April 2017 81

Open Access and the Humanities

The Case of Classics Journals

Paul Ojennus

Since the earliest pressures to develop open access (OA) options for journal literature were in the fields of science and medicine, the predominant models reflect those origins and fit those disciplines. These models are less applicable to humanities publishing models, which have been slower to embrace open access. Current literature on OA in the humanities focuses on theoretical frameworks and end-user perceptions. This study complements those perspectives by examining current practices in the humanities, specifically, the OA options offered by journals serving the discipline of the classics.

The open access (OA) movement originated in response to developments in lacksquare scholarly communications in the sciences, where cost-increases for journals published by for-profit publishers had clearly become unsustainable. The solutions proposed by current OA models, conventionally labeled "green" and "gold" reflect that early context. The green model has a version (usually the "revised," "stage-2," or "accepted" version) of the paper placed in a freely open repository, to be made openly available following an agreed-upon embargo period (e.g., six months). This reflects a compromise between the imperative to make the scholarship freely available and the publisher's economic exigencies, which retains the rights to the published version of the paper, and is justified in charging a premium for providing the most current research. The gold model allows the author to make the published version of the paper freely available, usually for a fee. This model responds to legal necessities where public funding of research is contingent on the free dissemination of its results. The cost of the processing fee is incorporated into the funding of the research more broadly and thus is not an onus for the individual researcher, and the upfront payment by the author offsets a notional diminution of income to the publisher from those who can now access the research without a subscription. It is becoming generally recognized that these models are not well suited for humanities and social science (HSS) publishing for a number of reasons. First, the models do not address the greater importance of monographs, especially in the humanities. Second, HSS researchers tend to be more conservative about placing their research in repositories and accessing others' research, when available, in repositories. Third, since HSS researchers are less likely to have grant money available, they are less likely to be able to pay the fees associated with gold OA. Current research has examined this issue from the perspective of faculty attitudes and ideologically, particularly pointing the ill fit between publishers' capitalist models and the gift culture of researchers. The author proposes exploring an additional perspective, examining what OA solutions are in fact being employed in one particular subfield of the humanities to determine what progress has been made, what obstacles remain,

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and what creative solutions have been found that might be applied elsewhere.

Literature Review

Two approaches dominate the current research on OA in the humanities. The first approach has been to survey the attitudes of various humanities user-groups, particularly university faculty. The second has been to postulate models of OA that would solve current problems, often from an ideological viewpoint. Other researchers have explored OA in the humanities in relation to similar issues, such as the role of digital scholarship in the humanities more broadly, the so-called monographs crisis, and the details of licensing scholarly production in the humanities. Duranceau points to the gap in the literature for a primarily pragmatic approach such as I am proposing here: "Politics and philosophy will not be the main drivers toward a commons-based system for sharing research and scholarship. Economics, technology, and the social and practical realities of human behavior will be."

On the selection of the field of classics for this study, in his study of electronic journals in classics, Romanello observes that OA in classics journals is a topic that needs to be explored, but is outside the scope of his research.²

User Attitudes to OA in the Humanities

The analysis of user attitudes to OA in the humanities is a wellestablished line of research. Rodriguez finds that HSS faculty are often not well-informed about the issues surrounding OA, and that while factors such as discipline and experience have some influence on attitudes toward OA, none is strongly predicative of a decision to publish in an OA venue.³ Stanton and Liew similarly surveyed graduate students' attitudes toward placing their research in institutional repositories for OA, and found that awareness and understanding were the strongest influences in that group.4 Kingsley examined disciplinary differences in attitudes and behaviors regarding institutional repositories as an OA venue, finding chemistry and computer science researchers were more likely than sociologists to use the repositories.⁵ Duranceau's localization of the issue of user attitudes being determined by awareness, "when faculty become aware of the issues related to access to their work, they do care, and that our campuses do need IRs to support open access to faculty research," seems to represent a broad consensus on this topic.6

In contrast, there is also a general consensus that humanities researchers continue to resist the changes in publishing more than their colleagues in the sciences. Harley et al. found that English faculty often equated gold OA with vanity presses. Jöttkandt and Hall discovered that humanities faculty feared that publishing in OA journals

would harm their career more than science faculty.8 While attitudes have likely continued to evolve since these studies, more recently Stanton and Liew found that HSS graduate students continued to lag behind their peers in the sciences, business, and education in awareness and use of OA repositories. Edwards notes that, most particularly in the humanities, OA journals continue to lack the prestige of long-standing print journals, and that there is the ongoing perception that they are disadvantaged in assessment tools such as the UK's Research Excellence Framework or Australia's Research Quality Framework. 10 More broadly, Rodriguez calls for future investigations to explore discipline-specific concerns in OA publishing, and mentions the humanities in particular as a growth area. 11 We can see, then, that while the research has established that faculty awareness is the most important factor influencing use of OA, and that researchers in the humanities tend to be more reluctant to use OA than their peers in the sciences, work remains to be done to identify issues specific to the intersection of the humanities and OA publishing, and to identify appropriate solutions.

