Mirror, Mirror: the Growth of Mirror Journals

Title slide

Welcome to the latest Wednesday webinar. This month we're going to look at the issue of mirror journals – something you might have come across if you're involved in Open Access and reading up around Plan S but what are they?

Topics

We're going to cover that topic and more in this session by looking at the what and why of mirror journals – why do they exist and why now?, the different ways they could help the move towards wider adoption of Open Access and the potential problems they can cause. We'll conclude with looking at some of the next steps you can take when supporting researchers with decisions about mirror journals.

Spotting mirror journals in the wild

Mirror journals are new Open Access titles which are being created as a mirror image of existing, established journal titles. They are published by the same publisher, have the same editorial board and selection criteria and they publish the same type of research. The crucial difference in their business model – mirror journals are fully Open Access in contrast to the original journal which operates under a traditional subscription model.

You can spot a mirror journal as it is a different title with a separate ISSN (International Standard Serial Number) and it usually has an X at the end of the title like Journal of Water Research X or World Neurosurgery X.

The whole process of mirror journals is something being pioneered by the publisher Elsevier as a way to offer researchers more choice when publishing their work and other publishers have started to pick up the model as a potential way forward.

In theory this helps to address some of the concerns that researchers, publishers and librarians have about the hybrid Open Access publishing model. Under this model a publisher offers a journal via subscription whilst also making selected articles openly available if the authors pay an article processing charge (something which can run into many

thousands of pounds). This leads to accusations that publishers are exploiting the OA model and charging libraries and other institutions twice – once for the subscription and again for any Open Access payments. When it was introduced, the hybrid model was designed as a way to speed up the transition to Open Access whilst appearing both publishers and researchers but for reasons we'll get to this hasn't necessarily been the case!





The publishers of these journals claim that mirror journals will help the move towards the wider adoption of Open Access as over time more and more content will be openly available. At this point the two titles can merge back into one and become a completely OA journal.

So how does this actually work in practice?

How do they work?

The Journal of Research is an established journal in its field and it's popular with researchers looking to publish. It currently operates under a hybrid model by charging a subscription and APCs to make articles openly available. They want to encourage the move towards Open Access and avoid accusations of double-dipping so they set up the Journal of Research X which only publishes OA content. It has the same editorial board, the same mission statement, the same peer review process and the same criteria for selection. At this point the original Journal of Research reverts to being subscription only.

For the researcher the process should in theory be seamless. They submit their paper to the Editor as usual and it's sent out for review – it's the same editor and reviewers for both, working to the same standards. If it's accepted then the researcher makes the choice about whether to publish in the Journal of Research and have their article paywalled or pay the fee and publish Open Access in the mirror title. Of course, the choice may be out of their hands because of funder mandates but the important thing to stress is that the decision isn't made by the publisher.

Why are they needed?

So, now we have a better idea of what mirror journals are, why do we actually need them? One of the main reasons involves Plan S – the set of principles released in 2018 outlining how research outputs can be shared openly into the future. I'm going to briefly recap Plan S so we're all on the same page.

Plan S recap

Plan S states that "By 2020 scientific publications that result from research funded by public grants provided by participating national and European research councils and funding bodies, must be published in compliant Open Access Journals or on compliant Open Access Platforms" - except that they have since announced this deadline has been extended for a year!

There are ten key principles in Plan S but the one influencing mirror journals is that hybrid Open Access models have been declared specifically non-compliant. This is a major problem for some researchers as they think it means they will have less choice about where to publish as their favoured titles aren't compliant with their new funder mandates.

So why are hybrid journals such a problem?

Hybrid facts and figures

Hybrid journals are those titles that operate a traditional subscription model but offer authors the chance to pay a fee to make selected articles Open Access. They were meant to be a





temporary measure to encourage the flip to OA but I think we can all agree this hasn't happened exactly as planned! Publishers have been accused as using it as an excuse to get more money from institutions through the delightfully named process of double-dipping!

Instead of declining as Open Access has become a more popular route, the number of hybrid journals is actually increasing. Unfortunately, most of the content in these journals is not published openly. Current figures show that under Plan S mandates 85% of these journals would be off limits to researchers looking to publish. It's hoped that mirror journals will help to fix this trend and make more titles accessible whilst increasing the general uptake of Open Access.

How can they help?

Those in favour of mirror journals claim that they can not only help to promote Open Access but work towards solving many of the problems with the current scholarly publishing system.

Prestige

One problem that mirror journals claim to fix is connected to issues around prestige and academic freedom. When Plan S was first announced a lot of the backlash focused on researchers who were worried this would mean that suddenly the journals they wanted to publish in would be off limits. Rightly or wrongly a lot of the reward system in academia is tied to the prestige of the journal title that you publish in. Researchers are under pressure to publish in certain titles which are widely read and will get them lots of citations and recognition. Even if they're not aiming for huge numbers, each discipline has its own journals which researchers are expected to share their work in. When Plan S mandated that hybrid journals weren't compatible then suddenly people thought that a lot of these titles became inaccessible which might have an impact on their careers. If a researcher was funded by a Plan S funder they might not be able to publish their work where they needed to but might have to rely on smaller, more niche titles which wouldn't do anything for their career.

