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Demystifying the indigenous language ‘inadequacies’ towards capacity building in science and technology in Zimbabwe

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Abstract

Africa seems to be underplaying, underestimating and despising the role of indigenous languages as an emancipatory tool from the socio-economic and political bondage born of colonialism. Language, this paper argues, is the means of identifying entities, categorising objects and concepts, perceiving ideas and things, grasping the abstract, the concrete as well as the supernatural, and thinking about anything in whatever form. This paper demystifies and challenges the hegemonic position accorded to the colonial master’s language as the only viable instrument for mediating the exploitation of science and technology.

Keywords: Linguistic imperialism, Indigenous, Emancipatory

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1. Introduction

Africa's crisis of documentary deficit brewed the assumption by colonialists that Africa was indeed a continent without history. The absence of African initiated written contracts with marauding concession seekers condemned Africa to marginality and servitude. As Tarugarira (2009:192-193) has noted, 'the Europeans imposed their languages and discarded the indigenous languages as gibberish or gimcrack'. Cultural clashes and contestations which characterized imperialist battles in Africa denigrated indigenous languages and some of these languages ultimately perished into unrecorded oblivion.

Zimbabwe which has more than 16 languages has seen the non-Shona and Ndebele citizens for example, the Tonga, Chewa, Venda, Kalanga, Shangani and Nambya complaining of a subtle but vigorous campaign by government to turn Shona into the single national language of the country. The worry has been that some languages were endangered and were likely to be extinct unless policy measures were put in place to save them. The reason for the marginalization of the indigenous languages has been their alleged lack of technical and technological terms with which to foster development.

English has become a 'global' language, noting its pervasiveness as the language of power and resources. This article points to the need to connect such language issues to questions of growing inequalities in wealth and neo-imperialism. In Zimbabwe, there exists the wrong equation of formal education with the knowledge of a foreign language, English. Zimbabweans have almost come to believe that national integration, development and welfare can only be maintained through this language. The citizens cannot be physicists, technologists, doctors or engineers unless they first acquire this modern non-African language or another as a prerequisite. The result has been some form of psychological reaction which has made the African look down upon his own language. Many Zimbabwean scholars, doctors and engineers today stoutly oppose any attempt to educate their own children in their mother tongues even at the primary school level. Shona, Ndebele and other minority languages are often neglected and written off as 'useless vernaculars'. People have so much been carried away by the scientific or technological superiority of the Europeans that they identify this superiority with their language. It is important to note that languages are related to the emotional feelings of their users and coercive efforts to make people give up their own languages for others usually fail. This paper posits that Zimbabwe takes a deliberate new look at this fascinating yet melancholy linguistic situation by planning, cultivating, improving and developing indigenous language in the fields of economics, science and technology, since African languages are indispensable to the emergence of a truly African culture.

2. Theoretical/conceptual framework

The Sapir-Whorf hypothesis acknowledges the idea that language influences a person's view of the world. Whorf stated that the background linguistic system (in other words the grammar) of each language is not merely a reproducing instrument for voicing ideas but rather it is responsible for shaping ideas. In other words, people dissect nature along lines laid down by their indigenous language (Thomson, 1996:82). Whorf

argued that, instead of merely labelling reality, the words and grammatical structure of a language can actually determine the way its speakers perceive the world. Thomson has reviewed and evaluated this hypothesis and asserts that, although language may not create reality, it affects our perceptions. There is also Einstein's theory of relativity which propounds that how people saw the phenomena of the universe was relative to their point of observation. In other words, the people's world view was relative to the language they spoke. As a result, it is possible to compare one person's language expressing that person's view of the world, with another's language for exactly the same characteristic of the world. Again, the human ability to differentiate reality seemed to be affected by the resources offered by language. The richness of linguistic resource undoubtedly helps people to cope with subtle gradations in the things they deal with every day.

Antonio Gramsci uses hegemony to describe processes of power in which a dominant group does not merely rule by force but leads by consent through exerting intellectual and moral leadership. Gramsci was familiar with the term 'hegemony' as used by linguists as a synonym for the terms 'prestige' and 'attraction' to describe how certain populations adopt and adapt the linguistic forms of other social groups. English carries emotional appeals as well as the implications of economic wealth, growth and national development that most people associate with the west. Paralleling this, mastery of English is commonly taken as a sign of higher education. Rarely did it serve as a vehicle for logical thought or specific knowledge.

Gramsci understands languages as intricately connected to how we think about and make sense of the world. His attention to language provides insights into the daily and molecular operations of power. Linguistic hegemony for example, is premised by the notion that command over a foreign language, for example rudimentary English provides an appeal to social status. The vernacular language like Shona spoken by 75% of Zimbabwe's population would be viewed as more mundane, or pedestrian, given that everyone has a mastery of it. English by contrast, would conjure exotic images, notions of economic prosperity, knowledge, class status and the lifestyle that goes with them. The viewing of English as a sign of fashion and style has held little regard for how the language was often 'grammatically pulverised, semantically twisted and structurally mangled until it conformed to the rudimentary skills of most people'. Weiss shows how, upon his return from a mission boarding school Nathan Shamuyarira was paraded in front of villagers by his proud parents and urged to demonstrate his education by speaking English. It did not matter what he said, but that he spoke the masters' tongue (Weiss, 1994: 35).

