

Reimagining the Humanities in the Twenty-First Century: Towards an Interdisciplinary and Collaborative ‘Digital Humanities’ in Africa

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Abstract

The Humanities should be re-imaged in terms of interdisciplinarity and that as a collaborative ‘digital Humanities’ in Africa. Where student numbers and financial viability often trump the intellectualization of disciplines, the humanities more often than not find itself victim to higher education ‘cut backs’. In addition, major shifts in society, brought about by the recent technology and globalization driven communications revolution, pose serious questions about the continued viability of sole reliance on ‘traditional’ communication approaches that have preoccupied humanities scholars over the years. Despite these anomalies, there are major attempts within Africa to strengthen and advance the contribution of the humanities to national life and development of the continent, such as the Council for Development of Social Science Research in Africa (CODESRIA), and the Ministerial Special Project for Humanities and Social Sciences in South Africa (NIHSS). While both these initiatives advance arguments for the importance of the humanities in the twenty-first century, very little attempt is made to engage with robust debate on the technological potential for reimagining the humanities in Africa. It is against this background that this article aims to articulate a reimagining of the twenty-first century humanities as a ‘digital humanities’, thereby advancing groups of scholars and researchers that engage ‘interdisciplinary’ research collaboratively – ‘collaborative’ knowledge production in a ‘digitalized’ environment. This new categorization of an interdisciplinary and collaborative ‘digital humanities’ serves as a proposal that could advance

knowledge production on the African continent. To this end, the article draws on definitions of the ‘digital humanities’; an analysis of the current modalities of the digital humanities; an analysis of emerging trends in institutionalizing the digital humanities; and finally it reimages the humanities in Africa with a focus on ‘interdisciplinarity’ and ‘collaboration’ in knowledge production.

Keywords: Digital humanities, knowledge production, interdisciplinarity, collaboration, digitalization.

Introduction

Over the past decade, we have witnessed an increase in discourses addressing the state of the humanities. A classification of these discourses reveals two emerging trends. In the first trend much of the debates centre on the demise of the humanities as an academic area of scholarship within a progressive and ‘market’ driven higher education sector. Nussbaum (2010: 2) aptly captures this in the following:

The humanities and the arts are being cut away, in both primary/secondary and college/ university education, in virtually every nation of the world. Seen by policy-makers as useless frills, at a time when nations must cut away all useless things in order to stay competitive in the global market, they are rapidly losing their place in curricula Indeed, what we might call the humanistic aspects of science and social science – the imaginative, creative aspect, and the aspect of rigorous critical thought – are also losing ground as nations prefer to pursue short term profit by cultivation of the useful and highly applied skills suited to profit-making.

For Nussbaum the transposition of the humanities to the fringes of higher education is largely the failure of the humanities, by its very nature, to compete and occupy these ideological and market driven spaces. It is to this end that Nussbaum (2010) describes the state of the humanities as a ‘silent crisis’. Belfiore (2013: 27) builds on Nussbaum’s thesis by further contending that the humanities is faced by an ‘image problem’ of relevance,

it has ‘lost credibility and gone astray in a self-indulgent sea of arcane jargon, impenetrable “theory” and non-communicative language’. It is for Belfiore, (2013: 27) this very preoccupation that has ‘undermined the traditional formative function of the humanities’. Pannacker (2012) further problematizes the state of the humanities by arguing that the current pressures placed on the humanities result in a ‘narrowing of the intellectual range’ of graduates who must become extremely specialized in order to compete in the academic labour market. Thus, the humanities is not about the ‘balanced-cultivation’ of the whole person, it is intensely market driven and often a costly professional training for positions that are unlikely to be available to graduates (Pannacker 2012)¹.

In the second trend we find an ‘activist’ approach, which attempts to reposition the humanities from the ‘*fringe*’ to the ‘*locus*’ of higher education ideological advancements, by contending for a ‘humanities-based’ education that possesses wealth-knowledge and social-regeneration potential (cf. Davis 2012; Belfiore 2013; Olson 2013).

In the African context, we find this second trend taking a formidable position amongst the Council for Development of Social Science Research in Africa (CODESRIA), who contend that in a complex neo-liberal globalization, amidst rapid urbanization; poverty; evolution of gender relations; evolution of spirituality and the role of religion in modern societies; the emergence of knowledge societies; and the information and communication technologies (ICTs) revolution, the challenges confronting Africa is not to only understand how these new transitions affect society, but also how to become an African continent amidst these transitions (cf. CODESRIA 13th General Assembly Report). It is to this end that CODESRIA positions the humanities as a significant contributor in addressing the twenty-first century challenges faced in Africa, amidst the important position that knowledge plays in development, and the ‘vulnerability’ of Africa, as a result of its ‘marginal’ position in the world of knowledge.

¹ For further discussion on the shifting academic labour system, see Bousquet (2008) ‘How the University Works: Higher Education and the Lower Wage Nation’; Donoghue (2008) ‘The Last Professors: The Corporate University and the Fate of the Humanities’; and Grafton (2010) ‘Humanities and Inhumanities’.

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A further advancement of the second trend can be seen in South Africa, where the downscaling of human and social forms of scholarship have culminated with a lack of intellectuals who play a leading role as Africans together with other developing societies in Africa and the South to solve local challenges. This decline in scholarship has posited a humanities and social sciences intervention, which was turned into a special project by the Ministry of Higher Education and Training. This Ministerial Special Project for the Humanities and Social Sciences culminated with the June 2011 ‘Charter for the Humanities and Social Sciences’. The critical role that the humanities could be playing in South Africa is most aptly stated by the Minister of Higher Education and Training, Blade E. Nzimande in his ‘Foreword’ to the Charter:

While it is debatable whether the humanities and social sciences (HSS) in South African universities is in crisis, it is clear that, on the whole, it could and should be a lot stronger in order to play the role it could be playing in the development of our society, our economy and our intellectual life (Nzimande 2011: 5).

Nzimande (2011: 6) attributes the ‘weakening’ state of the humanities to the ‘rapid changes our society has undergone’; ‘the changing nature of the universities and the expectations of academics’; and the ‘increased commodification of knowledge’. To this end, in December 2013 the National Institute for Humanities and Social Sciences (NIHSS) was formally constituted to advance the vision of the Charter and address some of Nzimande’s observations. Part of the objectives of NIHSS is to establish communities of scholarship; to strengthen South-South collaborations in dialogue with Northern counterparts; and to establish catalytic projects that open up new areas of research, which have transformative implications for the curriculum in the humanities and social sciences. While the production of knowledge features very strongly in the objectives of NIHSS, there is clearly a lack of articulation on the impact of technology and its affordances to offer an alternative model of the humanities in South Africa (and Africa) that can serve its ‘transformative’ goals.

