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Conceptualizing, Financing and Infrastructuring: Perspectives on Open Access in and from Africa

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ABSTRACT

In the 1970s and early 1980s, parastatal and independent indigenous publishing houses were established in capital cities across Africa, but these emerging operations and institutions were quickly undercut by structural adjustment programmes; African scholars had little alternative but to turn to organizations and publishing systems in Europe and North America. Unfortunately, contemporary scholarly publishing on the African continent remains largely controlled by Western corporate academic publishers. Even as the notion of open access has gained popularity, a growing body of scholarship indicates that the concept is in fact re-entrenching the power of traditional academic publishers under a revised business model. This piece offers perspectives from African scholars and activists on the politics of open access, revealing different experiences of and imaginaries for open access in Africa. The piece is supplemented by data from the indepth discussion that informed it, which is published on an open-source platform in an effort to invite readers to also lend their analytic perspectives and contribute towards iterative analysis and ongoing dialogue.

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INTRODUCTION

At a 2019 workshop on scholarly publishing attended by the first author, the co-organizer, Dr. Divine Fuh, stated decisively:

Open Access will further marginalize people. If the University of Nairobi does not have a printing press and doesn't think that investing in its university press is a political project to give it a voice, that is a problem. It is doing what Paulin Hountondji (1990) called scientific extroversion. ... Once you build such local publishing infrastructure, *then* Open Access can kick in. It can be a public good. [But] how many African countries have that research foundation today?

Soon after independence, in the 1970s and early 1980s, parastatal and independent indigenous publishing houses began to be established in African capitals (Bgoya and Jay, 2013). But these emerging operations and institutions were quickly undercut by the Bretton Woods structural adjustment programmes in the 1980s, giving African scholars little alternative but to turn to organizations and socio-technical publishing systems in Europe and North America. Today, scholarly publishing in and on Africa remains largely dominated by corporate academic publishers headquartered in cities around the global North. While the notion of open access (OA)² has grown in popularity since the late 1990s, instead of achieving its original radical vision to democratize who can contribute and access scholarly knowledge ('Budapest Open Access Initiative', 2002), a growing body of scholarship indicates that the label of 'open access' is in fact re-entrenching the power of traditional academic publishers under a revised business model (Larivière et al., 2015; Mirowski, 2018; Posada and Chen, 2018). Scholars like Eve and Gray (2020) have underlined that moving from a reader-pays subscription model to an author-pays or donor-pays model under an Article Processing Charge (APC) open access regime does

² I use the definition of open access introduced in the original 2002 Budapest Open Access Initiative: 'By "open access" to [peer-reviewed research literature], we mean its free availability on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited' (see: https://www.budapestopenaccessinitiative.org/read).

not fundamentally change the terms of scholarly access. Under the APC model, rather than paying to read, one pays to publish.³ If you have a research grant from a narrow list of donors such as Wellcome Trust or Bill and Melinda Gates Foundation, then your OA publishing fees will be paid on your behalf,⁴ but otherwise, you are expected to cover the cost of publishing your own work; for scholars in Kenya, this can range from 20,000 to 200,000 Kenyan shillings (approximately US\$200–2,000). Many African scholars would struggle to raise even the lower end of that range to publish their work. Under such a narrowly defined open access regime, then, only an elite few are in fact able to publish 'openly', leading to the privileging of certain voices and perspectives. So should we give up on the notion of 'open access'?⁵ Or is there still a dream towards sustaining a public knowledge commons for diverse communities that can be revitalized?

This piece offers perspectives from African scholars and activists on the politics of OA publishing. Rather than focusing on the specifics of Plan S as others have done, in this special section and elsewhere (see, e.g. International African Institute, 2019), this piece focuses on different imaginaries of and for open access which are emerging on the continent. In order to write the piece, a recorded discussion was facilitated with scholars, practitioners and publishers from the continent to think together about the promises of OA and how different mechanisms of support for scholarly publishing might influence their everyday work and ability to participate in scholarly dialogue at multiple scales. The full audio recording as well as a transcript and additional supporting materials are published and available for re-analysis and re-use under a CC by SA 4.0 licence (Okune et al., 2020). These materials have been published as an invitation to readers to also lend their analytic perspectives to this issue and to contribute towards iterative analysis and ongoing dialogue.

