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## **The Academic Ethics of Open Access to Research and Scholarship**

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**Abstract:** In this paper we present the case for regarding the principles by which scholarly publications are disseminated and shared as a matter of academic ethics. The ethics of access have to do with recognizing people's right to know what is known, as well as the value to humanity of having one of its best forms of arriving at knowledge as widely shared as possible. The level of access is often reduced by the financial interests of publishers in a market in which there is little sense of a rational order, given huge discrepancies in prices for similar products. At the same time, there are risks to limiting researchers access to scholarly resources, both for the quality of the knowledge that is not entirely open to review and for the production of new knowledge that it might inspire. Then there are issues of access beyond the academy for professional practice and out of human interest, for both of which undue limitations raise what are, for us, more than *academic* ethical questions.

In introducing a recent collection of essays, *Creating the Ethical Academy*, Tricia Bentham Gallant, the Academic Integrity Coordinator for the University of California, San Diego, and Lester F. Goodchild, professor of Higher Education at Santa Clara University, place the ethical focus squarely on the misconduct of students, admission

officers, and faculty members. They ask, in light of the repeated media coverage of cheating, bending, and fudging of the rules of academic conduct, “are we heading down a road of inevitable corruption? Or is there an alternative way forward?” (2010, p. 3). Attending to those who break the rules is a common enough approach to academic ethics. This approach carries with it, however, the implication that, if and when such misconduct is eliminated, *ethical* questions would politely disappear from view. We raise this point because our contribution to this special issue of *Ethics and Education* “in search of the ethical university” takes a somewhat different approach to finding an alternative way forward for the ethical academy.

We are treating the *ethical domain* as a realm of positive action – in which, for example, one goes out of one’s way to help someone – rather than an arena of moral failings, as suggested by exam cheating and research fudging. We believe that with the coming of the digital era, the university faces an unprecedented ethical opportunity to act in a positive fashion by reaching out to help others. We wish to present the ethical case for going out of one’s way to ensure that one’s research and scholarship has been made as widely available as possible to other scholars around the world, as well as to interested members of the public. With this approach, we are following, in effect, the identification by Gallant and Patrick Drinan, a political science professor at the University of San Diego, of the university’s “ethical center – which is, after all, the infrastructure and base for the pursuit and transmission of knowledge” (2010, p. 215). As this ethical center moves into the twenty-first century, the new digital publishing medium affords higher education a whole new range of opportunities for sharing what is discovered and learned within these institutions. The literature on the contribution and value of “open access” (OA), as it is

widely known, to scholarly research continues to grow dramatically during the first decade of the twenty-first century (Bailey, 2010). We recognize that there is a host of related ethical issues associated with openness and the academic integrity of research and scholarship.<sup>1</sup> However, the ethics of access to the published literature takes on a particularly timely, if not urgent, quality amid the relatively rapid transition from the print culture to digital publishing for scholarly journals (and soon, perhaps, scholarly books). While other ethical dilemmas, such as cheating and fudging, have a timeless quality to them, there is something of a limited-time opportunity for ethical action when publishing models are changing and in this unsettled period are radically split between tendencies toward increasingly restrictive (for reasons of profit) and open (for a wider sharing) practices. There are even some very recent signs of some crossover, with publishers looking to advance profits through open access, with the financial consequences providing their own potential damper on the circulation of knowledge.

Thus there is a need to consider the wide, if sometimes confusing, range of initiatives underway to direct this new publishing medium toward a more ethical and responsible approach to the basic human right to know and to knowledge. To ensure that the momentum gained around greater access over the last decade is not lost, we review the ethical dimensions of OA in scholarly communication. Much within the current academic culture of *publish-and-perish-the-thought-of-doing-anything-more-with-the-work* militates against the extra effort that is still required to ensure that the work done by scholars and researchers is distributed as widely and fairly (in terms of costs to readers) as possible. Once there was a time when having a study published in a scholarly journal was the only way to make the work public in timely and responsible (peer-reviewed)

way. Publishing it in a highly reputed journal further guaranteed that the work was more widely circulated, as such journals had more subscribers. There was no more to do than that, except perhaps respond to those preprinted postcards, typically from Eastern Europe, requesting an “off-print” of your paper, which they had somehow caught wind of.

That is no longer the case. As libraries struggle to afford even their current subscriptions, the new means of achieving almost universal online access presents itself. We, as scholars, face new responsibilities for thinking about how widely our work circulates, which does not preclude publishing in the prestigious journals, but which does call for a more ethical approach to the sharing of our work.