Both CODESRIA and NIHSS clearly articulate the contextually relevant questions for Africa in terms of the critical positioning of the humanities in the twenty-first century. Nevertheless, there is a noticeable lack of robust debate connecting the humanities in the twenty-first century, the crisis of knowledge production, and the affordances rendered by the technological revolution in Africa².

It is against this situational context of (1) the marginalization of the humanities; (2) a critique of its relevance; and (3) the contentious position and desire for the reinvigoration of the humanities in Africa, that the authors envisage articulating a reimagining of the humanities in the twenty-first century. Thus, this paper advances a ‘digital humanities’, which offers potential for interdisciplinary and collaborative knowledge production. In order to attain the above, this paper will firstly provide a definition of ‘digital humanities’, followed by an analysis of the current modalities of the digital humanities, and an analysis of the emerging trends in institutionalizing the digital humanities. Finally we contend that a reimagining of the humanities in Africa should take place through a contextualizing of the the technological affordances of interdisciplinarity and collaboration in knowledge production.

Defining the ‘Digital Humanities’

An analysis of the literature surrounding the ‘digital humanities’ reveals a multifaceted and complex literary and ideological space, with scholars often contesting the very nature of the concept.³ The Digital Humanities Manifesto 2.0 (2009) provides the following definition of the ‘digital humanities’,

² While acknowledging this ‘lack’ within CODESRIA and NIHSS, the authors of this paper believe that both initiatives possess the potential to advance the scope of what is being articulated in this paper as a reimagining of the humanities in the twenty-first century through the ‘digital humanities’. It is to this end, that the authors offer this paper as a preliminary discourse exploring the potential of a ‘digital humanities’ in Africa.

³It should be noted that while the concept ‘digital humanities’ is fairly new and coming to the fore more strongly within the past decade, its field can be traced back to decades of academic preoccupation with ‘humanities computing’ or ‘computational humanities’ (cf. Svensson 2009).

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Digital humanities is not a unified field but an array of convergent practices that explore a universe in which: a) print is no longer the exclusive or the normative medium in which knowledge is produced and/ or disseminated; instead, print finds itself absorbed into new multimedia configurations; and b) digital tools, techniques, and media have altered the production and dissemination of knowledge in the arts, human and social sciences.

It is in the context of the above definition that the manifesto positions the digital humanities in an inaugural role to shape digital models and scholarly discourse, and innovation in knowledge production, in an environment in which the university is no longer perceived as the sole producers, custodians, and disseminators of knowledge and culture. The manifesto highlights the shifting terrain of the humanities in the twenty-first century technological era and contends that the digital humanities is still an ‘emerging’ field, with much needed exploration on how the humanities may ‘evolve’ through engagement with various technologies. To further grasp what is implied by ‘digital humanities’, we turn to a few leading voices that have influenced the digital humanities discourse over the past decade.

Cohen (2011) defines the digital humanities as

the use of digital media and technology to advance the full range of thought and practice in the humanities, from the creation of scholarly resources, to research on those resources, to the communication of results to colleagues and students.

Cohen’s definition of the digital humanities accentuates three critical elements. The *first element* of Cohen’s (2011) definition is ‘resources’, which implies much more than a library or repository, it is the combination of search tools; metadata; cross-referenced collections of information; interoperability of digital repositories and archives; and the platform on which we are allowed to access such tools and information. The *second element* of Cohen’s digital humanities is ‘research’. While the digital resources make the whole approach to knowledge in the humanities easier, accessible and searchable, it does not eliminate the need to analyse and read the information. Research within the digital humanities allows one to filter through data in a more accurate and informed manner in order to compare all

the depositions relating to the specific subject matter (Cohen 2011). The *third component* of Cohen's definition is 'communication'. This implies the sharing of information once results are obtained, i.e. via open source platforms, social media sites, and so forth, where researchers, scholars, students and members of the public have access to the information (Cohen 2011).

Kirschenbaum (2012: 56) defines the digital humanities as,

a scholarship (and a pedagogy) that is publicly visible in ways to which we are generally unaccustomed, a scholarship and pedagogy that are bound up with infrastructure in ways that are deeper and more explicit than we are generally accustomed to, a scholarship and pedagogy that are collaborative and depend on networks of people and that live an active 24/7 life online.

Kirschenbaum's definition of the digital humanities emphasises the social undertaking in establishing online communities – i.e. networks of people, who collaborate through working together, sharing research, arguing and competing.

Fitzpatrick's (2012: 12) definition of the digital humanities moves the discourse from 'networks of people' to 'a nexus of fields'. For Fitzpatrick, the digital humanities is

a nexus of fields within which scholars use computing technologies to investigate the kinds of questions that are traditional to humanities (Fitzpatrick 2012:12).

Fitzpatrick's 'nexus of fields' highlights the 'interdisciplinary' nature of the digital humanities by including scholars of history, musicology, performance studies, media studies, and other fields that can benefit from collaborating on traditional humanities enquiry through use of computing technologies.

Spiro (2012: 16) contends that given that the digital humanities include people with different disciplines, methodological approaches, professional roles, and theoretical inclinations, it is impossible to settle on a single definition of the digital humanities. Hence, for Spiro (2012: 16-17) in defining the digital humanities, one should think in terms of a 'flexible'

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statement of values that can be used to communicate its identity. It is to this end that Spiro identifies the following values:

- (a) *Openness*: a commitment to open exchange of ideas, the development of open content and software, and transparency (2012: 24).
- (b) *Collaboration*: a free flow of information which allows people to build on ideas and think together in new ways to solve social problems by tapping into ‘collective creative potential’ (2012: 25).
- (c) *Collegiality and Connectedness*: the humanistic element which focuses on the value of ‘inclusiveness’, welcoming contributions and offering help to those who need it (2012: 26-27).
- (d) *Diversity*: a recognition that the community is more vibrant and projects are stronger if multiple perspectives are represented (2012: 28).
- (e) *Experimentation*: a demonstration and support for risk taking, entrepreneurship, and innovation.