Mirror journals are offered as one solution to this problem as they essentially replicate the original journal title that a researcher needs or wants to publish in. They have the same scope, the same editorial board and standards for acceptance so from a prestige point of view they are basically the same. Publishers claim this offers authors a gold route to Open Access whilst still allowing them to publish in their community favoured journal titles.

Costs

From a publisher point of view, setting up a mirror journal helps to keep their costs down which means that they don't have additional costs to pass on to the researcher. Setting up a new title has a lot of costs for the publisher – they have to find and recruit an editorial board, set up new publishing procedures and make sure people know the title is out there. It also incurs a cost in terms of time, especially in the time it takes to build up a reputation. With mirror journals they essentially keep everything the same but set up a new title with X at the end and have some type of mechanism for accepting Open Access payments (which most of them already have).





Publishers also claim that there are cost benefits to institutions as they don't have to pay to subscribe to an openly available journal so there is no more double dipping. Most of these mirror journals are eligible for something known as 'read and publish' deals which aim to support Open Access whilst still giving publishers a sustained source of income. Under these deals an institution pays a publisher an upfront fee to cover the Open Access costs of all the articles it is expected to publish based on previous figures. Corresponding authors at that institution can then publish gold OA in these publications at no cost to them and the institution also gets access to the subscription content. The idea is that over time, as more institutions take part in these agreements the amount of OA content grows until everything is distributed this way. New mirror journals are eligible for these agreements which publishers say will help the move towards Open Access.

Potential problems

For balance we also need to think about some of the criticisms of mirror journals – ironically most of them are a mirror of some of the proposed benefits!

Plan S

Although mirror journals have in part been created to avoid any issues caused by Plan S and offer researchers the same level of choice over where to publish, it's also one of the major problems. The funders behind Plan S do not accept mirror journals and have explicitly stated that they are considered as hybrid publications and so not eligible for Plan S. Of course, the guidelines around the implementation on Plan S are currently under review and may change but this is one aspect that is likely to stick which does somewhat create more of a problem than it solves!

Metrics

We can argue over how metrics *should* be used but the fact remains that the current academic system rewards those who publish in journals and with publishers who have a high metric score. Mirror journals are designed to carry over some of this prestige to the new title in terms of name and reputation but there is confusion around how this would work in practice for the metrics of a title. Traditionally used metrics such as the Journal Impact Factor take time to build and even newer measures such as Altmetrics are not always as instant as they want you to believe. Publishers of mirror titles have said that at least initially the two titles will have their own separate metric scores and these may merge in the future if the mirror and original title merge back into one. Whilst everything is still uncertain this doesn't really help researchers who are under pressure to publish or perish in the most high impact titles so this could also cause problems.

Too many journals

One of the arguments for mirror journals is that they help to avoid the need for the creation of smaller, niche publications which will struggle to attract an audience but mirror journals are still new title and there is a risk that the market will start to get crowded. It's not likely to happen, but imagine that every hybrid journal title suddenly spawns a mirror journal – think how many you would have! Even if only a third did this you are still looking at hundreds of





potential new titles. The market is going to get busy really quickly and there may not be enough high quality research to go around. Are these titles going to struggle for content or are they going to be overwhelmed? Will this lead to titles having to accept anything to fill their pages and what does this mean for the quality of research being produced?

Predatory publishers

This leads onto a final problem with mirror journals – the ever growing problem of predatory publishers. The term is contentious but what we mean by this are publishers who exploit the lack of understanding about Open Access to encourage researchers to publish their work in substandard titles for a fee. They charge an 'OA' payment but then don't provide services like peer review or editing meaning that anyone can pay to publish anything and claim it's academic research – something which is obviously very dangerous for research integrity.

No one is suggesting mirror journals are in any way predatory publications but there is a danger that they might be mistaken for them. One tactic employed by predatory publishers in the past has been to clone titles of legitimate publications to attract researchers and that is similar to what mirror journals are doing. If researchers have listened to the messages we have been giving them about Open Access and predatory publishers over the last few years they are going to be understandably confused!

The other possibility is that predatory publishers will move on to exploiting a lack of understanding of what mirror journals actually are as they have with Open Access. I think there's actually an increased understanding about Open Access practices now amongst the research community and titles which have made money conning researchers are starting to look for new targets and they may use the confusion about mirror journals to their advantage. For this reason it's really important that we talk to our researchers about what mirror journals actually are and why they've been created.

What next?

That's an outline of all the potential advantages and pitfalls of mirror journals and I hope that helps you to make up your own mind about whether they are a positive or negative on the way to Open Access.

Next steps

I want to conclude with some tips on what you can do to help your research community understand mirror journals so you can at least avoid the problems we have seen with predatory publishers.

It's important to explain that for all their problems, mirror journals are legitimate. They are published by the same publishers as the original titles they will be familiar with, they have the same editorial board and the same standards when it comes to things like peer review. They will incur a fee if the researcher publishes with them but they will be getting what they pay for in contrast to predatory publishers who will just take the money.





Researchers also need to understand that currently under the Plan S proposals publishing in mirror journals would not be compliant. Time will tell what happens with the implementation of Plan S - at the moment things are still developing. However the team behind the Plan do seem pretty set on the goal of avoiding hybrid and pretty clear on their opinion that mirror journals are just hybrid in disguise.

Wolf in sheep's clothing?

We need to watch developments on mirror journals closely to find out if they are just a wolf in sheep's clothing or the future of Open Access publishing.



