

Introduction

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*If you can look into the seeds of time
And say which grain will grow and which will not
Speak then to me.*¹

*Wisdom is like a baobab tree; no one individual can embrace it.*²

Connects and disconnects

This volume is published to mark the 50th anniversary of SCOLMA (the UK Libraries and Archives Group on Africa).³ Celebrated with a two-day conference in Oxford,⁴ the anniversary was a fitting time to try to understand the complex changes brought about so far by the digital revolution – the most profound development to affect research libraries in considerably more than 50 years.

At first sight, it might appear that the exponential rise of digital knowledge resources over the last two decades – aptly summarised by one commentator as ‘a fundamental paradigm shift from an age of scarcity to an age of abundance’⁵ – is a tale of runaway success. In African Studies, as in other knowledge fields, the speed and ease with which researchers can access huge amounts of information has transformed the nature of the research process. Today, scholars globally increasingly expect digital libraries with relevant content.⁶ In the North, and in Africa too, impressive initial projects of digitised Africana have come online: in fact, there

¹ Shakespeare, *Macbeth*, I-3-58.

² Ewe proverb.

³ SCOLMA was formerly known as the Standing Conference on Library Materials on Africa; see the website at www.scolma.org, accessed 9 July 2013

⁴ The conference programme is given in the Appendix. This book is based on contributions to that conference; in particular, the editors would like to thank the other members of the editorial team, Jos Damen, Lucy McCann, John McIlwaine, John Pinfold and Sarah Rhodes (all long-standing members or supporters of SCOLMA) for their hard work in liaising with authors and editing contributions. We are also very grateful to Jos Damen for further assistance with the illustrations, liaising with the publisher and helping us with technical advice.

⁵ R. Rosenzweig, ‘Scarcity or Abundance? Preserving the Past in a Digital Era’, *American Historical Review*, 108, 3 (2003), p. 739.

⁶ For general discussion of digital libraries see, for example, W. Arms, *Digital Libraries* (Cambridge, Mass., MIT Press, 2000); E.D. Looker and T.D. Naylor (eds), *Digital Diversity: Youth, Equity, and Information Technology* (Waterloo, Ont., Wilfred Laurier University Press, 2010); R. Wilkie, *The Digital Condition* (New York, Fordham University Press, 2011).

is now what might be described as a ‘critical mass’ of digital resources for African Studies.⁷ At the same time, research libraries have understood, responded to and been part of these developments in many different ways. Although, on occasion, change has undoubtedly been painful, libraries have moved on far beyond the ‘dusty books’ identity sometimes attributed to them by their detractors, and are likely to retain an important role in the future, despite – or perhaps because of – the fact that many academic writings and research resources are now presented virtually.

Despite the very great, and in many respects, unforeseen benefits brought by the digital revolution, there are also downsides – as will be obvious to most users of this material. The SCOLMA conference did not accept papers on planned, future projects: we had already heard many presentations on promised achievements. We were much more interested in analysing the digital resources already available, the projects through which they had been brought to fruition and the more general social, political and economic context in which they operated. What had been achieved so far, and what could we learn from it?

Perhaps the most obvious question mark, in the case of African Studies, was that over the ‘digital divide’: political and economic inequality between North and South, which has shaped not only the form and content of digital libraries, but also access on the continent to material about the continent. This inequality is a recurring theme in many of the contributions to this volume which, for example, analyse the difficulties of accessing digital materials in Africa. Nevertheless, the complex politics of archives, memory and the digital age are brought out in many of the chapters of this book in a way that takes us beyond a simple understanding of such divides. And the growing significance of the digital revolution for Africa is revealed in many ways. For example, African librarians have highlighted the importance of digital developments in their strategic planning,⁸ and several university and national libraries or archives (for example in South Africa, Senegal, Burkina Faso, Zambia, Kenya and Malawi) have embarked on successful digitisation projects. Partnership working – if carried out well – holds out many possibilities; and there are many new ways of ‘building on digital’, whether to exploit the potential of old maps or to engage in citizen journalism.

⁷ Some of these resources are described by Cooke and Wallace in this volume.

⁸ E. Namhila and J. Ndinoshiho, ‘Visioning and Strategising for the University of Namibia Library: Planning the Library’s Facilities, Services and Resources for the Aspired Library Vision’, *Innovation: Journal of Appropriate Librarianship and Information Work in Southern Africa*, 43 (2011), pp. 3–19; B. Mbambo-Thata, ‘Overview and Content of the Library’s Digitization’, in *idem* (ed.), *Building a Digital Library at the University of Zimbabwe: A Celebration of Team Work and Collaboration* (Oxford, INASP, 2007), pp. 1–11, p. 1.

