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Borrowing, translation and endogenous knowledge preservation

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ABSTRACT: *This study is a position paper which shows how endogenous knowledge and local practices can be preserved through borrowing and translation. Endogenous know-how and practices are couched in indigenous languages, most of which have not yet been described, let alone being taught. This poses a serious problem as some answers to the problems the world is facing today are found in endogenous know-how. To understand the working of various local practices, one needs to know the languages in which they are encoded. Unfortunately learning a language to the point of being capable of decoding knowledge transmitted from generation to generation must take some time. In the meantime, experts who master this know-how are dying, taking along this precious ancestral know-how. As a first step to solve this problem, this paper proposes that all endogenous practices be translated from the indigenous languages into Pidgin, a language which already functions as the main lexifier of many Cameroonian languages. By so doing, these practices will be preserved temporarily, as the next elder who kicks the bucket may take them away. As a second step, children will be taught two ancestral languages as from primary school and, when they master these languages, they will then translate the know-how from Pidgin back into the ancestral languages they originated from.*

Keywords*: borrowing, translation, Cameroonian languages, Pidgin English, telegraphic communication, endogenous know-how, local practices*

I. INTRODUCTION

Over the years, African communities had developed various techniques to improve on their daily life. These techniques, which are referred to here as endogenous know-how and practices, are gradually getting lost partly because these communities have been exposed to other cultures, especially Western ones which have brought in other ways of doing things. The loss of these ancestral techniques is generally accompanied by the loss of the words which were used to refer to them. The purpose of this study is to examine ways of preserving both these words and the practices and know-how to which they refer. The questions underlying the study are:

- How can endogenous knowledge be preserved in the short run i.e. before the last expert dies with it?
- What has hitherto been the most common process of formation of words referring to new concepts in Cameroonian languages?
- What steps need to be taken today so that endogenous know-how be retrieved or reconstituted when the last expert dies?

The study is divided into three sections, with the first taking up borrowing in Cameroonian languages. Section 2 focuses on how to preserve endogenous knowledge through translation from local languages into Pidgin and section 3 examines how to promote indigenous languages through education in Cameroon.

II. BORROWING IN CAMEROONIAN LANGUAGES

English presently has over 200,000 words (see the free online Merriam-Webster Unabridged Dictionary, at https://www.merriam-webster.com); in contrast, many indigenous languages in Cameroon have a word stock of barely 10,000 words. When these languages got in contact with Western languages and cultures, they borrowed extensively from these Western languages. This point can be illustrated with insights drawn from available works on four languages: Shupamem (Njoya 1988[1]), Ngiemboon (Fasse Mbouya 2000[2]), Ngemba (Lambo Ouafo 2007[3]), and Fe'efe'e (Kouega 2017[4]). These four languages were selected because of availability of relevant studies. Other works which could be added to these include Kachin (1990[5]) and Fouda

(1991[6]). Let us consider Shupamen first. Also known as Bamun, this language is coded 195 in the *Ethnologue* (Lewis et al., 2014[7]). In a short study on this language, Njoya (2000[1]) selected words referring to foreign concepts and objects from available documents. In addition, he used the elicitation technique to get more data: he showed his informants relevant objects like a radio set and asked them what they were called. Then he compared the realisations of such loans in the donor and the receiving languages. The analysis revealed that borrowed words usually underwent the processes of substitution, epenthesis, elision and metathesis. An illustration is the word "pusi". This word is pronounced "pussy" in English, "pusi" in Pidgin and "buʃi" in Shupamen. A close look at the word shows that the initial /p/ is rendered as /b/ and /s/ becomes /ʃ/. This slight modification of one sound segment does not prevent the listener from recognizing this word if he knows Pidgin.

Table 1. Modifications of Pidgin words in Shupamen

Word	Pidgin	Shupamen	Comments
pussy	pusi	buʃi	The consonant /p/ is replaced by /b/ and /s/ by /ʃ/

Despite these modifications, "pusi" and "buʃi" are recognised as the same word. In other words, Shupamen has borrowed items borrowed from Pidgin English.

The next language to consider is Ngiemboon, which is coded 191 in the Ethnologue. Fasse Mbouya (2000[2]) studied this language, using data drawn from a collection of existing texts in that language. He identified some 255 words, of which 207 came from Pidgin English and 48 from French. The processes underlying the formation of these loans were substitution, epenthesis, elision and a combination of processes as shown in Table 2. At the semantic level, it was found that donor language words underwent such processes as meaning restriction and extension, as shown by the word "iron" in Table 2.

