

African Studies in the Digital Age

DisConnects?

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Concluding Remarks

Peter Limb

The very breadth, initiative and visibility of projects enumerated at the SCOLMA conference was breath-taking and an earnest of the considerable development of, and research into, African digital libraries, but they should not make us giddy with success. We heard of many connects, and also of a good number of disconnects. There is always the danger of meltdown if resources remain fragile, and of the current rough balance between public and proprietary digital collections becoming skewed towards the latter, driving provision of digital sources into an elite operation. Peter Lor has wondered if all this

puts the researcher at the mercy of whoever decides what to digitise, has the resources to do it, and can determine availability. In the old days, there were more nooks and crannies to discover material. I am afraid of increasing centralised control of resources, especially as commercial interests gain a greater say and efficiency-minded managers will be tempted to ditch paper because it is all available digitally.¹

Some ‘nooks and crannies’ are disappearing even in hallowed universities such as Oxford – there was anecdotal evidence and personal experience of this from a number of conference participants; from one viewpoint this is quite sad, but in other ways inexorable. To some extent, given the nature of publishing, such fluidity has always been the case, but in the past microfilming of print archives and newspapers had very real, substantial overheads that research libraries were prepared to reimburse. In the Internet Age such costs are less obvious to some, but expectations of sharing much greater. The future surely lies in maintaining a healthy tension, even interaction, between open and proprietary access, as there is so much to be digitised and so much value to be added by linking and connecting growing collections.

Despite advances, there has been relatively slow growth of open access digital libraries. In the North this has been held back by a seeming reluctance of national archives or libraries, even university research libraries, to embrace digitisation of ‘serious’ research materials, preferring instead to craft image galleries that, if extremely attractive (not least to potential funders) and important in such matters as African identities, have limited long-term scholarly

1 Email to the author, 3 January 2012. Peter Lor was a director of the National Library of South Africa.

value. Coupled with this are the very real costs of obtaining permissions, scanning and adding effective search facilities. Many archives in the North also appear stuck in a fee-based service model.

Comparatively, if we adjust for income disparity, there appears greater enthusiasm in the South to tackle core sources for digitising. The great value accorded to sharing in African cultures may help explain why cash-strapped African repositories in some cases lead the way with deep-level, open-access projects such as Digital Imaging South Africa (DISA) in South Africa, and projects involving the National Archives of Kenya and Zambia and CODESRIA.² And the sources to be digitised are, after all, the heritage of Africa. There is funding from the North for some of these projects but it would be easier for African repositories to digitise if partners concentrated on local capacitisation.

Another disconnect relates to educational trends. There appears to be a dramatic shift in student and researcher habits as we move to a Facebook and Twitter generation, although there are already signs that such habits may be changing as the novelty of Facebook wears off. We hear of lecturers warning against reliance on Wikipedia and pacing up and down, despairing that scholarly articles are being read at all, as students click away on Facebook. On the other hand, Dan Reboussin in this volume points to very real advantages of Wikipedia and argues that by better connecting digital archives and users, through such intermediary sites, we can start to bridge such gulfs. Jos Damen, in his paper to the conference, spoke of students who 'don't do paper'. It is urgent we address this shift, even if it chiefly concerns undergraduates. Flooding Facebook or Twitter with digital Africana may not be feasible or attractive to some, but the idea of librarians getting more involved in metadata and pushing out links can help put such resources on scholarly horizons. Librarians also need to keep abreast of new research into actual research behaviour, as Ian Cooke and Marion Wallace note in their chapter.

2 M. Pickover, 'The DISA Project: Packaging South African Heritage as a Continuing Resource. Content, Access, Ownership and Ideology', *IFLA Journal*, 34, 2 (2008), pp. 192–197; B. Namande, 'Digitization of Archival Records: The Kenya National Archives and Documentation Service Experience'; C. Hamooya, 'Digitization of Historical Information at the National Archives of Zambia: Critical Strategic Review'; T. Wordofa, 'Digitization and Digital Preservation Activities and Initiatives at Addis Ababa University' (all unpublished papers to 2nd International Conference on African Digital Libraries and Archives, Johannesburg, November 2011, available at <http://hdl.handle.net/10539/11522>, <http://hdl.handle.net/10539/11500>, <http://hdl.handle.net/10539/11541>); CODESRIA repository, available at <http://www.codesria.org/spip.php?rubrique79>; all accessed 6 June 2014.

