The Role of Library Publishing in Making Non-Traditional Research Outputs Count

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Our goal with this presentation is to encourage participants to think critically about ways that library publishing services, including institutional repositories, can make non-traditional research outputs more discoverable and measurable now and into the future. We will start by defining what we mean by "non-traditional research outputs," and discussing why we think they're playing an increasingly important role in disseminating research results. Then we'll discuss ways that libraries can potentially expand their support in this area.
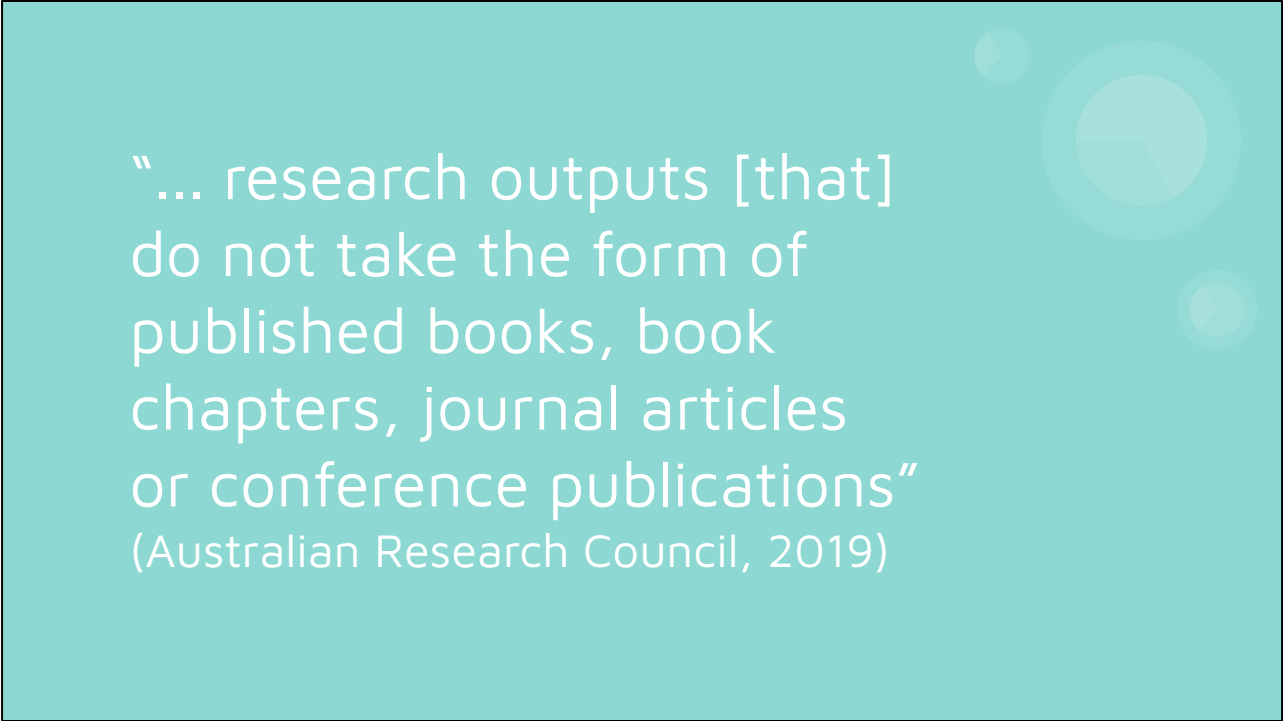
This session is informed by some early, high level results from two related but separate research projects. Robyn will be reporting on a study exploring the role of library publishing to support community-based research in Canada. And Christie will be sharing how academic libraries in the United Kingdom are using institutional repositories to host non-traditional research outputs.

The Library Publishing Coalition's 2020 research agenda notes that more research needs to be done to understand the role of library publishers in stewarding non-traditional research outputs, and specifically mentions institutional repositories as playing a role. This is where our research questions focus.

What Are Non-Traditional Research Outputs?

First we wanted to start by defining what we mean by non-traditional research outputs, since this concept is what unites our research interests and our presentation here today.

To date, we have not found a comprehensive definition of "non traditional research outputs" and we aren't going to try to create one in today's presentation, but we do have some context to help us all get to a shared understanding of this concept.

Non-traditional outputs may be easier to describe for what they are **not**, per this definition from the Australian Research Council. The Australian document goes on to mention outputs such as "original creative works, public exhibitions and events, research reports for an external body, and portfolios" as examples of non traditional research outputs.

