

## SPARC Japan Seminar 2022

Current Status and Challenges of Open Access  
Affected by E-Journal Transformative Agreement and the APC Issues

# The History of SPARC and the Transformation of Open Access

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### Abstract

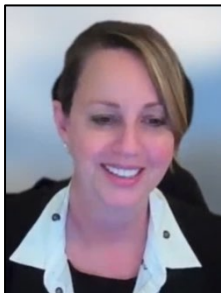


The Scholarly Publishing and Academic Resources Coalition (SPARC) in North America and Japan have interesting origins and histories. Both organizations have played significant roles in building the movement and are leaders in the present-day transformation of Open Access (OA). Each SPARC is unique and has taken different paths to support OA, including building technical infrastructure, providing education on social norms, and advocating for policies and practices as they have charted and navigated the OA landscape. This past decade has brought many new and exciting twists and turns for OA. I would like to consider the SPARCs' influences on the Transformation of Open Access and what the future holds for the distribution of scholarly information.

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Advocate for Open Access and open infrastructure, having recently completed a doctoral dissertation on how the organizations of SPARC NA and JP support open access infrastructure. Recently completed a two-month JSPS Short-term Post Doc with the NII in 2022. SPARC NA Steering Committee member. Chair of the Statewide California Electronic Library Consortium (SCELC) Scholar Communications Committee and of the SCELC IR Subcommittee. Presenter for the Association of College and Research Libraries (ACRL) Scholarly Communication Roadshow. An alumnus of the SPARC Open Education Program 2019–2020 and OpenCon 2014 and 2016. Doctorate in Communications and Information Science and a Master of Library Science from the University of Hawaii at Manoa. Jennifer's career as a Librarian has been committed to researching and advocating for policy that would help faculty participate in Open Access in alternative ways.



My presentation is about the history of SPARC and the transformation of open access. First, I will share some history and key points on the origins of SPARC. Then, I will briefly touch on the 20-year span of open access and where we are today, as well as the Budapest Open Access Initiative (BOAI) and how it can guide how we think about

the future of open access. Finally, I will share my excitement about the transformation of open access and what is happening in the U.S.

### A Short History of SPARCs

To begin, I would like to share a very short history of the SPARCs and some key points (Figure 1).

For my dissertation, I studied SPARC North America and SPARC Japan. My research focused on how institutions support open access infrastructure, including the people, groups, policies, and technologies needed to make research openly accessible.

In the 1990s, most academic libraries were having conversations about the sharing of their scholarly works and they were worried about the serials crisis. Libraries had been considering issues around the ever-rising cost of subscriptions to journals and they were starting to warn their constituents about this impending crisis. In 1997, at a meeting of the Association of Research Libraries (ARL) in the U.S., library leaders banded together to discuss how they could take collective action to address the rising price of journals. This eventually led to the official formation of SPARC North America.

SPARC North America has continued this coalition-driven model for over 25 years, which has helped them get out the broad message of open access. Their activities have been encouraging librarians, faculty members, and scholars to band together and push for open access mandates. They became a national leader and then global leader in open access around education and policy advocacy. They did this through building and maintaining relationships with a network of members and partners whose goals and values conformed to their

own, as well as building communities of practice with their members.

In 2001, a similar thing happened in Europe, where the Association of European Research Libraries (LIBER) voted unanimously to become an umbrella organization for SPARC Europe, who then facilitated competition in European scientific journals and introduced advocacy initiatives tailored to European research and library communities. They facilitated open access through developing policies and influencing leaders at the national and local levels of government for more open scholarship. They also did a lot of advocacy, guidance, and tool service development in support of the implementation and monitoring of open policies. In addition, they were a supporter of cOAlition S and Plan S, and actively worked on ways to aid in their success.

In 2002, we saw the emergence of discussions at Japanese universities as well, with their libraries starting to talk about open access. In 2003, MEXT circulated a report on institutional repositories that prioritized the role of university libraries in the distribution of academic information. After this report, an investigation followed, and the National Institute of Informatics (NII) started working with six Japanese universities to conduct trials and introduce the experimental implementation of institutional repositories. SPARC Japan was formed at that time and is also known as the International Scholarly Communication Initiative. Their initial project was to encourage the digitization of scholarly journals, especially English-language journals published in Japan, with their SPARC publishing partners.

Over the past 20 years, SPARC Japan and NII have been unique in their open access approach.