Librarians, information managers and publishers also need to better interact within the academy. The ‘discontinuity of digital publishing’ is highlighted by Chris Borgman, yet she hints at emerging solutions; humanities scholars, long disinclined to co-author, may be so encouraged by digital projects. Similarly, Michael Nielsen points to new patterns of online collaboration, arguing we are in the early days of a dramatic change in *how* science is done, accelerating discovery and cooperation.³

There are cases of African scholars working with librarians and archivists on digital projects,⁴ and this should continue. But in African Studies, how often and how well do we cooperate? What influence do we have on publishers? Who decides *what* and *when* to scan? How can we better bring together scholars, librarians, archivists, publishers? As digital silos proliferate, how can we avoid duplication of effort and foster cooperation and networking?

Looking ahead, the state of African digital libraries in 2022 will to a large extent depend on developments currently under way, policies applied and available resources. Yet the mere presence of digital content is no guarantee of usefulness to practitioners, and the praxis around content can take unexpected forms, as Diana Jeater makes clear in her chapter on an apparent lack of critical use of online resources in some Zimbabwean educational arenas. Moreover, despite the projects discussed in this book and the probability that there will be many more, and ever more sophisticated, initiatives in this sphere, it is quite possible that the *rate of change* (based on initial limited digitisation and infrastructure) and depth of transformation in Africa, qualitatively and quantitatively, may well continue to fall behind that in the North, requiring close attention to issues of equity and sharing.

The uneven nature of the development of digital libraries in Africa is very evident. I came straight to the SCOLMA conference from Malawi, where laying of new fibre-optic cables paradoxically saw internet connections *worsen* on certain campuses, as the cable did not go the extra few kilometres. Such negatives underline the need for caution, foresight, planning and generous partnerships. If, in the face of contemporary user demands for cutting straight to the digital text, we may well ask ‘Who needs a paper library?’, we should remember that in Africa there is still great hunger for the printed textbook. Efficient

3 C. Borgman, *Scholarship in the Digital Age: Information, Infrastructure and the Internet* (Cambridge, Mass., MIT Press, 2007); *idem*, ‘Data, Disciplines and Scholarly Publishing’, *Learned Publishing*, 21, 1 (2008), pp. 29–38; M. Nielsen, *Reinventing Discovery: The New Era of Networked Science* (Princeton, Princeton University Press, 2012).

4 See P. Limb, ‘Partnerships with the University of Malawi and University of Nigeria Libraries’, *African Research and Documentation*, 114 (2011), pp. 13–22.

South–North cooperation can certainly help. In a situation of general ‘catastrophic aid inefficiency’, too little aid goes to libraries.⁵ The digital cooperation of libraries in the North with African universities is still too meagre. Greater generosity is a must.

It may well take another generation before the availability of digital collections becomes so extensive that usage becomes second nature to scholars of Africa. To overcome these disconnects we will have to pay more attention to maintaining and coordinating emergent collections if they are to become truly useful, global, digital libraries.

Digital Libraries of Africa: Current State and Future Questions

As we mark 50 years of SCOLMA, it is timely to step back and analyse the current state of African and Africa-related digital libraries. There have been many experiments, open access and commercial, in putting content online. Trends over the last decade are clear and likely to intensify: more and more content, of better quality, and with more demand from users. There have been successes and failures. We know more about usage, but still too little. We need to be better at appraising the usefulness of new sources, and their quality. To assess the situation, I pose several questions, the answers to which I do not fully supply but which may be glimpsed in the chapters of this book.

What Are the Predominant Forms of African Digital Libraries?

Digital content is growing rapidly, as the chapters above show. Usage by format varies with discipline, but currently we lack statistical surveys to help us gauge the predominant and most successful forms of all these digital initiatives. However, the broad trends are clear.

