PROBLEMS AND POSSIBILITIES FOR INTEGRATING RECORDED CONFERENCE CONTENT INTO SCHOLARLY PUBLICATIONS

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INTRODUCTION

Conference presentations play an essential role in scholarly communications and the research lifecycle. Indeed, by some estimates, there are more than 4.5 million presentations at academic, scientific, and professional conferences each year, a figure which would make them, numerically at least, the "major medium of scientific communication."[1] In theory, most of these presentations will be turned into journal articles, where the data and findings originally presented orally in front of a live audience will be made accessible to researchers around the world. In reality presentations are among the most ephemeral of research outputs. If they are later published— and many, even most, presentations are not—it will be in revised form and after significant delays associated with the publication process.[2] Except as lines on a CV, the remainder effectively vanish from the scholarly record.

Prior to the pandemic, virtual conferences were an anomaly, and the daunting economics of recording presentations delivered in conference hotels and convention centers ensured that few conference presentations were recorded. When COVID-19 forced academic conferences around the world onto virtual platforms, it suddenly became possible to routinely record entire conference programs at little to no extra costs. Between 2020 and 2023, untold thousands of such recordings have been made by conference organizers. Once recorded, conference presentations could be transformed from ephemera into widely accessible scholarly outputs. As yet, the business models that would support this transformation remain unclear. However, the sudden flush of content invigorated efforts by well-established publishers, scholarly societies, and commercial start-ups to experiment with what to do with this content and in particular, how to monetize it.

As the primary organizers of large academic meetings, scholarly societies play a critical role in creating recorded research presentations. Broadly speaking, they have followed one of four approaches towards that material. Some have chosen to treat access to recordings as a perks of meeting registration by giving registrants access to conference recordings for a few weeks or months after the end of conference. Others are experimenting with making recorded presentations a member benefit. A few are distributing the content freely through YouTube or on the association's website. And some are partnering with start-ups to package and license the recordings as a new content, and revenue, stream.

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This paper focuses principally on the last of these approaches because societies often assume that university libraries, who already play an essential role in providing access to written scholarly outputs, will be their primary customer. As these products come to market, university libraries will benefit from consideration of the opportunities and risks involved in reconfiguring ephemeral conference presentations into a durable content stream.

I begin with a brief overview of the types of products beginning to come to market and assessment of the most significant argument in favor of wider distribution of recorded research presentations: that they democratize access to cutting edge research findings, accelerate the spread of new knowledge through research communities, and ultimately increase the pace of scientific discovery. This is an idea that makes a great deal of intuitive sense, though the disconnected scholarly literature on conferences as a form of scholarly communications provides mixed evidence to support it. I then raise several concerns about the potential distorting effects that widespread recording of presentations might have on scholars and the research process and speculate about the current level of demand for recorded presentations. I conclude by suggesting that recorded research presentations from specific disciplines can make useful additions to library collections: nevertheless, libraries should be cautious about making significant investments in licensed conference content until questions about their value to research communities have clearer answers.

VENDORS AND BUSINESS MODELS

Several models for aggregating recorded content into licensable products are emerging from collaborations between scholarly societies, publishers, and start-ups. These include both pay for access and pay for publication models, with the former being more common.

Many pay for content models focus on recordings created by a single society and devoted to a specific field or discipline. Examples of this approach are the American Society of Civil Engineers' (ASCE) and the American Society of Mechanical Engineers' (ASME) Conference Video Collections—both hosted on Morressier's platform. The ASCE and ASME conference video collections are available as either an add-on to existing journal subscriptions or a stand-alone institutional subscription. Similarly, Cadmore media hosts video content from the American Institute of Aeronautics and others, and has partnered with the American Institute of Physics' publishing wing to integrate video and audio content into their journal portfolio. At present, these collections are modest in scale and cost. The ASCE conference video library, for example, currently includes 1,225 presentations from 13 different conferences and costs $2,030 to license.[3]

Underline, which sometimes calls itself the "netflix for scientists," is taking a more centralized approach. Their digital library now includes more than 25,000 video presentations from a range of disciplines, including both open access and subscription only content.[4] Like other vendors in the space, videos in the library have DOIs, abstracts, transcripts, MARC records, and other features designed to increase their usability. Regardless of the size and scope of the product offering, libraries are the entities that are most likely to be targeted as customers.