In providing a definition of the ‘digital humanities’, we have moved from theorizing, to praxis, to embedded values. This three-pronged definition serves to explicate a rather complex concept by providing a much more holistic approach to the digital humanities in the twenty-first century. It is against this background that we explore some of the current modalities of the digital humanities.

Current Modalities of the ‘Digital Humanities’

In classifying the ‘evolving’ characteristics of the digital humanities, four distinct modalities can be observed (cf. Figure 1). The first modality can be classified as ‘computing humanities’. The origins of computing humanities can be traced back to Father Roberto Busa (1913-2011), an Italian Jesuit priest who in 1949 initiated with IBM a thirty year project to digitize the complete works of St. Thomas Aquinas in a searchable database – i.e. ‘Index Thomisticus’ (cf. Hockey 2004: 4). An exposition of the trends within the early computing humanities reveals a focus on building tools; infrastructure; standards; and collections (cf. McPherson 2009: 119). Thus, Unsworth (2002) defines computing humanities as ‘computers used as a tool for modelling humanities data and our understanding of it’.

In the last decade advances in computing (e.g. wikis, social networking, crowdsourcing, etc.) have created tools that are redefining the digital interaction with the humanities. One of such interactions is the ‘blogging humanities’. McPherson (2009) defines blogging humanities as ‘the production of networked media and peer-to-peer writing’. Due to digital humanities being a fairly new area, blogging humanities creates the ideal space for researchers and scholars to define what they are doing in digital humanities and articulate some of their own ideas on the subject. These views are expressed in open spaces, which offer potential for others to collaborate and take these ideas further or critique the type of developments being articulated. Blogs are emerging as a critical source of information in many publications on digital humanities⁴. Hence, it beckons the critical question of what constitutes ‘legitimate’ knowledge in the humanities and in which domain/s should this ‘legitimate’ knowledge be deposited.

The third observable modality is the ‘multimodal humanities’. McPherson (2009) defines the multimodal humanities as ‘the bringing together of scholarly tools, databases, networked writing and peer-to-peer commentary, while also leveraging the potential of the visual and aural media that are part of contemporary life’. For Svensson (2010) the multimodal humanities is ‘comprehensive, simple and points to the importance of networked media and writing as well as describes an ongoing development’. Multimodal humanities shift the focus from technology, which is seen as an ‘expressive medium’, to ‘multimodal knowledge production’, which is the central focus (cf. Svensson 2010). For Davidson (2008) the multimodal humanities can also be defined as ‘Humanities 2.0’, i.e. making use of Web 2.0 technologies that are more interactive, collaborative and open. McPherson

⁴ Some noteworthy blogs: Dan Cohen < <http://www.dancohen.org/>>; DH Commons < <http://dhcommons.org/>>; HASTAC (Humanities, Arts, Science and Technology Alliance and Collaboration < <http://www.hastac.org/blogs>>; University of Victoria Humanities Computing and Media Center < <http://hcmc.uvic.ca/blogs/index.php>>; Digital Digs: An Archaeology of the Future < <http://alex-reid.net/>>; George Mason University Edwired < <http://edwired.org/>>; Ideas: Federation for the Humanities and Social Sciences < <http://www.ideas-idees.ca/blog>>; DigitalKoans < <http://digital-scholarship.org/digitalkoans/>>; Nicomachus < <http://nicomachus.net/>>; and Open Culture < <http://www.openculture.com/>>.

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(2009), Svensson (2010) and Davidson (2008) articulate a modality that enables the ideal environment for decentering of authorship, interdisciplinary and collaborative knowledge production in the humanities.

The fourth modality is the emergence of the ‘digital humanist’. This modality starts from the individual person (i.e. the scholar or researcher)

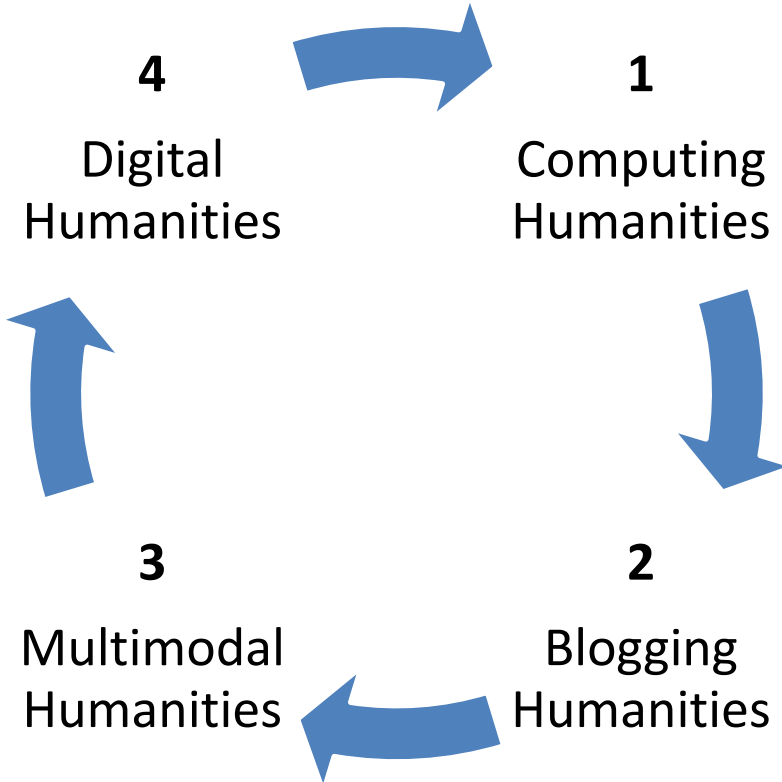


Figure 1: Current Modalities of the Digital Humanities

engaged in the digital humanities. It epitomizes the kind of work the individual does (i.e. thinking, reflecting, writing, and creating) at the intersection of the humanities and information technology. Thus for Svensson (2009) the term ‘digital humanist’ represents a specific category of scholars

that are engaged with a form of digital interaction with the humanities. Hunter's (2009) observation sees this modality as articulating a shift to the 'individual' as being the central element of the digital humanities. Thus for Hunter in this modality the individual occupies a 'sacred' space to ensure that technology designs are people centred and that digital humanities values the agency of human beings (individually and collectively) and that critical thinking, rationalism and empiricism are epitomized (cf. Hunter 2009).

These varying modalities bring to the fore different possibilities for institutionalizing the digital humanities. Thus, the following section will explore how selective institutions institutionalize the digital humanities.