Table 2. Modifications of Pidgin words in Ngiemboon

Words	Pidgin	Ngiemboon	Comments
sugar	shuga	shuka	The consonant /k/ is replaced by /g/
Milk	milk	meleg	The cluster /lk/ becomes /leg/ and the vowel /i/ becomes /e/
stranger	trenja	telenza	A combination of processes takes place
iron	ayon	hanyan	It refers to the household tool used for pressing clothes

These loans were found to fall in the semantic domains of administration, trade, religion, technology and education. These domains could be extended to include endogenous know-how and practices if the description of these practices were available in Pidgin.

Similarly, Lambo Ouafo (2007[3]) described borrowed words in Ngemba, a language coded 153 in the Ethnologue. She recorded casual conversations of speakers aged 16 to 83 years and identified some 249 relevant tokens. These words include the following (Table 3):

Table 3. Pidgin words in Ngemba

Words	Pidgin	Ngemba
candle	kandele	kandele
captain	kapten	kapten
cargo	kaku	kaku
cow	kau	kao
doctor	dokto	dokta
government	gomna	ngomna
kitchen	kisi	khisim
prayer	preya	preya
razor	lisa	lisa
rice	rais	lesi
school	suku	suku
towel	tawel	tawet

A semantic analysis of these loans showed that they fall into such domains as administration, occupation, education, religion, trade, techniques, industry, medicine, clothing, food, animal names and place names, all of which refer to modern life. If local knowledge was already described in Pidgin, loan words would have also been used to refer to it.

Lastly Kouega (2017[4]) examined loan words in Fe'efe'e, a language coded 198 in the *Ethonologue*. The data he analysed came from two sources, both written and spoken. The written data were drawn from documents in Fe'efe'e written from 1960 to the present time. The spoken data were collected in the cities of Yaounde, Douala, Penja, Loum, Manjo, Nkongsamba and Bafang in August 2009. The subjects were Fe'efe'e speakers attending their weekly tribal meetings in these localities. The instruments used were an audio-tape recorder, an ordinary notebook and a pen. The researcher seized the opportunity of being a member of a team paying courtesy visits to various associations to collect these data. He sat through meetings of two to three hours and jotted down new words that were used by successive people taking the floor in each meeting and the contexts in which these words were used. Later, three teachers of Fe'efe'e residing in Bafang were asked to provide equivalents to these foreign words. When any two teachers gave the same Fe'efe'e equivalent to a given new word, that word was removed from the corpus. For example, the word "banina" (from Pidgin "banana") whose Fe'efe'e equivalent is "lat" or "tok" was removed. Words that were found in written documents but were not used in the spoken texts were also removed. In the end, some 356 tokens were retained and they therefore constituted the narrow corpus for his study.

These 356 tokens were grouped into 13 semantic domains labelled: science and technology, food and beverages, religion, divisions of time, behaviour, trade, household objects, occupations and related terms, clothes, health, education, countries and nationalities, and a ragbag category that was called "others". These domains are considered in turn.

By science and technology was meant those objects that were available in Western civilisation. These include, amongst others, *basiku* (bicycle) and *avion* (aeroplane). New items of food and beverages entered the Fe'efe'e culture as a result of contacts with Europeans as well as Cameroonians from other tribes. This can be instanced by such words as: *bia* (beer), *flawa* (flour) and *suka* (sugar). One thing that Europeans brought with them and that affected the traditional African culture markedly is religion. Fe'efe'e speakers, who were animists, embraced Western religions in general and the Catholic faith in particular. This explains the heavy borrowing of such religious terms as *batisi* (baptism), *pegen* (pagan), *Sata* (Satan). With colonisation, a new type of trade came into being and so did new terms like *dola* (the CFA Franc currency), *kaku* (luggage, cargo), *patan* (tax) and *tiket* (ticket); new household objects were introduced, like: *botolo* (bottle), *frepa* (frying pan) and *kobati* (cupboard). So were new occupations and related terms, like: *lanibue* (apprentice) and *kapinda* (carpenter). New items of clothing were used, like: *boli* (brassiere) and *kuti* (coat). With the arrival of health specialists, words like *fipa* (fever) and *kini* (quinine) gained currency.

