Development priorities for African universities

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Abstract

African knowledge remains at best on the margins, struggling for an epistemological foothold in the face of an ever dominant Western canon. At worst, African knowledge is disparaged, depreciated, and dismissed. It is often ignored even by African scholars who, having gained control of the academy in the postcolonial context, seemingly remain mesmerized by the Western canon in most dimensions of thought, inquiry, theorization, culture (classical as well as popular), and ideology. Such is the hegemonic influence of historical legacy and current power relations in the production and dissemination of knowledge.

This paper argues that African knowledge, given appropriate impetus, can serve as a powerful stimulus to development. Against the backdrop of intractable development challenges, the paper will explore the role of African universities in the creation, dissemination, and support of African knowledge; and the preservation of indigenous knowledge. Since a scholarly effort towards integrating an African ethos into discourse, consciousness, and praxis is critical, this paper will consider transformative action for African human development and outline key priorities for African universities to position African knowledge for successful development effectively, and thereby provide an alternative canonical perspective more resonant with the aspirations, interests, and development agenda of the continent.

Keywords: indigenous knowledge, development, cognitive justice, higher education, African universities

Introduction

The pervasiveness of Western epistemology in the deep fibres of knowledge creation and validation among non-Western nations and peoples has resulted in a schizophrenic cultural discourse. This happens at the interface of clashing universes of knowledge, much as Africa has had to contend, through a history of subjugation,

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with the clash of civilizations and the clash of knowledge paradigms. Among the great ideological and intellectual conflicts today is the battle between dominant Western canons and indigenous knowledge systems in an all but unequal battle supreme.

When compared with the rest of the world, much of Africa is characterized by stark economic disparities. Access to educational resources is characterized by unequal admission to the world of intellectual property, perpetuated through the dominance of global publishing conglomerates. Western dominance in knowledge creation and ownership deepens the knowledge divide between peoples and nations, with severe and enduring consequences for social justice and the socio-economic well-being of millions.

Africa in general, and South Africa in particular, have had a complex and troubled association with the West. Apart from the ideological differences, there is still the matter of epistemological dominance that we have to contend with. It is therefore axiomatic that mainstream discourses can be highly influential, as we incur the risk that Western discourses that perpetually discount indigenous knowledge are persistently internalized by local people. Western knowledge systems are glorified in the face of the perpetual muting of African knowledge, and in certain domains indigenous knowledge is simplistically associated with deceptive notions, irrationality, and the captivity of superstition.

Considering the global permeation of Western forms of education and how occidental education malevolently replaced indigenous knowledge, David Orr illuminates how people lost their vernacular knowledge and, as a result, their cultural worth (Chinnammai, 2005). Orr pronounced Western education as inadequate and ascribed the inadequacy of Western- styled education to its principal preoccupation: the creation of money, rather than the preservation of cultures (Chinnammai, 2005). This rings true in the context of South Africa, where all things Western permeate our societies. Even the so-called 'born free'¹ generation, who are free to revel in African philosophy, art, language, and culture, demonstrate a marked preference for Western culture, individualism, materialism, and consumerism.

With a democracy that is just 21 years old, South Africa is hard at work traversing the obstacle-ridden and border-controlled knowledge pathways. We exist amidst nations of the world that claim intellectual, cultural, and religious pedigrees that trace back unbroken for several centuries. We bear witness to the supremacy of these pedigrees in the arena of higher education as evidenced in the entrenchment of the European higher education structures, forms, and traditions. These include the Humboldtian, Napoleonic, and Anglo-Saxon traditions that were promulgated around the world during the expansion of the colonial empires. 'Referred to as the "research", "training" and "personality" models respectively these models refer effectively to the elite higher education systems of more than a century ago' (Arthur and Little,

2010). The negative consequences of these traditions are still evident in African higher education. Despite being situated amidst unprecedented development and contextual challenges, African universities still continue to produce legions of graduates who become highly elitist, disconnected from the needs of society, but with the confidence that their university education has facilitated their arrival into a state of privilege. Western education traditions have produced, in their own likeness, a brand of cognitive elites in Africa who lack the ability, or the will, to influence societal transformation and participate in development and nation-building, but who often become complicit in defending the status quo.

