Open Access Author Contracts and Alignment with the Open Ethos: A Global Study

Melissa H. Cantrell and Sarah Wipperman

Author contracts in scholarly publishing serve to outline the rights and permissions for each party in the use and redistribution of a work throughout the life of its copyright term. Although rights and licensing expectations for open access publishing—the "open access ethos"—have been detailed in the Budapest Declaration, Plan S Principles, and other documentation, studies that explore the implementation of these ideals in contracts between authors and publishers have been limited in focus and scope. This study seeks to initiate a holistic approach toward evaluating open access journal agreements that is not limited by region or discipline, with the aim of discerning best practices as well as delineating common points of deviation. The authors distributed a survey to contacts from journals in the Directory of Open Access Journals (DOAJ), including both journals with and without a DOAJ Seal. The results suggest that DOAJ Seal status is central to alignment with the open access ethos and that there is more misunderstanding about the importance of copyright and licensing terms than shown in previous research. This research contributes to discussions pursuing a future of open access publishing that supports authors' rights as a central tenet.

Introduction

The past twenty years have seen a dramatic rise in open access publishing. In 2001, the Budapest Open Access Initiative (BOAI) provided the first definition of "open access" as a statement of principles and guidelines for making research free and available to anyone with access to the internet. Since then, many major funders have required that their grantees make their scholarly outputs open access, universities across the world have adopted policies and mandates to open the scholarship of their faculty, and a myriad of platforms and tools have emerged to make this transition possible. Alongside these changes, new publications models have emerged, creating fully open access journals and pivoting subscription journals to open access: The Directory of Open Access Journals (DOAJ) currently lists over 17,000 such open access journals in its database.

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Up to this point, it has been commonly accepted that open access journals embody an ethical standard and set of principles closely entwined with author rights—what we are calling an "open access ethos" — that subscription journals do not.4 Pivotal organizations like the DOAJ and efforts like the Plan S Principles help to shape and reinforce this open access ethos by laying out criteria for what sorts of behaviors are expected from open access publications. For licensing, the DOAJ and Plan S Principles require using a Creative Commons license (or similar terms), which clearly state the terms of use and reuse.⁵ Creative Commons licenses emerged as a way to make the open sharing of copyrighted material easier under a "some rights reserved" model, and these licenses have been widely adopted by open access journals.⁶ For copyright, the DOAJ states that copyright cannot "contradict the licensing terms or the terms of the open access policy" and that "'all rights reserved' is never appropriate for open access content."⁷ Around 10 percent of journals in the DOAJ have met additional criteria and been awarded the DOAJ Seal, which indicates that the journal "demonstrate[s] best practice in open access publishing."8 Under this criteria, the authors "must retain unrestricted copyright and all publishing rights," which also aligns with the Plan S Principles for author copyright retention. In contrast, subscription journals have long served as a barrier to open access in that rights associated with reuse and distribution, which are reserved automatically to the author, 10 are almost always required to be transferred in full to the publisher. 11

Efforts such as the Plan S Principles and the DOAJ Seal draw from early open access principles and statements (Budapest, Berlin, Bethesda) to codify the open access ethos by putting it into practice. ¹² Using these criteria as guidelines, a general pattern therefore emerges as to what is commonly expected of exemplary open access publications in relation to author rights. Common elements that align with an open access ethos include Creative Commons licensing to promote wide reuse of the work and author retention of copyright, including publishing and sharing rights; licensing criteria at odds with the open access ethos include copyright transfer requirements, sharing restrictions for the author, and access restrictions for users.

We, and certainly other librarians, have historically touted open access journals as a way to ensure copyright retention and future reuse when publishing. In our practice, however, we have encountered contracts for open access journals that are employing problematic practices that go against the open access ethos. It is important, therefore, to better understand how the scholarly communications landscape is changing vis-à-vis open access publishing and what best practices might be implemented to preserve the open access ethos.

This paper seeks to address the question of how well open access journal contracts align with an open access publishing ethos. Our aim is to determine how these widely accepted practices are actually being applied in author publication contracts. At the time that this research question was formulated, there were no systematic or comprehensive studies exploring this question. However, during the research design process for this study, SPARC Europe published "Open Access: An Analysis of Publisher Copyright and Licensing Policies in Europe, 2020," which includes some affinities with this study as well as important points of divergence.

We found that while the majority of journals in our sample are aligned with the central ethos of open access, a significant number of journals do not fully align: for example, their content may be openly available to the end user, but reuse rights may not be clearly delineated or are not necessarily fully retained by the author. Our findings are roughly consistent with findings of the SPARC Europe study; however, our results show significantly more journals

in which copyright and/or licensing features were unknown, such as those whose contracts did not mention author's rights at all. The landscape of copyright and open access publishing is also even more complex than what is revealed in the SPARC Europe report: Our findings demonstrate that absent, unknown, and contradictory factors are commonplace and likely lead to author confusion about the reliability of open access publishing for copyright retention, even among journals vetted for such standards. We did not evaluate the contracts in our sample according to US copyright law (where we are located), but rather according to their alignment with characteristics of the open ethos indicated above. These findings fill an important gap in the current literature by providing a unique look into the content of open access publishing contracts that are not readily available for public view.

Literature Review

Copyright terms and licensing practices in scholarly and open access publishing contracts are common concerns for both authors and publishers. Typical practices under subscription publishing, such as copyright transfer, as well as desired practices for open access publishing are discussed in abundance on scholarly communication blogs such as the Scholarly Kitchen¹³ and others, but there have been very few empirical studies exploring open publishing norms for author contracts. Even so, as far back as 2005 researchers were delineating the "commercial model" of scholarly publishing from the "open access model" by establishing the dichotomy that the former requires (without clear justification) copyright transfer from the author, while the latter "is far more in accord with the copyright interests of researchers." Discussions such as these established the foundation for what would become the open access ethos and aligning open access publishing with expanded author rights and copyright retention.

In the intervening years, much of the literature on this topic has had a practical and case-study based approach of providing information and advice to authors about what to know or understand concerning rights in the scholarly publishing landscape. A book chapter by Levine and Kost, for example, provided an overview of copyright and how to negotiate the terms of publisher agreements. Similarly, a commentary article in the *Journal of Librarian-ship and Scholarly Communication* gave recommendations to book authors on navigating rights pertaining to scholarly publications. Both of these examples are typical of the works that flood the field in this area of study, from formal publications to simple online library guides.