Emerging Trends in Institutionalizing the Digital Humanities

Klein (2014) defines 'institutionalization' as 'a process of establishing something within an organization or a social sphere, whether it is an idea, such as democracy, or an occupation, such as teaching'. For Shapin (1992: 355) categories of knowledge are also institutions not in the conventional sense of buildings and structures, but as a set of ideas constructed and maintained in cultural spaces. Thus, it is important to understand how the digital humanities is located within the cultural space of the academy through the processes of institutionalizing, professionalizing and educating.

For Cecire (2011) a significant challenge with the institutionalization of the digital humanities is the emerging 'identity crisis' of humanities scholars. Cecire argues that with the recent proliferation of digital humanities centres and institutions within higher education, many adverts for tenure positions stress the importance of 'digital skills' as opposed to 'critical scholarship' (cf. Cecire 2011). As a result, we are witnessing a shift of humanities scholarship, from scholars once immersed in methodology and critical pedagogy to scholars possessing the technical skills (i.e. the 'know-how') needed in the digital environment.

To address this critical problem of institutionalizing the digital humanities, Ramsay and Rockwell (2012) contend for a digital humanities epistemology where 'digital tools' should be seen as 'theoretical tools'. Ramsay and Rockwell see the construction of knowledge through digital tools as legitimizing a new type of scholarship within the humanities, i.e. a type of scholarship that can be characterized as 'immanent' and 'nondiscursive' (cf. Ramsay & Rockwell 2012).

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For Thomas (2011) the institutionalization of the digital humanities sees a shift in humanities scholarly practice to one that embraces a ‘more fluid and open exchange of ideas and arguments’. This can be characterized by a shift to ‘openly available original research’, to ‘open verification’ of findings, to ‘adjustment and re-examination’ of research findings (cf. Thomas 2011). This brings to the fore three important contributions to humanities scholarship. Firstly, it ‘increases the scale of research and data involved’; secondly, it addresses the ‘global distribution of discourse and materials’; and thirdly, it comprises new models of production where other researchers can ‘validate’ and ‘credit’ contributions in a way that enables future scholarship (Thomas 2011).

It is against this background that we now explore four universities pioneering the digital humanities (cf. Figure 2 below):

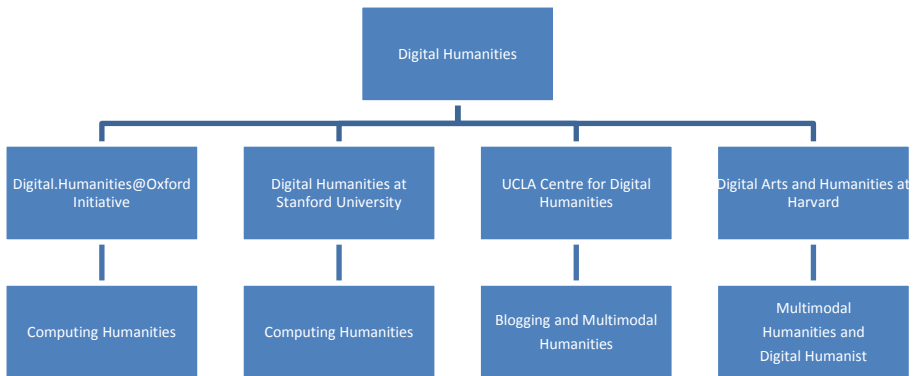


Figure 2: Institutionalizing Digital Humanities

(1) Digital.Humanities@Oxford Initiative

The Digital.Humanities@Oxford Initiative defines digital humanities as ‘research that uses information technology as a central part of its

methodology, for creating and/ or processing data' (cf. Digital Humanities at Oxford <<http://digital.humanities.ox.ac.uk/Support/whatarethedh.aspx>>). The Digital.Humanities@Oxford Initiative is a collaboration between the Oxford e-Research Centre (OeRC), Oxford Information Technology (IT) Services, the Oxford Centre in the Humanities (TORCH), the Oxford Internet Institute, and Oxford's Bodleian Libraries. Its history can be traced back to its earlier tradition of computing humanities in 1975 with its projects on concordances and databases in Classics, History and Oriental Studies.

In terms of institutionalization, the digital humanities in Oxford is a strategic priority of the Oxford e-Research Centre. Thus, it operates outside of the domains of 'traditional' humanities; functioning as a separate entity to connect various disciplines in Oxford. Its mission is to advance the use of information and communication technologies for research across the university.

An analysis of some of the projects it is engaged with, demonstrates the extensive digital humanities activity taking place across a range of disciplines at Oxford. Some of the projects worth mentioning are the 'Constructing of Scientific Communities' (English Language and Literature); 'Cultures of Knowledge: An Intellectual Geography of the Seventeenth-Century Republic of Letters' (History); 'Automatic Annotation of the Spoken British National Corpus' (Linguistics); 'The Book of Curiosities' (Oriental Studies); 'The Digital Image Archive of Medieval Music' (Music); and 'Eastern Art Online: Yousef Jameel Centre for Islamic and Asian Art' (Religion/ Visual Arts)⁵.

In addition to the above projects, the Digital.Humanities@Oxford Initiative hosts an annual digital humanities training event, which takes place in the month of July at the University of Oxford – i.e. The Digital Humanities at Oxford Summer School (DHOxSS). It partners with the Edirom Digital Humanities Summer School at the University of Paderborn, Digital Humanities Summer Institute at the University of Victoria, Humanities Intensive Learning and Teaching at University of Maryland, Digital Humanities of Switzerland at University of Bern; Digital Humanities of the Leipzig Summer School at University of Leipzig, and the Women Writers

⁵ For a more expansive list and a description of the various projects, see 'Past Featured Projects' of the Digital.Humanities@Oxford website <http://digital.humanities.ox.ac.uk/ProjectProfile/past_featured_projects.aspx>

Project at Northeastern University. Its objective is to introduce delegates to a range of topics in the creation, management, analysis, modelling, visualization, and publication of data for the humanities.

(2) Digital Humanities at Stanford University

Digital Humanities at Stanford University defines the ‘digital humanities’ as ‘a collection of practices and approaches combining computational methods with humanistic inquiry’ (cf. <<https://digitalhumanities.stanford.edu/about-dh-stanford>>). Stanford University has been engaged with digital humanities since the late 1980s. In terms of institutionalization, Digital Humanities at Stanford is an initiative of the Digital Humanities Centre. It hosts researchers and scholars who do not have a single institutional home, but are united through the support of digital humanities practice, theory and training.

