Linguistic Rights and Conceptual Incarceration in African Education

Sam Mchombo

Abstract
In 2014 the cultural agency of the United Nations issued a dismal assessment of education in Africa. The report noted that while, globally, a quarter of a billion children are failing to learn basic reading and math skills, resulting in an education crisis that costs governments $129 billion per year, the situation in Africa could only be described as catastrophic. Education on this continent had failed so miserably in its mission that ‘four in 10 African children “cannot read a sentence”’ (cited in Daily Nation 2014: 1). This equates to 40% of children, compared to 25% in other poor countries. The report attributed this situation to the fact that ‘fewer than three-quarters of existing primary school teachers were trained to national standards, while 120 million primary age

---

1 This paper was prepared as an invited keynote presentation in the Language Panel at the 10th Annual Conference on Teaching and Learning in Higher Education, University of KwaZulu-Natal, South Africa, 20-22 September, 2016. I thank Zehlia Babaci-Wilhite, Herman Batibo, Hatem A. Bazian, Langa Khumalo, Patricia Kwok, and David Kyeu, for comments. I am grateful to Jarvis Givens, Jessie Kabwila, Monica Kahumburu, William Kamkwamba, Pascal Kishindo, Wokomaatani Malunga, Francis Moto, Thoko Mchona, Al Mtenje, John Mugane, Deo Ngonyani, and Matthews Sapemba Tisatayane, for discussions. Thanks to Judith Khaya and Renée Khaya for comments on education in Malawi. All views expressed are my own. In American Canyon, California, Flora Suya provided emotional support; Collin Domingo, José Flores, Savannah Garcia, Carole Lonzanida, Nicolas Rapacon, Scott Turnnidge, Teri Urrutia, and Vilma Wakin have always offered cheer when I needed friends.
children across the world had little or no experience of school.’ It concluded that the African education system does not equip the children with the desired literacy and math skills or scientific knowledge. However, it is silent on the role that language might play in attaining these goals and a well-rounded education. The operative assumption is that African education is delivered in ex-colonial languages due to their centrality to math, science, and technology. This article focuses on the fallacies behind such an assumption and argues that the retention and entrenchment of European languages as languages of instruction serve to solidify the ‘conceptual-cum-linguistic incarceration’ of African education.

**Keywords:** language of instruction; colonial education; context of education; culture and identity; science and math education; rights in education; vernacular languages; globalisation

**Introduction**

Knowledge and the use of natural language is a uniquely human endowment in that people are the only creatures endowed with the cognitive structures or neural mechanisms involved in language (cf. Chomsky 1993). Ordinarily, language, that facilitates the transmission of knowledge and culture, is manifested through speech. Education, involved in citizenship training, imparting morals, practical skills, cultural or religious practices, intellectual development, etc., is conducted through the vehicle of language.

With oral knowledge, innovations are integrated into the knowledge repository and are modified as conditions change. There are no recognised authors and knowledge preservation depends on oral transmission to younger generations.

The oral tradition that requires personal interaction to exchange information tends to deal with the current, inevitably informed by the past. Crucially, the knowledge remains ‘local’, only spreading through migration or ‘missionary’ ventures. It is thus no surprise that education based on orally transmitted knowledge remains embedded within the context of the culture.

This article argues for a valorisation of educational programmes that utilise local African languages as languages of instruction (LoI), with an emphasis on math and science education.
Linguistic Rights and Conceptual Incarceration in African Education

Literacy and Knowledge Preservation
The advent of writing systems radically altered the creation, preservation, and transmission of knowledge. The invention of writing systems facilitated the representation of language in a medium that profoundly affected aspects of culture and communication, eliminating dependence on individual memory. Florian Coulmans quoted in Connor-Linton (2006), noted that writing was probably ‘the single most consequential technology ever invented…Writing not only offers ways of reclaiming the past, but is a critical skill for shaping the future’ (Connor-Linton 2006: 403).

The cultural changes ushered in by writing systems included the elimination of proximity or physical contact between the author and the audience. The written text cannot be modified based on readers’ reactions. Once a text is written and formally or informally disseminated, it is fixed. In addition, since the writer works in relative isolation without the benefit of immediate feedback from a participating audience, he/she depends on language and other literary devices to convey the totality of the meaning.