3. The primacy of the language

For many people, language mirrors reality. Words are labels for what we sense; they record what is already there. Words and grammatical structure actually shape reality. Language essentially has individual and social aspects which are immortalised in these two statements of the 17th century English dramatist, Ben Jonson: 'Language most shows a man; speak, that I may see thee', and 'Speech is the instrument of society'. Language is more than the mere dress of thought. The social aspects of language already indicate that what we know as the human society today, rural or urban, literate or pre-literate (or non-literate), traditional or modern, has been made possible through the instrumentality of language in its spoken or written form. Language makes it

possible for men to communicate, even to transmit knowledge across space and time. It is the means of socialisation. It enables us to pool our various kinds of knowledge, skills, and abilities together and subsequently organise the community intricately on the principle of the division of labour. Unfortunately, however, language can also play a divisive role in human society. It is the most suggestive index of the groups and sub-groups within society and contributes to the politico-social problems of sectionalism and divisiveness.

When people of different nationalities come into contact, a language develops. This confirms that when people are thinking and talking, they use the language that best describes their common experiences so that they understand each other. As such, reality is governed by the language the people speak.

4. The language policy issue

Language specialists from Zimbabwe, among other African countries have attended an avalanche of regional and international conference over the issue of language policies but no official language policy has been formulated. As a result, English remains the official language and has importance as a language of wider communication and the language used in legislation, the judicial system and administration. Although the University of Zimbabwe has strongly supported major research projects such as the African Languages Lexical Project (ALLEX), the efforts are not quite consistent with the national goals set out in such programmes as economic indigenisation.

Admittedly, specialists have gradually eliminated prejudices which seemed to be an obstacle to the adoption of policies in favour of African languages, which included claims that the languages were poor and unsuitable as vehicles for scientific concepts. What remains questionable here is the seriousness of purpose. When African countries drag over such issues, European countries will be showing great zeal as observers. For example, France, Germany and the United Kingdom attended The Intergovernmental Conference held in Harare from 17-21 March 1997. The indication is that the western world recognises the potency of languages. This also explains why they abandoned Latin in favour of what are now termed Romance languages (Chimhundu, 1998:84).

According to Chimhundu (1998:84) people think and dream in their own language and express themselves fully in them. Given the above, it is, for example, hard to defend the use of English for the teaching and examination of indigenous African languages at undergraduate and even postgraduate levels as happens today in Zimbabwe. How, for example can the style and flavour of African literature written in indigenous African languages be effectively conveyed through the medium of European languages with any measure of authenticity? It is my considered view that Africans will make their own contribution to science and technology only when original African thought, ideas and methods of production, based on African culture and rooted in its own ecology, can emerge.

Tarugarira (2009) has expressed concern over the irrational and excessive use of English in Schools to the detriment of indigenous languages. More than three decades of self-rule have continued to witness the role and function assigned to European languages during the colonial era still haunting Zimbabwe.

5. Language and technology transfer

The connection between Africa and Europe from the 15th century onwards served to block the spirit of the technological innovations among Africans. "Apart from inventiveness, when society for whatever reasons finds itself technologically trailing behind others, it catches up largely by borrowing. One would obviously question why European technology failed to make significant and lasting inroads into Africa during the many years of contact between the two continents. The basic reason is how Europe used the language to jealously guard and shield her technological developments and again to mystify and cripple indigenous knowledge systems among whose skills, creativity and artistry went into the construction of the pyramids of Egypt and the Great Zimbabwe stone walls. The Europeans have used and continue to use their languages to selectively omit non-European achievements, inventions and technologies. African manufactures before the time of the white men, for example, cottons from the Guinea Coast which were stronger than Manchester cottons, the velvet-like fabric from the old Kingdom of Kongo and a superior brand of red leather from West and North Africa have been contemptuously treated or overlooked by European writers" (Rodney, 1986:50; quoted from Tarugarira, 2009, p. 196). The VaRemba of Zimbabwe wove a fine cloth from a species of wild cotton and also a coarse cloth from the bark of the Baobab tree (*muuyu*). The wild cotton and the Baobab tree have been given botanical identities, *Gossypium transvaalens* and *Adansonia digitata* respectively. From the seeds of the *mutondo* tree (*Berlinia globiflora*) Davies (1940:27) observed Zimbabweans making birdlime or *urimbo* which compares favourably in its functions with western adhesives. The urine of the rock rabbit (*Procapra capensis*) what could be simply *mutundo wembira* (in Shona) and was found to be a remedy for hysteria and epilepsy is not far removed from the present-day use of mare's urine as the source of a hormone remedy (Watt and Breyer-Brandwijk 1950:73). What remains mind-boggling is why even African scientists are going for so-called botanical names when there are indigenous alternatives. On the evidence of language alone, Taylor (1934:64-67) observed that long before the time of Homer, green and blue pigments were used in Egyptian sculpture and decoration. In addition, he discovered that the Manyika of Zimbabwe as compared to the Welsh, Chinese and Hebrew (who had no words for blue or green), had a fairly advanced sense of colour.