The Library Publishing Coalition's Research Agenda mentions "multimedia digital projects [...], data sets, digitized primary source materials, or GIS projects."

In a book chapter published in 2022, Alperin and colleagues examined research, promotion and tenure documents from over 100 North American Universities, and found mention of 127 different types of scholarly outputs, which they grouped into 12 diverse categories.

What unites these outputs is that they are not likely to be of interest to commercial scholarly publishers. As such, they are less likely to be discoverable, preserved, and cited than traditional forms such as articles or books. Because of this, their creators may find it hard to receive academic credit for these outputs, and they may not benefit from the permanence and stability of formally published works.

Why Do Non-Traditional Research Outputs Matter?

So, why do non-traditional research outputs matter? We think that these types of non-traditional research outputs can be very important for a number of different reasons...

- Expectations from research **funders** are changing
- **Institutions** have made commitments to community engagement and impact
- **Research assessment** is shifting to include a wider range of outputs

At a high level, research funding agencies and institutions are recognizing the importance of these non-traditional outputs. In Canada, our federal funding agencies have increasing expectations that researchers will engage in knowledge mobilization and dissemination activities with community partners and other non-academic groups. This echoes a shift from a diverse group of funders beyond Canadian borders who are increasingly concerned with knowledge mobilization. Outputs created with or for non-academic partners are often in the form of reports, infographics, events, or other non-traditional outputs.

Institutions including universities in diverse contexts are also increasingly emphasizing connections with communities in institutional strategic plans and mission statements. This is certainly the case at the institutions where we work in Alberta. Several Canadian institutions have also created services to support researchers with community-based research and knowledge mobilization. We expect that these institutional commitments will result in an increase in non-traditional research outputs that are designed to meet the needs of community partners

Finally, the way research is assessed is also changing, in part in response to funder and institutional expectations, but also in part to reject a narrow reliance on quantitative bibliometrics such as the journal impact factor, which are well-recognized as being flawed and limiting. One prominent example of a researcher-led initiative to change research assessment is the Declaration on Research Assessment (DORA), which developed out of a scholarly conference held in 2012 and now has over 20,000 signatories from across more than 150 countries. One of DORA's recommendations is that a wider range of research outputs be considered in assessment exercises as well as a broader range of impact measures.

- Immediate **real world impact**
- Avoid **duplication**
- Represent **diverse voices**
- "Non-traditional resource outputs **ARE** research outputs"

These resources also hold tremendous value for researchers and information users as they are packaged and shared in ways that directly and immediately serve their intended audience. For instance, they frequently include reports on social issues that are shared with decision makers to inform policy and help community partners secure funding. Openly sharing such outputs may also help prevent duplication of effort, where several researchers might otherwise be approaching the same populations to gather information and conduct similar studies.

These outputs often also include the perspectives and experiences of systematically oppressed groups that are frequently absent from more traditional modes of publishing or inaccurately depicted. A good example of this includes studies utilizing arts-based methods, where participants create videos and photos that are shared openly online to build community, advocate for change, and put a name and face behind structural oppressions.

Lastly, "non-traditional research outputs *are* research outputs." In fact, nearly all of the community-based researchers I have spoken to as part of my current study, which I'll discuss in more detail in a few minutes, conveyed that they firmly believe that such outputs are far more impactful than what results from the articles and books they publish "to keep their jobs." However, what I have also discovered is that despite the support of funders, institutions, academics and non-academics alike, it is often more difficult for researchers to receive recognition for these "non-traditional" outputs towards academic milestones such as tenure and promotion.

What are Libraries Currently Doing?

Considering these challenges in finding and recognizing the impact of these types of outputs, what are libraries currently doing to support researchers who are producing non traditional outputs?

Results from a content analysis of UK repositories (N=77)

- Almost all institutional repositories accept a wide variety of non traditional outputs
- 33% of repositories provide persistent identifiers
- 82% of repositories offer some level of usage metrics
- 47% of websites describing institutional repository specifically mention non traditional outputs

As I mentioned, I am examining how academic libraries in the United Kingdom are using institutional repositories to host non-traditional research outputs. The reason I'm interested in this question is because my own institution signed on to DORA in 2021. For me, one of the exciting things about DORA is its emphasis on a wide range of research outputs, and I wanted to understand if other signatories to DORA had made efforts to promote the use of repositories for hosting and preserving non-traditional research outputs.

