



Intelligent Presentation of Virtual Reality News in Real-time Reporting

Chen Yuehong^{1,2}, Shi Youwen²

¹ School of Humanities, Social Sciences and Law, Harbin Institute of Technology, Heilongjiang Harbin

² Department of New Media and Art, Harbin Institute of Technology, Heilongjiang Harbin, China

Abstract: Virtual reality news relies on virtual reality technology to give viewers a new experience that is different from traditional real-time news reports. At the same time, the diverse and intuitive reporting methods have significantly increased the predictive value of news information; the guiding role of the audience's follow-up reactions and behaviors based on this news has become more prominent. On the basis of virtual reality, big data and robot technology are also continuously integrated into virtual reality news. The news reporting process is no longer simply to restore the scene through technology. The "human" thinking has become an important factor in the virtual reality news report. Virtual reality news greatly improves the processing power and efficiency of news information with its fast intelligent analysis and news presentation capabilities in real-time reports with high timeliness requirements.

[Chen Yuehong, Shi Youwen. **Intelligent Presentation of Virtual Reality News in Real-time Reporting**. *Researcher* 2019;11(12):95-99]. ISSN 1553-9865 (print); ISSN 2163-8950 (online). <http://www.sciencepub.net/researcher>. 11. doi:[10.7537/marsrsj111219.11](https://doi.org/10.7537/marsrsj111219.11).

Keywords: Virtual Reality News; real-time reporting; intelligent

Project: This paper is a phased achievement of the National Social Science Foundation project "Virtual Reality News Research under the Perspective of Communication Science"(No. 18BXW102).

The development of virtual reality news

1. Definition of virtual reality news

Virtual reality news is the use of virtual reality technology, the current computer simulation system to simulate the news process, transforming two-dimensional flat reports into a three-dimensional immersive experience, so that viewers have a more direct and in-depth understanding and recognition of news.

At the same time, there are more and more types of news that are now being reported using virtual reality technology. Therefore, the definition of virtual reality news has become increasingly blurred, and more and more specific news types meet its defined standards.

2. Technical support of virtual reality news

The emergence and development of virtual reality news is inextricably linked to the birth of virtual reality technology and continuous innovation. Virtual reality technology was first introduced in the 1980s. The father of American virtual reality, Jay Lanier, founded VPL Research Ins and proposed the concept of virtual reality technology. He was therefore recognized as the earliest proponent of virtual reality technology. ^[1]Virtual reality technology is the most likely to simulate three-dimensional space, thus creating a sense of immersion.

3. The reason for the rise of virtual reality news

One of the most striking aspects of immersive virtual environments is that people tend to react realistically to virtual situations and events, even if they know that these are not true. Even more surprising is that although the fidelity of everyday physical reality is severely reduced (about visual appearance, realistic lighting rendering scenes for computer lighting, physical implementation, the performance and behavior of all these virtual humans), this assumption The real response (RAIR) still occurs. In addition, the local illusion, that is, the feeling of existence and operation in the remote or virtual; rationality, that is, what is happening, a real illusion; the ownership of the body, that is, the brain has a high degree of plasticity, it is not difficult to produce The illusion of the ownership position of the entire virtual mechanism. ^[2] The local illusion, the rationality that is happening and the highly flexible brain are the reasons why we are fascinated by virtual reality. The virtual reality news born on the basis of virtual reality technology is quickly accepted by the audience and the technical framework is continuously improved. Improve the quality of news.

The form of news reported in real time

Real-time reporting content accounts for a large proportion of news content, especially in today's information society, which fully meets the needs of the

public to obtain a large number of real-time information that is happening or happening in the shortest time, so as to respond in time. Based on this, real-time news generated by news dissemination on third-party platforms is reported in real time, because the rapid response and dissemination of hot events has already had great market demand and dissemination value.

1. Report value of real-time news

Real-time news, as its name suggests, is a style that conveys events of a certain value and audience that are happening around the world to the public through third-party media in the form of images, paper, and radio. Such news has different effects on different groups, which is reflected in the direct or indirect intervention of the content of the news on the life and behavior of certain groups. For example, the real-time reporting of stocks by financial TV programs will affect the stocks of some investors. The operation of the national defense military television program on the regional situation will affect the travel and evacuation plan of some viewers; the real-time coverage of the entertainment TV program for the awards can meet the needs of some viewers. Real-time news is of great value and significance to many industries and audiences because of its timeliness.

2. Comparison of virtual reality news and traditional real-time news report forms

2.1 Disadvantages of traditional real-time news reporting

2.1.1 Single form of report

As viewers become overly familiar with the form of news reporting, traditional news reporting models have been difficult to attract and satisfy the needs of

viewers. For real-time news reports, limited to text form or only through audiovisual form, the audience is only a passive news information acquirer in this process, the content is very abstract and single.

2.1.2 The content of the report is too general

Real-time news covers a very large variety, and there are many uncertainties and content complexity in real-time or short-lived real-time. It is difficult to convey a large amount of key information in a short period of time only through the generalized news text. Especially for real-time news with guidance and predictive value, short news content is difficult to meet the follow-up information needs of the audience.

Therefore, a large proportion of real-time news in the type of news reports is in urgent need of seeking new forms of reporting to innovate, thus gaining a new living space.

2.2 The innovative level of virtual reality news

Compared with the traditional real-time news report form, virtual reality news changes the role of the audience in the process of news information acquisition, from passive information recipients to active information "participants". Virtual reality news brings more intuitive or realistic immersion to the audience through technical means, which makes the audience have a deeper impression of real-time news. The original general news content has become a specific news experience. This new form of reporting not only brings a new sense of new forms of reporting, but also gives the meaning and meaning of news different from the past.

