

# Plenary: Recombinant Scholarly Publishing: Challenges, Trends, and Emerging Strategies

## SPEAKERS:

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If you're a member of CSE, you may be familiar with *The Scholarly Kitchen*,<sup>1</sup> the official blog of the Society for Scholarly Publishing, which has established itself as a rich repository of information and an open forum for dynamic discourse that promotes collaborative, educational encounters among scholarly publishing professionals. Among the *Scholarly Kitchen's* many designated "chefs" (i.e., regular writers) are Lisa Janicke Hinchliffe and Roger Schonfeld, both of whom possess a uniquely comprehensive, global perspective spanning the fields of scholarly publishing, scientific research, communication, academic libraries, and higher education. As joint plenary speakers at the 2022 CSE Annual Meeting in Phoenix, Arizona, Hinchliffe and Schonfeld shared their insights and observations about several recent trends and trajectories they've identified in the scholarly publishing industry.

Hinchliffe began the tandem talk by framing it within the concept of *future thinking*—the goal of which is not necessarily to predict the future, but rather to engage in strategic dialogue and raise informed, enterprising questions that will serve to sculpt the world in which we eventually live. Doing so, she said, illuminates the policies and strategies that factor into a desirable future, with the caveat that a desirable future for one party may be unappealing to another. In addition, she warned against strategies that conflate idealism with reality; although idealism has its place in future thinking, a strategy for a future that is not grounded in realism may decrease the likelihood of that future coming to fruition.

Hinchliffe opined that crafting a potential future requires a thoughtful assessment of current trends—including available resources, discernable risks, and systemic pressures—as well as their potential implications. Trends are not necessarily specific to a particular initiative or institution and can even be in conflict with one another; however, they

share a commonality in the signals that reveal their nature and their trajectory. According to Hinchliffe, developing strategies, policies, and initiatives based on analyses of these trends increases the "probability, possibility, plausibility, and feasibility" of achieving a future that will benefit the scholarly publishing community at large.

Hinchliffe then referred to 7 current trends she and Schonfeld have been observing in the scholarly publishing industry. She discussed the first 3 of these trends before yielding the podium to Schonfeld to address the remaining 4.

## 1. The Age of Syndication Has Begun

The pieces of an infrastructure to support syndication of scholarly publishing content were put into place a few years ago: Springer Nature syndicated content to ResearchGate, and Rockefeller University Press and Wiley soon followed suit. In addition, both Wiley and the Royal Society of Chemistry have syndicated content to ScienceDirect, which struck Hinchliffe as remarkable: "If I had told you 5 years ago that Wiley would be serving up their content on Elsevier's platform, would you have believed me?"

## 2. Large-Scale Approaches to Infrastructure Are Maturing

Noting that content syndication is a smaller part of the larger-scale industry infrastructures being developed, Hinchliffe observed that infrastructures are maturing among for-profit and not-for-profit enterprises. Regarding the former, she cited STM Solutions,<sup>2</sup> a next-generation collaborative that was established in response to the seemingly exponential appearance of multiple tool-based collaboratives, such as CrossRef and ORCID. In the not-for-profit domain, Invest in Open Infrastructure recently issued a White Paper that attempts to define *infrastructure*,<sup>3</sup> The Knowledge Exchange recently released a report on alternative publishing platforms,<sup>4</sup> and the library platform group from The Educopia Institute is investigating how not-for-profit organizations can compete with scholarly publishing preprint services.

## 3. The Business Models for Open Access Are Solidifying

Article processing charge-based fees have become the basis for transformative and so-called "pure publish" agreements,<sup>5</sup>

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indicating a trend toward managing Open Access (OA) fees at an institutional level. And although some nascent small-sponsorship OA models have emerged, Hinchliffe noted that they cannot match the scale of output seen in the global scholarly publishing industry—meaning authors will have fewer OA choices within institutional infrastructures. In addition, alternative models such as Green OA will become deprecated, given that the very environment within which they operate pressures publishers to implement pay-to-publish rather than pay-to-read models. Finally, the intense policy pressure in Europe owing to Plan S forces publishers to offer transformative, institutional-level agreements—a trend that is particularly challenging for smaller publishers, who may need to partner with editorial service organizations to approach the scale of larger publishers.

#### 4. Scientific Openness Is Receding from its Global Peak

Schonfeld began his segment by highlighting a trend toward promoting science as an essential, global public good, specifically citing the United Nations' sustainable development goals for scientific research. Over the last 20 years, he said, we've moved away from thinking of the scientific enterprise as a distinguishing characteristic of individual nations and have come to view it as a global initiative, one in which openness is an essential component. Yet the last 5 years have seen a shift in this mindset. Geopolitical tensions have spilled over to the research enterprise and higher education, causing substantial disruptions in scientific collaboration and scholarly communication.

#### 5. Trust in Science Is Eroding

In roughly the same period, Schonfeld noted, science has become a tool of politics in several countries, with politicians and media outlets using—and misusing—issues such as climate change and COVID-19 vaccinations to sow seeds of doubt about the scientific enterprise. Yet he stressed that this phenomenon of mistrust is not strictly external to the scientific community. Citing preprints and OA as vectors for misinterpretation of scientific research among scientific and nonscientific audiences, respectively, as well as the still-prevalent fraud and misconduct within the scientific community, Schonfeld acknowledged the natural if not unforeseen consequence of the objective observer who asks “Should we #TrustScience?” Finally, he said, there is evidence that hostile nation states have used the scholarly communications infrastructure to introduce misinformation and disinformation into our political discourse, further eroding public support for science.

#### 6. The Scholarly Record Is Fragmenting

Scholarly publishers have historically considered the article PDF as the version of record—the “canonical object,” as Schonfeld put it—and have resisted viewing supplemental materials (such as data sets, trial protocols, and software packages) as being of equal significance. Yet these separate research objects are increasingly coalescing to create a more cohesive, machine-interpretable scholarly record, leading Schonfeld to envision a scenario in which the human-readable element of a given article constitutes a small percentage of that article's content. It will be interesting, he said, to see whether the historical “one-to-many” relationship between an article and its related research objects trends toward a “many-to-many” relationship over time.

#### 7. A Different Type of Merger Has Come to Characterize the Industry

Schonfeld noted that for some time, mergers and acquisitions occurring within the scholarly publishing industry largely involved competing publishers acquiring and merging with one another; however, such transactions have become increasingly rare. Instead, larger publishing houses have been investing in expanded services components of their businesses, acquiring organizations that support universities, societies, funders, and users who engage with the scientific community. Schonfeld attributed this “substantial trend” to a shift in strategy among publishers to distinguish themselves from one another by way of the extended services they provide, saying that he expects these types of investments to continue to expand and diversify in the future.

The Q&A session that followed the talk was rife with astute questions that prompted compelling responses from both Hinchliffe and Schonfeld. As so often happens, some of the questions begat additional questions, supporting Hinchliffe's earlier emphasis on the importance of analyzing current trends so that we might make decisions that yield a desirable future.

#### References and Links

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