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AN EXPLORATORY STUDY OF INDIVIDUAL MULTILINGUALISM IN A RURAL AFRICAN ENVIRONMENT: THE CASE OF LOWER FUNGOM

A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF A Ph.D. DEGREE IN APPLIED LINGUISTICS

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0.1 GENERAL INTRODUCTION

This chapter which is made up of the general introduction, background to the problem, statement of the problem, objectives, research questions, hypotheses, scope and delimitation of study, motivations, significance of the study, the context of the study, the Socio-Political Situation of LF, the economic situation of Lower Fungom, the pilot study, Classification of LF Languages, the Cartographical Representation of Lower Fungom, the work outline and conclusion presents the degree of competences people have of the languages of LF. The issue of multilingualism today is becoming so common that it becomes very rare to hear about a monolingual speaker or a monolingual community. Edwards (1995:1) also reminds us that multilingualism is "a normal and unremarkable necessity for the majority in the world today". The case of Lower Fungom (LF) is a glaring example of a hypermultilingual area.

Lower Fungom is situated in the North West Region of the Cameroonian Grassfields, precisely in Menchum Division. Not only is this area harbouring many languages, but also, we can find cases of individual multilingualism (Di Carlo, 2015). Eight languages are spoken in its thirteen small villages, each village speaking a variety or lect of one of the eight languages in LF including Pidgin English. These languages include the Mungbam ISO 639-3 [mij] language, which is made up of the (Munken, Ngun, Biya, Abar and Missong), the Buu, Ajumbu ISO 639-3 [muc], Fang ISO 639-3 [fak], Koshin ISO 639-3 [kid], Kung ISO 639-3[kff] the Mufu-Mundabli ISO 639-3 [boe] language made up of Mufu and Mundabli varieties and the Naki [mff] language (made up of the Mekaf, Small Mekaf (Batieh), Mashi, Nser and Nkang). Below, we are going to look at the background to our problem.

0.2 BACKGROUND TO THE PROBLEM

Urban centre multilingualism is motivated by the role of languages (Polomé 1982). As a result, non-native speakers of those languages invest their time learning such languages to the detriment of their own native languages. In the case of LF, speakers of this area seem not to be very interested in the job market some of those languages can offer but are concerned with social affiliations (i.e because they want to communicate with friends, family members and to prove love to their communication partners). In a sociolinguistic survey carried out in 2012 by Dr Pierpaolo Di Carlo and Angiachi Dimitris, the people of LF reported self-reported multilingualism of up to nine languages and up to 13 to 17 languages recorded by the author

herself. (Angiachi, 2013), Di Carlo 2015, 2016). Also, the self-reported rates of multilingualism in men seem to be higher than those of women (Di Carlo 2015). Even though LF inhabitants have claimed individual multilingualism of up to 13 to 17 languages, no empirical study has ever investigated the veracity of these claims. The use of the recorded text testing (RTT) tool which has for the past decades been used to test intelligibility testing (Casad 1974, Kluge (2006), Kluge and Hatfield (2002), Tompkins et al. (2002) was used here to assess passive multilingual competences of these speakers.

With the presence of many languages in this relatively small area, one would think that each speaker would want to be linked to his/her own language and to maintain his/her own identity. However, what we notice here is that people want to be identified in many social groups and be considered members of these groups if at one time, they ceased being members of their own groups (Di Carlo 2015). Kramsch and Whiteside (2007), also support this point saying that being a competent multilingual implies acquiring skills to be accepted as a member of a community of practice. That is, an L2 speaker can easily be accommodated in a linguistic community if only he/she can speak the language of the people. Below is the statement of the research problem of our study.

0.3 STATEMENT OF THE PROBLEM

It has been noted that there exist eight languages in LF, a very small area measuring about 240 km^2. This community's multilingual nature is not only portrayed by the co-existence of many languages but also, we notice a very high rate of individual multilingualism and the claims that inhabitants of this area are multilingual is cause for concern. This information is based on self-reported individual multilingualism (Angiachi 2013, Di Carlo 2015). The languages of LF have not received much attention from sociolinguists. Most works carried out in this area were based on other domains of linguistics (See Lovegren 2011, Good *et al*. 2011, Di Carlo (2011, 2015, 2016, Ngako 2013, Mve 2014, Ousmanou 2015). From the above presentation, it is crystal clear that none of the researchers were interested in the sociolinguistic aspect especially that of assessing actual multilingual competences. Therefore, our work is necessary as it comes to complement the above-mentioned works carried out in LF.

We therefore intended to check previous works done in this area not only on the people's self-reported multilingual competences but also to see if men in LF are more

multilingual than women as claimed in the works of some of the above mentioned authors. So far, no work has assessed this reported high individual multilingualism empirically.

Generally speaking, multilingualism is a social phenomenon governed by the needs of globalization and cultural openness. Because of the ease to access of information facilitated by the Internet, individuals' exposure to multiple languages is becoming increasingly frequent; thereby promoting a need to acquire additional languages. This brings in a lot of curiosity when people in traditional settings such as LF without access to communication networks are so actively involved in picking one language to another and the assumption that these linguistic varieties are being spoken by almost everyone in LF is our concern. So we want to see how multilingual these people are, which of these languages are the target of multilingualism, by whom. Also, the use of RTT which was entirely designed for intelligibility testing to assess passive multilingual competences, will be used to find out if it can be effectively used to assess multilingual competences.

0.4 RESEARCH QUESTIONS

The research was guided by the following research questions:

Main research question

Are the LF people multilingual as they claim?

Specific research question

RQ1: How many people have passive competence?

RQ2: How many people have active competence?

RQ3: Which of the age groups with self-reported multilingual competences is the most multilingual?

RQ4: Which gender is more?

RQ5: Which of these language are targets of multlingualism?

RG6: Can RTTs be used in assessing multilingual competences?

The objectives of this work have been put forward as seen below:

0.5. OBJECTIVES

We are guided by one main objective and six specific objectives which are:

Main objective

- To assess the actual competences of the second language (L2) speakers of LF in these languages.

Specific objectives

- Firstly, to find out how many people have passive competence
- Secondly, how many people have active competence
- Thridly, to find out which of the age group with self-reported multilingual competences is the most multilingual
- Fourthly, to find out which gender is more
- Firthly, to find out which of these language (s) are targets of multlingualism
- Lastly, to find out how it is possible to use RTTs in assessing multilingual competences

0.6 SCOPE AND DELIMITATION OF THE STUDY

This study will be limited to native speakers of LF who have lived in this area for at least fifteen years and have been judged competent in their own languages. This will involve both male and female from the ages of 18 and above, both literatesand illiterates. The reason for choosing this age group is conditioned by the pilot study and by earlier works like those of Angiachi (2013) and Di Carlo (2015) who were part of the research team during the pilot study. The age groups that were targeted during this period will also be maintained in this work. This is because changing the age group could in one way or the other influence the results. The above-mentioned authors carried out their studies on the multilingual rates of this area where they targeted the adult population of LF and since our work is concerned with testing the veracity of the claims these people made to us of their multilingual proficiencies, we also decided to maintain the adult population hoping that some other researchers will expand on it. Considering an age group that was not part of the above-mentioned works could

influence the results. As a result, our target population would involve people of all walks of life, the literate and illiterate, males and females. This work fail to include people below 17 years which could still be of great importance to the study.

After presenting the scope of our study, we will now talk about the context of the study which will give us a vivid description of the area. What we mean by context of the study is making people know more not only about the linguistic repertoires of the people, but also the geographical and cultural lives of the people known as the context of study.

0.7 THE CONTEXT OF THE STUDY

Context here consists of the following sub-headings: (1) the historical and geolinguistic context, (2) the socio-political presentation, (3) geographical presentation of LF village and language groups, (4) the linguistic context of LF and the classification of LF languages. Below, we are going to see the historical origin of the LF people.

0.7.1 Historical presentation and geolinguistics context of the people of LF

As it was the case with the movement of many communities in the 19th centuries, LF also experienced a wind of migration and fusion. In this area, we discover that many of the communities were not original settlers of LF but some came and fused with some of the communities while those that were considered original settlers of this area were very ready to live together with their new comers provided the newcomers were harmless (Di Carlo, 2011). Oral tradition states that when the "new comers" arrived, they got involved in a reciprocal transfer of their cultures and languages while others had to abandon their original languages and embrace those of the "natives".

Linguistically, according to Guy et Vergnaud (1983), Cameroon is considered as Africa in miniature because it is one of the most multilingual countries in sub-Saharan Africa. Out of the four language families in Africa, three are represented in Cameroon namely: Afro-Asiatic, Nilo-Saharan and Niger-Kordofan. Research carried out by Tadadjeu *et al.* (1990) has revealed that Cameroon has up to 248 indigenous languages and many more have been identified. Data from Ngako (2013), Di Carlo (2015) suggests that Buu which was formerly considered as the language of the Ji group, is a language on it own, Eberhard *et al*. (2019).

LF is made up of eight languages spoken in its thirteen villages. One amongst these eight languages is known as the Mungbam [mij] language, an acronym given by Lovegren

(2011) to represent the lects spoken in the villages of Munken, Ngun, Biya, Abar and Missong. The language code is referred to by ISO 639-3[mij.

The people in the villages speaking the Mungbam language are not comfortatable with this appellation because they claim each village speaks its own language; but at the same time they affirm that some of the 'languages' are similar. So far, that is the only way in which these dialects could be identified. (Di Carlo 2011, Lovegren 2011).

The Naki ISO 639-3 [mff] language, one of the languages spoken in and out of LF is an (Eastern) Beboid language. It is spoken in Mashi, Mekaf, Small Mekaf (presently known as Batieh), Nkang, Nser, and in other small settlements within Furu-Awa subdivision to the north of LF. The reason for the change from Small Mekaf to Batieh is due to the fact that these people have relocated to a new site. The name Batieh explains the level nature of their new settlement.

The Mufu-Mundabli ISO 639-3 [boe] language is spoken in the two villages of Mufu and Mundabli. The language spoken by the Mufu-Mundabli people in Lower Fungom's northeast periphery was formerly known as the (Ji group) with the inclusion of Buu as one of them (Hombert, 1980; Good *et al.,* 2011).

Ajumbu ISO 639-3 [muc] is a one-village language. It is associated with ISO 639-3 [muc] and in earlier sources the names "Mbu and Mbuk" have been used (Hamm *et al*., 2002). However, recent works like (Good *et al.,* 2011; Di Carlo, 2011, 2015) give it the name Ajumbu. It is located on the southern fringe of LF, which puts it in contact with the Mmen language especially with the Mmen speakers in the village of Fungom. Mmen is an important second language among the Ajumbu as most speakers here claimed; but these claims were not verified in that, assessing the Mmen language was not part of our work since it is a language spoken out of LF.

Koshin ISO 639-3 [kid] is also a one-village language spoken in the eastern part of LF. Both oral tradition and written sources hold that the Koshin people are relatively recent migrants into LF. It was founded by people originally settled in Bum area, not far from present day Sawe (Boyo Division), located some 20 km to the south of present day Koshin (see Pollock, 1927:23 and Bridges 1933:94**).**

Like Koshin, Fang ISO 639-3 [fak] is also a one-village language spoken in the southeastern part of LF. The Fang of LF has been reported to have no relationship with the

Fang ISO 639-3 [fan] of the Beti language cluster which is a Narrow Bantu language spoken in the Southern part of Cameroon and bordering countries (Good et *al.* 2011).

Buu, which was formerly considered as one of the Ji group, that is, to be linguistically connected to Mufu and Mundabli (Good 2011), has been proven by recent researchers like (Ngako 2013) to be a separate language from these two varieties. Its people are also known as the Buu people. This language has not yet been attributed an ISO code.

The Kung ISO 639-3 [kff] language has been considered and classified as a central ring language, a subgroup of Grassfields Bantoid found to the south, which include Mmen [bfm]. The language is spoken only in the Kung village, though some of its speakers are found in Yemgeh, a village lying just below the Mekaf hill. The Kung speakers of Yemgeh have settled together with those of Fungom who live in one part of the village and Kung speakers in the other. One very interesting thing about the speakers of Kung in Yemgeh and the Fungom speakers is that, they live together in harmony, have common meetings (cohabit), and inter-marry but none of the languages influences the use of the other.

One glaring example is when on several occasions the researcher attended mass at the Roman Catholic Church (St Clementine Anuarite Quasi Parish) in Yemgeh, and during mass, a song was sung in the local language. While Kung people sang in their language, the Fungom people also did that in theirs. Since she could neither sing in Kung nor in the Fungom language, she too decided to sing in her own language (Isu) and no disorder was noticed with the simultaneous use of these three languages as the song meant the same thing in all these languages. One would say that there is an identity conflict here, as each and every one would want to maintain his/her own identity but they still go forward to learn other languages.

What really puzzles me is the relationship this language has with that of Isu, one of the west ring languages spoken out of LF. Kung's history from written documents has nothing to do with that of Isu. However, it was so surprising when the researcher, though being a native of Isu, in her first contact with the Kung language, was able to understand what was said in this language. The researcher also discovered that Kung language and that of Isu were similar. When she tried to inquire from the Kung people the reason for these resemblances, she was told these people had had a previous contact and still maintain some friendship ties between them and Isu. Further inquiries revealed that the former Kung chief died in Isu and was buried in the Isu palace, and the present chief of Isu was enthroned by the Kung people. The question that is asked is that, is Kung a central ring language or a west ring language? Why

these close similarities between these two languages? It is recommended that some work be done to find out why these similarities, could they not be dialects of the same language? Those who founded Isu and Kung, were they brothers? The classification of this language still needs further verifications.

From the above, we have been able to see the origin of LF languages, their geographical sites and their relationships with other languages. One would therefore have a clear knowledge of why some of the languages are related, others are not. We have also been able to know how contact with other languages, sites and affinities influences languages and those who speak them**.** Below, we will give a rough estimate of the population of LF.

0.7.2 Demography

The population of this area is close to 14,000 inhabitants (Di Carlo 2011: 62). The region extends over some 240 km^2. The demographic density is 58.3 per sq km. The population of the various LF languages and villages are as follow:

TABLE 1: THE DEMOGRAPHIC DISTRIBUTION OF LF

SUBGROUP	LANGUAGE	VILLAGE	POPULATION
Yemne-Kimbi	Mungbam [mij]	Abar	650-850
Munken			around 600
Ngun			150-200
Biya			50-100
Missong			around 400
Mufu-Mundabli	Mufu		80-150
Mundabli			350-450
Buu	Buu		100-200
Fang [fak]	Fang		4,000-6,000
Koshin [kid]	Koshin		3,000-3,500
Ajumbu [muc]	Ajumbu		200-300
Beboid	Naki [mff]	Mashi	300-400
Mashi over side			not specified
Mekaf			not specified
Small Mekaf (Batieh)			not specified
Nkang			not specified
Central Ring	Kung [kfl]	Kung	600-800

Lower Fungom villages, adapted from Di Carlo (2011:11).

The table adopted from Di Carlo (2011) gives a rough estimate of the population of LF. The topography of the area will be seen below.

0.7.3 Topography

The attribute given to this area as "lower" refers to the lower elevation of this area as compared to those extending to its east, south, and west. Both physical boundaries and international characteristics like the Kimbi River known in Nigeria as the Katsina-Ala, steep escarpments and the Yemne stream make it easier to set this area apart from the surrounding physical context (Di Carlo 2011).

0.7.4 Soil and Vegetation

The area is characterized by frequent and steepness of hills, which are characterized by an abrupt ascent of about 250-300 m between the valley bottom and their narrow tops, which lie between 800 and 850 m. Both physical boundaries and internal characteristics make it easy to set this area apart from surrounding physical context (Di Carlo 2011). .

0.7.5 Climate

The climate of LF is of the monsoon type. The rainy season comes with strong winds, thunderstorms and heavy down pours. The amount of rain in this region is estimated to be between 1700 and 2200 mm per annum (Hurault, 1986: 116; Nettle, 1996: 4171; Nji Fogwe and Tchotsoua, 2010: 20).

0.8 The Socio-Political Situation of LF

As far as the socio-political situation of these people is concerned, the villages of LF are governed by chiefs. Chiefs in these villages are considered as the most important persons who influence the lives of their people (Di Carlo 2011).

Although power in this area does not directly concern women as it is the case in most Cameroonian contexts where women are always relegated to the background and never execute powers where men are and have no say as far as issues of inheritance are concerned, they have a lot to say as far as the choice of a chief is concerned since they are considered the best judges who can easily tell who they think could be a good ruler and a father of all. They would always know beforehand who is to be enthroned as chief even before the quarter heads. The women are also the ones who bathe the chief and rub him with camwood when he is

being enthroned (Oral reports given to the author by son of the Missong chief (Cho Boniface) and wife of the late chief of Buu (Kah Christina) .

We have presented the socio-political situation of LF; the economy situation of these people will not be left out, as it is equally as vital as the other factors mentioned above.

0.9 The Economic Situation of Lower Fungom

Lower Fungom, which is a rural area, pivots around farming, hunting, rearing of animals and petty trading activities. The current productivity system centres on subsistence farming, where the products that are produced, are mostly for local consumption and very little is left for trade purposes. Food produced here include: cocoyams, groundnuts, beans, corn, sweet potatoes, vegetables and cassavas which are sometimes traded in very small quantities.

Palm oil production is the main income generating activity in the area though not much money is gotten through this activity due to its relative cheap prices. Quoted in Di Carlo (2011:61). Palm wine tapping is also practised since it is very vital for cultural celebrations and ritual performances. Like in Isu, no event in this area is celebrated without palm wine being present though it is sometimes complemented with corn beer commonly known as 'shaa' but it remains the most important element as far as the above mentioned acts are concerned.

Fruits like mangoes, pears, oranges, limes, are also cultivated in this area mostly for local consumption.

