

The Impact of Digital Technology on News Writing: A Postprint Study

Authors: Wang Ruyi, Wang Ruyue

Date: 2023-10-08T00:00:00+00:00

Abstract

Amidst the continuous evolution of digital technology, journalistic writing is no longer presented separately as traditional text, audio, or video; multimedia news has proliferated, with interactive maps, H5 pages, data journalism, and other forms of visual reporting becoming ubiquitous. Drone footage, virtual reality reporting, and robot journalism are no longer unfamiliar concepts, while not all writers are professional journalists. Propelled by digital technology, journalistic writing has become simpler and more efficient, its content has become richer and more diverse, offering audiences a novel news dissemination experience.

Full Text

Research on the Impact of Digital Technology on News Writing

Abstract: As digital technology continues to evolve, news writing is no longer limited to traditional text, audio, or video presented in isolation. Multimedia journalism has emerged extensively, with visual reports such as interactive maps, H5 pages, and data journalism becoming ubiquitous. Drone footage, virtual reality reporting, and robot-generated news are no longer unfamiliar concepts, while authors are no longer exclusively professional journalists. Propelled by digital technology, news writing has become simpler and more efficient, with content growing increasingly rich and colorful, offering audiences a novel news consumption experience.

Keywords: digital technology; news writing; visual reporting

Chinese Library Classification: G206

Document Code: A

Article ID: 1671-0134(2017)05-094-03

DOI: 10.19483/j.cnki.11-4653/n.2017.05.032

Authors: Wang Ruyi, Wang Ruyue

2. The Impact of Digital Technology on News Writing

Modern digital technology has exerted a profound influence on the field of news communication. The rise and widespread application of digital communication technology have significantly enhanced the authenticity, intuitiveness, and appeal of news, substantially improving the effectiveness of news dissemination activities. To adapt to the development of digital technology, news writing must also undergo corresponding changes. This paper examines the impact of these digital technologies—network technology, drones, robots, and virtual reality—on news writing.

Digital technology is a scientific technology intimately associated with electronic computers, referring to the process of converting various types of information—including graphics, text, sound, and images—into binary digits “0” and “1” that can be recognized by computers for processing, storage, transmission, dissemination, and restoration. Because encoding, compression, and decoding processes require computer assistance at various stages, it is also known as digital code technology or computer digital technology. The development and iteration of digital technology have brought about tremendous transformations in news writing. For instance, under the trend of media convergence, news writing has begun to exhibit an integrated character, merging various news communication methods rather than representing a singular text-based writing capability. Convergent journalism has become the major trend in news writing. Simultaneously, news workers face both more opportunities and greater challenges. They must enhance their professional competence by employing diverse presentation forms such as graphic-text integration and innovating writing language and techniques, thereby making news reports more readable, news writing more artistic and engaging while maintaining accuracy, and better meeting readers’ needs.

2.1 The Impact of Network Technology on News Writing

The development and application of network technology have catalyzed innovation in news writing. Network technology enables easy sharing of abundant online resources, provides more diversified platforms for news publication, and accelerates information dissemination, leading to the continuous growth of online media and social media platforms. The impact of network technology on news writing is primarily manifested in form, content, and linguistic style, with enhanced user participation and interactivity. Increasing numbers of audiences are participating in news writing, enabling instantaneous interaction between communicators and receivers and greatly improving news dissemination effectiveness.

On one hand, integrating network technology with news communication activities has promoted the development of new media such as Weibo and WeChat, gradually diversifying the media and platforms for news writing. Online media has become an important news distribution platform alongside traditional

media, exemplified by Tencent News, NetEase News, and mobile news clients such as The Paper and Toutiao. On the other hand, employing hypertext and multimedia technology in news writing can effectively enrich its forms and content. When reporting news, journalists strive to present “vivid audio and visual elements with both graphics and text,” making news works more readable while maintaining comprehensiveness, objectivity, and accuracy. Since news writing can be presented through text, images, video, data, and other formats, convergent journalism and data journalism are becoming major trends in news writing under network technology.

Furthermore, because audiences have considerable freedom in selecting news within the network communication environment and enjoy good interactivity with news publishers, the language of online news writing tends toward colloquial, light-hearted, and humorous expression. News must not only be readable and informative but also entertaining to attract audiences. Additionally, with the popularization of network technologies such as Weibo and WeChat, the era of omnimedia where everyone is a medium has arrived, and UGC (User-Generated Content) has further developed. Audiences can become news publishers at any time, with increasingly more important news or source materials first released online by netizens. For example, during the Tianjin explosion on August 12, 2015, micro-videos filmed by netizens became important source material for authoritative domestic media. These examples illustrate the impact of network technology on news production and writing.