General Issues

Some of the issues facing OA in the humanities are common to the whole of the scholarly communication landscape, but have particular ramifications for humanities researchers. Article processing charges (APCs) are regularly cited as a major obstacle to publishing in OA journals for humanities researchers, who typically do not conduct research funded by grants and therefore lack the resources to pay APCs.¹² There is a concern that if APCs are paid by the researcher's institution it may lead to a form of censorship where the institution could promote or discourage certain lines of inquiry by paying the APCs. 13 In addition to misunderstandings about the nature of OA noted above, there is a real issue of prestige attached to well-established journals. New OA journals may find it difficult to compete for both highquality content and readership since they lack the prestige of older, more established journals; conversely, established journals have little incentive to provide OA options, since they already attract the best content and widest readership.¹⁴ Since prestige does not necessarily correlate with quality, use of prestige as a selection criterion tends to unfairly disadvantage newer journals, which are more likely to be $OA.^{15}$ This issue seems to be especially acute in the humanities where researchers tend to be skeptical of metrics and rely more on experience and intuition in choosing where to publish or in evaluating their peers' work.¹⁶ The appropriate length of embargoes for green OA for humanities journals is another contentious issue. Mandler cites the United Kingdom Research Council policy, which institutionalizes a two-tier policy of limiting embargoes to six months for gold and twelve months for green in the sciences but twelve months for gold and twenty-four months for green for others, and the Arts and Humanities User Group proposal of a three-year embargo as standard for green OA in humanities journals. ¹⁷ Claims that short embargoes are harmful to humanities journals and a general prejudice that timeliness is less important to humanities scholars are often repeated but generally not substantiated. ¹⁸

Top-Down Postulates

A number of scholars have proposed wide-ranging solutions to the issue of OA for humanities journals. Martin Paul Eve, founder of the Open Library of Humanities project, suggests a cooperative venture among academic libraries that would "underwrite the labor of publishing on a not-for-profit basis, offering societies an opportunity to do gold OA without author-facing charges."19 Jackson cites the Open Library of Humanities as a model that provides traditional editorial and gate-keeping services without the APCs that are usually prohibitive for humanities researchers, by being subsidized by library partners.²⁰ Others propose similar projects that adopt the gold model prevalent in the sciences, but look for ways to shift APCs away from the authors. Willinsky proposes that libraries could shift funds from subscriptions to cover APCs, and that libraries can partner with journals to provide expertise in hosting and preservation.²¹ Kennison and Norberg suggest a similar shift of funds to a central administrative unit that would distribute them to scholarly societies and related organizations to fund their journals to eliminate the need to collect article processing fees.²² The success of these proposals remains sub judice, but could be slow in coming as they require sustained funding from partners (primarily academic libraries) who must be convinced that at some point in the future the ventures will attain the critical mass that will make OA in the humanities less expensive than traditional publishing models. Of particular interest is the OA movement in the United Kingdom, where research tends to be more centrally funded; in this case, the legal requirement that such publicly funded research be made openly available serves as a more direct incentive for publishers to provide OA options, and UK legislation has been relatively aggressive in using that leverage, compared (especially) to the United States, where the research landscape is more diverse and OA initiatives tend to be less centrally organized.²³ Given that humanities research is less typically publicly funded, it is worth investigating what effects these different contexts have on OA in the humanities.

Related Issues

Eve notes that some humanities journals have proceeded to OA outside of such larger frameworks that would help

offset their costs of production, but it is also evident that this approach entails issues of its own.²⁴ Rodriguez notes that faculty sometimes commented on the challenges of accessibility and discovery of content in OA journals, presumably reflecting that they often lacked the sophisticated interfaces of commercial databases.²⁵ Anecdotally, in the author's library, titles in the Directory of Open Access Journals (DOAJ) are more likely to present issues with link-resolver software, in terms of having inaccurate coverage ranges, inaccurate URLs, and not being able to accept OpenURL requests for specific articles. Jöttkandt and Hall, in describing the Open Humanities Press, indicate that one of the project's goals is to provide a research gateway that would allow them to compete with commercial consortia like Project MUSE and JSTOR, indicating that this continues to be an area of concern for OA publishing.²⁶ Parallel to the "serials crisis," humanities researchers face a "monographs crisis." While publishing monographs continues to be important for humanities faculty in terms of promotion, library budgets have tended to reduce monographs budgets to accommodate increases in serials costs, reducing the available market for monographs in the humanities and endangering the monographs publishing ecosystem, as it were.²⁷ Yet the current dominant models of OA do not address the issue of monographs.²⁸ In a parallel track, Cheverie, Boettcher, and Buschman note that nontraditional forms of scholarship (websites, blogs, software, etc.) present a similar challenge or alternative to traditional academic publishing; for certain forms of scholarship, the traditional tools of peer-review and publication in a prestigious journal or university press are less obviously appropriate, but the needs for evaluation, dissemination, and preservation remain.²⁹ A global view of OA in the humanities should also address these scholarly products.