As formal education was instituted, so words like *kreyon* (pencil), *lakre* (chalk) and *suku* (school) came into being. The need to refer to other countries and nationalities arose, hence such terms as *Flansi* (French people), *Jaman* (German people) and *Portugais* (Portuguese) became popular. With urbanisation, new patterns of behaviours were observed, as can be instanced by *bafasi* (poor behaviour, loose manners), *doti* (dirty, filthiness) and *lukot* (look out, watch out). The Western division of time upset the traditional Fe'efe'e one, where a week includes eight days. Because of this lack of fit, nearly all terms referring to time were borrowed: *hawa* (hour), *minit* (minute), *Monde* (Monday), and *Niuya* (New Year). Other new words that cannot be fitted into the broad categories outlined above, like *fosi* (first), *politik* (politics), *toni* (story), *trenja* (stranger, guest) and *watarot* (< water road i.e. gutters), were brought together in a ragbag category labelled "others".

The analysis revealed that of the 356 new words in the corpus, 302 tokens resulted from the process of borrowing, i.e., 87.6% as Table 4 below shows.

Table 4. Processes of word formation

Borrowing	Other processes	Total
305 85.67%	51 14.33%	356 100%

A look at the 305 borrowed words showed that 218 came directly from Pidgin or processes involving Pidgin like loan blend and the remainder came from French, as shown in Table 5.

Table 5. Sources of borrowing

Pidgin	French	Total
218 71.48%	87 28.52%	305 100%

As this section shows, borrowing is widespread in Fe'efe'e and the dominant source of borrowed terms is Pidgin.

In short, the four works considered above show that Cameroonian languages tend to create new words by borrowing and, interestingly, when they borrow, they tend to draw extensively from Pidgin English. This finding answers the second research question guiding this study, which is: What has hitherto been the most common process of formation of words referring to new concepts in Cameroonian languages?

III. PRESERVING ENDOGENOUS KNOWLEDGE THROUGH TRANSLATION

As Pidgin is already the dominant source of borrowed terms in Cameroonian languages, it can naturally be used to preserve endogenous know-how. This can be done through translation of local practices from the indigenous languages into Pidgin. This language meets at least three requirements that other languages do not. First, Pidgin is already used in many languages as new words in these languages are usually drawn from it. Secondly, the structural features of Pidgin are more flexible and less complex than those of French or English. Actually these structures have more in common with Cameroonian languages than with French and English. This means that the chances of losing information when translating the local practices from Pidgin back into the indigenous languages would be slim. The simplicity of Cameroon Pidgin at all levels of linguistic analysis is attested in various works including the following: Kouega (2015[8]), Ngefac (2016[9]), Nkemngong (2016[10]). Most importantly, the translation process will not require the hiring of trained translators; the work will be done by committed people who are proficient in Pidgin and who are willing to work in difficult and occasionally dangerous terrains.

Technically, the translation work will be done by one linguist leading a team of competent Pidgin speakers. The team will observe an endogenous expert at work and will describe in Pidgin every step this expert goes through to, say, produce an object like a pot. The members will pay attention to the materials the expert uses, the place where these materials are collected from and the various transformations to which the materials are subjected. Needless to say, the Pidgin text thus written needs to be sprinkled with local language terms, a technique that will facilitate information retrieval during the process of translation back into the local languages.

To illustrate, one can mention the technique of treating a broken bone by way of massage and without the use of a plaster as in a modern hospital. Another illustration is the making of a crossbow. Before the gun became widespread, the crossbow was the only instrument that was used to shoot big or fast animals like elephants, antelopes and monkeys from a distance. In rare cases, it was used in wars. To make a crossbow, the endogenous expert needed a special type of wood that can be curved without getting broken, a strong string that can pull an arrow and release it abruptly, and an arrow that can pierce the flesh of an animal and remain in its body, therefore making it difficult for the wounded animal to run a long distance. In addition, the expert mixed a number of plant saps to produce a type of poison to be rubbed on the pointed edge of the arrow; properly done, this poison can kill a game in a very short time but not a human being who eats that game. It is this type of know-how that needs to be collected and translated into Pidgin.

It may be argued that translation from local languages to Pidgin and later from Pidgin back into the local languages is not cost-effective. However, it should be borne in mind that some endogenous practices are on the verge of disappearing. In some tribes, children are not interested in learning these endogenous practices and their parents are consequently dying with them. Needless to say, some of these practices can potentially save humanity if people were aware of their existence. Translating them into Pidgin today will help to preserve them before the last experts travel to eternity with them.

IV. PROMOTING INDIGENOUS LANGUAGES THROUGH EDUCATION

While endogenous practices are being translated into Pidgin, indigenous languages are to be developed and taught in school. Over the years, successive Governments have done very little to promote indigenous languages. Worse, they have not even attempted to count them. As far as we are aware, there is no official document in the country listing these languages. The only document that seems to exist is the form used for the third national census that was conducted in the country in November 2005 (see Kouega 2008 [11]).