Livestock breedings, ranging from fowls, pigs, goats, dogs, cats are mostly practiced by the males though in limited numbers in purely residential areas of LF. Cattle rearing is also practised by the "Aku people" in the hilly areas though they constitute a very small population of this area. There is no special market and a market day set aside for the sale of these cattle as is the case with Isu which has a special day assigned for the sale of cattle; which is Thursday. The cattle here are bought by traders from the neighbouring villages of Weh, Wum, Zhoa and Bafmen (Nsen, 2011).

Hunting which used to be an essential activity in this area, is today limited mostly to small game like cane rats and similar rodents (Di Carlo, 2011). Fishing is also practised with the use of locally made nets along the Mbum and the Kimbi Rivers.

Moulding of bricks is one means through which these people generate income, as those who want to construct their new houses employ temporal workers to mould bricks for them. This activity is mostly done by young girls and women who meet their daily needs through this activity.

As far as communication is concerned, a motorable road, although in very bad condition, leads from Weh to Abar are used by trucks, four wheel drives and motorcycles. This is the only way one can gain access in this area other than foot. The whole area is crossed by many footpaths. These footpaths also connect the area with all surrounding regions. Electricity is absent in the whole of LF and the only source of light out of their homes is the moonlight that brightens up the area at night though not all the time. This moonlight is a very important element of this area as it permits people to visit their love ones whenever they deem necessary.

It also helps in language acquisition as young children stay out at night with their friends who do not necessarily speak the same languages and try to transfer the competences they have in their languages to their playmates by teaching them directly or through songs. It is very common during these periods of the appearance of the moon to see people moving from one village at night to the other in order to visit their friends and love ones. This is also one of the elements that has encouraged a very high rate of intermarriages in this area of LF as young boys will always sneak out of their homes at night to another village just to go and meet a girl in another village.

In my personal discussions with one Missong boy in Buu, there was a day I passed a night in Buu and while I was sitting outside enjoying the brightness of the moon, a boy immediately approached me and greeted me. While we were discussing, I came to understand that he came from Missong that night to see his girlfriend and he told me he would be going back to Missong that same night.

There are also no internets and patches of telephone networks are gotten from the only Orange antenna found in Mekaf and where this network does not appear, one is forced to move up hilltops in order to capture some network.

0.10 SIGNIFICANCE OF THE STUDY

Any potential research work must be able to put forward points as reasons for any scientific work one embarks on. Therefore, the research study is not only important to the LF communities but also to the world atlarge. The significance of this study is threefold: scientific, cultural, and social.

0.10.1 SCIENTIFIC SIGNIFICANCES

- **World awareness**

As far as the scientific significances are concerned, we are willing to document and make the world at large be aware of the multilingual phenomenon encountered in the area; individual multilingualism; the actual performances, the feeling and attitudes of the people of LF will be scrutinized. Most often, when people hear of multilingualism, what usually comes to mind is a scenario where foreign languages come into contact with African languages and these languages are always almost learnt because of market value, prestige and also because of the job opportunities these languages provide. But the case of LF presents a situation where national languages come into contact with other national languages. And the fact that these languages are spoken almost by everybody not because they possess the above mentioned advantages but just because those speaking these languages want to be affliliated to those language communities is something to reckon with.

- **Contribution to the already existing literature in the area**

Our work will also contribute much to the already existing literature in the field of sociolinguistics and most especially, as it has to do with actually assessing the linguistic competences of these people thus verifying the veracity of self-reported competences in previous works.

It would also add to the bank of data that already exists in this area, which could be helpful for future analyses. That is, the fact that we will document most of what we would get from the field; it would provoke other research questions and consequently findings.

- **Adding more tools for language assessment**

The successful use of the RTT to test passive competences will increase the number of tools for multilingual language assessment. That is, the successful implementation

of a tool that was initially designed to test dialect intelligibility in assessing multilingualism will enourage other researhers to use this tool for the same purpose.

0.10.2 CULTURAL SIGNIFICANCES

- It will be further beneficial for the natives of LF who up to now have never experienced any sufficient exposure in their language and culture to do so by listening to the recorded texts, viewing the stimuli and also by listening to the wordlists that have been recorded in different languages.
- Also, written and recorded documents will give opportunities to people who have never been to LF to live the realities of the area since they will be able to learn by listening to the recorded texts and through the images used during the visual stimuli what actually takes place in the area.
- These languages through the recordings and the documentations, will be preserved and as a result, transmitted from one generation to another.

0.10.3 SOCIAL SIGNIFICANCE

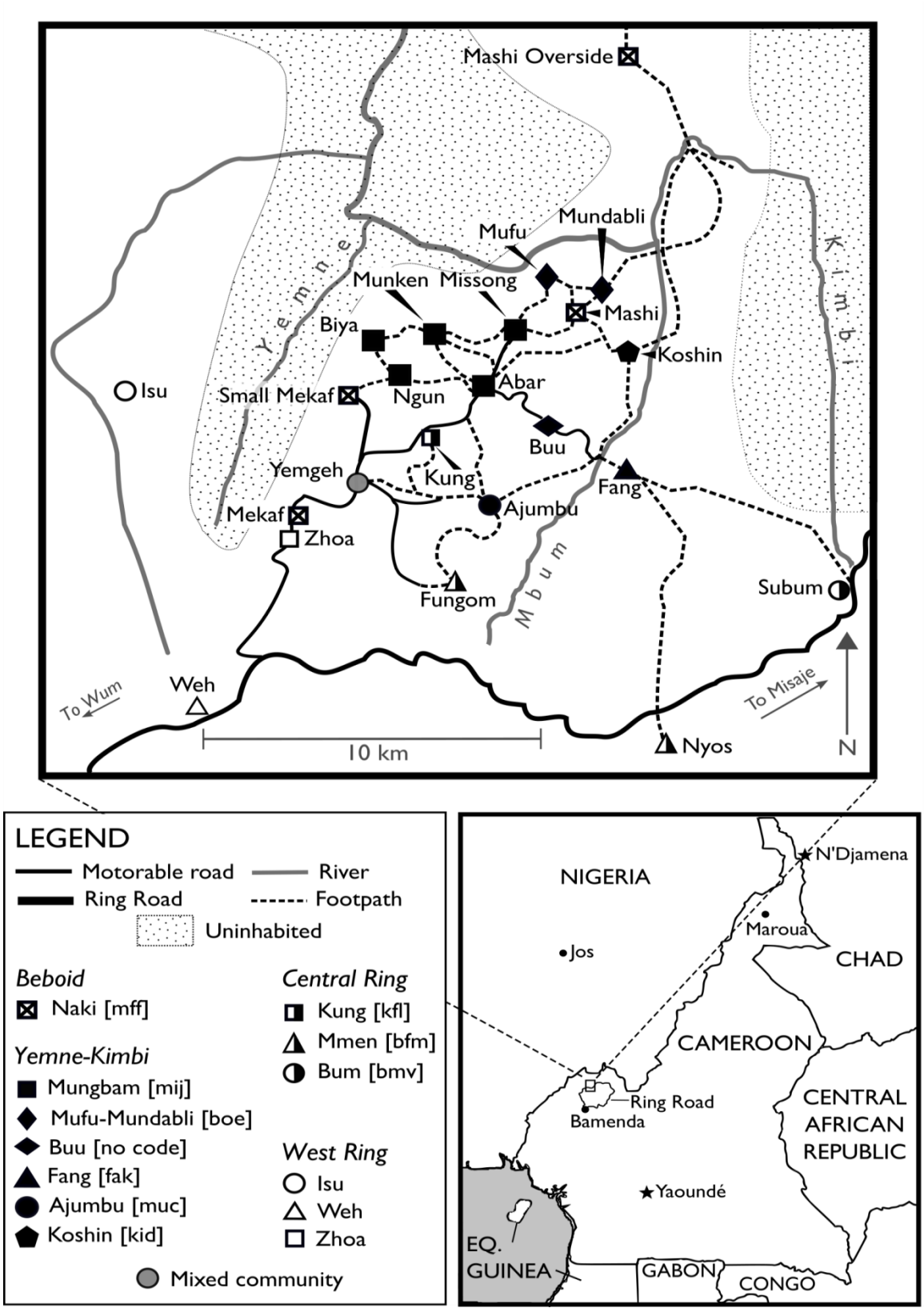
- Socially, it would also provide information to Anthropologists and Archaeologists about the people, their way of live, origin and how kinship functions in this area. This could give the researchers opportunities to want to carry out a comparative study in this area which is a traditional setting with another or with an urban setting.

After having seen the reasons put forward for carrying out this piece of work as elaborated above, we are now going to present the area. Below, we are going to situate these languages through a cartographical presentation.

0.11 The Cartographical Representation of Lower Fungom

The presentation of LF in a cartographical format is very imperative as it gives a vivid description of the focused area of research. So the following maps show the location of LF in Cameroon. Map 1 shows the map of LF with its environs and map 2 is the map of Cameroon indicating the location of Bamenda, Menchum Division where LF is found.

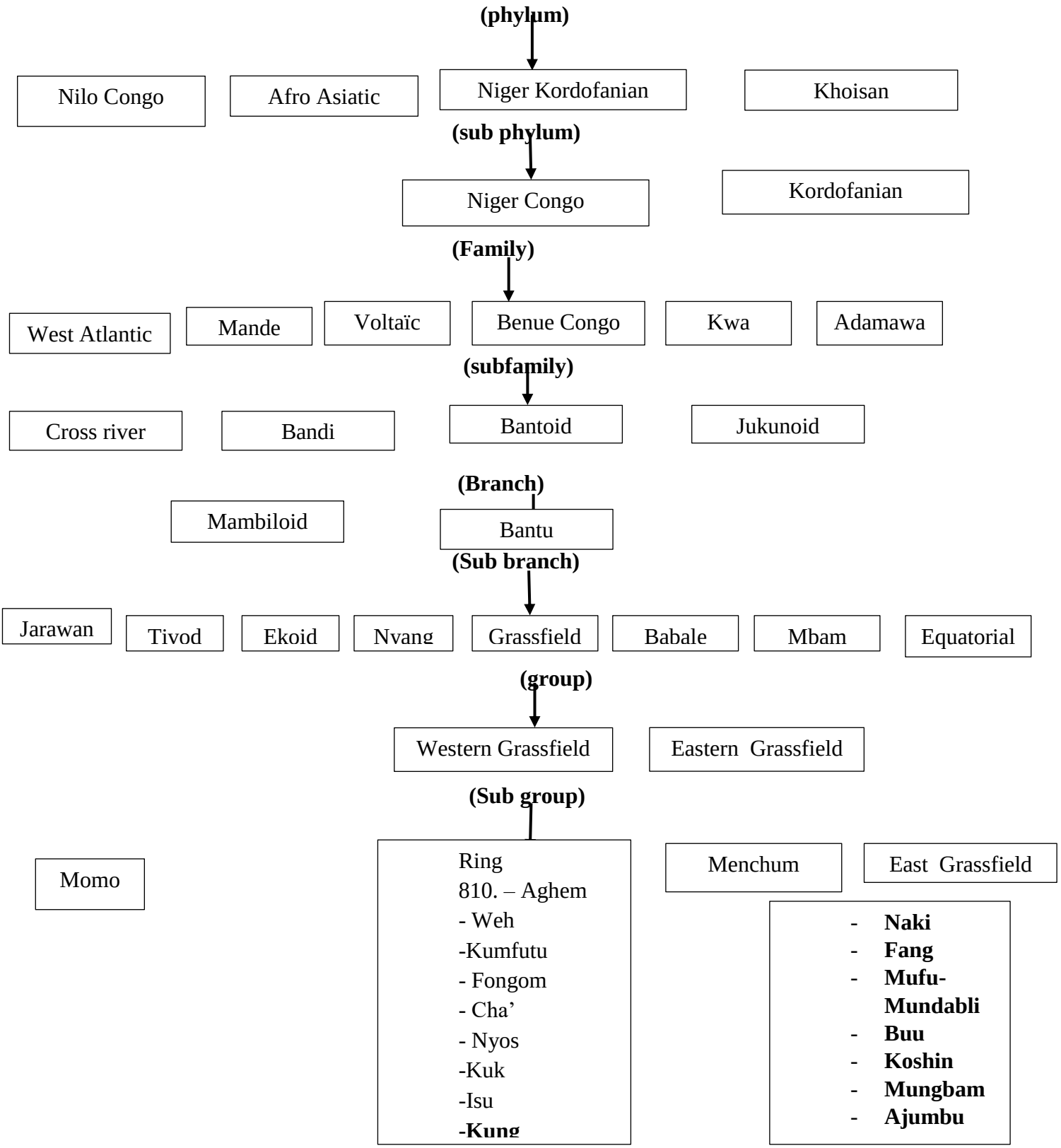
MAP 1 AND 2: MAPS OF LOWER FUNGOM AND THAT OF CAMEROON



0.12 Classification of LF Languages

These languages have all been classified in the Bantoid group (Walters 1989). This puts them among the closest relatives to the well-known (Narrow) Bantu group of languages, which dominate southern sub-Saharan Africa. (Good *et al*. 2011), states that, their primary basis for their classification is their Bantu-like systems of noun classes, which are not very different from the noun class systems associated with Bantu languages (Maho 1999; Katamba 2003). They suggest that, these languages should be treated as part of a higher-level grouping within Benue-Congo, the subgroup of Niger-Congo in which the Bantu languages have been classified. Good et al. (2011) also considered Buu one of the LF languages as belonging to the Ji group which is comprised of the Mufu, Mundabli and the Buu varieties but recently, Ngako (2013) makes it clear that Buu is considered a separate language from that of Mufu-Mundabli where both are considered dialects of the Mufu-Mundabli language. Below, we are going to see how the languages of LF are classified.

FIGURE 1. THE GENEOLOGICAL CLASSIFICATION OF LOWER FUNGOM LANGUAGES AFRICAN LANGUAGES



The classification of these languages has given us a clue to their genetic relatedness.

Source : Eberhard *et al.* (2019)

0.13 Outline of the Study

The study is divided into eight chapters. The first chapter, which has been termed the general introduction, situates the problem, objective of the study, motivations, scope and delimitation, significances of the study, the genealogical presentation of the languages. The LF languages are contextualized as well as their speakers, and chapter concluded.

In Chapter One, concepts will be defined; literature and theoretical framework reviewed. These phenomena will be taken as guide for the data discussion and analysis. Focus will be on the concepts of communication, communicative competence/ language assessment and multilingualism. The chapter ends with review of some related works in multilingualism in general and language assessment in particular and then the chapter will be concluded.

Chapter Two is on research methodology. This section talks about the target population, data collection, data collection techniques and instruments, the distribution of the sample population, research and scoring procedures, data treatment and presentation, ethical issues, a review of both the standard RTT method and the RTT Retelling method and our choice. It equally presents the list of informants and finally the conclusion.

Chapter Three deals with data treatment, presentation and analysis of RTT data.

Chapters Four and Five both capture data collected using the visual stimuli method. While chapter four deals with data treatment, presentation and analysis of data collected in Kung, Fang and Koshin, chapter five in its part, treats, presents and analyses data collected in Missong, Small Mekaf, Mufu, Buu and Ajumbu.

Chapter Six is on the presentation and analysis of data collected using the wordlists. Here, L2 speakers were assessed in two ways. The first being on whole words and the second on the prefixes/ noun classes. And finally, they will be the conclusion of the chapter.

The last chapter deals with the general conclusions, the general findings, specific findings and research outcomes, implications and contribution of the study, limitation recommendations and difficulties encountered and finally, a closing remark.

0.14 Conclusion of chapter

This chapter has been able to set a pace and design a road map for the other chapters to follow. In the chapter, we have been able to introduce the topic, state the problem and put

forward the research questions. We further examined the aim, motivations, significance, delimitation and the backgrounds of the LF communities. In the chapter that follows which is termed chapter one, we shall be defining some key terms, examining related works to see how they contribute to our study and designing a theoretical framework that will suit our methodology and analyses.

CHAPTER ONE: LITERATURE REVIEW AND THEORETICAL FRAMEWORK

1.1 Introduction

The chapter opens with the general presentation of the linguistic situation of LF, the histories and origins of the languages, definition of terms, theoretical framework and literature review.

1.2 Presentation of the General Linguistic Situation of LF

This section seeks to present the actual linguistic ecology of this area. The phenomenon we notice here is the existence of so many languages within a very limited area of land. There is the presence of up to 30 languages with 42 lects including those whose linguistic communities are not found in LF. Since the objective of our work was to assess multilingualism and not multilectalism, we will present in a table form only the different languages that exist in this area and will further narrow down this study only to native languages of LF. All the languages present here include:

TABLE 2: THE GENERAL LINGUISTIC SITUATION OF LF

Mufu-Mundabli	Pidgin	Oku
Buu	Fungom	Nyos
Fang	Bum	English
Naki	Aghem	Kom
Mungbam	Isu	Mukuru
Koshin	Ajumbu	Hausa
Munggaka	Mmen	Mbororo–Fulfulde
Mankon	Kung	Modele
Nso	Nkwen	Ajume
Bamun	Bambui	Weh
Bafut	Bambili	Dumbo
Jukun	Kumfutu	French

The table above shows the rate of multilingualism in LF. Whatever attracts these hyper rates of multilingualism in this area has been exhaustively given by Angiachi (2013) and Di Carlo (2015). Both authors in their write-ups considered all the languages present here including those whose linguistic communities are not found in LF. The general linguistic ecology of this area has been given above though my aim is not to focus on all the languages present in LF. The general linguistic situation of the area has been fully presented so that one should have an idea of what actually goes on here which might also have an impact on the present study. As ealier mentioned above, only languages that are considered native languages of LF with their community of practices present here will be represented in the analyses. We have also succeeded in portraying the general multilingual ecological situation of LF. That is, presenting all the languages found in area.

1.3 THE ORIGINS OF LF LANGUAGES

The languages of this area have varying histories and origins. While some of these languages are considered native languages of this area, others have outside origins. Below, we will see where and how some of these languages came about.