³ Kate Meagher's annotation in the RDS open ethnographic data platform touches on this point (Meagher, 2020).

⁴ As Sulaiman Adebowale noted in comments on a draft of this paper, in order not to suggest that the external and whimsical donor system is the *only* option to pay author fees, it is important to call attention the existence of local research bodies, learned societies and public funded initiatives to support the publishing of an author's work. This kind of support has existed in varying forms, even before the advent of electronic publishing.

⁵ See Leslie Chan's reflections on his experiences in the OA movement (Chan, 2017).

Geographies and Scale

The term 'Africa' is used here with caution, as it often serves to flatten and homogenize what is actually a richness and broad diversity of experiences. Socio-technical publishing systems are complex, and the needs of each region are variegated. For this reason, it is important not to gloss over differences in search of a representative 'Africa'; interesting points of comparison should not be lost in attempting to articulate a uniform 'African' perspective. Nonetheless, it would be remiss to ignore shared experiences that exist as a result of widespread policies such as the Bretton Woods Structural Adjustment Programmes (SAPs) and other important regional and continental-scale histories, relations and politics. Thus, it is important not only to attend to the micro level of analysis, but also to zoom out to meso, macro and meta levels in order to better understand transnational effects. It was clear that participants in the discussion were attuned to this balance, explicitly stating when they were speaking from their own national perspectives while also expressing curiosity over whether or not these aspects held transnationally, seeming to ask each other: 'this is how we have found it in South Africa, what about in Kenya?'.

The facilitated virtual discussion, which was conducted in March 2020, involved individuals with long careers and personal histories in Senegal, Kenya and South Africa.⁶ This composition was partly due to personal and extended social contacts, time and availability, and of course, a certain amount of serendipity. This article tacks between the genre forms of a published interview and an essay, citing direct quotes from the discussion as data, as well as linking to previous published interviews conducted by others, additional relevant 'grey literature' resources, and insights offered by others working on open access who annotated the data through the data-sharing platform hosting the data.⁷

⁶ For the discussion participants' bios, see Okune (2020a).

⁷ The Research Data Share (RDS) platform is an attempt to explore, through practice, the challenges and opportunities of sharing qualitative data. As a research object in and of itself, this platform is being used to facilitate discussion over the worries and possibilities imagined and experienced by those interested in sharing qualitative research data. The platform was originally set up as part of Angela Okune's doctoral dissertation project to facilitate the sharing of the project's own data as well as any relevant data produced by collaborating research organizations where Okune conducted fieldwork. Okune's approach drew inspiration from the concept of 'para-ethnography' (Marcus, 2000) and expanded the para-ethnographic into the digital realm. The platform now serves as open infrastructure for individuals and groups in Kenya interested in archiving and sharing ethnographic data, including the Research Data KE Working Group. Learn more by visiting: https://www.researchdatashare.org/about-research-data-share.

This thought piece is written using first-person singular pronouns, but the piece lists all participants as co-authors. This is to signal and acknowledge the key contribution of the discussion participants, without whom this paper could not have been written. Nonetheless, I do not use plural pronouns as I do not purport to speak on their behalf. This slightly awkward attempt to substantively acknowledge the labour of the discussion participants reveals the limited options available (either as an author or within an 'acknowledgements' section in a published article, which scholars cannot put on their CV). There is obviously a need for more nuanced and diverse ways to substantively credit all contributors to research. Biagioli and Galison (2003) have explored in detail the history and genealogy of the author function in the sciences. Such literature on scientific authorship also relates to and raises questions around the recent shift to assigning academic credit based on quantitative metrics of academic evaluation associated with the notion of 'impact' — a point which emerged several times in the discussion.

In what follows, I touch briefly on a few of the most notable points that emerged from the discussion in the hope that scholars, policy makers, funders and practitioners working on OA around the world will recognize the importance of attending to the margins of universalizing policies and frameworks. I invite you to also turn your analytic gaze to the same material and share your interpretations and personal experiences through the Research Data Share platform.⁸

WHY OPEN ACCESS?