Writing was a social skill that eventually became definitional of the concept of ‘literacy’. While every society has a spoken language, only some had their languages reduced to written form. Speech is part of the biological endowment of humans, a human birthright. On the other hand, writing is a social skill rather than a biological attribute. As such ‘every normally developed person in a society that uses writing learns to speak, but not all learn to read and write’ (ibid: 402). The centrality of reading and writing to literacy profoundly shaped the concept of ‘education’ that became a programme of knowledge acquisition in diverse disciplines codified in written form (cf. Mchombo 2014). The central role of literacy in education unwittingly contributed to a negative evaluation of African Indigenous Knowledge Systems (AIKS), or Traditional Knowledge (TK), and of African languages. This arose from its predominance in colonialist education in Africa, focused on imperialist domination.

Literacy and the power relations of colonialism endemic in ‘formal’ education, very quickly relegated the oral tradition to the status of inferior or, worse still, non-existent knowledge and intruded in the characterisation of the notions of ‘language’ and ‘literature’. Language was viewed as ‘national’ while dialect is ‘local’. Furthermore, language was defined as ‘the standard, written form; dialect as the nonstandard, substandard, or unwritten form’
Sam Mchombo

(Nurse & Hinnebusch 1993: 37). This characterisation degrades unwritten (or recently written) languages as ‘less’ than languages, mere ‘dialects’, a term imbued with connotations of lack of political and/or economic empowerment, or intellectual acuity. The less charitable construal of the term ‘dialect’ projects it as denoting ‘primitive’ systems of communication that are totally lacking in grammar (cf. July 1992). The written tradition also influenced the notion of ‘literature’, characterized as ‘1 The body of written works of a language, period, or culture. 2. Imaginative or creative writing, especially of a recognized artistic value. 3. The art or occupation of a literary writer. 4. The body of written work produced by scholars or researchers in a given field’ (The American Heritage Dictionary of the English Language, 4th edition: 1022)

These characterisations undermined the recognition of African languages as ‘languages’ or of oral literature as ‘literature’. The racist attitudes that accompanied colonialism and imperialism aggravated the situation.

Furthermore, the written medium was credited with being the primary driving force behind Western civilization. Biakolo claims that Western civilization:

... owes its origin to writing. With the Greek invention of the alphabet, the organization of knowledge was radically transformed. In oral cultures, the poets, sages, and thinkers depend on poetic rhythm and narrative structure to ensure the remembrance of past utterances. With the introduction of writing, this mnemonic function is most effectively served by the medium itself, making the storage and retrieval of knowledge so much easier (Biakolo 2003: 14).

With this medium communication underwent a paradigmatic shift from a ‘time-oriented focus of communicative consciousness to a space-oriented one. Even more importantly perhaps, there was a change in the style of knowledge presentation resulting in a dominance of discourses that were more and more definitional, descriptive, and analytical’ (ibid.). Western science and philosophy owes its genesis to this medium. Biakolo quotes Havelock as stating that ‘without modern literacy, which means Greek literacy, we would not have science, philosophy, written law or literature, nor the automobile or the airplane’ (ibid).

Philosophy gained prominence through writing because, ostensibly, all elaborate, linear, so-called ‘logical’ explanation depends on writing. This
is not readily achievable in the oral tradition. In oral cultures a person might be wise or endowed with great capacity to provide some explanation of things, but ‘the elaborate, intricate, seemingly endless but exact cause-effect sequences required by what we call philosophy and by extended scientific thinking are unknown among oral peoples, including the early Greeks before their development of the first vocalic alphabet’ (Ong 1986: 42). Thus, the technology of writing came to exert powerful shifts on conceptions of language, literature and, especially, scientific knowledge.

**Conceptual Incarceration of African Education**

The centrality of literacy to colonialist inspired education translated into acquisition of Western knowledge systems dutifully recorded in the colonialists’ languages. The knowledge represented colonialists’ history, systems of government, culture, science, beliefs, etc., and was identified with intelligence and civilization. Combined with ‘the premise of a superior race and the premise of a superior culture’ that undergirded ‘European arrogance’ (Mazrui & Mazrui 1998: 14), the ‘context of learning’ was decidedly non-African. Education so enhanced and maintained power relations that it became the most powerful weapon to suppress African values. Thus, education cannot be distinguished from politics (cf. Freire 1970, 1998). In Africa, it was central to European domination of Africans and, ‘… colonization by Europeans destroyed much of … indigenous knowledge and replaced it with the European educational and political system that consequently devalued what was left of it’ (Iaccarino 2003: 4). This devaluation of AIKS contributed to the view that African peoples had no science (see Maddock 1981). Elliot (2009), quoting Peat (2002), comments that, ‘a dominant society denies the authenticity of other people’s systems of knowledge’ (Elliot 2009: 285). In Africa, as elsewhere, the reality is that ‘…indigenous languages, knowledges and cultures have been silenced or misrepresented, ridiculed or condemned in academic and popular discourses’ (Tuhiwai-Smith 2012: 21).

