



## Cognition in Translating Some Ciluba Dual Gender Terms into English

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**Ambroise Lumbala Lumbala**

Teacher Training College of Mbujimayi, DR Congo

[lumbalalimbree@gmail.com](mailto:lumbalalimbree@gmail.com)

**Résumé :** Nous nous appuyons sur le modèle linguistique et psycholinguistique de Bell (1991) pour étudier l'interface entre le savoir et le savoir-faire dans la mémoire des apprenants de l'anglais, langue étrangère tel que reflété dans leurs traductions anglaises de certains termes "ciluba"<sup>1</sup> couvrant le masculin et le féminin. Hormis l'introduction et la discussion et conclusion, cet article comprend une analyse du modèle du traitement de l'information, les considérations méthodologiques, la justification des informateurs et du texte dans cette étude et aussi l'analyse et l'interprétation des termes dualistes en ciluba et en anglais. Les résultats tendent à indiquer que le genre est encore un problème transculturel qui mérite l'attention des enseignants de l'anglais, langue étrangère comme en témoigne le pourcentage (38.1) des termes masculins en anglais pour la traduction des termes dualistes en ciluba. Ceci montre que le sexisme tient encore une place importante dans la mémoire des natifs luba apprenant l'anglais. Au vu des résultats, nous invitons les enseignants d'anglais, langue étrangère à accorder une attention particulière à cet aspect de la question dans les processus d'enseignement et de formation.

**Mots-clés:** Modèle du traitement de l'information, mémoire, modèle gravitationnel, ethnosciences, genre.

### Cognition dans la traduction en anglais de certains termes ciluba à double genre

**Abstract:** In this article, I rely on Bell's (1991) linguistic and psycholinguistic model of analysis to study the interface between declarative and procedural knowledge in English as a foreign language learners' memories as reflected in their English translations of some Ciluba dual gender terms. Apart from the introduction and the discussion and conclusion, the article contains an analysis of the information processing model, the methodological considerations, the justification of the informants and the text used for the study and the analysis and the interpretation of dual gender terms in Ciluba and English. The results tend to indicate that gender still makes up a cross cultural issue deserving pedagogical attention in foreign language classrooms. The percentage (38.1) of the English masculine gender terms for Ciluba dual terms shows that sexism still obtains in the mind of the Ciluba native learners of English used as informants in the study. For this reason, teachers of English as a foreign language are invited to pay attention to this aspect of things in their teaching and training processes.

**Keywords:** Information processing model, mind, gravitational model, ethnosciences, gender.

## Introduction

This paper tries to point out the interface between declarative and procedural knowledge (Anderson 1983 cited in Alves and Goncalves 2007) by diving into the information processing model of the human cognition<sup>2</sup>. It is postulated that the two types of knowledge are part and parcel of the translator's competence<sup>3</sup> (Bell 1991; Alves and Goncalves 2007). In other words, it tries to show that declarative knowledge per se seems to be of little use in the production phase of translation if it does not get amalgamated with procedural knowledge<sup>4</sup> (be it mentioned in passing that the two types of knowledge have been shown to be highly dynamic). And this will be pointed out in the analysis of some Ciluba dual gender terms as translated into English by Ciluba native students of English as a foreign language. But more importantly it tries to show that procedural knowledge is the most practical knowledge, i.e., the rule-of-thumb based on the declarative one which, in combination with it is the product of our daily living.

This points to the need of understanding the merging of horizons (Horizontverschmelzung). This term has been demystified by cognitivists (Schank 1982, Fillmore 1977, and Lakoff 1987 to mention but these, all cited in Stefanink and Balecescu 2009) as they have shown to what extent our understanding of a text<sup>5</sup> results from the interaction between top down and bottom up processes. The former is closely related to our living world which culminates in structuring our brain in engrams which in their turn subordinate our reception of the information, or text to translate. The latter by contrast, can be equated to Lederer's (1994) "Contextual knowledge" cited in Lumbala (2016a). In fact, this is understood as "knowledge acquired through the specific and immediate listening to the speech to be interpreted, or reading of the text to be translated." (Haverson 2009). It seems that the two types here belong to the declarative type of knowledge and are relevant to the understanding phase.