1.3.1 The Mungbam ISO 639-3 [mic] language

Oral tradition states that the villages speaking the Mungbam language have varying histories. The historical reconstruction of the LF languages in general, and the Mungbam in particular, implies that the villages in LF speaking a variety of Mungbam represent a continuation of speech varieties of an "indigenous" population of the region (Di Carlo, 2011). The villages of Ngun and Abar are said to be made up of natives of this area, though very few Abar people came from Fang side (Di Carlo 2011). Others like Missong, Biya and Munken are known to be "new comers" though these three did not come there as a group. The terms "first comers", "new comers" and "antagonistic new comers" have been used by Di Carlo (2011) to refer to differences in their arrival.

One very interesting thing about these Mungbam varieties is that though "first comers", "new comers" and "antagonistic new comers", some of the varieties are very close to each other. That is, there are a lot of similarities between them. In an on-going research conducted by the researcher entitled 'assessing multilectalism in Lower Fungom: the case of the Mungbam language', it has been discovered that, the Ngun variety, though considered as 'native', is very similar to that of Biya which is a 'new comer in LF'; while Munken, though considered as an in-coming variety, is also very similar to Abar which is an indigenous variety of this area.

The Missong people are said to have come from diverse areas. Oral tradition states that the chief kin group of Missong is reported to be native to a place called Adjume not far from Dumbo (Donga-Mantung Division, Missaje Subdivision) located 20 km to the east-northeast of present day Missong. After leaving this place, his ancestors are said to have lived for some time in "Ntsa", in the area of Mashi Over side (Furu-Awa Subdivision), before they moved to today's Missong. Some of these people were reported to have come from "Fang over side" and "Ufayu" (today's Mashi overside) (Di Carlo, 2011). No matter their varying origins, the people of Missong must have been absorbed into the Mungbam language speaking communities and consequently, adopted the Mungbam language and at the same

time maintaining its original language. Some Mungbam speakers confirm this by declaring that the Missong people have "stolen" their language. Surprisingly, the Missong people themselves do not deny this as some Missong consultants have even suggested that the group is particularly adept at learning the languages of others (Di Carlo 2011).

The Biya people, formerly known as the 'Za', people. (Hamm *et al*. 2002), are reported to have come from diverse origins too. One amongst which is "Fang over side".

Munken people are reported to have come from Tabenken area, also known as Tangmbo or Tangmunken (see Chilver and Kaberry 1967a: 1092 and Chilver 1997, Di Carlo 2011: 86). They are reported to have some friendship ties with the Isu people as they have farmland boundaries with them in a farm settlement known as 'dzúkághì'. I remember as a child in Isu, I had friends from Munken with whom I had never had physical contact because of the river Kimbi that separated our farmlands. Nevertheless, we would always stand at the banks of the river and communicate with one another from a distance, shared our secrets, our languages and exchanged gifts by shooting them across the other sides of the river.

1.3. 2 The Naki ISO 639-3 [mff] language

Oral history states that the Naki variety spoken in Mekaf and Batieh is exactly the same, though this claim has not yet been investigated. The Naki-speaking communities originated from Bebe-Jatto (Bui Division, some 45 km to its E-NE) and their ancestors were still living together in Mgbemgbi (in Furu-Awa until pressure on the part of Isu pushed some families southwards, where they later founded Mashi and Mekaf. Conversely, others were pushed northwards and later founded Nser (Furu-Awa Subdivision) (Cantle, 1929:6, cited in Hamm *et al.,* (2002: 5) and (Di Carlo, 2011:79).

1.3. 3 The Mufu-Mundabli ISO 639-3 [boe] language

However, recent works have revealed that Buu is a separate language from the varieties of Mufu and Mundabli. (Di Carlo, 2015; Ngako, 2013). Moreover, from their history, Buu is considered an indigene of this area while some Mufu and Mundabli's oral traditions indicate their outside origins. Some of the Mufu people are reported to have come

from Dumbo, while others are considered as indigenes of this area. Mundabli on her part came from diverse areas and some from the Dumbo area.

Mundabli's oral traditions are corroborated by those of Bum, a group speaking a Central Ring language found to the southeast of LF. They probably would have settled together with some of the Mufu people from Dumbo. This explains why their varieties are very close. Also, the close nature of their present settlements must have given them more reasons to be similar.

1.3. 4 The Ajumbu ISO 639-3 [muc] language

Oral traditions also represent Ajumbu as an indigenous language in the area. At the same time, other LF groups do not show evidence of close connections to Ajumbu, and its strongest relations appear to be outside of LF, with the village of Fungom (Di Carlo 2011). Good *et al*., (2011) declared that Ajumbu is quite distinctive in LF.

1.3. 5 The Koshin ISO 639-3 [kid] language

The Koshin people add that their ancestors originated from Oku in Bui Division, around 50 km to its S.SE) and that after leaving the village near Sawe, they settled for some time in a site called Ndangansi (lying in the vicinity of present-day Kimbi River village, some 10 km to the south-east of present day Koshin) (Di Carlo 2011; Good *et al.*, 2011). Koshin is situated at the periphery of LF and has no connection with the Mungbam, Buu and Mufu-Mundabli languages whose speakers are considered the oldest settlers of LF either in linguistic terms or in terms of affinity (Di Carlo, 2011).

1.3. 6 The Fang ISO 639-3 [fak] language

They are said to have come from Befang [bby], spoken to the south of Wum, which is part of the Menchum group of languages (See Boum, 1980), (about 45 km to its south west). Both Fang and Befang have been considered to have originated from Bafang (West Region, Haut Nkam Division, more than 170 km to the South of present day Fang). Quoted in Di Carlo 2011; Hawkesworth, 1927: 5, Smith 1929: 42-43).

The Fang people report to have settled with the Bafang people of the West region of Cameroon before moving to LF (Di Carlo, 2011). Oral history states that, it is relatively recent in the area of LF. It is also situated at the periphery, southeast of LF and lack a clear

linguistic affinity to the many groups in this area. Fang is considered the most populous village in this area.

1.3.7 The Kung ISO 639-3 [kff] language

Oral history indicates that Kung is relatively a late comer in LF. The movement of Kung people to the area appears to be associated to a decline of a language that was spoken in the region, earlier known as Lung that was mostly closely related to Ajumbu (Di Carlo, 2011).

The Kung people are said to have originated from Mawas, in the vicinity of Oku (Bui Division, some 40 km to its southeast). According to oral history collected in Fungom and Bum, Kung ancestors were living some 15 to 20 kilometres to the S-SE of the present-day Kung village, in a place called Tikum (Smith, 1929:34.

1.4 Definition and Explanation of Concepts

Concepts that are used in this work will help us to better understand the work under study. The concepts include; (1) multilingualism, (2) individual multilingualism, (3) language assessment, (4) passive and active competences, (5) communication, (6) communicative competence, (9) the Levenshtein distance and conclusion.

1.4.1 Multilingualism

Multilingual competences have been given different views by different authors. This phenomenon does not only affect an individual; the entire society is included since individual multilingualism cannot be measured without considering the society in which these languages are used.

The definition of multilingualism as used by Edwards (1994:1) centres on the practice of using more than one language, to varying degrees of proficiencies, among individuals and societies. That is, he considers multilingualism as the use of two or more languages either by an individual speaker or by a community of speakers.

The European Commission sees multilingualism as ‘The ability of societies, institutions, groups and individuals to engage, on a regular basis, with more than one language in their day-to-day live’ (EC 2007: 6).

Definitions of this term are all geared towards the use of two or more languages either by an individual speaker or by a community of speakers.

Basically, multilingualism is the co-existence of more than one language in any given situation. According to Guadelupe Valdés (2007), in the Linguistic Society of America website, multilingualism is actually the norm for most people and not the exception. He defines Multilingualism as 'The ability of societies, institutions, groups and individuals to engage, on a regular basis, with more than one language in their day-to-day live' (EC 2007:6). The Council of Europe points out that the mere existence of more than one language in any given territory does not mean that multilingualism affects all individuals there.

Multilingualism refers here exclusively to the presence of several languages in a given space, independently of those who use them. For example, the fact that two languages are present in the same geographical area does not indicate whether inhabitants know both languages, or only one. Therefore, multilingualism can often be seen to refer more to societies and states rather than individuals.

Accordingly, a person may be called multilingual if he/she uses his or her languages on a regular basis and is able to switch from one to another wherever it is necessary, independently from the symmetry of his/her command of the languages, of the modalities of acquisition and of the distance between the varieties (cf. Haugen (1953), Oksaar (1980) and Grosjean (1982).

When dealing with individual multilingualism, researchers are often interested in the level of proficiency in the different languages. Quoted in Cenoz (2013), Bassetti and Cook (2011) showed that most definitions of multilingualism centre around two groups which include maximal and minimal proficiencies which require native control of two or more languages while minimal might consider incipient bilingual with minimal competence. A related issue of both terms includes balanced and unbalanced multilingualism which state that an individual is considered to have a balanced multilingualism if he/she is equally fluent in two or more languages, while an unbalanced multilingualism stipulates that a person could be fluent in one of the languages and could only understand the other (s).

Though most scholars consider the use dimension of language as the main characteristic when defining multilingualism, (see Lüdi and Py 2009:158), and Grosjean (2010), Skutnabb-Kangas and McCarthy, (2008) stand for the fact that a person must not have a perfect mastery or perfect balanced in two or more languages in order to be considered multilingual. This therefore brings us to the views of passive and active multilingualism which will be explored in the work. Multilingualism here include both the use and understanding dimension of these languages, our work does not judge the multilingual nature

of someone only on his/her spoken languages. It also considers a persons being able to understand two or more languages without necessarily speaking them as a multilingual person.

1.4.2 Individual Multilingualism

Multilingualism usually refers to a speaker's knowledge and efficient use of three or more languages while bilingualism is the sociolinguist's term to describe a speaker's knowledge and use of more than one, i.e. two, languages - their mother tongue and an additional language. However, multilingualism and bilingualism are often used interchangeably and bilingualism might also indicate that a speaker knows and uses more than two languages. Thus, bilingualism means the mastering of two or more languages.

The terms multilingualism and bilingualism refer to the language competence of the individual language user. In this case we speak of individual bilingualism (or: multilingualism). A communicatively competent multilingual speaker has both active and passive knowledge of the language varieties he or she uses. In other words, this speaker can understand (= passive knowledge) certain varieties in the speech and writing of others and he or she can actively use his or her own speech or writing abilities in the respective varieties (= active knowledge). However, multilingual speakers often do not have identical competence in all the languages they know.

Individual multilingualism means a person's ability in languages other than their mother tongue. 'Individual multilingualism: one mind, many languages' considers how individuals use two or more languages in their lives; how the brain processes more than one language; how speakers switch between languages when they speak or write; the impact of language on identity; and language loss and maintenance (Maher 2017). The idea of passive and active multilingual competences was brought out through assessing speakers' competences in what is known as "language assessment as seen below.

1.4.3 Language Assessment

Language assessment or language testing is a field of study under the umbrella of applied linguistics. Its main focus is the assessment of first, second or other language in the school, college, or university context; assessment of language use in the workplace; and assessment of language in the immigration, citizenship, and asylum contexts.

Allen (2009) defines language assessment "as 'the practice and study of evaluating the proficiency of an individual in using a language efficiently". Smith *et al.* (2004) opined that assessment is all about gathering information about students' learning. It is often used for the purpose of making qualitative and quantitative judgement about what students have learned. Sutherland (1996) also says that assessment is a social activity and it can only be understood by taking into account cultural, social, political and the economic context of an individual. Hence, it is proved that holistic assessment is impossible without taking into account the students' social, cultural and historical contexts. Sociocultural perspective of assessment is essential to measure the competencies of the students who are coming from diverse linguistic backgrounds (Smith *et al*. 2004. The definitions given by most linguists exclude traditional settings of language assessment.

The researcher defines language assessment as 'ways in which a language tester/judge uses to test/check and give judgments on an individual's ability to comprehend/understand and use a given language regardless of the contexts and statuses of such languages. The definitions given by most linguists exclude traditional settings of language assessment. Most of them focus their attentions only on already standardized languages, involving traditional settings only when it has to do with intelligibility testing.

As is the main concern of this work, below, we are going to present what competence is all about and how different authors view it.

1.4.4 Competence

Competence as expounded by Chomsky (1965) as follows:

> *'A speaker's competence is the underlying ability to produce and interpret well-formed sentences in a given language and to distinguish well-formed from ill-formed strings. While performance covers not only the manifestation of competence on actual occasions of language use, but the effect of memory, perception, and attention on language behavior'.*

What Chomsky meant by competence and performance is not only the knowledge one has of a language but it also involves how this language is actually used by its users, what we have considered here as the passive and active competences, respectively. In other words, passive competence refers to the implicit knowledge one has of a language where he/she is able to distinguish between poorly formed sentences from well-formed ones without

necessarily being able to speak that language. On the contrary, active competence entails the actual usage of language considering all the factors (cultural) that embody effective communication.

First expounded by Chomsky in (1965), the definition of competence and performance, remains problematic to all sociolinguists. Milroy and Gordon (2003), a speaker's competence is the underlying ability to produce and interpret well-formed sentences in a given language and to distinguish well-formed from ill-formed strings. The specifics of such competence are generally established by eliciting intuitions (or using the analyst's own intuitions) of grammaticality. Performance, on the other hand, covers not only the manifestation of competence on actual occasions of language use, but also the effects of memory, perception, and attention on language behaviour.

In 1986, Chomsky revised the competence/performance dichotomy, preferring a distinction between I (internal) and (E) external language. In the early days of sociolinguistics, Hymes (1972) pointed out that Chomsky's competence was only one kind of linguistic competence. Not only did competent speakers produce and interpret well-formed sentences, but they also used varieties of language from a systematically structured community repertoire to perform social actions in contextually appropriate ways that were meaningful to other members (Milroy and Gordon, 2003). They also recognized particular utterances as ironic, teasing, serious, etc. (Hymes 1972, 1974). Any socially informed linguistics concurs with Hymes in conceiving of knowledge "with a view to its fundamental role in communication between socially located actors in continuously changing human societies" (Sidnell, 2000:41).

Hymes (1975) also pointed out that competent speakers do not only produce and interpret well-formed sentences, but they also use varieties of language from a systematically structured community repertoire to perform social actions in contextually appropriate ways that are meaningful to other members. This statement is true of LF where we find competent speakers in say three to four languages where at any given time they find themselves in one of these communities, they become members by simply not only being able to speak and interpret utterances well in these languages but also getting involved in the community-specific (ways of speaking), that is how to greet, how to talk about the chief, how to perform verbal or non-verbal acts, etc.

In Di Carlo (2015), a speaker declares that he speaks a language/dialect because if he ceases from being a member of this community (A community), he will immediately be integrated into community B. This therefore pushes them to try to speak like the native speakers of these 'borrowed languages' as they will want to be accepted into those communities. The above notion of competent speakers as expounded by Hymes (1975) encourages convergence in the communication accommodation theory. This aspect of the above mentioned theory makes it clear that, convergence is noticed when a speaker goes closer to his/her interlocutor in the way of speaking by speaking almost the same like his/her communication partner (Giles 1972).

Note that we can talk of different levels of ability in the same individual: a person may speak one of his/her languages more easily than another, but she/he remains 'plurilingual'. The above definition of plurilingualism is true of the European contexts and the French-speaking part of Cameroon though it is not known or very uncommon to the English speaking part of the country.

In the context of the English speaking part of Cameroon, multilingualism here is attributed to both the speakers and the space in which these languages are used. Therefore, since our target area LF is found in an English part of the country, we will consider multilingualism to involve both those who use two or more languages and where these two or more languages are used. As can be seen, an individual's competence could only be judged or assessed only if there is communication and this would be seen under the communicative competence. The different views of communicative competence will be seen below.

1.4.5 Communicative Competence

Spitzberg (1988: p.68) defined communicative competence as "the ability to interact well with others". He explains that, the term "well" refers to accuracy, clarity, comprehensibility, coherence, expertise, effectiveness and appropriateness.

For Canale and Swain (1980) communicative competence has three components but Canale (1983) included one other component referred to as discourse competence. According to them, communicative competence is defined in terms of:

-grammatical competence; words and rules

-sociolinguistic competence; appropriateness

-strategic competence; appropriate use of communicative strategies

-discourse competence; cohesion and coherence.

Bachman (1990), in his more recent survey of communicative competence, divides it into the broad headings of "organizational competence" which include both grammatical and discourse (or textual) competence, and "pragmatic competence", which include both sociolinguistics and "illocutionary" competence. Strategic competence is associated with the interlocutor's ability in using communicative strategies (Faerch and Kasper; Lin, 2009).

Our interest will be based on the definition proposed by Canal and Swain (1980), (1983). This is because it is made up of the four competence areas that are essential for effective communication. They include: linguistic, sociolinguistic, discourse and strategic competences. Linguistic competence to these authors means knowing how to use the grammar, syntax, and vocabulary of a language. By so doing, linguistic competence asks questions such as: What words do I use? How do I put them into phrases and sentences?

Sociolinguistics competence means knowing how to use and respond to language appropriately, given the setting, the topic, and the relationships among people in a community. Sociolinguistic competence asks questions such as: Which words and phrases fit this setting and this topic? How can I express a specific attitude (Courtesy, authority, friendliness, respect) when I need to? How do I know what attitude another person is expressing?

Discourse competence talks of knowing how to interpret the larger context and how to construct longer stretches of language so that the parts make up a coherent whole. Discourse competence asks questions such as: How are words, phrases and sentences put together to create conversation, speeches, Email messages, newspaper articles?

Strategic competence signifies knowing how to recognize and repair communication breakdowns, how to work around gaps in one's knowledge of language, and how to learn more about the language in the context. Strategic competence asks questions such as: How do I know when I am misunderstood, or when someone has misunderstood me? What do I say then? How can I express my ideas if I do not know the name of something or the right verb form? Canale and Swain (1983).

