

# A librarian perspective on Sci-Hub: the true solution to the scholarly communication crisis is in the hands of the academic community, not librarians



*Sci-Hub is a pirate website that provides free access to millions of research papers otherwise locked behind paywalls. Widespread dissatisfaction with scholarly communications has led many to overlook or dismiss concerns over the site's legality, praising its disruptive technology and seeing justification in the free access it affords people all over the world. **Ruth Harrison, Yvonne Nobis and Charles Oppenheim** discuss the challenges Sci-Hub presents to librarians advocating for open access to scholarly content. Sci-Hub perversely enhances the status of prestige publication and its narrow view of what constitutes value in scholarly communications, its users risk causing their libraries to be in breach of licensing agreements, and the site operates with an utter contempt for copyright law that should not be ignored.*

Librarians often appear as the unwanted spectre at the open access to literature feast; urging restraint whilst others access research papers via Sci-Hub. Discussions on Twitter (most recently initiated by [a George Monbiot article in The Guardian](#) in which the journalist praises Sci-Hub for providing unrestricted access to research papers and recommends that people use the site) reflect conversations taking place in libraries and elsewhere in the wider community about whether use of Sci-Hub should be condoned or condemned.

In one corner of academic Twitter, enthusiastic supporters of Sci-Hub (including many open science and research advocates) praise the disruptive technology and the seemingly free access to research the site provides. In the other, a strange alliance of librarians and publishers (who, it must be stressed, are not natural bedfellows) raises concerns with the site which are frequently overlooked or justified by “publishers are ripping us off” arguments.

It becomes exhausting to be charged with defending the status quo and to be accused of complicity in the scholarly communication mess we now find ourselves. There is some justification to this latter charge, as librarians naively bought into the concept of the “big deal”, the very existence of which underpins much of the current dysfunctional publishing ecosystem. However this narrative ignores the long tradition of open access advocacy within the library community.

This post aims to redress the balance by presenting a (UK) librarian perspective on Sci-Hub and demonstrating that the solution to the journals crisis (a term used since the early 1980s, so these issues are longstanding) is not in the gift of librarians but of the academic community. It is very easy to forget that libraries are a service industry and our customer base is formed of the institutions we work in and the staff and students who are our patrons.

## So, what is Sci-Hub?

Sci-Hub, which describes itself as “the true solution to the Open Access problem”, [claims to make over 70,000,000 research papers](#) freely accessible (for pragmatic reasons, we have linked to the Twitter account as the website itself keeps changing domains). Established in 2011, Sci-Hub and its founder Alexandra Elbakyan have been the target of publisher opprobrium and legal action for breach of copyright. However, it has also received uncritical praise from many researchers and open science/access advocates, with Elbakyan being nominated for several open access awards.

Sci-Hub is symptomatic of a wider problem. It is indisputable that something is badly amiss with the state of scholarly publishing (unless one is a shareholder in a major publisher or one of its employees). Whilst there is a cost to publishing, profit margins are consistently high (e.g. Elsevier at [36.8% in 2018](#)), a few major players dominate the sector, and big deals mean institutions are unable to cancel unwanted subscriptions. The cost of big deals rises faster than inflation and faster than library budget increase; the result is that library expenditure on smaller publishers of journals, and on monographs, is squeezed. Moreover, the multi-year nature of these big deals leaves only a small window for cancellation every few years. The irony is that the transition from print holdings to online access has meant we are ever more shackled to a pricing model that largely, though not exclusively, reflects historic print spend.

Although there is some evidence that national consortia (as evident in Sweden and Germany; Jisc in the UK represents too diverse a constituency to be much more than a purchasing group) can bring pressure to bear on publishers (in both above-mentioned countries negotiations have stalled and access to some big deals suspended), the latest negotiations seem to have reached an impasse.