Respondents were required to indicate both their local languages and nationality. Under local languages in the census taker guide (MINPAT 2005: 36-37 [12]) were listed the following 82 languages, preceded by these codes:

01 Akoose
02 Arabe
03 Bafaw-Balong
04 Bafia
05 Bafut
06 Baka
07 Bakossi
08 Bakweri
09 Bali
10 Bamoun
11 Bana
12 Bangolan
13 Basaa
14 Beti
15 Buduma
16 Bulu
17 Byep
18 Daba
19 Dena
20 Dii
21 Doyayo
22 Duala
23 Ejagham
24 Eton
25 Ewondo
26 Fali Sud
27 Fe'efe'e
28 Fulfulde
29 Gbaya Nord Ouest
30 Gbaya Sud-Ouest
31 Ghomala
32 Giziga Sud
33 Gude
34 Gyele (Bagyele)
35 Haoussa
36 Hedi (Xedi)
37 Kako
38 Karang (Mboum Est)
39 Kenswe Nsei
40 Kenyang
41 Kera
42 Kom
43 Koozime
44 Kuo
45 Lamnso
46 Limbum
47 Mada
48 Mafa
49 Makaa
50 Mambila
51 Masana
52 Mazagway
53 Mbembe Tigon
54 Mbo
55 Medumba
56 Mefele
57 Mendankuwe-Nkwen
58 Merey
59 Meta
60 Mofu Gudur (Mofou Sud)
61 North Mofu
62 Mundani
63 Musgum
64 Ngiemboon
65 Nguemba
66 Nomaande
67 Noone
68 Ntoumou
69 Nugunu
70 Pku
71 Prarkwa
72 Tikar
73 Tunen
74 Tupuri
75 Vengo
76 Vute
77 Wandala
78 Wawa
79 Wuzlam
80 Yamba
81 Yambeta
82 Yemba
83 Autre
00 Aucun

From this list, the following observations can be made:
- only 82 out of the over 250 languages of the country were listed and any other language was to be entered under the code "83 Autre" i.e. other language. This label irked some people to the point that they refused to take part in the census;
- some language names are new even to the speakers of these languages e.g. 39 Kenswe Nsei, 71 Prarkwa, 78 Wawa;
- languages, dialects and ethnic names are allocated different codes; for example, 14 Beti is listed as a language and so are some of its dialects: 16 Bulu, 24 Eton and 25 Ewondo. On the other hand, 01 Akoose and its alternative name 07 Bakossi are entered as different languages.

Because of this confusion, many census takers skipped that question and limited themselves to the question on nationality.

One interesting action that Government took to promote indigenous languages was to instruct its use on the media: the ten regional radio stations in the country broadcast in a few indigenous languages and so do some public and private FM radio stations (see Kouega 2007:66-67 [13]). In another study conducted in 2008 by Kouega, respondents attested that they do listen to programmes broadcast in the following 28 mother tongues:

Table 6. Languages used on the radio and types of radio stations where they are used

Mother tongue	Radio stations		
	Public	Semi-public	Private
Akoose	CRTV Buea		
Baba	CRTV Bamenda		

Bafia	CRTV Centre		
Bamun		Radio Communautaire du Noun	
Basaa	CRTV Centre		Radio Siantou
Douala	CRTV Douala		
Eton	CRTV Centre		Radio Venus
Ewondo	CRTV Centre		Radio Environment Radio Lumière
Fang			Radio Equatoriale
Fe'e fe'e			Radio Siantou
Fulfulde	FM Maroua		
Gbaya	CRTV Bertoua		
Ghomala	CRTV Bafoussam Poala FM		Radio Baham Radio Bonne Nouvelle Radio Siantou TBC
Kenyang			Voice of Manyu
Mafa	CRTV Maroua		
Mbo	CRTV Buea		
Medumba			Radio FM 100 Medumba
Mundang	CRTV Maroua		
Ngemba			Radio Batcham RVT-FM
Ngomba			Radio Lumière
Ngombale	CRTV Bafoussam		Radio Batcham
Nguiemboon			Radio Batcham
Tunen	CRTV Centre		
Tupuri	CRTV Maroua		
Yambassa	CRTV Centre		Radio Bonne Nouvelle
Yemba	CRTV Bafoussam		CBC Yaounde

Another action taken by Government to promote indigenous languages is in the domain of education. In 1977, a number of language institutes were created, purposely to describe these languages and introduce them in the school system. These are: the Centre for Anthropological Research (CREA), the Department of African Languages and Linguistics (University of Yaounde) and the National Centre for Education (CNE). These institutes completed their work but their proposals were rejected. Government rather reinforced its French-English bilingualism policy. In 2000, the second official language was made a compulsory subject from the first day of primary education. The following year, an order introducing the second official language subject in both the written and oral parts of the primary school exit examinations, i.e., the First School Leaving Certificate (FSLC) and its French equivalent, the *Certificat d'Etudes Primaires* (CEP) (Order No 66/C/13 of February 16, 2001) was signed.