The above are areas one needs to be aware of in order to communicate competently. In line with the above areas as far as competence is concerned, we need to know that there are two types of competences in which the above are interwoven. These include the passive and the active competences. Passive competence can be defined as the ability for one to have knowledge about a particular language. Meaning, understanding without necessarily speaking it.

Active competence is defined not only as being able to understand a language, but actually able to speak that language following what Canale and Swain (1980, 1983) have proposed, terms like "near passive" and "active competence" were used. These terms were used for those who in our assessment of the passive and active competences did not performed so poorly as to be considered incompetent. So they could not have been considered not to have complete passive or active competences in those languages.

Saville-Troike (2003) defines communicative competence as "what a speaker needs to know to communicate appropriately within a particular language community". It involves knowing not only the vocabulary, phonology, grammar, and other aspects of linguistic structure (although that is a critical component of knowledge) but also when to speak (or not), what to say to whom, and how to say it appropriately in any given situation. Furthermore, it involves the social and cultural knowledge speakers are presumed to have which enables them to use and interpret linguistic forms.

The term language community refers to a group of people who share knowledge of a common language to at least some extent Saville-Troike (2006). Multilingual individuals are often members of more than one language community–generally to different degrees, and the one or ones they orient themselves to at any given moment is reflected not only in which segment of their linguistic knowledge they select, but which interaction skills they use, and which features of their cultural knowledge they activate.

As earlier said in chapter one, not every individual has the same level of competences in these languages. That is, their degrees of competences vary. This explains why we have terms like 'near passive, 'near active and 'near native competences. While 'near' passive competence captures only the aspect of being able to understand or comprehend a given language which we will see in chapter three, 'near active, near native' are competency levels that have to do with actually being able to speak a language and these two terms will be seen inchapter four below since it handles active or communicative competences.

As earlier said above, L2 speakers were grouped unders passive, near passive, active, near active competences and native and near native speaker's competence's based on peoples' competences in the languages under test. Above, we have seen what communicative competence is all about. One has to note here that, this cannot be fully expressed or assessed if there is no interaction. That is, they must be a conversation or exchange between people. Multilingualism cannot exist without languages coming into contact. Below, we are going to find out what language contact especially in a rural African environment is.

1.4.6 Language Contact

Whenever people hear of language contact, what immediately comes to their minds is foreign languages coming in contact with African languages. They never think that mother tongues could still come in contact with other mother tongues. This therefore gives us a picture of two different contexts. The context of an African-urban environment will therefore be characterized by foreign languages coming in contact with mother tongues where most of these languages could be used at the detriment of the mother tongues since those foreign languages are attributed to power, prestige and job market. In the case of a rural environment like that of LF, the contact here is that natural languages are in contact with one another. There is no issue of power, prestige and job market attributed to these languages and yet, they are learnt by non-native speakers of these languages.

Sarah Thomason (2001) defines language contact as 'the use of more than one language in the same place at the same time'. As we will see, language contact in this substantive sense does not require fluent bilingualism or multilingualism, but some communication between speakers of different languages is necessary. Language contact most often involves face-to-face interactions among groups of speakers, at least some of whom speak more than one language in a particular geographical locality.

The above assertion is so contrastive to that of LF. In this area, there is a very high level of linguistic contact as these people are constantly coming together for either trade purposes, friendship reasons and annual dances or cultural festivals. There is a very high rate of solidarity whereby the joy and grief of a village is the concern of all: this encourages the acquisition and learning of languages. It has also encouraged the phenomenon of language choice. Although most of the people are multilingual; they do not use all the languages at once but use them in the appropriate contexts and with speakers of the said languages. One very interesting thing is that the peoples' linguistic repertoires are full with different

languages spoken in and out of LF and they are able to use these languages in conformity with the contexts.

The interesting thing here too is the people's strong attachment to their languages. They do what can be termed 'acquire/maintain'. These terms mean that, as opposed to the urban settings or industrialized countries, while language contact has an impact on their original languages as they try to bring in new features gotten from the new language they are acquiring, LF people acquire new languages and at the same time maintain their mother tongues. They make sure that their languages are not influenced by any other language. That is, they maintain their languages in their natural states and at the same time rush for new languages for one reason or the other.

The above section was focused on defining key terms and concepts that will be used in this work, below we are going to find theories that will help us in our analyses.

1.5. Theoretical Framework

Theories are principles laid down in which scientific researches are based on. Being an exploration in hitherto little known domains –such as the assessment of linguistic competences in local languages of people residing in rural areas of Cameroon – there is in fact no theoretical framework that has radically shaped our research. Thus, to the extent theories have been used in our work, these include; the grounded theory, the Levenshtein distance theory, speech act theory, indexicality and the essentialism theories.

1.5.1 The Grounded Theory (GT)

The theory was first introduced by Glacer and Strauss (1967) in their write-up entitled "Discovery of Grounded Theory". These authors for the first time, made explicit the qualitative analytic procedures and research strategies. That is, they made explicit how data could be collected, described, divided into elements or principles.

The Central idea that runs through their theory is that all is data. Their theory gives the details of data collection, the methods, steps taken in achieving a given goal. They did not rely on existing theories in data analyses but developed their theory from information collected in the field. They actually made us to understand how data was collected, how it was managed before a theory was developed.

Charmaz (2004) defined grounded theory as "a strategy of inquiry, consisting of a set of data collection and analytical procedures where the researcher derives a general, abstract theory of a process, action or interaction grounded in the views of participants. (See also Creswell, 2009). What these authors are trying to explain is the fact that, GT is a plan of action whereby information gotten during the collection of data are used to develop a non-existing theory, its stages, actions and interactions based on the views provided by participants. To them, this theory is determined by actions of those involved in the inquiries. G. Allan, (2003) makes it clear that, grounded theory is quite different from the traditional model of research, where the researcher chooses an already existing theoretical framework, and only then collects data to show how the theory does or does not apply to the phenomenon under study**.**

Following the above views, data were collected without predefined or strict hypotheses that were to guide our research work. Most of the hypotheses came up in the course of manipulating the data. When we talk of manipulating this data, codes were given to each informant which became the basic clue to identifying them. Other embedded information about the place and the people were later identified which also later became the bases of our analyses.

Consequently, GT is a general method that can use any kind of data even though the most common use is with qualitative data (Glacer, 2001, 2003). One good thing about this theory is how far the researcher can manipulate and manage data. For this theory to be explicitly understood, one has to know the various sections that make up the GT. They include the stages involved in the development, its goals, its characteristics, the premise, different views of GT, importance/benefits of GT to all disciplines, the benefits of using grounded theory in scientific works, criticisms of the theory, GT and our work. Below, we are going to see the stages involved in developing a GT.

1.5.2 Stages in the Development of Grounded Theory

As earlier mentioned above, since GT is centred on data, after this data has been collected, the researcher now starts developing the theory even from the first line of the first interview.

The following stages are involved in the development of a theory. We are providing them here for the sake of completeness and to give the reader a point of reference. However,

as we will see in section 6.4, there are at times considerable distances between what grounded theory is as such and what we have deemed opportune to do in this research.

Stage	**Purpose**
Codes	Identifying anchors that allow the key points of the data to be gathered.
Concepts	Collections of code**s** of similar content that allows the data to be grouped
Categories	Broad groups of similar concepts that are used to generate a theory
Theory.	A collection of categories that detail the subject of the research

Once the data are collected, the grounded theory analysis involves the following basic steps:

The first stage is involved in coding which are: (1) open coding, (2) selective coding, (3) Integrating Categories and Building of Theory (4) axial coding and memoing.

1. An open coding is breaking data apart and delineating or marking out concepts to stand for blocks of raw data. At this initial stage of theory development, everything is coded in order to find out about the problem and how it is being resolved. As the name implies, open coding permits accessibility whereby codes are compared as more data is coded, merged into new concepts, and eventually renamed and modified. The GT researcher goes back and forth while comparing data, constantly modifying, and sharpening the growing theory at the same time as he/she follows the build-up schedule of theory's different steps. Similar to this is what is known as axial coding. It is the act of relating concepts/categories or themes to each other.

Strauss and Corbin (1990, 1998) also proposed axial coding and defined it in (1990) as "a set of procedures whereby data are put back together in new ways after open coding, by making connections between categories." As we have seen above, open coding involves every incident in the data. Every information that the researcher gets from the field is used and codes were given to the questionnaires that contained information gathered. With an open coding, not every unit or information coded could be used in the development of the theory. Below, we will see another type of coding that involves not all the elements in the data. This type is known as selective coding.

2. Selective Coding

The stage of selective coding is done after when the researcher has found the core variable or what is thought to be the core, the tentative core (the main variable he/she wants to verify). The behaviour of participants in resolving their main concern is explained at the level of the core. Selective coding delimits the study, which enables it to move fast. This is indeed encouraged while doing GT (Glaser, 1998) since GT is not concerned with data accuracy as in descriptive research but is about generating concepts that are abstract of time, place and people. Selective coding sometimes makes the researcher refer to old data to find out if the concepts or idea he/she wants to represent could be retrieved or found in this data. This type of coding explains why the researcher had to constantly refer to old data collected with some colleagues like Angiachi Dimitris and Di Carlo in 2012 to see if they were correlation of concepts or categories and see if these concepts tie with the situation at hand (Angiachi (2013, Di Carlo (2015). The next type of coding is integrating categories and building of theory. The next stage in the development of this theory is integrating categories and building of theory.

3. Integrating Categories and Building of Theory

This stage is involved in bringing together similar or defined categories and naming them. Theoretical coding means that the researcher applies a theoretical model to the data. Here, items are grouped based on the resemblances and hypotheses are brought out. It should be noted that this model is not forced beforehand but emerges during the comparative process of GT. This involves the last stage of the coding process. Here, the researcher tries to build theories after going through the data and memo and gathering the concept and categories that run through the whole data. After the coding process is over, the researcher now moves to memoing and theorizing.

4. Axial coding axial and Memoing.

At this stage, short notes or memorandums which help the researcher in recalling the main ideas/themes that run through the theory are written down. In other words, memos are a specialized type of written records, that is, those that contain the product of the analyses. They are fundamental representations of thought and grow in complexity, density, clarity, and accuracy as the research progresses (Dornyei, 2007). Glaser (1998) considers memos as “the theorizing write-up of ideas about substantive codes and their theoretically coded

relationships as they emerge during coding, collecting and analysing data, and during memoing". Writing memos should start with the first session of analysis and continue throughout this analytic process because it is part of the analysis. That is, part of doing qualitative research because they move the analysis forward.

> *Memos are important tools to both refine and keep track of ideas that develop when researchers compare incidents to incidents and then concepts to concepts in the evolving theory. Memoing works as an accumulation of written ideas into a bank of ideas about concepts and how they relate to each other. This bank contains rich parts of what will later be the written theory. When memos are written, the ideas become more realistic, being converted from thoughts into words, and thus ideas one is trying to demonstrate is communicated to the afterworld.* (Strauss and Glaser, 1967).

After writing down some important key notes that will help us not to loose tract of our work or ideas, the researcher moves into integrating, refining and writing/putting up of the theories as will be seen below.

Integrating, refining and writing up theories: once coding categories emerge, the next step is to link them together in theoretical models around a central category that holds everything together. The constant comparative method comes into play, along with negative case analysis, which looks for cases that do not confirm the model. One generates a model about how whatever one is studying works right from the first interview and sees if the model holds as one analyse more interviews.

This section has given us the inside of how GT theory is developed. The various stages involved, their content and how they help in developing the theory needed in the analyses. Below, we will find the goals of GT.

1.5.3 Goals of GT

As far as goals of GT are concerned, one goal is to formulate hypotheses based on conceptual ideas (Glaser and Strauss (1967). That is, the goal of GT is to bring out hypotheses based on mental ideas or imaginations. These hypotheses that are generated could further be verified by constantly comparing conceptualized data at different levels of abstractions.

Another goal of a grounded theory study is to discover the participants' main concern and how they continually try to resolve it. The questions the researcher repeatedly asks in grounded theory are "What is going on?" and "What is the main problem of the participants, and how are they trying to solve it?" These questions will be answered by the core variable and its subcores and properties in due course. As we will see in section 6.4 to 6.10, the questions we have kept in mind throughout this research are somewhat different and, therefore, require that a different course of actions be taken. Below are characteristics of GT.

1.5.4 Characteristics of GT

- **Simultaneous data collection and analysis**

In GT, data are collected and analysed simultaneously. Here, data analysis starts from the very first questionnaire or chunk of data collected and the analysis continues as more data are added.

- **Pursuit of emergent themes through early data analysis**

Emerging themes are followed up through early data analysis. Immediately, a theme is noticed at the very early stage of data analysis, the researcher immediately follows up the theme.

- **Discovery of basic social processes within the data**

The basic social processes within the data are discovered. Here, the life style and social life of the participants are presented in the data.

The above three points are characteristics of GT. Below, we are going to present the premise.

1.5.5 The Premise

As earlier stated above, grounded theory method is a systematic generation of theory from data that contains both inductive and deductive thinking.

Grounded theory method is aimed at conceptualizing what is going on by using empirical research. However, when applying the grounded theory method, the researcher does not formulate the hypotheses in advance since preconceived hypotheses result in a theory that is ungrounded from the data Glaser & Strauss (1967). This theory is very applicable to this work in that, most of the hypotheses came in, in the course of gathering and analysing data.

Hypotheses were not preconceived as they sprouted incourse of manipulating and coding data. We therefore brought up most of the hypotheses based on what was observed in the data.

If the researcher's goal is accurate description, then another method should be chosen since grounded theory is not a descriptive method. Instead, it has the goal of generating concepts that explain the way that people resolve their central concerns regardless of time and place.

Typically, several hundred incidents are analysed in a grounded theory study since usually every participant reports many incidents. What I will do is to maintain the terminology that was initially used in grounded theory and as a result, will give the summary of grounded theory here while section chapters 3, 4 and 5 of this work will show how this theory has influenced our work.

The results of GT are not as reporting of statistically significant probabilities but a set of probability statements about the relationship between concepts, or an integrated set of conceptual hypotheses developed from empirical data (Glaser 1998). Validity in its traditional sense is consequently not an issue in GT, which instead should be judged by fit, relevance, workability, and modifiability (Glaser & Strauss 1967, Glaser 1978, Glaser 1998). What these authors mean here is that GT relies on how concepts and ideas fit the contexts, events/incidents at hand.

Fit in GT has to do with how closely concepts suit with the incidents they are representing, and this is related to how thorough the constant comparison of incidents to concepts was done.

Relevance: A relevant study deals with the real concern of participants, evokes "grab" (captures the attention) and is not only of academic interest.

Workability: The theory works when it explains how the problem is being solved with much variation.

Modifiability: A modifiable theory can be altered when new relevant data are compared to existing data. After seeing what the GT is all about, these authors later brought in diverse views concerning this theory which later led to a split in the methods in which the GT was used.

As it is always the case with many scientific works, after the GT theory of Strauss and Glacer (1967) was appreciated by many, some researchers including the developers of GT came in with varying ideas as far as the theory was concerned. The disagreement between the two pioneer developers of this theory brought in two schools of thoughts which became known as Straussian and Glaserian paradigms with a later version coming in known as the Constructivist paradigm.

1.5.6 The different interpretations of grounded theory

Below, we will see the constructivists' view of GT.

1.5.6.1 Constructivists

The constructivists developed a later version of GT, which they called, the constructivist GT, rooted in pragmatism and relativist epistemology. They assumed that neither data nor theories are discovered, but are constructed by the researcher as a result of his or her interactions with the field and its participants (Mills J**.** *et al*. (2006).

These constructivists hold that, data are co-constructed by researcher and participants, and coloured by the researcher's perspectives, values, privileges, positions, interactions, and geographical locations. This position takes a middle ground between the realist and postmodernist positions as it assumes multiple realities and multiple perspectives on these realities. Within this approach, a literature review is used in a constructive and data-sensitive way (Ramalho *et al*.,2015).

From the above views, we have decided to use that of Glacier which has to do with the constant comparative method. This method has been used in our work in order to test the veracity of these people's reported degrees of competences. The constant comparative method was very vital since what they reported could not really prove their competences. Lesley Milroy and Mathew Gordon (2003), Li and Moyer (2007) made it clear that though self-reported degree of linguistic proficiency could be used for analysis; this method is combined with other methods in determining the people's actual linguistic proficiencies. Eva Codò (2007) also emphasises that, although useful in its terms, declarative data can never be used as substitute for data on speakers' actual linguistic behaviour. We therefore embarked on how to assess multilingual competences in these unwritten languages. The declared competences or

levels of proficiencies motivated us to carry out a study of this nature in order to see if what they reported about their linguistic competences were true. (See chapter 3, 4 and 5).

1.5.7 GT and our Work

To our knowledge, a research like ours has never been attempted so far, and the theoretical framework here on L2 acquisition, the decision that we made was to maximize the empirical orientation of our work. Essentially, this meant that:

No initial hypotheses were made concerning the issues at stake, in order to minimize preconceptions and possible unconscious limitations of the researcher's perspective on the research topics.

A number of different research tools were devised and progressively put into practice: this was made following the basic insight of GT going under the name of "constant comparative method". Since the problems we have focused upon had never been targeted so far, or not through field-based research of the kind we have done, multiplying the levels of inquiry and, therefore, the tools to be used in each of them, seemed to be the best way to tackle with little-known or little-researched topics such as ours.

Coding, memoing, and theorizing all proceeded in dialogue to each other according to the different levels of inquiry (passive discursive competence, active discursive competence, and active lexical competence). Below, we are going to see some of the criticisms of this theory.

1.5.8 Criticisms of the Theory

After this theory was greatly appreciated by most authors, some critiques saw some flaws in its application. Grounded theory method was developed in a period when other qualitative methods were often considered unscientific. It achieved wide acceptance of its academic rigour. These critiques based their criticisms on the following three points.