Empirical studies of copyright trends in scholarly publishing have been limited in scope to particular regions or disciplinary areas and not necessarily focused on open access publishing. Keele's 2010 study conducted a comprehensive review of copyright provisions in law journals. While the study was narrowly focused in subject area and sought agreements from only the top ranked journals rather than from all journals in the field, it was the only previous study we uncovered that used the methodology of directly contacting a journal representative to obtain a contractual document rather than gathering terms posted on the publisher's website, which was the most common methodology we found. Although not exclusively limited to open access journals, Keele outlines the shift of law journals from the "copyright transfer model" to more permissive agreements with non-exclusive licenses. The study found that copyright transfer was, in fact, the least common practice, with only around a fifth (21.9%) of law journals in the sample requiring transfer and a little under half using a non-exclusive license (44.3%). Similar to our study, Keele noted the difficulty of finding and obtaining author publication agreements and asserted that while some publishers regarded these as internal

documents, they "are, in many ways, concrete expressions of the journal's copyright policies; thus they should be not regarded as any more internal than their submission guidelines." 19

Other studies that follow a similar vein include one that examined open access policies of SciELO journals, which are primarily based in Latin America, the Caribbean, Spain, and Portugal, and another that sought to measure the openness of Spanish scholarly journals.²⁰ The study of SciELO health sciences journals used publisher websites and the SciELO portal,²¹ rather than contracts provided directly from the publisher, to analyze editorial policies regarding open access for 411 journals. The study found "ambiguous and unclear specifications of copyright terms" as well as a "lack of standardised language" for publication agreements. The rate of copyright transfer required by journals in this study was the highest, with 89 percent of authors granting copyright to the publisher despite the nearly ubiquitous adoption of Creative Commons licenses, and 92 percent of journals in the sample applying an open license.²² Bojo-Canales et al. argue that because of these inconsistently applied policies, which are often out of sync with the Budapest Declaration on open access, "[i]t is, therefore, important to foster explicit journal editorial policies in licensing, copyright terms, ownership and reuse permissions for readers and authors."²³

A 2017 study of nearly 2,000 Spanish scholarly journals used SPARC's Open Access Spectrum Evaluation Tool (now defunct) to provide a standardized score to journals based on openness criteria (reader rights, reuse rights, copyright, and author posting rights).²⁴ It found that while a large majority (more than 70%) of Spanish scholarly journals provide their content openly online, they tended to have more restrictive licensing on average than journals listed in the DOAJ. This study was additionally in agreement with others mentioned here that collecting and curating data on open access journal policies is a major challenge that lacks standardization.²⁵

Another geographical study that provides a more holistic view of copyright practices as they relate to open access journals across disciplines is a report commissioned by SPARC Europe.²⁶ In this study, Morrison et al. employed a double-pronged approach to data collection by gathering data from the websites of ten large legacy publishers based in Europe, as well as copyright and policy data from all European journal titles indexed in the DOAJ. The data was then used to evaluate the synergy of publishers and titles with the principles of Plan S, an initiative supported by cOAlition S, which requires all publicly funded scientific publications to be open access and makes formal recommendations to publishers and research funders for better compliance.²⁷ Reporting on the ten legacy publishers found that policies on author publishing rights retention were unclear at best, and only one publisher indicates on their website that the author retains publishing rights; later verification found that three additional publishers allow for publication rights via the Creative Commons license applied to the work.²⁸ While the DOAJ analysis portion of this study did examine policies at the title level, it relies on data reported within the directory and thus records far fewer inconclusive findings than what has been noted in our own and other previous studies. While the Morrison et al. study is exemplary in the scope of its DOAJ findings, its legacy publisher results rely too heavily on publisher websites or self-reported information from the publisher and cannot be generalized to the title level. Furthermore, its title level data from the DOAJ reports very few instances of unrecorded or unknown rights, which does not fit with known samples and previous studies. This either points to European journals far exceeding other regions in reliably recording rights and licensing policies, or to inconsistencies between what is recorded in the DOAJ and observable trends in actual publisher agreement documentation.

The preceding research on copyright and licensing practices in open access publications has been sparse but has provided a clear trajectory of research seeking to untangle the challenging problem of a lack of standardization and transparency around author's rights in open access publications. Even clear affirmations of open access principles, such as the Budapest Declaration, Plan S, and other global and regional documents, have not uniformly created alignment with model practices. With the exception of Keele, previous research has failed to highlight the nuances of terms within contracts obtained by publishers, in which authors could be given fewer rights than anticipated or experience contradictory terms. Previous research has also clearly highlighted regional issues but has not undertaken global trends. By soliciting contracts directly from publishers on the title level and expanding the scope to all journals indexed in the DOAJ regardless of region, our study aims to solve for some of the problems with data granularity and accuracy presented by past research while also expanding the scope to gain a fuller understanding of how copyright policies are being enacted in open access publishing at the global level.

Methodology

The subject and scope of this study is novel due to its global perspective on open access contracts as well as its analysis of formal contractual documents instead of the sole use of terms provided on publisher websites or in the DOAJ. To achieve these objectives, our methodology required a sample of contracts to be provided from the population of journals indexed in the DOAJ.

Sampling

This study was a non-probabilistic, voluntary-response sampling of all journals indexed in the DOAJ. The overall sample of DOAJ journals was stratified in that journals with a DOAJ Seal were contacted on a separate occasion from those journals without a DOAJ Seal, and contracts and responses from journals with a DOAJ Seal were kept separately from those without a DOAJ Seal. In order to provide email contact information for each journal, Chris Hallberg at Villanova University downloaded the API data from the DOAJ in order to generate a spreadsheet that included the journal name, publisher, contact URL, and DOAJ Seal status. Hallberg then developed a script that followed the contact link provided on the DOAJ directory and identified contact email addresses on the publisher's website. After the removal of many undeliverable emails, the script found contacts for 568 unique journal titles with a DOAJ Seal and 6,134 unique journal titles without a DOAJ Seal. Large publishers with many journal titles (greater than ten) and individual contacts associated with more than five titles were separated from the larger sample and emailed manually. Some journals returned many contacts for the same title. In order to make the email process more manageable, no more than five contacts were retained for each title with a DOAJ Seal and, for titles without a DOAJ Seal, only one contact was retained. Fewer contacts were retained for journals without a DOAJ Seal due to the sheer overwhelming volume of contacts for the 6,134 unique journal titles. The retained contacts were randomly selected. After data cleaning, there were 1,204 emails sent to contacts of titles with a DOAJ Seal and 5,912 emails sent to contacts of titles without a DOAJ Seal. The emails sent to contacts of titles without a DOAJ Seal is less than the total titles without a DOAJ Seal due to the separate treatment of contacts with multiple titles associated with them.