Research Questions

The goal was to examine a specific subdiscipline in the humanities, namely classics, to see how OA was in fact being implemented, specifically by the journals, with the broader intentions of grounding the often highly theoretical discourse on OA in the humanities and identifying less publicized approaches. Drawing on the trends that emerge in the literature review, the following research questions were identified:

- Do classics journals provide OA options, either green or gold, and to what extent do local culture and the age of the journal influence those provisions?
- Do classics journals that provide gold OA avail themselves of broader cooperative ventures to offset APCs?

- How do classics journals that provide gold OA outside of such broader frameworks address issues of access, preservation, indexing, etc.?
- Do classics journals that provide OA use models or approaches that are not identified in the literature?

Method

A list of classics journals was compiled from a variety of sources including TOCS-IN, SCImago Journal and Country Rank, and the DOAJ. The website The Ancient World Online was not used to compile the list of journals; although very thorough, its range is far wider than Greek and Roman antiquity, which was the understanding of classics used here, and its exclusion follows the practice of Romanello. The author also did not use the list of classics journals from L'Année Philologique, since this is a comprehensive historical list, and interest was in currently active journals. Each journal's OA policy was examined on the journal's website; where the policy was not clearly stated, information was supplemented from SHERPA/ROMEO. The following data were collected and recorded in a Microsoft Excel spreadsheet:

- Journal title
- Location
- Earliest publication date
- · Peer-review policy
- Is Green OA/self-archiving allowed?
- If so, which version?
- If so, is the length of the embargo?
- Is Gold OA available?
- If so, what is the APC?
- If so, do/could cooperative ventures defray the APC, their identity?
- Access/preservation/indexing issues observed
- · Other notes

In the process of collection, it became clear that the following data were also needed:

- Is the policy on the journal's site largely complete?
- How was the data augmented (e.g., from SHERPA/ RoMEO)?

Data were collected November 10, 2015m through February 18, 2016. Initially, 229 titles were identified; after data collection, 16 were omitted because they were not peer-reviewed journals (6), they had ceased publication (8), or no information could be retrieved (2), leaving 213 titles in the study. An unanticipated number of journals were published in print only (49); these journals almost exclusively did not provide OA or self-archiving options. To clarify the state of the field, these journals were further tagged as

print-only, and the data were processed both including and excluding these titles. Journals currently published in print only but with back issues available through a subscription service (like JSTOR) were considered print-only. Journals currently published in print only with issues in the public domain digitized by a third party (e.g., Google) were considered print-only. Journals currently published in print only with in-copyright back issues available through a public service (like Persée) were not considered print-only, but as providing a kind of OA. Locations were coded as North America, United Kingdom, Europe, and elsewhere; the United Kingdom has a unique set of regulations regarding OA (see above), and was therefore coded separately from the rest of Europe. Green OA was understood as available whether the publisher used the language "green open access," "self-archiving," "author retains copyright," etc.; if only an abstract or a link to the publisher site was allowed, this was not considered to provide green OA. If no policy was found, the title was not considered as green OA; however, if the title was a fully OA journal that did not express a separate policy for green OA or self-archiving, this was understood as allowed, following the model of SHERPA/ RoMEO. For titles identified as providing green OA, the version allowed was coded as "submitted" (i.e., the original manuscript before revisions or copy editing), "accepted" (i.e., the revised manuscript approved for publication, but before copy editing, also called "revised"), "final" (i.e., the version of record as it appears in the journal), or "unknown" (when the allowed version could not be determined). If a journal's policy indicated that several versions were allowed, the most liberal code was applied (e.g., if the policy stated "submitted or accepted version may be posted in institutional repository," this was coded as "accepted"). When an embargo was indicated, this was coded as a number of months, or as "unknown." Cases where the policy stated "submitted version may be posted immediately, accepted version after 12 months" were coded as "accepted" and "12." If the policy stated that the author retained copyright with no further provisions, this was understood to allow posting of the final version with no embargo. Gold OA was understood as available whether the journal policy used that term, the journal was itself fully OA, or otherwise stated that the content would be freely available from the publisher. APCs were converted to US dollars at the following rates: €1.00 = \$1.10, UK £1.00 = \$1.40, Canada \$1.00 = \$0.75, which were all typical rates during the period of data collection; no other currencies were encountered. If the policy did not provide the APC, it was coded as "unknown." As above, if back issues were made freely available through a cooperative venture (e.g., Persée), the title was considered to offer gold OA with no APC, and a note of the lag or embargo was made; if only issues in the public domain were digitized it was not considered to offer gold OA.

