & Wang, 2011). However, there is currently no research on the discourses of COVID-19. Therefore, this paper selected more than 30 multimodal discourses during the pandemic from

Weibo, Zhihu, QQ and WeChat as the research samples of this study. And they are divided into different categories for research. In this paper, we will analyze with visual grammar analysis framework, studying the construction and interpretation of these discourses and the relationships between words and images in the discourses.

2. Multimodal Discourse Analysis Based on Visual Grammar

In the past two decades, multimodal research has flourished. With the development of society and the advancement of science and technology, people gradually found that relying on language alone can no longer meet people's communication needs. Therefore, discourses with a single modality were gradually replaced by multimodal discourses composed of language, words and sound, etc. The social functional perspective of multimodal research was a major perspective of multimodal research. An important focus of this perspective was the analysis of multimodal discourses. Halliday's systematic functional grammar played an important role in the development of this perspective.

In systemic functional linguistics, Halliday (1995) argued that language had three major meta-functions, namely conceptual function, interpersonal function and textual function. On the basis of these three meta-functions, Kress and Leeuwen (1996) proposed visual grammar, which believed that the three meta-functions were not only limited to the language level, but should also be extended to the visual level for the analysis of visual images, which provided a new idea. Contrasting the conceptual function, interpersonal function and textual function in functional grammar, Kress and Leeuwen constructed an analysis framework based on reproductive meaning, interactive meaning and compositional meaning. Regarding reproductive meaning, Kress and Leeuwen distinguished between narrative and conceptual representations in images. Interactive meaning referred to the interactive relationship between the words and the viewer. The meaning of composition contained three kinds of resources, namely information value, salience, and framing. The information value depended on where the information was placed in the composition. Framing referred to the spatial separation of lines to determine the spatially separated or connected relationship between the elements in the words. Salience meant to attract the view's attention in different ways, which decided the importance of different elements in images.

3. Data and Methodology

The research object of this article is the discourses with words and images of COVID-19 created by Chinese people during the prevention and control of the pandemic in early 2020. In order to make the selection of objects more comprehensive and objective, this article selects Weibo, Zhihu, QQ and WeChat, the four mainstream Chinese social networking platforms, and searches for 50 discourses during February and March 2020. After deleting the offensive and nonrepresentative discourses, in this paper, 35 representative pandemic discourses are finally obtained, which constitute the research object of this study.

Through comparison and analysis of content, this article divides 35 discourses into three categories, namely, pandemic prevention measures category, status at home category and encouragement category. The pandemic prevention measures category consists of discourses that instruct the public to take measures such as wearing masks, washing hands and not gathering, etc.; the status at home category includes the discourses which express the mood of the public during the lockdown period. The third category refers to the discourses which are used to express people's encouragement to the people suffering from the pandemic and the medical personnel who assisted Hubei.

This paper adopts the textual function analysis method developed by Kress and Leeuwen (1996), visual grammar, to study the multimodal discourses of the pandemic selected in this study, and

analyzes the representative meaning, interactive meaning and compositional meaning of the discourse. And this paper will discuss the significance of information value and salience.

4. Discussion

4.1. Analysis of the Representational Meaning

The representational meaning includes narrative and conceptual reproductions (Kress & Leeuwen, 1996). These two types of representational meanings reflect the characteristics of different images. The narrative reproductions mainly rely on the role of vectors, and the actions performed are divided into action processes and reaction processes through the connection of the vectors to the participants. The action process refers to the direction of the participant's action vector, while the reaction process refers only to the direction of the gaze. The conceptual reproductions are relatively stable without the participation of vectors. After analyzing the samples, the paper finds that most of the collected discourses have vector participation, which belongs to the category of narrative reproduction, and only a small part of the belong to the category of conceptual reproduction. This article will analyze the representational meaning from the perspective of narrative reproduction.

The pandemic discourses attract people's attention through vivid and interesting images and words. The accompanying images are mostly those we have been familiar with before, such as old posters, animated images of Tom and Jerry, etc. These discourses help people to re-interpret the meaning of the words and use the words to express this new meaning. So how do these images express meaning? After research, it was found that most of these images calling on people to prevent viruses belong to the category of narrative reproduction, and also belong to the action process in the narrative reproduction. The vector contained in the image contributes to the composition and expression of the meaning through the eyes of the figure and the movement of the fingers.