In the course of the discussion, participants questioned the primary goal of OA: is publishing under OA intended to support academics expected to perform under particular university and international standards of 'excellence' (making what is already produced as 'scholarship' within the traditional academy more accessible); or is OA about broadening the reach of scholarship beyond the academy (and relatedly, broadening what is considered scholarship in the first place)? Can it be possible for a sector like scholarly publishing to embrace both humanist and entrepreneurial values straddling different interests and players across the globe? This fundamental question directly influences the implementation and practice of open access.

⁸ To access the data supplement to this article, which includes the recorded discussion, transcript, annotations and additional resources, see Okune et al. (2020).

Founder and editor-in-chief of the Nairobi-based OA journal *African Journal of Food*, *Agriculture, Nutrition, and Development* (AJFAND),⁹ Ruth Oniang'o, and Director of the University of Nairobi Library and Information Services, Angela Mumo, describe the pressure for African academics to be 'seen to be competing internationally' (Oniang'o) and the resulting expectations for academic publishing to help scholars to perform that goal. Oniang'o recalls the challenge of AJFAND becoming an internationally indexed journal (Okune, 2020g), while Mumo describes how the African researchers she serves as a librarian 'need a lot of support to be out there and to reach those impact factors that are on the other side of the world' (Okune, 2020e).

However, Independent Researcher at the Intellectual Property Law Unit at the University of Cape Town, Eve Gray, points out that when publications serve only to advance academic careers, OA misses its potential. She emphasizes the 'importance of publishing for development' (Okune, 2020f) and 'the power of a version of publishing which is about development issues, rather than about promotions and journals and so on' (ibid.). Gray describes how, in the early days of the OA movement, 'the president of Brazil made a wonderful speech about this being the opportunity to let the sound of the *berimbau* [Brazilian musical instrument] echo across the seas to Africa and back again, and to create a community of openness that would empower the world and change the vision of what was going on' (ibid.). She notes, however, that the present movement '[doesn't] have at its center anymore the idea of empowerment, and the empowerment particularly of developing country discourses and developing country communication strategies' (ibid.).

Here Gray underlines what Kate Meagher also points out in an annotation of the data:¹⁰ the multiple open access paradigms and competing notions of 'open access'. Gray stresses the importance of ensuring that the values of OA publishing remain radical and tied to development issues rather than being taken up strictly within traditional, commercial academic journal publishing. This would include moving beyond the academic journal as the sole vehicle for scholarly publishing and developing processes to validate other genres of publications including

⁹ Learn more about AJFAND at: <u>http://www.ajfand.net/</u>

¹⁰ Find the linked source data and annotation here: <u>https://www.researchdatashare.org/content/scholarly-</u>ecosystems-professional-publisher-ecosystems-and-corporate-publisher-ecosystems

reports by think tanks and organizations outside of the academy.¹¹ Gray suggests that institutions broaden their acknowledgement and support of scholarly publication channels outside the confines of an academic journal. Since many 'grey materials' are already open access, what is required then is not 'opening them up' but devising strategies to increase their legitimacy through appropriate review processes and institutional and funder support. If African universities (and indeed most universities around the globe) had more robust policies, norms and processes for reviewing and crediting a wider range of publication genres and forms, the conversation of accessing scholarly knowledge would quickly move past 'open access' strictly speaking and towards discussions of the socio-technical infrastructures¹² required to enable and encourage more diversity in what 'counts' as scholarly knowledge.

