Be Creative, Determined, and Wise: Open Library Publishing and the Global South

by Matthew Baker

Libraries throughout the world are increasingly involved in the production of scholarly publications. Much of this has been thanks to the growth of open access (OA) publishing in all its forms, from peer-reviewed "gold" journals to "green" self-archiving, and electronic theses and dissertation (ETD) repositories. As a result, more and more of the world's scientific, medical, and scholarly research is freely available online. Libraries' quickly evolving capacity as OA publishers holds great promise for students, teachers, and researchers—not to mention farmers, entrepreneurs, and civil society groups—in developing regions of the world. The vast majority of research is still produced and used in a handful of economically powerful countries. This disparity of access to knowledge is slowly being corrected, at least in some disciplines, thanks in no small part to the work and advocacy of librarians.

Every aspect of how information and knowledge make it from creator to user is being renegotiated. Indeed, thanks to the advent of the "read/write" web, the distinction between creator and user has effectively been eliminated. Many library and technology publications (including this one) regularly feature articles addressing the many issues raised by these changes and especially by the emerging role for libraries—from budgets to editorial workflows to the technical and legal challenges of digitization.

Although many of the challenges to OA library publishing apply in any context, there are some particular challenges faced by libraries in the Global South (areas also referred to as the Third World), not only in gaining full access to available resources but in participating more fully as *producers* of information and knowledge. Overcoming these challenges is an ethical imperative, enshrined in many a library mission statement, with profound consequences for freedom of thought and expression, democracy, and sustainable development.

Some well-known examples of current OA publishing are already enhancing research in the developing world, including HINARI (focused on public health), AGORA (focused on agriculture and the environment), and Bioline International (focused on bioscience). The Electronic Publishing Trust for Development and BioMed Central's Open Access and the Developing World do a nice job of tracking the latest happenings, while geographically focused efforts such as SciELO (for Latin America) and AJOL (for Africa) provide greater access for particular regions and language groups.

Describing the 'Divide'

The phrase "global digital divide" has been criticized for oversimplifying a complex set of issues and therefore tending to limit the kinds of thinking and planning required to best address those issues. At the most basic level, however, speaking of such a divide is useful shorthand for naming the tremendous gap in information resources between the affluent

Global North and the economically "developing" Global South. Many of the factors that create and perpetuate the divide are much larger than libraries. Political instability, pervasive corruption and inefficiency (at every level of the process, including Western "donors"), systemic economic inequality, environmental degradation, and racial, religious, and gender discrimination all contribute to information asymmetry, between countries and within them. All of these will severely limit individual and community capacity to participate in the production of knowledge. There are obviously no "silver bullet" solutions here. There are, however, some areas in which libraries and librarians can play an important role.

It's Not (Mainly) Technological

An obvious precondition for OA publishing of any kind is an adequate internet computing infrastructure. Many technological challenges remain, particularly for those in rural areas. Expanding the provision of reliable, high-speed internet connectivity continues to be a priority. The recent installation of fiber-optic cable in East Africa, as well as the many ingenious PC and mobile computing solutions currently being implemented (sometimes described as "ICT4D," or ICT [information and communication technologies] for development), all promise to benefit a great many people. Nevertheless, as many have observed, too great a focus on technical solutions ("throwing computers at the developing world," as one commentator rather astringently put it) can obscure the fact that the "divide" is perhaps better understood as a combination of *access* and *knowledge* problems, rather than simply a technology problem. Realizing this puts us all in a better position to come up with viable solutions.

While there continues to be a need for computing technology in some parts of the world, many urban centers in the Global South are well-equipped with at least basic ICT, to the extent that in some areas it is beginning to pose an environmental hazard. There are skilled IT professionals in nearly every major city on the planet. Many African refugees I met during my teaching years at the American University in Cairo, Egypt, for example, who were often of very limited education and means, knew far more about IT and computer hardware than many wealthy, tech-obsessed Westerners. As Peruvian professor of communications Eduardo Villanueva put it in a recent *First Monday* podcast, "the quality, the place, the way that you actually access changes the way that you can actually do things with the Internet." Important distinctions in terms of *kinds* of connectivity (basic versus 3G, for example)—especially the various uses to which that connectivity is being put on the basis of complex cultural and demographic factors—is where librarians need to be taking the discussion. In many places the question is increasingly becoming not "Do we have it?" but "What can, or will, we do with it?"

Combating Censorship

Many developing countries face major barriers to publication due to government censorship and filtering of the internet. This poses obvious problems for authentic publishing of any kind, particularly (but not only) where libraries are funded or controlled by repressive, authoritarian regimes. Such censorship may be either explicit or implicit,

the latter being a subtle, but no less real and powerful, disincentive to speak up for fear of one's job security or personal and family safety.

There is much important work being done to give a fuller picture of censorship and filtering activities. This helps inform advocacy and activism groups, at the official and grass-roots levels, that work to reduce barriers to the free flow of information. Reporters Without Borders, for example, maintains a list of "Enemies of the Internet" that currently includes China, Iran, and Egypt—major centers of knowledge production in their respective cultural and linguistic spheres. These and other countries have been singled out for their filtering of the internet as well as for the arrest of bloggers and other "cyber dissidents." The OpenNet Initiative also monitors and reports on global internet filtering and surveillance (the main culprits being in northern Africa and Asia). Resourceful individuals are sometimes able to find ways around government attempts to control the internet, as illustrated by events following the recent elections in Iran. Librarians' ongoing support of free speech and an open internet (in whatever form we're able) is crucial, not just for a healthy publishing climate but for a range of human rights.