Recently, historical newspapers and archives, raw materials of the historian, have come under the scanner, adding to an earlier corpus of digitised books, journals and theses digitised not only in the North but also in several African countries. Government documents, films and interviews are coming online, in fits and starts. Digitisation of hundreds of tapes of interviews undertaken over fifteen years by the Institute for Advanced Social Research at the University of the Witwatersrand, many in African languages, is a major

⁵ T. Trefon, *Congo Masquerade: The Political Culture of Aid Inefficiency and Reform Failure* (London, Zed, 2011).

project.⁶ The great leap forward in African digital newspapers, contemporary and historical, is striking. The World Newspaper Archive (WNA)⁷ has produced some 400,000 pages of pre-1923 papers by mid-2013, with a total project target of 1.6 million pages including phase two (due to start in 2014). The Center for Research Libraries (CRL) is doing 'scan-on-demand' of later decades. Although many African newspapers remain undigitised, this is a sea-change for teaching and research, which many of us have witnessed, as an increasing number of scholars exploit such sources. Open access is even better. South African projects will soon unveil open access versions of two major newspapers. The National Archives of Zambia is scanning 1950s newspapers, though integration of born-digital newspapers in these and other projects is still awaited.⁸ Hartmut Bergenthum in his chapter elaborates on newspapers, but a clear lesson is that digitisation of research staples such as newspapers, archives and government documents is highly likely to deliver positive research outcomes.

How Useful or Successful Are African Digital Libraries?

Usefulness or success can vary according to procedures, value-added metadata, access and completeness. Optical character recognition (OCR) enables searching within scanned files; to digitise without applying OCR technology is to inhibit research. The poor quality of the original microfilming can be a problem with early African newspapers. Researchers in the North might grumble that some digital collections in Africa are not accessible outside their institutions; African countries might as easily complain that companies – or libraries – of the North (often without direct permission, as has been the case with most digitisation of African newspapers by American projects) scan African heritage and lock it up either with high price tags or equally costly (to national economies) connectivity charges.

Without comprehensiveness researchers must flit between PDF, film and paper. The new slavery databases are a case in point; being only slices of larger, well-ploughed archives, they seem better placed for teaching than for

6 See Inventory for AG2738, <http://www.historicalpapers.wits.ac.za/?inventory/U/collections&c=AG2738/R/>, accessed 6 June 2014.

7 <http://www.crl.edu/collaborative-digitization/world-newspaper-archive/african-news-papers>, accessed 6 June 2014.

8 I owe this point to Hikabwa Chipande who related his recent research experiences in the National Archives (pers. com., 1 May 2012).

academic research.⁹ The new Confidential Print: Africa, 1834–1966, appears more complete, if in its own narrow silo. Herein lies one great hurdle in realising a real digital library. For both newspapers and archives huge gaps remain before we can claim anything like comprehensiveness.

Why Have Some Ventures Failed and Others Succeeded?

Emergent digital libraries need stability. The repository of six million PDFs at the University of Nigeria, Nsukka, got tangled in administrative changes and went offline (but is now back online).¹⁰ Some promising digital libraries disappear with little trace, such as Kwetu.Net ('our home' in Swahili), a subscription-based digital library based in Nairobi that acquired from government and NGO sources thousands of text and visual documents but which faded away after a lifespan of some three years.¹¹ Such volatility is typical of e-publishing, but raises questions of backup and resources. DISA, a major site, occasionally goes down, and this relates to resources. Administrators across Africa should be encouraged to invest in the maintenance of e-collections. Deep space storage capacity in North America and Europe should be made available to Africa universities. Scholars of the digital should research what happens when sites fail. It would be interesting to track a dozen digital libraries over time.

Durability and data loss remain concerns, increasingly so as born-digital content grows. Applying all this to Africa, researchers will have a growing need to understand uses of social media¹² there, and librarians will need to consider digital preservation of often ephemeral African websites or even perhaps of cellphones or their traffic. One preservation strategy is capturing selected websites in Africa, even their deep content of PDFs and streaming video, via such institutions as Archive-It and the Internet Archive (we can see there the digital

9 For example, both Slavery, Abolition and Social Justice 1490–2007, and Slavery and Anti-Slavery: A Transnational Archive, are modest selections from much larger archives, and thus eminently useful for linking to the classroom or for classroom projects, but often not comprehensive enough for sustained higher-level research.

