# Supporting academic freedom as a human right: challenges and solutions in academic publishing

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#### **Abstract**

This article explores academic freedom as it relates to scholarly publishing. While most discussions of academic freedom as a human right focus on threats to individuals' personal safety and careers, we open this out to include the 'soft repression' that it is possible to encounter during the publication process, and its potential impact on the scholarly record. An overview is given of some of the ethical issues encountered by editors and publishers working with authors experiencing academic, intellectual, or political repression – for example, the manifestation of these issues in authorship, metadata, transparency and reproducibility, research ethics, and competing interests. We go on to formulate suggestions on managing such conflicts while upholding academic freedoms and the integrity of the scholarly record.

Keywords: academic freedom, publication ethics, academic publishing, authorship, censorship

#### Introduction

Academic freedom is a relatively understudied human right,

- 1 local locking in clear definitions, and often conflated with the concept of freedom of
- 2 speech. For the purposes of this article, the definition of academic freedom is the one
- 3 given by Hook<sup>2</sup> as 'the freedom of professionally qualified persons to inquire, discover,

1 publish, and reach the truth as they see it in the field of their competence. It is subject to 2 no control or authority except the control or authority of the rational methods by which 3 truths or conclusions are sought and established in these disciplines'. This definition 4 both embeds the publication of results as a critical step in the process of knowledge 5 production and transcends the imposition of national or organizational boundaries on 6 that process. Today, most attempts to measure or understand threats to academic 7 freedom focus on 'hard repression', e.g. violence against scholars, their persecution and 8 imprisonment<sup>3</sup> or loss of position. Those which typically fall under what Hoffman & Kinzelbach<sup>3</sup> term 'soft repression' (from encouragement of self-censorship through to 9 10 restrictive educational and research policies) have received far less attention. This 11 article will explore one such problematic dimension of 'soft repression': threats to 12 academic freedom arising during the publication or research communication process<sup>4</sup>, 5, 6, 7, 8 13 Recent literature has discussed legal threats to publishers and authors<sup>9</sup>, 14 and other attempts to censor the scholarly record 10, 11, as well as reports that restrictive 15 16 policies or societal risks may lead to self-censorship in academic output<sup>7,12</sup>. 17 Furthermore, whether academic freedom applies only to individuals or to 18 organisations/other collectives has been debated in the context of state involvement in 19 directing academics' publication outlets through research assessment and funding requirement frameworks such as Plan S<sup>13</sup>, <sup>14</sup>. Less frequently discussed, however, are 20 21 what we would call 'micro-attempts' to manipulate the publication process as a soft 22 power tool to control or suppress knowledge. This 'day to day' risk profile has recently 23 been acknowledged as an aspect of the research process in need of guidance and support for researchers 15,16, but there is no parallel guidance development for authors, 24 25 reviewers, editors and publishers of scholarly content. We also suggest that the

manifestation of the risks identified are poorly understood. To emphasize this point, it is worth noting that the relative paucity of academic references in sections of this paper is

3 due to the fact that this area is not much discussed within academic literature to date

4 (although see Väliverronen and Saikkonen's survey<sup>7</sup>).

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We argue that further support and guidance is needed for those in positions of editorial power to navigate the risks to academic freedom inherent in research communication today, particularly as these risks also pose challenges to research integrity. For the purposes of this article, research integrity is defined as conducting research in such a way that allows others to have confidence and trust in the methods and the findings of the research. The key elements of research integrity and publication ethics are expressed through the UK Concordat to Support Research Integrity<sup>17</sup> as honesty, rigour, transparency and open communication, care and respect of all participants, and accountability. As an extension of research integrity, publication ethics are guided by the same key elements. Academic publishers have a fundamental responsibility to preserve the integrity of the publication record; often called the 'minutes' of research 18. Good 'minutes' of research require recording not only what was said, but when, by whom, and based on what. The editorial decision-making process for manuscripts is held to ideals of honesty, objectivity, and rigour – key elements of integrity which are in tension with the soft-repression of the publication process which we outline above. Finally, whether or not a 'reproducibility crisis' truly exists has been debated<sup>19</sup>, but anything that needs to be hidden from readers hinders their ability to understand and build on the full context of what is being read, and does not uphold the key research integrity elements of open and transparent communication.

The specific issues we will explore relate to: manuscript content (for

example, the representation of disputed territories in academic literature); limitations

1 placed on research material as a result of restrictions on academic or political freedom;

and the intersections between threats to academic freedom and publication ethics. From

there we explore why and how these scenarios challenge existing publication policies

and practice, and end with proposing some solutions and directions for future research

and practice.

Before exploring these aspects in more detail, however, it is worth noting that the extent to which these risk areas are greater or different today than before the rise of large-scale academic publishing in the 1980s<sup>20</sup> is relatively unknown. Perhaps they simply affect more people, manifest in different ways, or are perceived to be greater due to other cultural or technological shifts. A number of studies have noted both an increase in the proportion of academic papers with international co-authors<sup>21</sup>, and attempts by political entities to use digital tools to control narratives and realities in other media<sup>22</sup> so it is reasonable to assume that the frequency of threats to academic freedom manifested in the academic literature tracks either or both of these trends. Ultimately, this article does not attempt to quantify the risks or identify trends (although we recommend this is an area where further research is required), but rather attempts to characterize the issues and provide some proposed solutions to these challenges in response to an increase in requests for support (which we, as publishers of journals, have experienced) from a range of individuals and organizations including authors, editors, and professional and learned societies.