On the other hand, the paper tries to 'test' the application of the two principles found in "the gravitational model of language availability" (Gile 2009) and by extension of any knowledge in the memory. In other words, it tries to understand the degrees of activation of the consciousness. Be it said in passing that the first principle, i.e., centripetal law, stipulates that the more a linguistic element is used, the more it stays or gravitates near the centre (likened here to the short term memory), and the more it can easily be retrieved and used. The second principle, i.e., centrifugal law, by contrast stipulates the opposite of the preceding law. That is, the less a linguistic element is used, the farther it gravitates from the centre.

In addition by drawing on ethno-science the paper tries to understand the order of things in people's mind (Gulish 1990 cited by Stefanink and Balacescu

2009) and implies that a member of a given society has naïve notions relating to different sciences and that these notions can be brought into the open thanks to the analysis of their discourse. The present paper relies on the analysis and to some extent on the evaluation of the appropriateness of Ciluba dual gender terms as translated into English by Ciluba native learners of English. Put differently, I intend to understand the extent to which Ciluba native learners of English could integrate, say, transform the linguistic aspect of the gender issue into practice. That is, whether they could keep up with the cultural contents behind lexical terms as they were moving from Ciluba into English.

The objective is to get a glimpse at the information processing of the linguistic elements stocked in the memory. In other words, it seeks to find out clues as to how the learners activated both the declarative and the procedural knowledge to establish the “interpretive resemblance” (Gutt 1998) between Ciluba and English gender terms. What is meant by declarative and procedural knowledge? First the two types are not a special preserve of a particular discipline. In linguistics for example, declarative knowledge may refer to the knowledge of grammar as opposed to how grammar can be used to communicate in a real life situation (procedural knowledge). In law, the cataloguing of people’s rights can be considered as declarative knowledge whereas knowing how to claim those rights before which legal jurisdiction is procedural knowledge.

In translation studies, possessing linguistic as well as non-linguistic knowledge of the working languages is part of declarative knowledge and is essential in the comprehension phase, but abiding by the principles of translation to produce translations which respect the stylistic rhetoric of the target language is part of procedural knowledge. In the next section, I am going to talk about the information processing model.

### **1. A look of the information processing model**

The model of human cognition as information processing activity still carries some currency despite the appearance of other new approaches (Risku 2013). This model seems suitable for the analysis of the linguistic elements of this study given that it looks at the recycling and reuse of prior knowledge (see Risku 2013 and Halverson 2009 for more light). According to this classic model, translators work like code switchers; they replace the elements and rules in one coding system with the elements and rules of another (Wilss 1992:110 cited in Risku 2013). This is the very thing I intend to check on the part of the Ciluba native learners of English used as the informants in the study.

Human cognition as information processing is currently discussed along the literature related to memory, which can be understood as “the playground” or locus of cognition (Lumbala 2020). Cognitive theories of memory seem to be elusive and varied (Gile 2005). But it is customary in translation studies to talk of memory in terms of three stages: 1) sensory memory, 2) short-term memory, and 3) long-term memory (Mastin 2010, Cherry 2014, accessed 28<sup>th</sup> May, 2014). **Sensory memory** derives from the five physical senses of sight, hearing, taste, smell, and touch (Wikipedia accessed 28<sup>th</sup> May, 2014) and allows individuals to retain impressions of sensory information after the original stimulus has ceased. Shortly put, human cognition derives from the impressions of the physical senses. According to Cherry (accessed 28<sup>th</sup> May, 2014), sensory memory is the earliest stage of memory during which sensory information from the environment is stored for a very brief period of time, generally for no longer than a half second for visual information and three or four seconds for auditory information. In translation studies, people rely on senses of sight and hearing in acquiring knowledge.

