From text to video: an analysis of the communication effect of text short video news in mainstream media

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Abstract: In recent years, the video characteristics of mainstream media news communication methods have become prominent. Among them, graphic short video news composed of images, words and audio has become the main force of short video news communication. This study preliminarily discusses the impact of graphic short video on information entropy reduction and communication effect by using the methods of questionnaire and in-depth interview. The study found that the font size, color , news background and music score of text in video news will affect the communication effect of news.

Key words: Visual communication; Information entropy; Symbol; Graphic short video news

1 Introduction

In 2020, due to the isolation of the physical space of the audience during the epidemic, the short video industry ushered in a blowout development. Among them, graphic video news has played an important role in many social news events and even major public health events, such as the @ Chengdu 49 middle school student falling from a building, the announcement of the train number of @ novel coronavirus secret service personnel, etc. Due to the limitations of news information collection, it is difficult for many reporters to collect first-hand video data at the beginning of news, and graphic short video news has become a convenient way for audiences to participate in news production and form crowdsourced news. Graphic short video news, with its super timeliness, intuitive form of expression and strong immersion formed by matching dynamic music, has become an important way for Tiktok and other platforms to release first-hand social news. I have observed that text news can still achieve good communication effects on short video platforms with the help of content advantages and authority. I am curious about this. Why can the seemingly declining text news still occupy a dominant position in the new media era? What are the characteristics of character symbols compared with audio-visual symbols? With the rapid growth of short videos, how can we find the outlet of text communication?

2 Literature Review

2.1 Overview of visual communication theory:

The early research on vision abroad can be traced back to the S. Hungarian film theorist Balaz put forward "landscape society" from the perspective of social goods in

film aesthetics Film aesthetics,which laid an important theoretical foundation for visual

communication. The research on visual communication in this paper starts with the simple text media, and covers a small scope. Therefore, this paper only introduces the general situation of visual communication research in the field of text communication. Relevant works on visual communication include Paul Martin Leicester, Professor of Communication Department of California State University, Visual communication image moving information. Which aims to cultivate audiences to better understand visual information, better reduce entropy of information, and ensure the order of social system.

In terms of domestic research on visual communication, from the field of mass communication, Professor Sheng Xigui of Renmin University of China was the first scholar to engage in visual communication research. Since 1997, he has published a series of papers on Photography and visual communication in the people's daily, and his monograph on Influence communication is a representative scientific research achievement in this field in China. From the perspective of visual culture communication, Fudan University established the first visual culture research center in China in June, 2002, and held the first International Symposium on Visual Culture Communication in 2005. The conference conducted a comprehensive and multi- level discussion around "the theory and practice of visual culture visible and invisible in globalization", covering film and television, photography, news, advertising, architecture, urban research New media research and many other fields. The essence papers of the conference were collected into the book Theoretical interpretation of visual culture communication in the image age,which has both theoretical depth and practical significance. Meng Jian and Gu Zheng of the research center are active scholars in the study of visual culture communication.

A comprehensive survey of domestic scholars' research on visual communication mainly has the characteristics of fuzzy research methods, short research time, scattered coverage and so on. Therefore, the research on visual communication in this paper is based on the existing theoretical results to explore the depth and breadth, and further improve the research gaps and weak links from a systematic and profound perspective.

2.2 A summary of the transformation of news short videos

The domestic academic circles' research on the transformation of traditional media into news short videos rose in 2017, which is also known as the "first year of short videos". On the analysis of the current situation, effect and trend of the transformation of paper media into short video news, Wu Shenghua and Wang Bin said: "Although with the outbreak of short video, many traditional media have grasped the wind in time and transformed the short video news communication platform one after another, but on the whole, it is still in the initial stage, from layout to momentum, it is still necessary to build brand characteristics.", And for the future, the transformation of paper media into short video faces many difficulties and challenges. Especially

compared with radio and television media, its professionalism needs to be strengthened; On the other hand, while online short videos are subject to strict censorship standards, paper media also has stronger supervision. When analyzing the current situation of the transformation of newspaper media into short video news, He Xu found that the traditional media choose short video as a news form, which is not only affected by the media ecology of the development of the Internet, but also made a transformation path according to the increasingly diverse information needs of the audience. In addition, he pointed out that in the current situation, there are problems such as single content form, serious homogenization problems, and difficult business realization mode.

As for the development strategy of transforming traditional paper media into short video news, Li Tao believes that the most important thing for traditional media is still to "be the king of content", create high-quality content, pay attention to user experience, and improve their brand competitiveness. Guo Rongcun, aiming at the specific business of short video, proposed that the newspaper office should improve the strategic position of transforming paper media into short video, introduce professional video talents, encourage reporters to publish videos, enhance the influence of microblogging, and expand the perspective of the development of news short video.Zhang Hongning has carried out more research on this aspect. He believes that we should integrate platform resources, open up communication channels, and constantly maintain and consolidate the viscosity of users, so as to shape the brand image and credibility of paper media. "Any social Internet product, such as We Chat official account, Bai Du account and Wei Bo, has its fast-growing period of quickly attracting users", so it is extremely necessary to carry out in-depth media interaction and social networking.