There are other reported threats to academic freedom such as the notion of 'cancel culture' but these reflect wider behavioural and sociological changes rather than direct repression<sup>23</sup> so, although there may be parallels in thematic challenges, these are not within the scope of this paper. Similarly, we do not extend our scope to a consideration of the impacts on researchers or the research process (for example, threats

- 1 to researchers carrying out research in foreign countries, espionage, IP threat<sup>24</sup>, beyond
- 2 those arising as a consequence of the publication process.

#### **Contentious Content: Scenarios**

Although researchers may collaborate globally, research institutions and funders are generally national bodies, driven by national agendas and policies. Research communication, however, is truly global. Most of the world's largest research publishers, preprint servers, and other infrastructure providers are global organizations with a presence in multiple countries. The local/global tension is a recognized challenge in other aspects of scholarly communication (for example, ethical approval of research conduct, disparities in the ability to access or publish research), but can also be a major factor in issues relating to academic freedom in publishing, including the publication of content considered contentious by certain regimes. The following is a list of specific challenges in relation to content and academic freedom.

#### Geopolitics and territorial disputes

Country nomenclature appears in multiple places in publications – alongside affiliation or author information as part of the content metadata, within the text/content itself, and within third party materials used within the content (for example, the reproduction of maps). Publishers traditionally defer to author choice and/or the editorial processes responsible for reviewing the content to determine the nomenclature used within the content itself. For metadata, however, most large international publishers increasingly use standardized lists (for example the ISO country list<sup>25</sup>) and/or permanent identifier databases (for example ROR<sup>26</sup>, Ringgold<sup>27</sup>) to improve the cleanliness of publication metadata. This may require authors to request an exemption or actively alter an auto-populated field, and additionally introduces risks that a

1 manually entered country name will later be overridden or displayed differently because

of reliance on the underlying master list. There are also cases where an author's chosen

display is at odds with the official information provided by the organization or territory

4 with which they are claiming affiliation.

There are well-known examples of disputed (or simply varying) naming conventions for countries and regions (for example, 'Taiwan' vs 'Taiwan, China' and other variations), but the global research endeavor encounters many more such examples ranging from maritime features<sup>28</sup> to whole regions such as Kashmir or the East China Sea<sup>29</sup>, and in indigenous vs colonial names<sup>30</sup>. In addition to naming conventions, many regions have disputed borders or multiple claimants to the same geographical region or feature, all of which can cause issues for both authors and publishers during and after publication. Table 1 summarizes some potential scenarios encountered during the publishing process relating to geopolitics, naming conventions, and territorial disputes.

#### Authorship

Anonymity and pseudonymity

In our experience tracking such requests, publishers are receiving an increase in the number of authors requesting both anonymous and pseudonymous publication for political reasons (see also COPE Case 21-12<sup>31</sup>). Under pseudonymous publication, scholars approach or submit to journals using their real names, with a request made either pre-submission or post-acceptance to publish under a pseudonym, citing concerns following publication of their paper. Concerns may stem from governmental restrictions on the publication of the subject matter (for human rights, political, or other more esoteric reasons). Papers which are overtly critical of a current regime, or may be

1 interpreted as such, are obvious targets, and authors may be concerned about ostracism,

2 penalties, or worse punishments according to their situation.

In true anonymous publication, authors correspond entirely under an assumed name, with journal editors, staff, and reviewers all unaware of their true identity throughout the publication process.

It is worth noting that journals generally do not require proof of identity for authors (instead relying on proxies for identity verification such as institutional email address, ORCiDs, or personal knowledge of editors). However, all of these mechanisms are known to be flawed. Email address and ORCiD sharing between multiple authors are known to occur, and the personal knowledge of editors is extremely difficult to apply to large, global research communities. Anonymous and pseudonymous publishing may therefore be occurring unobserved. To disambiguate, the scenarios we present in Table 2 are those where authors have specifically alerted a journal to a need for pseudonymity or anonymity, and requested support to publish in this manner.

#### Ghost authorship

Ghost authorship is usually discussed in the literature as a form of research or publication misconduct whereby commercial or other influence on a paper are obscured 32,33,34 professionals are contracted to produce material attributed to another author 35 or whereby deserving scholars are purposefully excluded by co-authors ('denial of authorship'). 36,37 In addition to the examples discussed above, however, we would follow those such as Anderson et al 38 who suggest that there is an additional subcategory of 'ghost authorship' made more likely by threats to academic freedom – 'risk mitigation ghosts'. Anyone named as an author on a paper is agreeing to be accountable for its contents, but sometimes an individual's circumstance makes it difficult or impossible for them to assume authorship responsibility even if they are

