**ABSTRACT**

A majority of African student translators manifest weakness at two major levels: the conceptual and productive. From different perspectives, this is either termed ‘language’ or ‘cognitive’ problem. This dual view is a pointer to the tacit but intractable bond between language and cognition. The language↔cognition↔translator education relationship that begins with the mother tongue (L1), as well as its impact on the African translation learner constitutes the essence of this write-up. Working from the hypothesis that the cognitive development of the African child is adversely affected by the lack of a ‘veritable’ L1 blueprint, this reflection qualitatively substantiates this claim, and then concludes that mother tongue inclusion in the African school syllabus through appropriate language planning is, more than before, an imperative, given that as a contextual L1, it engenders and nurtures cognitive skills which are indispensable in translation learning and practice.

**Keywords:** Mother tongue, Cognition, Translator education, Language policy

**1. Introduction**

This paper is guided by the following main questions: a) Does mother tongue acquisition help construct cognition? and b) Can cognition inform the teaching, learning and practice of translation, especially in Africa? It further hypothesizes that excluding African mother tongues from the African translator training syllabus is detrimental to the development of the cognitive skills of African students in general and that of the student translator in particular. Finally, it relies on psycholinguistic, sociolinguistic, frame semantic and socio-constructivist theories to qualitatively correlate mother tongue, cognition and their implications on translator education/training, especially in Africa.

**2. Background**

It has been realized that in batch of African students admitted into the translation programmes on the African continent (ASTI for instance), only about 10% prove trainable by established standards, without a reinforcement of the ‘language’, or should it be described as the ‘cognitive’ component of the student. This
usually contrasts with their performance in former school where these students may have certainly been rated the best in ‘language’.

In effect, in the translation training school, ‘perfectly fluent and bilingual’ students of any language combination start failing to demonstrate their oral and written proficiency and idiomaticity in those languages because they have at no given moment as students probed the cultural fabric of these languages which are sadly always instead their L2. On the contrary, more than ever before, African students’ writing begins to glaringly reveal a mixture of indigenised European languages or Westernised African languages.

Ensuing tensions materialise into half-baked ‘semi-linguals’ who are inept and inapt for translation studies and practice which has a knack for natural use of language. In the African context, this veritable ‘hotchpotch’ points to a missing link created by initial training in someone else’s tools, and epitomises a gap created and replicated throughout the educational cycle (primary, secondary, tertiary levels), and rightly or wrongly but innocently/ignorantly, termed ‘language problem’ by non-specialists and ‘cognitive problem’ by specialists. This deserves special pedagogic attention especially in and for Africa - a quest for an African translation syllabus!

3. Mother tongue

According to Cambridge Advanced Learner’s Dictionary (2003), mother tongue refers to the “first language learned when you are a baby rather than a language learned at school or when you are an adult”. This language must be naturally acquired without interruption before the one learned at school in a bid to help define the world for the learner. This leads to enquiring which between the European and African languages are the mother tongues (L1s) of African translation students and professionals?

The widespread sociolinguistic and psycholinguistic considerations according to which the most suitable medium of education in the initial years of education is the mother tongue is no longer disputed (UNESCO, 1951, 1953, 1995; Conférence des Ministres de l’Education des Etats d’Expression Française, 1986; République du Mali, IPN. 1989, and Diarra 1983). This is because it enhances cognitive development and subject-learning which is better fostered through teaching in a language that the child knows well (Chumbow, 1981). At a time when in most African countries the medium of instruction at the different levels of education in post-colonial Africa is still in the European/Western languages, it is necessary to continue questioning whether the mother tongue education model, known to better cognitive development of the child (including the potential student translator) should not be re-examined and reviewed (Chumbow, 1990).

Rubagumya (1986), Bamgbose (1976, 1984, and 1991) and Akinnasso (1993) have asserted that the use of colonial languages for education in Africa needs restriction in a bid to usher in pupils’ improved educational performance. Amongst many other reasons, such use i) mitigates the inequalities aggravated by the use of colonial languages over which larger sectors of the population have little access or no control at all, ii) narrows the psychological gap between home and school, iii) integrates the school better into the local community, iv) gives recognition and value to the language and culture that the child brings to school, and v) promotes the development of indigenous languages. In the same vein, Ellis (1994), Cummins
(1979) and others add that the acquisition of the child’s first language facilitates subsequent acquisition and use of a ‘second tongue’ (which is a translation imperative), enhances the acquisition of cultural norms that construct frames which are reflective of world view (cognitive baggage), reinforces cognition much needed in code-switching during translation and multilingual language processing, and evidently is more complete and potent to express advanced scientific knowledge (Prah, 1995).

