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From green to gold to diamond: open access's return to social justice

Reggie Raju

University of Cape Town Libraries South Africa



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Abstract

The open access movement is underpinned by a philanthropic purpose of sharing research output for the betterment of society. In rolling out this noble cause, social justice imperative located within the movement was destined to disrupt the current publishing model.

From its fledgling stages 'foundationalised' by the green route via institutional repositories, the open access movement has grown to include the gold route and now it can boast the diamond route. The 'library as a publisher' service brings to the fore and consolidates the social justice imperative of open access. Researchers, in this growing service model, are supported by their desire to share their research output for the growth of research and to find solutions to the myriad of challenges that beset society.

Diamond open access publishing, which is the focus of this paper, itself is slowly gaining traction making libraries distinctive drivers of open access. The University of Cape Town Libraries is an exemplar of an academic library that is offering a diamond open journal and monograph publishing service. The driver of the Libraries' 'library as a publisher' service is the return to the social justice imperatives of open access.

In rolling-out its 'library as a publisher' service, UCT Libraries provides a service that makes content easily accessible to African researchers, addressing African challenges. The service provided returns to the core principles of open access, that is, sharing content for the betterment of society.

Introduction

It is posited by Aulisio's (2014) that it is "admirable that scholars choose to give up their rights so that their work can be widely read, but it is an excessive approach that ultimately is only benefitting publishing companies and indirectly harming authors and information users". The open access movement has grown in leaps and bounds in the last decade challenging this commercial paradigm that limits reader access to scholarly information. Academic libraries,

confronted by shrinking acquisitions budgets, adopted, adapted and implemented open access strategies that facilitated free access to scholarly content to the end user.

From its fledgling stages 'foundationalised' by the green route via institutional repositories, the open access movement has grown to include the gold route and now it can boast the diamond route. The 'library as a publisher' service brings to the fore and consolidates the social justice imperative of open access. Researchers, in this growing service model, are supported by their desire to share their research output for the growth of research and to find solutions to the myriad of challenges that beset society.

The focus of this paper is on 'library as publisher' service which contributes to the academic library's disruption of the commercialization of access to information. The paper will briefly touch on the transformation from the green to gold to diamond. Diamond open access publishing itself is slowly gaining traction making libraries distinctive drivers of open access. The University of Cape Town Libraries is an exemplar of an academic library that is offering a diamond open journal and monograph publishing service. The driver of the Libraries' 'library as a publisher' service is the return to the social justice imperatives of open access.

Through the publication of open journals, monographs and textbooks, the University of Cape Town is also addressing the transformation agenda of the country and the continent as well as the issue of the decolonialization of content. These challenges are being navigated under the broader umbrella of the innate principles of open access and social justice.

Having developed a proof of concept via the publication of interactive open textbooks, the South African national government has funded the development of an interactive legal textbook for use by all students studying for a law degree in South Africa and the public in general. Further, the success in publishing eight open monograph/textbooks and five journals has given UCT Libraries the confidence to probe the possibility of developing an African platform for the publication of open journals and monographs/textbooks.

Access to information a social justice imperative

As drawn from Rawls' theory, social justice is described as assurance of 'the protection of equal access to liberties, rights, and opportunities' whilst taking care of the disadvantaged members of society. This clearly indicates that human beings are all intrinsically equal and basic human rights should be accessible to all citizens. Cognisant that knowledge empowers and transforms society, United Nations adopted in 1946 Resolution 59 of its General Assembly that is the Freedom of Information which is essentially a right to access information (UNESCO, 2017). Several countries have adopted this Resolution and, by implication, supported access to information and education as a basic human right. Access to information as a basic human right is advanced through the promotion of both formal and informal education. This advancement will improve literacy levels which in turn greatly influence the growth and development of society. This right has been seconded by Kofi Annan (1999), former Secretary General of the United Nations, who stated that "education is a human right with immense power to transform". Expanding on the influence of education, Annan (1999) highlighted that, "on the foundation of education rest the cornerstones of freedom, democracy and sustainable human development".