(Figure 1)

First, they used already established infrastructure to create an interoperable academic cyber infrastructure. Then, in 2013, there was a national deposit mandate, where the publishing of all PhDs was required for doctoral institutions in Japan, thus requiring them to have institutional repositories. Furthermore, SPARC Japan (Note by the secretariat: Should be the NII in a strict sense) began developing relationships via educational activities and partnering with academic and research institutions, building a network of partnerships with journal publishing societies. Finally, they created JAIRO Cloud, a cloud-based national technical infrastructure which has also been tied to unique metadata standards via Japan Consortium for Open Access Repositories (JPCOAR). No other SPARC has created this kind of technical infrastructure (Note by the secretariat: Built by the NII and not by SPARC Japan).

SPARC Africa was founded in 2015, with priorities of capacity-building and infrastructure development to open up the African continent's scholarly output, making it accessible and discoverable to the international community.

## **SPARC Initiatives**

Over the past 20 years, the SPARCs have had many initiatives (Figure 2). Many of them were



(Figure 2)

founded on the goal of collective action to change the way that scholars distribute their work, as well as the goal of breaking big deals. Many of the SPARCs were interested in trying to take some power away from publishers. Librarians and scholars had this great idea as well, and they believed that faculty could advocate for open access mandates.

All of the SPARCs are leaders in educating librarians, scholars, future scholars, and their partners in governments. They are also focused on policy advocacy, government mandates, and legislative actions. In the U.S., SPARC North America works in the Senate and Congress to get politicians to sign on and put forward bills.

In addition, they have been creating specific standards and striving for interoperability, with SPARC Japan (Note by the secretariat: Should be the NII in a strict sense) specifically creating technical infrastructure. They have also partnered with the Confederation of Open Access Repositories (COAR), so we are looking forward to a time when everything works together and scholars can deposit their articles and data. Furthermore, they are expanding open science. I think many of us see open access as a way to expand open science and look at issues of reproducibility and ethics.

I think we could say that each SPARC has taken up these initiatives in different ways, but more than ever, they have become deeply connected with other partners, stakeholders, and open access influencers. Figure 3 represents a small number of them. Partnering together has made SPARC a global coalition committed to making “open” the default in research and education, but there is still more work to be done.

## **The BOAI**

To understand where open access is going and if it is actually transforming, it is helpful to think back to the BOAI, which was convened with a diverse group of stakeholders, 20 years ago. They launched a worldwide campaign for open access to all new peer-reviewed research. They deliberately drew together existing projects to explore how they might work together to achieve open access with broader, deeper, and faster success. They were the first to define the term “open access,” and their definition has become the foundation for open access policies, practices, and laws around the world.

Last year, the BOAI marked its 20th anniversary. To celebrate this milestone, they released four new recommendations (Figure 4) for the next 10 years based on a series of community consultations with people from all over the world, including SPARC and the Research Center for Open Science and Data Platform (RCOS).



(Figure 3)



(Figure 4)

First, they said that we should host open access research on open infrastructure. This would minimize the risk of future access restrictions or control by commercial organizations.

Second, they suggested that we reform research assessment and rewards to improve incentives. In some countries, we make research assessment practices for funding, hiring, promotion, and tenure decisions. We need to eliminate the disincentives for open access and create positive new incentives.

Third, they recommended that we favor inclusive publishing and distribution channels that never exclude authors on economic grounds. No one should have to pay an article processing charge (APC). We should move away from APCs and take advantage of green OA and diamond OA.

Fourth, when we spend money to publish open access research, we need to remember the goals for which open access is the means. We need to think about models which benefit all regions of the world which are controlled by academic-led and non-profit organizations that avoid concentrating on commercially-dominant journals and entrenching models in conflict with these goals. Notably, they mentioned that we should move away from Read & Publish agreements.

## **Transforming OA**

I believe that these recommendations can guide us when we think about transforming open access. Over the past 10 years, publishers, communities, libraries, policies, and SPARC and all of their partners have been working to understand the systematic problems of publishing. We know about the harms caused by proprietary infrastructure, the control of research access, and journal-based research metrics and rankings. We know about the

business models that are excluding authors from participating in open access because they cannot afford to pay. We know what happens when we put embargoed works in our repositories. We also know about the misunderstanding of different methods for providing open access.

On the other hand, we have seen a growth in the overall volume of open access literature, including the number of repositories and open access journals, as well as a growth in the number of journals converting themselves to open access. We have also seen a growth in the use and acceptance of open access preprints.

In addition, we have seen a number of tensions arise around the world. I would like to share about how they are occurring in the U.S. in terms of Read & Publish agreements, mandates, and infrastructure. I have great hopes for the future of open access in the U.S. Things are changing every day, making it a very exciting time to be a librarian in the open access arena.

### **Read & Publish Agreements**

In North America, Read & Publish agreements have become very popular (Figure 5). They provide publishing and reading access to subscription journals. Publishers have identified them as the most effective and sustainable method of transitioning research content in their journals to open



(Figure 5)

access, and more and more institutions in the U.S. are signing them.