Notwithstanding, colonial languages in Africa are sadly still perceived as means of socio-economic power – tools of economic and educational advancement, and are consequently still in such high demand by parents, students, and the public, because they lead to the more attractive and better-paid modern sector jobs. That is why many African leaders continue to hold tenaciously to these colonial languages or media of education to the detriment of the African, for fear of isolating their countries from the international community, obstructing access to science and technology, promoting parochialism and limiting onward investment and aid from the North (Bamgbose, 1976, 1984, 1991).

Yet, with all said and done, African mother tongue acquisition and education should not continue to create any paranoia whatsoever in African leaders, mindful of the defensible cognition construction impact (verifiable on translator training equally) of these African mother tongues on the African education milieu/sector.

4. Cognition

Cognition consists of cognitive structures and cognitive operations constituting a coherent system of mental processes which allow the thinking person to arrive at concepts, solve problems and come to a conclusion (either in logic or in the real world surrounding him/her) without the person being necessarily aware of the operations s/he performs (Sinclair, 1975, p. 224, in Chumbow & Adegbija, unpublished). With respect to translation, cognition accounts for beyond-the-linguistic sign decision-making processes of the translator and frames constructed and accumulated throughout life. Cognition construction calls for a critical re-examination of the notions of early socialization, taking into account first language acquisition and other environmentally determining factors. A host of scholars (Piaget, 1967; Sinclair, 1975, in Chumbow & Adegbija, unpublished) repeatedly argue that language has a formative influence on perception and cognition. That is why it has been defended that the individual’s world view and entire cognitive system are shaped by the verbal symbols given to each one of us by society as we learn our native language. Language is central to determining the cognitive and affective state of the individual. It is thus difficult to separate the two which, overriding each other from time to time, combine to make meaning which is the central thrust of translation. They both eventually come to constitute the cognitive content, context, and culture (Wills, 1992).

4.1 Cognition as content: Cognitive content is not necessarily made up of independent coherent elements, but rather perceived as souvenirs or mental representations of facts and experiences, emotions and events. It is equally theoretical knowledge, imaginations, the result of reflections, the fruit of reading, general knowledge and specialized knowledge – all contained in the brain in a deverbalised form which everyone resorts to for comprehension of a piece of communication. This ‘cognitive baggage’/encyclopaedic/world knowledge is common to the social milieu, but also
belongs to the individual. Even though not exactly identical in all individuals, its indicators of common knowledge are quite close to allowing for communication (Wills, 1992).

4.2 Cognition as context: Hatim and Mason (1990:37, 1994, 1997) view context as the “verbal and non-verbal environment” or “the totality of the culture surrounding the act of text production”. To a contextualist, the enumeration of personal translation abilities, for instance, does not matter; it is rather a description of the mental performance in a given translation situation that counts. Contextual approaches are situation-related, indefinite and unstable across times; they are also task specifications, and socio-cultural settings, and sadly therefore unsuitable for empirical verification and stringent generalization (Wills, 1992, p. 36). Intelligent translator behavior is directly pegged to contextual sensitivity as a complex, multi-dimensional concept that is influenced and modified by multiple situational perspectives. Context is viewed either parsimoniously or encompassingly, and of these two, translation prefers the encompassing or cognition-intensive paradigm. Context influences translator behavior and calls for purposive adaptation and reshaping of textual environments relevant to his/her activities. As Boase-Beier & Holman (1998, p. 13) assert, socio-cultural and contextual constraints immensely influence the translation process and ought thus to be taken into consideration because these are the factors that help shape even the original oral or written text.

4.3 Cognition as culture: Notwithstanding Katan’s assertion (1999, p. 16) that “despite a century of efforts to define culture adequately, there was in the early 1990s no agreement among anthropologists regarding culture”, Tylor (1871, in Encyclopedia Britannica (1983), further cited in Katan, 1999, p. 16-17) would like the pretty difficult notion of culture to be seen as “That complex whole which includes knowledge, belief, art, morals, law, customs and other capabilities and habits acquired by man as a member of society”.

This is in keeping with Asher (1994, 2001) who recommends a multi-level approach to understanding culture, and neither a ‘High Culture’ strain which is “external to the individual and relates to a particular and restricted body of knowledge learned, and to a particular upper-middle-class upbringing” (Katan, 1999, p. 17), nor the “artistic and social pursuits, expressions and tastes valued by a society or class” (CED, 1991), which pertain to “national literature, sports and hobbies” (Katan, 1991, p. 17), all both unsuitable perspectives.

