

# The Electronic

## The Migration from Print to Net: How Much to Move and What Will It Cost?

*Chair:*

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American Association for the Advancement of Science  
Washington, DC

*Panelists:*

**Pieter SH Bolman**

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Traditional print journals are finding their way onto the Internet. In the online world as in print, each journal is finding a special niche. And an online journal is not necessarily a copy of the print publication. Journals that have not taken the leap want to know more about the trip to the Internet. What did the online journals bring, and how much was the ticket? Three speakers with online experience discussed their online offerings and the cost of going online.

Pieter SH Bolman, president of Academic Press, became an online guru before the Internet was cool. His experience with the Internet began in the middle 1980s when many people owned Commodore 64 computers, if any. At Academic Press, he helped with the initiative to publish many full-text journals online. Academic Press was very successful and later created a national consortium of subscribers for the online journal database. Once a member joins the consortium, the agreement includes all journals offered by Academic Press. Currently, the journal titles total almost 200, and 8 million people are authorized to access the

journals. Other publishing groups use the Academic Press licensing model for online subscriptions.

Bolman made several points:

- The cost of going online has risen above expectations and will probably not decrease.
- Is the end of the print journal here? No, total conversion to the Net is 10 years away.
- Internet technology changes rapidly, and it is important to keep up.
- Archives are no longer simply copies of old information. Archives need to live, and each paper should have links to

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### “It’s not your grandfather’s journal anymore.”

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papers that have cited it.

- Reference lists should be active links for researchers. This creates a new dimension to literature research.

When journals consider online versions, they need to determine why they would want to go online, Bolman said. What needs and purposes does the journal have? And is it necessary to go online alone, or should the journal join a publishing group? Several publishing groups, including Academic Press, continually add journals to their online collections.

Monica M Bradford, managing editor of Science, provided an editorial perspective on going online. Science appeared online to subscribers in 1995. The online content of its site is more than a recreation of the journal, Bradford said. Space and time limit the paper journal, but online information can grow and evolve. Science Online includes indexes, technical comments, links to additional information, and interactive forums with authors. For the editorial staff, going online means work, Bradford said. The

staff needs more resources and technical information than before. Going online also can be expensive. Reformatting text, hiring personnel, developing software, and providing user support represent only a few of the new costs.

Peter B Boyce, senior consultant for electronic publishing for the American Astronomical Society (AAS), finds that the more items, such as abstracts, online journals offer to the public without cost, the more subscribers the journals get. AAS, which began publishing online in 1995, publishes a new issue online every 10 days. AAS publishes online first, so an online edition is not an addition to the paper version.

Journals need to decide their goals in going online, Boyce said. Good electronic journals constitute a permanent resource for transferring reliable and accurate information from producer to user. Many journals go online with partners, he said. Electronic publishing for AAS is in collaboration with the University of Chicago Press. The AAS online journals include machine-readable data, videos, and other features impossible to reproduce on paper. A linked site, the Astrophysics Data System supported by the National Aeronautics and Space Administration, contains a searchable database of abstracts and scanned images of the historical astronomy literature back to 1849. Production costs for the online plus paper versions are slightly less than the cost for the paper version alone in 1994. Copyediting costs are higher, but typesetting costs are reduced through the use of automation and electronic editing tools. When planned for, archiving costs are small.

Boyce advises other journals to experiment with online publishing and share the results. “It’s not your grandfather’s journal anymore”, he said, adding, “and we are just beginning to understand how to use the new medium.”