Moreover, open access mandates from UK funders and the REF 2021 requirement that all journal articles and conference proceedings from 1 April 2016 are open access have meant a further increase in publisher profits but without this being matched by an increasing open access availability of newly published research. It is [estimated](#) that 80% of all new articles published in 2018 will be behind a paywall. Clearly this situation leads to many frustrations and inequities, where access to publicly funded research is often not freely available to either researchers or the public (“walk-in” access via public libraries is not a practical solution). Sci-Hub seemingly offers a solution by providing free access at the point of use with none of the additional burden of access management demanded by institutional providers (indeed, much Sci-Hub use is in [evidence around university campuses](#), where access to journals is often not a problem).



Image credit: [Alexander Sinn](#), via Unsplash (licensed under a [CC0 1.0](#) license).

## So, what are our objections to Sci-Hub?

Firstly, there is an irony that whilst arguing that academic research should be available freely, the papers Sci-Hub provides access to are those only available via subscriptions and, in the main, provided by “legacy publishers”. Enabling access to these papers only serves to reinforce the association that these final, peer-reviewed manuscripts are the *de facto* currency of science. This perversely enhances the status of prestige publication (or “ribbons” as Jan Veltrop, one of the architects behind the original big deals, calls them). It is also completely at odds with [DORA](#) (the San Francisco Declaration on Research Assessment) which calls for a reappraisal of how the outputs of research are evaluated, and for “[the need to eliminate the use of journal-based metrics, such as Journal Impact Factors, in funding, appointment, and promotion considerations](#)”.

This is a very narrow view of what is of value and ignores genuine open access publishing and innovations such as the increasing use and visibility of preprint servers. It can be argued that, far from being disruptive or publishing’s “Napster moment”, by providing access to such material Sci-Hub is stifling the impetus needed to innovate in publishing.

Access to material that is included in Sci-Hub is available elsewhere. Libraries have always tried very hard to enable, within ethical and legal constraints, as instant access as possible to research literature, including (in the UK) an interlibrary loan system which can deliver a journal article to a desktop within 24 hours of making a request.

This may be slightly unwieldy and we strongly agree the system can be improved. Doubtless it will be, as there are many innovative start-ups in this area: examples include [Unpaywall](#), which links readers to open access versions of papers; [Dissemin](#), which finds papers behind paywalls and invites their authors to upload them to an open repository; or the [Open Access Button](#), which facilitates open access requests for research from authors. ResearchGate is a well-established method for sharing research outputs with colleagues, though it, too, has suffered from legal action by big publishers demanding some of the outputs be taken down as they infringe publishers' copyright.

It is also counter-intuitive to argue that the reason the big deals no longer work, and why we should walk away from them, is that their cost reflects that fact that they are leveraging unwanted content, whilst applying precisely the opposite logic to Sci-Hub. No single institution can provide access to all published content and it is unrealistic to expect this.

Again, it is ironic that access to the site is provided by the very mechanism it means to subvert. This argument becomes even more extreme when it is taken to its logical conclusion (which all three of us have heard) that we should cancel library subscriptions and rely on Sci-Hub: a major reason Sci-Hub exists is because of the subscriptions we pay for. It is unashamedly illegal and it is parasitic on library subscriptions.

Elbakyan has been coy about how the site is populated, stating only that it is via donated institutional logins. A September 2018 [Scholarly Kitchen post](#) about this was subject to ridicule by many on Twitter. There was scepticism of whether the "phishing attacks" Sci-Hub has allegedly carried out on publisher websites really occurred (the authors have all heard anecdotal evidence of these), the seriousness of donating access credentials, and the source of funding behind the site, the last of which we cannot comment on. Yet again, publishers and librarians found themselves strangely aligned.