Another theme running through much of the book is the importance of best practice – how to put together digital resources using the smartest strategies available, in the fairest and most productive ways. Debates as to what best practice is – for example, decisions about creating open access versus charged resources – are constrained not only by their political and economic contexts, but also by the practicalities shaped by that context – including money, time, the market, political will and copyright. These practicalities influence digital projects in quite powerful ways – whether through the selection of items for digitisation that will ‘sell’, or in determining how to carry out a digitisation project in Africa with low-tech, portable equipment. These things may not be obvious at first sight, but their persistent role is becoming increasingly evident. Thus, a thread running through the book is the *complexity* of the many factors that are shaping our current digital environment.

At many points, this collection touches on themes common to discussion of digital resources, whichever subject areas they cover. How do we archive and preserve even a small percentage of the mass of resources being created digitally, in numerous formats? What are the effects of the ‘blurring’ of audiences⁹ created by the openness of the internet – what, for example, are the potential and pitfalls of crowdsourcing?¹⁰ How can librarians make sure the resources they offer get to the top of a Google search? How does copyright impact on what we are trying to do? In all these areas, African Studies is influenced by wider developments – and may have some of its own answers to suggest.

Lastly, perhaps we should also remember at this point that not all the questions raised by the digital revolution are new. The environment has changed in ways that were unimaginable when SCOLMA began life in 1962, but in important respects the essentials remain the same. Among SCOLMA’s original aims were the ‘acquisition and preservation of library materials needed for African Studies, and to assist in the recording and use of these materials’. Connecting may now have joined collecting, and digitisation frequently accompany or follow recording and cataloguing – but the role of libraries and archives remains that of identifying, collecting, giving access to and preserving materials for research in African Studies. To make

⁹ Rosenzweig, ‘Scarcity or Abundance’, p. 739.

¹⁰ Crowdsourcing is essentially the involvement of users in the making or editing of a particular web resource – for example, by writing text, correcting errors, checking transcripts, making comments or georeferencing maps. See D.C. Brabham, *Crowdsourcing* (Cambridge, Mass., MIT Press, 2013).

available the bedrock of information on which research depends is still the role of libraries and archives, a role that remains – so far – essential for the research community.

SCOLMA's golden jubilee conference, 2012

All this means that the papers delivered at SCOLMA's 2012 jubilee conference on 'Dis/connects: African Studies in the Digital Age', a selection of which are presented here (and others published in *Africa Research and Documentation*),¹¹ are particularly timely and appropriate to the work of librarians, archivists and academics working in, and on, Africa. The conference brought together experts from three continents, and from two sides of the digital world that do not always interact: librarians, archivists and information technologists, and practitioners in the humanities and social sciences from disciplines such as history, anthropology and literature. We hope this collection of cutting-edge views will stimulate 'cross-disciplinary conversation'¹² to help publicise and optimise the use of African digital libraries.

The conference heard what researchers are doing with digital materials, what new models and processes exist, and what this all means for libraries and their users. A feast of lively presentations over two days gave participants many insights into recent initiatives as well as a balance of solid advances in, and continuing barriers to, further development of digital libraries. The keynote address by Christine Kanyengo underlined, from her perspective at the University of Zambia Library, that the promotion of local knowledge production and leveraging of existing networks (such as CODESRIA, the Council for the Development of Social Science Research in Africa) will surely be crucial themes in the unfolding development of digital libraries in Africa over the next few decades. The future, she suggested, was bright, but there was a need to discuss how to ensure access and preserve the integrity of materials digitised. Institutional and national commitments to finance, and close attention to the rights of creators of knowledge, are also required.

Marion Wallace and Ian Cooke from the British Library discussed challenges to doing research and the role of national libraries in the digital age. Jenni Orme demonstrated how the

¹¹ See Appendix for the list of conference papers and where they are published.

¹² T. Bartscherer and R. Coover (eds), *Switching Codes: Thinking through Digital Technology in the Humanities and the Arts* (Chicago, University of Chicago Press, 2011).

UK National Archives is using digitisation and online tools to widen audience reach, for instance through creative use of images. Jonathan Harle (Association of Commonwealth Universities) presented much data to better explain African research environments and what this meant for the use of digital resources.