The suitable ‘strain’ of culture, on the contrary, is that which is “internal, collective, and is acquired rather than learned” and in a “natural, unconscious learning of language and behaviour through informal watching and hearing”. This is the culture “acquired before the formal learning of culture at school” (Katan, 1999, p. 17) and not the “learned”, or the “formal” that is “consciously taught”. ‘Acquired culture’ (including ‘High Culture’) represents a “shared mental model or map of the world”. Katan (1999, p. 17) sees ‘acquired culture’ as a system of congruent and interrelated beliefs, values, strategies and cognitive environment, which guide the shared basis of behaviour. Each aspect of culture is linked to a system to form a unifying context of culture, which identifies a person and his or her culture.

Gail (1988, p. 7-13), for his part, perceives culture at two levels. Firstly, there
is the external, which comprises behaviours (language, gestures, and customs/habits) and products (literature, folklore, art, music, artefacts), and secondly, there is the internal made up mainly of ideas, beliefs, values, and institutions.

Culture is a resultant of context and the contextual dimension entails that translation can only be properly understood within a socio-cultural frame of reference that often differs amongst languages, text types or cultures. Culture is the defining element of language learning and mastery and therefore synonymous and reflective of cognition. It constitutes guarantee for translation practice, and has great implications for translation as a process, product and profession.

5. Cognition and translation

Cognition entails all the linguistic and extra-linguistic knowledge stored in the mind, re-activatable at all moments by external and internal solicitation using specialized organs in the brain – (dendrites and axons), by which information from without (and within) solicit the individual who continuously reacts to them, in order to communicate (Lederer, 1994, p. 37-39).

Translation can be considered as a socio-culturally determined linguistic behaviour that is both culture-specific and universal. However, beyond this rather deceptive declaration, translation remains a pretty amoebic concept to semantically circumscribe. The three pertinent opinions below capture this difficulty to conceptualise translation, and by the same token indicate how cognitive-intensive it is. While Nida (1977, p. 67) states that “purposes of translation are so diverse and the texts so different and the receptors are so varied”, Frawley (1984, p. 11) firmly declares that translation remains a complete obfuscation, something that requires the empirical rigour of the linguist, the perspicacity of the literary critic and voraciousness of the philosopher all in combination in a single proposed solution to the problem of translation.

Finally, and in this same vein, Hewson & Martin (1991, p. 113) posit that the science of translation is either widely diverging or frustratingly empirical owing to the fact that its theoretical reflection is plethoric.

5.1 Translational cognition: Translational cognitive processing refers to such fundamental activities as problem-solving, planning, inferencing, schematizing, mapping, comparing, evaluating, decision-making, intuiting, forming rules and strategies and so on, as well as such performance aspects as speed, automation, adaptation, and originality (Wills, 1992).

Translation is a knowledge-based activity merging context, culture and cognition. The translator’s modes of operation are akin to human mental processing. Translation as a complex instance calls for a complete exploitation of the translator’s ‘blackbox’/cognitive baggage which make up his world view. From the ensuing, the translator’s competence is therefore also the sum total of what he is.

Translation as cognition is a thus goal-directed, intertextual information-processing activity with a decoding and encoding phase that blends codes of the universal, individual, objective and subjective factors. This is how the interrelationship between content, context and culture is of relevance to translation practice. Cognition needs the support of both context and culture. On a stronger note, cognition is context and culture. Solving translational problems cannot transit through simple conventional algorithms in an encompassing manner; rather it calls for cognitive insights,
heuristic procedures and multiple stages that do not operate by predetermined standards and algorithms (Wills, 1992).

In all, a cognitive orientation to translation enables one to appreciate the fact that translation skills are not a static array, but a “dynamic system whose confines are always capable of reaching beyond the routines of ‘language for general purposes’ into new domains of ‘language for special purposes (LSP) of science and technology, their increasingly popularized discourse, and also language of religion, children’s books, theatre plays and so forth” (Wills, 1992, p. 42).

6. **Cognition-engineered translation pedagogy**

If language and cognition are inextricably linked because they come to construct content and culture, then where and how translators are trained cannot be a simple issue. Cognition is constructed through good socialization of which language is a key element. Personal preparation and training which help to build cognition and determine, and how particular translation tasks will be approached and carried through are a direct function of socialisation. More concretely,

Upbringing, education, knowledge, sensibilities, predilections and beliefs also contribute to the formation of the individual personality of the translator, limiting, defining, and also facilitating the translation process, from the initial selection of the SL text right the way through to the final release into the world of its TL progeny (Boase-Beier & Holman, 1998, p. 8-9).