Table 1. Version Approved for Green C

Version approved	Number	Percent
Submitted only	0	0
Accepted	36	36
Final	43	43
Unknown	21	21
Total	100	100

Table 2. Length of Embargos for Green OA

Length of embargo	Number	Percent
No embargo	43	43
12 months	15	15
18 months	6	6
24 months	13	13
36 months	3	3
48 months	1	1
Unknown	19	19
Total	100	100

Results

Availability of OA Options

A slim majority of the journals surveyed offered some type of OA. Approximately 47 percent (100/213) offered green OA options, and approximately 49 percent (105/213) offered gold OA options; more than 60 percent (129/213) offered green, gold, or both. If print-only journals are excluded from the results, the majority is more substantial with 78 percent (129/164) of journals offering at least one option.

Green OA Options

Of the hundred titles that offered green OA options, none allowed deposit of the submitted version only, though some indicated that the submitted version could be deposited immediately, to be replaced with the accepted or final version at the time of publication or the expiration of the embargo. Those allowing deposit of the accepted version were 36 percent (36/100), and 43 percent (43/100) allowed deposit of the final version or version of record. The policies of 21 percent (21/100) did not indicate which version could be posted (see table 1). Nearly half (43 percent, 43/100) of the titles offering green OA did not impose an embargo. When embargos existed, they ranged from twelve months to forty-eight months, with the preponderance of embargos being twelve or twenty-four months. For nineteen titles, the policy did not indicate whether there was an embargo, or, if

Table 3. APC Requirement

APC required	Number	Percent
Yes	32	30
No	59	56
Unknown	14	13
Total	105	100

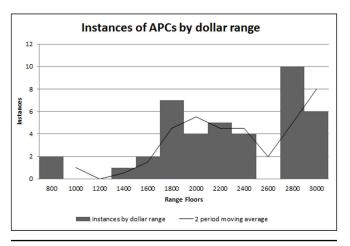


Figure 1. Instances of APCs by Dollar Range

there was, how long (see table 2).

Gold OA Options

Of the 105 titles offering gold OA options, 56 percent (59/105) did not collect an APC, 30 percent (32/105) did require an APC, and for 13 percent (14/105) the policy did not state whether an APC was required (see table 3). APCs ranged from \$800 to \$3,000, but most instances were at the higher end of the range, with the mean being \$2,347, the median \$2,435, and the mode \$3,000. In figure 1, the bars indicate the number of instances by range floor, and there were two instances of APCs of at least \$800, but less than \$1,000. The trend line shows the two-period moving average to give a clearer picture of the pattern.

Geographical Distribution of OA Options

The availability of green OA options varied by geography. In North America, 63 percent (33/52) of journals offered some green OA options, in the United Kingdom it was 41 percent (12/29), in Europe 39 percent (46/119), and elsewhere it was 69 percent (9/13) (see table 4). Statistical significance is not a relevant measure in this study; since virtually the entire population of classics journals is included in the data sampling error is not at issue. For analysis of this data as a sample of the larger population of humanities journals, see

Table 4. Green OA Availability by Region

Region	Offer Green OA in Region	Total in Region	Percent Offering Green OA in Region
North America	33	52	63
United Kingdom	12	29	41
Europe	46	119	39
Elsewhere	9	13	69

Table 5. Gold OA Availability by Region

Region	Offer Gold OA in Region	Total in Region	Percent Offering Gold OA in Region
North America	23	52	44
United Kingdom	11	29	38
Europe	63	119	53
Elsewhere	8	13	62

Table 6. Gold or Green OA Availability by Region

Region	Offer OA in Region	Total in Region	Percent Offering OA in Region
North America	37	52	7
United Kingdom	14	29	48
Europe	69	119	58
Elsewhere	9	13	69

the discussion below.

For gold OA options, these were offered by 44 percent (23/52) of North American journals, 38 percent (11/29) of UK journals, 53 percent (63/119) of European journals, and 62 percent (8/13) of journals from elsewhere (see table 5). When considering journals that offered green OA options, gold OA options, or both, this occurred in 71 percent (37/52) of cases in North America, 48 percent (14/29) in the United Kingdom, 58 percent (69/119) in Europe, and 69 percent (9/13) elsewhere (see table 6).