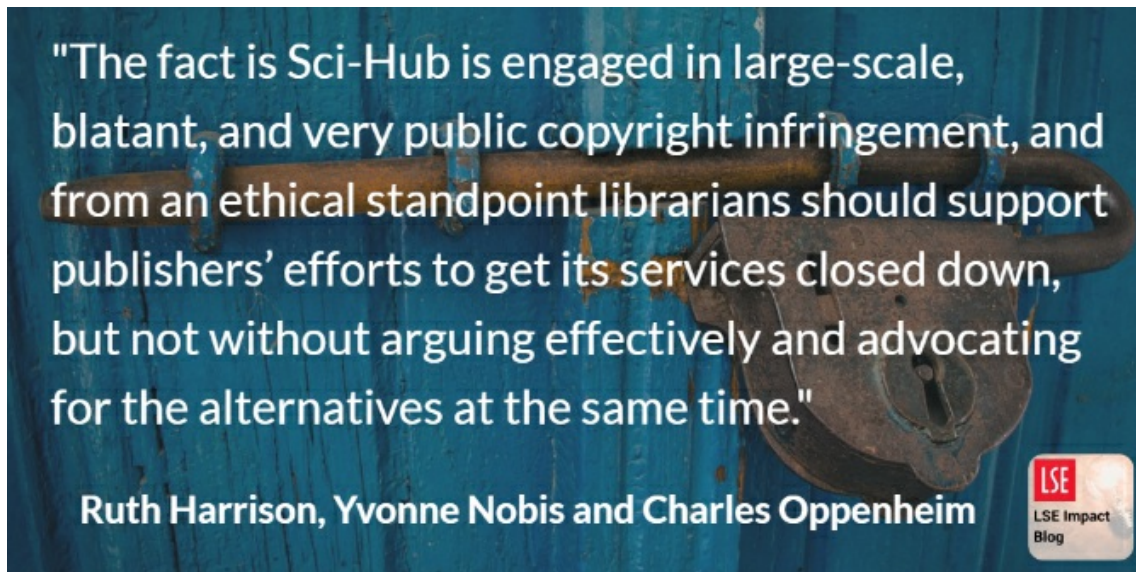
In terms of library access and users donating subscriptions, such action puts access to all our users at risk.

Any systems librarian can tell you of incidences where university-wide access has been "cut off" by publishers due to what is considered to be excessive downloading. As one publisher has explained, it is very difficult to determine genuine text and data mining activity from Sci-Hub "attacks" (their words). Significantly, UK Government advice relating to the text and data mining exception to copyright states that copyright owners are entitled to restrict access to their material if they feel the performance of their systems is being reduced by excessive downloading. There is no question that publishers have seized upon this advice (which has never been tested legally) as an excuse to threaten to cut off access to libraries where genuine text and data mining activities are performed.

Moreover, university libraries can become liable for breach of their contractual terms if services are misused, or credentials passed on by library users. Typically, contractual terms specify that "Authorised Users must not provide access and/or allow use of the Licensed Material by anyone other than Authorised Users" (or words to that effect). Thus, if a subscribing institution knowingly lets an Authorised User do this, or turns a blind eye to the problem if it is drawn to their attention, then the subscriber is in breach of its contract with the publisher and will be cut off.

Where a user donates their password to Sci-Hub, it is highly likely that the institution will be unaware of this, but it would still be liable. If an Authorised User donates their password without the subscriber being aware of it, the subscriber is *still* in breach because another clause will typically state "The Subscriber agrees to use all reasonable efforts to ensure the Authorised Users do not give their passwords or other access information to anyone else". Clause 10.6 of the standard Jisc licence states "Nothing in this Licence shall make the Institution liable for breach of the terms of this Licence by any Authorised User provided that the Institution did not cause, knowingly assist or condone the continuation of such breach after becoming aware of an actual breach having occurred", but unfortunately, many contracts libraries enter into with publishers do not include such a clause. One recommendation would be for all libraries to try to include such a Jisc-type clause with publishers in future.

The cost of donating credentials is often very high to the user; in a federated access environment, the password for access to resources will most probably also be that for access to personal and financial information. There is a clear data protection law breach risk if someone passes such information to a third party without permission, and as a recent [Morrisons supermarket data protection case](#) has shown, the employer ends up with the liability for a data protection breach initiated by an employee.



Our final objection to Sci-Hub is its utter contempt for copyright law – and this is an important point. Ownership of copyright in a work gives the owner the exclusive right to certain “restricted acts” in respect of that work, and a copyright owner may authorise others to do those acts by licence. Elbakyan is scathing in her blog posts “about so-called copyright law” that was “created to make to taboo free distribution of information”. The fact is Sci-Hub is engaged in large-scale, blatant, and very public copyright infringement, and from an ethical standpoint librarians should support publishers’ efforts to get its services closed down, but not without arguing effectively and advocating for the alternatives at the same time.