In this group of pandemic discourses that call for people to protect against the pandemic during the Chinese New Year, the words is composed of different elements to form a vector. In Figure 1, the direction of the finger pointing and the back of the head and the scarf and hat. The extension direction forms a vector, showing the reader a cartoon words that wants food, which is intended to show the numerous dinner activities during the New Year, and the role of the words is to cancel this intention of people of eating together. Therefore, this figure has played a very good role in alerting people. Figure 2 makes the direction of the wings and the direction of the tail form a vector, showing an upward cartoon words, catering to people's best wishes of the new year. People will be well protected in pursuit of this good meaning. In Figure 3, the direction in which the ingots are scattered and the direction in which Jerry's brush moves form a vector, implying that people want to make a lot of money in the New Year, they must clean their hands and play a corresponding appeal.



Figure 1.



Figure 2.



Figure 3.

Let's look at Figures 4 and 5 of multimodal discourses. The previous posters in our country are accompanied by words to express new meanings. The elements in this series of images all constitute vectors, including behavioral processes and reaction processes. Figure 4 The doctor in the hand holding the medicine and the direction of her eyes constitute a vector, which can attract the reader's attention, make the reader notice the medicine in the doctor's hand, and also make the reader notice the mask on the vector, which show the time, that is, period of the pandemic. It shows the important role of wearing a mask. Figure 5 is the image of two girls. We see that the direction of the girl's hand and the direction of the gaze form a vector. The mask in the girl's hand also forms a part of the vector. She calls on the elders to wear masks to prevent the virus from listening to the corresponding appeal of the young people.

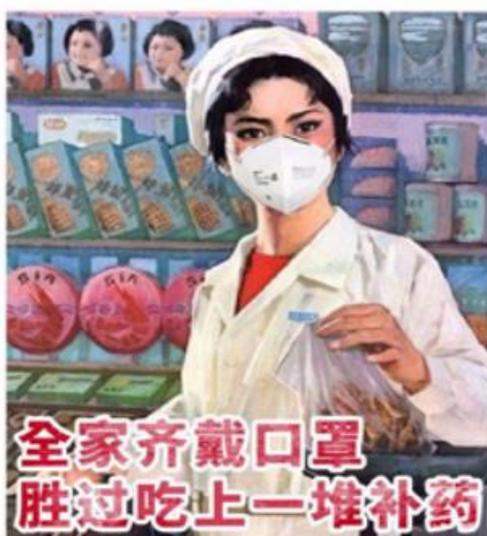


Figure 4.



Figure 5.

4.2. Interactive Meaning Analysis

The interactive meaning includes four aspects, namely: contact, social distance, viewpoint, and modality. These four constitute the interconnection between the image and the viewer.

4.2.1. Contact

In some images, the characters in the image have eye contact with the viewer. In the figure, the characters directly contact with the viewer. Kress and Leeuwen (1996) refer to this contact as a "request" contact, which is collected through analysis. The images related to the pandemic will find that most of the images are not "solicitation" images, and most of them are providing information, that is, the "providing" images proposed by Kress and Leeuwen (1996). Combining the words in the images, we will find that some of these images are mainly used as a reminder during the pandemic. Such images do not need to ask the viewer for information, but cooperate with the words to express a meaning to the reader, which in turn causes Reader's attention. Another part is that netizens use to express their boredom in isolation at home. It is to express one's current state and show one's own state to readers. Therefore, instead of requesting class images, they provide class images.

4.2.2. Social Distance

We will maintain different social distances to people with different levels of closeness, and different social distances have different manifestations in the images. Social distance can be divided into social close distance, social long distance and public distance. If the scale is close to the society, the viewer can see the whole person in the image. If the viewer can see the whole

person and there is space around it, it means that the viewer is far away from the person in the image. In the public distance, the viewer can see the torso of four or five people.

Analysis of the collected pandemic images and words found that the images in these images and words mostly belong to the social distance, and the viewer can not only see the entire character in the image, but also the environment around the character. The designer of the image hopes that the viewer can observe the characters in the image in an all-round way. The characters in the image complete their own actions. As a bystander, the viewer can combine the background in the image to better understand the behavior of the figure and the designer's intention.

4.2.3. Viewpoint

These images all adopt a horizontal viewpoint. The viewer and the participant are on the same horizontal plane, which reflects the equal social status of the participant and the viewer. This method can make the viewer feel friendly and more willing to accept the content in the image.

4.2.4. Modality

Modality can be defined as the reproduction of the "realism" of the image, based on the coding tendency of the senses, based on the saturation of color. As in functional grammar, modality can be divided into high, medium and low categories:

- (1) High-sensory modality: the image uses high saturation colors naturally;
- (2) Medium-sensory modality: the image color is not too saturated, such as "washed" or flowing gouache;
- (3) Low-sensory modality: The image is only black and white. (Li, 2003)

By analyzing the multimodal discourses of the pandemic, it can be found that most discourses are high-sensory and medium-sensory. High-saturated colors can make the image bright and colorful, and more able to catch the viewer's eye and attract people's attention.