OA Options by Age of Journal

The availability of green OA options also varied with the age of the journal. Age brackets were constructed as 1991 to present (26), 1966–90 (65), 1916–65 (76), and older than 1916 (46); the first division was set at 1991 to group together journals established since the advent of the internet and with the possibility of offering OA from their inception. Of journals established 1991 to the present, 85 percent (22/26) offered green OA; of those established 1966–90, 48 percent (31/65) did; of those established 1916–65, 36 percent (27/76) did; and of those established before 1916, 43 percent (20/46) did (see table 7). The incidence of offering gold OA options

was 81 percent (21/26) for journals established 1991 to the present, 52 percent (34/65) for those established 1966–90, 43 percent (33/76) for those established 1916–65, and 37 percent (17/46) for those established before 1916 (see table 8). Of journals founded from 1991 to the present, 88 percent (23/26) offered either green or gold options; of those founded 1966–90, 63 percent (41/65) did; of those founded 1916–65, 51 percent (39/76) did; and of those founded before 1916, 57 percent (26/46) did (see table 9).

Qualitative Data

Additional issues emerged from the survey that helped describe the humanities OA landscape. OA policies were often difficult to locate on the journals' websites and were frequently incomplete; 57 percent (122/213) were identified as being incomplete and in need of being supplemented by the RoMEO/SHERPA report; this information was also not available in the report for some titles. Language was often inconsistent, with green OA sometimes referred to as "self-archiving," and gold OA referred to simply as "open access," or the ability to post a citation and link to the published paper in an institutional repository was presented as a kind of green OA. Further, the description of the different

Table 7. Green OA Availability by Age

Age	Offer Green OA in Bracket	Total in Bracket	Percent Offering Green OA in Bracket
25 years or younger	22	26	85
50 to 26 years	31	65	48
100 to 51 years	27	76	36
100 years or older	20	46	43

Table 8. Gold OA by Age

Age	Offer Gold OA in Bracket	Total in Bracket	Percent Offering Gold OA in Bracket
25 years or younger	21	26	81
50 to 26 years	34	65	52
100 to 51 years	33	76	43
100 years or older	17	46	37

Table 9. Gold or green OA by Age

Age	Offer OA in Bracket	Total in Bracket	Percent Offering OA in Bracket
25 years or younger	23	26	88
50 to 26 years	41	65	63
100 to 51 years	39	76	51
100 years or older	26	46	57

versions of the article varied. For journals published by large publishers, a single OA policy was often set for all journals from that publisher. Very few cooperative ventures were seen; one journal provided OA for a "freemium," and an HTML version of the content was freely available, but to access a downloadable, printable (i.e., PDF) version, the reader's institution needed a subscription to the sponsoring body. A number of French journals made their content available through the cooperative venture Persée (see below), and a few other journals enjoyed similar relationships with other digitization projects. Where longstanding journals had converted to gold OA and were making all content available, the availability of back issues varied widely, both in terms of an embargo, which ranged from six months to twelve years, with most in the range of three to five years, and in terms of not yet having completed the digitization of older issues. In a few cases, a stated policy had not yet been implemented. For many journals published directly by university departments or scholarly societies, the online publishing platforms were very simple and lacked discovery tools such as indexing and OpenURL linking, though search functions by author or keyword in title were sometimes available.

Discussion

Implementation of OA in Classics Journals

The implementation of OA in the academic discipline of classics is promising, given that 60 percent of the journals surveyed offered at least one OA option, but there is substantial diversity within the field, and a number of serious issues continue to hinder further implementation. First, nearly a quarter of the journals surveyed continue to be published in print format only, and this number would be higher without cooperative digitization projects such as Persée. Romanello found this to be the case for Italian classics journals, and the preponderance (80 percent = 39/49) of print-only journals discovered in this survey were also from Europe. 34 Romanello noted that one of the major obstacles for older journals in converting to online format was the digitization of earlier issues, which is partially supported here in that the mean date of print-only journals was somewhat earlier than the mean date of all journals surveyed (1939 compared to 1947). However, geography was a much greater determinant for remaining print-only, since there are many long-standing journals in North America and, especially, in the United Kingdom, that have made the transition to the

Table 10. Green OA by Location, Excluding Print-Only Journals

Region	Offer Green OA in Region	Total in Region Excluding Print-only	Percent Offering Green OA in Region Excluding Print-only
North America	33	46	72
United Kingdom	12	22	55
Europe	46	80	58
Elsewhere	9	9	100

print-and-electronic format. This suggests that the resistance to this conversion in Europe may be more a matter of culture than of practicality. This is consonant with the general trend noted in the literature review that humanities scholars tend to be resistant to changes in publishing models. In France the Persée project has been effective at meeting this need, digitizing and hosting back issues of journals that would otherwise be available only in print; not all French print journals are yet available on Persée, but the utility of the online versions may help change the culture so that online access will become the norm. 35 The Swiss journal Museum Helveticum similarly makes its back issues available through the Swiss Electronic Academic Library Service, and the German journal Rheinisches Museum für Philologie makes its back issues available through a digitization project supported by the Deutsche Forschungsgemeinschaft. 56 Similar projects addressing Italian and Greek print-only journals in particular would help overcome this preliminary obstacle to OA.