These cognition-intensive qualities help the translator to always be in the text, for the text always has to pass through the translator who is ever present as the constraining and enabling filter. There are lessons in the above for translation pedagogy starting from the mother tongue, from which emanate frames that eventually aid selective decoding and encoding. The fact that only about 10% of students of African origin admitted into the translation programmes is trainable by established standards, without a reinforcement of the language or should we say cognitive baggage is a call for concern.

It therefore calls for a reconsideration of UNESCO’s highly heralded recommendation that the mother tongue be given priority over the foreign tongue, especially at a time when the languages of early socialization, growth and development, (languages of cognitive development) and the prime element of culture and identity of the African child are highly disregarded in their education in favour of foreign and imposed media of communication. No wonder, therefore that some African children who have proven to be proficient in creative craft reflecting their environment have sadly never passed an examination into primary II of the Western type of education. This is evidence that European languages that have served as media of instruction are rather constraints (and not a blessing) in the African educational context. From a pedagogic standpoint, constraints usher in demotivation and increase school drop-out which is clearly visible in African rural areas.

An introduction of the mother tongue at the initial level of education, as a medium of instruction and as subject in the curriculum ought to be a useful take-off point. From a purely socio-constructivist perspective, Haidara & Lemay (1989,1990) posit that relevance of education also requires taking account of the conditions of the surroundings, the needs and expectations of populations, in the cultural field. Since language is a living instrument of culture and means of communication, its
use is very important, both in education and for economic and social development. According to UNESCO (1995), language encapsulates local knowledge and can symbolize self-esteem, and identity. Its subordination by other more powerful languages distances education from the local context for language use is a factor in the on-going importance of school to the community. That is why imparting elementary education “in the mother tongue of encysted linguistic minorities is the only way of not just bringing children to school but, more importantly, keeping them there” UNESCO (1995:182).

Cognition-engineered translation pedagogy warrants that tradition and culture should constitute the starting point for any healthy and logical development (Gfeller, 1996; Gfeller & Robinson, 1998, p. 27). Without them, one would be promoting alienation. Promoting cultural heritage and integration into the local environment, including the school, would constitute the basis of balanced development.

7. Mother Tongue, Cognition and Translator Education in Africa

As already discussed, there is a symbiotic link between language (the translator’s main tool) and cognition as language expresses culture, and culture is expressed in language. This intractable link between language and culture is a formal way of paving the pathways along which subsequent cultural experiences are recorded. This means that the lack of a veritable L1 grasp would engender the inability to perform well as a translator since it is the way of acquiring and constructing the cognitive baggage. Without a firm cultural blueprint, it is not strange that most professionals and students often embark on a translation/communication task without the required armature.

Language proficiency is obligatory in translation practice. This is testified by the fact that in the translation context, the notion of language combination is a prerequisite, implying recognition of the principle of a better mastery of one language over the other in the language translational pair. This is the reason why most translation guilds have formally and very sternly forbidden non-natives from translating into their L2s (Language B). If for any reason the professional translated into his L2 because of market pressure, the quest for quality demands that such a text should, if not revised, be proofread by an educated native speaker. But beyond and above the misleading concept of ‘language’, what is referred to is rather a sound immersion in a specific culture.

For the above reasons, mother tongue (L1) ought to constitute the basis of the conception of translation programmes. L1 before FL as language of instruction makes learning ‘tearless’ for it is the L1 that sets up the frames for deciphering and understanding the world. L1 is the structuring element for culture and thus makes translation a parole-, and not a langue-based activity (Saussure, 1959), given that it is through parole that cultural elements and difference are perceivable.

While examining the language question for education on a worldwide basis, UNESCO (1951) considered the wellbeing of individual children as a primordial issue. UNESCO (1953) thus recommends the use of mother tongue from the beginning of school to as long as possible. Sadly enough, with the exception of Kiswahili in Kenya, (Gfeller & Robinson, 1998), Bambara and Bamanan in Mali (Haïdara, 2000), and Fe’e-fe’e e in Cameroon (Tadadjeu, 1984, 1990), cited in Gfeller & Robinson, 1998), the mother tongue has remained rare for education in
Africa. In effect, the linguistic map of post-colonial Africa shows dominance of European languages for education, administration, the media, international relations whereas mother tongues are still carefully and systematically evacuated from African public space including the educational.