During the first decade of this century, there has been an active debate about OA within the scholarly publishing field. It has typically involved advocates calling for transparency, fairness, and accountability on one side, while opponents of OA express concerns over unproven economic models and the threats posed to the quality and sustainability of peer-reviewed scholarly publishing if the money is not there, on the other (Davis, 2009). OA advocates hold that people do not only have an ethical right to this knowledge, but that the wider circulation achieved by OA is better for the quality and utilization (as well as the public support) of this knowledge. The advocates have been rag-tag group of researchers, scholar publishers, and a few well-financed OA publishers, such as BioMed Central (for-profit and now owned by Springer) and PLoS (non-profit foundation-funded). The opponents of OA are the corporate and society publishers, operating through organizations such as the International Organization of Science, Technical and Medical Publishers, where concern has been expressed that “achieving

widespread sustainability for open access journals will not be particularly quick or easy” given that the two leaders in OA publishing, BioMed Central and PLoS, were not “even close to profitability,” while fear abounded that OA would have “have a serious impact on journal subscriptions” (Ware, 2006, p. 4). In this way, some publishers have turned OA into an ethical dilemma: *Do efforts to make research and scholarship more widely available to the public, educators, and scholars justify placing publisher and society revenues at risk?*

We think that the answer is an emphatic *yes*, especially given the lack of evidence of such a risk at this point. The economic viability of the various open access models may not be assured in this time of transition, with bookstores closing and the record industry in a tailspin. However, the Directory of Open Access Journals (DOAJ; <http://www.doaj.org/>) operated by the University of Lund Library lists well over 6,000 OA peer-reviewed journals. This includes large commercial publishers such as BioMed Central, thousands of small journals, and everything in between. The Public Knowledge Project (<http://pkp.sfu.ca>) is tracking over 8,000 OA journals using its open source software (Open Journal Systems) the majority of which are not in DOAJ. It difficult to tell what percentage of journals are OA, as the commonly used total of 25,000 journals (Harnad et al., 2004) is clearly itself only a portion of the journals currently being published.

Still, it can be said that a good number of journals are making a go of it with OA. A study of the journals using the free open source software developed by Public Knowledge Project (with which we work) found that the scholar-publisher dominates these titles, with an average per-article cost under \$200 USD (Edgar & Willinsky, 2010). In addition,

the majority of large commercial publishers now provide an OA choice within their subscriptions journals. That is, authors can purchase OA, in effect, for their individual article through a substantial “article processing fee,” in the area of \$3,000, paid for by the author’s research account or institution. A number of major corporate publishers, such as the Nature Group and Wiley, have recently announced new journals that will be OA, on this article-processing fee basis.<sup>2</sup> This could well signal a shift in publishing models. If publishers move their economic model from high-priced subscription journals to high-priced article-processing fees, that may well put new pressures on research budgets and, for those without generous funding, university budgets. This commercialization of OA will need to be evaluated in comparison to non-commercial approaches, including those pursued by the vast majority of OA journals, which do not charge article-processing fees.

A second channel to open access that also appears to be proving itself economically is the author self-archiving route. Somewhat more than 60% of all publishers (including the publisher of this journal) allow authors to deposit their pre-prints and/or post-prints in OA archives or on their websites (SHERPA/RoMEO, 2011). In the case of one of the oldest pre-print repositories known as arXiv.org, the time from deposit to citation has decreased as the repository approaches 100% of the publications in high energy particle physics and astrophysics (Swan, 2007). Providing pre-prints (post peer-review) ensures a rapid turnaround between research and uptake, without sacrificing quality. There are now over 1,800 open access repositories in which to deposit their pre- or post-prints (ROAR, 2011). According to one estimate, the time needed to self-archive is less than 10 minutes per paper and, assuming that any one of the co-authors can perform the work, even a prolific scholar would need to invest no more than 40 minutes per year on self-archiving

time (Carr & Harnad, 2005). The few keystrokes and time cannot, by any standard, be considered onerous and the institutional repository alternative provides an answer to those who are concerned about the quality of OA journals.

The willingness of commercial publishers to adopt OA policies for their authors demonstrates that the publishing industry itself accepts the ethical imperative of OA. They are not taking any chances with this perceived risk, and are allowing that it may yet play a role in their long-term sustainability if not profitability. We would be remiss in overlooking some the potential effects of researchers making their work available as soon as it has been accepted through an institutional or central repository. When looking at the entire research cycle, the time between finishing the research and it being used is one of the only aspects of the cycle that can easily be improved. For their part, publishers have yet to report a decline in subscription revenue that can be attributed to author archiving, although they have observed a drop in visits to their websites, which they blame on OA (Ware, 2006, p. 4). As a result of these various efforts, somewhat more than twenty percent of the literature published in 2009 has been made available on an open access basis through authors archiving their work or publishing in open access journals (Björk et al., 2010). It all adds up to a certain viability for OA, and reduces the ethical dilemma posed by publishers who hold that OA places publisher revenues at risk and thus undermines the very publishing process.