10 <http://www.unn.edu.ng/library>, accessed 6 June 2014.

11 For a contemporary description, see P. Limb, 'The Digitization of Africa', *Africa Today*, 52 (2005), pp. 3–19.

12 On the growing use of social media by political parties in Europe see, for instance, U. Klinger, 'Mastering the Art of Social Media', *Information, Communication and Society*, 16 (2013), pp. 717–736, and on trends in Africa, E.O. Makori, 'Bridging the Information Gap with the Patrons in University Libraries in Africa: The Case for Investments in Web 2.0 Systems', *Library Review*, 61 (2012), pp. 30–40.

skeleton of Kwetu.Net).¹³ In April 2013 the Africana Librarians Council in the United States initiated a small Archive-It subscription project on the preservation of selected African websites, chiefly in the Democratic Republic of Congo. This initiative is laudable but, given the potential cost and breadth of African digital preservation, such pilot projects are of course a drop in the ocean. More comprehensive, and cheaper, options need exploring.

What Is the Evidence of Usage?

The chapters above show we are generally on the right track in appraising African digital libraries, but we need more usage analysis. For example, use of e-sources by African scholars is a complex, little-studied process. Quantitative statistics and qualitative user views are crucial in establishing trends. We need to examine closely the *application* of online primary sources in writings on Africa, as well as to be aware of recent technological and historiographical trends, and emerging usage models.

Some publishers now share usage data of their African online products. To test usage further a brief email survey of select historians of Southern and West Africa was undertaken for the SCOLMA Conference. The survey was also distributed via the Southern African Historical Society listserv. Examples of usage show a variety of tools. One young historian analysed uncut digital footage to publish an article. A Gambian historian used the fruits of a British Library Endangered Archives Programme grant to work on digitised Muslim court rolls to help write a doctoral thesis. Another, in South Africa, saw online sources as of cardinal importance in his work, changing the way he does research by making more sources available about African history. A senior historian reported that he sometimes tailors his teaching to what is online; another that he uses the new slavery digital libraries in both teaching and research, especially for keyword searches of African names. Popular online resources reported included DISA, colonial era e-books, and African language e-dictionaries. Results show not only extensive and growing use of e-resources in teaching and research but also a hunger for increased e-content, such as archival guides, correspondence, mission and court records, Hansard, *tarikh* ('histories' in many parts of Islamic Africa) and more complete runs of historical serials than currently available via Google or Hathi Trust.¹⁴

¹³ Archive-It, Web Archiving Services for Libraries and Archives, www.archive-it.org.

¹⁴ C. Saunders, P. Limb and B. Khangala, 'Southern African History in the Digital Era', panel at SCOLMA Conference, Oxford, June 2012; HathiTrust Digital Library, www.hathitrust.org/.

Uneven use of e-collections is common. I have made extensive use of online newspapers, notably the World Newspaper Archive, to produce a book on a black newspaper long considered 'lost'.¹⁵ A number of other presenters also emphasised WNA's practical usefulness. In contrast, my co-panelist felt such high usage not yet the norm. I agree that current usage is highly variable, but it is also rising. I can testify to the great value of digital newspapers and archives, not least because they enable historians to search for obscure names or events, including in under-used vernacular columns. Having reams of digital photos from archives encourages sharing among authors, and the medium can enable quick resolution of some historiographical problems.

Are Libraries Paying Too Much for Recycled African Data to Come Online?