The question of *why* open access' is therefore also entangled with the question of *what* is being made open access. An OA system that simply makes material that is already produced as 'scholarship' more accessible continues to be tied to the dominance of the academic journal. On the other hand, an OA that expands what is considered scholarship to include that which is produced beyond the academy requires further work on the necessary socio-technical infrastructures, including appropriate norms, practices and policies to allow for the inclusion of greater diversity of knowledge forms, genres and epistemologies. Policies like Plan S focus on the former, ensuring that academic articles become more available to read. But if we are to achieve more transformative scholarly communications and knowledge production/dissemination

¹¹ For an example sent to me by Gray after the discussion, see PLAAS (2020). Gray offers this report — an intervention by PLAAS at the University of the Western Cape on the question of food sustainability and the lockdowns being instituted to control the spread of the coronavirus — as a good example of professionally published development research outside of the academic journal. She explained in an email to me that 'PLAAS is well known for its combination of research rigour and the attention that it pays to critical current issues. This is not conventionally peer reviewed research but relies on the strength of the research team and the importance for them to retain the reputation of the institute. The content is very timely, addresses an issue that is of urgent importance in the country right now, and embodies what I have long argued is a vital component of research in a developing country like South Africa, where issues have to be addressed timeously and in a way that will attract policy attention. I see this as a central component of our research environment, bringing research focused on critical national issues to the forefront, when they are needed, and in accessible formats. This is too often marginalised in the rhetoric that drives formal research — journal articles and books, peer review and impact factors'.

¹² By 'infrastructures', I mean the systems that enable the circulation of materials, technologies, knowledge, meaning, people and power throughout the research lifecycle — from the earliest phases of research, collaboration and experimentation through data collection and storage, data organization, data analysis and computation, authorship, submission, review and annotation, copyediting, publishing, archiving, citation, discovery and more.

in Africa, we should not be satisfied with ensuring that existing and forthcoming academic articles are available for broader public consumption.¹³ Shearer et al. (2020) have detailed the need for diversity in scholarly communications and drawn attention to the notion of *bibliodiversity*, which has also been raised in the Jussieu Call.¹⁴ If scholars are to move towards an open access (at this point, open science is probably the more appropriate term) that fosters bibliodiversity of forms, genres and epistemologies, the movement must also turn a critical gaze on the underlying frameworks and evaluation criteria against which scholarly knowledge is evaluated and made meaningful. This includes tackling questions regarding who sets the standards of scholarly credibility including peer review and measures of 'impact'.¹⁵

FUNDING

A recurring theme throughout the discussion was the issue of funding open access. Many of the long-standing OA discussions have revolved around the topic of finding sustainable business models. However, there have been increasing calls to move the open science conversation away from technocratic solutions of finding appropriate business models towards addressing epistemological inequities of knowledge production (Open and Collaborative Science in Development Network, 2017). Rather than a discourse of speeding up the existing scientific process to find the 'right answer' and reducing the duplication of existing science, such proponents view open science instead as an opening that could enable greater inclusivity with regard to who participates in science, arguing that knowledge should be stewarded as a public good for all to consume and contribute towards.

Our discussion participants included researchers as well as those who support researchers through libraries or local publishing organizations, so the conversation was able to touch on the everyday (funding) challenges of running a publishing outfit as well as the more philosophical questions about stewarding knowledge commons. Former managing editor at CODESRIA and

¹³ Although this is still a feat in and of itself that is not to be diminished!

¹⁴ For the Jussieu Call (10 October 2017), see: <u>https://jussieucall.org/jussieu-call/</u> (accessed 26 August 2020).

¹⁵ Thank you to the Managing Editor of *Development and Change*, Friedl Marincowitz, for raising this point during the review of this piece.

founding director of Amalion, Sulaiman Adebowale, observed parallels across the continent where many academics began to set up journals, largely to compensate for a decrease in the spaces in which they could publish as a result of the SAPs of the 1980s (Okune, 2020c). Adebowale noted how these initiatives then moved from a desire to share, a need to publish and an aim to disseminate, towards commercial models of operation in order to sustain the journal operations. Oniang'o, who left a university professorship position in 1996 to run the journal she founded, described in detail this very challenge:

We are published by a Trust so we would like to turn that into a private company to try and generate resources. We have more manuscripts than we can handle ... so the challenge then became how do we raise funding. Personally I don't get paid; in fact I feel I benefit more from it, because it keeps my mind going. I find it very exciting, but I have to run a system that you know that compensates those that help me to run this. So we started to charge authors. We don't charge a whole lot because none of us academics ... earn a lot. ... I'm telling you there is a huge, huge demand by our African scholars especially in this field I'm in, to publish their work. And now, as I said earlier, open access is actually as regulations, as rules, and it can be shared. ... So, my challenge then becomes that I have to make sure that we do this well. Just because we got into Scopus or we are indexed, we are all over ... [i]t doesn't mean [we now make a lot of money. But if] we now go down [because we don't have money to run the journal] it won't just make sense. [So] ... I'm ... excited to learn about how to go commercial [laughs] because we have to sustain ... the journal you know. And we have to make it work. (Okune et al., 2020: AF 23:14)¹⁶

In response to this, Adebowale, whose Dakar-based independent academic publishing house runs on a commercial business model, probed:

[Y]ou are thinking of setting up a private company for the journal to be able to manage and earn money for the journal in a way ... to be able to continue publishing the journal. If a model like Plan S can get funding for the journal ... would that be an incentive for you not to go commercial on your own? (ibid.: AF 31:35)

Earlier, Adebowale had explained:

¹⁶ 'AF' in a citation signifies the location on the audio file for this part of the discussion.

[W]ith my publishing program, I'm trying to publish scholarly work on Africa and trying to publish scholarly work on Africa beyond academia as well. Trying to publish works that you don't need a university degree to read. And we have done some interesting work. I should say, this has all been done in a commercial way, not open access. So how to fit the open access model for scholarly monographs would be an area I would really, really like us to touch on ... for a private publisher, a commercial publisher that do not get funding for the work. Yeah, I've been involved with some work, some publications, with some development organizations. And I've made available copies, free copies of those work to those organizations where they are distributed and disseminated in their networks. But then the question of open access as both a model to promote the work, to promote both the printed and electronic versions, is interesting to me, but also as a model to get the word to the furthest reach possible is interesting to me. And how to fit that into the commercial model of publishing that I'm currently involved in? I know some publishers in Africa have tried it and had varying success ... (ibid.: AF 3:39).

At the risk of stating the obvious, these points raised by Oniang'o and Adebowale highlight that commercial publishers are not all the same. Scholarly societies and university presses obviously cannot be compared to commercial publishers like Elsevier (Okune, 2020d), while small independent and locally based commercial endeavours are also not the same as mega multinationals. Under policies like Plan S, then, more refined categories should be developed so that companies like Amalion and Elsevier are not subject to the same blanket terms.

Gray expressed worries about the model itself: 'I fear we [have been] captured [by] international commercial models' (Okune et al., 2020: AF 15:40) noting 'in an African context, it's ... a seesaw between something that comes naturally to us which is communicating openly and the European imperative to be profitable and commercial and ambitious and climb ladders' (ibid.). Meyerson and Scully (1995) have offered the concept of 'tempered radicals' that may be helpful here for thinking about African academics-turned-publishers who find themselves trying to achieve excellence as part of the dominant academic publishing system while simultaneously attempting to change the system. How can such tempered radicals be supported?

A starting point is understanding the diversity of interests, motivations and types of scholarly publishers. As highlighted above, there are at least two very different kinds of

commercial publishing models; small independent publishing houses in African countries are very different from corporate, multinational publishing giants. After recognizing the diversity in the publishing landscape, policy makers and funders must then respond to the question raised in the previous section: what kind of open access do they seek to nurture? The opening vignette underscored that OA is not a purely technical or economic issue; it is also political. There is a potential to leverage policies like Plan S to invest in existing and new small independent publishing houses on the continent, supporting a decentralized knowledge ecosystem grounded in values of knowledge as a public good.¹⁷ But if planners at cOAlition S do not pay attention to who owns the scholarly infrastructure that they are requiring grantees to use, then we may find that in the pursuit of opening up access, the power of established corporate publishing giants becomes further consolidated. For example, with the recent acquisition by Taylor & Francis of open access research publisher F1000 Research (Page, 2020), the mega-publisher now has a venue and a platform that fulfils all the Plan S criteria. Martin Eve (2020) discusses this acquisition in more detail in terms of neutralizing Plan S 'threat infrastructures'. Unless changes are made that explicitly differentiate between types of scholarly publishers, APC fees paid by Plan S funders will likely increase shareholder profits rather than support the continued survival of small independent scholarly publishers.