The unconquerable position of the West is, however, under threat. Though the education traditions of the West still have a commanding influence on knowledge practice globally, a revolution is under way. The position of the West is no longer unassailable and there is increasing evidence of its vulnerability, with even the rightwing historian Niall Ferguson concluding that 'we are already living through the twilight of Western predominance' (Ferguson, 2011). In our time, we are witnessing the seismic shifts of a changing global political, economic, and scientific order. Change, it would seem, is the *sine qua non* of an emerging new higher education order.

The reverberations of change are now being heard as it is becoming abundantly clear that the chief role players in the world of higher education and science are beginning to change (Royal Society, 2011). The South and the East show signs of becoming new centres of gravity in the emerging research world order. The race for political and economic ascendancy through knowledge is gaining considerable momentum. The West has called for improved support for research and innovation in the light of the emergence of nations like China, India, and Brazil. These nation-states have seen the benefit of collaboration in research and innovation and work consistently therein.

In the UK the Royal Society warned that '[the UK's] scientific leadership, which has taken decades to build, can be quickly lost' (Royal Society, 2011: 41). In a report entitled *Rising above the Gathering Storm*, the US National Academies called for a renewed effort to bolster competitiveness and warned that American advantages in science are 'no longer unique' (ibid.: 41). Across the Atlantic, through its European Commissioner for Research, Innovation and Science, the EU has also asserted that there is 'no more efficient investment in the future than research and innovation', and has since ploughed billions of euros into remaining competitive through research (ibid.: 66).

African universities and development

Sharp questions have been raised about the relevance of knowledge-producing institutions, and about the usefulness of the competencies that we equip our

graduates with. In Africa the voiceless, poor, and marginalized are rising up in fury and frustration against the tyranny of grossly unequal economic relations that keep them locked in a cycle of chronic poverty.

Individualism and consumerism are in ascendancy over and above the deep understanding, wisdom, and knowledge that are inscribed in local cultures. The rampant desire for power and material gain distort the human capacity for sharing, upliftment, and equality through cognitive and social justice, which are fundamental precepts of indigenous knowledge systems.

Against this backdrop, Catherine Odora Hoppers and Howard Richards have eloquently articulated the role of universities as agents for cognitive and social justice and inclusive human development (Odora Hoppers and Richards, 2012).

In a recent publication outlining the asymmetries in development partnerships between the North and South, we highlighted our captivity to Western modes of thinking, being, and doing. Here we note that, as a result of being under the incessant knowledge leadership and 'guidance' of the West, we have consciously and unconsciously attuned our research and knowledge to powerful and pervasive occidental thinking approaches (Baijnath and James, 2014). Universities have always been tasked with generating and protecting new knowledge, with the ultimate goal of sharing it for the benefit of humanity. Yet how African universities generate knowledge has been based strongly on Western models handed down by omnipresent Western structures.

Nkosazana Dlamini-Zuma, chair of the African Union, affirms the role of universities in development and the building of knowledge economies. She purports that universities' role in development will support Africa's prosperity over the next fifty years. Dlamini-Zuma contends that '[t]he link between universities as producers, reproducers and disseminators of knowledge, and social and economic development, had been a consistent component of endogenous African development since the 1960s' (Makoni, 2014). According to Dlamini-Zuma, despite having more than 1,000 post-school and higher education institutions operating across the continent, Africa's footprint in global knowledge production remained negligible. The continent produced less than 1 per cent of science and technology journal articles published globally' (Makoni, 2014).

Drawing from African wells: Two historical challenges

If we are to heed the call of Dlamini-Zuma to draw from, develop, and utilize African knowledge in order to contribute to the development of the continent, it is necessary to consider the historical challenges in drawing from African knowledge wells, especially since these wells have been sabotaged by centuries of colonial subjugation. Two critical issues that require consideration in this regard relate firstly to the impact of indigenous language suppression and secondly to the displacement of people from their land and consequently the knowledge that was inextricably rooted in the land. Development education will lack authenticity and sincerity if the twin historical challenges addressed below are not adequately dealt with.