- Its misunderstood status as theory (is what is produced really 'theory'?),
- The notion of 'ground' (why is an idea of 'grounding' one's findings important in qualitative inquirywhat are they 'grounded' *in*?)
- The claim to use and develop inductive knowledge

These three criticisms are summed up by Thomas and James (2006). These authors also suggested that it is impossible to free oneself of preconceptions in the collection and analysis of data in the way that Glaser and Strauss say is necessary. They also pointed to the formulaic nature of grounded theory method and the lack of congruence of this with open and creative interpretation – which ought to be the hallmark of qualitative inquiry. They suggest that the one element of grounded theory worth keeping is constant comparative method.

Goldthorpe (2000) has put forth some criticisms of grounded theory as an effort to synthesize variables oriented as empirical studies and radical choice theory. Grounded theory allows for modifications in the formulated hypotheses at the start of the empirical research process. In grounded theory, researchers engage in excessive conceptualization and defend this as "sensitivity to context." As a result of these two arguments, grounded theory escapes the testing of theory. There is a very thin line between context and regularities.

Goldthorpe supports this criticism in a review of three overlapping literatures: historical sociology, comparative macrosociology, and ethnography. On the one hand, historical sociology is good at analysing long-term processes of structural change, but on the other hand, its reliance on secondary sources opens several possibilities of bias. Comparative macro-sociology may be able to contextualize with reference to institutions and historical path-dependencies, but its focus on constellations of singular causal forces makes it difficult to break with long outdated mechanical models of reasoning. Ethnography may closely analyse actual mechanisms of interaction, but it does not provide acceptable knowledge about underlying generative processes, since it is unable to deal with variation within and across locales. Goldthorpe's core arguments are in terms of rational action theory and probabilistic statistical models. The grounded theory approach can be criticized as being empiricist; that it relies too heavily on the empirical data. It considers the fieldwork data as the source of its theories and sets itself against the use of the preceding theories. Parker and Roffey (1997) Strauss's version of grounded theory has been criticized in several ways.

- Grounded theory focuses on a quasi-objective centred researcher with an emphasis on hypotheses, variables, reliability and replicability. This is contradictory with the more away from this more quantitative form of terminology in recent qualitative research approaches.

- It will not be appropriate to ignore the existing theories by paying less attention to the review of literature. The researcher invariably comes to the research topic by finding more about his or her own discipline.
- Grounded theory focuses more on complex methods and confusing, overlapping terminologies rather than the data. Few processes like three stage process with associated data fragmentation may lead the researcher to lose the track of the overall picture which is emerging.
- Poorly put forth theoretical explanations tend to be the outcome where data are linked conceptually and early to existing frameworks. Concept generation rather than the formal theory may be the best outcome. (Grbich, 2007).

The section above has been involved in giving the detail analysis of what grounded theory is all about and its criticisms put forth. Below, we will present the Levenshtein distance, a tool that will help us in deducing if our L2 speakers are competent in producing words in the target languages or not. This theory played a very vital role in the analyses. It was a starting point for analyses since incidents were first of all checked (distance between them) through the constant comparative method.

1.6. Levenshtein Distance by Wunsch Needleman

The Levenstein distance has been used to bring out similarities and differences between words produced by L1 speakers and those of L2. In other words, it has been used to bring out the distances between words we had from L1 speakers and those from L2 speakers. This tool has been used in chapter six of our work (in the section dealing with wordlists) where L2 speakers' knowledge of closed and open sets were assessed which clearly brought out the lexical and morphological differences. This was done because an L2 speaker could be very proficient in words but not proficient in noun classes. For this to be brought out clearly, the Levenstein distance was very vital. This tool was used thanks to Jesse Lovegren who helped in running the script.

The Levenshtein distance is an important tool for the comparison of symbolic sequences, with many appearances in genome research, linguistics and other areas. Baake *et al.* (2006). For efficient applications, an approximation by a distance of smaller computational complexity is highly desirable. However, our comparison of the Levenshtein with a generic dictionary-based distance indicates their statistical independence. This suggests that a

simplification along this line might not be possible without restricting the class of sequences several other probabilistic properties are briefly discussed, emphasizing various questions that deserve further investigation.

This distance is that which was used in bringing out the similarities and differences between words of L1 and those of L2 speakers in LF. Wordlists from native speakers/L1 speakers will be considered as the reference/judge of those collected from L2 speakers.

We have been able to demonstrate how the Levenshtein distance will be used in our work especially at the section dealing with wordlists. (See chapter six for an overview of wordlists). The distance is going to show the relationship between words produced by L1 speakers and those which were produced by L2 speakers which will enable us say with exactitude if a given L2 speaker is competent in a given set or not.

1.7 THE SPEECH ACT THEORY

High interest on language use in the later part of the ninetieth century has led to a growing interest in the study of pragmatics. A very important approach in pragmatics is the putting in place of the notion of speech acts which has been the most important part of pragmatic studies. Such speech acts include; requesting, thanking, addressing, apologizing and greetings. The core of the speech act theory is that language performs communicative acts. The founding father of this theory, the British philosopher John Austin (1962), proposed in the theory the concept of "performative", which states that the issuing of an uttererance is the performing of an action. To him, a speech produced is not just that production but is doing an action or gives an effect. The study of the performatives led to the hypothesis of the speech act theory that holds that a speech act embodies three acts; a locutionary act, an illucotionary act and a perlocutionary act, (Austin, 1962, Searle, 1969).

Austin (1962) reveals that, the uttererance that a speaker produces conveys three layers of meaning that are interrataed to one another: the first being the literal produced by the speaker (locutionary act), the second has to do with the speaker's intention conveyed in the uttererance (illocutionary act) and the effect that utterance produced has on the hearer (perlocutionary act). A locutionary act in Austin's theory is the production of sounds and words with meaning; an illocutionary act is the issuing of uttererance with conventional communicative force achieved in saying something.

Austin's locutionary, illocutionary, and perlocutionary acts are seen in the following utterances in Abar "tí gbwàwɛ̀" does not just offer the word "tí and gbwàwɛ̀" which describes the locutionary act, but it also performs an illocutionary act which is wanting to know about the welfare of the interactant and to fulfil that cultural norm that one must greet someone in the morning and the perlocutionary act in the salutation lead to peace, harmony and social cohesion.

Of the above three acts, Austin's assessment led him in considering the illocutionary act to be the main component of language function since it is the actual performance of the speaker's purpose in speaking.

A locutionaty act, the performance of an uttererance: the actual uttererance and ostensible meaning, comprising phonetics, phatic and rhetoric acts corresponding to the verbal, syntactic and semantic aspects of any meaningful uttererance; an illocutionary act: the semantics; "illocutionary force" of the uttererance, and thus its actual effect, such as persuasion, convincing, scaring, enlightening, inspiring or otherwisw getting someone to do or realise something, whether intended or not (Austin 1962). Austin's theory has been credited by many scholars who adopt the theory. One of such scolars John R. Searle (1975), "speech act is often meant to refer just to the same thing as illocutionary act", which John L Austin had originally introduced in his theory.

1.7 .1 CLASSIFICATION OF SPEECH ACT (ILLOCUTIONARY ACT)

Searle (1975) expanded on Austin's theory by classifying the illocutionary speech act into speech acts that commit a speaker to the truth of the expressed proposition (representative). Example, reciting a creed, stereotyped greetings in Kung, speech acts that cause the hearer to take a particular action (directives). Examples of such speech acts include requests, commands, and advice. Speech acts that commit a speaker to some future action (commissive). Examples of such speech acts include promises and oaths. Speech acts that express the speaker's attitudes and emotions toward the proposition (expressive), example of these speech acts are congratulations, excuses and thanks, and speech acts that change the reality in accord with the proposition of the declaration (declaration), example of such speech acts include: baptism, pronouncing someone husband and wife, declaring a public holiday. In the above, Searle relies on some taxonomic principles, which reflect the types of conditions underlying speech acts. Searle's illocutionary speech act categories have been expanded upon

and given empirical studies in the recent years. The most widely studied are directives and expressives seen in requesting, commanding, excuses and thanks.

1.7.2 THE INDIRECT SPEECH ACT

Searle's contribution toward the speech act theory is by giving the important of indirect speech. Searle states that performing speech acts we ordinarily communicate with each other. A direct speech according to Searle (1975), is defined as, uttererances in which the propositional content (sentence meaning) of the utterance is consistent with what the speaker intends to accomplish (speaker's meaning). Searle's definition of direct speech is in line with Brown and Levinson (1978) bald on record strategy. According to Searle and Brown and Levinson bald on record, what is said should be directly and easily interpreted by the addressee depended only on what is said and nothing else.

Searle saw the need for an "indirect speech" which are acts that are "roughly" acts of saying something with the intention of communicating with an audience. He describes indirect speech as follows: " In indirect speech acts the speaker communicates to the hearer more than he actually says by way of relying on their mutually shared background information, both linguistic and non linguistic, together with the general powers of rationality and reference on the part of the hearer". Therefore, an account of such acts, it follows, will require such things as analysis of mutually shared background information about the conversation. Searle's "indirect speech" is also connected to Brown and Levinson's (1987) "off reecord" strategy. They both stand for the fact that when interactants share a common background information, and the fact that they are rational beings, indirect (off record strategy) would be more appropriate in that, they will still come out with expected results.

Following Grice's principle, Searle goes further to suggest that we are able to derive meaning out of indirect speech acts by means of a cooperative process out of which we are able to derive multiple illocutions. Searle (1979) also states that 'the chief motivation for using indirect speech forms is politeness". Examples of polite indirect speeches include; " Jacob can you open the window?" In the utterance, Jacob is asked if he will be able to open the window, but also requesting that he does so. This utterance also gives Jacob the opportunity of refusing by saying, "I can't which could still be that he will be unable to open the window or he does not want to open it.

In connection with the indirect speech act, Searle introduces the notion of "primary" and "secondary" illocutionary acts. The primary illocutionary acts being the indirect one that is not literally performed. The secondary illocutionary acts being the direct one performed in the literally utterance of the sentence (Searle 178). Given the examples below, a speaker asks, "would you mine coming to take a glass of wine with me? And another replies "I have class". The second speaker uses an indirect speech act which is not literally performed to reject the proposal (primary illocutionary act), and the secondary illocutionary act is the direct one, performed in the literal utterance of the response "I have class". Searle's "primary" and "secondary" illocutionary acts in the above reply of "I have class" could be that the respondent turned down the offer or he/she really has a class to attend.

Austin's speech act theory has laid a ground work for the study of various speech acts strategies like apologies, requests, greetings, thanking etc.

1.7. 3 CONTROVERSIES OF THE SPEECH ACT THEORY

Although this theory has been very influential for rechearches and more specifically pragmatic research, some researchers still bring out some fundamental problems. Many researchers criticised speech act research for basing their findings on isolated and single-sentence utterances that are not based on context. Levinson (1983); Leech, (1983); Geis (1995) and Thomas (1995). Levinson (1983) observes that speech act theories have failed to appreciate the absolutely critical contributions of the context of the situation in which the interaction takes place. He proposed a "context-changed theory" of speech act. According to him, interaction and the intended meaning should be based on the context of the discourse. Levinson (1983:276) goes further to state that "when a sentence is uttered, more has taken place than merely the expression of its meaning; in addition, the set of background assumptions have been altered"

Leech (1983) also argued against Searle's proposed speech acts classification because of its "formal" character. Leech's perspective (1983) is more functional, since he is also interested in the meaning of speech-act verbs as key to knowing how people talk about illocutionary acts rather than as a key to the nature of these same acts. Leech presents a functional classification including convivial (thanking and apologizing) and competitive (complaining, requesting and correcting) speech acts. Mey (1993) states that the so-called "indirect speech acts" in many cases are actually the most common 'direct' realisations of what we have come to know as 'illocutionary force'. According to Mey (1993), we should try

to concentrate on the pragmatic aspects of that force, rather than to try to establishing watertight semantic and syntactic criteria for individual speech acts and speech act verbs.

Geis (1995) proposes that the fundamental unit of investigation for speech act theory should be naturally-occurring conversational sequences, not the individually constructed utterances. Geis also argues that it is a mistake to to associate illocutionary force with individual sentences or utterances. Geis (1995) further proposes an alternative account of speech act theory, which he termed, dynamic speech act theory (DSAT). The DSAT's position is that individual utterances do not have illocutionary force in the sense Austin (1962) and Searle (1969, 1975) used in this term.

The overgeneralisation of rules governing speech-acts behaviour in Searle's proposal has also raised some opposing views. Thomas (1995) criticises the fact that Searle treats speech acts as if they were clearly defined categories with clear-cut boundaries. For this first author, the boundary between commanding, inviting, ordering, requesting and asking are often blurred. In fact, an identical speech-act or linguistic realisation may cover a range of slightly different phenomena, as illustrated by the distinct strategies that may realise it. As reported by Thomas (1995), two distinct speech acts may overlap in certain cases and this should be considered as a common fact illustrating pragmatic language use.

In fact, as argued by Thomas (1995:105) "it is a mistake to sacrifice the potential to exploit all the potential richness of meaning of speech acts for the sake of a tidy system of rule" Nevertheless, this author also assumes that certain criteria exist for a classification of speech acts. Unlike Searle's (1976) taxonomy, which merely considers formal aspects. Thomas regards functional, psychological and affective factors. Additionally, one should consider whether given speeches act is culturally specific or context-specific, and to what extent participants' interaction affect the realisation of speech acts. On the bases of these ideas, Thomas points to Searle's failure in providing specific arbitrary rules governing speech-acts behaviours. Instead the author advocates the term "regulates principle", given the context specific nature of speech act realisation.

The basics of the speech act theory centre on the idea that words, when placed together, do not always have a fixed meaning. Austin's work has had many critics. Many people have used his work without fully understanding its criticsms, and Austin's main arguments have had only one notable follow up work, that by Searle in 1969. Speech act theory is a continuing discourse, still written about and criticised in hundreds of articles and

books. The various conceptual systems we have indicated are only intelligible as extensions of an ordinary language framework, meaning that, as its basis, the theory must first have an already working or 'ordinary' set of rules that are indisputable and reliable. Below, weare going to see the theory of indexicality.

1.8 THEORIES OF LANGUAGE AND IDENTITY

Theories of language and identity that will be perused in our work include the indexicality and essentialism theories. These theories are based on the language ideologies of multilingual speakers as they are always motivated by one thing or the other before learning or acquiring an additional language. To begin with, we will show how these theories have been explored by other researchers and then see if they apply or not to the context at hand.

1.8.1 THE THEORY OF ESSENTIALISM

Like many other linguists, Pavlenko & Blackledge (2004) in their work "Negotiation of Identities in Multilingual Contexts" belief that negotiation of identities in multilingual settings frequently occurs in encounters where relations of power are unequal. It is also in their view that such encounters are profoundly influenced by the social, cultural, political, and historical settings in which they occur.

Meir's (1975:242) also illustrates that, in multilingual settings, language choice and attitudes are inseparable from political arrangements, relations of power, language ideologies, and interlocutors' views of their own and others' identities. These authors clink so much to an ideology of essentialism which is based on the notion of hierarchy and prestige. Essentialism in history as a field of study entails discerning and listing essential cultural characteristics of a particular nation or culture, in the belief that a people or culture can be understood in this way. Sometimes such essentialism leads to claims of a praiseworthy national or cultural identity, or to its opposite, the condemnation of a culture based on presumed essential characteristics.

One important critique of multiculturalism is that it promotes "essentialism", reifying the identities and practices of minority groups. Pavlenko & Blackledge reveal that in some settings languages function as markers of national or ethnic identities, in others as a form of symbolic capital or as a means of social control, and yet in others these multiple roles may be interconnected, while multilingualism is appropriated to construct transnational consumer identities (Piller, 2001).

Many scholars in sociolinguistic and anthropological research on multilingualism consider language choices in multilingual contexts as embedded in larger social, political, economic, and cultural systems. In many ways this reconceptualization was inspired by the influential work of French sociologist, Pierre Bourdieu (1977, 1982, 1991**),** who viewed linguistic practices as a form of symbolic capital, convertible into economic and social capital, and distributed unequally within any given speech community (linguistic stratification). The value of a particular language variety in a symbolic market place derives from its legitimation by the dominant group and the dominant institutions, in particular schools and the media. Woolard (1998) opines that ideologies of language are not about language alone but are always socially situated and tied to questions of identity and power in societies. Woolard (1985) pointed out that symbolic domination is grounded in the wide acceptance of the value and prestige of a particular linguistic variety, rather than in numerical disparities between majority and minority communities. She also expanded Bourdieu's marketplace metaphor, showing that, in any given context, there may be several alternative market places which assume different language norms and assign different values to particular language behaviors and linguistic varieties.

Drawing on her ethnographic explorations, Heller (1992, 1995 a,b) developed a theoretical framework for exploring ways in which language practices and negotiation of identities are bound in power relations. This framework links language and power in two important ways. On the one hand, language is seen as part of processes of social action and interaction and in particular as a way in which people influence others. On the other, it is a symbolic resource which may be tied to the ability to gain access to, and exercise, power.

The fact that languages – and language ideologies – are anything but neutral is especially visible in multilingual societies where some languages and identity options are, in unforgettable Orwellian words, 'more equal than others.' Negotiation is a logical outcome of this inequality: it may take place between individuals, between majority and minority groups, and, most importantly, between institutions and those they are supposed to serve. The goal of this volume is to examine negotiation of identities in multilingual societies where some identity options are more valued than others, and where individuals and minority groups may appeal to – or resist – particular languages, language varieties, or linguistic forms in the struggle to claim the rights to particular identities and resist others that are imposed on them.