**Short-term memory** can be understood as the very short time the individual keeps something in mind before either dismissing it or transferring it to long-term memory. According to Cherry (accessed 28<sup>th</sup> May, 2014), short-term memory can be defined as “The information we are currently aware of and thinking about.” That is, the information passes first through the short-term memory for a certain period of time before it goes into the long-term memory, where it will stay for a long period of time. For Wikipedia (accessed 28<sup>th</sup> May, 2014), short-term memory is “The capacity for holding a small amount of information in mind in an active, readily available state for a short period of time.” Here the duration of short-term memory is believed to be in the order of seconds and experiments have shown that information can be kept in short-term memory for about twenty to thirty seconds. This view is supported by Cherry (accessed 28<sup>th</sup> May, 2014) when she writes,

Most of the information kept in short-term memory will be stored for approximately, twenty to thirty seconds, but it can be just seconds if rehearsal or active maintenance of the information is prevented. While many of our short-term memories are quickly forgotten, attending to this information allows it to continue on the next stage – long-term memory.

This is to say that information kept in short-term memory is under the influence of double lot, that is, it can be dismissed or transferred to another stage – long-term memory. In other words, when the information remains passive (not used) in short-term memory, it can be totally forgotten; and when it is active, it is transferred to long-term memory for later retrieval.

**Long-term memory** is the one which holds an indefinite amount of information. According to Mastin (accessed 28<sup>th</sup> May, 2014), long-term memory can be defined as the one which “refers to the continuing storage of information.” In other words, long-term memory is our brain’s system for storing, managing, and retrieving information. Mazur (2006) cited by Wikipedia (accessed 28<sup>th</sup> of May, 2014) calls it “reference memory” because an individual must refer to the information in the long-term memory when performing almost any task. Given the fact that information is largely stored in the long-term memory, it has been noticed that some of this information is fairly easy to recall, while other memories are much more difficult to access (see Gile’s (2009) gravitational model above). Below I turn to research methodology.

## 2. Methodological considerations

As for data collection, a short text in Ciluba was handed to second year Ciluba native students of English for translation into English after they had already been taught notions of gender. The Ciluba text was purposefully intended to contain kinship dual gender terms. After translation, I identified all the translated kinship terms by underlining. Next, I relied on Bell’s (1991) linguistic and psycholinguistic model of analysis. The model presents two phases, i.e., analysis and synthesis. Albir and Alves (2009, p56) write that

Bell’s model accounts for translation in terms of information processing and requires both short-term and long-term memories for the decoding of source language input and the encoding of the target language output. The model follows a top-down/bottom-up structure...

**Analysis** here refers to the decoding phase in the comprehension phase of the source language text. More importantly, this phase should ideally culminate in “universal (non-language specific) semantic representation” (Bell 1991, p20) referred to by Lederer and Selescovitch (1984) as ‘deverbalisation’.

**Synthesis** by contrast refers to the encoding in the production or re-expression phase. Here, the translator should ideally re-express the meaning in the linguistic clothing of the target language. I wanted to check whether the subjects’ awareness of the gender issue would be activated; that is, considered in their translation of Ciluba dual gender terms into English.

Finally, I draw some implications as to gender sensitive language awareness across cultures, how language as the mirror of the culture shapes the world affairs including communication, and in particular linguistic communication and vice-versa.

### 2.1 Informants used in the study

Informants used were students from the second year of the first cycle from the Teacher Training College of Mbujimayi in the DR Congo, academic year 2011-12. There were 16 male students and only one female student. Worth of note is that the tertiary level of education in the DR Congo is divided into three cycles: 1) the first cycle is of three years; 2) the second cycle comprises two years and 3) the third cycle has two years of DEA degree and three/six years of PhD. The choice made on students of English lies first on the fact that the problem at stake here is to get a glimpse at these students' processing of linguistic information, viz. the translation of lexical items in context.

The Informants had been taught gender and the issues related to it. But as members of "Luba" culture, they had already stored in mind aspects of this culture related to gender. The objective is to see which, between the internalized culture and the lectures delivered on gender were near the centre, that is, could easily be retrieved and used in a real world situation like that of translation. In other words, I am in search for clues to enable us to get to the bottom of the mind, that is, to stir up the mental content (Nisbett and Wilson 1977 cited in Jääskeläinen 2009) to see which information between the old and the new learners actually retrieve easily. This means to understand the extent to which linguistic gender issues taught have become part of students' living culture.