However, these studies did not study the short video transformation of text news from the perspective of text subjectivity, so they did not answer the questions about this study.

2.3 Question raised:

Therefore, starting from the visual communication theory, this paper will try to answer the following questions: why can graphic short video news still occupy a dominant position in the new media era? How does the presentation of text and audio- visual symbols affect the communication effect of video news in graphic short videos? What kind of communication effect has the return of subjectivity of graphic short video news formed? In the process of communication, how to balance the relationship between words and audio-visual symbols?

3 Method

This paper attempts to answer the above questions by means of in-depth interviews and questionnaires.

3.1 Questionnaire survey method

3.1.1 Hypothesis establishment

Based on the above questions, the corresponding assumptions are put forward here:

H1: The font form of graphic short video news is positively related to the video communication effect. H1a: The larger the font size of graphic short video news, the better the video transmission effect.

H1b: The brighter the text color of graphic short video news, the better the video transmission effect.

3.1.2 Sampling method

The research object of this hypothesis is short video news.

First of all, we conduct a representative sampling of this kind of media. We mainly choose the graphic and short video news reports of political news, and choose the mainstream media of Tiktok platform as the main data source. The reason for choosing it is its high representative, a high number of users and obvious video characteristics.

Secondly, the author sampled the short video news works of the mainstream media based on the principles of font color, font size, news background and score. In the sampling process, first set the color, font size, background and score as variables, and then make a preliminary comparison of the communication effect. The comparison dimensions basically focus on the communication effect dimensions such as likes, comments, forwarding, collections, and finally take appropriate news samples for questionnaires.

3.1.3 Questionnaire time and respondent population

The study was conducted in mid July 2022 for students, ordinary staff, professionals and other people aged 0-40 years old. A total of 108 respondents were recruited in the experiment.

The researchers distributed news texts and measurement scales embedded with different experimental stimulus materials to each group of subjects in the form of online questionnaires, and informed the subjects that they were questionnaires on the communication effect of graphic short video news. The overall experiment filling process is less than 10 minutes.

3.2 In depth interview method

3.2.1 Interviewees selection

This study conducted 15 minutes of semi-structured in-depth interviews with 20 interviewers. The interview began on July 1st, 2022 and ended on July 15th, 2022. First the respondents included students, media people and ordinary audiences. Secondly, more research samples were collected throughWeChat. According to the maximum sampling principle of qualitative research methods, when the 20th respondent is recruited, all the interview contents are enough to answer the research questions, and the sample collection stopped.

Table 1: basic information of interviewees

interviewee	Age	Place of residence	**Occupation**
1	24	Hubei Wuhan	Student
2	26	Shanghai	Internship
3	23	Guangdong	Staff
4	23	Guangzhou	Reporter
5	24	Fujian	Doctor
6	23	Quanzhou	Staff
7	22	Hunan	Reporter
8	20	Changsha	Staff
9	28	Jiangsu	We media
10	23	Yangzhou	Student

4 Research data

4.1 Descriptive statistics

In this study, a questionnaire survey was used to analyze the graphic short video news, and 108 questionnaires were analyzed by comparing the size and color of the text in the video, as well as the soundtrack and background image of the video. Statistics show that the respondents are mainly young people aged 18-24, with women accounting for 63.16%, and more of them are undergraduate students. Combined with the analysis of variable font size, color, score and background image, it is found that 45.45% of people tend to browse news with large font; 60.9% people tend to browse news with rich font colors; 56.06% of people tend to browse the ones with a high degree of fit between the background and the news; 54.39% of the people tend to browse the news with score and high fit between score and news text.

4.2 Hypothesis analysis

4.2.1 The font form of graphic short video news is positively correlated with the video transmission effect.

Through the cross analysis of text font form and video communication effect, $p<0.01$, it shows that the original hypothesis is true. Namely the font form of text short video news is positively correlated with video communication effect. Moreover, the two sub variables of font size and color are cross analyzed with the video communication effect, and the results are shown in Table 2: the larger the font size of text short video news, the better the video communication effect; The richer the font color, the better the video transmission effect.

Table 2 cross analysis results of font color and communication effect

Subject	Name	Q7_ Which of the following news would you prefer to read? (%)			Total	χ2	p
		The font color is rich	The font color is little monotonous	The font color is monotonous			
Q8_ Which of the following news do you think you can get the most information from?	The font color is rich	62 (76.54)	2 (22.22)	9 (20.93)	73 (54.89)	60.297	0.000**
	The font color is little monotonous	4 (4.94)	5 (55.56)	4 (9.30)	13 (9.77)		
	The font color is monotonous	15 (18.52)	2 (22.22)	30 (69.77)	47 (35.34)		
Total		81	9	43	133		
* p<0.05 ** p<0.01							

4.2.2 The soundtrack, background image and news fit of graphic short videonews are positively correlated with the video transmission effect.