1 otherwise perfectly happy and able to do so. Coupled with known differences in authorship practice arising between international co-authors<sup>39</sup>, there are situations 2 3 whereby authors elect to avoid, or are prevented from, being named on manuscripts 4 because of the risks that this would pose for them and /or their co-authors. For example, 5 a co-author returns to their country of origin, becomes uncontactable, and co-authors 6 submit work without naming or obtaining express permission from the uncontactable 7 author. In our experience of one such situation, the author later contacted the journal 8 and expressed concern that they had not been consulted or included on the final 9 published version of the paper, despite carrying out much of the underlying data 10 collection, analysis and paper drafting. The named authors had decided (when unable to 11 contact the author) to err on the side of caution over transparency and not list the author 12 on the paper in case it jeopardized their safety in their home country. In another 13 situation, the co-authors wanted to include an uncontactable author who had contributed 14 significantly to the research presented but who had not seen the final drafts of the paper. 15 The co-authors approached the journal, rightly concerned that submitting the paper 16 without the permission of a named author would be poor authorship practice. The 17 journal advised that the uncontactable author could be moved to the Acknowledgements 18 section, with a description of their role in the research presented. The Committee on 19 Publication Ethics' case database 40 also contains several such cases (e.g. Case 20-11. 20 Case 19-14). In many of these cases, the common thread is an author returning from a 21 place of safety to a place where they are unable to fulfill authorship responsibilities – 22 either for logistical reasons or due to actual or perceived risk to that author. These 23 'ghost authorship' scenarios are, in effect, the extension of the scenarios presented in 24 Table 2 whereby an author requests anonymity or pseudonymity. If co-authors are 25 present and willing to take responsibility for the work in place of an anonymous

publication, some authors may instead choose or be forced to be excluded from the currency of authorship and acknowledgment for their contributions. Further 'ghost authorship' scenarios are summarized in Table 3.

A challenge for editors and publishers common to all scenarios in Tables 2 and 3 is that of assessing the credibility of an author's or co-author's claim. Organizations such as Scholars at Risk have mechanisms for assessing and triaging support requests from threatened scholars, often requiring a series of interviews, testimonials, and evidence gathering around the persecution of individuals. Journals have no such experience or mechanisms, nor would this be a feasible or appropriate task for an editor to undertake beyond goodwill. In practice, it is often the journal's editor who is left with the unenviable task of determining, on very little evidence, whether the risk to author's life or freedom outweighs the importance of transparency and accountability in authorship.

#### Destroyed or otherwise unavailable data

Data transparency/validity of data may be an issue if data has been destroyed in order to safeguard the data-gatherer, or as a consequence of a government or other body's order. When data are no longer available, neither reviewers nor readers have the opportunity to reproduce or otherwise validate the results. Journal editors must make their own determinations of the risks involved in evaluating articles for which the underlying data is no longer available, and the extent to which the article still makes a valuable contribution to the scholarly record. For example, in one case an author was informed via a formal (and somewhat threatening) letter (shared with the journal) from a government body immediately before publication (after the research process was complete and the article had been reviewed and accepted, but not yet published online) that the archive material on which the work was based was no longer to be discussed,

and certainly not cited, publicly. In such situations in this particular field of study it is reportedly common practice to refer to the censored archives as 'personal archives', understood to mean readers are free to contact the author for further details. Whilst there are legitimate and necessary reasons an author may choose to obscure aspects of datasets or sources (for example GDPR or privacy regulations), here we wish to highlight situations where the author was, at the time the research was conducted, ethically and legally permitted to use and reveal these sources or datasets, but cannot do so in a publication as a consequence of external pressure. Furthermore, these are generally situations whereby authors additionally feel unable to transparently communicate the reason for the obfuscation of the sources. Where similar situations arise, legal consultation may also be necessary to assess the risk of publishing what could be considered to be leaked information – itself a debated practice in academic publishing<sup>41</sup> with little guidance<sup>42</sup>. Table 4 summarises some potential scenarios encountered by journals and publishers relating to destroyed or unavailable data.

#### Research Ethics

Controversial papers or papers submitted under political pressure may face additional challenges in meeting internationally accepted standards, journal policies and requirements. What should be done when the governance, provenance, or ethical conduct of research is disputed, but verifying this through normal processes is undermined by international disparity or dispute on these matters? In one recent example, following concerns raised about the plausibility of a study's experimental design and participant recruitment, a journal sought confirmation from the relevant institution and national body responsible for research ethics. During the course of this process, it became apparent that the national body had different standards of approval and investigation than would be experienced in another national context (for example,

1 the journal's own home country). The journal has therefore been left to decide whether

to believe a seemingly flawed 'formal' investigation by a body ostensibly better placed

to draw conclusions as to the ethical conduct of the research process, or the

4 investigative findings of a concerned reader with insight into the author's practices.

Many journals require evidence of institutional (or other body) approval of research, particularly where this involves human or animal participants. Many international researchers do not have access to this sort of approval process, and even if they did, the act of seeking this approval may actively prevent the conduct of the research for political, not ethical, reasons. This effectively excludes these researchers from publishing in many journals, unless the journals are willing and sufficiently confident in the ethical conduct of the research themselves to make an exception to the approval requirements. In one example, a submitted article lacked approval from an Institutional Review Board (IRB) board – a standard and important ethical requirement for human subject studies – as a result of local laws, themselves considered to be a violation of human rights by the UN. Despite the impossibility of receiving IRB approval, the study in this case was accepted anyway as it was considered by the editor (and publisher) as an exceptional circumstance. Further scenarios are presented in Table 5.