I believe there is a great amount of pressure for signing these agreements coming not from librarians, but from our institutions and administrations. Publishers are offering these agreements to us at no extra cost and they are inclusive. Some libraries are excited to sign them as another way to get open access for faculty to enhance their services and start to participate in open access.

My personal experience is that we need to find ways to not become dependent on Read & Publish agreements. Presently, small institutions cannot afford to buy every Read & Publish agreement, so we must pick and choose by looking at how many authors published in certain agreements and estimating if they will possibly use one.

We are spending a lot of time informing and educating faculty about how they can participate in these agreements. We run workshops, create research guides for them, and send instructions to them on how to choose open access when they are going to be published. Our faculty are really excited when they find out that they can publish at the source of the journal.

Unfortunately, the processes around these agreements are invisible and many of us work behind the scenes to create this education. We are also the ones who approve these agreements via the rights portals, but faculty do not have a concept of what is happening. It is hidden to them. They believe that we are paying for this, but we are not.

When we do not have an agreement that a faculty wants or when they see that we do not have the journal that they are publishing in, they become really disappointed. Then, we must position our institutional repository as a second choice to

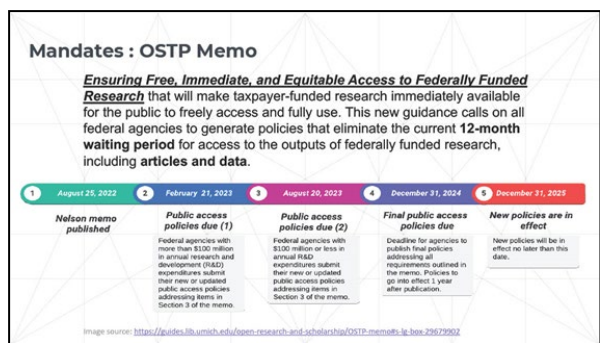
having the article at the journal source. Some faculty will choose the repository, but some will still want it at the source. For many U.S. institutions that do not have institutional repositories, Read & Publish agreements are a great option.

In the future, I worry that faculty will start to expect these agreements and become attached to them, and then, one day, we will no longer have access to them after publishers change the cost and arrangements or we will not be able to break our agreements. Therefore, I am not sure if I am really excited about them, but I think our faculty are starting to learn what open access is based on making a choice. Personally, I would like to move away from them, just as the BOAI is doing.

### The OSTP Memorandum

I am very excited about the Office of Science and Technology Policy (OSTP) memorandum, which was issued on August 25, 2022, ensuring free, immediate, and equitable access to federally-funded research (Figure 6). This will make our taxpayer-funded research immediately available for the public. This new guidance also calls on all of our federal agencies to generate policies that eliminate the current 12-month embargo for access, and includes articles and data.

My perception from the library world is that many of us are hopeful and excited about how the



(Figure 6)

memorandum might change our relationships with publishers in the U.S., and specifically make it so that no one will have to pay an APC. Those who wish to pay an APC can do so, but others may deposit their research in an accepted repository, possibly including our own institutional repositories. Many of our campuses are planning for this policy to come into effect on December 31, 2025. We are excited to follow the guidelines in the memorandum and we are watching several of our federal agencies start to collect information on complying with it.

We are also starting to think about interoperable systems for open access to assist our researchers if we do not have our own repositories. Right now, the majority of items in our repositories are journal articles. We do not deposit data, so we are thinking about ways to link the two processes together to be interconnected. If both the article and the data have to be available, then we need to prepare and think about the different workflows and how to make them happen at the same time.

We already know that faculty members want this to be easy and that they are motivated to do it because they are being funded. If they do not complete the process, they will not necessarily get all of their funds. Therefore, this memorandum presents our communities with ways to interconnect with our researchers who are funded.

Furthermore, on January 11, 2023, the OSTP designated this year as the “Year of Open Science,” so many federal departments are now taking the lead in opening up their research and data.

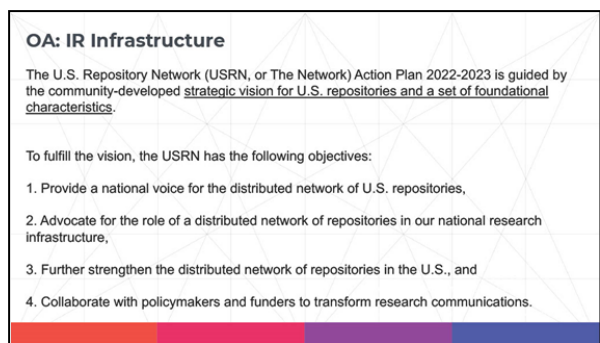
### IR Infrastructure

In the U.S., we are starting to talk about institutional repository infrastructure, similar to Japan’s JAIRO Cloud. The U.S. Repository Network

(USRN) is an initiative of SPARC North America, with support from COAR, who identified the need for assistance in breaking down institutional silos and developing a more cohesive approach and greater collaboration around repositories in the U.S. Currently, our repositories are not networked together. They sit individually within our institutions or we purchase them as they are hosted through various vendors.