Drawing on his research into the life of Herbert Rhodes, John Pinfold posed the question ‘Can We Write a Biography without Papers?’ Others asked similar questions. Jos Damen (African Studies Centre Library, Leiden) rhetorically problematised the ‘old paper library’ in terms now asked by some young scholars: ‘Who Needs a Paper Library in Africa?’ Original ideas on reconfiguring living archives, or digitally stitching back together scattered documents, were presented by Guy Thomas (Mission 21, Basel) and Massimo Zaccaria (University of Pavia).

The digital realm’s social breadth was underlined by Kate Haines (University of Sussex) who discussed the online interaction between dialogue, text and memory in social media and literary responses to post-election violence in Kenya. Here we glimpsed an emergent sub-discipline of the interpretation and analysis of social media, seen through such instances as the Kenyan Writers Google Group, and the interplay of contested identities – still a matter for traditional libraries and museums but also played out online. In a similar vein, the impact of digitisation on identities in Africa was highlighted by Simon Tanner and Rebecca Kahn (King’s College, London). Some projects may choose to digitise colonial records, but digital libraries can highlight the totality of the colonial system, warts and all. Embodiment of counter-memories in digital archives was also emphasised by Thomas Sharp (University of Manchester). All this means methodologies of ‘doing Africa’ have to adapt, and Stephanie Newell and Nara Improta of the University of Sussex underlined how archival digital preservation now shapes (re)search methods in African Studies.

Ways to better coordinate digital *collections* and move towards a genuine African digital *library* are suggested in other papers. The obvious starting point for data discovery is now the search engine. Daniel Reboussin and Laurie Taylor (University of Florida) show that by employing ‘search engine optimisation’ to ensure good text information on trusted websites and good links, as with Wikipedia, we can improve access to collections. Applying this idea to the digitisation of the Derscheid Collection on Burundi, Eastern Congo and Rwanda, the creation of item-by-item metadata and a Wikipedia entry led to much better search results.

Regular, detailed Wikipedia editing can be time-consuming and run the risk of overwriting, but such strategies offer improved access. Harvesting has been applied in other Africana e-resources. David Easterbrook and Michelle Guittar (Northwestern University) gave a detailed overview of numerous digitisation projects at the Herskovits Library, focusing on processes and outcomes in developing extensive photograph and poster e-collections.

That digital libraries also encompass maps was demonstrated by Lucia Lovison-Golob (Afriterrra Foundation), who argued that the integration of historic with present-day cartography (as in the Foundation's Darfur project) not only has the ability to make thousands of maps freely available, but also, more ambitiously, to deploy geo-referencing data to help resolve contemporary questions. Libraries have traditionally collected print maps but, for South Africa at least, digital copy is now available. Today cartographic procedures are thoroughly computerised and we have much to gain by seeking similar scientific inspiration to develop digital libraries in the humanities.

A series of papers on the current state of digital libraries in Africa continued the emphasis on the changing architecture of scholarly resources and their usage. We gained a better awareness of the opportunities and challenges of institutional repositories from Rose Kgosiemang (University of Botswana Library). Speaking on the basis of her recent research with university teachers in Zimbabwe, Diana Jeater (University of the West of England) summed up a conundrum across the humanities in Southern Africa with her title 'Data, Data Everywhere, But Not a Byte to Think', reminding us that the mere presence of online data is no panacea for the bottlenecks, or misunderstandings of the aim of data usage, that may develop in higher education due to political or bureaucratic intrusion.

Usage of digital libraries was also treated in other papers. We glimpsed usage of new resources in the analysis of user logs of Dakar sports theses by Pier Luigi Rossi (Research Institute for Development, Paris). Chris Saunders and Busi Khangala (University of Cape Town) and Peter Limb (Michigan State University) indicated how Southern African historians are engaging with resources newly available through digitisation. Some of these initiatives have not been without controversy, with African librarians at times expressing

frustration or resentment at domination or interference from the North.¹³ Amidu Sanni (Lagos State University) and Korklu Laryea (University of Cape Coast Library) considered the West African Arabic manuscript heritage and Ghanaian Christian ephemera respectively to show further research pathways; all this at a time when uppermost in many attendees' minds was the fate and future of the Timbuktu manuscript heritage, then at grave risk, a danger even more vividly apparent in coming months

Possibilities of a more effective, mutually beneficial nexus between Africa and the North on matters digital were well captured in a report on Ugandan projects by Edgar Taylor, Ashley Rockenbach and Natalie Bond (University of Michigan). Grassroots cooperation between historians and librarians from Ann Arbor and local Kaberole officials, Mountains of the Moon University staff and Ugandan national repositories has delivered a win-win scenario, with high quality preservation reminding us also of the role of the cataloguing of digital libraries. This theme of cooperation was also to the fore in the presentations by Zaccaria and Thomas on repatriation or reinvigoration of archives.

