

INTELLECTUALIZATION OF THE HAUSA LANGUAGE: THE ROLE OF
TERMINOLOGY DEVELOPMENT

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Abstract

The Hausa language has over the years consolidated its gains in the areas of Non-Controlling Domains (NCD) of the home and as a lingua franca. It has also consolidated itself in the Semi-Controlling Domains (SCD) which includes religion, politics and entertainment, but its in-road in education a subdomain of Controlling Domains (CDs), which is essential for it to be an intellectualized language, is slow. Hausa language despite its status cannot be referred to as an intellectualized language because of its inadequacy in providing a complete education in any field from nursery to the university. The inadequacy is manifest in the shortage of primary schools in Hausa, which will serve as the basic foundation for teaching learners in their mother tongue. The purpose of this paper is to use qualitative and quantitative data to show the benefits of terminology development in the intellectualization of Hausa language and also suggest ways for the establishment of a unified terminology bank to be used for the development of teaching and learning resources for the teaching of all subjects from primary up to university level.

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Introduction

The viability and efficacy of mother tongue education is not a cliché, it is a fact that has been corroborated. Testimony to this fact is not far-fetched from the reason for the difference between the prosperity of knowledge-driven economies over resource-driven ones. Even if one chooses to argue in favour of the gift of nature, the fact to be tendered will work in support of a knowledge of judicious management of the resources, language inclusive. One of the preliminary steps developing nations need to take towards developing the intellectual capacity of their people is language planning. Some of the benefits of mother tongue instruction are; increased attendance as shown by Benson, (2005); improved cost-effectiveness by Heugh (2004); and increased likelihood of girls and

minorities staying in schools by Benson (2005). Fafunwa (1989) shows that children taught in their mother tongue (Yoruba) performed better than those in the control groups in all school subjects including English. Other benefits of mother tongue education are; inclusion in social and political domains through support for multilingual communication. Mobility and capital through academic achievement and higher education. Social mobility through literacy.

Hausa language has created a niche for itself among major Nigerian languages due to the development of the Non-Controlling Domains (NCD) of the language, which can be seen from the numerical strength of its users in homes by native and non-native speakers. Its spatial distribution is also vast. Hausa is spoken as a first language by scattered settlements throughout West Africa, and as a second language or lingua

franca by millions of non-Hausas in northern Nigeria and in the northern parts of Benin, Togo, and Ghana. It is one of the three official national languages of Nigeria, Newman and Newman (2001).

Sibayan (1991,1994) classified language domains into three classes:

1. Non-controlling domains (NCDs) include language use in the home and as a lingua franca
2. Semi-controlling domains (SCDs) which include language use in religion, politics and entertainment;
3. Controlling Domains (CDs) which includes language use in:
 - i. government with sub-domains of executive, judiciary, and legislature,
 - ii. education with sub-domains of elementary, secondary, vocational-technical, and higher education;
 - iii. the professions such as law, medicine, accountancy, etc.;
 - iv. science and technology;
 - v. business, commerce and industry;
 - vi. information technology which includes mass media,
 - vii. literature and
 - viii. international relations.

One domain which is critical for the development of an intellectualized language is the Controlling Domains (CDs) which includes the education subdomain. Intellectualization of the Hausa language can be achieved, if the lexicon of the language is robust in terms of terminologies in all disciplines that will warrant teaching every learner at all levels and in all disciplines. An understanding of the state of terminology in the Hausa language is vital in the pursuit of intellectualization.

The Hausa language effectively serves as a veritable tool in effectively communicating

within the Non-Controlling Domains (NCDs) of the language which includes the home and the lingua franca. The Semi-Controlling Domains (SCDs) include religion, politics and entertainment. These two domains of the Hausa language are active functional as can be seen from how they are put to use.