# **Competing Interests**

One of the core principles of publication ethics is the declaration of conflicts of interest (also known as 'competing interests'). Following reports of pre-publication vetting of COVID-19 research by several Chinese universities<sup>10</sup>, and of environmental research by EPA researchers by the Trump Administration's transition team<sup>43</sup> we expect that authors, reviewers, and editors have found themselves with 'undeclarable conflicts

before submitting an article for publication, this could strongly influence what the author feels able to state or conclude in the research. Ordinarily, a situation which could be perceived to influence the objectivity of the research or its reporting in this way would be declared within the article, or mitigated as part of the editorial decision-making process. Authors could be encouraged to declare these 'undeclarable' conflicts as part of the article submission process (rather than publicly stating them within the article itself), but this approach places whomever becomes aware of the conflict of interest in a difficult editorial position. A reviewer or editor may similarly have, or be perceived to have, a conflict of interest in handling an article which includes elements that counter allowable narratives in the editor/reviewer's context. In this situation, both options (overlooking the objectionable element, declaring a conflict of interest) require acknowledgement of a counter-narrative, which in itself may pose a risk to the editor or

reviewer.

In all of these examples, there is very little guidance or support for editors beyond agreement that ultimately an 'editorial decision' should be taken based on an objective assessment of the quality of the publication's content (for example, see COPE case 12-17<sup>44</sup> or, in the case of published manuscripts, that readers/whistleblowers have a responsibility to investigate (for example, COPE case 21-04<sup>45</sup>. There is no international ombudsman for research integrity<sup>5</sup>.

#### **Exceptions to standard publication policies to uphold academic freedom:**

# journal-level considerations and solutions for handling requests

In the preceding section, we have highlighted several key contexts and examples where editors and publishers may encounter challenges to academic freedom arising

1 from global sociopolitical pressures. These situations are challenging not only because

of their nature and the risks presented to those involved, but because they are often in

direct tension with centrally held tenets of publication ethics, transparency and

4 reproducibility. Academic publishers have a fundamental responsibility to preserve the

integrity of the publication record; often called the 'minutes' of research 46. Good

6 'minutes' of research require recording not only what was said, but when, by whom,

7 and based on what. The editorial decision-making process for manuscripts is held to

ideals of objectivity. Whether or not a 'reproducibility crisis' truly exists has been

9 debated<sup>47</sup>, but anything that needs to be hidden from readers hinders their ability to

understand and build on the full context of what is being read. Consequently, the issues

above fundamentally place one or more aspects of transparency, objectivity, or good

record keeping in tension with dissemination of knowledge. Below we make

suggestions for balancing this tension in the context of each of the thematic challenges

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It is evident in reviewing many of the scenarios outlined above that the same journal policies that exist to protect the integrity of the academic record cannot always accommodate the preservation of academic freedoms in certain cases of soft repression. It is also clear that publishers need to provide editors with additional guidance on how to approach such cases where they arise. This guidance should include an ethical support framework, clarity on any pre-existing publisher policies, and suggested routes to resolution. As an initial step:

Authors should be required as part of the terms of submission to accept the
primacy of international ethical guidelines and frameworks on research conduct
and/or acknowledge and explain discrepancies.

- Editor and Reviewer Codes of Conduct should include a commitment to uphold
  the objectivity of academic research, and should outline what the publisher or
  journal expects in terms of valuing and supporting academic freedom.
  - Journals should encourage up-front discussion amongst their editors and editorial boards about the potential for conflicts or differences of opinion around these issues, particularly where the editorial make-up of the journal is global.
- Publishers and journals should provide discipline specific author guidance on
   common issues
  - Institutions should support researchers with risk awareness training appropriate to their research and research context.
  - Submissions made under such circumstances must be evaluated individually on their own merit and editors must make informed decisions on the level of risk they are ready to assume in publishing such papers. In some cases, an editorial note accompanying the paper may be warranted.

# Geopolitics and territorial disputes

A central principle of academic publishing is that of editorial independence; that is, the separation of editorial decision making from commercial or ownership interests 48,49. However, for issues such as territorial claims presented within a scientific article, this does not usually represent an expert presenting conclusions or observations of their research or investigation. Rather, it represents norms or requirements set extrinsically to the research process being presented as if intrinsic. Similarly, 'peer' review may not be an appropriate mechanism for assessing the appropriateness of territorial claims in articles, particularly where this has little or nothing to do with the research content of the paper. In other words, choice of terminology or treatment of

- disputed territories becomes more akin to choice of house style or American vs British
- 2 spelling. These stylistic choices are usually set by the publisher, not author. Most
- 3 publishers, however, state that they are 'neutral' regarding territorial disputes<sup>5</sup>, yet do
- 4 not enforce or explicitly adopt 'neutrality' in the content published in their name, nor
- 5 provide any guidance on what 'neutrality' means. From a policy perspective, content
- 6 within articles is generally placed firmly in the 'editorial independence' camp and
- 7 publishers generally refrain from intervening (although there are exceptions<sup>50</sup>). This
- 8 circularity means editors and reviewers are left either to comment on the accuracy or
- 9 appropriateness of the use of a particular term, or border, in the context of a particular
- article, or ignore it but 'accept' it by virtue of doing so thus not remaining neutral.
- We therefore suggest that:

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- Researchers should be encouraged by their institutions and funders, as a matter
  of research best practice, to be aware of tensions in their region of study and
  stick to recognised legal or scientific terms and identifiers, only using disputed
  terms or borders if used intentionally to support a key concept within the
  publication.
  - Journals, publishers, editors, and other organisations (for example, learned societies) representing researchers should re-enforce this message via policies and guidance.
- 'House style' for handling disputed territories or nomenclature should be made clear to authors. It is unrealistic given the nature and changeability of these issues for journals to adopt policies on specific regions, but, if 'neutrality' is the house style, they should at the very least explain what this means in practice for authors contributing to that journal.