The challenge of language

With around 2,000 indigenous languages, which is almost a third of the world's total, Africa's languages reflect a magnificence of different cultures (Ministerial Committee, 2003: 7). In the face of centuries of unremitting indigenous language subjugation, there has been wave after wave of the renewed spirit of African people to break free from imposed hegemony and give voice to the quest for identity, contextual affirmation, and mother tongue distinctiveness. Even now we continue to hear the reverberation of African tongues as a tool for counter-hegemonic social transformation. While there are noble initiatives at preserving African languages, our celebration of African languages is tempered by the relentless bombardment of the forces of globalization on our local languages.

While Africa is a continent of a multitude of tongues, tribes, cultures, customs, and histories, the collective struggle of Africa's people has been concerned with the obstinate challenges resulting from a long history of imperial dominance. Centuries of African cultural and epistemological subjugation have conspired to silence entire language groups. Finnish sociolinguist Tové Skutnabb-Kangas hauntingly describes this sinister silencing as 'linguistic genocide' (cited in Alexander, 2003: 6). This linguistic genocide has had a palpable impact on indigenous knowledge systems.

According to the Ministerial Committee:

... languages in pre-colonial Africa were successful modes of communication for meeting the range of societal needs. As the sole mediums of socialization, indigenous languages coped more than adequately with facilitating communication about all relevant topics, not only internally within integral societies but also across the boundaries internal and external to the respective language communities. Traditional societies with their indigenous knowledge systems were able to accumulate knowledge and to interpret it across critical areas of knowledge, such as astronomy, medicine, philosophy and history, and then passed this knowledge on to subsequent generations through language.

(Ministerial Committee, 2003: 7)

Neville Alexander, a hero of the anti-apartheid struggle and one of South Africa's foremost scholars of language, illuminated the critical situation as follows:

... colonial conquest, imperialism and globalisation have established a hierarchy of standard languages, which mirrors the power relations on the planet. The overall effect of this configuration has been to hasten the extinction of innumerable language varieties and to stigmatise and marginalise all but the most powerful languages.

(Alexander, 2003: 5)

The language of Section 6 of the *Founding Provisions of the South African Constitution* recognizes 'the historically diminished use and status of the indigenous languages' and specifies that, 'the state must take practical and positive measures to elevate the status and advance the use of these languages' (Prah, 2006: 12). Despite this provision, just over two decades since the establishment of our democracy, we have witnessed further erosion of African languages.

Language is maintained as a tool of enrichment for the economic and cognitive elite who have unparalleled access to the global knowledge society. According to Alexander, 'The language(s) in which the major economic transactions of a society take place function like a key to power, money and status' (2003: 8). There *is* a decisive link between language, class, and economic benefit. Language has been, and continues to serve, as a power tool extraordinaire.

Craig Mackenzie expressed the continued marginalization of local languages in the new South African dispensation and with the advent of electronic communication (Mackenzie, 2012). In the digital age we are witnessing new sites of struggle in the indigenous language arena, particularly in cyber space. It is said that 'while humanity's main languages are now well served by ICTs, there are still thousands of languages in the world in which one cannot send an email or read a website' (Osborn, 2010: ix). How will we harness the digital revolution to ensure the preservation and dissemination of African language content (Mackenzie, 2012)? How will we ensure that African languages are included as languages of digital communication? We know about the role of ICTs in supporting economic development, but what about the role of ICTs in the advancement of indigenous languages? Extensive progress needs to be made in this area.

The challenge of land

The second challenge relates to the sore issue of land. Land is inextricably linked to knowledge. The net effect of the rampant greed and scramble for parts of Africa by legions of colonizers was to systematically strip people of their land, deny them basic human rights, adulterate and even obliterate indigenous knowledge, culture, and identity. Land appropriation systematically dispossessed people of their land and with it the indigenous knowledge that was intimately bound to the land. Aside from a dependence that people had on the land for their nourishment and sustenance, land

had a profound social, cultural, and spiritual significance. Land is intrinsically linked to the spirit, memory, history, and knowledge of people. The land connects peoples to their ancestors and shapes our identity. Pat Anderson persuasively articulated this bond between people and the land as follows:

Our identity as human beings remains tied to our land, to our cultural practices, our systems of authority and social control, our intellectual traditions, our concepts of spirituality, and to our systems of resource ownership and exchange. Destroy this relationship and you damage – sometimes irrevocably – individual human beings and their health.