Education is one sub-domain within the Controlling Domain (CD) of the Hausa language, which has not been developed to the capacity of intellectualizing the language. An intellectualized language has the capacity to provide a complete education for its users. Nolasco (2009) observes that unless we begin basic literacy and education in our languages we will never be able to develop them for higher thinking. The road to intellectualizing the Hausa language lies in utilizing it to serve the needs of the speakers of the language in the three domains and sub-domains such that it can be used for teaching and learning from nursery to university.

The gap that this paper is intended to fill is one of providing resources towards intellectualizing Hausa language. Khumalo (2017) states that intellectualization entails a carefully planned process of hastening the cultivation and growth of indigenous official African languages so that they effectively function in all higher domains as languages of teaching and learning, research, science and technology. The immediate avenue for developing the capacity of Hausa language so as to function in all higher domains of human activity is to start by developing terminologies for teaching learners in their mother tongue (Hausa) rather than a language which is not familiar to them.

One question that continues to resonate in my mind regarding the potency of African languages is one posed by Professor Nhlanhla Mkhize, Deputy Vice-Chancellor and Head of

the College of Humanities at the University of KwaZulu-Natal, South Africa,

If intellectual giants in history – legendary names such as Sigmund Freud, Albert Einstein, Niels Bohr, Karl Marx and many others – had been instructed in isiZulu to the exclusion of their mother tongue, would they have attained the intellectual milestones for which they are now renowned around the globe?

The answer to the above question is in the negative, because of the limitation of teaching and learning in a second language in which learners have not mastered it. He asserted his conviction on the viability of the mother tongue in teaching and learning.

He continued,

We are also mindful that language is not a mere medium by means of which we can communicate our thoughts to others. Rather, it is the process through which higher mental functions such as thinking, cognition, memory and problem solving are formed.

In pragmatic terms the above question and assertion represents their effort towards intellectualizing the IsiZulu language.

The performance of pupils and students in core science subjects of Chemistry, Physics, Biology and Mathematics in Nigeria and some African countries is weak and sometimes poor. Several reasons are attributed to the weak performance in the said subjects. The findings of Ojukwu (2016), Stephen (2016) Bichi and Abdullahi (2017) attribute the poor performance to either; poor curriculum implementation, lack of science equipment and poor quality of science teachers. On the other hand, the findings of Ahmed (1982), Bamgbose (ed. 1972), Brann (1977; 1980; 1982), Chumbow (1986), Jibril (1986), Emenanjo (1985) Fafunwa (1989) and Kitta (2004) show the efficacy of the mother tongue as the most effective medium of instruction for learners. The Fafunwa (1989) study has corroborated their belief. Apart from

the lack of conviction and political will by government to implement mother tongue education, there is also the absence of teaching material to embark upon teaching learners in mother tongue as a prelude to the intellectualization of Hausa language. As more evidence in favor of mother tongue education emerge there is need to arm the language with the necessary terminologies to teach future generation of learners from nursery to university in their mother tongue, which is Hausa.

Intellectualization of a Language.

The concept of intellectualization was first used in 1932 by Havranek, a Prague School linguist, as a process that a language undergoes in its advancement. Havranek (2014:27-40) further state that, He further state that intellectualization of a language could also be called its rationalization, we understand its adaptation to the goal of making possible precise and rigorous, if necessary, abstract, statements, capable of expressing the continuity and complexity of thought, that is, to reinforce the intellectual side of speech.

Khumalo (2017) states that intellectualization entails a carefully planned process of hastening the cultivation and growth of indigenous official African languages so that they effectively function in all higher domains as languages of teaching and learning, research, science and technology.

Prah (2017:223) further reveals that Afrikaans developed from standardization to successful intellectualization between 1913 and the mid-1930s. he described this development as one of the three linguistic miracles of the past 100 years, with the others being Bahasa and Modern Hebrew. Over a period of little more than 20 years, the Afrikaans language was transformed from

primary standardization to a language capable of discussing the most advanced contemporary scientific knowledge.

Intellectualization of Hausa Language.