Data Collection

We used Qualtrics software for survey design, email requests, and data collection. The survey (see the appendix) consisted of eleven open-ended or multiple choice/drop down questions gathering demographic information about the journal in question, and two questions asking the respondent to upload a file. The first upload request asked for the journal's author contract, and the other provided an opportunity for respondents to upload supplementary documentation. Although it was determined separately by each university's IRB Office that this study did not require IRB review, the survey included an informed consent statement. The recruitment email for each participant was personalized and included the name of the journal for which demographic information and an author contract were being sought. Participants were asked to respond to the survey questions based on their knowledge of the journal indicated in the email.

Emails were sent using the Qualtrics email feature to DOAJ Seal journal contacts in spring 2021 and to journal contacts without a DOAJ Seal in summer 2021. Even after data cleanup where non-valid emails were removed, several hundred additional emails bounced or were returned as undeliverable. For each group, a follow-up email was provided two to three weeks after the initial contact. In some cases, the contact or multiple contacts were no longer affiliated with the journal title. Some contacts forwarded our request to the correct person, and some did not. If the email was not forwarded by the contact and an alternative contact was not provided, we did not attempt to find an alternative contact for the journal.

Methodological Limitations

While the methodology of this study expands on past research, there are a number of limitations that can be corrected for or explored in future research. One of the biggest limitations of this and similar studies is not accounting for journal titles that have no contracts or terms at all between author and publisher. Based on anecdotal evidence from journal representatives that reached out to us following our initial email, we suspect the number of such journals may be a significant minority. A better understanding of this population and of such journals' knowledge of copyright practices would help fill important gaps in current literature. We also recognize that 213 contracts is a small sample size compared to the total number of journals contacted. However, our demographic findings from the survey indicate a broad cross-section of titles for a global study such as this, though participation from journals based in Africa was low, so this remains an area for future exploration. Because of the international scope of this study, we evaluated contracts not based on the copyright laws of each contract's respective country but upon the characteristics of the open access ethos and specifically as those indicated by the DOAJ for inclusion in the directory and for acquisition of the DOAJ Seal. While we utilized Google translate for some contracts written up in languages other than English (twenty-five contracts or 11.7% of the total), we used our own working knowledge of other languages (e.g., Spanish, French) to aid this process and did not include any contracts in the sample that we could not reliably analyze for the terms and features we sought. Where the contract language was at all ambiguous, we did not assume the intent of the publishing contract but rather coded the rights as "Unknown." Though Google Translate does not provide highly reliable translations, the service is sufficient enough for our limited purposes, such as to divulge whether or not a contract in fact mentions author rights. Finally, although our method of narrowing the list of contacts returned for each title was necessary to manage communications and prevent duplicate survey entries, this strategy may have also limited our response rate by not reaching the best possible contact available.

Findings and Discussion

Basic Journal Demographics

After removing responses that did not include an author contract (some provided peer review guidelines or other journal documentation that did not address copyright or licensing), our final sample included 213 contracts, including 178 contracts from journals without a DOAJ Seal and 35 contracts from journals with a DOAJ Seal. Responses were received from journals originating in fifty-four unique countries. Figure 1 shows the number of contracts received from different regions of the world.

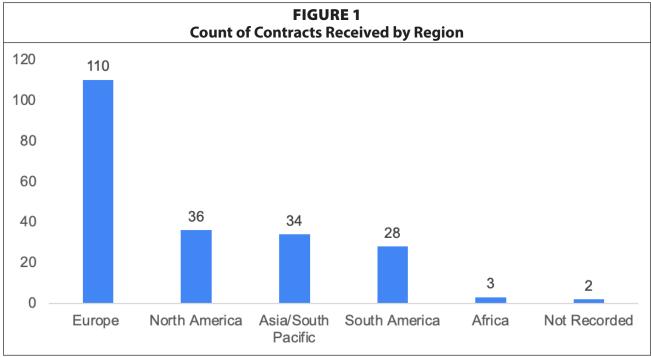
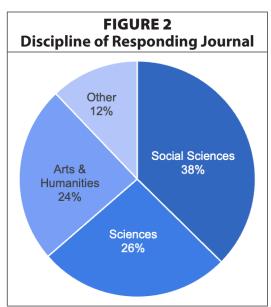
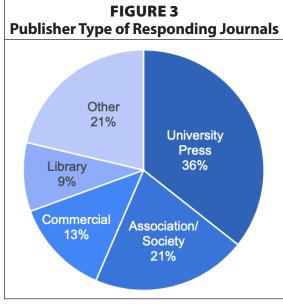
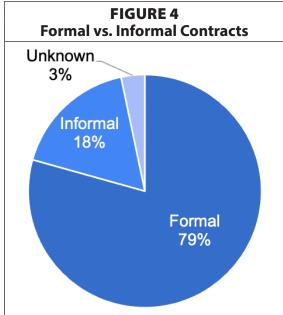


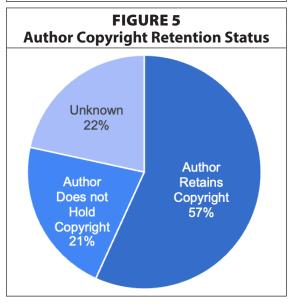
Figure 2 provides a breakdown of the self-reported disciplines of the 213 responding journals. Well over a third of the journals were reported as covering social science disciplines. Because respondents were able to select more than one discipline for each journal, respondents were more likely to co-select social sciences alongside another discipline. Sciences and arts & humanities journals are roughly evenly represented within the sample.

Figure 3 details the self-reported publisher type of journals within the sample. Respondents were able to self-select more than one publisher type for the journal. University press journals and association/society journals represent over half of the total responding journals.









Responding journals also represented a wide spectrum of newer and well-established open access journals with inception dates spanning 1905 to 2020. The highest concentration of journals in the sample (129) were founded between the years 2007 and 2018.