To help answer that question, I've been doing a website analysis of institutional repositories at universities in the United Kingdom. I chose to look at the UK because unlike in North America, many institutions there are signatories to DORA and have been for some time. I developed a list of 77 universities in the UK who are signatories to DORA and who have institutional repositories.

With my analysis, I wanted to see to what extent
- Non traditional research outputs were present in these repositories
- Whether institutional repositories were specifically being promoted to researchers as a place to store non traditional outputs

What I found is that while the vast majority of institutional repositories are already hosting a wide variety of non-traditional outputs, this volume of this content is quite small, and only about half of institutional repositories are actively promoted to researchers as a place to host, preserve, make discoverable, and track the impact of non-traditional outputs.
- This despite the fact that about a third of repositories provide a persistent identifier, and more than 80% offer some level of usage metrics (downloads, views, citations,

- altmetrics)

You can probably guess what repository websites and libguides ARE full of:information about how researchers can make open access versions of their peer-reviewed journal articles available to the public.

UK libraries are also under a great deal of pressure to assist their institutions in complying with the requirements of the UK's Research Evaluation Framework (REF), a national evaluation process that determines how public funds are allocated to universities, which leaves even less time to pursue outreach and engagement to faculty about non-traditional outputs which may or may not "count" towards the REF.

Findings from Interviews with Canadian Community-Based Researchers (N=17)

- Services are under-promoted and misunderstood
- Outputs live on temporary websites or offline
- Lack of clear copyright and reuse information

My findings have mirrored that of Christie's. Canadian institutional repositories are also not promoting themselves as a place to host non-traditional research outputs despite nearly all of them providing ways to preserve, track and share such content. 17 interviews I conducted with community-based researchers from across Canada revealed that most had an awareness of repositories, but only for archiving articles. Interestingly, a few noted that they did not see the value of repositories since they believed they only made content available to others on their campuses and not to the public. It was also clear that none of the researchers I spoke with had ever been approached by a librarian to deposit their non-traditional research outputs, nor had they ever explored whether or not this was a possibility.

When I asked about experiences with library services overall, only one respondent noted their libraries' ability to host digital exhibits, but that they found the process too cumbersome. At no point did anyone mention other services like Pressbooks, Open Journal Systems, web archiving initiatives, data repositories, or any other library publishing infrastructure or support.

Instead, I found that many of their non-traditional outputs end up on temporary websites, or they aren't shared online at all. My findings also revealed that the vast majority lacked clear copyright and reuse language, with most researchers admitting they'd never thought of including it on the reports and other outputs they shared with others.

When I asked about preserving this content for future use, most respondents agreed this would be valuable, but most also said they did not have time or resources to prioritize figuring this out.

How Can Library Publishing Services Help?

So, how can library publishing services do more to help support non-traditional research outputs?

- **Institutional repositories** well placed to hold non-traditional outputs
  - Wide range of format types
  - Discoverability
  - Usage Metrics
  - Persistent identifiers
  - Long term preservation

As should be clear by now, we see institutional repositories playing a major role. Repositories are typically quite flexible in terms of the content they can host and maintain; they make content openly discoverable through search engines; and most allow researchers to track and communicate usage metrics associated with their work, which can then be helpful when making a case for research impact.

One important advantage of these platforms is how they can be used to permanently house non-traditional research outputs that can then be linked and embedded elsewhere using persistent identifiers (also noted by Bradley, 2021). This could include linking to them on more temporary project websites, social media, faculty profiles, and in books and articles arising at a later date. This reveals a direct and practical way repositories and other library publishing services can mutually benefit each other.

- **Expertise** from library/publishing staff
  - Copyright
  - Digital preservation
  - Metadata
  - Research metrics/impact