The use of the concept of intellectualization of the Hausa language does not in any way claim that the Hausa language is bereft of intellectualism rather what is intended is the re-intellectualization of the language through establishing a strong foundation for teaching and learning in all

spheres of knowledge. Different scholars have made efforts and advocacies towards intellectualizing the language without necessarily using term. These efforts can be felt in works of Jinju (1990) Muhammed (1990)

Newman and Newman (2001) view the intellectualization of the Hausa languages from a different perspective from the efforts of language planners and educators whose goals are to modernize and expand the Hausa lexicon to meet the needs of the modern world.

Table 1: Phase One of Terminology Development in Hausa 1958-1983

	Author	Institution	Date	Publication
1.	Hausa Language Board,	Northern Region House of Assembly	ca. 1958	Alphabetical List of Words Imported into Hausa
			ca. 1959	Glossaries of Technical Terms (Bayanin Kalmomin da a ke Anfani da su a Ma'aikatu Iri Iri) (Explanations of Words Used in Various Work Places)
			1964	Vocabulary of Modern Political and Administrative Terms
2.	Campbell, M.J.	Head of the Department of Local Government at the Institute of Administration, Ahmadu Bello University Zaria	ca. 1958	A pamphlet of a similar nature focusing on governmental terms(from English to Hausa)
3.	Dalhatu Muhammed	Nigerian Educational Research and Development Council (NERDC).	1990	A Glossary of English-Hausa Technical Terms in Language, Literature and Methodology
4.	Nigerian Educational Research and Development Council (NERDC).	words and expressions on economy, education, health ,medicine, sports, and the military in Hausa, Yoruba, and Igbo	1991.	The Quadrilingual Glossary of Legislative Terms (NERDC, 1991)
5.	Muhammad Hambali Jinju		1990	Trilingual Hausa-English-French presentation of Hausa vocabulary in the areas of science and technology.
6.	Sakkwato, Bello Adamu.		1993	Trilingual Hausa-English-French presentation of Hausa vocabulary in the area of geography.
7.	Mahamane, Issoufou.		1982	list of French words relating to scientific matters with simple one-word or short-phrase Hausa counterparts
8.	Mijinguini, Abdou.		1983a	Hausa equivalents for French words describing history and geography, flora and fauna and agricultural produce
9.	Mijinguini, Abdou.		1983b	Hausa equivalents of French words on language and linguistics, presented in straightforward French-Hausa alphabetical order.

Newman and Newman (2001)

Language Intellectualization and Terminology Development

Terminology Development in Hausa

Terminology development in Hausa has been undertaken since 1843, Newman and Newman (2001) further state that as a major world language, Hausa has been undergoing rapid modernization and lexical expansion to cope with the changing world. For many years, regular international broadcasts have been produced in Hausa by the British Broadcasting Corporation, the Voice of America, Deutsche Welle, and Radio Beijing, and more recently by other nations in Africa. The need for a standardized terminology in Hausa which is capable of expressing modern concepts, sociopolitical structures, and material goods is urgent and has been recognized for years.

A survey of studies undertaken in the area of terminology development in Hausa will provide a picture of the expanse of terminology development in the Hausa language has covered. This knowledge will guide further research in the area of intellectualizing of the Hausa language.

Terminology development in Hausa is undertaken in the various fields of study in universities and colleges of education. Some of the areas covered by these studies are:

Rufai (2003:9-29) categorizes terminology development in Hausa into 3 periods viz

1. Period of conquest
2. Period maintaining law and order.
3. Period of consolidation or effective occupation.

The pre-independence period which spans 1900-1950 is the period of conquest. The overthrow of the Caliphate of Usman Bin Fodio and the enthronement of British colonial

conquest necessitated the development of military terms for communication. The second period saw a resurgence of terminology development to maintain law and order. There was a relative drought in terminology development efforts from 1979 to 1991. The need for more terms in Hausa was realised within this period. To satisfy the need the quadrilingual glossary of legislative terms was published. This publication has 1,800 entries.