The emphasis on Western knowledge systems under the guidance of European teachers or ‘appropriately’ trained Africans, made African education Eurocentric in content and language as well as elitist, training those who would eventually assume the reins of power in independent Africa (cf. Bunyi 2008). This paralleled the education of African Americans who were forced to:
adopt the European cultural heritage that dominates the educational milieu and thereby abandon their own cultural ties. Inevitably, as African Americans began to separate from their cultural tradition and assimilate into the dominant culture, they lost a degree of cultural identity and unity (Hill 1993: 682).

It gives rise to the general perception that public education in the United States embodies the dominant systems that~:

… have overwhelmingly supported the ideals and goals of white supremacy and are not arbitrary; they have been strategically crafted and executed. Schooling systems have functioned as channels through which members of the African Diaspora could be inundated with ideology that would stunt their political, economic, and social progress; thus, supporting the goals of white supremacy (Givens 2015: 1).

This constitutes the crux of Wade Nobles’ (1986) notion of ‘conceptual incarceration’ that denotes ‘the state of intellectual imprisonment in European value and belief systems occasioned by ignorance of African and Native American philosophical, cultural and historical truths’ (Hotep 2003: 6). The elite that emerged from African education were victims of such cognitive incarceration. They assimilated European values, with corresponding alienation from their own culture and knowledge systems.

**On Linguistic Incarceration in African Education**

African languages and culture were deemed deficient in the linguistic resources requisite for the codification of, especially, scientific knowledge. When their existence was acknowledged at all, TK systems were relegated to the non-scientific, pre-logical or superstition.

The language of instruction is significant because it directly impacts the degree of comprehension of the material learned, and incorporates cultural information. The sad commentary on African education is that ‘there are pronounced incongruities between the language the child understands, the language of the parent, and the language of schooling. Often the language of the child is also different from that of the teacher and both do not have
command of the language of instruction’ (Mugane 2006: 14). Proscription of the child’s first language in favour of an unfamiliar one reduces learning to rote memorisation, with minimal comprehension. Mugane refers to the non-use of the child’s first language as ‘linguistic incarceration’, an echo of Nobles’ ‘conceptual incarceration’. Mugane observes that the ‘first language of the child is incarcerated, reducing education to the pursuit of fluency in English mediated by markedly non-proficient instructors’. In brief, African education provided the forum for the dominance and spread of European knowledge systems and languages. It was appropriately sanitised as a civilizing programme. In 1897, Senegalese Governor General Chaudié had this to say concerning a French education:

The school is the surest means of action by which a civilizing nation can transmit its ideas to people who are still primitive and by which it can raise them gradually to its own standards. In a word, the school is the supreme element of progress. It is also the most effective tool of propaganda for the French language that the Government can use (Crowder 1962, cited in Mchombo 2017: 184).

The Eurocentric curricula of Africa’s education, together with the use of European languages for instruction, effectively incarcerated the African student both cognitively and linguistically.

Post-independent Africa inherited this educational system and various countries’ educational and language policies have virtually maintained it. Bamgbose termed this the ‘inheritance situation’, the retention of policies that have to do with ‘...how the colonial experience continues to shape and define post-colonial problems and practices’ (Bamgbose 1991: 69). In the case of language in education policies, Bamgbose states the obvious fact that ‘...all former British colonies have English, all former French and Belgian colonies have French, all former Portuguese colonies have Portuguese and the only former Spanish colony has Spanish’ (ibid.)