1.2 Brief Overview of Digital Technology Development

The rapid development of digital technology has brought tremendous changes to the field of news communication. In the 21st century, digital technology continues to advance with the times, with diverse new technologies emerging like bamboo shoots after rain, such as H5, Web3.0, VR, and artificial intelligence. These new technologies are exerting increasingly important influences on news communication activities. As the internet enters the Web3.0 era, digital technology is being applied more extensively in news communication, significantly impacting news dissemination methods, communication subjects, content, audiences, and effects. The application and development of network technology have gradually transformed network media into a new type of digital communication medium, prompting traditional media to cooperate with online media and seek transformation. For instance, People’s Daily represents the successful transformation of traditional media into new media, while Tencent and LeTV have established specialized news websites under their banners for instant news release and updates—these are new achievements accompanying digital technology development. Meanwhile, new digital technologies such as drones, robot writers, and virtual reality have also importantly impacted the field of news communication, particularly news writing, in aspects of news gathering, writing, and reporting.

2.2 The Impact of Drones on News Gathering

Literally defined, drones are aircraft that can fly without human pilots. This means that news organizations or individuals using drones must prepare appropriate radio remote control equipment to direct the aircraft's flight for their purposes. Drones were not first used in journalism; they earlier demonstrated exceptional capabilities in military applications before gradually being adopted for news gathering. The use of drones to replace journalists in news gathering serves several purposes. First, drones facilitate news collection under special circumstances. For instance, when Typhoon Haiyan suddenly struck the Philippines in 2013, it was difficult to expect journalists to risk their lives gathering news materials on the front lines. In such urgent and special disaster situations, using drones for news gathering became the optimal choice. When news gathering conditions are difficult, complex, or dangerous, employing drones to complete this work on behalf of journalists will become a trend in news gathering. This ensures journalists' personal safety in major disaster and war reporting, allowing them to collect high-quality news materials without placing themselves in dangerous situations.

Second, drones help audiences observe events from different perspectives, not only enhancing journalists' storytelling capabilities but also enabling them to devote more energy to news analysis, verification, and refinement rather than wasting time and effort on mechanical labor. Today, major Chinese media groups have successively established aerial photography centers. For example, *Chongqing Morning Post* established China's first aerial photography center in 2012, subsequently conducting extensive news aerial tracking practices using drones. Following this, other news media organizations also implemented drone filming practices; *Hubei Daily* established a specialized aerial photography center for news gathering in 2013 and consciously utilized drones for low-altitude filming projects. Currently, drones can be seen in numerous news reports both domestically and internationally, widely used in special event reporting such as disaster coverage, war reporting, and breaking news incidents—examples are countless.

Drone technology continues developing without stagnation. With technological upgrades and updates, new functions such as indoor filming and automatic tracking have emerged, providing powerful support for journalists to handle on-site reporting with ease. It can be said that technological upgrades have brought many surprises to the journalism industry, and the media industry has never pursued technological iteration and contemplated integration with technology as rapidly as it does today.

2.3 The Impact of Robot Writers on News Writing

Today, artificial intelligence technology has achieved rapid development, and "writing robots" or "robot journalists" can to some extent replace humans in writing and reporting, playing increasingly important roles in news production.

In November 2015, Xinhua News Agency's robot "Kuai Bi Xiao Xin" was officially launched nationwide, marking China's formal entry into the ranks of countries employing robot journalists for news production. Applying the latest computer technology to traditional media forms and keeping pace with this hottest global media technology has become an urgent task for the journalism industry.

First, robot writers have become an important driving force for human news gathering and writing, greatly liberating news productivity. In the past, editors and journalists originally had to undertake many primary tasks that consumed significant work time and physical energy, whereas intelligent machines free up more time for them to conduct in-depth news gathering and editing.

Second, robot writing guides the speed and methods of news writing toward faster and newer heights. This stems from the fact that this new writing method effectively promotes media efficiency improvements in both editorial workflow and content structure, rapidly conducting professional news reporting while fully leveraging the advantages of data journalism.

Third, the news reporting system will develop into a human-machine integrated model in the future. Machines can not only analyze and predict which reporting methods will achieve better and broader dissemination and gain more reader recognition, but they can also determine different writing styles for targeted writing based on different reader groups, thereby predicting how individuals or groups will feel after reading certain news information. This will signify that during topic selection and writing, communication effects can be appropriately anticipated in advance, and the writing process will gradually evolve from users being absolutely passive to users driving content production. Of course, robots cannot achieve news writing completely independent of humans. Although they can effectively analyze large amounts of complex data, humans must ultimately play the role of gatekeepers and decision-makers.