Contract Findings and Discussion

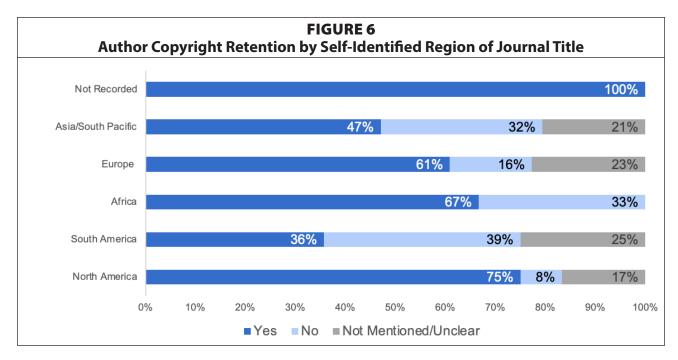
For the 213 contracts, we coded whether each one was a formal or an informal contract. We defined a formal contract as documentation that includes terms and conditions that the author must agree to as a prerequisite for publication. Informal contracts may include informational documents such as policies and Creative Commons license applied to the articles to be published but that did not outline formal, contractual terms of agreements for the author or ask the author to acknowledge these terms. Figure 4 shows that we coded the majority of contracts as formal under these criteria. A contract was coded as "Unknown" if its legal implications for authors were unclear.

Because this study relies on documentation self-reported by a journal contact, we cannot state definitively whether journals that did not provide a formal contract in the survey do not actually have such a document or terms available. The large majority of journals with formal terms—even if they do not require author signature—points to a general awareness of the importance of setting legal expectations for conditions of publication.

Copyright Retention

We coded each contract for whether it is explicitly mentioned that the author retains ownership of copyright to the publication in the journal. Over half (57%) of journals in the sample indicated that authors retain copyright; 43 percent of journals did not allow for author copyright retention, did not mention copyright retention, or had an unclear policy (figure 5).

This finding aligns with the Morrison et al. study, which found in its sample of DOAJ journals originating in Europe that 60 percent of authors held copyright without restriction.²⁹ Findings from

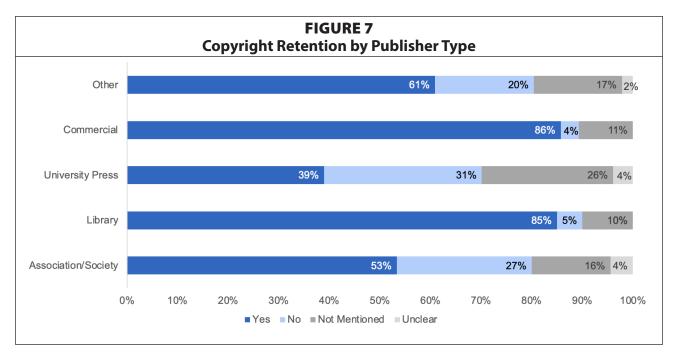


this study more strongly resemble trends in European journals than the findings on SciELO journals in Latin America and the Caribbean, where it was found that 89 percent of such open access journals required copyright transfer.³⁰ An important difference, however, is that our study recorded a much higher instance of the copyright status for authors as unknown—22 percent as compared to a negligible amount in the Morrison et al. study.

Rates of author copyright retention were quite variable by the region from which the journal originated (figure 6). North American journals were the most likely to provide author copyright retention and the least likely to require transfer of copyright to the journal or publisher, followed by Africa and Europe. Although no African journals required copyright transfer, it is difficult to draw conclusions about this region because the sample included only three journals from a single country, South Africa. South America was the only region in which the likelihood of the journal requiring copyright transfer was higher than the likelihood of the author retaining copyright. This is significant because even though South America has been a leading adopter of the open access model globally, our findings indicate that free and equitable access to research from South American journals may not translate to expanded rights for authors. This can generate confusion around how works can be further shared and distributed beyond initial publication.

Amongst publisher types, commercial publishers were the most likely to definitely allow for copyright retention (86%), closely followed by library publishers (85%). University presses were the least likely to provide for author copyright retention and were almost as likely to not allow copyright retention as they were to allow it. Just over half of association/society presses allowed for author copyright retention (figure 7).

Lower rates of author copyright retention in journals from university presses and association publishers could indicate less awareness of the importance of copyright retention as a standard practice in open access publishing. The varying policies among these publishers could also indicate less of an industry standard for open access terms in these spaces. On the other hand, commercial and library publishers generally allowed for author copyright retention, evincing a more ubiquitous understanding of contract alignment with the open access ethos.



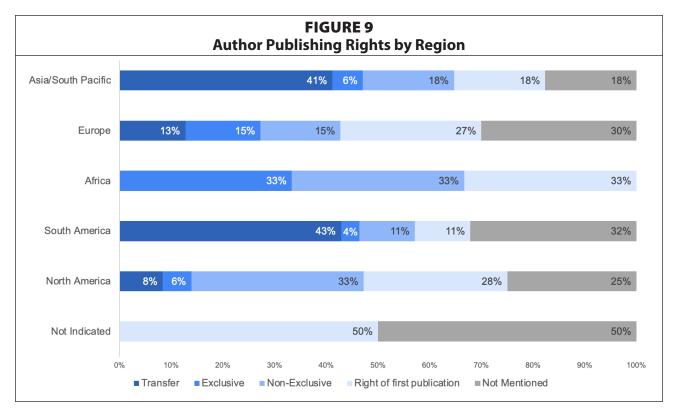
Publishing Rights

Whereas copyright retention in a publishing contract specifies whether the author retains the bundle of rights provided under copyright law, publishing rights pinpoint the rights or license being contractually requested by the publisher and also typically indicate how the author may enter into agreements with other entities. The most restrictive publishing agreements establish a transfer of rights or an exclusive license with the publisher. The first means that the author passes copyright and all associated rights to the publisher, while the latter establishes a license with the publisher that precludes the author from entering into further agreements, though the author may retain copyright ownership in principle. The least restrictive publishing rights are a non-exclusive license and the right of first publication. Unlike an exclusive license, the non-exclusive license allows the author to fully exercise rights under copyright by entering into other agreements. The right of first publication reserves for the publisher only the right to be the first to distribute the article but assumes no license over the content. Figure 8 displays



how publishing rights are distributed among the sample contracts.