(Anderson, n.d.)

A further powerful expression of this bond and the consequences of its destruction is evidenced in the following quote from the aboriginal community:

To understand our law, our culture and our relationship to the physical and spiritual world, you must begin with land ... Culture is the land, the land and spirituality of aboriginal people, our cultural beliefs or reason for existence is the land. You take that away and you take away our reason for existence. We have grown that land up. We are dancing, singing, and painting for the land. We are celebrating the land. Removed from our lands, we are literally removed from ourselves.

(Dodson, 2000)

In South Africa the destruction of this bond extended over and above the realm of the individual to impact entire groups of people. The erosion of the relationship between people and their land commenced even before the *1913 Natives Land Act* (Department of Rural Development and Land Reform, 2011) through successive waves of colonization that forcefully and ruthlessly turned indigenous people into strangers, servants, and slaves in their own land (Bell, 2013). The act became a tragic milestone in South African history since it facilitated the formalization of land dispossession and restricted ownership of land for the majority of the population, thereby laying the foundation for the apartheid policy of racial segregation (ibid.).

According to Ruth Hall and Lungisile Ntsebeza, white settlers in South Africa appropriated more than 90 per cent of the land surface under the Act (Hall and Ntsebeza, 2007: 3). The act irreversibly and relentlessly corroded the traditional lifestyles, livelihoods, knowledge systems, and cultural practices of entire communities. It bore enduring consequences, which as a matter of historical record, continue to impinge on the lives of South Africans who were victims of repression and land dispossession, and who still have to continue to suffer discrimination through disproportionate and marginal access to the economy.

Despite our deliverance from apartheid policy, we now witness new sites of land struggle. We hear the voices of the people who lament the sluggish pace of land reform. While attempts have been made to remedy the legacy, and some dispossessed communities have had reparation or the restoration of their land, much remains to be done. The patience of a restive populace has worn thin, and fertile ground has been created for populist leaders to exploit the situation and whip up a frenzy of passion on the unfulfilled aspirations of the masses.

Questions of land, equity, and justice are vital to discussions on inclusive human development. The issue of land has direct implications for the development of the country and the realization of social justice. Development education cannot afford to ignore the matter of land justice, since it is bound to the issue of cognitive justice.

Transformative action required for higher education in Africa

Against the backdrop of the challenges associated with drawing from African wells, it is clear that the development task of African universities is colossal. In South Africa the Education White Paper 3 of 1997 calls on higher education to contribute to the achievement of: 'political democratization, economic reconstruction and development, and redistributive social policies aimed at equity' (Minister of Education, 1997). Against this backdrop, it becomes crucial to recognize the *knowledge assets* of every society and work together to connect 'the forms of knowledge that societies already possess and the new forms of development ...' (UNESCO, 2005).

In order to turn this recognition from mere platitude to authentic practice, serious curriculum and teaching and learning reforms need to be undertaken. It will take audacious action to disrupt the comfortable hegemony of the Western canon and diminish the lingering consequences of colonial conquest. The drive to re-imagine and re-think the fundamentals of a dominant knowledge system, perhaps in the face of great resistance, is a mammoth undertaking. Among the priorities for transformative action are the following:

 Research and innovation are fundamental to the sustainable advancement of our continent and as such must become a national priority.² There is no doubt that investment in research and innovation is an incontestable component for the socio-economic progress of nations. Given the vast challenges we face on our continent, the careful understanding of local problems coupled with locally produced research findings that illuminate policy formation and contribute to nation-building become a critical undertaking. For this reason within the academy we need to support postgraduate studies that link African knowledge with African challenges. This support can begin by increasing the number of PhD studies and scientific articles published. We must also apprehend the competitive nature of research and learn to navigate the terrain vigorously and self-assuredly. As Benjamin W. Mkapa, the former president of Tanzania, suggests, 'Our universities must produce men and women willing to fight an intellectual battle for self-confidence and selfassertion as equal players in the emerging globalized world' (The Task Force on Higher Education and Society, 2000: 15). For this reason, collaboration with communities, thought leaders, practitioners, academics, and students is vitally necessary for the nurturing of a thriving intellectual community towards the goal of Earth-centred development (with attention to human, economic, and ecological development) and knowledge production.