2.4 The Impact of Virtual Reality Technology on News Reporting

Alongside the development of wearable devices, VR, and panoramic video technologies, these have been utilized by news communication workers, significantly changing or even subverting traditional news reporting and production concepts and processes. Against the backdrop of current media convergence, virtual reality is becoming an entirely new field. Virtual reality technology requires computers to generate interactive three-dimensional environments, providing audiences with immersive experiences that make them feel present at the scene. Audiences can experience virtual worlds through wearable devices, and computer simulation systems provide them with realistic feelings. This interactive experience helps audiences better understand news events and access news information more easily. In the journalism industry, the American Gannett Group foresightedly introduced virtual reality technology during its digital transformation period.

First, it enables news reporting to no longer be limited to showing readers what happened; panoramic news experiences for readers have become reality. On news platforms equipped with VR technology, journalists can transmit 360-degree panoramic news footage to internet users within 20 seconds, and users will experience the immersive sensation brought by technology. This will drastically reduce news production that originally took hours or even longer to seconds. On the 30th anniversary of the Chernobyl nuclear disaster, NetEase News used VR video technology to take people into that tragic story from 30 years ago, allowing them to personally experience the fear and harm the nuclear power plant leak brought to Soviet citizens. In past news reporting, simple pictures and text could not fully convey the on-site feeling, whereas VR compensates for this deficiency by bringing users to the scene with visual impact. In the VR era, it seems every user is a witness.

Moreover, VR news greatly stimulates user initiative and participation. Users can voluntarily participate in news reporting interactions. For example, by presenting news scenes three-dimensionally through VR, users can simulate participation in on-site interviews through immersive experiences—an interactivity that other forms cannot provide or achieve. The development of VR technology is driving changes in news writing experiences, presenting users with entirely new reading experiences. In other words, it has changed news information production, dissemination, and experience, exerting an irreplaceable influence on news reporting.

3. Development Trends of News Writing Under Digital Technology

The evolution of digital technology requires corresponding transformations in news writing to better adapt to technological iterations. Under the trend of continuously emerging digital technologies being applied to news writing, news writing has essentially bid farewell to traditional concepts and characteristics, no longer simply pursuing brevity, speed, and accuracy, but instead placing greater emphasis on the application and integration of new technologies. Keeping pace with the times, innovating continuously, and developing changes have become the direction and requirements for news writing development under digital technology. Therefore, news writing must continuously innovate itself to adapt to technological development. Applying technology to news writing and integrating technology with news writing is an inevitable path for news writing to continuously improve itself and adapt to technological development.

4. Conclusion

As digital technology continues to iterate and develop, news writing is no longer limited to traditional text, audio, or video presented separately. Future trends in news writing will be more closely integrated with digital technology. Therefore, in this digital age, news writing should not stick to conventions but must

continuously advance with the times, pioneer and innovate, transform news writing concepts and thinking, and promote innovation. News writing should dare to “sublate” in terms of presentation methods and language expression. In summary, news writing is no longer simply textual narrative; the multimedia nature of news expression, the popularization of news writing language style, and the emphasis on audience experience should all be fully considered. Media news reporting must fully consider the application and adaptation of technology.

References

- [1] Xinhua News Agency Research Institute. Strategic Transformation of Media in the Digital Age [M]. Beijing: Xinhua Publishing House, 2009.
- [2] Liu Guangran. Virtual Reality Technology [M]. Beijing: Tsinghua University Press, 2011.
- [3] Zhou Haiying. On Digital New Media [M]. Changsha: Hunan Normal University Press, 2009.
- [4] Yu Zheming, Jiang Rixin, Peng Lan. Changes in Harvest—New Applications of Virtual Reality in News Reporting [J]. Journalism 界, 2015(09).
- [5] Zhang Bingbing. The “New” Changes in Digital News Writing from a New Media Perspective [J]. Science and Technology Communication, 2015(10).
- [6] Tang Zhihong. News Writing in the Internet Age [J]. West China Broadcasting & TV, 2014(06).
- [7] Yao Shuo. Analysis of Changes in News Writing in the Internet Age [J]. Academic Frontier Forum, 2013(06).
- [8] Cui Wei. Research on the Current Situation and Development Trends of News Writing Under New Circumstances [J]. News Dissemination, 2013(03).
- [9] Zheng Liren. On the Development Trends of News Writing [J]. Science & Technology Information, 2011(14).
- [10] Xu Man. Development and Reflection on Foreign Robot News Writers [J]. China Newspaper Industry, 2015(12).
- [11] Xi Zhong, Liu Jinfeng, Shen Kun. Analysis of Digital Communication Technology Development Trends [J]. Science and Technology Outlook, 2014(21).

Author Affiliation: School of Humanities and Communication, Hainan University

Note: Figure translations are in progress. See original paper for figures.

Source: ChinaXiv — Machine translation. Verify with original.