To have equal opportunities in education, each person should have equal access to information as this supports both classroom-based education and self-directed learning in informal settings. It should therefore be a moral obligation for information to be freely available to everyone with no copyright restrictions. Commercial publishers on the other hand, place financial restrictions on access thereby, denying those that cannot afford subscriptions. The authors, as open access

advocates, the free flow of information. This free flow will advance equal access to information: this flow of information must be multi-lateral from North–South, South–North and South–South. As pointed out by Lor and Britz, (2005: 66), there has to be free information sharing among all the countries and regions. Lor and Britz, (2005: 67) go on to state that equal access to information will bridge the information divide, a gap between those who have access (information rich), with those who do not have access (information poor). Unfortunately, access to information is critical for the communities in the Global South, leading to their increased contribution to global knowledge production.

The lack of or limited access to knowledge due unaffordable subscription costs, has marginalized many African counties from actively participating the global knowledge production (Britz, 2009: 22; Dulle, 2015: 45). Sample (21012), a science correspondent, in an article in *The Guardian* on the unaffordability of journal articles, indicated that prices from two major publishers have increased by 145% over the past six years. Commercial publishers are not concerned that the steep cost of subscription journals exclude those who are impoverished by information, like the African continent, and the consequence is a global knowledge pool that is bias and one-sided, as most of scholarly works originate from those who have access; those who are information rich. It is the view of the authors that publishers' are far too preoccupied with their profit margins, which increasingly widens the divide between those who are information rich and those who experience information poverty. Hence, for-profit commercial publishers do not have the moral reasoning to provide access to information as a basic right for the empowerment of society.

The inadequate and limited access to research means that Africa is cut off from current international debates about critical research and therefore cannot actively contribute to these debates. Yet, it is through access to research findings that solutions can be sought to resolve African challenges such as sustainable development, food security, poverty, health and drought (Raju, Smith & Gibson, 2013: 46). Evidence of Africa being excluded from being a contributor to the global knowledge economy is demonstrated by the fact that less than one percent is produced by researchers based in Africa. This low percentage could be interpreted that Africa does not have too much to contribute, in terms of research output, to the global knowledge community. The authors posit that open access is one segment of the solution to improve the knowledge production from Africa.

Open access empowers those who experience poverty and injustice through lack of access to information as it is a redistribution of information resources to the end user and results in justice by providing 'information fairness' or equal access to information.

In 2002, a position paper on open access of the Budapest open access Initiative (BOAI) highlighted the need for unrestricted access to scholarly journals for the public good. (Chan et al., 2002). The vision of the BOAI stated: "Removing access barriers to this literature will accelerate research, enrich education, share the learning of the rich with the poor and the poor with the rich, make this literature as useful as it can be, and lay the foundation for uniting humanity in a common intellectual conversation and quest for knowledge". This vision underpins social justice principles at that time due to exorbitant subscription costs barriers marginalising researchers from the global south. The vision espoused by the BOAI position

paper was to improve access to information, via the green and gold routes of open access, to those that could not afford basic subscription costs.

Open access models and social justice

The green route, or self-arching a version of a scholarly work that has already been published into open access repositories, was implemented to provide access to scholarly output. However, 16 years later after the BOAI position paper, even though the green route is the most affordable, it has still not gained enough traction to narrow the access to knowledge divide. It is said that institutional repositories has filled only 15%-20% of the research output with the contribution from Africa being much smaller. Björk et al. (2014: 248) opines that the uptake of green open access is low because of the "[lack] of academic reward systems, availability of suitable repositories, and lack of awareness and time". Guédon (2017) adds that "the purpose of depositing their work into repositories was not always clear to researchers, and this was compounded by uncertainty over what they were permitted to do by copyright.". Thus, the low uptake of the green route, does not allow the imperatives for social justice to be realised. It may be deduced that a large proportion of current research continues to be inaccessible to the vast majority in the green route. We need to ask ourselves the same question Guédon (2017) asks: "who controls what? And if it appears that the control of scientific communication escapes the research communities, to what extent does it threaten to corrupt the very nature of scientific communication"?