While nearly a quarter of the contracts (24%) only ask for the right of first publication, another fifth (20%) require transfer of all rights. The most significant takeaway, however, is the large proportion (27%) of contracts that do not mention any publishing rights for the publisher or author in the contract provided. The percentage of authors that retain publishing rights without restriction (right of first publication or non-exclusive agreements, 42%) closely aligns with the Morrison et al. finding (44%).³¹ However, similar to the copyright retention findings, this study included far more contracts where no publishing rights could be recorded be-



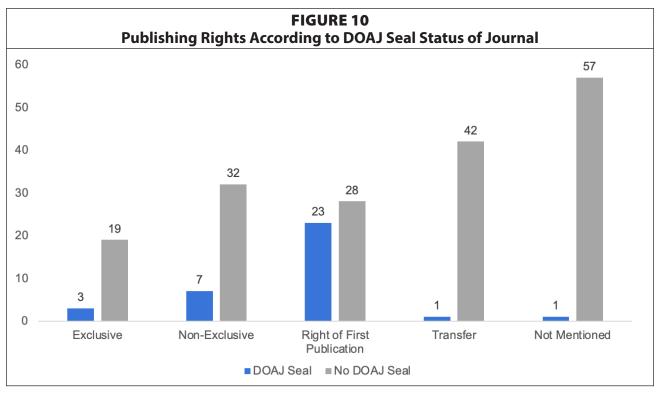
cause they were not present in the contract. These findings provide significant new insight that the understanding and delineation of publishing rights may not be as pervasive globally as what was demonstrated among European journals. In fact, analyzing publishing rights by region demonstrates the significance of this effect (figure 9).

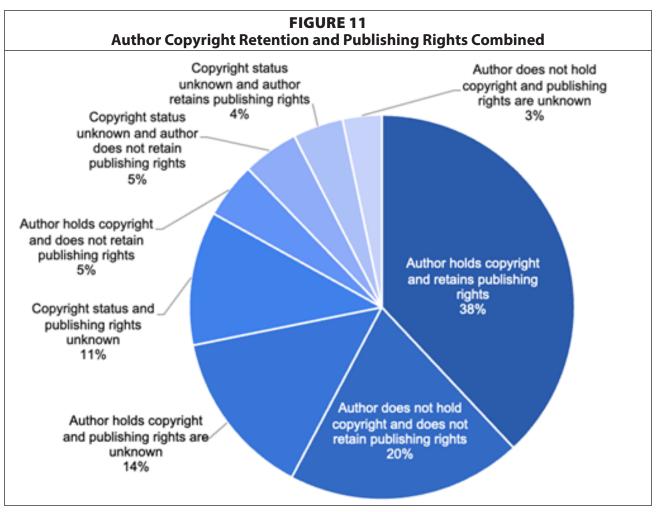
While it is notable that in the sample of contracts from Asia/South Pacific and South America the proportion of contracts requiring copyright transfer or exclusive agreements approaches half, the most significant finding here is that for several regions (Europe, South America, North America), the percentage of sampled contracts with no author publishing rights mentioned ranges from a quarter to nearly a third. That represents a significant proportion of contracts where authors' ability to enter into alternate agreements has no clear delineation and doesn't even include the unknown number of journals which have no contract at all with authors, since, as previously mentioned, those journals were not included in the scope of this study.

Parsing the data by DOAJ Seal status provides insight into how publishing rights differ significantly according to this status. Even while the portion of contracts from journals without a DOAJ Seal is five times as large as the portion with a DOAJ Seal, journals without a Seal were nonetheless almost exclusively those to require a transfer of all publishing rights or to not mention publishing rights in the contract (figure 10).

These findings indicate that DOAJ Seal status may be a very important indicator of how well the journal is aligned with the open access ethos and that simply being indexed in the DOAJ may not be a very reliable indicator of such an alignment.

When copyright ownership and publishing rights information coded from the sample are combined, the landscape appears to be even more complex (figure 11). While the share of contracts that provide for retention of copyright and publishing rights very closely aligns with the Morrison et al. findings amongst European Journals in the DOAJ (39.5%),³² we found far





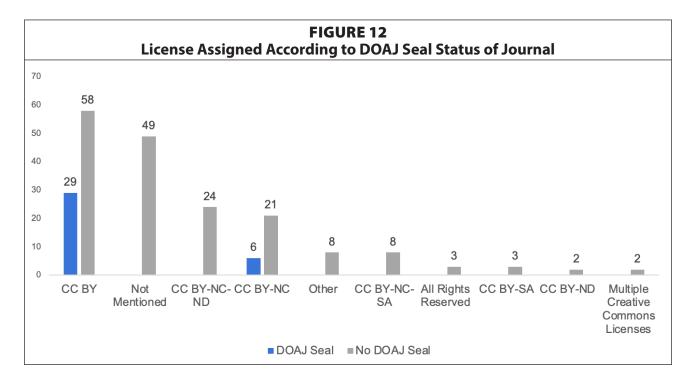
fewer contracts which do not allow for either copyright retention or publishing rights (20% as compared to 54.5% in Morrison et al.).

Instead, in over a quarter of contracts (26%), either copyright status or publishing rights status were unknown/undetermined, and, in an additional 11 percent of contracts, both factors were unknown. These findings extend the Morrison et al. report by demonstrating that on a global scale, open access publishing contracts may be a much messier landscape than what is revealed solely from DOAJ recorded data about European publishers and journals. Both studies confirm that there is some confusion about the importance of author copyright ownership and publishing rights retention to open access publishing, but this global survey points to broader inconsistencies in distinguishing the differences between the two. This creates contracts that are perplexing, full of internal contradictions, or both.

Licenses

These contradictions and inconsistencies are exacerbated by unevenly applied standards for the license being applied to the work. It is standard practice within open access publishing to apply a Creative Commons license to articles, and the CC BY (Creative Commons Attribution) license is widely considered the most aligned with the open access ethos. As figure 12 shows, within the sample, CC BY is, in fact, the most prevalent license among journals with and without a DOAJ Seal.

