The Plan S Rights Retention Strategy (RRS) requires authors who are submitting to subscription journals to inform publishers that the author accepted manuscript (AAM) will be made available under a Creative Commons Attribution (CC BY) licence. The laudable stated aim of the RRS is to achieve immediate open access to research outputs, while preserving journal choice for authors. However, proponents of the RRS overlook the significant administrative and legal burdens that the RRS places on authors and readers. Even though compliance with existing green open access (self-archiving) policies is poor at best, the RRS is likely to rely on authors to successfully execute the CC licensing of their work in the face of publisher resistance. The complexity of copyright law and CC licensing gives many reasons to doubt the legal validity of an RRS licence grant, which creates legal risk for authors and their institutions. The complexity of RRS CC BY licensing also creates legal risk for readers, who may not be able to fully rely on the reuse rights of a CC BY licence on the AAM. However, cOAlition S has released no legal advice that explains why the RRS is valid and legally binding. Publishers of legacy subscription journals have already begun implementing strategies that ensure they can protect their revenue streams. These actions may leave authors having to choose between paying publication fees and complying with their funding agreements. The result is that implementing the RRS will create a significant administrative burden for authors, the RRS is not fit for its stated purpose as an open access strategy.

Keywords
open access; rights retention; Plan S; Creative Commons; licence; copyright

Introduction
The Plan S Rights Retention Strategy (RRS) mandates that openly licensed copies of the author accepted manuscript (AAM) be deposited in an open access repository immediately upon publication. The RRS requires that a Creative Commons Attribution (CC BY) licence be applied to the AAM, allowing for the free sharing, adaptation and reuse of the work. The implementation of the RRS is ostensibly simple, since authors just insert some 'magic' words into their cover letter and/or acknowledgements claiming that a CC BY licence has been applied to the AAM. The example text given by cOAlition S states, 'For the purpose of Open Access, the author has applied a CC BY public copyright licence to any Author Accepted Manuscript (AAM) version arising from this submission.' Moreover, it has been suggested that anyone can implement the RRS whether or not they are required to by their funder just by using the RRS language. However, this presentation glosses over significant complexity in the application of Creative Commons (CC) licensing. There is already a plethora of strategies that can be employed to preserve the primacy of a legacy subscription journal publisher’s agreement with authors or, alternatively, protect their revenue streams. The result is likely to be that implementing the RRS will create a significant administrative burden for authors and create legal risks for authors, readers and institutions.
Negotiating copyright for open access has not been successful in the past

As academics, we are experts in our fields, but those fields are not usually law, let alone copyright law. In contrast, the RRS requires academics to negotiate with publishers over copyright. The last time this happened was over a decade ago, when the Scholarly Publishing and Academic Resources Coalition (SPARC) Author Addendum was launched. The SPARC Author Addendum was an instrument designed to modify the copyright transfer agreements signed by authors after acceptance. Like the RRS, the SPARC Author Addendum aimed to ensure that certain rights were retained by the author and to allow them to deposit a copy in an open access repository. However, it has enjoyed little success, with over 98% of copyright transfer agreements signed by authors with no modifications. In 2017, SPARC Europe found that there was only a 'low level of awareness' of the tool and 'a handful of respondents mentioned rejection of the Addendum by publishers'.

The SPARC Author Addendum has also been criticized for potentially limiting author choice of publication venue, for example by resulting in the rejection of an already accepted article. However, as noted by Suber in response to this criticism, the typical first step for publishers is to reject the Addendum rather than rejecting the article. While there are very few reports of author experiences using the Addendum, some scholars have written in blog posts and comment threads that publishers generally ignore the Addendum, but will at other times acquiesce to, negotiate about or reject the Addendum.

The lack of success in author-led copyright negotiations logically follows from the poor leverage that academics enjoy when submitting to prestigious journals. Thanks to the primacy of journal metrics and their centrality to funding, hiring and promotions, it is the publishers and editors of high impact or prestigious journals who have a strong negotiating position with respect to copyright. If an author is unwilling to sign a copyright transfer or exclusive licence to publish, a reputable journal is likely to have several other submissions of similar quality that can be published instead. As noted above, the vast majority of authors sign unmodified agreements and less than 30% were prompted by their funder’s open access policy to examine agreements more closely, suggesting widespread apathy. The author here has little leverage since the continued funding of the journal is not predicated on accepting their manuscript. Moreover, now that click-through copyright transfer agreements are common, authors have even less opportunity to intervene in the process even if they had the knowledge and inclination to do so. For authors faced with conflicting funder, employer and publisher policies, the situation can become irreconcilable.

