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Social Justice in Scholarly Publishing: Open Access is the Only Way

Subbiah Arunachalam

DST Centre for Policy Research

Indian Institute of Science

Bengaluru 560 012 India

subbiah.arunachalam@gmail.com

<http://orcid.org/0000-0002-4398-4658>

<http://www.researcherid.com/rid/B-9925-2009>

We live in an unequal world. There are tremendous differences between countries and between regions in a country in whatever characteristics we want to compare, be it the per capita income, educational opportunities, access to healthcare facilities or capacity to generate new knowledge. The difference is very pronounced in scientific and technical research, in terms of both volume and impact.¹ Writing about the distribution of science among countries some three decades ago, Frame et al had shown that the distribution of land area, national population and GDP, as bad as they are, are not so poor as the distribution of mainstream scientific research as reflected by *Science Citation Index*.² Back then just ten countries accounted for more than 83% of the world's scientific literature. Added to these differences are the prejudices inherent to human beings. It is against this backdrop, I would like to view what Chattopadhyay et al have said on the happenings in global bioethics research.³

Chattopadhyay et al. describe the difficulty faced by Low and Middle Income Country (LMIC) researchers in accessing research literature produced/published in the West essential for them to be equal partners in research and getting their own published in journals published from the West. This scenario is common to all areas of knowledge and not just to bioethics and medicine. But appealing to the moral conscience of publishers and researchers in the advanced countries is not the way to address this issue. The for-profit oligopoly that is controlling the scholarly publishing industry from the 1950s with the rise of Robert Maxwell and currently led by one or two corporations which regularly report profit margins of up to 35-40% is governed, like any other business, by stockholder and employee interests and not public good or moral values. Unfortunately, even the publishing arm of some professional societies functions like corporate entities and the membership of these societies do not seem to take it seriously. As far as the researchers are concerned, they are in a rat race; every aspect of their professional career – tenure, research grants, election to fellowship of academies, invitations to conferences, getting bright students, reputation among colleagues, all of these and more – are intimately linked to the journals in which they

publish and the impact factors of those journals. On top of this the publishers of these journals insist that the authors surrender copyright to the papers. Once they surrender the copyright to the publisher, authors cannot share their papers with others. In time the publishing industry grew, as a Deutsche Bank report says, into a “bizarre” “triple-pay” system, in which “the state funds most research, pays the salaries of most of those checking the quality of research, and then buys most of the published product.”^{4,5}

The open access movement emerged with the hope of making research papers freely accessible to all without any barrier, but as Harnad points out the inertia among scientists has hampered progress. For example, three major agencies in India, viz, the Department of Science and Technology, Department of Biotechnology and the Council of Scientific & Industrial research, have open access mandates that require all researchers working in laboratories under them and those receiving any kind of support from them to place their published papers in institutional repositories which in turn are harvested by a central repository. But, most researchers do not honour this requirement; nor are the agencies taking any action. As a result, the central repository is not getting populated.

Currently, according to a study by Science-Metrix (Archambault et al) carried out for the European Commission, about half the number of papers published in science are open access.⁶ But others put the figure at as low as 25%.⁵

Thanks to arXiv founded in 1991, physicists have a well functioning central repository for preprints. Computer scientists are well served by CiteSeer^x. BioRxiv (a preprint server for biology) and SocArXiv (a preprint server for social sciences) are yet to pick up momentum. The good news is 12 preprint services, viz. arXiv, bioRxiv, AgriXiv, MarXiv, MindrXiv, PaleorXiv, BITSS, SocArXiv, SciELO, PsyArXiv, engrXiv, and FocUS Archive, backed by heavyweight funding agencies, have come forward to establish a central preprint service for the life sciences.⁷ Also, about a year ago E.U. member states have agreed to make all scientific papers freely available by 2020.⁸ According to Stevan Harnad, this target is eminently achievable if the European Union opts for the Green route to open access – depositing papers in institutional repositories.⁸

It is an irony that commercial publishers who opposed open access in the beginning and did everything possible to torpedo all OA initiatives including those proposed and discussed in the US Congress, are the ones reaping a big harvest through the OA movement - through the Gold OA route where they charge hefty Article Publishing Charges (APC). In many cases, publishers charge the authors for making their papers open as well as charge the libraries the regular subscription fees – referred to in the OA literature as double dipping. The APC route to OA has also given birth to a host of unscrupulous publishers and predatory journals. The US FTA has even sued a company called OMICS International for what they consider unethical practices followed by the company in the name of open access.

Chattopadhyay et al. refer to discrimination developing country researchers face in different areas of scholarly communication, such as getting papers accepted in the so-called international journals and being invited to join the editorial boards of these journals. Papers by scientists from Africa, Asia and Latin America do not get accepted for publication in Western journals all that easily as papers from

North America and Western Europe. In 1997 *New Scientist* [1 November 1997, p. 3] commented on the discrepancies in an editorial. They noted that when it came to choosing manuscripts for publication editors of reputed international journals would more likely select the one from Harvard in preference to the one from Hyderabad – even though both manuscripts may be of comparable quality. To most editors in the West, Harvard seems a sounder bet than Hyderabad. When refereeing manuscripts received from journals, the *New Scientist* editorial says, overly enthusiastic reviews are given to work from friends, friends of friends and people whose work is already familiar from conferences. More negative reviews go to researchers with unfamiliar names from far-off lands. No wonder many American journals are perceived to be parochial even by European scientists.

But, why should these journals matter at all? Why not make central repositories the default mode as physicists have done? Why should one feel a sense of rejection by a dominant culture? China offers a great example. In the 1990s, China was nowhere near the top ten in science, but today the United States is in danger of losing its supremacy to China in many areas of science and technology. Look at the huge number of scientists and technologists from Asia behind the success of Western universities and corporations.

Within the centre-periphery dichotomy, there are other instances of discrimination and unethical behavior.

Pharmaceutical companies in the West take advantage of the knowledge of traditional systems of medicine from local healers such as the shamans of Ecuador and neighbouring countries and veds of India and make huge profits.⁹ These companies import tonnage quantities of plant material and herbs from Asia, Africa and Latin America and convert them into allopathic drugs and what is more they sell those drugs to the same regions.

Within the United States, as elsewhere, there is the problem of racism. According to LeBron James, arguably the world's best basketball player, "No matter how much money you have, no matter how famous you are, no matter how many people admire you, being black in America is tough."¹⁰ Even in global literature, the situation is the same. Toni Morrison, the 1993 Nobel Prize winner, once said that it seemed as if writing about the life and sensibilities of Black people didn't really count; it was not thought important enough to merit attention; it was peripheral. It is the same in science and scholarship.

Neither James nor Morrison has thrown up their hands.

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