Second, translation itself being by its very nature a "linguistic process" consisting in transferring meaning from a text in one language into a text in another (Kusmaul and Tirkonen-Condit 1995, p180), I have found it better to check the extent to which they could carry on an interlinguistic communication successfully. The objective is to study the gravitation of different types of knowledge in the students' mind as a window into the cognitive contents. Put otherwise, I wish to see which type of knowledge takes precedence over the other in the course of a translation task and why.

### 2.2 Text used for the study

For the purpose, as already said above, the text submitted to the subjects for translation consisted of two short paragraphs, both centring on indiscriminating love of one's relatives and containing a number of dual gender terms of kinship.

**Bâna bêtù,**

**Bakakwetù bambila nè: 'Kushipi muntu, kwenzedi mukwèba bibi; bwalu mwana wa mwânènu udi bu weba mwâna. Mwâna nansha wa mwakunyèba,**

nansha wa **mukulwèba**, nansha wa **bukwenda bwèba** wamulama byakana'. **Muntu** kalondi mwambila **bakaku** ne: 'Mwana wa **mwaanenu** mmunga **muntu**, ncyamu cifula kudi munga **muntu**'.

Below I turn to the analysis and interpretation of the lexical items in bold.

### 3. Analysis and interpretation of dual gender terms in Ciluba and English

As it can be noticed, the terms in bold are of dual gender in Ciluba and the task of analysis consists in presenting the charts of the terms or expressions used by Ciluba native students of English to translate them into English. The procedure is as follows: I present a Ciluba dual expression on the top of a chart, then the expressions used by the students to translate it followed by their frequency. After the chart I classify the English expressions used according to the gender.

<b>Bâna bètu:</b>	
Our brothers	1
Dear friends	1
Dear brothers	6
Dear people	2
Dear brothers and sisters	2
Dear sirs	1
Dears	2
Dear colleagues	1
Nonlexicalized	1

Chart 1: **Bâna bètu** and its different renderings in English

As it can be noticed, 8 out of 17 students have used masculine expressions (our brothers, dear brothers and dear sirs) and eight others have resorted to dual

gender terms (dear friends, dear people, dear brothers and sisters and dear colleagues) whereas the seventeenth has simply ignored that expression.

<b>Bakakwêtu:</b>	
Our ancestors	13
Our elders	1
Our people	1
Our grandfather	1
Nonlexicalized	1

Chart 2: **Bakakwêtu** and its renderings in English

Fifteen students have used dual gender terms (our ancestors, our elders and our people) against one who has used a masculine term (our grandfather). Finally, the seventeenth has not lexicalized it.

<b>Muntu:</b>	
Your neighbor	1
Your friend	3
Someone	8
A person	4
Your brother	1

Chart 3: **Muntu** and its renderings in English

Here sixteen students have resorted to dual gender terms (your neighbor, your friend, someone, a person) against one for the masculine (your brother).

<b>Mukwêbà:</b>	
Neighbour	7
Your friend	3
Your fellow	1
Someone/body	1
Another	1
Your next	1
Others	1
Your brother	1

Chart 4: **Mukwêbà** and its renderings in English



Here again sixteen students have used dual gender terms (neighbor, your friend, your fellow, someone/body, another, your next and others) against one for the masculine (your brother).

<b>Bukwênda bwêba:</b>	
Step brother	2
Step brother/sister	1
Brother-in-law	10
Brother-/sister-in-law	3

Chart 5: **Bukwênda bwêba** and its renderings in English

Twelve students have used masculine terms (Step brother and brother-in-law) against four for the dual gender expressions (step brother/sister and brother-/sister-in-law).