Further to this effort was the Hausa metalanguage project. This publication is a collection of 3,000 entries in 123 pages. The Centre for the Study of Nigerian Languages (CSNL) Bayero University Kano also hosted a workshop on translation which gave rise to the publication containing 400 terms in the areas of national and international politics, economics and sociology.

In 1981 Usmanu Danfodio University Sokoto coordinated an International Workshop on modern terms in Hausa for UNESCO, from which some terms from African History were selected for translation into Hausa. In 1988 the Centre for the Study of Nigerian Languages at Bayero University, Kano held a workshop on translating marketing terms. The workshop translated 1,850 terms into Hausa. Before Nigeria's post-independence era, there were other efforts during the pre-independence period in terminology development in Hausa. From 1955- 1968 the defunct Hausa Language Board translated over 1,000 terms in the areas of mining, works and Housing, Agriculture, Health, Medicine, Engineering, forestry, social welfare and veterinary medicine. Within the same period, the British Broadcasting Corporation (BBC) Hausa service translated 350 terms in International Affairs Politics, Science and Technology, Military, Security Affairs, Economics, Agriculture, Forestry, Crime and Law.

Jinju (1990) provides a stepping stone for the establishment of a technical term base in Hausa. This effort was followed by Muhammad (1990), a product of the collective effort of 62 professionals from diverse areas of interest and specializations. This metalanguage of technical terminologies has been invaluable to translation in Hausa.

Phase Two Terminology Development in Hausa

Terminology development in Hausa intensified and cover key areas and disciplines. Some of these studies undertaken in universities are as follows: Pharmaceutical Science: Agigi (2013) Arikya, (2013) and Ibrahim (2014). Nasiru (2013) Ladidi (2014). Pediatrics: Muhammad (2014) Mijinyawa (2014) and Shehu, (2014). Law and Judiciary: Abubakar (2013), Musawa, (2013), Faruk (2015), Jibril, (2016). Economy: Ibrahim (2014), Ya'u (2014) Yahaya (2014), Ismail (2008). Dermatology: Abubakar (2014). Botany: Hamza (2016). Anthropology: Ibrahim (2016). Human Anatomy: Samaila (2009). Human Physiology: Datti (2016). Economics: Ismail (2008), Yahaya (2014), Ya'u (2014) and Ibrahim (2014). Metallurgical Engineering: Shehu (2014). Sports: Alhassan (2014). Banking: Ali (2007). Sociology: Ahmad (2013), Tunau (2013). Geography: Adamu (2016) Junaidu (2016)

This inventory of research and publications in terminology development reflects efforts at developing communication and the ability to utilize manufactured products. However, very few have a clear, conscious, and careful process of intellectualizing the Hausa language.

Terminology Development Through Translation

Translation has continued to be a means of resolving myriad problems which includes

intercultural communication through terminology development. Terminology development through translation into Hausa language was also undertaken with the intent of improving communication or making knowledge of manufactured products accessible to Hausa speakers.

Mukoshy and Umar (2021:84-92) studied the contribution of the internet to the development of terminologies in Hausa. The study also reviewed works carried out on terminology in Hausa. The work is an effort to enrich the language in the area of research works conducted on ICT terminologies, thus its contribution in that regard.

Jibrin and Mohammed (2020:79-89) observed that the majority of prior research is concentrated on the relevance of translation to language and national development, without recourse to the availability, effectiveness and consistency of terminologies. They therefore proposed establishing a terminology bank in the Hausa language, to the difficulties associated with translating science and technology.

Prah (2017:222-223) argues that a significant component of the organisation of an intellectualised language-based society is the creation of a translation industry. Modern societies have a large body of translation intelligentsia who can render foreign ideas and literature into local languages. The depth and extent of this capacity determines the degree to which foreign-derived knowledge is or can be 'domesticated'.

