I Don't Want My Article Next to That:

Educating Faculty and Graduate Students about Issues of Open Access, Institutional Repositories, and "Predatory" Publishers

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Introduction

Since the rise of the information age, the role of the librarian has increasingly become that of educator, the overwhelming amount of data leading librarians to focus not so much on helping patrons to locate information as helping them to navigate and sort through the available data.[1] Likewise, the growing number of universities maintaining institutional repositories and passing open access policies has increasingly pushed librarians toward the role of educators in issues of scholarly communications and open access. While there have been many studies related to predatory journals and publishers throughout the last decade,[2-6] little has yet been done relating to the problem of predatory journals within the specific context of institutional repositories. This paper will address a number of faculty concerns pertaining to "predatory publishers" and the institutional repository, as well as using insights gleaned from a study of articles and citations from predatory journals posted to an institutional repository to discuss in which ways librarians can educate faculty and graduate students to help them in navigating such issues as open access, institutional repositories, and determining the quality of potential outlets for publication.

Background

Indiana University—Purdue University Fort Wayne (IPFW), a multisystem metropolitan university of around 350 full-time faculty members and more than 12,000 students,[7] first launched in institutional repository called "Opus" on Bepress's Digital Commons platform in 2010. The repository originally featured mainly citations, archiving a record of scholarship and creative endeavor performed at IPFW, although faculty had the option to submit open access manuscripts at their discretion. A major turning point for the repository occurred on April 13, 2015 when the Indiana University–Purdue University Fort Wayne Faculty Senate voted unanimously to officially adopt an open access policy.[8]

In the summer of 2015, IPFW librarians and administrators began to hear concerns from faculty members that some article citations included in the repository were from journals which had been published by open ac-

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cess publishers of dubious quality—some of which were what have come be known in the scholarly communications world as "predatory publishers." A standard definition of a predatory publisher is provided by Jeffrey Beall, Librarian and Associate Professor at the Auraria Library at the University of Colorado, Denver:

Predatory open-access publishers are those that unprofessionally exploit the gold open-access model for their own profit. That is to say, they operate as scholarly vanity presses and publish articles in exchange for the author fee. They are characterized by various level of deception and lack of transparency in their operations.[9]

Beall is best known as the publisher of the "Beall's List: Potential, Possible, or Probable Predatory Scholarly Open-Access Publishers,"[10] a "black list" which has become a standard quick-reference guide to potentially problematic publishers. This list has remained controversial, with some librarians suggesting that Beall has a "complicated, and not entirely supportive, attitude toward OA in general."[11]

The very term "predatory," itself, is not without problems. In a May 11, 2015 blog post, "Should We Retire the Term 'Predatory Publishing?" Rick Anderson suggests the alternative term "bad faith."[12] The term predatory would seem to indicate a clear victim/ perpetrator relationship—that someone is being preyed upon. This raises the question as to whether it is possible to prey upon the willing. As awareness of predatory publishing increases among academics, the term becomes even more problematic. However, for the sake of simplicity, the term "predatory" will be used throughout this paper to denote journals and publishers of questionable quality and/or dubious ethics. It should also be noted that not all journals which charge authors for publication, or, in some cases, to make a work open access, are necessarily predatory. What makes a publisher predatory is that it does not provide a return on investment. If a journal which has a high ranking in the metrics and a solid process of peer review charges an author fee, it is still a reputable journal.[13]

Although citations for many of the suspect articles had been in the repository for several years, it is likely that IPFW's passage of an open access policy brought the issue to the forefront. Several faculty members expressed hesitation about including their own future works in the repository if citations to the suspect works were also included, fearing harm to their professional reputations. Their fears centered largely around "guilt by association"—that having their open access articles or citations to their articles in the same repository as citations to articles published in predatory journals might taint their own professional reputation and that of their academic departments. Some seemed to view the repository as a publication source itself rather than a record of items which had been published elsewhere. These faculty seemed to view having an article in the same institutional repository as an article or citation from a predatory journal as equivalent to publishing an article in a journal with other articles of dubious quality. Many faculty members also expressed concerns which tended to equate open access in general with predatory publishing.