4.3. Significance of Composition

The meaning of composition includes three kinds of resources, namely information value, framing and saliency. The composition elements are placed in different positions such as up, down, left and right in the image to reflect different information values. The left and right placements form a known-new information structure; the upper and lower placements respectively represent ideal information and real information, and the center and edges also have different information values. Distinctiveness refers to the different degree to which elements attract the attention of viewers. The framing refers to whether there is a framing method (by dividing the line, or actually dividing the frame line). (Li, 2003)

According to the different 35 pandemic discourses with words and images collected in this article, the pandemic image and words relationship studied in this article can be divided into six types, namely: discourse with image above and words below, discourse with words above and image below, discourses with image left and words right, discourses with words left and image right, discourses with words in the center and discourses with words scattered. Among them, discourses words above and image below account for the largest proportion, followed by discourse with image above and words below. The scattered words distribution also accounts for 23% of the proportion (see Figure 6). Therefore, these three image and textual relationships are more representative in the pandemic situation. In view of the small number of framing in the collected images and words, this article mainly analyzes the information value and significance of the three types of discourses with images and words in the discourse with image above and words below, discourse with words above and scattered words distribution.

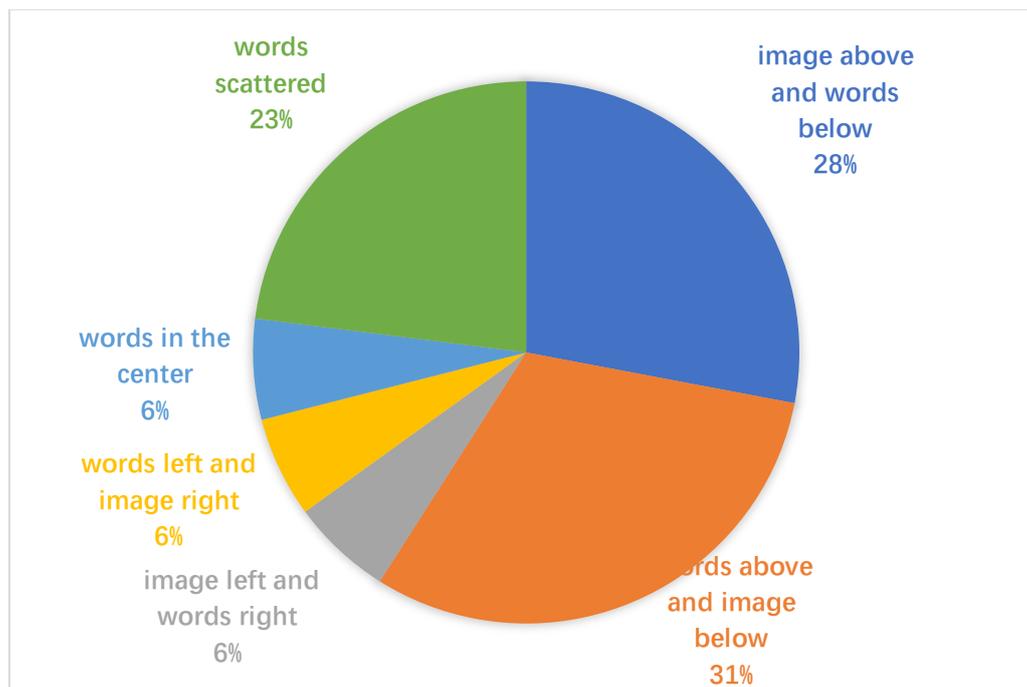


Figure 6.

Among the 35 images and words collected in this article, the relationship between the words and the image in 11 discourses is as shown words above and image below. We have already mentioned that placing them up and down means “ideal” information and “real” information, respectively. In the discourse words above and image below, the words represent “ideal” information, while the image are “real” information. In the discourse words above and image below, the words are the information to be expressed, and the corresponding meaning can generally be expressed through the words, but the words may not be able to fully express the creator’s thoughts, so the words is “ideal” words and images are “real” information. Under the envelope of the pandemic, words alone are inevitable to be too monotonous and repressive. Therefore, people put images under these words to make the information to be transmitted more vivid and attractive for people’s attention. The words above in the discourse are often more eye-catching and attractive, so they are more distinctive, and the image plays an auxiliary role to help the words reflect the meaning, so it is not visually significant. Regarding framing, because the dividing line is the criterion for judging the framing, so in terms of the composition of the words, the words contained in the discourses with words above and image below is not separated by the dividing line, so this type of discourse is not framed.