Is prior licensing a better approach?

In contrast to the SPARC Author Addendum, the RRS relies on prior CC BY licensing of an AAM. Funders that implement the RRS may also apply stronger incentives for compliance (or, more likely, penalties for non-compliance) than the SPARC Author Addendum. However, RRS language is far from a 'magic sentence' or two that takes precedence over all agreements between author and publisher. Copyright law is far more complex than that and concerns have already been raised over whether the RRS is legally enforceable. Whether the RRS will be enforceable depends on a multitude of factors, including the nature of the funder agreement, who legally owns the copyright to the work, the country in which the work is authored and whether the RRS language is legally sufficient to apply a CC licence. The complexity of these factors renders the prior licensing approach of the RRS administratively burdensome for researchers and legally risky for authors, institutions and readers.

Funder agreements, authors and rights retention

In most cases, an academic owns the copyrights for their own works. The only exception is if those works are classified as work-for-hire and the academic’s employer asserts
their rights as the copyright owner, but most universities traditionally have not availed themselves of the work-for-hire doctrine. For example, instead of asserting work-for-hire copyright ownership, Harvard’s approach is to obtain a licence grant from their faculty and then grant those rights back to the authors. Elsewhere, academics are recognized as the copyright owners in their own works and some jurisdictions have laws exempting academic publications from work-for-hire rules.

Rather than asserting copyright ownership by funders or universities, the RRS seeks to obtain a licence from authors via two mechanisms – prior licensing and prior obligation. In the case of prior licensing, the funder will ‘require their grantees to apply a CC BY license to all future AAMs which arise from their funding’ (emphasis in original). In the case of prior obligation, funders ‘will impose an obligation on their grantees’ to apply a CC BY licence to AAMs before publication. While the objective of these is the same, each comes with its own considerations.

The first mechanism of prior licence appears to be similar to the Harvard approach, where there is a prior agreement between the funder and the researcher giving effect to the CC licensing arrangement. While the language on the cOAlition S website frames this mechanism as a ‘requirement’ and therefore identical to the second mechanism of prior obligation, let us assume that this mechanism is able to grant a legally enforceable prior licence. However, if this is the case, it would appear to render the RRS language redundant, since there is already an irrevocable prior licence in effect when an article is submitted. If the funding agreement has already transferred or licensed rights in the author’s work in a legally enforceable way, then they are not able to sign away their copyrights to a publisher anyway. This mechanism is also unavailable to authors who are not subject to the prior licensing mechanism contained in the funder agreement, in contrast with statements from Plan S officials that anyone can apply the RRS. It may also be unavailable in some jurisdictions, such as France, which have statutory prohibitions on total copyright transfer in future works and overly broad copyright assignments.

The second mechanism of prior obligation is much weaker. In this case, the funder imposes an obligation on the researcher to apply a CC licence. However, there is a difference between a funder imposing an obligation and an author meeting that obligation. Even though many countries have had green open access mandates for years that impose obligations on authors, rates of self-archiving are estimated at around 30%. Librarians report receiving few deposits from Faculty and even librarians exhibit low rates of self-archiving. Moreover, rates of publication in journals where embargo requirements exceed the limits allowed by funder policies have been unaffected by green open access obligations. If most funders rely on prior obligation rather than prior licensing, then it is likely that the RRS will see similarly low rates of compliance or poor execution that render the CC licences on AAMs invalid.

**Applying Creative Commons licences is not necessarily simple**

The RRS is therefore reliant on its execution by individual academics, which is likely to be far from perfect and vulnerable to manipulation by publishers with commercial interests. Despite the ‘magic’ words of RRS language being just one or two sentences long, there are many ways that immediate access to a CC BY AAM can be circumvented. Some of these have already been detailed by cOAlition S, including:

- ‘confusing or misleading guidance to authors’ that an embargo must be applied or that they can only comply with funder requirements via paid open access routes
- re-routing submissions with RRS language to paid open access journals
- modifying submission systems so that authors are required to agree to pay a fee for open access
- asking authors to not share their AAM immediately on publication.
While cOAlition S argues that these strategies are not legitimate and do not legally apply, this actually conflicts with advice from Creative Commons and legal scholarship on open licensing. For example, cOAlition S claims that ‘researchers do not need the publisher’s permission to immediately share their AAM zero embargo with a CC BY licence, as long as the publisher has been given notice of the prior licence’. However, just because the publisher has been given notice of the prior licence, this does not mean that a CC licence has been properly applied. The cOAlition S website includes no legal advice that explains why RRS language is a valid and legally binding approach to the application of a prior licence.