- Journals should also include in their author guidance a requirement that where disputed terms or borders must be used, these should be marked or otherwise acknowledged as disputed. This could include, for example, a methodological note clarifying that local names have been used throughout the paper.
- Where journals are approached post-publication and asked to change
  nomenclature, standard practice regarding the use of corrigenda/correction
  notices should be followed. If exceptions are made in updating the Version of
  Record due to threat to life/public harm/legal obligations, we recommend the
  inclusion of a note as indicated above.

# Authorship

Anonymity and pseudonymity

Despite a long history of anonymous and pseudonymous publication on controversial subjects, the modern journal publication is not well-equipped to handle such requests. The publishing ecosystem has evolved to promote transparency in author identity, and journal and publisher workflows are not designed to support anonymity. Metadata tagging, from the point of content creation through to submission, review, production, and online publication and indexing, all log and transfer author names to multiple publisher systems and internal and external databases. In cases where the request for pseudonymous publication has been made after submission, the author may have already had multiple interactions with journal editors and/or staff under their real name, with their identity stored (at a minimum) on email servers and in online peer review systems. The timing of such requests has a significant impact on the ability of a journal to protect an author's identity as data feeds, article versions, and hosting sites may be differentially accepting of updates and changes, and, even where changes can be

made, asynchronous. In cases of anonymous publication, the author – who has sometimes gone to great lengths to protect their identity – must still sign, electronically or physically, a publishing agreement which identifies them in perpetuity to their final publication. Even when stored in a secure location, the existence of this data record again creates multiple opportunities for journal staff to interact with the author's true

identity.

The use of (and in many cases, requirement for) ORCiD in scholarly communications has created an additional level of complexity for authors for whom a complete publication list is a risk rather than an advantage – even those who choose to publish under their real names. In a scholarly ecosystem where 'findability' is the ultimate goal, a scholar whose publications may push the limits of free speech within their home region must attempt to exist in two worlds. ORCiD provides an option for authors to limit public access to their publications list, however these are not necessarily protected in the case of foreign government or police pressure (or indeed, hacking). In consideration of this, publishers could allow authors to request exemption from ORCiD requirements, even within journals that otherwise mandate its inclusion. Authors may also create ORCiD records for a pseudonym.

It is important to state however that publishing under a pseudonym can decrease the value of the research as the reader's ability to identify the author(s) is not just a way of contextualizing the paper but is an important part of the process of ongoing dialogue and discussion within a field of research. Without a continuing connection to the author, only a literal interpretation of the material is possible, without debate and without development. In many cases, however, the work remains valuable enough that it is

worthy of publication and publishers should feel a responsibility to ensure that good research enters into the scholarly conversation.

Both ethical and logistical perspectives must be taken into account and frameworks developed to ensure that such requests are handled equitably, and reasonable precautions taken to safeguard the identity of the author where this has been agreed necessary. The publisher or journal owner should also be prepared to handle political or business pressures to release the names of authors, as unlikely as such a scenario may be.

From a purely ethical perspective, the following should be considered when considering an author's request to publish anonymously or pseudonymously:

- Accountability and reproducibility of research in the scholarly record should take precedence unless there is credible risk of serious harm.
- The authors must clearly understand the implications of their request (including any risks involved in safeguarding their identity, including into the future and/or the result of hacking attempts) as well as any difficulties they may face in reclaiming their material in the future when the risk may have been mitigated
- Changing the author name(s) must not obscure a clear conflict of interest.
- When possible, the institution employing the author(s) should agree, in order that it be properly credited
- When requests to make published articles retrospectively
  anonymous/pseudonymous are received, journals should seek to confirm that the
  request comes from the original author of the article, and the articles should
  contain a time-stamped update notification

- If an author publishes multiple pseudonymous papers, the author should be encouraged to use the same pseudonym for all papers.
- Ideally, the article should state transparently that the name used is a pseudonym
- The author should have demonstrably attempted other means of reducing the risk for example, seeking institutional or NGO (Non Government
- 6 Organisation) support or protection before resorting to anonymous or
  7 pseudonymous authorship
- When a co-author cannot be listed on the article, it should be transparent within
   the article (perhaps via use of contributor taxonomies such as CRediT) what the
   nature of the contributions of the unnamed author were, and ideally why the
   author could not be listed.
- 12 In the event an author becomes uncontactable and cannot approve final proofs, it 13 is the responsibility of the journal and co-authors (where relevant) to ensure that 14 the author is given any available opportunity to review and approve final article 15 proofs. Ultimate approval for publication can be undertaken by co-authors 16 and/or editor in extreme circumstances. Ideally the article would contain a note 17 clarifying the basis on which the journal had proceeded, and at what stage the 18 uncontactable author had last approved the publication (for example, see COPE Case 15-11<sup>51</sup>) 19
- From a legal and logistical perspective:
- The author must use their real name when signing the author publishing agreement, as use of a pseudonym is not enforceable
- The journal or publisher must securely archive and future proof a link between the author(s) real identity and pseudonym.