Still in the domain of education as reported in Kouega (2011[14]), Government instructed the Higher Teacher Training School to set up a Department of Cameroonian Languages and Cultures, where teachers are to be trained to teach Cameroonian languages. Teacher trainees are taught a variety of subjects, including the Alphabet, Orthography and Culture of all Cameroonian languages and cultures (course code LCC131), Cameroon oral literature (course code LCC161), Science of education (course code EDI 101), etc.. After graduation, these teachers are expected to teach a new school subject, i.e., Cameroonian languages and cultures, in secondary schools in the country. For a start, the following languages were chosen: Basaa, Beti, Bulu, Duala, Ghomala, Limbum, Ngiembon and Yemba. No decree announcing the choice of these languages was issued and very few Cameroonians were aware of what was going on. The list of the chosen languages already poses a serious problem: Beti has always been regarded as a language group with Ewondo, Bulu and Eton being its dominant dialects. Strangely, Bulu is cited here as a separate language and Eton does not feature at all. Besides, five out of ten regions are not represented, i.e., Adamawa, East, Far North, North and Southwest, while one region is represented by three languages, i.e., the West with Ghomala', Ngiembon and Yemba. In addition, one dialect of the Beti language group, i.e., Bulu, has been raised to the status of full

language. Such a programme bears the seed of its failure, as it does not result from consultations with experts. In short, Government wants indigenous languages to be taught in secondary school while French and English are taught as early as the first day of primary school.

This paper proposes the reverse, i.e., that at the primary level, one official language and two indigenous languages be taken up by every child. At the secondary and tertiary levels, every child should be taught two official languages and two indigenous languages, preferably the same the child started with. This proposal is expatiated in the paragraphs that follow.

At the primary level, all Cameroonian languages should be taught and so should one official language, not two as is the case presently. It is very challenging for a child to start school with two foreign languages. The primary child should learn one official language (not two as is the case now) and at the same time he should be introduced to two indigenous languages, i.e., his own mother tongue in the first position and one Cameroon indigenous language of his choice in the second position. This teaching of the indigenous languages will be limited to the acquisition each year of some 200 common vocabulary items like “father”, “mother”, “sun”, “house” etc and short expressions like “what is your name?”, “where are you going?” etc., in each child’s two languages. That gives a total of 1200 words in the six primary school years. These words are to be recorded on CDs with taxpayers’ money and sold at a subsidized price in schools. This exercise will enable Government to draw up a list of those languages which are most often chosen in the second position; from this list will come the ultimate national language of Cameroon. By getting all Cameroonian languages to be taught at the same time, Government will be implementing a constitutional provision.

If the teaching is done effectively, every child will be able to realise telegraphic communication in two indigenous languages. By telegraphic communication is meant a form of communication in which the speaker relies on key words to construct utterances following the syntax of a given language. Take for example the utterance ‘the children are playing in the garden’, which can be reduced, following English syntax, to the telegraphic sentence ‘children, play, garden’. If every Cameroonian child can do this in two Cameroon ancestral languages, then Government will no longer be accused of neglecting these languages. Presently, many children cannot hold a telegraphic talk even in their parents’ mother tongues. The syllabus will be designed by specialist teachers, the recordings made by audio-visual specialists and the teaching itself done by every school teacher including historians, mathematicians to name only these. In the classroom, the teacher’s job will be limited to checking that each pupil’s CD reader is working, that the CDs themselves are good and that each child is working on his chosen languages and is not doing other things.

V. CONCLUSION

This paper has observed that endogenous knowledge is getting lost without any records having been kept. Endogenous know-how and local practices do exist but they are encoded in indigenous languages, most of which have not been described let alone being taught in school. The experts in these local practices are usually old people who have not always succeeded in getting their own children to learn these practices. Consequently, when death comes, they die with these ancestral practices, some of which if developed, can solve some of the world’s problems today. This paper posits that all local knowledge be translated into Pidgin, for the sole purpose of preservation, as Pidgin is already the main lexifier of many Cameroonian languages. As translation work is going on, indigenous languages are to be taught in school and when school-going youngsters master their chosen indigenous languages, they translate this local knowledge from Pidgin back into the indigenous languages from which it came.

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