<b>Mwâna wa mwanênu:</b>	
Your brother's son	6
Your friend's child	1
Your neighbour's child	1
Your brother's child	5
Your brother's or sister's son	1
Niece/nephew	1
The child of your dear	1

Chart 6: **Mwâna wa mwanênu** and its renderings in English

As it can be noticed, this expression **Mwâna wa mwanênu** contains two dual terms in a genitive construction. It follows that 6 out of 17 students have resorted to the masculine gender for both terms (your brother's son), 5 out of 17 have used dual gender terms (your friend's child, your neighbour's child whereas five have used a masculine gender term for the possessor and a dual gender term for the possessed. One has used a dual gender expression for the possessor and a masculine term for the possessed (son).

<b>Webwa Mwâna:</b>	
your's	11
Your own son	1

Your son	3
Your child	2

Chart 7: **Weba Mwâna** and its renderings in English

Thirteen students have used dual gender terms (your's and your child) and four have used masculine gender terms (your own son and your son).

<b>Mwâna:</b>	
Child	8
Son	8
He/she	1

Chart 8: **Mwâna** and its renderings in English

Nine have used dual gender terms (child and he/she). By contrast eight have used a masculine term (son).

<b>Mwakunyèba:</b>	
Little brother	1
Younger brother	13
Younger brother/sister:	2
Younger	1

Chart 9: **Mwakunyèba** and its renderings in English

Here fourteen students have used masculine expressions (little brother and younger brother) and only three have used dual gender terms (younger brother/sister and younger).

<b>Mukulwêba:</b>	
Elder brother	13
Elder brother and sister	2
Elder	1
Big brother	1

Chart 10: **Mukulwêba** and its renderings in English

The masculine expressions have received 14 occurrences (elder brother and big brother) while dual gender ones have had just 3 (elder brother and sister and elder).

<b>Mu-(mwâna):</b>	
Them	1
Him	11
Him/her	2
S/he	1
One	1
Nonlexicalized	1

Chart 11: **Mu-(mwâna)** and its renderings in English

The masculine pronoun (him) has been used eleven times, the dual gender expressions by contrast have been used five times (them, him/her, s/he and one) and nonlexicalized pronoun one time.

<b>Muntu:</b>	
no one	3
Any person	1
Not one	1
Nonlexicalized	12

Chart 12: **Muntu** and its renderings in English

It is worth noting that **Muntu** here has a negative meaning and has been rendered five times with dual gender expressions (no one, any person and not one) against twelve nonlexicalized expressions.

<b>Bakaku:</b>	
Ancestors	14
Grandfather	1
Others	1
Nonlexicalized	1

Chart 13: **Bakaku** and its renderings in English

It is evident that apart from **ancestors** (dual gender) which has received fourteen occurrences, grandfather (masculine gender) has received one occurrence and the rest two.

<b>Mwâna wa mwânenu:</b>	
Your brother's son	8
Your friend's child	1
Your neighbour's child	1
Your brother's child	4
Your brother's/sister's son	1
Your brother's/sister's child	2

Chart 14: **Mwâna wa mwânenu** and its renderings in English

Here again the expression **Mwâna wa mwânenu** contains two dual gender terms which have received different renderings in English. Both terms rendered by the masculine gender terms (your brother's son): eight occurrences. Both terms rendered by the dual gender terms (your brother/sister's child, your friend's child and your neighbour's child): four occurrences. The first term masculine and the second term dual gender (your brother): four occurrences and finally, the first term dual gender expression and the second masculine (your brother's/sister's son): one occurrence.

<b>Munga muntu:</b>	
Someone else	18
Another person	7
Someone man	1
Another man	8

Chart 15: **Munga muntu** and its renderings in English

This last expression calls for some explanations. It appears twice in the Ciluba text (source text) though a little bit differently. I have found it better to treat both of them at the same time, which makes it that the figures have been doubled. Concerning the figures themselves, the masculine gender expressions have received nine occurrences (someone man and another man) against 25 for the dual gender expressions (someone else and another person).

#### 4. Discussion

It is worth noting that gender can be seen as one of the sensitive social issues today in that it has brought with it some noticeable social changes such as parity between men and women, women's emancipation, positive discrimination, etc. In fact, all these changes have a clear impact on how language tends to be used today to reflect them. In English for example, there

have been drastic consequent changes in its grammar and lexicon to adapt the language to this new world view. On the grammatical level, **he, him, his** for dual gender referents are fading away in favour of **s/he, him/her and his/her**. Likewise, on the lexical level, sexist terms such as headmaster, policeman, etc. are being replaced by neutral terms head teacher, police agent, etc.