Some of the projects that Digital Humanities at Stanford University are currently engaged with are: ‘Kindred Britain’ – an exploration of British culture and history from the perspective of family; ‘ORBIS’ – an interactive scholarly work that allows readers to examine the movement of goods and people in the Roman World through a creation of a historical transportation network model, interactive maps and visualization materials; ‘Performing Trobar’ – a website designed to support teaching and learning; ‘African Archives’ – a study of colonial systems, digitizing indigenous personnel records of the colonial administration in Senegal; ‘Chinese Philosophical Texts’ – a classification of Chinese and early Chinese thought; and ‘French Revolution Digital Archive’ – a digital version of the key research sources of the French Revolution.

Similar to the Digital.Humanities@Oxford Initiative, Digital Humanities at Stanford University hosts a series of training workshops that aim to provide the skills and information needed to effectively manage digital projects, as well as an exploration of ideas and tools. Some of these workshops focus on data management, text-based model creation, metadata for digital projects, code management for non-programmers, preservation strategies for digital projects, etc.

(3) UCLA Centre for Digital Humanities

The University of California, Los Angeles (UCLA) Centre for Digital Hum-

anities defines ‘digital humanities’ as ‘the cultural and social impact of new media and information technologies – the fundamental components of the new information age – as well as creates and applies these technologies to answer cultural, social, historical, and philological questions, both those traditionally conceived and those only enabled by new technologies’ (cf. <http://www.digitalhumanities.ucla.edu/about/what-is.html>). In terms of institutionalization, UCLA Digital Humanities comprises of thirty-five affiliated faculty that come from more than twenty different departments and five schools including Arts, Architecture, Social Sciences, Humanities, Information Studies, and Theatre, Film and Television. It networks with the following UCLA initiatives: Academic Technology Services; the Experiential Technologies Centre; the Institute for Digital Research and Education; the UCLA Library; and the Ahamanson Laboratory for Digital Cultural Heritage.

UCLA Digital Humanities scholarship epitomizes ‘collaboration’ and ‘interdisciplinarity’ through creatively expanding its networks of participation, the modes of access, and its mechanisms for dissemination of scholarship (i.e. open platforms, blogs, etc.).

In terms of projects, UCLA Digital Humanities has several strategic projects, which are collaborations between the Institute for Digital Research and Education (IDRE) and the Humanities, Arts, Architecture, Social and Information Sciences (HAASIS). Some of these projects are the ‘Ancient Egyptian Architecture Online’ (AEGARON); ‘Digital Karnak’; ‘Hypercities’; UCLA Encyclopaedia of Egyptology’ (UEE); ‘St. Gall Monastery Plan and Manuscripts’; ‘Korean Folklore Online Archive’; ‘Qumran Visualization Project’; and the ‘Cuneiform Digital Library Initiative’.

In addition to the above projects, UCLA Digital Humanities also offers an undergraduate minor, a graduate portfolio, a graduate certificate and several elective courses within the field of digital humanities.

(4) Digital Arts and Humanities at Harvard University

The Digital Arts and Humanities at Harvard University (DARTH) sees the digital humanities as the creative use of digital technologies to organize and gain insight into vast bodies of visual and textual information, and to experiment with computer-aided analysis of all forms of digital information (cf. <http://www.darthcrimson.org/about/>). Blackwell (2014) a Harvard correspondent, defined the digital humanities as ‘bringing as much life to the

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study of human culture as there is culture of humanity itself’, through ‘sound, images, video, and the immense body of data collected everyday describing the footprint of life’ through ‘exploring unconventional ways to tell the story of humankind’.

In terms of institutionalization, DARTH functions as a separate entity within Harvard to support faculty and students by connecting them with technologies designed to enrich digital scholarship. In order to achieve this DARTH partners with ‘Digital Futures’ (a network of faculty, researchers, technologists and librarians engaged with ongoing transformation of scholarship through innovative technology) and Harvard Library UX.

In terms of projects, DARTH has been engaged with several interdisciplinary initiatives, such as, ‘Lasky Brajas Digital Pioneers’ - which showcases original and innovative projects in the digital arts and humanities; ‘Vassiliki Rapti’ – a film project by students of Modern Greek; and ‘Bringing the Giza Pyramids to Life’ – onscreen navigation through 3D immersive experiences.

A strategic development of DARTH is ‘THATCamp Harvard’ (an acronym for ‘The Humanities and Technology Camp’). THATCamp is an ‘unconference’ (i.e. a participant driven meeting) for humanists and technologists to meet, present and discuss ideas. Schreiner, an organizer of THATCamp 2014 and the Head of Harvard Libraries Map, Media, Data and Government Information Department, noted that the dynamics of humanities research is steadily changing with technology advancements creating new ways to conduct and present research: ‘the old idea of sitting in a carrel and going into the library stacks – you can’t work that way anymore because people have to work together. Everything is very interdisciplinary’ (cf. in Blackwell 2014).

The philosophical underpinning to the digitalization of the humanities at Harvard is aptly captured by Shaw (2012) in the following,

Like pyramid-building itself, the work of the humanities is to create the vessels that store our culture. In this sense, the digitization of archives and collections holds the promise of a grand conclusion: nothing less than the unification of the human cultural record online, representing, in theory, an unprecedented democratization of access to human knowledge. Equally profound is the way that technology could change the way knowledge is created in the

humanities. These fields, encompassing the study of languages, literature, history, jurisprudence, philosophy, archaeology, religion, ethics, the arts, and arguably the social sciences, are entering an experimental period of inventiveness and imagination that involves the creation of new kinds of vessels—be they databases, books, exhibits, or works of art—to gather, store, interpret, and transmit culture. Pioneering scholars are engaged in knowledge design and new modes of research and expression, as well as fresh reflection and innovation in more traditional modes of scholarly communication: for example, works in print that are in dialogue with online resources.