Next, there were marked differences in the availability of OA options depending on geography, with green options being more widely available in North America and elsewhere (63 percent and 69 percent respectively) than in the United Kingdom or Europe (41 percent and 39 percent). Part of that discrepancy may be accounted for because of the preponderance of print-only journals in Europe, but the difference is still marked when print-only titles are removed from the data (see table 10). This was especially surprising in the case of the United Kingdom, since it in particular has developed legislation tying public funding to OA and underscores how humanities researchers tend not to rely on public funding and that efforts to broaden OA in the humanities that rely on applying pressure through that route may not be successful. In offering gold options, these were more widely available in Europe and elsewhere (53 percent and 62 percent) than in North America and the United Kingdom (44 percent and 38 percent); this difference is partly due to Persée and similar projects making otherwise print-only journals freely available, and partly through the preference of several major European publishers (e.g., Brill, DeGruyter) to offer gold options for all their journals. Altogether, the geographical distribution of options suggests there are substantial differences in the humanities publishing cultures between the different regions: larger European publishers tend to prefer offering gold options for all their products, which poses difficulties for humanities scholars who typically lack the public funding to pay the APCs, while smaller journals still published by university departments or learned societies tend not to offer electronic versions. In North America, journals tend to prefer offering green options, which lay the burden of navigating the variety of policies and terminology on the scholar. UK journals seemed generally most resistant to offering any kind of OA options. These trends are demonstrated here for classics journals only, but analyzing the classics journals as a sample of the larger population of humanities journals sometimes indicated statistically significant results. A chi-square test of independence was performed to examine the relation between geographical area of the journal (all categories) and offering green OA. The relation between these variables was significant: X^2 (3, N = 213) = 11.931, p < 0.008. The same test was performed to examine the relationship between geographical area (comparing North America and the United Kingdom) and offering any type of OA. The relation between these variables was also significant: X^2 (1, N =81) = 4.179, p < 0.05. In other cases, such an analysis was less conclusive. A chi-square test of independence was performed to examine the relations between geographical area (all categories) and offering any OA, and between geographical area (all categories) and offering gold OA. The relations between these sets of variables were not highly significant: X^2 (3, N =213) = 5.016, p < 0.18 and $X^2 (3, N = 213) = 3.936, <math>p < 0.27$, respectively. Thus the results, while describing the trends in classics journals, are not immediately applicable to humanities journal more generally. While further study is needed to clarify the role of local publishing cultures in the humanities more broadly, efforts to increase OA options in classics journals specifically would seem best directed at local obstacles.

The age of the journal consistently corresponded inversely with its likelihood of offering OA options across all geographic regions, whether looking at green, gold, or either option. This finding, while not surprising, corroborates anecdotal evidence and theoretical models found elsewhere in the literature. Considering classics journals as a sample of humanities journals more broadly, these results tend to be significant. A chi-square test of independence was performed to examine the relations between the age of the journal (all categories) and those offering green OA, offering

gold OA, and offering any OA. The relations between each of these sets of variables was significant: X^2 (3, N=213) = 15.523, p < 0.002, X^2 (3, N=213) = 14.391, p < 0.003, and X^2 (3, N=213) = 11.68, p < 0.009, respectively. While we should wish to repeat this test with a more representative sample for the humanities more generally, progress in expanding OA in the humanities requires understanding the obstacles specific to long-standing journals and how these can be addressed.