Over the years, assumptions about identities and indexicality made in early code-switching research and, in particular, in Myers-Scotton's markedness theory have been subject to a number of criticisms. First of all, critical sociolinguists argue that identity cannot and should not be used as an explanatory concept in the study of linguistic practices, as it is itself in need of explanation (Cameron, 1990; Tannen, 1993). Second, they criticize the essentialized links between languages and specific national or regional groups which obscure the fact that individuals may also construct particular identities through linguistic resources of groups to which they do not straightforwardly belong (most recently this phenomenon was explored in studies of code-crossing, cf. Lo, 1999; Rampton, 1995, 1999a, b). Third, many researchers express concerns about the notion of indexicality and the unproblematic links it posits between languages, identities, and speech events.

1.8.2 THE THEORY OF INDEXICALITY

Most scholars who have worked in multilingualism concentrated their studies in urban centres where the ideologies of languages are centered on essentialist ideas (on power and prestige.) They generalised the ideologies people have of urban centres. This is contrary to the case of Lower Fungom as the people here willingly learn the languages of their neigbours just because of index as they want to be considered members of different linguistic communities. The idea of essentialism has no place in this area as none of the languages or cultures here is considered superior to the other. This explains why you will hear consultants saying that they learn language A or Y because of friendship, individual relations, movements, blood relations, marriage/ in-laws, education and religion (see Angwara 2013, Di Carlo, 2015, 2016). And never will you have these speakers say that they learn a given language because of prestige or because the language is powerful or dominant.

Di Carlo (2015) tried to envisage the language ideologies that surround the languages of Lower Fungom. He uncovered to us the role of languages in this relatively small area which was just out to index. The Ideology of essentialism is based on the notion of hierarchy and prestige, while that of indexicality is based on the notion of affiliation and identity.

The fact that prestige, except for the colonial languages—such as English and French—is not among the main symbolic assets negotiated in the local linguistic market of the people of LF has tremendous consequences for our understanding of the local language ideology. Instead of the indexing of a social identity implying personal prestige, what Di Carlo uncovered here was suggestive of a language ideology more oriented towards the

indexing of affiliation with a given group, devoid of any behavioral or moral reflexes (see Di Carlo 2015, 2016, Angwara (2013), Nsen (2022).

Throughout Lower Fungom at birth every child receives at least two names: one is given by their father, the other by their mother'family. While the former is more likely to become the most used, and ultimately the only name recognized by Cameroon's administration, the latter—not a nickname but a real personal name usually taken from the repertoire of names peculiar to the maternal kin groupis kept somewhat hidden and used only by the child's maternal kin. This twofold identity can also have a linguistic side. If the child's parents come from two different villages and, hence, are speakers of two different languages then the child is expected to learn both languages and use them in the appropriate circumstances. Simplifying somewhat, the father's language is the exclusive code to be used for communication with their paternal kin, whereas the mother's language must be used with their maternal kin. In essence, the child acquires distinct identities with respect to each kin group. This is the clearest instance of the significance of multilingualism for the region's traditions Di Carlo (2016). It indicates that the local culture acknowledges the possibility for an individual to develop multiple social identities, stressing language as a major means to symbolize them.

Each person was attached to several groups of solidarity. Depending on the context, one expected support from each and offered it to each of them. In times of conflict, one tried to mobilize the maximum contextually relevant group. Since traditional African societies were structured in terms of corporate groups, individual survival was possible only by being under the protective umbrella of one or another such group, and the larger and more powerful it was, the safer one was.

Not only is language essentialism important to the way people conceptualize language; it also has implications for the way we think about language-in-use. It is common for sociolinguistics and linguistic anthropologists to suggest that particular linguistic practices, including code choice, constitute an 'index' of identity, context, social relations, or interpretive frames (Di Carlo 2016).

This closeness of villages and the people of LF to one another is a situation which can be seen as a fertile ground for 'pure' indexicality to become central to local language ideologies, which assign languages only a marginal role as expressions of some cultural essence exclusively connected with a given 'ethnic' group.

The above section has dealt with theories that will be used in our work. They include; the grounded theory, the Levenshtein distance theory, the speech act theory, the theories of indexicality and essentialism. All except the Levenshtein and the grounded theories will be used in analysing our data. Below, we will present literature related to our work known as the literature review. Related works that were used in the work included those of: Angiachi (2013), Angela Kluge (2006), Baake *et al.* (2006), Bachman (1990), Bachman, L.F. and A.Cohen. (1998), Brye and Brye (2004), Carmen Fought (2006), Casad (1974), Chenemo (2011), Clapham, C. and D. Corson (eds.) (1997), Dabrowska and Street (2006), Decker (2012), Di Carlo (2015), Di Carlo and Pizziolo (2013), Edgar C. Polomé (1982), Edu-Buandoh (2006), Gerhard Jäger (2013), Good (2012), Pred (1990), Jason Diller et *al*.(2010), Lovegren (2011), Milroy and Gordon (2003), Reldfeldt (2010), Saul B. Needleman and Christain D. Wunsch (1970), Scotton (1976), Wall, D. (1996), Kunene (1979) and Connelly (1984).

1.9 Literature Review

Angiachi (2013) seeks to define that account for individual Multilingualism in Lower Fungom (a rural area located in the North West Region of Cameroon). Her work attempts to expose the state of multilingualism in pre-colonial times in a rural setting of LF and she also highlights the importance of gathering data from an ethnographic perspective thereby revealing possible language choices.

The reasons she gave on why she focused on the above-mentioned points were prompted mainly by the scarcity of literature on rural multilingualism and the lack of attention paid to pre-colonial rural multilingualism.

In her study, a sociolinguistic survey using a fine-grained ethnographic questionnaire which handled both linguistic and ethnographic information was used. Though her sample was biased towards old people and men because of possible revelations that such a sample was appropriate in her quest for reasons of high rates of multilingualism in LF, the data collection and analyses revealed that significant rates of multilingualism in the area are explained socially in terms of blood relations, marriage, in-laws, perceived proximity and similarity, religion, education, individual relations and movements.

Also, the data suggests evidence of pre-colonial multilingualism explained in terms of trade, dependability and search of security. She also made us understand that, the absence of a lingua franca and the topography of the area are favourable conditions for the learning of local languages.

The ethnographic approach that was employed in data elicitation revealed a true sociolinguistic picture of the Lower Fungom people in that it enabled them to see beyond (thick descriptions) apparent belief. The understanding of the dynamics of language use in rural areas as opposed to urban ones was thanks to this approach.

The local language ideologies of the Lower Fungom people which consist of creating the maximum number of social networks for their own benefits (economic, political and social) underlie whatever sociological factors that account for high rates of multilingualism in LF was also x-rayed.

Angiachi's work is closely related to ours in that it has to do with reasons for this high rate of multilingualism in LF and the method that was used to get them clearly. Her work, like that of Di Carlo (2015), provided new hypotheses to be tested in our work. It was also out to give a contrast on how multilingualism functions in a rural area as opposed to an urban setting. Whatever reasons were tendered for these high rates of multilingual competences had no backings since their actual competences were not tested in these languages. Whom consultants consider as a multilingual person could just possibly be the fact that he/she is living in an area where two or more languages were used. We therefore decided to check the levels of individual multilingualism. That is, checking the assertion given by the Council of Europe (2007:17) which states that:

> *Multilingualism refers here exclusively to the presence of several languages in a given space, independently of those who use them: for example, the fact that two languages are present in the same geographical area does not indicate whether inhabitants know both languages, or only one.*

A multilingual person is someone who can communicate in more than one language, either actively (through speaking, writing, or singing) or passively (through listening, reading, or perceiving). So, we did not want to base our conclusions on the claims observed in the pilot study and previous works like Di Carlo (2015) and Angiachi (2013) that is why we decided to check their actual competences.

Angela Kluge (2006) in her write-up presents a method that has been used to replace the RTT standard recorded testing method proposed by Voeglin and Harris (1951, in Casad, 1974) and Wolff (1959, in Casad, 1974) which was based on questions and answers about a given text. The standard RTT method uses a short text recorded from an L1 speaker of the

speech variety being tested with questions being posed after each short text. Respondents are to answer these questions in their own first languages (L1). This version has been based on the assumption that from the level of correctness respondents have on the variety under test, inferences are made on the overall comprehension level of those tested. This method stipulates that, if respondents score very high in a given variety under test, by implications, the dialect under test is intelligible to that of the respondent which will therefore help them to know which dialect could pose as a reference dialect. Kluge also did not consider the fact that, a respondent could be competent in a language that had no relationship with his/her first language.

Due to the difficulties or flaws noticed in the RTT standard method which range from culturally inappropriate, requiring indirect inference to difficult question selection, Kluge (2006) brought in a modified version of this method which is known as the RTT retelling method which entails that respondents listen to a recorded narrative where the texts are broken down into one or two sentences and respondents retell these stories in their L1 without having to answer questions.

After reviewing the RTT standard method and its difficulties regarding its question-answer format, Kluge gives us a detail view of the RTT retelling method, its design, the testing and scoring procedures and lastly, some of the advantages and disadvantages of the RTT retelling method which were;

Both methods have made us to come to the conclusion that these tools could not only be used to assess inter-comprehension between dialects of the same language; but also to assess speaker's passive competences in given languages since understanding a language or variety does not necessarily entails that these varieties/languages are dialects of the same language as one is still able to comprehend two or more unrelated languages.

Kluge's difficulties portrayed in the RTT standard method regarding the inferred responses to questions has helped us to pose questions concerning the texts in the simplest way that will be comprehensible and interpretable to all respondents. This has therefore avoided the possibilities of respondents giving responses that are out of place or that were not intended in the texts.

The 'hometown' method used in this write-up has helped the researcher to make sure that the translated texts have been done into the respective languages under test. It has also

helped the researcher to get real native speakers of the targeted languages to be tested in languages other than theirs and at the same time helped in getting judges who helped in the assessment and scoring process.

Baake *et al.* (2006) gives us an insight of what the Levenshtein distance is all about. The Levenshtein distance is an important tool for the comparison of symbolic sequences, with many appearances in genome research, linguistics and other areas. For efficient applications, an approximation by a distance of smaller computational complexity is highly desirable. However, our comparison of the Levenshtein with a generic dictionary-based distance indicates their statistical independence. This suggests that a simplication along this line might not be possible without restricting the class of sequences several other probabilistic properties are briefly discussed, emphasizing various questions that deserve further investigation.

The Levenshtein (or edit) metric (Levenshtein, 1965) is a standard tool to estimate the distance between two sequences. It is widely used in linguistics and bioinformatics, and for the recognition of text blocks with isolated mistakes. As is well known, its computational complexity, when applied to two sequences of (approximately) the same length n, is O (n2). Since this is a hurdle in many practical applications, it is desirable to replace, or to approximate, the Levenshtein (L) distance by some quantity of smaller (preferably linear) computational complexity. Two fast approximation algorithms for edit distances were suggested by Ukkonen (1992), one based on maximal exact matches, the other on suitably restricted sub word comparisons between the two sequences; compare also Lippert et *al.* (2002). This would indeed give O (n), due to their computability from the suffix tree (Guseld, 1999).

However, they only provide lower bounds, and hence no complete solution of the problem. It seems possible to estimate probabilistically, with sublinear complexity, whether the L-distance of two sequences is `small' or` large'; see Batu *et al.* (2003). Whether an improvement of this rather coarse result or even a replacement of the L-distance is possible, with at most linear complexity and a non-probabilistic outcome, seems open. They went further to compare the L-distance with a representative dictionary-based distance. Their findings supported the conclusion that such a simplication might be difficult or even impossible. They highlighted some interesting properties that have been neglected so far, but seem relevant for a better understanding of such distance concepts. This work is similar to ours in that, this tool helped us to bring out the distance between words produced by L1 and L2 speakers of LF.

Bachman (1990) advances that language is not tested in a vacuum. That is, when a language is being tested, the tester has to strive to know how this language was acquired or taught. He also goes further to emphasis on the fact that, in order for one to undertake a test, he/she is supposed to specify the characteristics of test tasks and test methods so that we can be able to assess a test-takers' performance in a given test task. Here, Bachman mean that, when a language test is to be conducted, the language tester is supposed to make it clear or specify what aspect he/she wants to test in this language. Is it the grammar, morphology or extra-linguistic features?

Bachman goes further to tell us about the problems caused by the measurement theory. To him, test performance is sometimes always influenced by the test method that is used. If tests scores are to be interpreted as an indicator to language ability, and not based on how well a test-taker can use multiple methods, it means one is not supposed to consider the test method used when testing individual's language proficiencies.

He also presents to us factors that might affect our test and what we need to consider before administering a language test. These factors are both random and personal attributes. Random factors include the physical and mental state of test-takers and could be uncontrollable while personal attributes such as sex, age, native language, cultural background, etc. can be controlled. Bachman's work has helped us in knowing exactly what aspect of the languages to be handled and how to go about it. A test-taker not knowing particularly what he/she wants to do and how to do it, will end up not attaining his/her objectives.

Bachman and Cohen's (1998) work serves as a useful introduction to the interfaces between second language acquisition and language testing research. It discusses the reasons why SLA and language testing were for some time viewed as totally distinct, and it gives reasons why in recent years the two fields seem to have moved closer together. Bachman and Cohen describe areas of common interest between SLA and language testing and make recommendations for future joint areas of research. How their study is related to ours is that, the fact that LF speakers declared that apart from their native languages (L1), they have other languages (L2) in their linguistic repertoires and as a result, this has pushed us to find out if really their knowledge of second languages or additional languages is a reality.

Brye and Brye's (2004) was focused on the Bebe and Kemezung languages of the North West Region of Cameroon. Their goal was to assess the need for literacy development

and Bible translation in national languages throughout Cameroon. It was also done in order to know the interrelationship that exist between the Eastern Beboid languages and see how they could be grouped together. This work was just a continuation of what they had done in March and November 1999. They first of all carried out a rapid appraisal survey of all the eastern Beboid languages. While in the Kemezung and Bebe languages, an intelligibility test was carried out using the recorded text testing procedure.

A word list was also carried out in the languages under study to see the level of similarities. According to Bergman (1989.8.1.6), if words had similarities of up to 70% and above, it meant further data was needed and could be considered dialects of the same language. During the intelligibility test, informants were first of all tested in their mother tongue to know their level of competences. A participant must have been raised in the area of test and if he/she could score 75% in the comprehension test in his/her own language, he was then considered eligible to be tested in the other languages (3). Texts were translated into the tested languages and played. Questions were asked to the informant at intervals concerning the text. Attitudes speakers had of documenting their languages and those of others were asked.

Their work is connected to ours at the level of data collection methods. We used RTTs and word lists in our work to test how competent our informants are in the LF languages. Though these instruments were used to test intelligibility, ours will be used for language assessment. Though we had different objectives (intelligibility testing as oppose to language assessment), the RTT tool was administered in the same way like Brye and Brye (2004). Another criterion for the selection of respondents was that he/she must have been judged competent in his/her language, and this is exactly what happened in the selection process of our testees. We made sure that those involved in the tests were first of all very competent in their own L1.

Carmen Fought (2006) offers us a window into the social and psychological processes that are involved in the construction of an ethnic identity and showed how language is both a mirror for reflecting these processes and a part of the process itself. She tries to show how language and ethnicity are related. Her focus is based on the form (linguistic variables) and functions (uses of languages). She also explores the role of pragmatics and discourse features in ethnic identity, and how this can lead to miscomprehension.

Fought makes mention of the aspect of "crossing" the use of language associated with an ethnic group to which the speaker does not belong. What Fought is saying here is that, language gives one's identity and when a person speaks a language or a variety he/she is identified as a member of that community or ethnic group. Therefore, if one is able to acquire languages or dialects that are not his/her own, he/she automatically become a member of many speech communities. To her, identity is constructed through social and psychological processes which are therefore the case notice in LF where some consultants declared they speak particular languages because they want to be affiliated into those communities. This is also attested in Di Carlo (2015). Fought in his work has also confirmed the assertion that solidarity is one of the reasons that enable people to acquire languages like what we find in LF.

Casad (1974) in his book "Dialect intelligibility tests" did an intelligibility testing between dialects to see how near or distant his target varieties were to each other. Though first mentioned by Voegelin and ZELIG in (1951) and was later developed by him, he said, when two varieties are considered dialects of the same language, two stories were registered in each of the varieties. These stories are personal stories based on events lived by the author and not from folklore or history. That is, the RTT consists of a registered text in dialect A, which is made, listened to by the speaker of dialect B. After which, the text is interrupted by questions asked in this dialect B. And for every question, there is a mark allocation. The result obtained determines whether there is intelligibility or not.

Borrowing from Casad's method, we decided to use this instrument in testing the multilingual competences of individuals since we know that having competence in given code does not only mean that these codes are dialects of the same languages as seen in Casad (1974). Here, texts were also written in the eight different languages of LF and were made to listen to and interpreted by speakers of other languages. Our reason for using this tool was to test the people's passive competences in the languages that were not theirs. What we mean here is that, Casad's work in general and his methodology in particular has also provoked our write-up as we wanted to prove that this tool could not only be limited to intelligibility testing.

Chenemo (2011), in her work "A comparative study in the linguistic varieties in the Bafutfondom "did a sociolinguistic survey in the domain of language variation in the Bafut fondom. In her study, she highlights some varieties in the Bafut Fundom which she thought

were dialects of the Bafut language. These varieties include: Buwi, Mantaa, Otang, Obang, Mbakong and Butang. In order to do this, she did a lexicostatistic study where a 200 word list was carried out to see how similar these varieties were to the Bafut language and if they were to be considered dialects of Bafut or not.

Another method that was used was the recorded text testing (RTT) method. Here natural speeches were recorded in English and translated into the dialects under test. Where those being tested were to listen first by identifying the varieties after which they were to answer questions that concerned the various texts. The last but not the list method was the global group assessment method were subjects were tested on the attitudes they have vis-a-vis their languages and those of others.

Our present work is similar to that of Chenemo at the level of research instruments and methods. A word list and an RTT test have been used to assess the level of competences of speakers under study vis-a-vis the LF languages. Her work has also presented a similar case of what normally happens in LF, that of multilingualism.