That is why the proclaimed transfer of technology from Europe and America has never succeeded. The trouble is that what is involved is more than a mere transfer; it is a transplant. As Afoyalan (1982) puts it, for a transplant to succeed, the receiving body must be conducive to transplantation. More to that, a transplant is never as authentic, effective and durable as a natural cultivation. Surely the natural cultivation of authentic African culture, science or technology requires the indigenous African language as its vehicle or tool. Mere transfer of technology can never rise above technological colonialism.

Every society defines education according to the way it views the world. Africans and Zimbabweans in particular have been making a profound mistake of "borrowing Western conceptual models of "education" and the "educated person" as the principles of enlightenment and conditions for human progress" (Balogun, 2008, p. 118). The consequence has been a historical superimposition of foreign categories of thought on African systems of thought. Why there has not been much recognition of indigenous knowledge is because the Western conception of an educated person has been considered a paradigm for Africa. The uncritical assimilation and patterning of our educational system after the Western model has obviously led to

conceptual recolonization (Balogun, 2008). Despite herculean efforts which have seen the publishing of a Shona Medical Dictionary to prove that Shona can be developed to cover science and technology, the purported lexical and conceptual inadequacy of indigenous languages has remained.

Some words used in Mathematics and natural sciences have a cultural context. The existence of such cultural contexts should therefore provide credence to the advocacy for the recognition, appreciation and possible incorporation of indigenous mathematics and scientific ideas in school instruction. As Tarugarira (2009) has observed, Zimbabwean pottery is in the form of mathematical shapes such as spheres and cylinders, huts and their roofs are rich in geometrical concepts such as circles, locus and triangular prisms. The study of such aspects of informal education has been ignored and yet it is crucial to note that in societies where there was no written language, cultural and historic knowledge of was passed on from one generation to another through the medium of stories, songs, idioms, proverbs, riddles. Besides providing entertainment, indigenous games like *pada*, *nhodo* and *tsoro*, embraced some mathematical ideas such as counting, subtraction and addition. Many other games which involved running, digging, collecting and arranging objects, constructing huts or kraals made learning part of fun. This explains why in his account of Shona education, Gelfand (1979) gave the Shona's three R's as Proverbs, Riddle and Rules, then added a 'G' for Games.

Even beads worn by women were not purely for decoration. The Africans exhibited indigenous system of arithmetical ideas which were accompanied by gestures in describing number, size, weight, quantity, distance and time. Language is simply gesture and speech.

Intellectual dominance and dependence associated with colonial education have set people's eyes on paper qualification without valuing intellectual creativity or problem solving capacity which has seen indigenous languages also enriching themselves by borrowing words from English. Effort and motivation towards eradicating the perception of mathematics and science as Eurocentric are rarely thought of as requisite for Zimbabwe's home-grown approaches to scientific development. In this connection, it would be interesting to have some investigation in regard to what is purely indigenous and what is imported. For example, is the word *fodya* for tobacco derived from the Latin *folia* through the Portuguese, and is there anything to support Sir Harry Johnston's statement that *ndarama* for gold is ultimately derived from the Greek *drachma*?

What can be applauded is that developments taking place in the information technology sector are facilitating the engagement of Information Communication Technologies (ICT) in African languages, paving way for the future development of online language dictionaries, lexicographical database to support and enhance the theoretical, descriptive and historical importance of Africa languages. This move has to be followed up with resolute planning and action which includes maintaining, reinforcing and enriching (including codifying and elaborating) the local indigenous languages. However, what remains disheartening is that institutions of higher learning are not complementing the efforts. The essential ingredients of such a new dynamic policy are that African languages and European languages must be made the real instruments of both government and education. In politics a progressive endoglossic policy should replace the erstwhile exoglossic policy. In education, the indigenous local African languages should, to start with, become the

media of basic or primary education and then progressively become the media of secondary and even tertiary education.

6. Conclusion

The charge that indigenous languages are inferior and non-functional as the media of instruction in technical and vocational institutions is unfounded. In fact, research has shown that any language is capable of being developed to the highest levels of science and technology provided its owners have a patriotic will to do so (Tarugarira, 2009). For Zimbabwe to quickly realise effective and rapid development in science and technology and liberate itself from the chains of technological underdevelopment there is need to eradicate the perception of mathematics and science as Eurocentric. The significance of language in this day of science and technology is clear for all to see. Knowledge and skills in science and technology are indispensable for wealth creation and economic independence. Thought obviously lies behind every creative activity and technological discovery and advance. As such, the power of language to affect, if not to direct, the perception of reality should never be trivialised. While languages may not give their speakers entirely different world views, they certainly influence thinking to some degree.

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