Towards an Interdisciplinary and Collaborative ‘Digital Humanities’ in Africa

In our introduction we articulated the many challenges facing the humanities in the twenty-first century, as well as the attempts made by CODESRIA and NIHSS that aim to reinvigorate the critical positioning of the humanities in Africa. In acknowledging the above, the we have observed the potential for a reimagining of the humanities within a rapidly technologically advancing society. By harnessing the potential of this transitioning environment, we posit that a reimagining of the humanities in Africa, as a ‘digital humanities’, can shift the imbalance in terms of knowledge production, its relevance to students, as well as its critical positioning within the market. By comparing the institutionalization trends of the digital humanities in Oxford University, Stanford University, University of California, Los Angeles, and Harvard University, we conclude that a positioning of the digital humanities within higher education institutions in Africa has the potential to promote interdisciplinary and collaborative research. However, what is clearly evident is that the success of establishing these digital humanities is dependent on the availability of infrastructure and resources. While the we have explored how the digital humanities have been ideologically defined and established within ‘developed’ countries, we are not ignorant of the digital divide that exists between the developing countries (i.e. Africa) and the developed countries. Hence, it is important for us to understand the changing technological landscape within Africa.

The recent developments in Africa, more especially within the last decade, indicate a gradual transformation of ‘access’ to technology and ‘connectivity’. Africa currently contributes 9.8% of the world’s internet users, with internet penetration in 2014 totalling 26.5% which amounts to 297 885, 898 internet users as of 30 June 2014 (cf. Internet World Stats: Internet Usage Statistics for Africa). Macharia (2014) reported in the ‘African Renewal’ that internet access in Africa is no longer a ‘luxury’ it is a ‘necessity’. Mobile penetration in Africa has grown from 1% in 2000 to 54% in 2012 (Macharia 2014). Today Africa boasts more than 754 million connections in sub-Saharan Africa and over 35 mobile network operators in Africa. Countries such as Seychelles, Tunisia, Morocco and Ghana, have mobile subscription penetration rates in excess of 100%, with Tunisia at 120% - i.e. 10.8 million mobile connections and more than it has citizens (Macharia 2014). This progressive scene is no different in South Africa, which in 2010 totalled 2 400, 000 internet users and in 2014 saw a massive increase to 24 909, 854 internet users (cf. Internet World Stats: Internet Usage Statistics for Africa). This indicates an internet penetration of 51.5% of South Africa’s population. This increase can be partially attributed to the drop in market prices of devices due to the competitive market in which service providers find themselves and the lower data rates needed to maintain subscribers within a competing market. These technological transitions create the ideal environment for higher education institutions to explore the potential of a digital humanities.

But how have the advancements made in technology affected the production of knowledge? Knowledge production within this transitioning environment is taking place at a much faster pace throughout the world. Both knowledge and information are also becoming obsolete at a faster pace. Hence, for Mchombu (2007: 24) in order for African countries to compete internationally, they need to have access to the latest knowledge and information. Amidst the lack of access to knowledge, Africa is also - as noted in the ‘Introduction’ - placed at a vulnerable position due to its lack of ability to produce knowledge. Addressing the knowledge deficit that separates Africa from the technologically advanced countries is a crucial challenge in this twenty-first century. To address this knowledge deficit, Africa needs to (1) *acquire* knowledge that is already available; (2) *create* knowledge locally through research; (3) build capacity of the population to *absorb* and *apply* knowledge; and (4) create a capacity to *communicate* knowledge (cf. *ibid.*)

The current modalities and examples of emerging trends in institutionalizing the digital humanities (as discussed in this paper), offer potential to address this deficit of knowledge production within an ‘innovative’ space. In order to address this deficit through the digital humanities, two significant values need to be foregrounded, (1) interdisciplinary and (2) collaboration.

Interdisciplinary Knowledge Production

Klein (2014) defines the concept ‘interdisciplinary’ as ‘typically characterized by integration of information, data, methods, tools, concepts, and/ or theories from two or more disciplines or bodies of specialized knowledge’. Klein further contends that ‘interdisciplining’ is ‘proactive focusing, blending, and linking of disciplinary inputs, which foster a more holistic understanding of a question, topic, theme, or problem’ (Klein 2014). Thus interdisciplinary work can take the form of an individual scholar who integrates a diverse range of materials and methodologies into his/ her research, to joint initiatives by scholars from different disciplines to produce new knowledge.

But why is ‘interdisciplinary’ research important in Africa? The economies and cultures of knowledge production are an integral part of a multifaceted, complex and often contradictory intellectual and ideological process⁶. Interdisciplinary research offers the potential to address Africa’s epistemic invisibility in knowledge production, deconstruct Africa’s identity as the ‘inferior other’, and decolonize its scholarly legacies. Reimagining the humanities within an ‘interdisciplinary’ domain requires ‘interrogating’ the paradigms of knowledge corroborated with Eurocentric assumptions and developing innovative methods and theories grounded in the experiences of seeing the context through an ‘African lens’ or as Robbe (2014: 258) says ‘thinking through ‘the African’’. Interdisciplinary research thus involves two

⁶ For Weingart and Stehr (2000: xi) disciplines are not only intellectual, but also represent social structure, organizations and established social networks that shape and bias views on the relative importance of knowledge. Zeleza (2007: 198) defines disciplines using geographical images of ‘territories’, ‘fields’ or ‘turfs’ that aspiring interdisciplinarians seek to ‘cross’, ‘explore’ or even ‘annex’.

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dimensions – *firstly*, it involves questioning and crossing the borders of institutionalized knowledge; and *secondly*, of opening academic disputes into the public sphere and engaging with issues that are of concern for different social groups (cf. Robbe 2014:258). It is in this context that the the digital humanities has the potential to ‘cross the borders of institutionalized knowledge’ and ‘engage the public sphere’, thereby, articulating a contextually relevant discourse and epistemology in knowledge production by Africans for Africa.

By its very nature of being the ‘digital’ humanities, an interdisciplinary framework for research is created. The computing technologies embedded within the digital humanities framework create the ideal interdisciplinary space for ‘team-based’ research. *Firstly*, it provides a ‘common space of interaction’ where researchers and scholars can share ideas and address critical questions or problems of common interest. *Secondly*, the digital humanities creates ‘spaces of experimentation’ affording African scholars the ‘safe’ space to experiment with their thoughts and ideas. *Thirdly*, the digital humanities serves as an ‘interdisciplinary information portal’ (as noted with the four institutions we discussed earlier), i.e. repository for digital collections, such as websites, electronic text projects, blogs, visual and aural data, and so forth⁷.