Quantitatively the dual gender terms take over the masculine gender terms, an indication that lectures on gender had become part and parcel of students' memory and gravitated near the centre, here the working memory. That is why they were easily retrieved and used in a real situation. In clear terms, out of 288 terms or renderings of some 16 expressions, dual gender terms have had 161 (55.9%). As to the masculine gender terms, the figures indicate that they have had 110 renderings (38.1%) and lastly, nonlexicalized or non specific renderings appear 17 times in the corpus (5.9%).

As it can be seen from these figures, the use of the masculine gender renderings for dual ones shows that gender or sexism can still be considered, not only as a linguistic but also as a cultural issue which deserves pedagogical attention. There is not a single example where the informants, included the woman student, used a feminine gender expression to translate the Ciluba dual terms.

In terms of the pedagogical objectives, students of English as a foreign language are expected to be able to understand, speak, read, and write the target language, here English. That is, they should be able to communicate successfully in the target language. It puts the learners in a better position to teach the language. But nowadays EFL learners and teachers are expected to develop a fifth skill, that of translation, for them to be able to carry out a bilingual communication successfully. And this includes a good degree of biculturalism within its compass. It opens up a new avenue for these learners and teachers. (Pym 2012).

Qualitatively, it is curious to read the expressions in charts 6, 10, 14, to mention but these, to understand that for the informants the masculine gender for both terms seems to be the only accessible item which is near the centre. This can be accounted for in considering the informants' cultural background which is male-dominated. In Luba culture, the structure and growth of the family are patriarchal to the extent that **mwana wa mwanenu**, literally **child of your sibling** be translated by **your brother's son**. In the universe of those who have retrieved and used only the masculine gender, women (i.e., their female kins) are no part of their relatives; rather they are considered to be part and parcel of their husbands. This culture is not unique in the world. The Bible is said to be written

from the male's point of view and contains some passages which seem to lend support to sexist language (Gen.2:22, 23).

But sexist language is problematic as it is likely to lead to social tensions. For example, in the second television debate on October 9<sup>th</sup> 2016, the Republican candidate for the US presidential election, Donald Trump, was left without a leg to stand on for the sexist language he had held some eleven years before. Even his wife recognized that that language was unacceptable, though she asked for forgiveness.

### **Conclusion**

Given that there is no social reform without education, teachers are invited to pay attention to this aspect of things in their teaching and training processes. They should bring their learners to understand that if they want to find their way out in the present world, they need to consider the gender issue seriously and to let it be reflected in their language use, translation being a type of "interpretive language use" (Gutt 2010) and one of the objectives in the training of foreign language teachers (Durieux 2005). Since language is the mirror of a culture; therefore given the change regarding sexism, there must be the same degree of change in the language when we consider it as providing us with the means to express our views of the world. It is up to trainers to raise their learners' awareness to linguistic issues related to gender. And this can be achieved by devising communicative activities around gender. By allowing the learners to engage in such activities, they may 'proceduralize' their declarative knowledge. For me, proceduralization of knowledge becomes effective with time and consistent exposure to comprehensible and meaningful input (Benati 2020).

### **Notes**

- 1) "Ciluba" is one the four national languages of the DR Congo spoken mainly in the central part of the country. It is classified as L31a by Guthrie.
- 2) I am well aware of the other more recent cognitive approaches to translation, but I find the information processing model to be adapted to the task I am concerned with here. I refer interested readers to Risku (2013) for details.
- 3) Relying on Kiraly (2000) and Bernardini (2004), Pym (2012) establishes some difference between translation competence and translator competence.
- 4) PACTE group (2005) shows which sub-competences are declarative and which ones are procedural.

5) Relying on Halliday and Hasan (1985) and de Beaugrande (2002), by text I understand the meaning which is communicated, no matter the medium of expression.

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