However, journals without a DOAJ Seal showed more variability in licensing practices than journals with a DOAJ Seal, which all applied one of two Creative Commons licenses: CC BY or CC BY-NC (Creative Commons Attribution-Non-Commercial). A significant portion of journals without a DOAJ Seal (23% of the entire sample) did not mention the license to be applied to the work, Creative Commons or otherwise. For journals without a Seal that did mention a license, the contracts were split amongst the six Creative Commons licenses and also included contracts requiring All Rights Reserved, a choice amongst Creative Commons licenses, and other license types. These license findings confirm that within this sample of



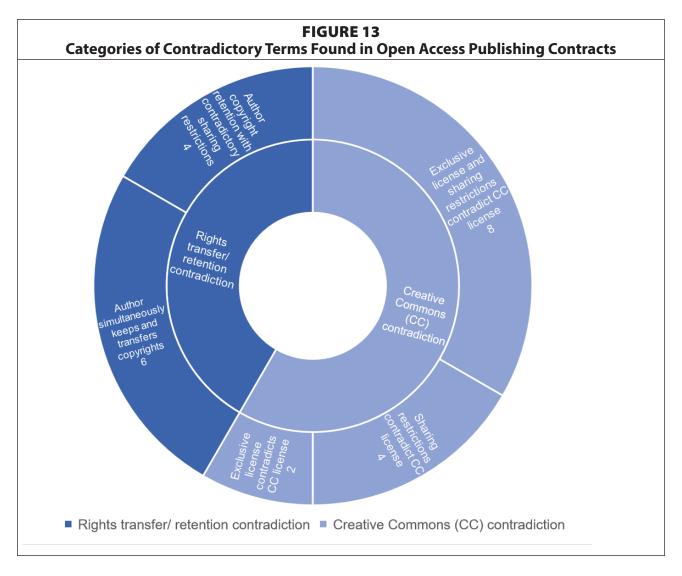
global open access publishing contracts, inconsistencies and misalignment with the open access ethos occur most prevalently in journals without the DOAJ Seal.

In addition to all of the contract features discussed above, we also coded the contracts in the sample for other features, including "hold harmless," limitations of liability, and mandatory arbitration statements, as well as mentions of journal/publisher open access policies. While all of these features were present in the contracts sampled, we are not including an analysis of them in this paper because there were no significant findings related to these criteria.

Contradictory Terms

We additionally conducted qualitative coding for contradictory terms within the contracts we received. In order to qualify as a contradictory term, the contract had to have internally conflicting requirements. Sometimes these contradictions were blatant, such as one paragraph asserting a full transfer of copyright from the author to publisher followed by a statement in the next paragraph that the author retains copyright over their work. In other instances, the contradictions were less significant or more vague, such as restricting the author's use of their work despite the author retaining all copyright and placing the work under an open license.

Of the 213 total contracts, we identified 24 contracts (11%) as having internal contradictions. We performed a qualitative analysis of those contracts to determine the type of



contradiction(s) that occurred in each contract and to broadly categorize these contradictions based on similarities. Figure 13 shows the results of this analysis.

The contradictions broadly fell into two larger categories: Rights transfer/retention contradictions and Creative Commons contradictions. Rights transfer/retention contradictions comprised 42 percent of the contradictory contracts. The contradictory terms in this category were further divided into subcategories in which the author retains copyright with contradictory sharing terms (for example, the author retains all copyright and publishing rights without restriction but is not permitted to reproduce the articles for commercial purposes), and those in which the author simultaneously keeps and transfers their copyrights (for example, as evidenced above as a blatant contradiction). Creative Commons (CC) contradictions accounted for 58 percent of the contradictory contracts and were all instances in which the publishing terms and restrictions went against the Creative Commons license being applied. These contradictions were placed into subcategories in which the sharing restrictions contradicted the Creative Commons license (for example, the work is published under a CC BY license but the author is not allowed to share the final version of their work), the exclusive license contradicts the Creative Commons license (for example, the author is asked to give the publisher full exclusive rights to the work but also places the work under a nonexclusive Creative Commons license), or the contract exhibited both of these categories.

Most of the contracts with contradictory terms (75%) came from journals without a DOAJ Seal. The contradictory terms in the six contracts that were from journals with a DOAJ Seal were largely sharing restrictions that contradicted a Creative Commons license. The contradictory contracts were fairly evenly distributed across disciplines and types of publishers, similar to the distribution of the contracts overall. Geographic distribution was also similar to the overall contract composition in that nearly half of the contradictory contracts (46%) came from journals that self-identified as European countries, but there were a few differences. South American countries had fewer contradictory clauses (4%) compared to their composition overall (13%); the North America and Asia/South Pacific regions made up the difference, comprising 25 percent and 21 percent, respectively, of the contradictory contracts. The remaining 4 percent came from African countries.

There were additional contracts that could have qualified as "contradictory" had the work also been placed under a Creative Commons license, for example, where sharing was restricted in a way that would not be supported by a Creative Commons license, but it was unclear what license the open access publication was published under. However, because we decided to only look at the terms within the contract and not rely on other, external data, such as the DOAJ or the publisher's website, these contracts were not included in this analysis unless they displayed internal conflicts. Analysis of these contracts indicate that some may contain holdover language from previously closed journals. This can particularly be seen in the contradictory sharing restrictions, which often refer to different sharing privileges for different versions of the work that are typically associated with green open access, or self-archiving, practices. Similarly, contradictions in which the author simultaneously keeps and transfers copyrights often start with a standard copyright transfer agreement followed by a description of a "shared approach to copyright," "the author retains copyright," or other language typically associated with the open access ethos. While some of the more blatant contradictions could be caught and understood by most of the general public, many of the contradictions require a closer reading or understanding of legal concepts that may not be available to many journals or authors.

Because publishing contracts are legal documents that outline each party's rights and what can and cannot be done with the work, contradictions and unclear terms create uncertainty as to what is being agreed on. This has the potential to raise legal questions as to who actually owns what rights over the work or, at the very least, could erode trust between the author and the publisher should there be a disagreement as to what the terms stipulate. These contradictory clauses further add to the overall theme of unclear policies and inconsistent practices in open access journals.