- 2. We must become alert to the present pressures on indigenous knowledge systems (IKS). According to Goolam Mohamedbhai, there are three primary threats (Mohamedbhai, 2013). First, due to the largely oral nature of indigenous knowledge the older-generation custodians and bearers of indigenous knowledge find difficulty in communicating their beliefs and practices to a younger 'scientifically educated' generation. The death of the older generation will therefore result in the tragic loss of the valuable, irreplaceable indigenous knowledge. Second, Mohamedbhai notes that there is 'still reticence in the use of IKS, which is considered anecdotal and not scientific, in the development process' (ibid.). Finally, he cautions that unless it is 'protected, documented, studied, modified if necessary and then widely disseminated to promote development,' IKS in Africa will be wiped out due to the rapid changes resulting from imported economic, cultural, and political development models brought about by globalization (ibid.).
- 3. In the light of these threats we must lend our efforts to reviewing and revitalizing the local and regional indigenous knowledge and innovation systems and find relevant niche areas. In strategic planning initiatives it is necessary to promote and increase IKS research and development capacity. Further to this a comprehensive policy for indigenous knowledge is required. We must use research to ground advocacy efforts towards the goal of comprehensive and inclusive policies and provisioning that defend IKS thereby averting exploitation, duplicitous misappropriation, and abuse. In this regard, chapter four of South Africa's recent 'Protection, Promotion, Development and Management of Indigenous Knowledge Systems Bill' has helpfully attempted to outline the scope, eligibility criteria, terms of protection, and beneficiaries of rights pertaining to indigenous knowledge systems protection (Minister of Science and Technology, 2015).
- 4. We must also advocate greater spending on indigenous knowledge research in national and institutional budgets. In addition to this, robust discussions

concerning intellectual property rights and compensation for indigenous knowledge workers and experts are necessary (Emeagwali, 2003).

- 5. We require discourse, consciousness, and action that will authentically draw from the laboratories of African life into the laboratories of science. It is necessary to explore the characteristics of grass-roots innovative thinking and behaviour and to determine the consciousness needed for the creation of laboratories of life. The dividing walls between the laboratories of science and African life must be broken and ways to amplify African communities' share of innovation must be sought. We must support development thinking among African communities and showcase community innovation on the national and international stages.
- 6. Development education on the continent cannot be fuelled by policy alone, but must be accompanied by a zeal and commitment for justice. In the African development context, scholarship must be complemented by revolutionary activism. José Medina articulates the significant role of the scholar in the insurrection of subjugated knowledge. It is worth quoting Medina in detail:

The critical task of the scholar and the activist is to resurrect subjugated knowledges – that is, to revive hidden or forgotten bodies of experiences and memories – and to help produce insurrections of subjugated knowledges. ... An epistemic insurrection requires a collaborative relation between genealogical scholars/activists and the subjects whose experiences and memories have been subjugated: those subjects by themselves may not be able to destabilise the epistemic status quo until they are given a voice at the epistemic table (i.e. in the production of knowledge), that is, until room is made for the marginalized perspective to exert resistance, until past epistemic battles are reopened and established frameworks become open to contestation.

(Medina, 2011: 11)

- 7. As we continue the tradition of collaborative practice, we can contribute to building a sustainable future for the local and global communities we serve. It is necessary to nurture confident scholars who can draw from and critically explore indigenous knowledge while appreciating the capability to live and flourish in a world with cognitive and cultural plurality. Our researchers and students must therefore have a critical understanding of their context with its historical particularities, knowledge systems, challenges, and change agency.
- 8. Transformative action is required in the arena of education technology and ICT (Baijnath and James, 2014). In order to explore this new site of struggle authentically, we need to consider the localization of ICTs strongly.