Journals should develop and test workflows in advance to safeguard author
anonymity and pseudonymity in publication systems, with staff at all points in
the peer review, production, and legal processes involved briefed on how to
handle sensitive information appropriately.

#### Ghost authorship

Unlike anonymous/pseudonymous authorship, in 'ghost' authorship it is not simply the identity of the author that is obscured, but the fact that another author contributed significantly to the work. Following the principles of transparency we advocate for throughout this article, where 'ghosts' cannot be named yet contributed to the content in a way that would otherwise be considered 'an author,' it should be made clear that the article is the product of such involvement. Some options for achieving this include:

- Use of contributor taxonomies (for example the CRediT taxonomy<sup>52</sup>) to
  otherwise acknowledge the contributions of those who cannot assume the
  responsibilities of authorship
- Addition of statements to the Acknowledgements section, as is already
  widespread practice in many journals for other types of contributions that do not
  meet requirements of authorship
- Clarity in journal authorship policies so authors understand when someone's contribution would be classified as 'ghost authorship'
- An explanatory note should be added to the article acknowledging any
  discrepancy between the article's authorship and the journal's normal policies.

#### Destroyed or otherwise unavailable data

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2 As noted earlier, journal editors and publishers are often left to make their own 3 determinations of the risks involved in evaluating articles for which the underlying data 4 are no longer available or accessible, including risks of publishing irreproducible or 5 fraudulent research, and any legal risks. Data analysis may also be impeded by foreign 6 government intervention, for example the closure of archives. Authors may purposefully obscure the source of their data in order to progress their publication and 7 8 avoid censure. All of these scenarios place editors in an extremely difficult editorial 9 position; balancing support for the continued dissemination of research originating in 10 challenging contexts, with effectively condoning publication of irreproducible research. 11 In our experience, many articles for which this is a problem are also those which 12 address severely understudied research questions, or which provide unique and valuable 13 insight into otherwise unknown archives or circumstances.

- In the case of both destroyed and inaccessible or inadmissible data:
- The journal should be confident the research is genuine
  - The journal should assess any legal risks involved in publishing the data
  - If circumstances allow, the author and journal should work with an academic body representing or supporting the author (for example, a university, funder, learned society, or charity) to put in place other support and mitigation measures.
    - In the event a manuscript based on unavailable data is accepted, the publication of an editorial note stating the circumstances under which any exceptions to policy have been made is vital. If relevant and appropriate, and as recommended by others <sup>53,8</sup>), this could include publishing details of litigation threats, or providing other supporting information explaining the rationale for publication

- despite unavailable data. If it is not possible to include this explanatory information, the journal should archive the information for future retrieval.
  - In cases whereby the limitations on the data or methodology sharing are
    transient, consider advising authors to publish the work as a preprint until such a
    time as the data or methods can be shared more fully.

It is acknowledged that decisions regarding the propriety of publishing research for which the underlying data is unavailable to the reader may vary widely according to discipline. In certain subject areas this may be dangerous or otherwise seriously inadvisable to pursue.

It is the responsibility of the journal to ensure any material related to the original source of the data that it may have in its possession, such as correspondence regarding the submission and peer review process, is preserved in case future restrictions on access are lifted (for example in the case of closed archives). Ideally this responsibility would be retained by the corresponding author, however in cases of pseudonymous or anonymous publication, the author's institution/funder (if possible), or publisher should assume such responsibility. If relevant to the interpretation of the article, an addendum (or, in the case of preprints or publishers with versioning capability, a new version) could be published containing the additional information.

#### Research ethics

- Journals should be sufficiently confident in the ethical conduct of the research themselves to make an exception to any policies regarding ethical approvals, especially those concerning human study participation.
- Should an exception be made and an article published, an editorial note stating
  the circumstances under which any exceptions to policy have been made is vital.

#### Competing interests

- 2 There are also ways to reduce the potential risk to an author arising from making
- 3 important competing interest declarations public:
- Authors can be encouraged to declare conflicts as part of the article submission
   process rather than within the article itself. This would still equip the editor with
   useful information when assessing the contribution and would ideally be
   archived alongside a record of the review and decision making process.

Such exceptions to journal policies are inevitably compromises, particularly as research communities and publishers push to value transparency, openness and integrity as better measures of research quality than novelty or prestige (see also Lewandowksy and Bishop<sup>46</sup>) For example, while we recommend that journals develop a policy on anonymous / pseudonymous authorship covering the dimensions we outline above, any policy should be balanced with the assumption that anonymous/pseudonymous authorship should be an exception, not a default option.

