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Research on Innovative Communication Methods and Channels for Journal-Media Convergence: Postprint

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Abstract

With the continuous development of modern information technology, media convergence between journals and media has become the main theme of the era. This article first introduces the content of media convergence, then presents the current status of journal-media integration from two aspects: content production and dissemination methods, and finally briefly outlines innovative models for the integrated development of journals and media, aiming to enable better development for astronomy journals.

Full Text

Research on Innovative Methods and Pathways for Journal-Media Convergence Communication

Abstract: With the continuous development of modern information technology, media convergence between journals and other media platforms has become the dominant trend of our era. This article first introduces the concept of media convergence, then examines the current state of journal-media integration from two perspectives—content production and dissemination methods, and finally outlines innovative models for the convergent development of journals and media, aiming to facilitate better development for astronomy journals.

Keywords: journals; media; convergence

1. Connotation of Media Convergence

Media convergence is generally understood as the integration of functions across various media platforms, such as combining traditional television with newspapers and periodicals. Some scholars argue that media convergence essentially represents an alliance between different media. In the current reform pro-

cess, the integration of journals and media—driven by information technology—constitutes one form of media convergence. This convergence is not merely technologically driven but occurs at multiple levels and in multiple directions, representing the internal and external integration of entire industry chains.

2. Current Status of Journal-New Media Convergence

New media differs from traditional media in many respects, but the most significant difference lies in their communication patterns: traditional media follows a one-to-many broadcast model, whereas new media enables many-to-many communication. The integration of journals with media platforms shifts communication from unidirectional to interactive models, employing diversified media dissemination methods to enhance journal readability and better fulfill their inherent value. Currently, most Chinese journals maintain only superficial integration with new media, with only a few outstanding examples achieving deeper convergence.

2.1 Content Production

At present, Chinese journals still rely primarily on traditional publishing methods. Major databases have not integrated all journal categories, and existing journals mainly operate through internal editorial processes. The current landscape is characterized by dispersed, small-scale journal operations, which hinder efforts to strengthen and expand journals while complicating management. For instance, data from a certain province in 2015 shows that there were over 400 publishing institutions producing 430 journal titles, including more than 100 university academic journals and over 10 astronomy journals. These astronomy journals were hosted by nine different organizations: one research institution, one astronomy enthusiasts' association, and the remainder by universities and publishing companies, with each entity hosting only a single journal. The vast majority of journals continue to follow the traditional workflow of submission, editing, publication, and distribution. Although some have implemented online office automation systems, editorial work remains essentially the same as in the print era, with little substantive difference. To date, six of the nine astronomy journals (70%) have established online office systems, yet research reveals that many editorial departments utilize these systems infrequently, rendering them little more than decorative fixtures that fail to serve their intended purpose.

2.2 Dissemination

2.2.2 Using Journal Websites for Communication with Readers and Authors During the journal transformation process, establishing dedicated websites has been among the earliest strategies employed. Today, all types of journals prioritize website development, particularly astronomy journals that need to disseminate the latest information to readers. Websites offer the optimal channel for providing superior services to readers, fostering closer relation-

ships between editors and readers while enabling timely notification of editorial calls for papers and facilitating online submissions. Through web access, readers can freely access journal content, making information retrieval convenient. However, due to insufficient human and material resources, many Chinese astronomy journal editorial departments have been slow to develop websites and update content online. Consequently, beyond a few major astronomy journals, most smaller publications have very limited influence. Furthermore, although some astronomy journals can effectively aggregate information, inadequate openness means many potential readers remain unaware of their existence.

The cooperative development between Chinese journals and media remains relatively slow, with dissemination channels limited primarily to websites and databases, representing a very narrow range of new media types. In earlier periods, blogs developed rapidly and became a major focus of internet attention, prompting some astronomy journals to establish their own blogs. However, blogs had limited influence, and most astronomy journals lacked experience in maintaining them. According to surveys, 30% of astronomy journals have created Weibo accounts, yet their social impact remains weak, with insufficient follower counts and slow information updates.

Following the blog era, WeChat has become the main force in media dissemination. Currently, major astronomy journals are expanding their influence, with many choosing to push original content to followers via WeChat official accounts. Some accounts post 1.3 articles per day on average, while others post only 0.1. However, WeChat official accounts have limited reach, inadequately meet market demands, and offer restricted dissemination scope, making it difficult to achieve large-capacity, high-intensity mass communication.

3. Innovative Models for Journal-Media Convergence Development

The convergence of journals and media has become a prominent topic, bringing profound changes to the media industry and generating new developments in the entire media ecosystem. Astronomical communication requires accuracy, speed, and efficiency. Integrating traditional astronomy journals with media not only facilitates the adoption of new media technologies to enhance content and quality but also expands dissemination pathways to achieve the goal of serving the public.

3.1 Leveraging Various New Media Tools to Interact with Readers and Improve Content Quality

Internationally, astronomy journals are primarily content-driven, with products controlled by providers. In China, however, the situation differs, as the focus has been mainly on technology. Technology providers, lacking their own journals, need to integrate different publications to serve their interests. With continuous information technology development, the future trend will inevitably shift

toward content-centric models. In the media era, readers are no longer mere audiences but have become users. Consequently, astronomy journal editors must transform their mindset, focusing on aspects such as topic selection and information interaction to better serve readers. Simultaneously, editors must fully utilize big data to highlight the latest developments in astronomy for their readers. They should also monitor the activities of young professional scholars in the field, study their research interests, and solicit contributions from them promptly to enhance journal quality.

3.2 Leveraging Publishing Companies to Achieve Digitalization of Journal Content Production and Dissemination

As readers' habits change and their methods of accessing information evolve, what journal readers need is no longer specific publications but accurate content information. This requires astronomy journals to transform their dissemination methods and actively adapt to social development. Facing societal and technological impacts, astronomy journals should undergo systemic transformation, shifting from fragmented operations to intensive management models. With market development, specialized digital publishing service companies have emerged in China, primarily offering journal online services. If astronomy editorial departments can utilize these publishing companies, editors can be liberated from tedious and repetitive daily tasks, alleviating personnel shortages and allowing editors to devote more energy to manuscript quality and management.

In summary, the convergence of astronomy journals with media represents an inevitable trend. Astronomy journals should seize this historical opportunity, innovate themselves, and thereby achieve better development.

References

- [1] Wang Xinhong, Wang Guohong, Peng Shaoming. On the Digital and Media Transformation of Scientific and Academic Journal Publishing[J]. *Acta Editologica*, 2012, 24(5): 481-483.
- [2] Tao Hua, Zhu Qiang, Song Minhong, et al. Current Status and Development Strategies of New Media Communication for Scientific Journals[J]. *Acta Editologica*, 2014, 26(6): 589-592.
- [3] Jiang Liping, Xue Rongrong, Huang Guangli. Reform of Traditional Scientific Journals in Editing and Publishing in the "Internet Plus" Era—A Case Study of *Acta Astronomica Sinica*[J]. *China Media Technology*, 2016(8): 16.
- [4] Du Min. Media Convergence: A New Path for the Future Development of Academic Journals[J]. *Journal of Chifeng University (Philosophy and Social Science Edition)*, 2016(1): 8-10.
- [5] Guo Yumei, Guo Xiaoliang, Ji Haitao, et al. The Innovative Path of Academic Journals Under the Background of Media Convergence[J]. *Acta Editologica*, 2014, 26(6): 521-525.

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