Additionally, librarians and library publishing staff often have expertise in copyright, digital preservation, metadata and impact evaluation that can provide added value to users.
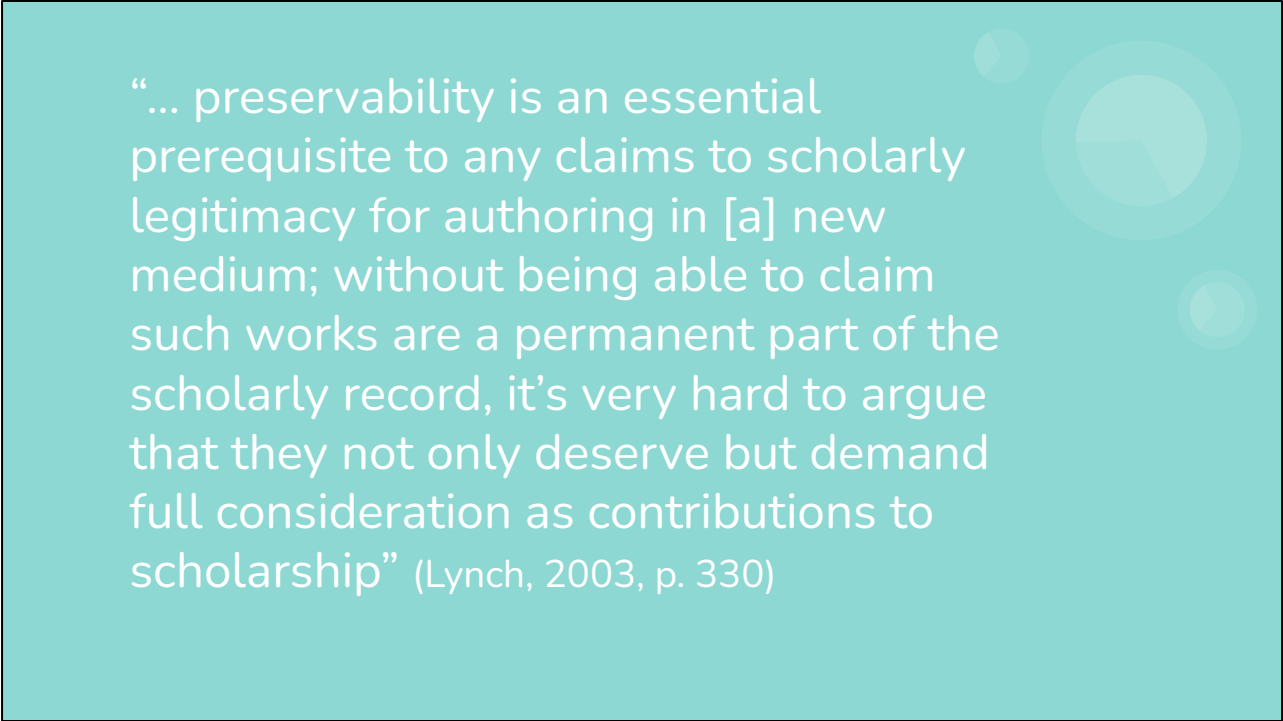
As each of our findings revealed, however, institutions wishing to grow their support for non-traditional research outputs in this way need to take a close look at how these services are communicated.

When I asked researchers about ways that libraries can do a better job of promoting such services, most noted that they never have time to engage with library website content, newsletters or workshops. Instead, most suggested visiting department meetings and making direct contact with researchers to discuss their specific needs.

Several also noted having close working relationships with subject librarians assigned to their departments. This underlines the importance of involving subject librarians in scholarly communications work and ensuring, at the very least, that they are aware of ways that library publishing services and related supports can help advance various types of research outputs.

Final Thoughts

One of the reasons why non-traditional outputs may be less well recognized in academic systems is that they can be ephemeral, housed on grant funded project websites, quickly buried on social media platforms, or presented at a single community event that's not recorded.

> "... preservability is an essential prerequisite to any claims to scholarly legitimacy for authoring in [a] new medium; without being able to claim such works are a permanent part of the scholarly record, it's very hard to argue that they not only deserve but demand full consideration as contributions to scholarship" (Lynch, 2003, p. 330)

As Clifford Lynch noted twenty years ago now, ""preservability is an essential prerequisite to any claims to scholarly legitimacy for authoring in [a] new medium; without being able to claim such works are a permanent part of the scholarly record, it's very hard to argue that they not only deserve but demand full consideration as contributions to scholarship" (2003, p. 330).

Through our research and as scholarly communications practitioners, it is apparent that library publishing services, including repositories, can play a major role in helping to make these works part of the scholarly record to the benefit of institutions, researchers, and the broader public. While this may not be a suitable approach for all non-traditional research outputs, it is an important area for us to consider.

Thank You

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Thank you very much for attending our presentation. We look forward to your questions!

Discussion Questions

- Is supporting non-traditional research outputs **a priority** in your local contexts? Why or why not?
- What **challenges** and **opportunities** have you faced, or do you anticipate, through supporting this type of work?

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