**Language and Rights in Education**

The ‘inheritance problem’ did not entirely undercut efforts to review the content of African education. As the political objectives of nation building,
national unity, and cultivation of national identity gained ascendancy in independent African countries, the question of national language(s) and/or LoIs in schools came under review. The first president of Tanzania, the late Mwalimu Julius Nyerere, formerly a teacher himself, proposed ‘Education for Self-Reliance’ (*Elimu ya Kujitegemea*) (Nyerere 1968). A crucial aspect of the programme was the introduction of Kiswahili, the main language of the country, as the country’s national and official language and as the LoI in schools. The programme included revision of the content of education to include the nation’s political ideology of Ujamaa (African socialism). Thus, Tanzania is an example of a country adopting one language, Kiswahili, not merely as a national and official language, but also as the LoI in primary schools (cf. Mchombo 2014; Rugemalira *et al.* 1990). The changing fortunes of the policy have to do with the politics of aid from international organisations such as the International Monetary Fund (IMF), the World Bank, or the former colonial regimes and more industrialised nations, the core countries that effectively place African countries on the periphery (cf. Mazrui 1997; Phillipson 1992). Dependence has impacted policies on language in education. Political will is also required to drive the policy (cf. Ngonyani 1995). At the opposite extreme is the case of countries where ex-colonial languages remain official-cum-national languages and LoIs, as is the case with Portuguese in Mozambique (cf. Firmino 1995; Henriksen 2010).

While catering to African children on African soil, colonial education practically excluded connections with African culture, epistemology, history, and beliefs, as well as African languages, insulating it from the cultural context. It effectively constituted the domain for indoctrination of, and conversion to, Western knowledge systems and values, all delivered in European languages.

Furthermore, the exclusion of local languages in the curriculum or the school environment that required children to adjust to instruction and communication in foreign languages constituted denial of a basic human right (cf. Kiramba 2017; Ngugi 1986). UNESCO enunciated this right categorically:

> We take it as axiomatic that every child of school age should attend school and that every illiterate should be made literate. We take it as axiomatic, too, that the best medium for teaching is the mother tongue of the pupil (UNESCO 1953: 6).
More than 60 years later, this right appears to be accorded minimal, if any, recognition in the conduct of education in many erstwhile colonised countries where, by and large, it is not even part of common knowledge.

The non-use of African languages in education subjects the child to the twin disadvantages of mastering foreign knowledge while, simultaneously, trying to understand the foreign language in which it is delivered. This is a denial of rights in education (cf. Babaci-Wilhite 2014). A report by the UN cultural agency in 2014 on dismal literacy rates in African education noted that, ‘four in 10 African children ‘cannot read a sentence’ (cited in Daily Nation 2014: 1). However, it was notably silent on the languages in which sentences are written. Clearly, the report’s unstated, but understood claim is that the children cannot read sentences in European languages, especially English.

African education continues to strengthen the use of European languages, especially English because of their presumed relevance to science, technology, and modernisation. This bestows economic value on ex-colonial languages, especially English, since they are viewed as necessary for gainful employment. However, this reasoning is fallacious considering that ‘…there is little empirical evidence demonstrating that English-language teaching brings any benefits or is cost-effective in developing countries’ (Coleman 2011: 15). Nonetheless, policy makers valorise it as the LoI because ‘globalisation’ and ‘competitiveness’ are identified with knowledge of English.²

The Republic of Malawi provides an apt example. The perennial under-performance of school children is blamed on poor standards of English. To improve results, in 2014 the Ministry of Education resolved to make English the LoI from Grade 1. Making the announcement, the then Minister of Education, Dr Lucius Kanyumba, claimed that this would be in line with ‘a

² Langa Khumalo (p.c.) remarked on the complexity of the problem. He observed that (i) African governments (viewed as liberation movements) that took over from colonial settlers, have largely maintained the colonial linguistic status quo; (ii) their governments have failed to wean themselves from foreign funding with their fiscal activities largely dependent on the erstwhile colonisers; (iii) they are themselves largely contemptuous of African languages, thereby perpetuating the fallacy that African languages are devoid of logic or science.
new Education Act which will see pupils being taught in English right away from Standard 1’ (Nyasa Times 2014: 2). The objective was to ensure better performance in math, science, and technology. Strictly speaking, the country’s Education Act did not articulate anything novel. Education has traditionally been delivered using English as medium of instruction, with even greater emphasis on its use in official settings. The use of Chichewa, the main local language, as the medium of instruction, let alone in government or official duties, was either proscribed, certainly in parliament (cf. Matiki 2002; Mtenje 2002) or muted.