Pay for publication models directed at academic institutions are currently less common on the marketplace, though Cassyni—which is unique for focusing on seminar presentations rather than conference presentations—is building its video archive in a manner reminiscent of publish and read contracts.[5] While most video libraries include open access content, Cassyni's entire collection is free to viewers, with fees paid by content creators, publishers, and institutions. Their publishing model has attracted attention from Elsevier, which is using the platform to host and archive content related to its physics journals and Springer Nature, which has compiled webinars and conference content related to math and statistics. Cassyni also markets its service to individual departments and universities, though they have not yet prioritized libraries as customers.

THE EARLY STAGE RESEARCH HYPOTHESIS

The most consistent argument in favor of the rapid dissemination of recorded research presentations is what I will call the "early stage research" hypothesis. The core idea is that researchers often use conferences as venues for sharing new findings and emerging perspectives for the first time. In traditional conference settings, the impact of these new discoveries are blunted, because only the small number of people in the room have access to them.

Besides slowing down the spread of discovery, the early stage research hypothesis posits that recording and distributing conference presentations can disrupt deeply entrenched inequalities that stratify academic communities. At in-person conferences, the individuals in the room gain a competitive advantage over those who will need to wait months or years while those findings make their way into print. Ample evidence suggests that those benefits will accrue disproportionately to the most privileged members of academic communities.

The high cost of travel makes participating in in-person conferences difficult for early career researchers and faculty from under-resourced institutions in the United States or the Global South, while the need to travel limits attendance by those with caregiving responsibilities or with certain disabilities. Even before the pandemic, early career and precariously employed scholars, and even tenured faculty at many institutions were voicing concerns that they were being priced out of their discipline's major conferences. Women, scholars of color, and other members of marginalized groups frequently reported cultural problems ranging from microaggressions to outright harassment.[6]

The virtual conferences of 2020-2022 have provided powerful quantitative evidence on the cumulative impacts of financial equalities and hostile academic cultures. Several important studies have documented huge increases in the number of women, international scholars, and people from historically marginalized groups who participated in virtual meetings.[7]

For advocates, recording and distributing conference presentations can disrupt deeply entrenched inequalities that stratify academic communities by opening access to entire research communities. As Morrison et. al, explain, the time is ripe to "stop thinking of annual scientific conferences as only updating a subset of attending scientists on what is happening in a field and start thinking of conferences as being able to update the entire world …especially all relevant scientists," on the latest developments.[8] In fast moving fields such as computer science and engineering, which already rely heavily on conferences to quickly communicate new discoveries, the impact of increased access could be particularly transformative.[9] Subscription services of recorded presentations would clearly improve the accessibility of conference content, though they would not address barriers to accessing the social and networking benefits of conference attendance, or provide opportunities for excluded individuals to present their own research.

If the accessibility and diversity benefits of recorded presentations are relatively straightforward, evaluating the actual and potential impact of greater dissemination of "early stage research" on knowledge production is more challenging. Despite their ubiquity, research on the impact of academic conferences is still relatively uncommon, with most of the studies that do exist focused on their social functions or bibliometric analysis of resulting publications.[10] The assumption that conference presentations serve to speed the pace of knowledge exchange is ubiquitous in the literature on conferences, the marketing language used by societies and vendors, and by organizations such as the NIH that are well positioned to grasp productive, but diffuse influences on scientific research and discovery. However, direct evidence of this effect is rare. Some bibliometric work has suggested that conference presentations (as represented in proceedings) can be "interpreted as early indicators of scientific development and even the configuration of new fields of inquiry."[11] There is interesting evidence that scholars attend conferences, in part, to keep up with the latest research in their fields. Ithaka S+R's 2021 national survey of faculty found that conferences were the most common way that faculty learned about new research.[12] Other literature has suggested that significant majorities of conference attendees go home with new ideas to further their research.[13] Even so, it is difficult to know where expectations about the impacts of conference presentations end and their actual effects begin.

In this respect, recorded research presentations share similarities with preprints, a comparison that vendors have sometimes evoked as a parallel.[14] Preprints have been similarly credited with accelerating the pace of discovery and in the well documented case of COVID-19 have empirical evidence to support this contention.[15] In theory, timely and widespread distribution or recorded conference presentations could allow *even earlier* stage research to circulate within research communities, thus further accelerating the pace of knowledge exchange. It's worth asking, though, when the quest for ever earlier research outputs meets with diminishing returns or becomes detrimental to the research process. Despite their obvious benefits, the scholarly value of preprints continues to be a matter of debate, with skeptics—and even advocates—warning about the potential proliferation of poor quality research and concerns that preprints can be used to spread misinformation when picked up by

journalists or other non-specialist readers, who may not be equipped to understand the place of preprints within scholarly publication or the nuances of academic literature.[16] Similar questions could be raised about conference presentations, especially those devoted to sharing new findings for the first time.