Libraries and archives sit on the largest sources for digitisation. We could lock them up and charge \$30,000 to use them, as do some publishers, but there are openings for hybrid models. WNA is one example, a happy library–commercial joint project between CRL and Readex. While it is not cheap, there is cheaper access to CRL members. The terms of partnership also matter. CRL 'owns' the images and is amenable to sharing with African institutions. A second alternative model (if you have the resources) is mainstreaming in-house digitisation. Major research libraries such as Northwestern University have put up impressive digital galleries. Some national libraries and archives (for example Spain and Australia) are putting their newspapers online; a few ask researchers to pay for initial scanning, then allow open access. This model could pay dividends for Africanists. Undoubtedly both open access and commercial digital libraries will continue to appear, but these examples show viable hybrid models.

How Can We Improve Coordination of Digital Libraries?

If we have to search too many sites, research becomes unnecessarily cumbersome even though technology exists to avoid this. Better coordination (perhaps via software such as Zotero) would enhance efficiency. There have been successful cooperative digital projects, but many have been individual initiatives. At the SCOLMA conference, Busi Khangala drew attention to recent

15 P. Limb (ed.), *The People's Paper: A Centenary History and Anthology of Abantu-Batho* (Johannesburg, Wits University Press, 2012).

efforts to coordinate the visual archives of several South African repositories. The digitisation work under way there and elsewhere shows that much research is coming online, and if individual projects are catalogued or even merged with other emerging collections, then scholarly awareness of, and access to, such treasures will be greatly enhanced.

Can We Now Write a PhD from Online Resources?

More and more data is coming online for researchers to crunch: newspapers, books, journals, archives, films, interviews, maps, music. We should not exaggerate the ability of online resources to become a 'one-stop-shop' for higher research, but we may be approaching a stage when even a doctorate can emanate from such sources. This varies by discipline: in most, it is always preferable to undertake fieldwork, but already a dissertation based mostly on electronic sources in, say, comparative literature, diplomatic history or political theory looks possible.

Many of the above themes figure in the weekly routines of librarians. A busy round of reference queries this year from African History classes saw me plunge undergraduates into a gaggle of relevant full-texts: no waiting, an *acceleration* of learning. Postgraduates now use raw or refined digital sources: a *broadening* of access. Academics share digital data from archives, accelerating the research process: having sharable data enhances *quality* by facilitating such processes as translation or textual analysis. Then there is the inexorable spread of new media. Indeed, usage of cell phones is now so ubiquitous across Africa that, together with a new generation of tablet computers already noticeable in African libraries, they are changing not only daily life but also research habits.¹⁶

Concluding Questions (for SCOLMA's 60th Anniversary)

Looking ahead ten years to SCOLMA's 60th anniversary, I suggest that big questions need to be resolved. What should be the *digital priorities* of the Africanist community of scholars, librarians and archivists? Does crafting more and more digital connects *on* Africa in the North merely serve to disconnect Africans? And how can the global community of Africanists help to build, connect and maintain digital resources in, and to, Africa?

16 See the chapter by Mirjam de Bruijn and Walter Gam Nkwi in this volume.

Traditionally a library has been a series of information collections tied together for better usage by classification and other forms of organisation. The exploding data anarchy of the internet means that to some extent this managed, organising function has been lost, yet the very nature of the internet ensures a degree of connectivity between dispersed collections. But Google can't or won't do it all. And with some major collections behind pay-for-use firewalls, coordination is cramped. The challenge of the next decade will be to continue creating, cataloguing and making accessible these disparate collections, bibliographically and in open and full-text access, and to turn mere *collections* into genuine digital *libraries*.

Today's initiatives are crucial as the foundation of the first generation of the African Digital Library. Many more such initiatives are needed, given the still limited range of digital Africana, especially in African languages and from archives. Yet if they are not integrated they will create more and more places to search. Whether Google restricts or opens up all its e-books, and whether scholars remain satisfied with tediously searching dozens of separate collections, may influence the future shape of digital libraries. Ironically, given the wealth divide, but mindful of continued limited online coverage of Africana, responsibility for driving this forward may well rest as much with the scholars, librarians and archivists of Africa as their counterparts of the North, but success will be facilitated by working in tandem. Let us hope that by the time of SCOLMA's 60th anniversary, the process of creating digital libraries in and about Africa, and coordinating and making them more equitably accessible, has proceeded apace, and that they are, more or less, connected, and with far fewer disconnects.

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