Theories that were presented in her work gave us different views of the language ideologies of the area of Lower Bafut (LB) contrary to that of Lower Fungom.

There is the theory of essentialism presented in Lower Bafut (LB) which stipulates that LB speakers struggle to acquire the Bafut language because of the power that language possesses. Bafut is considered as a prestigious language which explains why every speaker of this area wants to have a place in the Bafut language. This is contrary to the case of LF which demonstrates not essentialism but indexicality. LF speakers acquire other LF languages not because they possess some power/prestige over their own languages but because of solidarity and because of spiritual insecurity. They want to be identified to one another not because those they identify themselves to have prestige but because they want to be considered just as members of groups or because they want to be affiliated to one another.

Clapham and Corson (eds.) (1997). This volume contains 29 chapters on different aspects of first and second language testing and assessment. Each chapter presents a state-of-the-art description of one aspect of language assessment and provides a bibliography of about 30 references for future researchers in the field. The book which is divided into four sections covering the testing of individual skills, methods of assessment, quantitative and qualitative approaches to test validation, and the ethics and effects of testing and assessment.

These authors have blew our minds on the different aspects of language assessment. The book as is the case of our work has dealt with individual skills and methods of language assessment which is exactly what we have duelled in our work. Our work has been concerned with assessing individual multilingualism, which in other word could be termed ‘assessing individual skills of a language. A series of methods have been used in the assessment process which is what the above authors have also dealt with.

Dabrowska and Street (2006) in their paper challenge the assumptions held by most linguistics works that–all normal speakers master the basic constructions of their languages and that–proficiency with a particular language structure depends on the individual‘s linguistic experience. The authors tried to test the veracity of the above widely held assumptions by basing their arguments on an experimental study which involved testing speaker´s ability to interpret passive sentences.

A group of three persons were tested. The first being educated speakers who were used with the notion that since full passives are mostly used in written texts, as a result, such speakers might be expected to perform better because they have more experience with such constructions.

The second and third groups included; non-native and native speakers of English. These two sets of persons were used in order to determine whether the type of linguistic experience matters as well as sheer amount. The non-native speakers who were highly educated adults second language learners though have the benefit of schooling, but quantitatively less experienced with passive than native English speakers and hence should perform worse than native speakers if proficiency is merely a function of the amount of exposure.

What the authors mean here is that, if proficiency is merely a function of amount of exposure, educated speakers on one hand should normally be more proficient or perform better in full passive sentences than any other group of speakers, while native speakers of English should also perform better than non-native adults second language learners since they have more linguistic experience and sheer amounts than the latter.

Sentence comprehension were tested using a modified version of a task developed by Ferreira. The misinterpretation of non-canonical sentences in cognitive Psychology 47,164–203]. Participants were asked to identify the agent in four types of sentences: plausible active, implausible active, plausible passive, and implausible passive. It was found out that both of

the highly educated groups and the less-educated non-native group performed at ceiling in all conditions. The less-educated native group performed at ceiling on the plausible sentences, but had difficulty with implausible actives (65% correct) and especially implausible passives (36% correct). These results suggest considerable (possibly education-related) differences in level of attainment among native speakers. However, the performance of the less-educated non-native group indicates that this effect is not solely attributable to the number of passives in the speakers' experience. They suggested that processing implausible non-canonical sentences depends to some extent on metalinguistic skills, which may be enhanced by explicit L2 instruction.

These authors here have made us to understand that, being exposed longer in a given language than the other does not suffice for that person to be able to have more proficiency in the language than the one whose exposure is very limited. This is also the type of complex situation we noticed in LF. The degree of exposure does not matter to these people as they have different motives for learning/acquiring other people´s languages. These motives stem from kinship, friendship ties, marriage, commerce, etc. We also noticed some cases where some speakers have had more exposure to certain languages, for one reason or the other, but have no degree of proficiency in these languages; and at the same time more proficient in others they have been less exposed to.

Decker (2012) did a study on two areas of North Pakistan where his focus was on knowing about and preserving knowledge and cultures of these people, what they think languages or dialects of the same languages are and the attitudes they have vis-a-vis developing their languages. What he discovered was that some of the natives considered lects as being dialects of the same language not based on reasons that could be scientifically justified. The natives of these languages considered varieties to be the same even though they had nothing in common. That is they do not even rhyme the same and at the same time varieties that have something in common or rhyme, they consider them different languages. Decker also discovered that, as they move from one village to the other, the distant between these languages become wider. That is "language A is very close to language B" and less close to language C and so on.

For Decker, proximity is a very glaring factor for languages to be intelligible. Villages that are very close to each other have almost the same and these varieties start becoming different from others as they move far apart. This immediately shows differences in the case

of LF whereby geographical nearness of villages do not mean these varieties are intelligible. We notice this with the case of Ajumbu and Kung languages which are geographically very close to each other but very different in structures (not structurally affined to one another), same with Buu and Abar (one of the Mungbam lects).

When questions were asked concerning the attitudes these people have as far as developing their languages were concern, some of them showed a negative attitude toward developing their own varieties but were instead shifting toward languages that were not theirs. This situation has also been experienced in Polomé (1992) where children of farmers and low-level employees tend to shy away from their original social backgrounds and languages and prefer Swahili to their native languages. Though LF speakers are busy acquiring new languages, their languages remain their priorities as they are considered as their own wealth.

In Decker (2012) native speakers of the Pakistanis languages consider dialects as being varieties of the same language even though they are not intelligible. This is contrastive to the situation in LF whereby speakers of the Mungbam varieties claim that their lects are different from the others though they have been scientifically tested to be dialects of the same language (2012 survey). This dialect segregation` brings in some sort of emblematic ideas which at a certain point might bring many deviations from the original lects or language and thus new unrelated languages might be created.

Di Carlo (2015) presents an ethno linguistic study on the rates of multilingualism carried out in Lower Fungom through a write-up entitled “Multilingualism, solidarity and magic. New perspectives on language ideology in the Cameroonian grass field” He talks about the language purity of this area and the reasons why they are multilingual. He emphasized on the notion of individual multilingualism that is very common in this area. That is to him not only is the area having many languages but also those living here are said to be multilingual.

According to Di Carlo, people acquire many languages for solidarity purposes and because of magic. Solidarity in the sense that, they want to be members of many speech communities so that at any point where they seized to be members of their own speech communities, they could easily integrate into the other communities whose languages or varieties they can speak. Another reason he advances to why these people learn many languages is that of magic. To him, because people are constantly afraid of the unknown (invisible) since they consider that whatever thing happens physically, must have taken place

in the spiritual, they learn varieties of dominant speech communities so that they could be protected under them. This work was published in 2015 which was as a result of a sociolinguistic survey carried out in 2012 which later provided new hypotheses to test. In this present work, we will check if the claim that people of LF are competent in many languages is true or false. His work has given me the core of what usually happens in this place and my target population has been conditioned by his results. Particularly, the claims that most of them do not only understand but also can actually speak 13-17 languages.

Di Carlo and Pizziolo (2013) carried out a study on spatial reasoning in GIS; the case of LF. To them, GIS is very important in monitoring language change. That is across time (history and an ongoing process). They focus their interest in an ongoing process of language relating from the past stage of that language to see how this can lead to a change in the method used in prehistorical researches. Paraphrasing Pred (1990:7), geographic space to them is considered to be "a theatre for the enactment of history, an unproblematic and unchanging set of surroundings within which practices and events occur, a fixed field for the play of social action."

Edgar C. Polomé (1982) in his write-up "Rural versus Urban Multilingualism in Tanzania"` presents to us the vivid multilingual nature of Tanzania and the various degrees of competences individuals have in the different languages. He first of all begins by telling us what multilingualism is all about. To him, multilingualism is a person's competence and performance in a number of languages and in multiple social settings. Polomé considers a person multilingual if he/she is able to use many languages and function in different social contexts. A person having a command of many languages should be able to know which language to use and in what context, the degree of competences the person possess in those languages should be looked into. Polomé enumerated some elements that needs to be considered when assessing a person´s oral competence which brings about the degrees of multilingualism. When judging a person´s oral competence, one has to consider to take into consideration that the person is able to understand and respond to the following situations below:

- Exchanging greetings
- Understanding or giving directives
- Selling or buying things at the market and bargaining about a price of goods
- Talking on a simple conversation
- Talking about health, farming, the weather etc.

To him, for a speaker to be considered competent in a given language, he/she must have been tested in the various commands above and not just be declared competent because he/she has understood or uttered some few phrases in a given language.

He emphasizes on the various skills that one need to consider when assessing a person´s competence in a language; understanding, speaking, reading and writing which are the various ways of assessing multilingualism. These competences include: understanding a language/languages, speaking, reading and writing. He makes us to understand that, based on our respondents; we will decide which type of assessment to carry out. If our respondents are literates, their writing and reading skills are to be considered ranging from reading/writing road signs to newspapers and from religious to technical books.

He also makes us to understand that Tanzania is undergoing urbanization which therefore makes it difficult to really say with exactitude which is a rural or urban centre. Swahili is highly learnt by almost everybody because of the market value it possesses. This has reached an extent that some people because of their new professional and cultural environments, they tend to shy away from their original social backgrounds and to prefer Swahili to their native languages.

Conclusively, in defining the degree of multilingualism of an individual, the choice he makes in definite social settings need to be considered.

Edgar's work has presented to us the situation lived in Tanzania as far as Swahili is concerned. Swahili is almost imposed to everybody due to the opportunities it possesses. This is contrary to the case of LF which is a complete rural setting. In LF, though people are multilingual, understanding/speaking languages that are not theirs, the aspect of dissociating themselves from their own social backgrounds and languages does not exist. In Tanzania, the essentialist idea has been projected through Swahili over other languages while in LF indexicality has been noticed among all the speakers. They acquire languages not because of market value or prestige such languages possess but just because they want to belong to different linguistic groups.

This work has come to throw more light on the kind of assessments to be made based on the population we are dealing with. If we are dealing with literates, the reading and writing skills are to be considered in the assessment process whereas if we find ourselves with respondents who have not been to school/illiterates, we are supposed to consider the

understanding and speaking skills. Since about 90% of our target population were illiterates (people who have never been to school), we had just to assess their listening and speaking skills.

Edu-Buandoh (2006) explores multilingualism among college students in Ghana, which is a West African country that contains about 80 different languages. English, being a colonial language in Ghana, but is recognized as the official language and language of instructions in schools.

The research questions that guided her study documented an account of the many languages that exist in Ghana, and also examined how multilingualism influences the construction of identity in Ghanaian college students. As far as her target population was concerned, 8 focal participants were selected out of the initial pool of 130 participants that were enrolled in different fields in the university of Cape Coast. Here, the criteria for selection were based on their ability to speak many languages. Data for her study was collected using interviews, observations, field notes and diary logs. After which data was analysed using the constant comparative method. Her results revealed how focal participants learned and used various languages within different communicative contexts, and how their choices of specific languages were indicative of their varying perceptions toward English and the different Ghanaian languages. Focal participants constructed multiple identities in their everyday communicative practices, and demonstrated how their perceptions influenced their daily lives both in and out of school.

The educational implications she tabled include how educators should be more aware of the benefits of native language instruction for multilingual students' language learning processes in order to enhance their subsequent mastery of English. She also remarked in her study that there is a serious need for native language reading materials to be made available for multilingual students in Ghana. As a result, recommends that future research should take into account the need to examine how languages are assigned official and private roles in multilingual settings in Ghana.

Edu's work has also been based on multilingual assessment which entailed to find out how university student construct multiple identities through the use of many languages. Like this study, her target population has been those who could speak many languages. The use of questionnaire as a tool for data collection was also used in our work which helped in portraying the complete multilingual situation that surrounds this area. The constant

comparative method used in our work was used for data analysis, a method that has helped us to constantly compare the degree of multilingual competences of L2 speakers to those of L1 speakers and the degree of declared vs actual competences.

Gerhard Jäger (2013) investigates the task of inferring a phylogenetic tree of languages from the collection of word lists made available by the Automated Similarity Judgment Project. This task involves three steps: (1) computing pairwise word distances, (2) aggregating word distances to a distance measure between languages and inferring a phylogenetic tree from these distances, and (3) evaluating the result by comparing it to expert classifications. For the first task, weighted alignment was used, and a method to determine weights empirically was also presented. For the second task, a novel method was developed that attempts to minimize the bias resulting from missing data. For the third task, several methods from the literature were applied to a large collection of language samples to enable statistical testing. It will be shown that the language distance measure proposed here leads to substantially more accurate phylogenies than a method relying on unweighted Levenshtein distances between words.

Our work also involved the collection of wordlist to bring out a judgment on the similarities of words between two speakers one being a native speaker and the other an L2 speaker. Some of the tasks carried out by Gerhard were also used in our work which included computing pair wise word distances and aggregating word distances to a distance measure between words which helped us in determining if a given L2 speaker was competent or not in a said language.

Good (2012) 'How to become a 'Kwa' noun' brings out contrast between 'Kwa' languages and those of 'Bantu'. He brings out one of the most glaring example between these two groups of languages by saying that, 'Kwa' languages are isolated from one another whereas those of the 'Bantu types are characterized by agglutination. That is, they are stuck together. He clearly brings out the noun classes of these languages by letting us know the various classes that characterize these language types. What is revealed as far as the noun class system of the 'Kwa' languages are concerned, is that there are some nouns in these language types that do not have noun classes while those of Bantu languages at one extreme show noun classes that are complex even at worldwide level (Corbett 2005). Noun class system is the most important tool to determine a member of a language family. What Good means here is that languages that exhibit the same noun class system is an indication for them belonging to the same family.

Noun classes can be gotten from the singular and plural forms of nouns and sometimes from concords in possessive and demonstratives. Classes 6 and 14 in Good's work on Kwa language are associated to nouns whose singular and plural markers are the same. Classes 3 and four are marked by a 'w' and a 'y'. This class is associated with nouns that have undergone initial consonant mutation. That is the initial consonant for the singular form has no relationship with that of the plural. An example is seen in Good's examples given in the Mundabli variety; whereby, the singular form of house and in Fang, there is consonant mutation for words like 'tooth and teeth', hill and hills. Good (2012) exhibits that, noun classes could be attested with changes just at the level of tone. This is a glaring example of the Fang language, a language of LF whereby words like 'leg', 'neck', bridge and bridges, etc.

Pred (1990) tells us that geographic space is like a theatre ground, where social actions take place over and over again. Space is acknowledged as having a high informative potential. That is, from a particular setting, we could tell what took place some centuries ago and what is still taking place since all these take place in a particular environment. Here, when maps are being drawn, they should be drawn with care because a given area tells us with exactitude what is happening in that area, its people, language and their way of life. Spatial reasoning therefore has to do with the landscape (space), its people, action both the natural and human actions. They go further by telling us the number of space we have which include two types of space; geographic and cultural landscape.

Geographic space is the objective entity while cultural space has to do with the perception of a people, actions and the landscape narratives based on what is collected from informants in a given space (cultural). His work will enable us to find out more about whom our target area and population is all about.

Jason Diller *et al*. (2010) carried out a sociolinguistic survey in the Giyanga speech community (Guang language family). This survey was designed to help SIL Togo-Benin administrators determine whether there is the need for SIL participation in Giyanga language development and, if so, the priority and strategy for such involvement. The survey was multi-faceted and involved work in both Ghana and Togo. The first part of the survey was conducted in Ghana, where the team elicited narrative texts in Gikyode and recorded Bible passages for comprehension testing among the Anyanga in Togo. The team also interviewed available GILLBT Gikyode project leaders (the GILLBT Gikyode project is designed to promote language development through literacy and translation efforts for Bible Translation).

The remainder of the survey was conducted in Togo, where they interviewed community leaders, elicited a wordlist, administered the Recorded Text Test (RTT) and Scripture test, and interviewed the individuals who took the tests. This work is similar to our present study in that, we will be using similar instruments like the RTT, word list in order to test the people's competences.

Lovegren (2011) worked on the linguistic phonetic properties of vowels of the Mungbam language. According to him, two of the dialects employ a type of phonetic contrast which is normally always found in West African languages processing ATR-based vowel harmony, even though Mungbam does not have vowel harmony as a synchronic process. This work has just come to complement Lovegren's work since Mungbam is one of the languages we are assessing.

Milroy and Gordon (2003) focused on the methods and theories that underlie sociolinguistic works especially that championed by William Labov which is that of variationism. They want to awaken the minds of those who are still to carryout research in sociolinguistics as they most at times base their analysis on the variationist theory. Though this theory does not work independently of others, one has to be aware of the underlying practice in their field and at the same time, they should develop an ongoing awareness between their field and that of others and the historical antecedents that have shaped their field or sometimes by providing a framework in which other researchers would react on. They went further to emphasize on the type of enquiries sociolinguists are interested in which to them, is the performance or actual usage of language though sometimes, research too is also carried out on self-reported information on language usage which to them, such reports on language usage is not often accepted by most sociolinguists to be true as they believe that such reports could not reflect the actual usage and could only be important on examining the effects of language ideology. What these authors are bringing out is not very far from this present work, as we do not want to base our analyses on self-reported information on the language usage of the LF speakers. We deemed it wise to see if self-reported competences that were gotten the pilot study, Angiachi (2013, Di Carlo (2015) match the speakeŕs actual performances.

They also brought out the difference between variability within generative tradition and sociolinguists. They make us to understand that, sociolinguists make reference to social (extra-linguistic features) as well as linguistic information in specifying them on the variability. What they mean here is that, sociolinguists do not only base their findings on

linguistic features as is done by generative tradition (generative linguists) but they also consider non-linguistic features in language variation. In most languages, paralinguistic features are not used the same way they are used in other languages. What is considered as an insult in one language might be considered as an appreciative gesture in another.