Some faculty also expressed concern that colleagues might have obtained promotion and tenure via questionable means. In this matter, the library had to walk a delicate line between addressing legitimate faculty concerns regarding predatory publishing, while also educating faculty regarding the nature of a university repository and, simultaneously, avoiding becoming embroiled in intradepartmental politics. Several faculty also expressed sincere concern for graduate students who had been included as co-authors on questionable articles— suggesting that, due to their trust in their faculty mentors and an urgent desire for publication at any cost—some might have inadvertently made decisions which could have severe negative ramifications on further graduate study and/or job prospects.

Lastly, concern was also expressed by some of the university's most avid faculty supporters of open access. These professors were deeply concerned about open access publishing, which they championed, being associated with poor quality and dubious ethical practices. These faculty members wanted to avoid anything that could provide further evidence to those who held such views, and they believed that keeping the repository free

of such citations and articles might be the best way to promote open access as a positive and to fight negative preconceptions.

Methodology

To attempt to ascertain the exact extent to which IPFW faculty members had published in predatory journals and to pinpoint those areas and departments of greatest occurrence, a study was launched in the summer of 2015. Although predatory publishers have also branched into the realm of academic conferences,[14] it was decided, for purposes of this study, to stay within the confines of articles which had been published in journals. The planning and execution of the study were performed by a librarian in collaboration with a paraprofessional, and the study began by using the Beall's List[15] as a baseline.

The first step in the study was to request a report from Bepress containing a list of all content posted to the repository from its inception. One complication immediately encountered was that, although Beall also maintained a smaller list of stand-alone journals,[16] the focus of the primary Beall's List was on publishers. Unfortunately, the IPFW repository administrators had not, up until this point, kept records of which specific publishers had produced the journals in which the articles included or cited in the repository were published. Thus, before the comparison of the articles in the repository against Beall's List could even begin, the publisher of each journal containing an article cited in the repository had to first be identified. To gather this information, Ulrichsweb: Global Serials Directory, Google, Worldcat, and a number of other related sources were consulted. The fly-by-night nature of many truly predatory journals and publishers often made finding information about them particularly difficult. Finding the publishers of articles published in journals published outside of the United States also often presented a greater challenge. Publications not appearing in Ulrichs required more extensive searches and consultation with colleagues for particularly difficult cases.

As the publishers were identified for each of the articles in the repository, this information was recorded in an additional column within the spreadsheet. After the publishers of all but approximately twenty articles had been identified, filters were used to remove duplicates, reducing the list to one occurrence for each publisher. Staffing issues led to additional challenges. Since the repository contained over 2,000 articles, and the primary staff member working on the project was also assigned to a variety of other duties around the library, the first stage of determining journal publishers took approximately four to five months, considerably longer than originally expected. While the original plan had been to go through the various university departments alphabetically, once the immense scope of the project became more apparent, it was decided that those departments whose faculty had expressed the greatest concern should be prioritized. For the purposes of this paper, due to the political sensitivity of the study, involving faculty careers and departmental reputations, specific departments will not be identified, and discussion will, of necessity, be kept in the abstract.
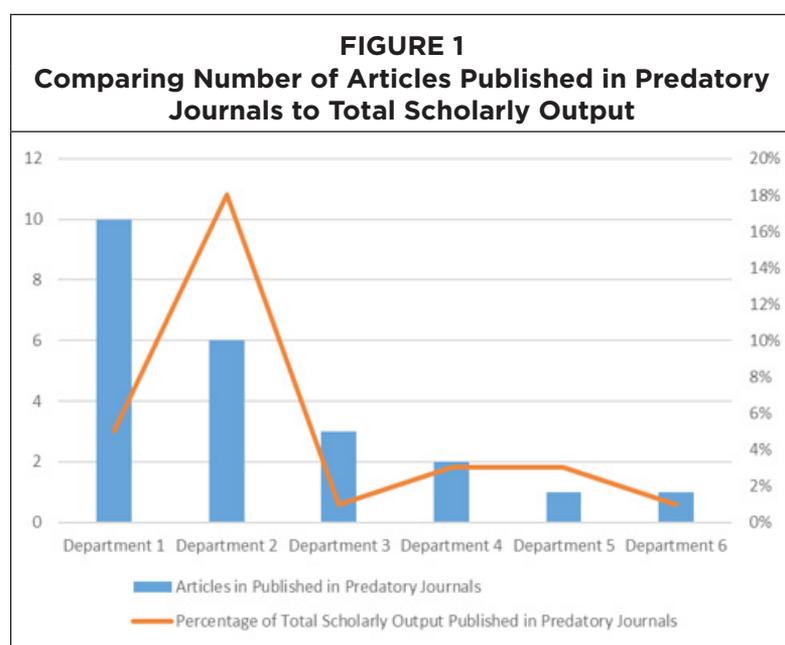
After all publisher names were reduced to one instance in the spreadsheet, the slow process began of comparing each publisher, one at time, against Beall's List. One difficulty was the fact that multiple publishers were encountered with very similar sounding names, as well as dubious or predatory publishers with names very close or identical to the names of reputable publishers. Although Beall's List provided hyperlinks to the websites of each of the publishers included, many were difficult to verify, as the ethereal nature of predatory publishing meant numerous broken links. In some cases, it was possible to locate new URLs for these publishers via web searches, and the investigative skills of the library's interlibrary loan specialist were enlisted for particularly vexing cases.