A final uncertainty is what percentage of conference presentations actually focus on communicating early findings. My point here is not to suggest that conventional wisdom about the use of conferences to share new findings is wrong so much as to add an important, if rather obvious qualifier: unveiling early stage research is one of many purposes for presenting at conferences (and only part of why people attend conferences). This is by no means a bad thing: panels, keynotes, roundtables focused on professional issues, presentations synthesizing bodies of research or publicizing previously published work, all have value—just not those attributed to early stage research presentations. This is an issue only insofar as the value proposition of recorded research presentations as a licensed product is predicated on access to early research, which raises the question of how many such presentations one might reasonably expect to find on a typical conference program, and how much other content the subscriber is also paying to acquire.

ORAL PRESENTATIONS IN THE AGE OF MECHANICAL REPRODUCTION

Conference presentations are designed to be delivered orally to specialized, knowledgeable audiences. The intrinsic feature that makes recorded presentations a potentially valuable tool for scholarly communication is it can convert a fragile, situationally dependent, and ephemeral communicative act into a fixed, reproducible record that can be made available beyond its immediate context. Yet in some circumstances, the ephemerality of an oral presentation delivered to a finite audience and the knowledge that what they share can not circulate widely is an asset rather than a liability. If we are moving towards a world in which the presentations are routinely recorded for subsequent licensing, we will need to consider the ethical, privacy, and intellectual property issues that are raised or intensified by being recorded and made available through streaming. At times, the act of recording may hinder scholarly communication by discouraging candor and risk-taking, perhaps especially by scholars from marginalized groups, who are precariously employed, or who study controversial topics.

Consider a few scenarios. A junior scholar of middle eastern descent is presenting on the conflict between the United States and the Taliban at an area studies annual meeting. Her presentation is highly critical of the United States Army and of individual soldiers accused of war crimes. The presentation takes place in a conference room and is attended by a few dozen researchers with similar issues and elicits lively discussion about whether the actions of the individual soldiers in her case study meet the legal standards of war crimes. A specialist presents preliminary findings from a comparative longitudinal study of the sexual and gender identity of trans men and women which show that some trans individuals' sense of identity changes over time while others are quite stable. They ask their colleagues to refrain from live-Tweeting the session, as they are concerned that their findings might be misused by lawmakers seeking to ban access to hormone therapy by minors. A primatologist shares photos and GIS locations of an endangered primate species that is heavily targeted by poachers. The information he shares is invaluable to conservation efforts, but could easily be used by poachers if shared widely. A graduate student on the job market is presenting findings critical of the chair of a department in their field that is hiring. Elsewhere, the final speaker at a panel dismisses the findings of an earlier speaker with a sexist joke, while a lecturer one room over is speaking about black nationalist poems that may run afoul of their institutions' increasingly strict policies around speaking openly about "divisive content."

While hypothetical, these are all illustrations of the kinds of presentations that are routinely presented at academic conferences. In each case, the transience of oral communication and/or the presenter's ability to trust that their audience is both knowledgeable and discrete are important conditions that enable effective scholarly communication. Even in more mundane situations, recording and distributing presentations may discourage presenters and audience members from taking risks for fear of embarrassment if semi-formed or provisional data that might later be corrected or substantively refined becomes permanently accessible. Particularly in competitive STEM fields, early career scholars are sometimes warned against sharing early findings in conferences,

out of an (largely erroneous) sense that it will hurt their chances of subsequent publication or expose them to being scooped. Some voices have suggested that recorded presentations may exacerbate those concerns.[17]

Considering the steady stream of reports indicating that the intense political polarization of the contemporary United States is fostering self-censorship and caution about how and what faculty research and teach, protecting the conference presentation as a semi-private conversation between peers, particularly in fields in the crosshairs of the culture wars, may be more important to the research process than facilitating its dissemination. Scholars from minoritized groups are particularly likely to face professional and even personal harm when their research circulates beyond its immediate academic context.