Mamman (2012:112) expresses his optimism that African languages are capable of developing, borrowing and adapting or using a semantic extension to represent science and technology terms in the languages. What is not emphasized in the above study is the role specialized and cultural knowledge will play in

the development of scientific terminologies in Hausa.

Aujara (2011:261-272) extolls the virtues of the Hausa language as capable of driving economic, scientific and technological development in the Hausa language. It is thus capable of being used in the teaching and learning of science and technology. He listed 19 features the Hausa language possesses, two of the features are its ability to create new words for contemporary usage. Its ability to borrow from close and distant languages. He further enumerates 9 constraints the language faces. Some of these constraints are; the dearth in publications and terminologies in science and technology. The solution he proffered for the problems was the establishment of a Translation Bureau similar to that established in 1929. He suggested that, this time it should draw professionals from diverse disciplines with more emphasis on translating science and technology books.

Osborn (2010:41-42) states that terminology is an aspect of language and planning. He referred to the process of developing or borrowing terminology from another language as language adaptation. He recommends that terminology development should be undertaken by experts in specialized fields under a broad lexicographic project rather than translators who provide a more or less stop-gap solution to the problem of terminology in African languages.

Wolff (2010:18-22) emphasizes the importance of using good and consistent terminology and style as a way of increasing the confidence of software users and avoiding bad-quality translation, which is capable of damaging the image of the software.

Makoni, et al (2003:126) surmise that, insufficient or lack of terminology in African

languages as a scenario not confined to the field of science and technology, it is also a problem that hinders proper articulation of views, perspectives topics in various fields. in the politics it is not only demanding and taxing for a parliamentarian to prepare his/her speech in an African language, it can also be difficult for interpreters and translators because of the lack of relevant, sufficient terminology and jargon in African languages.

Flick, (1997:3) suggest a chronology or sequence, which would require subject matter knowledge before undertaking the act of translation. Subject matter knowledge is hinged on the relevance of understanding scientific terms and concepts that drive communication through translations. Proper terminology is important, especially in the computer age, where dictionaries are ambiguous and limited. Computerized keyword searching, of terms can make the work more visible to interested parties.

Emenanjo in Rufai (1991:65-75) provides a historical overview of the development study of Nigerian languages from 1960 to 1989 which revealed prospects in the study of Nigerian languages as fields of study. He however suggested a lexical modernization in general and metalanguage in particular. The study took stock of the state of the study of Nigerian languages with a suggestion of introducing more vigour in teaching, discussing, analyzing writing in and about Nigerian languages in the Nigerian languages will have a great impetus towards intellectualization of Nigerian languages, if proper funding and researches are undertaken.

Fardon and Furniss,(1994:217-218) realized that to be able to teach in Kiswahili at a high level of scientific sophistication, adequate Kiswahili scientific terminology would be required. To achieve that, researchers put more impetus to coining terms in domains such as

politics, social sciences, engineering, medicine, mathematics, biology, physics, etc. Various procedures and techniques were used ranging from borrowings (from Arabic and English), to phonological adaptation of internationally standardized terms, and outright 'assemblage' based on existing terminology.

Galinsky and Budin (1993:209-215) opine that the need for terminology development to undertake effective translation is premised on reducing the gap between different phases of development in knowledge and language. The formation of new terms is said to be impeded primarily by the very limited number of term elements available in any language for naming new concepts. The number of concepts, on the other hand, increases more or less at the same pace as knowledge grows.

Gasset (1992:95) drew a similitude between language and terminology, stating that language is a system of verbal signs through which individuals may understand each other without a previous accord, while the terminology is only intelligible if the one who is writing or speaking and the one who is reading or listening have previously and individually agreed with the signs. This agreement between the parties involved in writing and speaking on the one hand and those reading and listening on the other is a far-reaching one because of the high probability of arriving at a consensus of understanding between speakers and listeners or publishers and readers.