From the sphere of international librarianship, IFLA/FAIFE's recent "Transparency, Good Governance and Freedom From Corruption Manifesto" (in addition to its related past documents) outlines a set of values and best practices relevant to ameliorating the digital divide and furthering the cause of OA publishing. Of particular interest is the document's emphasis on libraries as an active force in aiding citizens and scholars to fight, and where possible work around, the various forms of control and repression that limit free expression. In this context, working to create ways to make OA publishing possible is a political issue, radical in the true sense of getting "at the roots."

Institutional Wherewithal

As many OA advocates are quick to clarify, though it can be much less expensive than conventional publishing models, OA does not necessarily mean free. Even with its use, lack of institutional resources is also, not surprisingly, a constant issue in less economically developed libraries. Finding time on small or nonexistent budgets to support and publish scholarly literature is a challenge for many researchers and libraries in the developing world. Subsidies and waivers for economic hardship have been a great help for many publishing from poorer institutions, and we are already experiencing the good fruit of those wise strategies.

In a 2008 editorial in *Science* magazine, Mohamed Hassan, Ph.D., of TWAS, the Academy of Sciences for the Developing World, argued that the global digital divide has become a threefold division, "the North, the surging South, and the stagnant South." He notes that, in terms of scientific research, developing world scientists are now responsible for about one-fifth of the articles appearing in international, peer-reviewed publications, although the great majority of these are still from a few countries (specifically China, India, Brazil, Turkey, and Mexico). That so many more from the South are contributing to the production of scientific knowledge is exciting. It is evidence for the success of OA publishing approaches so far and a further challenge to keep insisting and experimenting.

Generally speaking, of course, resource and budgetary worries are a true "library thing." Even so, there are some interesting approaches that may help libraries in the developing world participate more fully as producers of knowledge. One idea, discussed by Jingfeng Xia in last July's *Journal of Scholarly Publishing*, suggests an institutional, rather than a subject or discipline, focus for open journal publishing. This would allow libraries and research institutions to showcase professional and student research from a variety of disciplines and perspectives. Among Xia's key examples is the widespread publication of university journals throughout China. It is easy to imagine such an approach finding success in other countries as well, with each institution bringing its institutional or geographical strengths to the broader scholarly conversation.

Another way librarians can continue to contribute is by insisting that libraries always work to broaden the scope of what's considered publishable. The peer-reviewed article—with its useful, if sometimes narrow, canons of method and style—is in no danger of losing its cachet, the protests of OA opponents notwithstanding. However, publishing can also include podcasts, audio lectures, blogs, and other more "primary" matter such as songs, transcripts of community meetings, and oral narratives. In other words, in addition to the conventional forms of scholarly communication, there are many other forms of "local knowledge" to be made freely available for a variety of uses.

In this regard, Xia has still more light to shed on possible models of scholarly research and publishing. The *kiyo* is a form of academic publishing in Japan whereby senior faculty members oversee and vet research by a body of students and/or junior faculty. In effect, the form falls somewhere between peer-reviewed and "green" and has a history reaching back nearly 100 years. *Kiyo* is rooted deeply in a particular culture and is not without its own problems. At the very least, however, it offers an occasion to consider what other options for publication may already exist elsewhere, as well as what new forms might be devised in the present.

Language and Accessibility

Other obstacles to be addressed if OA library publishing is to reach its full potential are language and accessibility. Not surprisingly, the overwhelmingly dominant language of the internet is English, followed by Chinese and Spanish. As many of us will have experienced firsthand, automated translation technology still leaves much to be desired. This puts serious constraints on what types of research can be used and by whom. While larger scale translation issues will persist, one benefit of a more widely accessible publishing model is the capacity of researchers within particular regions or language groups to exchange knowledge. In terms of local and regional public health, agricultural, and economic information, there is much to be gained as librarians help make available as wide a swathe of information as possible on whatever scale they can.

There are increasing numbers of open source, multilingual publishing tools freely available to libraries. The Public Knowledge Project's Open Journal Systems, Cornell University's DPubS, and Drupal's E-Journal are only three of the best known options.

Again, though OA does not equal free, there is a growing selection of tools to help libraries participate as publishers despite budgetary, personnel, and technical limitations.

The work of removing barriers to information for seeing-, hearing-, or otherwise-impaired clients is ongoing. Fortunately, accessibility issues are increasingly being factored into software and hardware development. However, many places in the developing world (as well as in the developed) still lag woefully behind in this area.

A Position of Strength

Libraries have already played a significant role in shaping the future of scholarly communication. Their capacity to lead the way into publishing's uncertain future is greater, and broader, than has generally been acknowledged so far. They have the history, the intellectual and practical skill sets, and the "big picture" perspectives needed to be instrumental in shaping the forms that publishing—scholarly and otherwise—takes in the years to come.

As libraries continue to work on opening access to scientific and scholarly research, and as they assume more and more the roles, responsibilities, and capacities of publication, they are strategically placed to help significantly reduce the global digital information divide. There is much work to be done. By keeping the important ethical and social justice priorities of the open access movement at the heart of the evolving publication roles of libraries, we can bring the best instincts and practices of libraries to bear on this important issue. Librarians know this about OA. We love it. It gets us all fired up.

Indian OA advocate Subbiah Arunachalam has given librarians this challenge: "International action is one thing, but genuine free access is another. It will need a champion (or champions) in every institution to promote the creation of institutional archives, and persuade scientists [and scholars] to place their papers in them." Let's be creative, determined, and wise in continuing to champion open publishing, for the Global South in particular, for the benefit and betterment of us all.