As repositories still struggle to be populated with scholarly content, the gold route has different challenges. A study was conducted with 330 African journal editors and publishers on the current state of scholarly publishing in Africa; it was found that 182 journals out of 1012 African journals were open access (Murray & Clobridge, 2014: 35). Whilst more than three quarters of open access journals in the Directory of Open Access Journals do not charge a publication fee, the unregulated cost of article processing charges (APCs) for the OA journals that do charge a fee means that African researchers are challenged with the costs of APCs. Even though it was never the intension for APCs to be unaffordable, the reality is that African researchers cannot to publish in top-end open access journals (such as *PLOS ONE*, *Scientific Reports*, *Science Advances* and *PLOS Medicine*). Therefore, open access publications from global north countries are visible and accessible because the researchers can afford the APCs, in contrast, global south countries cannot afford APCs further minimising capacity to share research findings. The very reason for the formation of open access movement is negated by gold APC-focussed model which become exclusionary.

Ellers, Crowther and Harvey (2017: 96) stated that the unequal financial burden, in terms of the high APC costs, "violates the egalitarian principles that underlie open access". Shashok (2017: 1) believes that the commercial publishers have influenced the open access policies so that profit is more important than access, knowledge production and dissemination. Yet Guédon (2017) emphatically states that "in no case should economic interests be allowed to interfere with the full potential of a free communicating system designed and destined to help humanity – the whole of humanity – grow knowledge".

Clearly, there is much that needs to be done for the open access movement to fully realise its philanthropic principles. The social justice principles of open access, which were intrinsic in the 2002 BOAI declaration, need to be rolled-out. These principles incorporate fairness, justice and equality to the reader and should be extended to the creator or author of scholarly work. Diamond open access, a relatively new stream in the open access movement, reverts to the original principles of Open Access which is the social justice philosophy of producing equal opportunities and fairness to everyone by confronting the structures that perpetuate poverty and injustice (Aulisio, 2014: 68). By the eradication of restricted access to marginalised communities, like those countries in the global south, diamond open access confronts and disrupts the profit-driven monopoly of publishers and the commercialisation of access to information.

What is Diamond open access? According to the University of Groningen Library: "[it] differs from gold open access in that the costs of editing, peer review, online publication, hosting, etc., are borne by an institution, fund or collaborative arrangement. Societies, universities and other non-commercial institutions make an infrastructure available and most of the professional work is done by academics in their roles as editors or peer reviewers".

Diamond open access is practised as a 'library as publisher' service in academic libraries which publish scholarly works (Raju & Pietersen, 2017: 4). Shashok (2017:10) refers to this publishing option as 'institutions as publishers'. The authors assert that diamond open access offers researchers the option to publish, free from third-party service provider-imposed constraints, and make such output accessible to all (Shashok, 2017: 10). According to Fuchs and Sandoval (2013: 438), "diamond open access is the only sustainable future for academic publishing" and it will prevent the "further commodification of the academic world".

Benefits of open access for the marginalised

Diamond open access is being embraced by a number of higher education institutions in South Africa. Currently, there are six South African higher education libraries that are offering, in some way or another, a "library as publisher" service. These academic libraries have published almost 40 open access journals. The University of Cape Town Libraries has taken this service one step further through the publication of open access monographs and textbooks. In a country that has been riddled by years of injustice through the system of apartheid, the social justice principles has taken centre stage. The authors maintain that the diamond open access service will address the imperatives of the country and assist in altering the socio-economic conditions of the continent. The open access monographs published by UCT Libraries have relevant local content that might not have been published by commercial publishers as their mandate is too focused on maximum profits, yet the monographs published by UCT Libraries are contextually relevant and focuses on research findings for Africa.

Since 2015, South African higher education, had student protests, which were 'umbrellaed' under #FeesMustFall campaign. The movement argued that most students were negatively affectively during their higher education journey as they could not afford the university fees and other related costs and that would include the costs of textbooks.