The prevalent view of African languages is that they are not suited for scientific discourse with all the mathematical concepts and calculations or logical inferences involved in its formulation. This is curious, since it is unclear ‘…where the belief that science is better learnt in English than in other languages originates. While it is a belief one often comes across in Africa, the claim seems so unsubstantiated’ (Brock-Utne 2012: 9).

Language and Power in Math/Science Education
In 2014, the Ministry of Education in Kenya decided to enforce the language policy that had been in place for three decades that children in lower primary schools be taught in a mother tongue (Daily Nation 2014a). The rationale was as much political as it was pragmatic (cf. Babaci-Wilhite 2013, 2014; Babaci-Wilhite & Geo-JaJa 2014; Brock-Utne 2007; Prah 2008). The pragmatism was that it would contribute to improvement in educational achievement and cultural preservation. Mother tongues contribute to the maintenance of children’s cultural grounding. A strong argument in support of using the vernacular or a community’s own language in the educational system is that:

It provides a means by which the linguistic and cultural wealth of the community can play an essential role in the formal education of its children, thereby enabling knowledgeable members of the community to participate in ways which might not otherwise be open to them (Hale 1974: 3).

Besides, educating children in a language they do not understand results in poor outcomes (cf. Romaine 2015).
The then Cabinet Secretary of Education in Kenya, Professor Jacob Kaimenyi, cited these points to support his call for the implementation of mother-tongue education in lower primary grades, noting that ‘the use of local languages in the formative stages of child development was critical and had scientifically been proven to be productive’ (Daily Nation 2014b: 1).

Despite all these considerations, the directive faced opposition, primarily from teachers. The arguments ranged over the usual terrain of lack of instructional materials in local languages, to the lack of qualified teachers, and the perennial argument about exacerbating ethnic divisions and thereby undermining the political goal of national identity and unity. Furthermore, the policy was criticised for being myopic or retrogressive in that it failed to factor in the knowledge required for economic and technological advancement in the 21st century, etc. (cf. Gacheche 2010; Kioko & Muthwii 2001 for more general observations).

The last point constitutes the main objection to mother tongue education in Africa, viz., that it would undermine efforts to impart or acquire knowledge in math and science, with negative effects on development. Indeed, in Zanzibar, one of the countries that promoted the use of Kiswahili as the LoI in primary education as its population is monolingual in that language, a new Education and Training policy was introduced to ‘increase the use of English and change the language of instruction in science and mathematics’ (Babaci-Wilhite 2012: 17). As noted by Babaci-Wilhite:

The pressure to use English in mathematics and science subjects is a reflection of how much attention those subjects are now receiving in the international sphere, and how nations are struggling to balance their desire to gird students for the global job market against issues of national pride and the desire to preserve and promote the use of a local language (ibid: 28).

This statement outweighs nationalistic sentimentality about using local languages as LoIs (cf. Neke 2003).

Students’ performance in math and science remains largely dismal. This should provide impetus for a continued search for more credible solutions including the role of language (cf. Mazrui 2004). Math and science will continue to dominate views on development, industrialisation, etc., and English remains the language of globalisation. What is not self-evident is the
utility of teaching math and science, and much else, in English or, conversely, of ‘bludgeoning of indigenous African languages from the education system’ (Mugane 2006: 13), based on their presumed inferiority and inability to articulate concepts and theories in science and math, a bizarre viewpoint at best. What is its basis?

Math and Science as Culture-independent Knowledge
Science and math, as well as logic, are intertwined, sharing the aura of being culture-free, objective, and universal. Science traverses cultural and national borders and seeks universal truths using unique methods that, ostensibly, are not shackled to any culture-specific beliefs or practices. The scientific enterprise is, ostensibly, concerned with ‘a search for explanatory laws or principles’ that have the unique property of being ‘testable (or “refutable” or “falsifiable”) predictions’ (Smith 2005: 31). Scientific hypotheses or theories are rooted in, and supported by, empirical data that is, putatively, publicly accessible. In other words, science thrives on the formulation of claims, hypotheses, theories, etc. that are supported by reasons or empirical data, and are susceptible to refutation.

Logic, science and, especially, mathematics, are routinely equated with profound thinking and reasoning. In general, math is accorded more culture-free knowledge than science because its statements are assumedly universally true (cf. Bishop 1990).