However, while ‘interdisciplinary’ approaches in knowledge production within the digital humanities affords the opportunity to revisit and constructively engage the historical legacies that have marginalised African scholarship, it also implies the positioning of the African scholar and researcher on the same level as scholars from the developed countries that

⁷ With regard to the interdisciplinary journal *Alternation*: With its thematic editions stemming from collaborative research groups, it embarked on engaging the creating of these ‘common spaces for interaction’; these have been ‘spaces of experimentation’ involving postgraduate students; and finally with its CDs and DVDs containing all previous publications (launched in 2008) as well as its website that opened on an open access platform in January 2012, it has started to engage the digital humanities. There are plans afoot to develop the website into a more comprehensive ‘interdisciplinary information portal’ including isiZulu tools and web-resources.

occupy digital humanities spaces⁸. In order to do so, scholars/ researchers in Africa need to (1) acquire the digital skills in content and subject mastery; (2) know how to disseminate knowledge beyond the boundaries of a specific discipline; (3) know how to function as a ‘member’ of a team as opposed to the traditional prestige assigned to ‘autonomous’ researchers; and (4) how to negotiate ‘space’ when dealing with similar subject matter across disciplines.

Collaboration in Knowledge Production

The second value which we highlight in this paper is ‘collaboration’. Collaboration and interdisciplinary research are seen as ‘interlinked’. When scholars discourse notions of interdisciplinary research, collaboration emerges as the underpinning philosophy describing the type of engagement needed in such space. Collaboration as defined by Kuhlen (2006) is

a means of cooperating and sharing resources with others in an open, friendly, often non-competitive, but supportive way – collaboration is in general organized in networks, not in hierarchies’.

By applying this definition within the sphere of digital humanities, Spiro (2012: 25) expresses collaboration as ‘a free flow of information that allows people to build on ideas and think in new ways’ (as noted earlier). For McCarty (2012: 4) the emphasis on collaboration is a shift from ‘solitude’ at one extreme to ‘collective’ reasoning at the other, hence it encompasses ‘a spectrum of work styles varying in time as well as project’.

Flanders (2012: 68) adds a new dimension to collaboration in the digital humanities by emphasising the role of resources in mediating the nature of collaboration,

Digital humanities projects take place in a space constrained by a set of technical norms that govern the informational and operational behaviour of the digital environment. Because these collaborations are aimed at building something that works, a tool, a resource, an

⁸ This has been one of the main objectives that *Alternation* and its interdisciplinary collaborators have strived to contribute to now for twenty years already.

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online collection, the collaborative activities are typically mediated through things like software tools and data standards. However, since these initiatives take place in the humanities, they also require agreement concerning disciplinary norms that shape the practices of digital representation. These include acceptable standards of authenticity and verification, the kinds of commentary and contextualization that are acceptable or required, and beliefs about the interpretative or analytical or critical goals that are at stake. These norms arise from detailed ongoing debates concerning both the ultimate goals of scholarship and methods and practices by which we achieve them.

The above definition illustrates the level of complexity when it comes to technologies mediating the ‘nature of collaboration’ and its ‘outcomes’. However, in the above definition we also note the ‘progressive’ nature of collaboration, i.e. the ‘ongoing debates’ concerning the goals of scholarship, methods and practices amongst its involved researchers and scholars.

Thus, collaboration within the digital humanities is interdisciplinary, linking together the humanistic and computational approaches. In addition, instead of the researcher/ scholar working alone, they function as part of a broader team. It reflects the need for people with a range of skills to contribute to knowledge production within the digital scholarship. By bringing together people with diverse expertise, collaboration opens up new approaches to addressing a problem. It is to this end that Spiro (2012: 25) sees collaboration as an expression of ‘diversity’ and the realisation of the ‘collective creative potential’ of the team.

The element of collaboration features strongly in both the objectives of CODESRIA and NIHSS. As noted earlier, one of NIHSS objectives is to strengthen South-South collaborations in dialogue with Northern counterparts. Digital humanities has the potential to serve as a vehicle to attain such objectives by fostering a ‘digital space’ where such researchers/ scholars can collaboratively engage on projects of common interest. In addition, by facilitating the collaboration of scholars within Africa, the digital humanities can act as a medium to decolonize knowledge production by harnessing the collective ideas and thoughts of scholars within Africa for Africa. Prior to the information technological revolution in Africa, when it came to knowledge production and dissemination, Africa was marginalized-

due to the printed word. Until very recently African scholars suffered from complete isolation. However, the advancement towards a digital humanities can serve to ‘bridge’ the gap between African scholars and the rest of the world, while strategically positioning African scholars with a ‘voice’ and an autonomous African space to articulate an organic scholarship.

A Framework of Technological Affordances for Interdisciplinary and Collaborative Research Practices

The rapid advancements in information technologies has brought to the fore an array of ‘loose tools’ in the form of synchronous (real time) and asynchronous (delayed time) tools. In order to fully understand the potential of these tools for advancing a digital humanities in Africa, one needs to categorically place them within a framework that highlights its affordances – i.e. its ‘action’ potential. In order to do so, we employ the categorizations of Siemens and Tittenberger (2009: 45): (1) Access (tools used to access resources); (2) Presence (tools used to indicate state of presence online or physical proximity); (3) Expression (tools used to illustrate expression); (4) Creation (tools used to create new content and resources); (5) Interaction (tools used to interact with others through synchronous or asynchronous action); and (6) Aggregation (tools used to retrieve and filter information of interests. Each of these six categories (cf. Figure 3) possesses the affordances needed for a digital humanities in Africa.

In the following, we briefly highlight a selection of important tools currently being used within the broader domains of interdisciplinary and collaborative knowledge production.

The first tool is ‘blogs’, which are used to establish presence, creation, and interaction. Blogs are basic web pages, which enable unique opportunities to improve communication with (and between) researchers and scholars, increase depth of reflection, and enable the formation of diverse viewpoints and perspectives (cf. Siemens & Tittenberger 2009: 47). Blogs can also be used as e-portfolios or online journals.

The second tool is ‘wikis’, which are used for access, creation and interaction. Wikis are ‘unconventional’ knowledge spaces that enable individuals to create a collective resource; thus, often termed collaborative writing on the web. The common use of wikis include: collaborative writing and group work, content creation or collaborations with researchers from

other departments/disciplines/ universities.

The third tool is ‘podcasts’, which is used for access and creation. Podcasting is the distribution of audio online through RSS feeds⁹ (cf. Siemens & Tittenberger 2009: 49). The usage of podcasts within the research domains include: recording lectures, external presentations, evaluation and feedback, and short introductions to new knowledge areas.