As articles cited in the repository from publishers included in Beall's List were identified, they were highlighted in yellow within the spreadsheet. Once the process of checking each publisher against Beall's List was

complete, the full rows for each article marked as having been published by a predatory publisher were copied and pasted into a separate sheet for ease of use. Each row in the spreadsheet also contained useful data such as the departmental affiliation of each faculty author. Once the raw data had been fully acquired, filtering functions were used to sort the articles identified as being published in predatory journals by such categories as author, academic department, and journal.

Results

Of 2,275 articles posted to the institutional repository as of the spring of 2015, only 29, or 1.3%, were published in journals produced by predatory publishers. Of 41 departments or programs posting articles to the repository at the time of the study, only six were found to have had articles published in predatory journals, with two departments having only one each. The department with the highest number had 10 articles published in predatory journals out of 193 total articles published. The department with the second highest number had six articles which were published in predatory journals, but, due to a smaller scholarly output, this added up to 18% of their total published articles. Of the six departments where at least one faculty member had published an article in a predatory journal, four, including the two highest, were in science and technology areas. Further study will be required before a hypothesis can be offered as to reasons for this departmental distribution.

FIGURE 1
Comparing Number of Articles Published in Predatory Journals to Total Scholarly Output

On the author level, within the 29 articles published in journals produced by predatory publishers, only eight IPFW faculty members published articles in such journals more than once. Of these eight faculty members, six published in predatory journals twice, one did so three times, and another published in predatory journals on four separate occasions. The eight faculty members publishing articles in predatory journals more than once were distributed throughout only three academic departments, one department having five faculty members who had published in a predatory journal more than once. Once faculty member actually published in the same predatory journal twice. Lastly, it should be noted that only IPFW faculty members were addressed in this study, although many of the articles in question had one or more co-authors from other institutions.

The years in which the questionable articles were published were also analyzed, as the growing awareness

TABLE 1 Articles Published in Predatory Journals by Author and Department	
Articles published in predatory journals	29
Faculty members publishing in predatory journals	29
Faculty members publishing in predatory journals more than once	8
Faculty members publishing in predatory journals more than twice	2
Departments with faculty members publishing in predatory journals more than once	3

TABLE 2 Articles Published in Predatory Journals by Year	
2014	1
2013	8
2012	4
2011	4
2010	3
2009	3
2008	2
2005	1
2004	2
2001	1

of the problem of predatory publishing has been gradual, and educational efforts are ongoing. Of the 29 articles or citations to articles in the IPFW repository which were published in journals produced by predatory publishers, 20 were published after the year 2010. For context, Beall's List was begun in 2008,[17] and, in 2013, John Bohannon published the article "Who's Afraid of Peer Review?" in the journal *Science*, bringing greater attention to the issue of predatory publishing by describing a "sting" whereby "Dozens of open-access…accepted a spoof research article, raising questions about peer-review practices in much of the open-access world."[18]