Massamba in Fardon and Furniss (1994:217-218) approach terminology development from the viewpoint of language modernization where necessity will compel languages to develop means of expressing both new and technological concepts through scientific and/or technical neologisms. He is optimistic that, with scientific and technological

innovations and inventions new concepts are bound to emerge.

Jinju (1983:3) proposes a methodology for analyzing science and technology terminologies, via derived fieldwork, borrowing and neologism. He also emphasized the use of historical sociology and anthropological linguistics as important tributaries to scientific and technological terminology development. He extolled and compared the wealth of the Hausa language in terms of intellectual achievements with Europe in the medieval periods.

The above survey of literature shows the concern of Hausa specialists, Africa and general linguists on the importance of terminology in solving communication problems. Few works on terminology development are pursued to provide teaching and learning materials which will equip the Hausa language with terms and concepts that can be used for high-function domains, which can lead to an intellectualized language.

Establishing the Hausa Language

To succeed in the terminology project, which is capable of leading Hausa to becoming an intellectualized language, we must learn from other countries that have embarked on and succeeded in in that regard. Two countries stand out; the Terminology Coordination Section of the South African Department of Sports Arts and Culture and the Philippines.

Another source that can be useful in charting a course for the development of Hausa language terminology is the procedure put in place by United States Guide for Environmental Protection Agency (EPA) editors and stewards. Terminology services consist of five components, which include:

1. Content: an online repository of important terms.
2. Governance: use of collaborative governance approach to promote search and re-use to

bring communities of interest together to create terminology

3. Tools: online server.
4. Machine-to-machine services: Creation of Application Programme Interface (API) and web services to allow other systems to access vocabularies stored in the system.
5. People services: The coordinator and system support staff will provide routine training, technical assistance and guidance regarding the governance structure.

These steps are important in guiding the process of establishing a terminology base for diverse disciplines in Hausa

Findings

The contributions of the two phases of terminology development in the Hausa language have not led to the publication in Hausa language of books in the core science subjects of Chemistry, Physics, Biology and Mathematics,

The contributions have not also led to the establishment of a central corpus of terms and concepts in the said science subjects for teachers, authors, and researchers to utilize in teaching learning and publications. The existence of a central corpora of scientific terms and concepts will give rise to consistency and uniformity in their usage for both teaching, learning and publications in the Hausa language.

This study has realised the need to fill the wide gap in published teaching and learning materials for teaching science subjects in Hausa.

There is a top-bottom approach to the intellectualization of the Hausa language. The vibrancy of the language as a learning discipline at the tertiary levels of education has not permeated to the primary and secondary school levels.

The contribution of the Centre Centre for the Study of Nigerian Languages, Bayero University, Kano, towards teaching students in their mother tongue through the production of some science textbooks in Hausa Language, such as *Kimiya da Fasaha* book 1-3 for primary school pupils, *Lissafi, Fizik, da Kamistare* for senior secondary school students is a commendable effort that needs to be sustained.

Conclusion

Terminology development in Hausa is positive, but efforts are concentrated on solving the problem of a lack of terminologies for consuming the products of advanced disciplines. This concentration on advanced disciplines has led to a poor foundation that will assist in the development of terms and concepts so that the Hausa language can be used in all high-function domains through the creation of a discipline-specific terminology corpus which will be used for the teaching of all subjects from primary up to university level in the Hausa language.

Recommendations

- Establish a terminology unit under the Nigerian Educational Research and Development Council (NERDC) to extract, conserve, preserve, research and document terminologies in all fields of study.
- Provide funding for the establishment of terminology units for the three major Nigerian languages.
- Create coordinating units for the three major Nigerian languages in three Nigerian universities.
- Production of subject field dictionaries in Hausa for the use of primary school pupils and secondary school students.
- Encourage the production of primary and secondary school textbooks for all school subjects in Hausa.

- Create government-sponsored programs for mass media advocacy on the importance and benefits of mother tongue education.

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