Through the cross analysis of news background, score and video communication effect,p<0.01, it shows that the original hypothesis is true,Namely the background of graphic short video news, the fit between score and news text content is positively correlated with video communication effect. Moreover, the two sub variables of music and background are cross analyzed with the video communication effect, and the results are shown in Table 3: the higher the fit between the background image of graphic short video news and the content of news text, the better the video communication effect; The higher the fit between the score and the text, the better the video transmission effect.

Table 3 cross analysis results of background fit and communication effect

Subject	Name	Q9Which of the following news would you prefer to read?			Total	χ2	p
		No back-ground	Low fit between background and content	High fit between background and content			
Q10_ Which of the follow-ing news do you think you can get the most information from?	No back-ground	1(8.33)	2(4.35)	1(1.35)	4(3.03)	44.619	0.0000**
	Low fit between background and content	7(58.33)	35(76.09)	14(18.92)	56(42.42)		
	High fit between background and content	4(33.33)	9(19.57)	59(79.73)	72(54.55)		
Total		12	46	74	132		
* p<0.05 ** p<0.01							

5 Summary and discussion

5.1 Graphic short video news has both rational elements and sensory stimulation.

Daniel Bell wrote in his book The contradiction of capitalist culture: "in the new media era, the 'mainstream discourse' of society is visual and auditory sensory experience.".All kinds of audio-visual symbols fill our lives. These audio-visual elements have brought sensory stimulation to the current audience and become the means of mainstream information dissemination.

Video communication mode will not drown the role of text. In the "video age" environment, on the one hand, text will be more or less affected by the development of video, and develop text video. Among them, "graphic short video news" is the text product of the video age. The expression of words for sensory experience is richer than video expression, and the rational and rigorous expression of words and sensory stimulation are also shown in the video age. More importantly, through the adjustment of text size and font color, it can also bring stronger sensory stimulation to video news. On the one hand, the text itself can enhance the audience's rational thinking and abstract thinking ability.On the other hand, the graphic presentation can stimulate the audience's sense and enhance the communication effect of news.

5.2 background map and soundtrack show strong cultural cohesion.

The concept of "cultural cohesion" was first put forward by Wordsworth, who believed that "the rapid dissemination of news and the acceleration of the pace of life have caused people's

desire for rapid access to news information.".The use of pictures and music also accelerates the consumption of this fast-food news information, which is in line with the current era of efficiency.

In the era of text dominated news, people need a lot of time to read, taste and precipitate the information the author wants to convey in reading. However, at this time when money is precious and efficiency is the first, on the one hand, the news background map can enable people to quickly complete the interpretation of the news text under the visual stimulation. On the other hand, the strong background fit between the news picture and the news text can effectively aggregate audio-visual, text, video and other text display forms to deepen the cultural edification and interpretation of the content of the news text, so that the audience can use the simplest, convenient Immersive reading of news texts in an intuitive way can achieve good communication effects.

In addition, as an important variable, the score plays an important role in the creation of news theme artistic conception, the contrast of news characters, and the extension of news picture space. From the perspective of the cooperation between music and pictures, the soundtrack, as an auditory element, extends and supplements visual symbols, and determines its own rhythm, tone and atmosphere according to the text content, picture composition, color, etc., effectively integrating a variety of news communication forms and symbols. In addition, during the interview, freelance journalist sister Q also said, "The integrated communication mode of fitting music with rational words and visual short videos has achieved the communication effect of graphic short video news 1+1>2.". The sense of immersion and substitution of news added by the score also verifies the positive role of the score in the effect of news communication.

5.3 subjectivity return of words in the era of visual communication

The short video of graphic short video news, combined with pictures, text and music, effectively avoids the linear expansion and abstraction of text. In the comparative analysis of the audience's understanding difficulty, browsing difficulty and communication intention of graphic video and ordinary video, it shows that the communication effect is very poor in content understanding difficulty, browsing difficulty and communication intention, 0.29, 0.31 and 0.25 respectively. Although this result reflects that the audience has a relatively strong interpretability and willingness to disseminate ordinary video than graphic video, considering the overwhelming advantages of ordinary news video in platform construction and hardware technology in the real environment, its advantages in communication effect are not obvious, which just proves the possibility of the return of subjectivity of text news in the era of short video.

The return of subjectivity of characters in the era of visual communication, on the one hand, shows that characters are more open than other media. Compared with the past, newspapers only contain pictures and words, broadcasts only contain sound, and videos integrate graphics and images, which makes the subjectivity of words more prominent. For example, in 2022, the popular words on the Internet were rolled up and laid down. The audio and video content carried at the beginning of their transmission has been forgotten, but the social emotions carried behind the words have been deeply engraved in the hearts of the audience, which shows how far-reaching the communication effect of the words is. On the other hand, the development of video also provides technical support for the transformation of traditional text news. However, it is worth noting that

this study also found that the return of subjectivity of text news in the short video era will bring negative effects of social landscape and visualization, which is worthy of vigilance and reflection.

6 Research limitations

Because this study is one-sided because the interviewees cover too many fields, researchers in the field of visual communication may need more attention and expansion in future research. In addition, the questionnaire survey method is too single in the distribution of respondents, mainly students, so it does not have strong social representation.

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