Copyright exists to protect authors’ rights in their work. It is the author’s choice to transfer copyright to the publisher, as most of them do. Therefore it follows that the publishers do have the legal right to take action in breach of their copyright by publication on Sci-Hub.

This is the essential problem with much of current scholarly output: that authors are willing to transfer copyright in their works to publishers. There is a legal debate as to whether an academic owns the copyright in research outputs they create. There is a rule in copyright law that the copyright in anything created by an employee as part of their employee duties automatically belongs to the employer, not the employee. In general in the UK, academic employers have turned a blind eye to employees claiming, and then assigning, copyright in their outputs to publishers. So at the very least, custom and practice indicates that employees can do what they want with the copyright they appear to own. However, they don’t need to assign copyright to the publisher. As noted above, they could simply give the publisher a limited licence, for example, to just reproduce in a specific journal, and retain all other rights for themselves. Initiatives such as Plan S and the UK Scholarly Communication Licence are largely based on this approach. There has been some debate as to whether Plan S infringes “academic freedom” in that it forces recipients of public research funding to publish in some journals, but not others. That debate is outside the scope of this blog post.

We believe that although there are some things libraries can do, such as advocacy, examining purchasing decisions, and practical actions (i.e. insisting on a Jisc-type clause in every licence agreement we sign), the real onus is on academics to solve this problem. Here, we suggest some things for academics to think about and to act upon:

1. Instead of saying “it’s ok, I’ll go to Sci-Hub” when looking for the full text of an output, ask why they are condoning using a blatantly illegal service.
2. Ask publishers why they insist on authors signing over their copyright. Refuse to assign copyright to a publisher when that publisher accepts an output, and insist on granting the publisher a limited licence to publish in a specific journal instead – and be prepared to walk away if the publisher says you must assign the copyright.
3. Ask why your university should support the out-of-date system offered by the vast majority of publishers as a method of research dissemination. Ask why you are participating in a reward system that has nothing to do with the actual quality of your research, and everything to do with a publishing system that hasn’t changed in many decades.

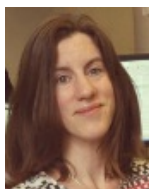
4. Ask why we are operating a print subscription model when the internet is available. And ask why you are berating your library when they a) spend money on a subscription and b) when they don't spend money on a subscription.

Academic libraries exist to provide access to knowledge for their communities; we would love that knowledge to be openly available and there are many, many things we would prefer to do instead of managing subscriptions, **but until those in the academy accept their role in the research dissemination process and acknowledge that it is only they who can change it, please stop saying Sci-Hub is free, and that libraries should “just stop paying subscriptions”**.

*This blog post first appeared under a different title on the [UK Copyright Literacy](#) blog and is published under a [CC BY-SA 4.0](#) license.*

*This article gives the views of the authors, and not the position of the LSE Impact Blog, nor of the London School of Economics. Please review our [comments policy](#) if you have any concerns on posting a comment below.*

### About the authors



**Ruth Harrison** is Head of Scholarly Communications Management at Imperial College London Library Services, working in various research support areas including open access, research data management, information literacy, copyright, and responsible metrics. As a librarian, her aim is achieving fair and equal access to knowledge.



**Yvonne Nobis** is Head of Science Information Services at the Betty and Gordon Moore Library where she has been involved in many open initiatives over the last eight years. Prior to becoming a librarian she was a publisher for both Elsevier and Proquest.



**Charles Oppenheim** was until 2009 Professor of Information Science and Head of the Department of Information Science at Loughborough University. He is currently a Visiting Professor at two UK universities. He also worked for many years in the electronic publishing industry, primarily dealing with contracts and licensing. He is now a consultant. His principal areas of consultancy are intellectual property rights, scholarly publishing, and data protection.