

Inventory of Achievements: Postprint on Innovative Outcomes of Media Convergence Development at the 2017 National Two Sessions

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Abstract

ChinaXiv Cooperative Journal: Two Sessions Media Convergence Special Achievement Review: 2017 National Two Sessions Media Convergence Development Innovations Author: Cao Sanxing

Full Text

Preamble

ChinaXiv Cooperative Journal: Two Sessions Media Convergence Special

Achievement Review: 2017 National Two Sessions Media Convergence Development Innovations

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(Author Biography: Cao Sanxing is Vice Dean of the New Media Research Institute at Communication University of China, professor, and doctoral supervisor. He serves as a committee member of the Multimedia Professional Committee of the China News Technology Workers Association, co-founder of the China New Media Convergence and Innovation Services Alliance, founding member of the Chinese Institute of Electronics Virtual Reality and Augmented Reality Branch, executive vice chairman of the China Campus Microfilm Alliance, university consultant of the Internet Society of China, member of the Ministry of Industry and Information Technology Information and Communication Experts Committee, chairman of the International University New Media Innovation Festival, and expert committee member of the New Media International Collaborative Innovation Promotion Center. He has received honors including “Top Ten New Media Figures in China” and “Annual New Media Driving Force Figure,” and is a renowned expert in China’s new media field.)

1.2 VR Live Broadcasting

Virtual reality technology provided immersive experiences for Two Sessions coverage. Multi-signal live broadcasting equipment enabled audiences to access panoramic content through VR headsets, creating a sense of presence at the event venue. This technology allowed users to freely switch between different perspectives, significantly enhancing the viewing experience. The “Iron Man” multi-signal live broadcasting system offered convenient and rapid deployment, enabling journalists to capture comprehensive footage while maintaining mobility. According to reports, this system reduced manpower requirements while ensuring broadcast quality. The all-media live broadcasting equipment integrated multiple functions including video capture, recording, streaming media storage, and distribution, streamlining previously complex workflows that required extensive coordination.

1.1 Wearable Camera Rigs

The wearable camera stabilizer represents a key development in multi-signal live broadcasting technology. In concert applications and sports broadcasting, these devices allow cameras to be mounted directly on photographers, integrating their movements into the live stream while reducing shake and ensuring stable footage. The stabilizer’s micro-advantages have been incorporated into broadcasting workflows, minimizing vibration while increasing camera mobility. During the 2017 Two Sessions coverage, wearable stabilizers enabled photographers to move freely through venues while maintaining professional-grade image stability, representing a significant advancement in mobile broadcasting technology.

2.1 Xinhua News Agency Robots “iSi” and “Xiao Xin”

Xinhua News Agency deployed both physical robots and virtual avatars: the physical robot “iSi” and the virtual robot “Xiao Xin.” The “iSi” robot participated in Two Sessions reporting, while “Xiao Xin” specialized in automated news writing. Users could interact with these robots through dedicated columns in Xinhua’s client applications, accessing news content and multimedia reports. The intelligent virtual robot “Xiao Xin” operated across Xinhua’s user platforms, with its writing capabilities integrated into news columns. This AI-powered system utilized deep learning and big data analytics to generate news content, though its responses were marked as “for reference only” during testing phases.

The “iSi” robot demonstrated advanced capabilities in news reporting, having written numerous articles during the Two Sessions period. However, its current functionality primarily assists human journalists rather than replacing them. The robot’s writing process relies on algorithmic templates that analyze

provided information and generate reports, representing an early stage of AI application in journalism. While the technology shows promise for future development toward more sophisticated intelligence, it currently functions as a tool to augment human capabilities rather than achieve independent creative work.

2.2 Potential Issues

Pseudo-Intelligence and Templatization

Critics have described robot writing as resembling “assembly-line production,” where systems fill predetermined templates with data. This approach raises concerns about “pseudo-intelligence,” as the output lacks genuine creative insight. Over-reliance on such systems may lead to homogenized content and could potentially diminish human journalists’ writing skills. The fundamental limitation lies in the algorithmic nature of current systems, which operate within fixed frameworks and cannot adapt beyond their programming.

Privacy and Ethical Concerns

As intelligent broadcasting and robot writing become more prevalent, privacy issues emerge regarding the collection and use of personal data. AI systems require vast amounts of information for training and operation, but lack the ethical judgment to distinguish between public and private data sources. This creates challenges in protecting user privacy and raises important media ethics questions about how to program systems to minimize privacy violations while maintaining functionality.

Depth and Contextual Limitations

Current robot writing systems excel at data analysis but struggle with deep, contextual understanding. While they can process large datasets and identify patterns, they cannot replicate human emotional intelligence or nuanced interpretation. This limitation is particularly evident in complex social and political reporting, where contextual awareness and cultural sensitivity remain essential.