Granting science and math those qualities does not constitute a basis for the preference of one language over another for their instruction. Technical vocabulary is associated with the scientific enterprise or mathematical reasoning and ‘English has acquired the summit position as the language of choice for communication…in Science’ (Mishra 2009). Such technical language abstracts from ordinary language to reduce the ambiguities or vagueness that are rampant in the latter. Symbolic notation may be deployed for representation of concepts and ‘…symbolic systems created in scientific enterprise differ radically from natural languages in their fundamental formal properties, as in their semantic properties, it appears. To call them ‘language’ is simply to adopt a metaphor’ (Chomsky 1993: 29).

Symbolic systems are elucidated and communicated in ordinary language and are hence expressible in all languages. Put bluntly, the prevalence of English in science and math education has less to do with the
intrinsic aspects of science and math or those of the African linguistic structure and more to do with power or prejudice.

Advocates of the use of African languages in science and math education normally appeal to the translatability or adaptability of scientific vocabulary (cf. Rugemalira et al. 1990). This response evades doubts about the translatability of scientific concepts into African languages. Dalvit, Murray & Terzoli, citing others, note that the African linguistic structure might pose difficulties for science education. It is claimed that:

African languages make little use of logical connectives, which are a common feature of scientific writing. African languages do not use the English articles ‘the’ and ‘a’, hence ‘copper is a metal which conducts electricity’ and ‘copper is the metal which conducts electricity’ could cause confusion when written in an African language (Grayson, cited in Finlayson & Madiba 2002: 48). (Davit, Murray & Terzoli 2009: 41).

Thus, African languages, that lack definite/indefinite determiners comparable to those in English, and make ‘little use of logical connectives, which are common to scientific writing,’ (ibid.) are not ideal for science education. When one considers the ‘objectivity’ and ‘universality’ of the knowledge embodied in science, the inexorable conclusion is that African languages are inherently inadequate to express universal or objective knowledge and hence cannot express ‘explanatory principles’. Policy makers can, therefore, be excused for resorting to further marginalisation of African languages in education.

In reality, the emergent language policies derive from politics and economic dependency. Their political nature is exemplified by recent uproar about the use of Afrikaans as a LoI in South Africa. When demands were made in 2015 to eliminate Afrikaans as a language of instruction at Stellenbosch University the arguments did not invoke the alleged grammatical or lexical deficiencies of the language in expressing science or technology concepts (BBC News 2015: 1). Rather, they were presented as a crucial ‘…part of a movement to “decolonize” higher education’. Afrikaans was difficult for non-native speakers to learn and understand as a LoI through which to acquire content. Technically, the argument was disingenuous given that the use of non-indigenous languages as LoIs is standard practice in African education (cf. Mchombo 2017). The problem with Afrikaans was political; it is mired in the
racism and politics of exploitation, dehumanisation, and domination of the apartheid era. Stellenbosch University was criticised for remaining ‘…a little enclave protecting the interests of the architects of apartheid - and by extension the language of the oppressor, Afrikaans’ (ibid.).

In June 2016, the issue of Afrikaans as a LoI arose at another South African university. A commentator on local TV defended its retention by invoking linguistic rights; its elimination would violate the rights of some students to receive education in their mother tongue. While this is a laudable point, this right is routinely violated when it comes to investment in African languages of non-European origin, except when it suited the politics of inequality and exploitation.

Science Education and Vernacular Languages
Bishop (1990) expresses doubts about the cultural independence of math and science, pointing out that, as a subject domain, science or mathematics is not acultural, without context or purpose, including the political. The reality is that mathematics is a discipline that has thrived within some cultural contexts and mathematics education is no different from other societal contexts characterised by power relations. As such, they are components of epistemologies of societies, theories of knowledge that make basic claims about the nature of knowledge, who can know, what we can know; epistemologies that are ‘…situated within political, historical, and economic contexts that can provide power and legitimacy to their knowledge claims’ (Hunter 2002: 120).

The power relations inherent in science are masked through its treatment as comprising ‘objective’ knowledge. Feyerabend noted that:

*The idea of objectivity*, however, is older than science and independent of it. It arose when a nation or a tribe or a civilization identified its ways of life with the laws of the (physical and moral) universe and it became apparent when different cultures with different objective views confronted each other (Feyerabend 1987: 5).