Despite spirited condemnation of systematically evacuating the mother tongue from the African public space (including the educational) by a host of African scholars, Africa’s use of European languages as official languages has gone on unabated. Mbuagbaw (1984, p. 15) frowns at the Western model which produces “Techno-Africans” with a colonial thought mould whose mental structure seeks identical concepts in the African situation through the spectacles of the former colonial master, failing to see the African realities both in and around the ‘poor-looking’ hut and its occupants - living monuments of African civilization and living libraries of African culture. Mbuagbaw (1984:77) then concludes that despite the number and diversity in education, “the present structures of education appear inadequate and ineffective in terms of the deployment of products through the schools and for the labour market”.

Like Mbuagbaw (1984), Bamgbose (1976, 1984, 1991); Ouane (1995) and Gfeller & Robinson (1998, p. 20) also assert that the school within a Western tradition has fallen short of its aim for up to 80% of the rural population. In the same vein, Ouane (1995, p. 122) posits that it is preferable to deliver primary education, initial learning/basic education, or whatever takes place, in the mother tongue, whenever this proves possible, because the mother tongue is language of ‘intimate discussion’, ‘serious matters’, of ‘discussing a complex problem’, ‘exploring one’s inner self’, ‘if one is distressed’, ‘if you want to put the other person at ease’, when ‘among friends’, etc (Gfeller & Robinson, 1998, p. 30). Mother tongue resonates with idiomaticity, naturalness, and offers frames for representing the world – the cognitive baggage - providing a solid basis for later learning and must also improve the fit of the acquired knowledge with the social context. Pupils’ preference for this method”, shows once more the advantages of grounding learning in local socio-cultural realities by the use of the local language in teaching” – Cains (1987, Tadadjeu (1990, in Gfeller & Robinson 1998), and Gfeller & Robinson (1998, p. 25).

Apart from developing personal and social identity, Prah (1995, p. 47) even argues that the “African elite which has facility in the use of European languages, is not and cannot be sufficiently well-grounded in these languages to create technologically and scientifically”. In effect, intellectual development is not at all compromised by the use of the local language. It is rather the opposite. Thus, the whole effort and discussion of African development must be seen to have a possibility of take-off only if and when development on basis of African languages (in a vehicular position) shall have been made. “African development cannot obviate African culture, the culture of the masses; rather it must sustain and build on it” (Prah, 1995, p. 47-48). This widely recognized perspective is of special pedagogic significance and prompts Africans to clamour for an Africanised syllabus.

8. Conclusion

Though Fasold (1984) says language choice as the medium of education is “one of the most crucial language
planning decisions that can be made’, Edwards (1994) regrets that social and political above the purely educational factors have affected language choice in education more, as it is the case in Africa.

Since education in Africa in general and translator education in particular have remained overly Eurocentric, mother tongue education that enhances cognitive development and prepares the translator for the herculean task of text-processing should therefore be reconsidered. Africa needs not only scholastic evidence of mother tongue education merits but a veritable iron political will to change. Mother tongue acquisition should not only precede but be an addition to the existing European language(s) which have found fertile ground on the continent. This added language can only be an advantage given that bilinguals and multilinguals (than monolinguals) are more used to switching thought patterns and have more flexible minds (Gfeller & Robinson, 1998).

A cognitive orientation to translation teaching and learning which enhances selective decoding and encoding will provide the translator-apprentice with the means to actualize his free-of-premature intelligence potential, and enable him to adequately face the world of variegated practical translation tasks. The degree to which the translator blends and correlates these two categories in handling novel translational problems shall be adequate testimony of sound grounding in cognitive mental processing which passes through the mother tongue.

Incorporating language/culture into translation will be a tacit recognition of the need for a dense cognitive baggage for the translator. Constructing such an asset for him/her entails a good blend of sociolinguistic, psycholinguistic and socio-constructivist inputs, and complemented by the translation pedagogue in the classroom. Though African translators are not likely to use their mother tongues for translation in the immediate future, introducing them in the school curriculum through non-complacent language planning will certainly help in building unperturbed cognition which is the translator’s professional springboard.

It is thus indisputable that there exists a symbiotic link between language (the translator’s ‘spanner’) and cognition. In this light, the role of mother tongue acquisition in the construction of cognitive ability and its potential to inform the teaching and learning of translation demands new attention. Such a perspective will be in tune with Wills’ statement (1992, p. 38) that ‘language is obviously to some degree relative to culture’, showing the “importance of regional studies in the training of translators and interpreters”.

This ushers in recognition of the dire need for a cognition-engineered translation pedagogy for Africa, making this a veritable apologia not only for the inclusion of the mother tongue in Africa’s educational system but its prerequisite status in admission into translator training programmes.

References