MOVING FORWARD

A third point raised in the discussion was a reminder not to limit our gaze to an end goal of simply having more research outputs available as open access online. Director of the University of Nairobi's Library and Information Services, Angela Mumo, began by acknowledging that 'we still have a lot of research ... good research, which has been done by students and faculty...[b]ut because there is no support, we are unable to put this research online in the repositories' (Okune et al., 2020: AF 46:08) but she underlined that 'the biggest problem is funding. African researchers are not funded. And they feel frustrated. They do their research with their own funds.

¹⁷ See for example the 'Invest in Open Infrastructure' initiative to enable durable, scalable and longlasting open scientific and scholarly infrastructure to emerge, thrive and deliver its benefits on a global scale. Read more at: <u>https://investinopen.org/</u>.

And research is very expensive. So to me, in Africa, we are looking at a continent that is frustrated in terms of research funding' (ibid.: AF 40:57). Mumo's comments drive home the need not only to support the publishing of outputs in and from the continent, but also to address broader inequities in global research as part of decolonizing global structures of knowledge production.

'Who should run the publishing houses? And who should pay for the whole system?', asks Michael Schulson (2020). He sees the answer to these two key questions as determinants of the future direction of open access:

Instead of an open-access commons run by scholars in the public interest, the new openaccess revolution increasingly looks like it will depend on the same big commercial publishers, who, rather than charging subscription prices to readers, are now flipping the model and charging researchers a fee to publish their work. The result is a kind of commercial open-access — a model very different from what many open-access activists envisioned. (ibid.)

Thus, paying close attention to who owns and manages the socio-technical infrastructures on which research materials sit is vital. Plan S will be a failure of the open access community's imagination if it opens up funding that then supports the Western publishing giants who already make nearly 20 per cent net profit margins.¹⁸ Instead, a broader focus on investing in open regional scholarly infrastructure would not only allow research materials to be made openly accessible but — perhaps more importantly — would provide funding support to local publishers to make their content available. This would be a double win, furthering the work of African authors within their national contexts and internationally as well as promoting underlying local publishing infrastructure and capacity to conduct and publish research work at home.

Funders and organizations would do well to pay attention to new kinds of inequities that may arise from OA mandates and work towards addressing those. Local journals like AJFAND 'may be addressing African local issues, but ... still have to be seen to be competing internationally' (Okune, 2020g). How can international bodies help facilitate such processes to enable smaller journals with more localized reach to be credited and to circulate without needing 'scale'? As Adebowale points out, there is a need to experiment and innovate around better

¹⁸ Find the latest financial data from RELX, Elsevier's parent company here: <u>https://www.relx.com/investors/key-financial-data</u>

models of collaboration at intra-national, intra-regional and transnational levels (Okune, 2020b). How can funders or other international organizations reduce the competitive friction of individualized 'success' and instead encourage more creative, egalitarian and innovative models of partnership around scholarly publishing?

CLOSING THOUGHTS

I began this piece by quoting the co-organizer of the Nairobi workshop on publishing book manuscripts, Divine Fuh. He closed his session by arguing: 'open access [can] only come after infrastructure exists. ... Every journal is running to the continent to pick researchers to publish outside. Content and knowledge production, the future is right here'. I pick up his point to argue that unless studies and policies pertaining to scholarly communications broaden out beyond discussions of business models and content, and turn their gaze on the established publishing infrastructures themselves, it would appear that OA systems could very well re-entrench long-standing colonial power imbalances. Leaders working on open access would do well to think and act broadly and strategically with regard to how funding programmes, especially state-run initiatives, contribute towards enhancing inclusive knowledge infrastructures (Okune et al., 2018).¹⁹ Rather than training a narrow gaze on enabling journal publications to be freely viewed across Africa — an important first step but not the end in itself — the radical potential of open access to more fundamentally change the relationships and practices of knowledge production on the continent requires a more expansive view of what 'openness' (Chan et al., 2019) and 'access' really represent.

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