In brief, claims of objectivity are basically political statements about the values of those who dominate others. Science fits into that paradigm. It is not value-free, but embedded in the value system of a particular cultural milieu, viz., that
of white middle-class males that, in the name of objectivity and value-neutrality, can impose its ideology on society, perpetuating ‘racist’ assumptions about the agents of knowledge production and of legitimate knowledge. In the cultural invasion that characterised colonialism, education was a crucial component:

… promoting western mathematical ideas and, thereby, western culture. In most colonial societies, the imposed education functioned at two levels, mirroring what existed in the European country concerned … [and] … in some of the mission schools and in the later years of colonialism when elementary schooling began to be taken more seriously, it was, of course, the European content which dominated (Bishop 1990: 55).

Part of the problem with math and science education is that the LoI gets confused with the technical jargon or abstract symbols and rules used for manipulation and transformation that adhere to special formulation of the meanings. In communication studies, a distinction is drawn between basic interpersonal communicative skills and cognitive academic language proficiency. The former pertain to basic communication in discussion of everyday things and concrete events in situations where context provides relevant cues for total comprehension of the verbal interaction. It is ‘contextualized communication’ (cf. Cummins 1984). On the other hand:

Cognitive academic language proficiency…is the type of language proficiency needed to read, to dialogue, to debate and to provide written responses …. Learners who are yet to develop their cognitive academic proficiency could be at a disadvantage in learning science and other academic subject matter (Asabere-Ameyaw & Ayelsoma 2012: 56).

Significantly, the varieties of proficiency indicated here are intra-lingual, easily identified with diglossia (cf. Ferguson 1959). The distinction may correlate with different languages used for the different modes of communication but this would derive from independent factors. This prevails in African education where the diglossic situation is identified with African languages used for contextualised communication and English or ex-colonial
languages for cognitive academic language proficiency. Again, this derives from the colonialist origins of formal schooling in Africa.

The identification of logic and science with wisdom or knowledge has led some scholars to subject African proverbs to logical analysis or coherence. Kazeem (2010) examines the logic of Yoruba proverbs, looking at their adherence to the rules of logical inference. Ngalande (2011) engages in a comparable analysis of some proverbs in Nyanja. The analyses have intrinsic intellectual value but the propaganda component is to show that the wisdom in African proverbs has a logical basis. Ngalande adopts the view that:

…logic, ordinarily understood as intelligence, is the basis for wisdom. In logic, wisdom is equated with the appropriate use of syllogisms. Thus, a wise person is expected to use syllogisms that are valid and sound to a greater degree than would an ordinary person (Ngalande 2011: 105).

He concludes with the observation that his analysis shows that ‘proverbs contained the highest percentage … of valid and sound syllogisms’; they thus, ‘truly represent the wisdom of the people’ (ibid.). Equating logic with intelligence and his demonstration that Nyanja proverbs contain sound and valid syllogisms underscores the intelligence inherent in African wisdom.

There is imminent danger in conflating wisdom with logic since wisdom regards holistic situations and operations in the density of real life rather than abstractions. Logical inference may not always be germane to, let alone a criteria of, wisdom. The latter is defined as the ability to discern what is true, right, or lasting, comprising the sum of learning through the ages. Wisdom includes precepts that guide individuals in dealing with issues of life and living based on experience, not necessarily matters of formal logic.

The Role of Literacy in African Languages and Education
Problems with traditional African education and knowledge systems have been attributed, in part, to the lack of literacy in pre-colonial Africa. Adeyemi & Adeyinka observe that pre-colonial Africa suffered from:

...the inability of the people to write and keep records, which would have enabled local teachers and master-craftsmen and herbalists to
preserve their wisdom and knowledge for the use of the younger generation … A situation where a master in a profession dies with his knowledge should not be allowed to continue (Adeyemi & Adeyinka 2002: 237).

The centrality of literacy to modern education raises, yet again, the issue of the languages in which to assist children to acquire the social skills of reading and writing, a fundamental goal of primary education. Alphabetic writing that is basic to literacy is independent of any particular language and, once mastered, does not require re-learning when a new language is learned. Therefore, it makes sense ‘… to teach this principle to a young child in his own language. And it makes no sense whatsoever to teach it to him first in a foreign language, thus placing on him a double learning task’ (Hale 1974: 2).

Hale’s point receives further support from the observation that the principle of alphabetic writing is more effectively delivered to a learner who is in full control of the phonology of the language for which the writing system is designed, since he/she can grasp the relationship between the alphabetic symbols and the phonological segments of the language.