Conclusion

This research aimed to determine how well how open access journals align with a commonly accepted open access ethos and how these widely accepted open publishing practices are being employed on a global scale, as evidenced by journal contract terms. While the SPARC Europe study previously cited in our literature review focused on major publishers and those within a single geographic region, the sample for this study incorporated contracts from a broad range of journals and publishers throughout the world. While the SPARC Europe study thoroughly identified trends among some of the world's biggest publishers, we believe that our findings are more indicative of the full breadth of practices across various regions and publisher types. Further, because there were discrepancies found between some contracts and alignment with criteria for inclusion in the DOAJ, our study more accurately delineates the gap between some journals' aspiration to align with the open access ethos and what that looks like contractually. Specifically, studies that look only at the language on a publisher's website or at indicators in the DOAJ are incomplete, as we found that contractual terms were sometimes at odds with this public documentation. Our results suggest that open publishing practices vary widely across open access journal publishers at a global level, and there are a number of discrepancies and inconsistencies being used in practice that run counter to the open access ethos. Our findings show that publishing in an open access journal does not guarantee that an author will retain rights over their work or that the work itself will be published under terms that align with accessibility and sharing, which goes against the purpose of the open access movement. For example, we found journals that indicated use of a Creative Commons license and/or author rights retention on their website or in the DOAJ but required copyright transfer in the legal contract signed by the author. These disparities have the potential to erode trust in open access publishers; open access alignment needs to be addressed by publishers and demanded by authors. We posit, however, that these discrepancies might be due to a lack of proper legal counsel in composing these author contracts, particularly among smaller, non-profit publishers.

For this reason, publishers need better avenues to improve their agreements and authors need better resources to vet publishing venues based on their contractual terms. The DOAJ requirements provide a good basis for open alignment but, at the same time, do not guarantee that the publishing contract is coherent or employs good open practices. Journals with a DOAJ Seal are overall more likely to align with the open access ethos and thus provide more predictable and standardized terms. Our findings also indicate that open access publishers could benefit from general guidance or best practices in drafting their publishing agreements to ensure that the terms are clearly laid out and are free of contradictory terms, as discussed in the previous section. To that end, we have provided some best practices in a subsequent section. Contracts are an incredibly important part of enabling open access, and we hope that

our work will inspire open access publishers to look more closely at their own contracts to identify areas of improvement and greater alignment with the open access ethos.

Our study has several limitations in addition to our methodological limitations that could affect our results. First, because we reached out to individual journal contacts, we did have some instances of duplicate publishing contracts from different journals with the same publisher or similar publishing systems (for example, Open Journal Systems). We chose not to deduplicate the contracts because each submission reinforces current publishing practices, even if they are the same or similar to others, and further adds to our overall analysis of the landscape. Second, we coded the agreements ourselves. While we aimed to be as consistent as possible in our readings of the contracts and sought a consensus in situations where interpretation was not straightforward, there could be human error in how we read and documented the results, particularly when the contracts themselves presented conflicting or vague information.

Author Contract Best Practices

While we are not in a position to make formal recommendations to publishers about how author contracts should be constructed—and we generally recommend that publishers consult with a lawyer when creating these documents—there are several best practices we identified based on this study. While contracts should generally align with the characteristics identified in this study as part of the open access ethos—copyright retention, author publishing and sharing rights, and a Creative Commons license assigned to the final, published work—the findings from this study associated with journals worldwide that have been awarded the DOAJ Seal give some further nuance to those best practices.

First, while providing for continued author copyright retention after publication is a straightforward practice to include in every contract, it is important to also separately include and delineate publishing rights that do not contradict author copyright retention. For example, non-exclusive licenses established between the author and publisher or publisher right of first publication are most compatible with the author retaining copyright ownership. Exclusive licenses, when used in open access publication contracts in tandem with copyright retention clauses, place limitations on the author and contradict the full exercise of their rights under copyright law.

Second, not only do contracts need to include the license(s) that will be applied to the final published work, but they should also use Creative Commons licenses to ensure they do not conflict with author retention of copyright and publishing rights. To avoid confusion for authors and end users, it is best practice to confirm that any additional sharing guidelines provided in the contract align with the permissions afforded by the Creative Commons license and to use the definitions provided by Creative Commons to describe the terms of the license. According to journals from this study's sample with a DOAJ Seal, CC BY or CC BY-NC are the most preferable Creative Commons licenses aligned with the open access ethos, although CC BY best aligns with the original BOAI principles and helps to ensure that that content will not only be available to read but also to reuse as widely as possible.

Lastly, we can affirm the importance of having a formal contract of agreement between the author and publisher containing these terms. We undertook this study with the assumption that most journals would have such contracts on hand; only after sending out surveys did we discover that many journals indexed in the DOAJ did not use such a contract at all. Unfortunately, our survey instrument was not designed to capture instances where journals do not have an author contract at all, so we were unable to gather data that might give more insight to this practice. Based on anecdotal evidence gathered, however, a substantial number of open access journals in the DOAJ may be published without any clear contractual guidelines for author or journal. According to the DOAJ,³³ this practice may be in violation of their stated guidelines for being indexed in the directory. In our analysis, we found three DOAJ journals utilizing "All Rights Reserved" licenses without clear open access policies in their contracts, but further study is needed to confirm the extent to which indexed journals might deviate from the DOAJ guidelines.

Future Directions

Our work greatly expands the current knowledge of open access publishing practices through contract terms, and it exposes a number of unanswered questions that could be explored in future work. Future research could connect contract terms to policies listed on the publisher website and in databases like the DOAJ to see how well these practices align and where there might be contradictions. More research could be conducted to expand our results in order to gain a better understanding of open access publishing practices in less represented areas of this study, such as in African countries; look into the prevalence of journals without contracts; or investigate journals' overall knowledge of copyright practices and how that knowledge is applied to their contracts and policies. A longer term study might investigate how open access publishing terms have changed or are changing over time and how those changes align with the open access ethos. As a more practical outcome, our findings could be used by publishers to make changes to their existing contracts—or draft new ones—to ensure that their terms are clear and in agreement with open access principles. We would also encourage organizations, such as Creative Commons, to provide more targeted outreach to publishers on the nuances of these licenses and how to avoid contradictory terms within publisher guidelines and contractual agreements.

Appendix. Open Access Author Contracts and Alignment with the Open Ethos: A Global Study

Q1 Informed Consent

You are being invited to participate in a research study about author contracts for Open Access journal publishers. This study is being conducted by Melissa Cantrell from the University of Colorado Boulder and Sarah Wipperman from Villanova University.

Purpose: To ascertain what open access journal contracts can tell us about the state of open access publishing.