At the conference dinner John McIlwaine, SCOLMA's elder statesman (University College London) recounted the valuable contributions of SCOLMA over five decades and reminded delegates that the organisation continues to be highly productive with both publications and coordination with Africanist communities, including recent cooperation with European librarians. The big change from the 40th anniversary, Marion Wallace, SCOLMA chair, added, was the 'digital turn'. Across all these stimulating papers common themes were patterns of usage and connection, problems of disconnects and the need for better coordination.

The way ahead

Predicting the future is a risky activity, as Shakespeare knew. In June 2008 apps (mobile applications) did not exist. In fact, smartphones were just appearing on the market, sales beginning in 1994 ('The Simon'). The first iPhone was sold in 1997. On July 10 2008,

¹³ See M. Pickover, 'Negotiations, Contestations and Fabrications: The Politics of Archives in South Africa Ten Years after Democracy', *Innovation: Journal of Appropriate Librarianship and Information Work in Southern Africa*, 30 (2005), pp. 1–111; P. Limb, 'The Politics of Digital "Reform and Revolution": Towards Mainstreaming and African Control of African Digitisation', *Innovation: Journal of Appropriate Librarianship and Information Work in Southern Africa*, 34 (2007), pp. 18–27.

Apple's iOS App Store opened. Google Play followed in October 2008, Blackberry World in April 2009 and Samsung Apps Store in September 2009. Others followed later. In 2013 Apple announced the App Store had over 900,000 available apps, and 50 billion apps were downloaded up to that date.¹⁴ (Apple forgot to mention that 7 out of 10 users delete most apps within 90 days.) In April 2013 Google announced similar figures to Apple: 900,000 available apps and 48 billion downloads.¹⁵ According to ABI Research the mobile app market will be worth \$27 billion in 2013.¹⁶

These figures are not important in themselves; they do, though, illustrate the pace of change.¹⁷ They show that between 2008 and 2013, so within five years, many people favoured their smartphone over their PC, and looked at the weather forecast and read news articles on their phone. They might have even read a *Medieval Bestiary* or *Alice's Adventures* on their smartphone, from the British Library's mobile website.¹⁸

But then: who remembers AltaVista? In 1995 it was one of the first, in 1997 arguably the best internet search engine. In 1999 owner Compaq ruined its interface; in 2003 it was taken over by Yahoo. In 2013 AltaVista was shut down.

Back to the way ahead for African Studies and libraries, archives and digital platforms. What form will African Studies take shape in ten years from now? A few things are easy to predict: there will be more scientific and academic information on Africa available online in the near future. Google Books reputedly has 30 million books scanned.¹⁹ These 30 million are a considerable proportion of the total number of books in the world, estimated at between 130 and 300 million.²⁰ Google is not the only active player: there are many more interesting initiatives (for example, www.archive.org). Publications on and from Africa are still very much under-represented in most digital initiatives (though several major libraries such as

¹⁴ Apple Press Info, May 16, 2013, <http://www.apple.com/pr/library/2013/05/16Apples-App-Store-Marks-Historic-50-Billionth-Download.html>, accessed 16 July 2013.

¹⁵ Todd Wasserman, <http://mashable.com/2013/05/15/google-claims-900-million-android-activations/>, accessed 16 July 2013.

¹⁶ <http://www.abiresearch.com/press/the-mobile-app-market-will-be-worth-27-billion-in->, accessed 16 July 2013.

¹⁷ See also 'The Brief History of Social Media', <http://www.uncp.edu/home/acurtis/NewMedia/SocialMedia/SocialMediaHistory.html>, accessed 16 July 2013.

¹⁸ <http://www.bl.uk/app/treasures.html>, accessed 16 July 2013.

¹⁹ R. Darnton, 'The National Digital Public Library is Launched', *New York Review of Books*, 25 April 2013.