Last year, SPARC hired a visiting program officer, engaged with an expert group of library repository professionals, and consulted with the broader repository community to develop a strategic vision for U.S. repositories and a set of complementary foundational characteristics to guide the network's action plan. There is also a steering committee composed of library leaders and repository managers. I believe this action plan will advance the vision and ensure the ongoing engagement and sustainability of the network.

To fulfill the vision, the following objectives have been outlined (Figure 7) – to provide a national voice for the distributed network of U.S. repositories, to advocate for the role of a distributed network of repositories in our national research infrastructure, to further strengthen the distributed network of repositories in the U.S., and to collaborate with policymakers and funders to transform research communications.



(Figure 7)

In this context, “U.S. repositories” refers to all open access repositories based in the U.S., regardless of content, host, or platform. Many smaller institutions in the U.S. do not have repositories, especially those that lack adequate funding, staffing, and expertise, so it is exciting to think we might be interconnected someday. We need to consider where those smaller institutions fit.

At my institution, we are lucky to have had an institutional repository for 10 years. Unfortunately, it is owned by a vendor, so my goal in the next few years, before the memorandum takes place, is to have our own DSpace. Therefore, there is hope and I am very excited about the future of open access in the U.S. and globally.

● **Question 1** Regarding the USRN, how will you divide the roles between existing repositories in each field? Will there be differences for the positioning of each repository?

● **Beamer** We are now starting to have discussions about how we will work together. We have not actually built the network yet.

● **Question 2** Does current strong dollar currency situation boost more Read & Publish agreements between US Universities & non-US academic publishers?

● **Beamer** At my institution, we have five Read & Publish agreements, the most expensive one being with Wiley. Presently, we do not actually pay Wiley more than our subscription, but I worry that they will start to ask us to pay for the “publish”

part which is likely to be too expensive for us eventually.

● **Question 3** I think it is great that SPARC is supporting Read & Publish agreements. Do they provide individual support? If so, does that mean that they are building up knowhow internally on how to negotiate with publishers for Read & Publish agreements? It seems like it would be a valuable asset.

● **Beamer** Presently, SPARC does not provide individual support to institutions for Read & Publish agreements, but they keep us informed on how to negotiate and they have a large database of the cost of journals and Read & Publish agreements.

● **Question 4** Thank you for the insightful presentation. With open access, I think there are many stakeholders and many issues as well. How do you think scholarly communication should move forward? I believe it may be different in the U.S., but could you talk about how you see it in the future?

● **Beamer** I believe that there are two parallel ways that we can achieve open access. We know that faculty like to publish at the source of the journal, but my hope for the future is that we can convince them that using the repository is the better option. However, I think the best that we can hope for now is that both of these systems will run together in parallel. If we cannot get faculty to use repositories, then we can help with APCs.

● **Question 5** Even if Gold OA by Read & Publish agreements is needed for the time being, I do not

think it is the final goal. What are your thoughts on how to transition from Gold OA to diamond OA?

● **Beamer** I believe that the government can help us with this task. We need to figure out a model where nobody has to pay, but we know that somebody has to pay for the technical infrastructure. I believe JAIRO Cloud is very successful because it is supported by the Japanese government (Note by the secretariat: The JAIRO Cloud service was developed and is provided by the NII. It is operated by JPCOAR, receiving fees from user institutions.). I think this would also be the best option in the U.S. We could have money for a kind of national repository.

I do not know the best way to transition, but I worry that Gold OA publishers will keep charging us in the same way they have for the last 30-40 years for our journal subscriptions.

● **Question 6** The BOAI recommendations are saying that scholars should not have to pay APCs and that green OA or diamond OA should be used. With that said, I think some scholars would prefer to publish in well-known journals, even if the APC is expensive, in order to increase their research performance. In the transition to open access, do you think that a way to assess research performance should also be included?

● **Beamer** I think there will always be researchers who will pay and include the request for payment in their grant. The reward that faculty receive in the U.S. when they publish is tenure or promotion, so I think there needs to be a kind of incentive for them to publish in OA. They could also run an OA journal or publish an OA book. They should be



rewarded for this kind of activity.

Nevertheless, we have a very long way to go. Many faculty still do not want to publish in OA. I think in a few years, they will realize with the OSTP memo that they have to do so if they want to use a federal grant, but it is a challenge to encourage them. For now, only their employer can help them by giving them a reward to publish in OA.