Limitations of Study

The study was not without its limitations, and the decision to use Beall's List as a baseline was not made without caveats, including a full awareness its controversial nature. Additionally, Beall's List is specifically limited to open access journals, and Beall freely admits that he has, due to loopholes, at times been obliged to remove publishers he still considered dubious—for instance, publishers not changing their practices beyond beginning to charge nominal subscription fees so as to no longer technically qualify as open access.[19]

This study also only identified articles and citations for articles published in journals from predatory publishers which had been submitted to IPFW's institutional repository, and it was thus unable to analyze articles published in such journals which had not been submitted to repository. Additionally, although the study was able to identify articles published in predatory journals, it was not able to discern motives—whether authors had been truly fallen victim to predators or whether they knowingly submitted their works to journals which published all articles submitted by authors willing to pay. For this reason, there was an effort made to specifically identify those faculty members who had published in predatory journals more than once.

Discussion

The results of the study indicate that the problem of IPFW faculty members publishing articles in journals produced by predatory publishers is not as wide-spread as many professors had originally feared, and having hard data to support this fact has been helpful in providing context for future outreach efforts. In the year following the study, the library launched a campaign to begin educating faculty and graduate students as to the nature and purpose of the institutional repository, contemporary scholarly communication issues such as the threat of predatory publishing, and methods and criteria for determining publisher quality. One part of this campaign featured a series of library sponsored workshops for faculty and graduate students. It was decided that graduate students should be included, since studies have indicated that early career researchers are often particular targets of predatory publishers.[20] In an effort to avoid drawing attention to only the negative or risking the further association of open access with poor quality in the minds of faculty, the workshops were simply titled "Publishing Need to Knows: Predatory Journals, Emerging Trends, and Making an Impact." These workshops focused not only on the characteristics and telltale signs of predatory journals but also on sources for obtaining journal metrics and positive aspects to look for in journals of quality. An emphasis was also placed on emerging "white lists" such as the Directory of Open-Access Journals (DOAJ).[21] Additionally, an online guide to scholarly publishing

was created to provide information to those unable to attend the workshops and to provide a lasting resource to which faculty and graduate students could refer at point of need.[22] Those faculty attending the in-person workshops were encouraged to spread the word to their own graduate students and departmental colleagues. Similar workshops were held in the fall of 2016 in conjunction with the celebration of International Open Access Week, and further educational efforts are ongoing.

A few months after the first workshop, a professor emailed the library to ask if several of his works, all published in journals produced by publishers on Beall's List, could be removed from the repository. He said that attending one of the workshops had made him realize that he may have made a few mistakes in his past choices. Although, he did not admit to intentional malfeasance, his request did provide some affirmation as to the efficacy of the library's educational efforts. As to whether such articles *should* be removed raises a number of philosophical questions, some getting at the very nature of an institutional repository, which are worthy of further study. Over the last year, fewer faculty in general have raised questions about the predatory journal issue, and, when they have, there are now resources in place to which they can be referred. With cautious optimism, this too may be taken as a sign that the library's educational efforts are paying off—maybe even for those faculty most concerned about the proximity of their scholarship to "those articles."

Conclusion

In January 2017, Beall's List was taken down.[23] Although this takedown has been much discussed in the library blogosphere, the reasons are not yet known. However, this development does make the words of those who have suggested that librarians and scholars have relied too heavily upon Beall's List seem prophetic.[24] Although Beall's List remains online in various archival locations, the very nature and fluidity of the problem of predatory publishing requires a list that is actively maintained, and archived copies of Beall's List are likely to become quickly outdated. It has, thus, never been more essential for librarians to serve as advisors for faculty in deciding where to publish and for librarians to provide faculty with the discernment skills needed for the successful evaluation of publisher quality.

Notes

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