Localization 'includes the translation and cultural adaptation of user interfaces and software applications, as well as the creation of internet content in diverse languages and the translation of content from other languages' (Osborn, 2010: 1). On the continent, localization is vital in order to increase accessibility to emerging ICTs, ensure the relevance of ICTs to the needs and aspirations of African users, and bridge the 'digital divide' by providing rich local content in indigenous languages (ibid.).

- 9. African universities must endeavour to reflect the linguistic, cultural, and ideological diversity and complexity of the continent and its epistemologies. The illustrious sites of higher education are in danger of becoming irrelevant if we remain disconnected from local languages, identities, and realities. Africa has a treasure of indigenous knowledge that has yet to be appreciated and celebrated. Universities across Africa can work to create innovative solutions for the preservation, promotion, development, and nurturing of African languages, and to inform indigenous knowledge policy provision and development education.
- 10. Yusef Waghid asserts that 'students should abandon the expectation that prescribed texts and course readings are the *master* texts' (Nakusera, 2004: 134).³ Clearly there are burgeoning alternative pathways to learning, and a proliferation of learning resources and content that we must capitalize upon and contribute to. We must also be alert to the danger that by being too parochial in our thinking, we may be blind to the revolution that is under way in the open educational resource movement. Like the African Commons Project, we need to understand local implications of open access in terms of the production, publication, and consumption of academic resources and research activities. It is critical that we empower communities through access to global and African commons. The University of South Africa (Unisa), for example, has worked to participate in the Open Education Resource (OER) movement by becoming a founding anchor partner in the OER University initiative, and approved its own OER strategy in 2014 (De Hart, 2014). The institution has also launched the Unisa Open portal to showcase its own OER offerings and support staff in finding and employing OERs in curriculum development, materials development, sharing good practice, and free and open resources through creative commons licences.

Conclusion

In managing our presence locally and globally, African universities would do well to avoid the temptation to create inbred knowledge empires or to gain dominance. We understand that the increasingly commercial presence of universities in the world masks the tension between the pursuits of knowledge on the one hand as a noble endeavour to advance the frontiers of knowledge, develop a critical citizenry, and realize individual talent and capability; and on the other, the crass commercialization of knowledge. In an environment of extreme competition, cross-border education, and internationalization, African values of community and sharing must not give way. It is for this reason that our foremost priority springs from our impulse towards social justice. We are well aware that social justice cannot be attained without cognitive justice. As a continent that prides itself in overcoming exclusion and segregation for a new era of inclusion and integration, we will not realize the fullness of justice until we escape the entrenched notions of Western cognitive superiority in higher education. We must therefore hold confidence in African solutions to historical and structural problems.

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Notes

1 'Born frees' refer to South Africans who were born after 1994, the first year of our democracy.

2 We discuss this point in detail in Baijnath and James (2014).

3 Nakusera is here quoting Waghid.

References

African Commons Project. Online. www.africancommons.org (accessed 5 August 2015).

Alexander, N. (2003) 'The African renaissance and the use of African languages in tertiary education'. PRAESA Occasional Papers No. 13. Cape Town: PRAESA. Online. http://to.ly/TTz7 (accessed 4 August 2015).

Anderson, P. (n.d.) 'Our identity as human beings remains tied to our land'. Indigiquotes website. Online. http:// to.ly/TUjA (accessed 4 August 2015).

Arthur, L., and Little, B. (2010) 'The REFLEX study: Exploring graduates' views on the relationship between higher education and employment'. Online. http://to.ly/TWkn (accessed 5 August 2015).

Baijnath, N., and James, G. (2014) 'Transforming development: A view from the south'. In Larsen, K.E., and Jørgensen, K. (eds) *Power and Partnership*. Oxford: Regnum, 29–49.

Bell, C. (2013) 'Apartheid's roots: The Natives Land Act'. Online. www.bbc.co.uk/history/0/22786616 (accessed 4 August 2015).

Chinnammai, S. (2005) 'Effects of globalisation on education and culture'. Paper presented at ICDE International Conference, New Delhi, 19–23 November. Online. http://to.ly/TWkL (accessed 5 August 2015).