My point here is not to make a blanket argument in favor of fully in-person, closed door conferences. Nor is it to suggest that the risks I have identified require that most presentations go unrecorded. Many potentially controversial presentations will never attract notice and in most situations, presenters have the option of declining to have their presentation recorded—if they can foresee the need to do so before delivering the presentation. In the United States, copyright for a recorded presentation depends on a number of factors but in many cases may defensibly be said to belong to the creator of the content—that is to say, the entity that organized the conference rather than with the presenter. The speaker agreements that scholars sign consenting to being recorded often explicitly or implicitly give conference organizers open-ended rights to reuse or publish recording,[18] and—in my personal experience—many virtual events (particularly one-off webinars) are now routinely recorded and redistributed by default without a signed agreement of any kind.

SUPPLY AND DEMAND

One important effect of the virtual first academic world of 2020-21 was that it 'solved' what was, and still is, one of the two most significant challenges to the idea that recorded research presentations could become a mainstream scholarly output. When everything was virtual, entire conference programs and innumerable one-off webinars could be recorded at the push of a button and, for all intents and purposes, for free. The result was a massive increase in supply and in the early enthusiasm for virtual meetings, it was possible to anticipate that a future full of virtual and hybrid meetings would provide an essentially endless supply of content that could be licensed.

That idea seems much less certain now, as many societies are enthusiastically returning to in-person focused meetings. Fully hybrid meetings are no less economically feasible for most societies now than they were before the pandemic: in 2021, for example, the American Academy of Religion, estimated that a fully hybrid meeting would add an additional $4.3 million in expenses.[19] While virtual events and programming have established a place for themselves, the boom-times of abundant, cheap, recorded research presentations looks increasingly like a product of the COVID lockdowns of 2020-21. To the extent this is true, the video collections that are being marketed to libraries are likely to have limited growth in content, and to include less and less of the early stage research that is their primary selling point.

The second challenge is whether there is real demand for the content among scholars. Is this a product in search of an audience? In 2022, Ithaka S+R fielded a national survey of library decision makers about their current and anticipated acquisitions of streaming video. One question in the survey inquired about librarian's interest in licensing recorded conference presentations: 60% of respondents had either no interest or only slight interest, while just 12% reported being very or extremely interested.[20] I know of no substantive research on the topic, but my conversations over the past year with leaders of approximately 20 scholarly societies as part of S+R's work on the Future of Scholarly Meetings has left me with the clear impression that viewership of both open and subscription resources is low.

The vendor community is investing heavily in tools to make their content more compatible with researcher's practices. They are using AI to break oral presentations into small, highly structured and searchable segments, assigning DOIs to individual powerpoint slides, adding transcripts and translations, and building features that add social media and networking components to their platforms. Video is now widely used in postsecondary instructional contexts, but has yet to make substantial inroads into researchers' practices.[21] Whether the tools that vendors are building will be successful in converting scholars to adopt video as a source remains to be seen.

CONCLUSIONS

Research presentations make distinct contributions to scholarly communication, not least because they provide opportunities to share and refine research at early stages of development. As societies and vendors experiment with models for recording and distributing these presentations, those findings will be available to much larger audiences. This could potentially speed the pace of scholarly communication and provide presenters with new opportunities for exposure in a highly competitive academic environment. Yet part of the value of research presentations is the chance to engage with peers and to workshop ideas in a relatively low-stakes situation. This function could be distorted or undermined by the act of recording, which raises the visibility and the stakes of presenting.

Libraries are deeply invested in supporting scholarly communication and ethical commitments that favor increased access as a public good. They may ultimately decide that the potential risks of recording presentations are a problem for scholars and conference organizers to manage, especially if there appears to be demand for the material within their university community.

At present, that demand appears too modest to justify widespread licensing of recorded scholarly content. However, there are certain fields that could merit more targeted acquisitions. Computer science, for instance, is a discipline in which conferences play an unusually large role in scholarship and moves at a pace that may meaningfully disadvantage those without rapid access to the newest ideas. Engineering is another. Physicists have embraced virtual and hybrid meeting technologies, which might be a sign that recorded presentations would have value to researchers. Finally, professional fields that have continuing education requirements that can be satisfied via video recordings may also be worth prioritizing by acquisition librarians—though this type of recording is often sufficiently valuable for societies to market to individuals. New tools may encourage further adoption of this kind of material, as may growth in other types of scholarly video content such as video abstracts that could help bring video into the mainstream of research processes. But for the time being, libraries' caution towards recorded research presentations seems to reflect a market offering that is still in search of a business model and of a clear articulation of its value to the research community.[22]

NOTES

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