According to Statistics South Africa, textbook prices increased by the above-inflation percentage of 13.6% in 2013. One student said in a *Mail and Guardian* newspaper article, "They are extremely expensive and editions change every year, too". Further, the entire textbook is never used in lectures. Wiens (2015) found that the average cost of first year textbooks for science students at UCT is approximately US\$1400 per year, yet the contribution toward textbooks on a Bursary Scheme is approximately US\$283. There is an additional cost of \$1117 per year for textbooks, which is unaffordable and very reason for the rise of the #FeesMustFall movement.

It is for the very reason of excessive cost of printed textbooks that the one of UCT's leading researcher opted to publish his ear, nose and throat (ENT) textbooks by UCT Libraries. The researcher said: "A new set of operative surgery textbooks may cost colleagues working in some African countries as much as a month's salary... Much of the content in modern textbooks has limited relevance to surgical practice in a developing country setting anyway". The ENT textbook is one of the two textbooks published by UCT Libraries. The other textbook is a HIV Atlas. Thus, the publishing service is not only about making the content freely accessible and allowing the researcher to publish at no cost, it envisages to publish content that is relevant for the African continent so that local research may provide possible solutions to uplifting the development of the continent.

In a blog written in 2015, Barbara Fister comments that "the thing about privilege is that those who have it don't see it - and access to scholarship is no exception. The first challenge is to recognize our privilege. The second is to examine what we do in our everyday lives that makes things unequal and work on fixing it". To this end, access to the textbooks is available in different formats as part of the publishing service. These formats for access are intrinsic to the publishing service of UCT Libraries and form part of the social justice drive for the African content. As mobile broadband is more affordable than internet broadband in Africa, the two textbooks that have been published are accessible on a mobile device, using the formats of pdf, html and epub. Furthermore, as Africa struggles with stable internet connectivity and electricity outages, included in the textbooks are video and audio clips that can be downloaded and viewed when there is no internet available, specifically in rural parts of the continent. A magnifying feature is being investigated to zoom into images from the textbooks to assist with surgical procedures.

The South African government is also contributing financially to the transformation imperatives that emanated from the student protests. UCT Libraries has been awarded government funding, as part of a bigger university block grant for *inter alia*, to develop relevant, inclusive curricula. The UCT Libraries will be publishing a constitutional law open access textbook with this funding. The textbook will allow access to critical judgements in various transformative formats to support learning and ensuring that every law student in South Africa will have free access to a critical textbook. It is envisaged that this project will be completed by the end of 2019.

The catchall phrase, 'African solutions for African problems', is the ability of Africans to understand the problems of the continent and provide solutions to them (Serekebrhan Figuremariam, 2008). UCT Libraries' publishing service has provided a proof of concept for

the publishing of local content, focusing on transforming and empowering the continent through the moral obligation of social justice. With the 'library as publisher' service as a proof of concept through the six monographs, two open access textbooks and the buy-in from the South African government to publish a constitutional law textbook, UCT Libraries are in a leadership position to devise a sustainable solution for open access publishing on the African continent. UCT Libraries are investigating the feasibility of developing a publishing platform that is relevant for African by implementing the open access principles that are specific to the African continent.

Conclusion

The transition from green open access to diamond open access consolidates the social justice underpinnings of the open access movement. This transition enhances access to knowledge for the betterment of society. As much as the gold open access stream offers free access to scholarly content to the reader, the exorbitant cost of APCs makes access to publishing opportunities for authors a major challenge. The adoption of diamond open access demands a shift in the responsibilities of the librarian, but more importantly, it offers different opportunities for authors and readers: in terms of authors, there is no APC cost and for the readers, there is immediate free access to scholarly content. Besides the broader consolidation of social justice imperatives, diamond open access also makes provision for the sharing of local content to address local challenges. The absence of subscription and APC costs and, the fact that it is the final published version of the output which is immediately accessible, makes diamond open access the most significant disruptor of the current commercial publishing model.