De Hart, K. (2014) (compiler) *Open Education Resources (OER) Strategy 2014–2016*. University of South Africa. Online. http://to.ly/TWj8 (accessed 5 August 2015).

Department of Rural Development and Land Reform (2011) 'Green paper on land reform'. *Government Gazette*, 30 September, 34656. Online. http://to.ly/TUm7 (accessed 4 August 2015).

Dodson, M. (2000) 'Art, land and the dreaming'. Online. www.aboriginalartonline.com/culture/land.php (accessed 4 August 2015).

Emeagwali, G. (2003) 'African indigenous knowledge systems (AIK): Implications for the curriculum'. In Falola, T. (ed.) *Ghana in Africa and the World: Essays in honor of Adu Boahen*. Trenton, NJ: Africa World Press. Online. www.africahistory.net/AIK.htm (accessed 5 August 2015).

Ferguson, N. (2011) 'Why the West is now in decline'. *Daily Telegraph*, 6 March. Online. http://to.ly/TWmc (accessed 4 August 2015).

Hall, R., and Ntsebeza, L. (eds) (2007) *The Land Question in South Africa: The challenge of transformation and redistribution.* Cape Town: HSRC. Online. http://to.ly/TUvX (accessed 4 August 2015).

Mackenzie, C. (2012) 'Surf the global tide in language and survive'. *Mail and Guardian*, 24 August. Online. http://to.ly/TUaK (accessed 4 August 2015).

Makoni, M. (2014) 'Research universities to shape Africa's future success'. *University World News*, 25 April, 317. Online. http://to.ly/TTmd (accessed 4 August 2015).

Medina, J. (2011) 'Toward a Foucaultian epistemology of resistance: Counter-memory, epistemic friction, and guerrilla pluralism'. *Foucault Studies*, 12, 9–35. Online. http://to.ly/TW7q (accessed 5 August 2015).

Minister of Education (1997) 'Education White Paper 3: Programme for the transformation of higher education'. *Government Gazette*, 15 August, 18207. Online. http://to.ly/TUyp (accessed 4 August 2015).

Minister of Science and Technology (2015) 'Protection, Promotion, Development and Management of Indigenous Knowledge Systems Bill, 2014'. *Government Gazette*, 20 March, 38574. Online. http://to.ly/TW2N (accessed 5 August 2015).

Ministerial Committee (2003) 'The development of indigenous African languages as mediums of instruction in higher education'. Online. http://to.ly/TTxc (accessed 4 August 2015).

Mohamedbhai, G. (2013) 'Indigenous knowledge must be harvested for development'. *University World News*, 9 March, 262. Online. http://to.ly/TUN3 (accessed 4 August 2015).

Nakusera, E. (2004) 'Rethinking higher education transformation in terms of an African(a) philosophy of education'. *South African Journal of Higher Education*, 18 (3), 127–37.

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Odora Hoppers, C. and Richards, H. (2012) *Rethinking Thinking: Modernity's 'other' and the transformation of the university*. Pretoria: University of South Africa Press.

Osborn, D. (2010) African Languages in a Digital Age: Challenges and opportunities for indigenous language computing. Cape Town: HSRC Press. Online. http://to.ly/TTOG (accessed 4 August 2015).

Prah, K.K. (2006) 'Challenges to the promotion of indigenous languages in South Africa'. Cape Town: The Centre for Advanced Studies of African Society. Online. http://to.ly/TTNc (accessed 4 August 2015).

Royal Society (2011) *Knowledge, Networks and Nations: Global scientific collaboration in the 21st century.* London: Royal Society. Online. http://to.ly/TWnb (accessed 4 August 2015).

The Task Force on Higher Education and Society (2000) *Higher Education in Developing Countries: Peril and promise*. Washington, DC: The International Bank for Reconstruction and Development. Online. http://to.ly/TUIh (accessed 4 August 2015).

UNESCO (2005) Towards Knowledge Societies. Online. http://to.ly/TUzU (accessed 4 August 2015).

Van der Velden, M. (2006) 'A case for cognitive justice'. Unpublished paper. Online. www.globalagenda.org/ file/24 (accessed 5 August 2015).