Gold OA and APCs

APCs did not appear to be the central issue for OA in classics journals that the literature suggested. The majority of journals that provided gold OA did not have APCs, but provided free access to all content, often after an embargo period. Where APCs did exist, the data supported the general trends seen in the literature: most APCs were in the range of \$2,000 to \$3,000, which scholars cannot reasonably afford without outside funding, which is generally not present for humanities researchers. Most APCs were charged in accordance with publisher-wide policies that do not account for the different financial landscapes of humanities scholars as compared to researchers in science, technology, engineering, and math (STEM) disciplines. Only one publisher offered a sliding scale with reduced APCs for scholars from developing countries. This is perhaps not surprising, given that the field of classics deals primarily with the cultural heritage of Europe and the preponderance of scholars are located in the developed countries of Europe, the United Kingdom, and North America. Nevertheless, it is something of a missed opportunity to encourage the distribution of scholarship from outside that historical core. Few journals offering gold OA indicated that APCs were offset or could be offset by cooperative ventures. The journal Aitia: Regards sur la Culture Hellénistique au XXIe Siècle indicated that it was supported "by the UMR 5189 HISoMA, the UMR 5037 CERPHI and the WISH," but this sort of explicit statement was rare even among journals that made all content freely available.37 Especially for journals closely associated with university departments or learned societies, the assumption seems to be taken as given that the associated body provided the resources to make the content available. In either of these cases, it was not a matter of a cooperative venture providing funds to cover APCs, but of individual university departments or societies; professional organizations in the field of classics do not yet seem to have pursued this option for promoting their scholarship. The greatest issue with APCs was communication; policies on APCs were generally not available in the same part of the journal's website where policies on submissions, peer-review, etc., were found, and often required an extensive search to locate, which would tend to discourage researchers from pursuing the gold OA option. A substantial portion (13 percent = 14/105) of journals where gold OA was available did not indicate whether there was an APC or what it was.

"Just Doing" OA

As Eve noted, humanities journals have sometimes "just done" OA, but that this often entails further issues.³⁸ This study supports Eve's observation. Although quantitative data were not collected, many of the journals that made their content freely available did so by simply posting electronic copies of the articles on their sites, others provided some rudimentary tools, such as author and title indexes, others provided more sophisticated tools such as keyword search, and some had professional-level sites. Altogether diversity was the rule here, and age and geography do not seem to be strong determinants, though, again quantitative data was not collected on this question, since the relevant variables were not yet understood, given the paucity of research on the topic. For example, Bryn Mawr Classical Review claims "to be the second oldest online scholarly journal in the humanities," first publishing in 1990 and providing OA from its inception; it offers keyword searching and indexes of authors of reviews and authors of works reviewed, but no subject indexing or article-level linking.³⁹ With a completely different history, Greek, Roman, and Byzantine Studies was founded in 1958 and ceased paper publication in 2010 and became a fully OA journal, charging no APCs but funded by Duke University Libraries and Duke University, Department of Classical Studies. 40 The site is sophisticated, offering author, title, subject term, and Greek word indexes, though the last two indexes have not been completed for earlier volumes at the time of writing, and article-level linking is not available. This is a good example of an established journal converting to OA without waiting for larger frameworks to be established; the journal depends on the Duke University Libraries to host the content and on the professional service of its editors and reviewers, which seem to be readily available. Whether such a model is exceptional to this journal, would be more broadly usable in the field of classics, or even extensible to the humanities generally needs further exploration. In comparison, Graeco-Latina Brunensia provides content only, with a minimum of discovery tools (i.e., keyword searching).⁴¹ Similarly, the New England Classical Journal provides free access to issues prior to 2004, tables of contents for recent issues, and selected recent articles, but no discovery tools or article-level linking, though a master list of tables of contents is available.⁴² Most journals published independently by their sponsoring university departments or scholarly societies lay somewhere within this spectrum, from providing HTML versions or scanned images of select content to comprehensive coverage with sophisticated discovery tools. None seemed able to compete with commercial

publications in terms of article-level linking through technologies such as OpenURL. This diversity suggests that development in this area has depended on the awareness, interest, expertise, and initiative of the individuals involved, and that efforts in promoting OA to individual editors may produce substantial results as much as trying to implement the broad frameworks that appear in the literature.

Innovative Approaches

Disappointingly, the journals examined did not evince a great deal of innovation, and no new approaches were identified by the survey. As noted, Bryn Mawr Classical Review was highly innovative at its inception and continues to keep pace with developments, but does not offer any insights over the currently familiar landscape. Again, innovations noted in the literature were not broadly implemented in this set of journals, with only one employing the "freemium" model, and a single publisher offering a sliding scale of APCs for authors from developing countries. In France, the digitization and delivery services provided by Persée represent an important innovation that is not widely discussed in the literature and one that has been successful in partnering with a many journals. As previously noted, this is an important local approach for Europe, where there remain a relatively large number of journals in print only, and, the literature suggests, the digitization of earlier issues is one of the roadblocks to moving online and ultimately considering offering OA options.

Strengths and Limitations of this Study

This study was primarily exploratory since much of the literature has dealt with the question of OA on a theoretical level or examines scholars' attitudes, not the practices of journals. The study's primary strength is its comprehensive coverage of its subject population; since classics is a rather narrow field, a very high proportion of all current, peerreviewed journals in the field could be examined, so that the results represent that field with high accuracy. Because data were gathered on all the journals, and failure to post a policy was collected as a kind of data, there is a minimal self-selection bias (see above for the few journals that were excluded). The primary caveat in this respect is that journals did not always communicate their OA policies clearly, and some results were based on third-party data (e.g., RoMEO/ SHERPA) or interpretation of potentially ambiguous language in the policies.