#### **Directions for Future Research and Practice**

Given the current absence of guidance in this area, we propose a community approach to capturing and interrogating the broad range of potential scenarios and developing guidelines accordingly. Below follow some initial proposed solutions, as well as barriers we have found to progress in this area.

#### Author support resources

There are currently no easily locatable resources designed to support researchers in making decisions about the communication of their research when faced with the sorts of challenges to academic freedom outlined above. Where approval reviews are in

- 1 place, these mostly focus on risks to the continuity of the research, the ethical conduct
- 2 of the research, or legal risks. The Academic Freedom and Internationalization
- Working Group's Draft Code of Conduct<sup>54</sup> does advise that researchers should be
- 4 trained on 'academic freedom in pre-departure training courses, including a basic
- 5 overview of respect for academic freedom globally and consideration of
- 6 limitations/risks'. However, nothing in this document refers to guidance on preparing
- 7 materials for publication, or what authors should expect in terms of policy and guidance
- 8 from publishers. See also 'Industry Level Action'.
- 9 Authors in precarious situations may also be referred to appropriate support
- 10 resources such as Scholars at Risk (SAR)<sup>55</sup>, the IIE-Scholar Rescue Fund<sup>56</sup>, Cara<sup>57</sup>,
- PAUSE<sup>58</sup>, or the Philipp Schwartz Initiative of the Alexander von Humboldt<sup>59</sup>
- 12 Foundation. Such organizations may also offer assistance to authors in reclaiming their
- 13 careers in exile.

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#### Journal and editor guidance

- We have highlighted earlier in this article where support would be valuable, but
- who should editors and journals turn to in the event of a dispute arising as a
- 17 consequence of the globalization of research? Unfortunately, in our experience there is
- rarely anywhere for journals and their editors to turn. As a starting point, for journals
- 19 with a publisher, we suggest that support arrangements should be discussed and
- clarified as part of the contractual and on-boarding process. Many publishers have in-
- 21 house legal and research integrity support teams that can pool expertise with that of the
- 22 editors of the journal to assess and recommend a course of action. Publishers can also
- 23 help by providing editor 'toolkits' of template email responses, checklists, and contact
- 24 directories to assist in managing these situations. We also recommend following any
- 25 relevant COPE guidance or case precedents as far as possible.

#### Industry Level Action

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- 2 There are an increasing number of informal groupings dedicated to protecting
- 3 academic freedom from both 'soft' and 'hard' repression such as the 'Academic
- 4 Freedom and Internationalisation Working Group'<sup>12</sup>, which are starting to issue
- 5 guidance to researchers and their institutions. In addition to this promising development,
- 6 we also propose:
- A role for COPE in assisting editors in navigating these tricky situations,
- 8 particularly around ethical approval and authorship issues.
- Scope for CARA / SAR work with publishers and journals to develop workable
   guidance for situations where an at-risk scholar has a publication record.
  - Collaboration between publishers and other bodies (such as research funders, universities, and learned societies) responsible for researchers and their research to provide 'end to end' training and risk assessment skills in these issues.
    - An industry-academic collaboration to create a case database to inform future guidance and better characterization of issues of 'soft-repression'. This could be achieved through better integration with existing databases and organisations (e.g. Columbia University's Silencing Science tracker<sup>60</sup>, Scholars At Risk's Academic Freedom Monitoring Project<sup>61</sup>, or a new category within COPE's case database<sup>33</sup>), or be a new initiative.
    - Consider the development of a new type of article notice to accompany articles impacted by these issues. The solution we have referred to throughout is 'a note'

       however, these types of editor or publisher's notes are typically poorly integrated with the article itself with poor discoverability. For other information notices with a similar level of impact on article interpretation and use (e.g. corrections, addenda, and retractions), these notices are intrinsically linked to the

article. We propose a 'context' notice, with the same formal linkages as 2 corrections and other notices, could be used to outline pertinent information 3 relating to exceptions in editorial policy and would be useful in circumstances 4 beyond those described here.

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Further research into under-characterised issues such as the "undeclarable competing interests" topic we introduced above.

7 We also support the consideration of international approaches to research 8 integrity and the research enterprise. As discussed earlier, there is no international 9 ombudsman for research integrity and publication ethics. The Committee on Publication 10 Ethics is an advisory and educational body, not a regulatory or investigative outfit. 11 International codes of conduct exist governing the ethical conduct of research 12 (particularly governing research involving human subjects), but there are still many areas of approach to research integrity not governed by an international body<sup>62</sup> and 13 14 considerable difficulty handling misconduct allegations and investigations involving international collaborations<sup>63</sup>. There is no international ombudsman for research 15 16 integrity and publication ethics to arbitrate or investigate allegations of breaches of 17 codes of conduct. Countries are increasingly launching or recommending national 18 research integrity committees, but even amongst countries which do have such bodies, 19 there is poor harmonization in definitions, policies, and approaches between countries<sup>64</sup>. 20 These national bodies generally limit their scope to investigating and acting on cases 21 directly involving the actions of their citizens and national standards, not on resolving 22 issues arising precisely because of differences in national perspectives or standards. 23 Bodies which specifically support threatened academics rightly prioritize the safety of 24 those they help, as well as moving them into situations in which these threatened 25 academics can continue their research safely. Perhaps, therefore, there is a role for an

- 1 international body able, and with authority, to investigate matters relating research
- 2 integrity and publication ethics, regardless of country of origin.