Such arguments call for a re-examination of language in education policies that decry the use of the mother tongue that is crucial to the child’s growth and development.

Dhano Ipuonjo Nyaka Tho
The proverb or saying above, from the Luo of Kenya, is rendered in English as follows:

(i) A person is taught until s/he dies;
(ii) Education is a lifelong process; and
(iii) No one person in the world has monopoly of wisdom and knowledge.

The proverb indicates that education is a lifelong process, embedded in the cultural context of a society. Circumscription of formal schooling from the cultural context, and disregard of the linguistic and cultural endowments of a society, with a focus on foreign knowledge systems and languages, not only condemn societal values and resources to the insignificant or inferior, but
eliminate the society’s involvement in educating its youth while promoting an education that deprives learners of basic rights and produces ‘cultural misfits’.

Arguments in support of the use of local languages in education are criticised for disregarding multilingualism in Africa. This obscures the fact that when the Europeans started the colonisation of Africa in the last quarter of the 19th century, they introduced their languages to serve specific communicative functions, viz., communication among themselves, and communication and book-keeping in the higher sphere of the colonial administration, the judicial system and law enforcement, and industry. The European colonisers typically communicated with Africans:

… through a small class of colonial auxiliaries that they trained. The schools that the colonizers set in place thus had the primary function of forming these colonial auxiliaries (including secretaries, teachers, and nurses) who learned the European language, so that they could function competently as intermediaries/interpreters (Vigouroux & Mufwene 2016).

In brief, education had the narrow objective of co-opting locals (elites) to serve as intermediaries between the colonisers and the colonised.

Arguments that invoke the lack of instructional material or appropriately trained teachers in African languages have to do with politics and economics. It is fallacious to maintain that, because of its centrality to world affairs, English is crucial to economic development and technological advancement; sustaining the belief in its necessity to improve economic performance³.

**Conclusion**

Like other non-indigenous languages, English should be taught as a foreign language. It could serve as a medium of instruction at appropriate stages where it facilitates comprehension of particular material (cf. Babaci-Wilhite & Mchombo 2016). Local languages should not be eliminated by fiat.

³ Langa Khumalo (p.c.) noted that economic progress would be better served if the scientific progress were accessed through African languages. This would bring in about two-thirds of local people as active economic participants.
Linguistic Rights and Conceptual Incarceration in African Education

Chronic failure rates largely resulting from a lack of investment are blamed on poor proficiency in foreign languages. Ngonyani points out that changing attitudes towards Kiswahili and English in education in Tanzania are simply:

… a symptom of the political and economic crisis in Tanzania. People blame Swahili for the decline in education while the actual causes are neglect to the education system and the empty rhetoric of politicians insensitive to people’s needs. The desire to bring English back is symptomatic of the dependence syndrome so evident in our economics (Ngonyani 1995: 91).

Persistent criticism of education in Africa revolves around its resistance to ‘decolonisation’. It excludes Africans’ concerns and world views and prevents research being conducted from an African perspective for Africans’ own purposes. African education should thus desist from insulating foreign languages, cultures, and knowledge systems from African values and cultures in schools.

References
Babaci-Wilhite, Z, & M.A. Geo-Jaja 2014. Localization of Instruction as a Right in Education: Tanzania and Nigeria Language-in-Education’s


Linguistic Rights and Conceptual Incarceration in African Education


Sam Mchombo


Linguistic Rights and Conceptual Incarceration in African Education

Case of Kenya and Malawi. *International Relations and Diplomacy Journal* 5,4:181-204.


*Nyasa Times* 2014. Malawi Std 1 Pupils to Start Learning in English All Subjects. Available at: https://www.nyasatimes.com/2014/03/05/page/2/. (Accessed on 09 October 2017.)


Prah, K. 2008. ‘The Language of Instruction Conundrum in Africa’, for the Meeting on The Implications of Language for Peace and Development (IMPLAN). University of Oslo, 2-3 May 2008; The Institute for Educational Research at the University of Oslo co-sponsored by the Boston Consortium on Gender, Security and Human Rights in the US, the


UNESCO 1953. The Use of Vernacular Languages in Education. Monographs on Fundamental Education. Paris: UNESCO.


Sam Mchombo
University of California
Berkeley
mchombo@berkeley.edu