The main form of real-time reporting

1. Reporting by reporters



Figure 1. Post-disaster situation in Zhejiang after the typhoon “Likima” transits

Because of the timeliness of real-time news, it is especially important to get the latest news on-site information in news reports, that is, to report the latest events in the shortest time. Therefore, in the news reports, reporters are often selected to send real-time reports to the first scene of the event, especially some periodic news, which lasts for a period of time and the latest news of each stage has certain value. When news articles report real-time news, they often interact directly with reporters in front of them, presenting the latest developments in the event through the image reports of journalists at the first scene (Figure 1).

2. News real-time data update

Some real-time news in the process of reporting in order to more intuitive and concisely present the

latest developments and processes of the event to the audience, often in the form of some real-time data, especially for news with certain trends and trends, the audience for its subsequent development or The result has a certain interest. In such real-time news reports, some predictions made through real-time data are also highly informative. Real-time data usually appears in the screen in the form of layouts, animations, large screens, subtitles, virtual reality, etc., usually as part of a news program. Real-time data can be classified into statistical data, relational data, text data, and the like. The real-time data in European and American news programs is diverse and expressive. Such as the previous British elections, the US election report ^[3] (Figure 2).



Figure 2. 2016 US election real-time public opinion

3. The news broadcast platform broadcasts part of the news content in real time



Figure 3. Part of the opening ceremony of the 2008 Beijing Olympic Games

Live broadcast is the most common form and means of real-time news reporting. For real-time news that has its own theme restrictions, short duration, and content regardless of its importance, it is often preferred to broadcast some of its content in news reports so that viewers can have an overall understanding of the event for the first time. This form of reporting is often used in some large and medium-sized international real-time news reports, such as some large and medium-sized conferences, awards ceremonies and sports events (Figure 3).

4. Multi-news platform cooperation

Due to the timeliness of real-time news, not all news platforms can get the latest information in the first time, so it is often necessary to cooperate to spread the content of the report for this event, so as to

ensure that the audience of their platform can also be in a short time. Get the general content of news information, and make the real-time news content of

your platform more comprehensive and rich (Figure 4).



Figure 4. CCTV cited CNN report

Intelligent in real-time reporting

In addition to the virtual reality technology that it relies on, virtual reality news is gradually combined with the popular artificial intelligence in recent years. It not only pursues the highly-reduced stereoscopic display of news scenes and content, but also attempts to make the news reporting process by computer simulation of "people" thinking. And the content presentation is more intelligent, giving the news itself a richer and more diverse form of report and content.



Figure 5 CCTV "Data says Spring Festival"

1. The application of big data in news reports

Big data news is a new type of news generated by artificial intelligence after entering the journalism industry, which greatly enhances the visualization effect, and its application in real-time news and reports has gradually become widespread. During the Spring Festival of 2014, CCTV produced a special program called "Spring Festival". Through the combination with Baidu map data, it successfully mapped out the migration route map of China's population during the Spring Festival. In the past few decades, China's Spring Festival population has achieved a leap-forward breakthrough. It has reached 3.6 billion person-times. The report uses the bright lines of the flow to show the direction and quantity of population movements, causing widespread concern and enthusiastic response (Figure 5).^[4]

2. The application of "media robot" in news reports

With the continuous improvement and development of artificial intelligence, "media robots" began to enter and serve the news field. At the beginning of March 2018, the world's first theme was the MGC (Machine Production Content) video news of the two sessions. The "2018 Two Clubs MGC Lyrics Hotspot" was produced and released by Xinhua News

Agency "Media Brain", which broadened the application of artificial intelligence in the field of news reporting. [5] In the same year, under the support of robotics technology applied to the media field, the short video news of the first goal of the World Cup was issued in a dozen seconds, greatly improving the processing efficiency of news information.

Conclusion

In summary, virtual reality news has gradually occupied an important position in real-time news reports because of its immersion. Through the analysis and understanding of virtual reality news, real-time main report forms and news intelligence, it gradually deepens the understanding of new news types and news media technologies. At the same time, the impact of advances in science and technology on the future development of the news media is also worthy of attention. Under the background of scientific and technological progress, the form of news reporting is increasingly diversified, and more forms of news reports will emerge in the future.

Authors:

Chen Yuehong, Professor, School of Humanities, Social Sciences and Law, Harbin Institute of

Technology.

Shi Youwen, Undergraduate student, Department of New Media and Art, Harbin Institute of Technology.

References

- 1 Wu Jin. The Application of "Virtual Reality" Technology in Local Media Communication—Taking "Upstream News" as an Example. *Media Forum*, 2019(14): 117.
- 2 Nonny de la Peña, Peggy Weil, Joan Llobera, Elias Giannopoulos, et al. Immersive Journalism: Immersive Virtual Reality for the First-Person Experience of News. *Presence Teleoperators & Virtual Environments*, 2010-08-01: 293-294.
- 3 Li Xiaoqing, Huang Shuo. Analysis of the visual design of real-time data in TV news. *Modern TV technology*, 2019 (05): 128.
- 4 Wang Liping. Analysis of the Intelligent Trend of Media Industry. *Communication Research*, 2019(19): 34.
- 5 Li Jiazhuo. My "brain" is the master of the road - the media of the mainstream media. *News and Writing*, 2018 (04): 4.

12/25/2019