**Uncertain grant of licence**

The legal validity of RRS language is important because CC licences are typically granted via their distribution and use. The CC licences themselves explicitly state in their preamble that the other party (or ‘licensee’) has to do certain things to accept the licence terms:

‘By exercising the Licensed Rights (defined below), You accept and agree to be bound by the terms and conditions of this Creative Commons Attribution 4.0 International Public License (“Public License”). To the extent this Public License may be interpreted as a contract, You are granted the Licensed Rights in consideration of Your acceptance of these terms and conditions, and the Licensor grants You such rights in consideration of benefits the Licensor receives from making the Licensed Material available under these terms and conditions.’

When a publisher receives an RRS manuscript they are therefore in receipt of an ‘offer to license’, rather than a manuscript that has already been licensed. Most jurisdictions interpret CC licences as contracts, with only a minority considering them as unilateral legal acts. Incorporating both aspects of contracts and unilateral acts (the ‘contract/licence dichotomy’). While some legal scholars have argued more strongly in favour of the contract view of CC licences, Herr has recently noted that courts in the United States ‘interpreted the CC licenses using statutory law and case law by applying the principles of copyright law and contract law’. To the extent that a CC licence is a contract, there is nothing obliging a publisher to accept it. Indeed, if a publisher asks authors to sign their own copyright transfer agreement or licence to publish, then it seems clear that the publisher is rejecting the RRS offer of a CC licence. Merely receiving a manuscript with RRS language or CC licence statement is not sufficient to form the contract. To this end, some jurisdictions recognize that not everyone who downloads and uses freely available material online fully accepts and agrees to the terms of its licence. Despite the RRS language, if a publisher rejects the licence, the contract has not been formed and the CC licence cannot be relied upon.

The process of making an offer to license is codified within the CC licences themselves. Once a CC licence has been granted, anyone else who receives the CC-licensed material as a ‘downstream recipient’ then ‘automatically receives an offer from the Licensor to exercise the Licensed Rights’ under section 2(a)(5) (A) of the CC licence. For such a downstream recipient, just as for a publisher in receipt of an RRS manuscript, the grant of a CC licence is not automatic. The licence has been offered, but it has not been granted. Just as with any other contract, it can be declined.

Even if RRS language in a cover letter or article acknowledgements is sufficient to grant a CC licence to a publisher, it is far from obvious that the RRS language grants the CC licence to anyone else. After all, for a manuscript that has not yet been distributed elsewhere (e.g. as a preprint), there are no other parties or downstream recipients. Moreover, there do not ever need to be any downstream recipients, as will be discussed in the following section.
No obligation to continue distribution

A second claim made by RRS proponents is that it frees authors from obligations to embargo.\textsuperscript{38} However, this is simply not true. As noted by Hinchliffe, a publisher can require an embargo period.\textsuperscript{39} Even if we assume that the grant of the CC licence is valid, rather than merely an offer to license, there is no obligation to continue distribution. Creative Commons themselves are clear that, even though a licence is irrevocable, this does not mean that distribution under the terms of a licence must continue:

‘Once something has been published under a CC license, licensees may continue using it according to the license terms for the duration of applicable copyright and similar rights. As a licensor, you may stop distributing under the CC license at any time, but anyone who has access to a copy of the material may continue to redistribute it under the CC license terms.’\textsuperscript{40}

Moreover, this possibility is explicitly contemplated in section 6(c) of the licence deed, which states that the licensor may ‘stop distributing the Licensed Material at any time’.\textsuperscript{41}

The problem for RRS articles is that, assuming there is no preprint or other distributor, there is no one except the author and the publisher with the RRS article. If the publisher has rejected the CC licence and the author has just agreed not to distribute under the CC licence (at least for a period of time), then the CC licence itself is no impediment to compliance with a publisher’s embargo.

Passing legal risk to authors, institutions and readers

The lack of legal clarity in the licensing of RRS articles presents legal risk to authors, institutions and readers. As noted by cOAlition S, ‘Moreover, these publishers do not provide clarity on what action they will take in cases where a researcher exercises their right to make their AAM open access.’\textsuperscript{42} Of course they don’t. If they are going to take legal action, defendants will find out when they are contacted by a lawyer. Secondly, no sensible business is going to rule out acting to protect their intellectual property or revenue streams.