The survey results are limited in that they are directly applicable only to the target population. The field of classics has something of a unique culture within the humanities so that the study results are not immediately generalizable to the broader field, though they may help define the trends

and relevant questions for further research. In particular, age of journals was found to be a good predictor of OA policy, but since classics has comparatively many long-running journals and few recently established journals, that correlation may be different in other disciplines. Comparative data between different disciplines within the humanities will help refine our knowledge of the issues around OA there. Again, the study is descriptive, surveying journal policies, and does not provide access to the rationale behind those policies; further research, for example, surveying or interviewing journal editors, is needed to provide this kind of insight. Further limitations of the study include that it represents the state of the field at a single time; since OA practices are changing rapidly, adding longitudinal data to identify trends is a further desideratum.

Conclusion

This study confirms in quantitative terms some of the conventional wisdom about OA in the humanities found in the literature, and in other cases challenges those views. Further, it identifies some trends not discussed in the literature, and can help establish a research agenda to further map the policies, potentials, and issues of OA in the humanities. First, as suggested in the literature, access to OA journals in classics often suffers in comparison to commercial offerings such as JSTOR or Project MUSE, most particularly in article-level linking, but in many cases also with subject and author indexing. The intuition that older, prestigious journals tend to have little motivation to offer OA, and that newer journals are more likely to offer OA, is substantiated in that newer journals were far more likely to offer OA options, though it was less clear that this had to do with prestige rather than the logistical challenges of converting a long-standing print journal to an OA model. In contrast, the idea that APCs are a major obstacle for humanities scholars did not receive unambiguous support; where APCs were required, they tended to be outside the reach of scholars without external funding, as is typically the case for humanities researchers, but the majority of journals offering gold OA did not charge APCs, and often also offered green OA options. The conventional view that embargoes tend to be longer in the humanities than for STEM journals needs refinement; for self-archiving, the greatest number of journals did not impose an embargo, and for those that did, only a few were greater than twenty-four months; in comparison, when journals offering gold OA options imposed embargoes, they generally were thirty-six months or longer, which tends to be seen as excessively long. The tendency in the literature to look to larger cooperative ventures to support OA journals or reduce or eliminate APCs seems to have made little impact on this group of journals; where journals noted partners or sources of support, these were often local, individual partnerships with a university library or department, or a scholarly society. Persée's success may suggest that such projects could best focus on overcoming specific obstacles rather than trying to address the whole complex of issues surrounding OA.

The study also identified several issues that were not previously widely discussed in the literature on OA. First, a significant number of classics journals continued to be published in print only; further study is necessary to determine if this a common issue across the humanities or is primarily a function of the age and conservatism of this particular field. It is certainly an important obstacle to OA that needs to be addressed. Second, differences in trends in OA based on the geographical distinction between North America on versus and Europe and the United Kingdom appear as a significant finding of this study. As discussed earlier, part of this geographical difference is a matter of practicalities, with Europe and the United Kingdom producing more long-running journals for which the digitization of back issues and changing of workflows and business models present obstacles to offering OA options. We should not rule out a cultural component contributing to this difference as well, especially as the United Kingdom (and to a lesser extent, Europe) has been more aggressive in establishing centralized mandates for OA, and this seems to have produced results different in extent and kind from the laissezfaire approach taken in North America. Altogether, the geographical distinctions seem to be the result of complex issues that require further research. Much of the literature on OA in the humanities tends to approach the problem systematically, looking for global solutions, though, as Eve notes, some journals proceed with offering OA on their own terms as they are able; this study suggests that this path to OA may be closer to the rule than the exception for humanities, and that solutions that address local problems are more likely to be effective. 43 Finally, perhaps predictably, the larger publishers, such as Oxford University Press, Cambridge Journals, Brill, DeGruyter, and Wiley, tended to have the fullest and most nuanced OA policies; naturally such publishers have the resources to adapt their technologies and business models more quickly than an independent journal supported primarily by a university department or a scholarly society, yet it is often the latter that stands to benefit both itself and the discipline most from the move to OA in terms of providing broader access to specialized content and increasing the diversity of viewpoints in the field. Since goals such as these may be seen as closer to the center of OA in the humanities, where unscrupulous pricing tends to be less of an issue than in STEM journals, this research may encourage stakeholders looking to expand OA in the humanities to explore ways to support such independent journals in their transition to offering OA options.

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