²⁰ <http://booksearch.blogspot.co.uk/2010/08/books-of-world-stand-up-and-be-counted.html>, accessed 16 July 2013; <http://www.oclc.org/en-europe/worldcat/catalog.html>, accessed 16 July 2013.

Oxford, the Herskovits (Africana) Library of Northwestern University, Stanford, UCLA and Michigan State have been part of the digitising process from Google Books). However no library in Africa is represented in Google Books.

More metadata on African archives and academic journals will be available online. More illustrations, maps, moving images and sound recordings will be opened up digitally. In July 2013 Wikimedia Commons contained 17.6 million uploaded images tagged with a creative commons licence.²¹ African universities and organisations are rapidly opening up and are digitising their (new) publications and making them available via repositories and via websites of aggregators such as African Journals Online (AJOL). Some are digitising their complete legacy (see Massimo Zaccaria's chapter in this volume).

Open access is quickly gaining ground in academic circles. British and American governments have announced strict regulations on open access for publications funded by public money. Scientific Commons has harvested over 50 million publications from university repositories from all over the world. The role of libraries and non-commercial organisations in the publishing industry is obvious. SCOLMA, along with the African Studies Association of the UK, has contributed to the open access debate in the United Kingdom.²² Accurate predictions are hazardous in a fast-changing and confused scenario, but there is a real danger that African scholarship and research, and libraries in Africa, will be disadvantaged in this new environment.

Many young users assume that all academic information is available online. Librarians and archivists will be active and engaged as promoters, trainers and interpreters. First they have to make sure that descriptions, inventories, EADs (Encoded Archival Description) and snippets of their Africana collections are available online. Then they have to promote their collections via their websites, publications, conferences and in direct contact with users. They will also, for the foreseeable future, have to persist in reminding their users, especially the younger generation, to look beyond the internet and the web. Not all research resources are catalogued online. Some are not catalogued at all. Research Libraries UK (RLUK) produced an

²¹ http://commons.wikimedia.org/wiki/Main_Page, accessed 16 July 2013.

²² Written evidence submitted by the African Studies Association of the UK (ASAUK) and SCOLMA (the UK Libraries and Archives Group on Africa) to the House of Commons Business, Innovation and Skills Committee, <http://www.publications.parliament.uk/pa/cm201213/cmselect/cmbis/writev/openaccess/m02.htm>, accessed 16 July 2013.

important report in 2013 which found that ‘hidden collections’ (defined as material for which there is no online catalogue record) remain an immense problem for UK libraries.²³ As more material becomes available online and researchers expectations of digital content expands, those resources not easily available in digital format in turn become ‘hidden’. SCOLMA’s 2013 annual conference discussed the extent and scope of ‘hidden collections’ in different formats in African Studies in the UK, looked at examples of projects addressing this problem and worked towards ways forward at a national level. Local collections will continue to be important, perhaps grow in importance, as the rarities and unique material in their holdings are recognised.

Some things are unclear, or less easy to predict: the role of researchers in the information chain will certainly change, but in what way? Will they become suppliers of information, through their VREs (Virtual Research Environment), and with enriched data?

Overall, new technological features and possibilities will certainly pave the way for new ways of research and collecting. More and better information will be available more quickly to more people by more mobile devices. Data mining, apps and linked data will open up novel approaches. New methods will influence the means of teaching and learning at all levels. Emerging African economic power may impact educational and research infrastructure in new and unexpected ways, as may the investment and influence of rising economic powers such as China, India and Brazil.

Those who attended SCOLMA’s golden jubilee conference were left with many questions to ponder, as Peter Limb’s concluding remarks in this volume make clear. Two chapters (those of Hartmut Bergenthum and Mirjam de Bruijn) were specially commissioned for this book to extend coverage of important issues and examples, in the spirit of the conference – a spirit of nuanced optimism for the future of African Studies in the digital age and for SCOLMA’s ongoing role.

²³ Over 13 million volumes were uncatalogued in the libraries that responded, 18.5 per cent of the total number of volumes held by those libraries. Over four million more (in a smaller number of libraries) had unsatisfactory catalogue records. The report noted that foreign language material and formats which require particular skills and expertise (such as maps, music and archives) were heavily represented in ‘hidden collections’, and found that while there were significant retrospective cataloguing projects, the scale of the problem is often beyond individual institutions. <http://www.rluk.ac.uk/strategicactivity/strategic-strands/udc/hidden-collections-report/>, accessed 28 Feb 2014.

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