Regardless of how bad it might look for a publisher to take legal action against their own authors or institutions, if the RRS is sufficiently successful it may eventually tip the balance towards it being a rational commercial decision. In that case, authors, institutions and readers are all exposed. Authors and institutions that host their AAMs are exposed because they will be the ones distributing AAMs in conflict with their publishing agreements. Third parties that host material or aggregate content may also be exposed.\textsuperscript{43}

Readers who attempt to reuse the work will also be exposed to legal risk even if they meticulously comply with the terms of the CC licence. This is because CC licences come with no warranties for the licensee. If the licensor did not actually have the rights to distribute under the licence, then the licensee is liable. This liability exists even if the licensor did have the rights to distribute the article, but a reader reuses part of the article that the licence does not apply to, such as a figure from another source that was not properly marked.\textsuperscript{44} If an author signs a publishing agreement that transfers the rights necessary to grant a CC BY licence, then the CC BY licence will not protect readers or anyone who attempts to use the work under the CC BY licence. As reviewed by Ding, this has previously occurred and in one case dozens of companies were sued when they used a photograph that was CC-licensed by someone who did not own the rights.\textsuperscript{45} If publishers later use this tactic, then the loss of trust in CC-licensed AAMs might produce a chilling effect greater than the hoped-for expansion of reuse rights from adopting the RRS.
No free rides

However, rather than engaging in costly legal battles, publishers currently prefer to extract author fees from RRS articles. As noted above, publishers are re-routing articles carrying RRS language to their author-pays open access journals. In other cases, they are modifying their submission systems so that authors agree to pay a fee. There is nothing that stops publishers from doing this. The only penalty is suffered by authors because cOAlition S funders will not pay these fees.46

One example of how this would negatively impact upon authors comes from the recently proposed adoption of the RRS by Australia’s National Health and Medical Research Council (NHMRC).47 In this proposal, the NHMRC proposed modifying its open access policy to require immediate open access by requiring RRS language in submissions.48 In the draft further guidance to this policy, the NHMRC stated that it would not provide separate funding for any costs associated with open access, but that researchers may use NHMRC grant funds to pay for publication fees.49 Since there is nothing stopping publishers from charging fees for their services and authors would still be permitted to pay these fees out of grant funds, the only loss is to the author’s research budget.

Although the NHMRC guidance on this policy suggests that the RRS would not affect an author’s choice of journals, this is limited in practice. If a publisher re-routes RRS submissions to an author-pays open access journal, this effectively prevents an author from publishing in the original journal. Alternatively, if a publisher then imposes a fee on the author for submitting with RRS language, this may also constrain an author’s publishing decisions. Funders may well be within their rights to do this, but similarly some academics may have reasonable concerns about or be dissatisfied with the gradually increasing constraints on them as authors.50 Funders should transparently articulate their justifications for why these constraints are justified, rather than claiming that they do not exist.

Conclusions

The RRS is a superficially attractive plan with the laudable goals of immediate open access and open licensing of scholarly works. However, it creates administrative burdens for academics who must negotiate an increasingly complex copyright landscape with multiple interacting licences. The legal basis of the RRS is unclear because copyright law is complex and how copyright ownership and licensing is interpreted and enforced may differ across jurisdictions. Furthermore, the complexity of CC licences and their interactions with copyright law extends far beyond the scope of the present article. For example, how statutory provisions for revocation of licences in jurisdictions such as the United States might be applied51 or their compatibility with moral rights in France.52 Applying CC licences may seem simple, but their application comes with numerous challenges.

Examination of publicly available advice from Creative Commons, the legal code of CC licences and legal scholarship on CC licensing of academic works identifies several vulnerabilities in the legal validity of the RRS. Key legal vulnerabilities include the validity of the RRS grant of a CC BY licence and the claim that RRS language nullifies embargo obligations. These questions open authors, their institutions and even readers who attempt to reuse the work to legal risk. Despite the administrative and legal complexity of the RRS, it may even fail to enable the fee-free sharing of AAMs, since some proposed implementations would continue to allow grants to pay for the fees publishers are imposing in response to the RRS. Funders who are considering the RRS should therefore seek (and publicize) robust legal advice and reconsider whether trying to create and exploit loopholes in copyright and licensing is really a sustainable open access solution.
Acknowledgements
The author was supported by a fellowship from Fonds de Recherche du Québec – Santé (Grant IDs: 270051, 306413).

Abbreviations and Acronyms
A list of the abbreviations and acronyms used in this and other Insights articles can be accessed here – click on the URL below and then select the ‘full list of industry A&As’ link: http://www.uksg.org/publications#aa.

Competing interests
The author is the founder and editor of a free open access journal, Neuroanatomy and Behaviour, and President of its publisher, Episteme Health Inc. He does not receive remuneration for this role or any other author, reviewer or editorial role at any publisher. He declares no other competing interests.

References
3. cOAlition S, “Plan S Rights Retention Strategy.”