3.1 Guangming Daily Media Convergence Center “Xiao Ming AI Two Sessions”

Guangming Daily’s “Xiao Ming AI” system represents a sophisticated application of robot writing technology. Developed in collaboration with academic institutions, this system utilizes machine learning algorithms to generate news content. During the 2017 Two Sessions, “Xiao Ming” demonstrated capabilities in data analysis and automated reporting, though its developers acknowledged limitations in achieving human-like depth of understanding. The system processed vast amounts of delegate information and meeting data to produce reports, but struggled to capture the emotional and contextual nuances that characterize high-quality journalism.

3.2 People's Daily Central Kitchen "Xiao Rong" and "Xiao Duan"

People's Daily's "Central Kitchen" model integrated both physical and virtual robots: "Xiao Rong" (physical) and "Xiao Duan" (virtual). These systems provided comprehensive support for the media group's Two Sessions coverage, combining data analysis, deep learning, and interactive capabilities. The robots processed information from multiple sources to generate content across various platforms, demonstrating the potential for AI to streamline news production workflows while maintaining distribution across diverse media channels.

3.3 Shenzhen Special Zone Daily "Dute"

Shenzhen Special Zone Daily deployed its "Dute" robot for Two Sessions coverage, leveraging machine learning and big data analytics for intelligent interaction. The system was designed to provide responsive news services, though its implementation remained at a preliminary stage. The robot's development reflected broader trends in Chinese media organizations adopting AI technologies to enhance reporting capabilities and audience engagement.

3.4 People's Daily - Alibaba Cloud ET Robot

In collaboration with Alibaba Cloud, People's Daily integrated the ET Robot into its "Everyday Two Sessions Hot Topics" column. This partnership combined Alibaba's advanced AI capabilities with People's Daily's journalistic resources, creating a system capable of real-time data analysis and content generation. The ET Robot utilized deep learning and natural language processing to analyze trends and produce news content, representing a significant step toward intelligent news production.

3.5 Zhejiang TV Intelligent Robot "Xiao Cong"

Zhejiang TV introduced "Xiao Cong," a physical robot equipped with servo motors and advanced sensors, enabling natural interaction with human hosts. During live broadcasts, "Xiao Cong" demonstrated real-time responsiveness and contextual awareness, successfully integrating into the program's dynamic environment. The robot's design emphasized human-robot collaboration, showcasing how AI can enhance rather than replace human presenters.

3.6 Guangzhou Daily Robots "A Tong" and "A Le"

Guangzhou Daily developed writing robots "A Tong" and "A Le" for its WeChat and news applications. These systems specialized in analyzing government work reports and policy documents, quickly processing and summarizing key points for audience consumption. During the Two Sessions, the robots generated popular content analyzing development plans and policy proposals, demonstrating the utility of AI in making complex information accessible to the public.

3.8 Hong Kong Ta Kung Wen Wei Media Group Robot “Xiao Bao”

Hong Kong’s Ta Kung Wen Wei Media Group deployed “Xiao Bao,” a robot developed in partnership with Baoqian Group. The system focused on data analysis and intelligent interaction, though its capabilities remained primarily in the realm of information processing rather than creative writing. The robot represented the media group’s exploration of AI applications in cross-regional news coverage.

3.7 Henan Radio & TV “Feixiang V Zai”

Henan Radio & Television’s “Feixiang V Zai” robot featured a humanoid design with rounded, friendly aesthetics. The system integrated with the station’s all-media data island, enabling intelligent analysis and interaction. During the Two Sessions, “Feixiang V Zai” facilitated communication between the station and delegates, demonstrating how AI can bridge gaps between media organizations and news sources.

3.9 Southern Metropolis Daily “Xiao Nan”

Southern Metropolis Daily’s “Xiao Nan” writing robot utilized machine learning and big data analytics to generate news reports. The system analyzed daily Two Sessions content to identify trending topics and produce corresponding articles. This approach allowed the newspaper to rapidly respond to breaking developments while maintaining comprehensive coverage of the complex political event.

3.10 Development Trends in Intelligent News

The application of intelligent writing systems in news production is expanding rapidly, enabling faster, more comprehensive, and more accurate data processing and analysis. These technologies significantly enhance news production efficiency while reducing human workload. However, current systems remain limited to data-driven domains and cannot replicate human creativity and emotional intelligence. Future development will likely focus on improving contextual understanding and ethical decision-making capabilities. As algorithms advance, intelligent news systems may evolve from simple writing tools to comprehensive assistants capable of handling complex reporting tasks, though human oversight and creative direction will remain essential for quality journalism.

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

Source: ChinaXiv — Machine translation. Verify with original.