#### Conclusions

The challenges highlighted in this article, which together frame the idea of a 'soft repression' of academia through the manipulation and restriction of academic publishing, are derived principally from our own experiences of submission to and publication in the books and journals with which we have worked. The scenarios we present are likely to represent the tip of a poorly understood iceberg, but even the tip of the iceberg challenges the integrity and transparency we expect and seek to uphold in research publishing. We hope that this article and the solutions it suggests will be the start of a conversation about how the global research enterprise can better support its atrisk authors' right to expression, and what we need to do as a community to understand and mitigate threats to academic freedom in the academic publishing process.

The nature of these issues mean that a broad swathe of research disciplines and journals will be affected – whether natural sciences addressing global challenges, or area studies tackling research questions which necessitate working in and writing about areas where these issues are prevalent. Many of these challenges are also resource intensive to address, be that in researching the issues, seeking legal advice, or simply time taken to navigate complex and sensitive situations. Many smaller journals, publishers, and academic societies may simply not be equipped or inclined to handle these threats to the publishing record, so an industry level approach could create a freely available toolkit to support publishers of all sizes. Lastly, publishers and journals currently lack any common frame of reference to discuss these issues, meaning inconsistency in approach is likely. We hope our outline may serve as an introduction to some of the issues and possible solutions for those looking to support academic freedom

- 1 throughout their publishing outputs, and a starting point for the development of new
- 2 international guidance for journals, editors, and publishers on these topics.

# 3 Acknowledgements

- 4 Thanks to Cambridge University Press partner societies and editors for sharing their
- 5 experiences, and to Dr Mohammad Hosseini for his helpful input on the scholarly literature on
- 6 authorship. We also thank the twos reviewers and special issue editors for their helpful
- 7 comments and feedback.

# **8** Disclosure statements

- 9 Wright, Avouris, and Hoffmann are employed by Cambridge University Press and have
- 10 encountered many of the scenarios discussed in the paper through their management of a
- 11 research integrity team (Wright) and the editorial management of a list of journals (Avouris and
- 12 Hoffmann). Frost declares none

# 13 Tables

# 14 Table 1. Potential scenarios: Geopolitics and territorial disputes

Pote	Potential scenarios: Geopolitics and territorial disputes	
1	Disputed territory presented as undisputed in a paper / researcher's institution or funder requires researcher to include nationally approved map version in publication regardless of relevance to publication's content.	
2	National authority requests "correction" to work based on use of "incorrect" boundary or naming convention	
3	Reviewer suggests edit to submitted article on the basis of different view of a country or region's status, name, or boundaries	
4	Author uses or requests alteration to disputed nomenclature	
5	National authority prevents importation or printing of publications unless maps used within are changed to those approved by a national body	

6	Translation of a publication into a different language includes alterations to nomenclature or boundaries
7	National authority disputes validity of sampling/data gathering based on not having permission from an alternatively recognized jurisdiction

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# 2 Table 2. Potential scenarios: pseudonymous/anonymous authorship

Pote	Potential scenarios in pseudonymous/anonymous authorship	
1	Author submits article on politically contentious topic; is comfortable corresponding and undergoing review under their real name but prefers pseudonymous publication. One or more, or all, authors may be pseudonymous	
2	Political situation changes during submission process and authors request pseudonymous publication to protect what has now become contentious material. One or more, or all, authors may be pseudonymous.	
3	Political situation changes post-acceptance or post-publication and author requests removal of name or change of name to pseudonym	
4	Author submits under pseudonym and identity is not known to editor(s) or peer reviewers. One or more, or all authors may correspond and publish using a pseudonym (anonymous publication)	

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# 4 Table 3. Potential scenarios: "risk mitigation" authorship

Pote	Potential scenarios in "risk mitigation" ghost authorship	
1	Author removes themselves from the authorship list of an article they actively drafted prior to submission or during review, with knowledge of co-authors	
2	Co-authors remove an author from the authorship list prior to submission, either with or without permission from the removed author.	

3	Author or co-author request removal of authorship list post-publication in response to threats experienced because of the article's publication.
4	Author agreed before research commenced/before publication drafting that they should not be a named author due to the risk this poses them.

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# 2 Table 4: Potential scenarios: Destroyed or otherwise unavailable data

Poter	Potential scenarios: Destroyed or otherwise unavailable data	
1	Author gathers data which is destroyed after analysis to protect either the author or the participants (if a human study) from political repercussions	
2	Source of data is considered to be "secret" or unpublishable by government or private business	
3	Data may be available, but author is unable to describe methodology without putting themselves or participants at risk.	
4	Data were available at the time of submission, but later become inaccessible due to political or commercial pressure (for example, see Silencing Science <sup>6566</sup>	

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# 4 Table 5: Potential scenarios: Research and publication ethics

Potential scenarios: Research and publication ethics		
1	IRB approval is impossible due to local restrictions	
2	Dispute over which jurisdiction is responsible for approving research	
3	Ethical approval conflicts with journal's own policies	
4	The data, analysis, and/or conclusion of articles is altered to meet funder, institution, collaborator, peer reviewer, or governmental expectations	

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