References

Annan, K. 1991. Foreword: the state of the world's children. Available: https://www.unicef.org/sowc99/sowc99a.pdf

Aulisio, G. 2014. Open access publishing and social justice: Scranton's perspectives. *Jesuit Higher Education: A Journal*. 3(2), article 7. Available: https://epublications.regis.edu/cgi/viewcontent.cgi?article=1073&context=jhe [2018. Jun 21]

Björk, B., Laakso, M., Welling, P. & Paetau, P. 2014. Anatomy of green open access. *Journal of the association for information science and technology*. 65(2): 237-250. DOI: 10.1002/asi.22963.

Britz, J. 2009. Open access: challenges and barriers to African scholars. *Inkanyiso: Journal of Humanities and Social Sciences*. 1(1): 22-26. Available: https://www.ajol.info/index.php/ijhss/article/download/62105/50143 [2018, June 1].

Dulle, F. 2015. Online information resources availability and accessibility: a developing country's scenario. *African Journal of Library, Archives & Information Science*. 25(1): 45-57. Available: http://www.ajol.info/index.php/ajlais/article/view/126825 [2018, May 20].

Chan, L., Cuplinskas, D., Eisen, M., Friend, F., Genova, Y., Guédon, J-C., Hagemann, M., Harnad, S. et al. 2002. *Budapest Open Access Initiative*. Available: http://www.budapestopenaccessinitiative.org/read [2018, May 4].

Ellers, J., Crowther, T.& Harvey, J. 2017. Gold open access publishing in mega-journals: developing countries pay the price of western premium academic output. *Journal of Scholarly Publishing*. 49(1): 89-102. DOI: 0.3138/jsp.49.1.89.

Fiquremariam, S. 2008. African Solutions to African Problems [Blog, 18 September]. Available: https://issafrica.org/iss-today/african-solutions-to-african-problems [2018, May 24].

Fister, B. 2015. Checking our library privilege [Blog, 20 October]. Available: https://www.insidehighered.com/blogs/library-babel-fish/checking-our-library-privilege [2018, May 20].

Guédon, J. 2017. Open access: toward the internet of the mind. Available: http://www.budapestopenaccessinitiative.org/open-access-toward-the-internet-of-the-mind [2017, May 5].

Lor, P. & Britz, J. 2005. Knowledge production from an African perspective: international information flows and intellectual property. *The International Information & Library Review*. 37(2): 61-76. DOI: 10.1016/j.iilr.2005.04.003.

Murray, S. & Clobridge, A. 2014. The current state of scholarly journal publishing in Africa: findings and analysis. Available: http://www.ajol.info/public/Scholarly-Journal-Publishing-in-Africa-Report-Final-v04c.pdf [2018, May 2].

Robinson, M. 2016. Social Justice. Available:

https://fletcherspanish.wikispaces.com/file/view/What+is+Social+Justice.pdf. [2017, August 5].

Raju, R., Smith, I. & Gibson, H. 2013. Opening access to African scholarly content: Stellenbosch University's AOARI platforms. *Insights*. 26(1): 44-50. DOI: 10.1629/2048-7754.26.1.44.

Sample, I. 2012. Harvard University says it can't afford journal publishers' prices. *The Guardian (UK)*. 24 April. Available:

https://www.theguardian.com/science/2012/apr/24/harvard-university-journal-publishers-prices [2018, May 28].

Shashok, K. 2017. Can scientists and their institutions become their own open access publishers? [arXiv preprint arXiv:1701.02461]. Available: https://arxiv.org/pdf/1701.02461 [2018, May 28].

UNESCO. 2017. Communication and Information. Available: http://www.unesco.org/new/en/communication-and-information/freedom-of-expression/freedom-of-information/ [2018, June 3].

Wiens. 2015. SPARC MORE: Blue Sky Big Picture Available: Panehttps://www.youtube.com/watch?v=OZ2ao8SzzJs&index=6&list=PLL-E44GP_Ha3bqBzIyLc5lWcMHcnyTPoO [2018, May 21]