As shown in Figure 7, the four words “ding qi fu zhen (regular return visit)” are bold, attractive, and clear in meaning, that is, let the discharged patients with COVID-19 regularly check in the hospital, so the words are “ideal” information, which is significant. But if there are only words, patients will inevitably feel cold and no temperature. The discourse creator added a medical staff who smiled and waved below the words. The patient will think of his treatment in the hospital and the meticulous care of the medical staff, so that he feels warm, and the words supplements the words information. The words Will be more powerful. Therefore, the words are “real” information. However, because the words are complementary to the words, it is not distinctive.

定期复诊



Figure 7.

Compared with the pandemic multimodal words in the figure below, the words in the words below and above is the “ideal” information, and the words limits and supplements the words. Most of the words in these images and words are familiar animated characters or poster characters. Therefore, the information conveyed by the appearance and actions of the characters in the words are relatively fixed, the content is more general, and the creators of the images and words are also expected to be viewers. Recognize the meaning, so these words are “ideal” information, occupying a prominent position in the words. The words below the words is “real” information. These words are words set according to the specific situation of the pandemic, supplement and explain the information of the words, and further clarify and limit the meaning of the words.

As shown in Figure 8, the words above the multimodal words is a poster popular in China in the 1960s and 1970s. People who experienced that era are very familiar with this words, and it is not difficult for them to interpret the meaning of the words , And young people have more or less seen the old posters posted at home or seen in film and television dramas, and can also interpret the meaning of the words. If you only observe the characters' expressions and movements, the raised palms usually mean rejection or prohibition, while the figures in the figure have firm eyes, which deepens the degree of rejection and prohibition. The interpretation of the mask elements in the image is usually self-protection or protection of others. Therefore, the words above have universal significance, and the information transmitted is relatively fixed. It is therefore “ideal” information. The words occupy a prominent position, which is convenient for people to observe and interpret. The words below provide a specific context, and the viewer can combine the context to have a more appropriate interpretation of the words, so it is “real” information. In the case of an pandemic situation, in conjunction with the words “refuse to gather at the party, don't diminish family affection, wear a mask without chaos”, the raised palm and firm eyes express “refuse to party” and “do not chaos” No, and the mask element is the same as “wear mask” in the words. Combined with the words, the viewer can grasp the meaning of the words-refuse to party and wear masks, without causing trouble to the society and others.



Figure 8.

Discourses and words with scattered words account for a large proportion of pandemic discourses. There is usually more than one character in this kind of image and words, and the existence of the words is mostly used to explain the inner thoughts of the character or the communication between each other. The words play an auxiliary role and helps the viewer to deepen the understanding of the relationship between the characters and to Interpretation of words. Because the words are in the center of the entire image and words, it is distinctive and attracts people's attention, while the words are not distinctive in the image and words. As shown in Figure 9, the two children are in the center of the words and are in a prominent position. You can judge the meaning of the words by observing their expressions and actions. One of the children is disappointed and covers the mouth of the other child with his hand. The words in the image constitutes a dialogue, which reflects the psychological state of the two children most vividly-they want to go out and play without masks, so they are full of disappointment. The image and words as a whole embody the psychological state of people's desire for freedom during the pandemic, but also reflects the importance people attach to the protective measures of the pandemic.



Figure 9.

No matter what kind of discourse relationship, the words mode and the words mode complement each other. Although the words and the words have different positional relationships in the words of the words, the parts that occupy the main position in the discourse are also different, but the words and The combined effect of words enables people to interpret the meaning of images and words in a clearer and clearer way, and promotes the smooth progress of network communication. Therefore, both the words and the words work together in the image and words.

5. Conclusion

Based on the visual grammar proposed by Kress and Leeuwen, this paper analyzes the multimodal discourse of pandemic discourses in my country, and finds that the construction of pandemic discourse meanings is carried out from three aspects: reappearance meaning, interactive meaning and compositional meaning. The participation of the vector in the words promotes the construction and expression of the meaning of representation. The interactive meaning is mainly expressed by the interaction between the participant and the viewer. The meaning of composition is the saliency and information value reflected by the different positional relationship between the source and the image. In the analysis process, this article also found that in the process of interpretation of the pandemic discourses, the interaction between images and words is indispensable. Image modalities and textual modalities complement each other. Based on different positional relationships, the main information of a discourse can be expressed by image modalities or textual modalities. Another mode is in an auxiliary position, but the overall meaning of the discourse is conveyed and construction is carried out by two modes. Compared with the research on publicity advertisements and picture books, there are few domestic studies on the pandemic image and words. Therefore, this article provides an effective way for the pandemic image and words research. However, this article only analyzes and interprets the pandemic situation in my country, and the research on the pandemic situation abroad still needs to be explored. The following research can also make a comparative analysis of the pandemic discourses at home and abroad, and find out the differences between the domestic and foreign interpretations of the pandemic discourses.

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