Procedures: To complete this survey you must be 18 years or older. The survey consists of no more than 10 questions and will take approximately 5 minutes to complete. Participation is voluntary and participants may choose to withdraw or end the survey at any time.

Confidentiality: Surveys will be collected through the survey tool Qualtrics. Confidentiality cannot be guaranteed in the online research environment. Any documents uploaded to the survey will be deidentified and will not be made publicly available.

If you have any further questions or concerns about this research or your participation, please feel free to contact the investigators below. By clicking "I agree" below you are indicating that you are at least 18 years old, have read and understood this consent form, and voluntarily agree to participate in this research study. Please print a copy of this page for your records.

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- □ I Agree
- □ I Do Not Agree

Skip Logic - If "I Agree," display Q2. If "I Do Not Agree," go to end of survey

Q2 The following questions are in regard to the journal title noted in the email that linked to this survey. Please answer the questions to the best of your ability.

*Denotes required field; enter "NA" if not applicable

Q3 Journal Title*

Q4 Journal ISSN*

Q5 Publisher*

Q6 Publisher Type*
□ Commercial
□ Association/Society
□ University Press
□ Library
Other
Q7 Subject/Discipline (select all that apply)*
□ Arts & Humanities
□ Sciences
□ Social Sciences
 Other
Q8 Country ▼ Afghanistan (1) Zimbabwe (1357)
Q9 Language*
Q10 Year of journal inception (yyyy)*
Q11 Impact Factor of journal*
Q12 Is this journal peer reviewed/refereed?* □ Yes □ No
Q13 Submit contract (Word document preferred)*
Q14 Submit other documentation (optional)

Notes

- 1. "Budapest Open Access Initiative," (Open Society Foundations), accessed December 10, 2021, https://www.budapestopenaccessinitiative.org.
- 2. Heather Piwowar et al., "The State of OA: A Large-Scale Analysis of the Prevalence and Impact of Open Access Articles," *PeerJ* 6 (2018), https://doi.org/10.7717/peerj.4375, 2.
 - 3. "Directory of Open Access Journals," DOAJ, accessed December 10, 2021, https://doaj.org.
- 4. John Willinsky, "Copyright Contradictions in Scholarly Publishing," *First Monday* 7, no. 11 (April 2002), https://doi.org/10.5210/fm.v7i11.1006.
- 5. "Guide to Applying," DOAJ, accessed June 2, 2022, https://doaj.org/apply/guide; "Plan S Principles," cO-Alition S, accessed December 10, 2021, https://www.coalition-s.org/plan_s_principles.
- 6. "Share Your Work," Creative Commons, accessed December 10, 2021, https://creativecommons.org/share-your-work. Currently, 16,889 out of 17,198 journals in the DOAJ bear a Creative Commons License.
 - 7. "Licensing & Copyright," DOAJ, accessed June 2, 2022, https://doaj.org/apply/copyright-and-licensing.
 - 8. "The DOAJ Seal," DOAJ, accessed December 10, 2021, https://doaj.org/apply/seal.
 - 9. "The DOAJ Seal"; "Plan S Principles."
- 10. U.S. Copyright Office, *Copyright Basics—Circular 1* (Washington, DC: Library of Congress, 2021), 1–2. https://copyright.gov/circs/circ01.pdf.
 - 11. Willinsky, "Copyright Contradictions."
- 12. "Budapest Open Access Initiative"; "The Berlin Declaration on Open Access," (Berlin 9 Open Access Conference 2011), accessed December 10, 2021, http://www.berlin9.org/about/declaration; "Bethesda Statement on Open Access Publishing," June 20, 2003, https://dash.harvard.edu/bitstream/handle/1/4725199/Suber_bethesda.htm.

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- 13. "Archives: Copyright," *The Scholarly Kitchen* (blog), accessed November 22, 2021, https://scholarlykitchen.sspnet.org/category/copyright.
 - 14. Willinsky, "Copyright Contradictions."
- 15. Melissa Levine and Karen Kost, "Chapter 17—Rights and Publishing Contracts: What Authors Need to Know," *Medical and Scientific Publishing: Author, Editor, and Reviewer Perspectives,* ed. Jasna Markovac, Molly Kleinman, and Michael Englesbe (London: Elsevier Academic Press, 2018), 157–66, https://doi.org/10.1016/B978-0-12-809969-8.00017-6.
- 16. Melody Herr, "The Rights Provisions of a Book Publishing Contract," *Journal of Librarianship and Scholarly Communication* 6, no. 1 (2018), https://doi.org/10.7710/2162-3309.2273.
- 17. Benjamin J Keele, "Copyright Provisions in Law Journal Publication Agreements," *Law Library Journal* 102, no. 2 (2010): 269–83.
 - 18. Ibid., 274.
 - 19. Ibid., 277.
- 20. Cristina Bojo-Canales and Remedios Melero, "Open Access Editorial Policies of SciELO Health Sciences Journals," *Journal of Information Science* (July 2021), https://doi.org/10.1177/01655515211015135; Remedios Melero, Mikael Laakso, and Miguel Navas-Fernández, "Openness of Spanish Scholarly Journals as Measured by Access and Rights," *Learned Publishing* 30, no. 2 (April 2017): 143–55, https://doi.org/10.1002/leap.1095.
 - 21. "SciELO," accessed December 9, 2021, https://scielo.org/en.
 - 22. Bojo-Canales and Melero, "Open Access Editorial Policies," 11.
 - 23. Ibid., 2.
 - 24. Melero, Laakso, and Navas-Fernández, "Openness of Spanish Scholarly Journals," 143.
 - 25. Ibid., 153-54.
- 26. Chris Morrison, Jane Secker, Brigitte Vézina, Ignasi Labastida i Juan, and Vanessa Proudman. "Open Access: An Analysis of Publisher Copyright and Licensing Policies in Europe, 2020," SPARC Europe (September 2020), https://doi.org/10.5281/zenodo.4046624.
 - 27. "Plan S Principles," cOAlition S.
 - 28. Morrison et al., "Open Access," 21.
 - 29. Ibid., 24–25.
 - 30. Bojo-Canales and Melero, "Open Access Editorial Policies," 11.
 - 31. Morrison et al., "Open Access," 26.
 - 32. Ibid., 27.
 - 33. "Basic Criteria for Inclusion," DOAJ, accessed November 22, 2021, https://doaj.org/apply/guide.