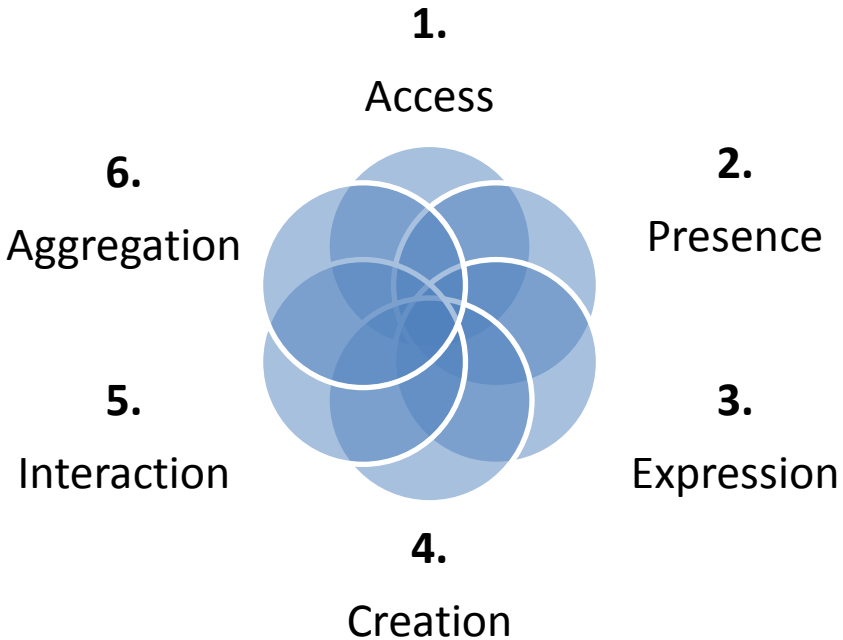


Figure 3: Framework for Technological Affordances

The fourth tool is ‘micro-blogging’, which is used for access, presence, creation and interactivity. Micro-blogging involves sharing resources and engaging in short conversations with other users of the service

⁹ RSS = Real Simple Syndication.

or experts in other disciplines (cf. Siemens & Tittenberger 2009: 51).

The fifth tool is social networks, which is used for access, presence, expression, creation and interactivity. Social networking has moved from the subculture domain to mainstream (cf. Siemens & Tittenberger 2009: 51). Social networking sites have integrated suites of tools with functionality similar to blogs, micro-blogging, image sharing, etc. The use of social networks for research has vast potential from organizing online research groups, and communicating through its mobile platform functionalities.

The sixth tool is web conferencing, which is used for interactivity as well as creation. An example of the innovative use of web conferencing is the Global Centre for Advanced Studies (GCAS)¹⁰, which uses the ‘Big Blue Button’ (an open source web conferencing project) to conduct seminars with prominent scholars through virtual interaction on contextually relevant matter. This open source platform features record and playback functionality; whiteboard; desktop sharing; integrated voice conferencing; web camera and presentation sharing functions¹¹.

The seventh tool which we would like to highlight is the use of Open Educational Resources (OERS). In terms of ‘distributing’ knowledge, OERS have a critical function within Africa. OERS address the knowledge deficit in Africa by providing access to knowledge that is affordable and usable.

These seven tools serve to illustrate the potential for advancing the digital humanities in Africa. By incorporating these tools into a digital humanities model, the humanities can advance a critical positioning within Africa in the production and dissemination of knowledge.

Conclusion

The crisis of the humanities as articulated by Nussbaum (2010), Belfiore

¹⁰ The Global Centre for Advanced Studies (GCAS) is a global classroom with leading philosophers, theorists, artists and visionaries that serve to empower through knowledge distribution and conscientization. While not classified as a digital humanities, its model epitomizes interdisciplinarity and collaboration.

¹¹ This is a very important resource especially as we seek to develop cross-country PhD and other research cohorts and groups in Africa.

(2013) and Pannacker (2012) cannot be ignored¹². These three individuals pose critical questions that force one to rethink the way we ‘do’ humanities in Africa. Amidst ‘rethinking’ how we engage with the humanities in Africa, the discourses generated by CODESRIA and NIHSS on the critical positioning of the humanities to the development of the continent, offer a vision for optimism. In addition, harnessing the potential embedded within a rapidly changing technological landscape offers the opportunity to ‘reimage’ the humanities in the twenty-first century. It is against this background that we set out to articulate a discourse, which advances an interdisciplinary and collaborative digital humanities in Africa. As a fairly new concept, we began by offering a definition of the digital humanities. In so doing we captured some of the leading voices such as those of Cohen (2011), Kirschenbaum (2012), Fitzpatrick (2012) and Spiro (2012). In surveying the implementation of the digital humanities, we found four modalities present, i.e. computing humanities, blogging humanities, multimodal humanities, and the digital humanities. These varying modalities offered the potential for the institutionalization of the digital humanities to take on varying shapes. Hence, we highlighted four prominent institutions in the field of the digital humanities and reflected on how they institutionalized the digital humanities. These four institutions offer insights into how digital humanities is contextualized and the type of projects and activities they are engaged with. The findings indicate a strong emphasis on interdisciplinarity and collaboration. By drawing on these two concepts we began envisaging how one could advance a digital humanities in Africa. What is of vital importance in our observations is that while there exists a digital divide between Africa and the ‘developed’ countries, the major strides in access to technology and connectivity in Africa in recent years, create an ideal environment for the exploration and development of the digital humanities. It is to this end that we focused on the values of interdisciplinarity and collaboration, and the technological affordances for a digital humanities in Africa.

In offering a summation of the discourse generated in this paper, we position three critical concepts: (1) Africanization; (2) innovation; and (3)

¹² Cf. also the contributions in this volume – especially those by Mkhize and Ndimande-Hlongwa; Kamwendo & Pogieter; Keet; Olivier; Stewart and Kamwendo

knowledge production. These three terms have strategically dominated higher education discourses over the past decade. The advancing of the digital humanities in Africa allows for ‘innovation’ in ‘knowledge production’ with the ability to produce knowledge that resembles the local ideas, thoughts and aspirations of researchers and scholars within the African content. This process hence engages with a level of Africanization, as it articulates a decolonization of Eurocentric knowledge and the reimagining of African scholarship. It is within this context that we find ourselves advancing the digital humanities as a possible ‘catalytic’ project to develop a prototype of a digital humanities in Africa.

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