The other side of this ethical question concerns the demonstrable value of OA. Is it having any impact on the readership and utilization of the work that is being made freely available? The evidence gathered to date indicates that this is the case. Work that is made

OA is attracting more readers than similar materials that have not been made OA; what can also be said is that OA materials are also being cited more often, according to the majority of studies that Stephen Hitchcock surveys on this phenomenon (2011). This vanity and career-advancing aspect of OA may even seem to compromise the ethical element of more widely circulating this knowledge. Professorial vanity poses as an ethical risk, as noted by Steven M. Cahn, former provost of the Graduate Center, CUNY, in introducing the twenty-fifth anniversary edition of his *Saints and Scamps: Ethics in Academia* (2011). But this OA advantage in citations and readership is also part of the transition, with early adopters rewarded, while others play catch-up, at which point the vanity-advantage disappears.

Where the large publishers have joined in on the efforts to provide OA out of an ethical concern for access in the world's poorest nations, as with bio-medical (the HINARI program), agricultural (the AGORA program) and environmental research the (the OPARE program), the impact has been considerable. For example, 2.5 million PDFs have been downloaded by non-research institutions in developing countries alone (medical schools, teaching hospitals, and government offices) between 2003 and 2006 through the World Health Organization's Health InterNetwork Access to Research Initiative (HINARI, 2006). However, this only points to the ethical gap faced by developing countries that are not poor enough to qualify for these programs, such as India, as well as the disciplines and areas of knowledge that are not covered by these programs (Aronson, 2004).

Now some have also argued against OA by pointing out that some sensitive research



material could pose a risk to the public. Controversial cases, such as the alleged link between MMR vaccines and Autism, have been used as examples (Wakefield et al., 1998). We would argue that limiting access on the basis of financial resources is not an ethical, but rather an expedient, way to protect the public interest. The public, in turn, benefits from being able to judge the evidence for themselves, by reading both the original Wakefield et al. (1998) article and the evidence of fraud (Deer, 2011). However, we are willing to concede that those who seriously believe that their research would cause harm if released to the public are exempt from any moral obligation to distribute their work widely. However, it is worth noting that the U.S. and U.K. governments have recognized that access to health research sponsored by the National Health Institute and the Department of Health/National Institute for Health Research, respectively, should be made publicly available to health personnel and patients (NIH, 2011; DH/NIHR, 2011). However, the same principle applies to other fields, even if not all have such direct implications for physical well-being. As a further endorsement of the OA approach to sharing knowledge, just under 200 funding agencies and institutions (including departments and some entire universities) have passed policies calling for the deposit of at least the final draft of published work in OA archives (ROARMAP, 2011).

Be that as it may, it would be unfair to characterize this as an issue of the wealthy needing to provide access to the poor, not least because much of the research that goes behind pay barriers originates in lower-income countries. In the North American context, the rising costs of subscriptions are placing limits on what even the wealthiest libraries can afford (ARL, 2006; K4All, 2011) and students have begun to claim a right to open access research (Right to Research Coalition, 2011), as too have taxpayers and patient

advocacy groups (Alliance, 2011). The voices of librarians, students, patients, and scholars on the issue are a sufficient indication that there is a demand for greater access.

The university has long been regarded as a center of knowledge creation, one that has often been held to strict ethical standards. And certainly when it comes to the best ways of engaging in scholarly publishing, we can accept that there will be debate as to where the balance lies in terms of how to organize, finance, and structure this increased access to knowledge. What we cannot do is ignore the ethical dimensions of this issue. We must come to a shared understanding of what our obligations are in undertaking this research and scholarship. As we found in recent work on academic ethics, even those who are taking the lead in defining the scope of ethical matters in higher education have yet to consider the moral good to be realized by taking advantage of new technologies to increase access to research and scholarship. Our hope is that as we might move forward “in search of the ethical university,” so that the ways and means by which we distribute what we have learned, as a matter of public trust and public good, might become more public and widely available. It seems like the right thing to do.

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## NOTES

<sup>1</sup> Richard Wellen calls OA advocates to task for failing to recognize that the commercialization of research itself (for example, by pharmaceuticals) is “almost certainly a greater long-run threat to openness than today’s publication system” (2004, p. 14).

<sup>2</sup> For Nature Group see <http://www.nature.com/srep/marketing/index.html>; for Wiley see <http://www.wileyopenaccess.com/view/index.html>.