Reldfeldt (2010) presents the heterogeneous nature of German children as parents come from different countries with different linguistic backgrounds. The increasing number of multilingual children has resulted in significant challenges not only in Germany. As a result, he tries to assess these children using the inductive approach which is based on Jim Cummins'1997/2000 model of a common Underlying Proficiency and its iceberg analogy with broad reference to Chomsky. It is here that words like 'performance' and 'competence' are clearly demonstrated. In addition, there is also a common area where the two icebergs are fused: the central, unified processing system, called CUP. With broad reference to Chomsky, the conversation above the surface may be observed as performance, whereas the CUP, were the processing takes place, may be regarded as competence. Considering language impairment to be caused by impaired language processing, with reference to the picture of, it may well be explained, why language impairment always affects all languages. Therefore, the SLT may be interested in understanding how a child processes language .This is the model of the Inductive Approach (Scharff Rethfeldt, 2010).

Even from the monolingual view, which is one side of the iceberg, the SLT might be able to focus on processing strategies, which are tied to language processing, as long as he / she analyses and interprets the findings by integrating the individual, linguistic, cultural and social background.

With reference to culturally diverse children, language assessment can be subdivided into three types: (a) interview on medical and developmental history including collection and review of further background information and a multilingual biography, (b) observation in as many different contexts and with different interlocutors as possible, and (c) (in) formal tests, in ways of dynamic assessment, multiple tasks, and culturally sensitive and relevant stimuli.

Therefore, observing the multilingual client in as many different contexts as possible with many different communicative partners as possible is one major factor of assessment. The author emphasizes that when an assessment test is being conducted, many tasks should be carried out before conclusions on informants´ competences are drawn.

That is, one is not supposed to draw a conclusion saying that a given interviewee is competent or not after having tested him only on one or two items and in one or two different contexts. What the speaker declares here is that, like is the case of this work, we are not supposed to base my conclusions on the informants´ competencies only by administering the RTT or even with the use of the visual stimuli, my conclusions were not to be drawn on their competences after having presented only two to three related pictures. This explains why my pictures used in the visual stimuli have about twelve unrelated topics. For example, pictures on farming, harvesting, praying, smoking etc.

This work has also presented us with what takes place in a European context between multilingual children. These children´s proficiencies are tested using an approach that is different from ours (inductive approach).

Saul B. Needleman and Christian D. Wunsch (1970) in their write-up 'A General Method Applicable to the Search for Similarities in the Amino Acid Sequence of Two Proteins´ presents to us how a computer adaptable method for finding similarities in the amino acid sequences of two proteins has been developed. From their findings, it is possible to determine whether significant homology exists between the proteins. This information is used to trace their possible evolutionary development. The maximum match is a number dependent upon the similarity of the sequences. One of its definitions is the largest number of amino acids of one protein that can be matched with those of a second protein allowing for all possible interruptions in either of the sequences. While the interruptions give rise to a very large number of comparisons, the method efficiently excludes from consideration those comparisons that cannot contribute to the maximum match. Comparisons are made from the smallest unit of significance, a pair of amino acids, one from each protein. All possible pairs are represented by a two-dimensional array, and all possible comparisons are represented by pathways through the array. For this maximum match only certain of the possible pathways must, be evaluated. A numerical value, one in this case, is assigned to every cell in the array representing like amino acids. The maximum match is the largest number that would result from summing the cell values of every pathway.

This work has inspired us in that it will help us in the calculation of the similarities of wordlists used in this present work.

In our work, we will be matching two words collected from L1 and L2 speakers in order to bring out the similarities that exist between those words. This will also include a match which is a number dependent upon the similarities in the two words being compared A

numerical value of one will be assigned to similar words and less than one if there are some mis-matches in these words.

Scotton (1976) presents findings on the use of language by African peers from inter-ethnic groups in three African cities. She talks about what happens when people from different areas in Africa with different languages come together for work purposes, they pick up a type of language which they consider a "neutral language". Neutral in the sense that they would not want to favour a region by speaking their language either because that language is either dominant in the field of education or authority. Here, it is contrasted with the case of LF in that these people pick up any language they are exposed to. For example the fact that most of them are multilingual in most of the languages of LF, when they find themselves in Missong, they pick up the Missong variety and start using and so is the case with other varieties, say Kung. Those who are competent in the Kung language, when they are situated in Kung or are with Kung speakers, they immediately embrace the Kung language because of their present context and immediately they have an opportunity to communicate with someone either from Fang or Biya, they immediately switch to these varieties. Scotton's notion of a ́neutral` language by African peers from inter-ethnic groups when they find themselves in cities is seen in the Fang speakers of LF. These people prefer to pick up an in-coming language like Pidgin English or English language which are neutral languages of this area rather than learning any other LF language. This is also attested in Di Carlo (2015) where they declared that; apart from their language, the only language they knew was Pidgin English.

Wall, D. (1996). Her write-up describes several key concepts in educational innovation. The author applies these concepts to the teaching of English as a foreign or second language and relates them to a study she carried out into the washback of a new school examination in Sri Lanka. She shows how the belief that assessment and the curriculum would together affect teaching in the classroom turned out to be misplaced, partly because of discrepancies between the curriculum and the examination, and partly because of a lack of teacher training in the new 'communicative' methodology. In her conclusion, she makes suggestions as to how future investigations into washback should be carried out and how innovations in the classroom might be brought about more successfully. Though the author centres on a formal context which is that of a classroom situation, both her work and ours have something in common since they not only deal with assessment but also with second language acquisition though ours have dealt with assessment on informal context.

Kunene (1979) carried out a study on the acquisition of Swati nominal morphology, focusing on noun class prefixes and nominal agreement (possessives and demonstratives). Data were drawn from spontaneous speech samples and informal elicitation sessions with two children aged 2; 2-3 and 2; 11-3; 6, and an experimental study with three children aged 4; 6-6 years.

He also did another study in the Zulu language where many of the Zulu acquisition data were drawn from a longitudinal spontaneous interaction study of three children between 1; 10-3; 5 years, plus data from other 2 children collected for shorter periods of time (Suzman 1991). Studies investigate the acquisition of the noun class system (Suzman 1980, 1996), agreement (Suzman 1982), and passives (Suzman 1985, 1987). These topics, as well as the acquisition of relative clauses and tone (including an elicited production experiment with 9 Natal children 2; 6-4 years old), are discussed in Suzman (1991). This study has been involved in the acquisition of noun morphology (the noun class system), including possessive and demonstrative pronouns, agreement and passive in Swati and Zulu from children through spontaneous speeches; our work has been focused on the acquisition of noun class systems from adults in their non-native languages who happened to be multilingual speakers. Though both works tackles two different age groups, that is, that of adults and children, both authors are concerned with how noun classes are acquired.

Connelly's (1984) semi-longitudinal study of noun class prefixes examined 2 urban and 2 rural children in Lesotho (Sotho) aged 1; 6-4; 2 years. There is also a brief discussion of the acquisition of clicks. Demuth's (1984) longitudinal spontaneous production study of four rural children in Lesotho (aged 2; 1-3; 0, 2; 1-3; 2, 2; 4-3; 3 and 3; 8-4; 7 years) provides the database for much of her subsequent work. Research has focused on question and prompting routines (Demuth 1984, 1987a), as well as the acquisition of word order (Demuth 1987b), the noun class and agreement system (Demuth 1988, 2000, Ziesler & Demuth 1995), passives (Demuth 1989, 1990), morpho-phonology (Demuth 1992a, 1994), the tonal system (Demuth 1992b, 1993, 1995a), relative clauses (Demuth 1984, 1995b), and applicative constructions (Demuth 1998, Demuth, Machobane & Moloi 2000), including experimental data from 3-8-year-old's and adults.

Another study was conducted by (Idiata 1998) in Sangu (Gabon), a Bantu language outside southern and eastern Africa. Data were collected in, a series of comprehension and elicited production experiments and narrative storytelling tasks with 2-13-year-olds and adults. The study examines morpho-syntactic phenomena including noun class prefixes, nominal and verbal agreement, locatives, and verbal extensions such as the causative, applicative,

imperfect, reversive, stative, durative, and passive. A CD-ROM containing the images used in the experiments and one of the first grammatical sketches of the language are also included.

The above section has explored literature that is related to our work. Works related to the main terms, theories and methods used in this work have been explored. Below, we will see the conclusion of the chapter.

1.10 Conclusion of the Chapter

This chapter has given us some luminous 'macro-knowledge' on multilingualism, competence and on language assessment. We have also peruse many books and articles. Some related literature and theories backing our study have also been explored. Works like those of Kluge (2006) who gives us a vivid description of what both the standard RTT and the Recorded Text Test retelling methods were all about. She made us understand that with standard RTT method, texts are recorded where informants are asked to listen to and translate these texts into the targeted variety/language and RTT retelling method having to do with listening to recorded texts and answering questions that are based on the texts. Write-ups such as those of Di Carlo (2015) which made us know that multilingualism in LF is encouraged by solidarity and magic. That is, speakers of LF learn many languages because they want to maintain friendship with speakers of those linguistic groups, they want to be affiliated to the linguistic groups and also because they want to be protected under the groups whose languages are being learned. The grounded theory also examined and this has led to updating our hypotheses.

In the next chapter, we shall be looking at the methodology put forward to give this study its scientific quality.

CHAPTER TWO: METHODOLOGY

2.1 Introduction

What makes a piece of work interesting is the method the researcher used in gathering information about the subject under study. What then is methodology? Methodology has to do with where data was recorded, from whom and the conditions under which the data was recorded. Therefore, this chapter informs us on the data collection methods and research procedures. It begins with (2) data collection, (3) the pilot study, (4) target population, (5) the distribution of the sample population, (6) research procedure, (7) method of collecting data, (8) data collection techniques and research instruments, (9) choice of tool (Standard RTT and RTT Retelling Method), (10) Recording, (11) data treatment and presentation, (12) Meta data, (13) ethical issues and (14) Conclusion. We discuss them below.

2.2 Data Collection

The data collected for this study were elicited from native speakers of LF both within and without LF who proved to be very competent in their respective native languages. Basing on claims of multilingual competences in (Angiachi 2013, Di Carlo 2015), our target was to collect data to assess L2 speakers' multilingual competences.

2.3 The pilot study

Before this work proper, a pilot study of this area was carried out with two other researchers: Angiachi Demitris and Pierpaolo Di Carlo in May 2012 where some consultants' opinions about their linguistic repertoires were sampled and the reasons for these high degree of linguistic competences in this area. It should be borne in mind that their self-reported multilingual competences during this pilot phase motivated our study on assessing their multilingual competences since they declared their multilingual and multilectal competences in languages spoken both in and out of LF. They claimed a degree of multilingual and multilectal competences ranging from 10 to 13, and 12 to 17 respectively. These self-reported multilingual competences were gotten with the help of a sociolinguistic questionnaire.

The use of a questionnaire reveals the presence of thirty languages. However, eight of these languages are the languages of the LF area spoken in its thirteen small villages. They include: Mungbam made up of Munken, Ngun, Biya, Abar and Missong varieties and Ji

clusters, known in recent works as the Mufu-Mundabli language, Buu, Kung, Koshin, Fang, Mashi and Ajumbu.

The Mashi variety is said to be a variety of Naki spoken in and out of LF. Most of the languages found here are languages spoken by people of the North West Region of Cameroon, for example Bambui and Bambili (varieties of the same language), Mmen, Mungaka, Isu, Befang, Nkwen, Weh, just to name a few. In addition, languages of the North and the West of Cameroon like Hausa, Bororo and Bamum are present in the linguistic repertoires of these people. Inclusive also, are the official languages of Cameroon which include: English, French while Pidgin English is a lingua franca spoken almost by everyone in LF. Pidgin English was the medium used by the researcher to communicate with the consultants. Almost every speaker of LF has active competence in Pidgin English which explains why it was used as the medium of communication not only between consultants and the researcher but also, as a language used to interpret recorded texts. Some of the reasons given by these people for the high linguistic density and competences included: Objective proximity vs. Perceived proximity, Objective structural affinity and perceived structural affinity, individual relations, movements, blood relations, marriage/ in-laws, education and religion**.**

2.3.1 Objective proximity vs. Perceived proximity

The notions of 'objective proximity' and 'perceived proximity' are quite similar but at the same time distinct in the world of research. It is important to state here that these two notions were accommodated in this work. 'Proximity' is approached in objective terms; geographical proximity is physical closeness to the target language. This areal approach was considered on our sampled languages in order to deal with subgroups of these languages as opposed to the whole sample. 'Perceived proximity' by contrast involves thoughts i.e. what people think is close to them may not be physically true (X may consider Missong to be close to Abar physically but Y rather sees Mufu as close to Abar). These thoughts go beyond actual physical closeness. This phase of proximity captures reasons as to why people in LF learn languages. Similar to the above is objective structural affinity and perceived structural affinity as we will see below.

2.3.2 Objective structural affinity and perceived structural affinity

Objective structural affinity vs. perceived structural affinity. Just like 'objective proximity' and 'perceived proximity' dichotomy explained above, the concept of 'perceived structural affinity' and 'objective structural affinity' also differ to an extent. 'Structurally affine lects' is a factor that facilitates language learning processes.

Objective structurally affine lects are lects which are found in the same language cluster (Angiachi 2013). In other words they are dialects of the same language, therefore genetically related. For instance Munken, Ngun, Biya, Abar and Missong i.e. Mungbam are varieties of the same language (scientifically established). Also, this sub categorization we made on our sampled languages in order to deal with subgroups of them as opposed to the whole sample. Unlike 'objective structural affinity', 'perceived structural affinity' is explained in terms of thoughts. That is, what people of LF consider to be genetically close to their target languages (see Angiachi 2013). By considering both objective structural similarity and perceived structural similarity gives a better picture as to why people in LF are multilingual.

As explained above, LF speakers at times decide which languages or dialects are structurally affined to theirs based on the relationship they handle with the latter. In one of my audios, a Missong man said he did not understand Abar though it has been scientifically proven that these two varieties are diaclects of the same language just because of an old problem the Missong people had with the Abar people. But after some enquiries, it was discovered that he did not only understand Abar, but actually spoke it. The speaker in question insisted that he could not speak this lect because those people to him are considered very wicked but he claimed Buu was structurally affined to Missong than to Abar though Buu is quite a different language from Mungbam of which both Missong and Abar are varieties. (See Angiachi 2013) for details on these factors for linguistic density.

The pilot study was very imperative for this study because it was:

-a strategy of selecting the participants

-knowing the factors for this high linguistic density

The people contacted during the pilot phase will be known as core consultants as seen below.

Core consultants for the 2012 survey were tested to confirm their level of competences in the various languages as they claimed. These included; QPP 22, QAD23, QAD 24, QAD 25, QAD 28, QAT 16, QAT 17, QAT 22, QAT 25 and QAT27. These were codes given to questionnaires during the pilot study. In this work, some new codes were added which helped us in identifying our interviewees and these codes will be used throughout the work. We want to avoid using names of consultants.

TABLE 3: CORE CONSULTANTS

Table 3 presents the sociolinguistic backgrounds of core consultants. What we mean by core consultants here are those whose multilingual competences pushed us to carry out our findings.

Codes	**Sex**	**Age**	**Native speaker**	**Residence**	**No of languages**
QAD23	M	60yrs	Buu	Buu	6
QAD24	F	56yrs	Buu	Buu	6
QAD25	F	65yrs	Buu	Buu	6
QAD28	M	61yrs	Buu	Buu	6
QPP22	F	48yrs	Mufu	Buu	6
QAT16	M	70	Missong	Missong	6
QAT17	M	68yrs	Missong	Missong	5
QAT22	M	55yrs	Buu	Buu	7
QAT25	F	45yrs	Mufu	Buu	7
Qat27	M	68yrs	Buu	Buu	6

Table 3 above does not exhaust the number of persons who declared competences during the pilot stage. These people were chosen to represent the LF population as all except Fang speakers claim competences in more than three LF languages. A sample of those whose multilingual claims motivated our findings has been presented.

Lower Fungom is a hyper-pluralistic society. The pluralistic situation of LF is 52 dominant as compared to, for example, the linguistic ecology in Somié, found in the Adamawa Region of Cameroon. It registers the presence of twenty lects and fewer languages (Connell, 2009).

During the assessment process proper, consultants were presented recorded texts (RTT) as a tool to assessing their passive competences in their L2. This started with a pre-research period which consisted of the writing of narratives that were to be used on the field. These narratives included day-to-day experiences. They were first of all done in English by the researcher herself and were translated into the various LF languages that were to be tested. The texts were translated by native speakers of the languages under test, and not by those who claimed competences in the languages. We adopted Jess and Peggy Thomson's (2002) method known as "hometown testing" for our narratives. Hometown because, after the texts were written in English, we took them to LF where they were translated by native speakers of these languages residing in LF. We wanted to be sure that, those doing the translations were native speakers of the languages concerned and must have been judged by others to be competent in this task. We also collected data through the use of visual stimuli and wordlists in order to confirm the veracity of these self-reported multilingual competences. The next section discusses the target population.

2.4 The Target Population

Our target population were all adults; from the age of 18 years and above, both literates and illiterates. This choice was conditioned by previous works like the pilot study, Angiachi (2013), Di Carlo (2015). The above studies targeted only adults, and since we had to confirm the results of the self-reported competences of individuals; in the pilot study and those of the above authors where after their claims, no test was conducted in order to test their actual competences, we avoided the possibility of influencing the results if an age group that was absent in the previous studies was included .

Talking about the target population for this study, our consultants were all native speakers of one of the eight languages of LF, though not all of them resided in their respective language communities because of socio-economic, ethnographic and cultural reasons. In fact, those we contacted were first of all judged very competent in their respective languages before being tested in the languages that were not theirs. We did our best to have all the LF languages represented.

One would note here that the target population for the study was made up of two groups: those whose competences were tested and those who were to serve as judges for the L2 speakers and those who directly helped us in scoring the visual stimuli. To be eligible for a judge, people who share the same native language with them must have judged them

competent too in their languages. The population that involved in the study was made up of 101 persons divided into different groups based on the role they played in the collection and interpretation of data. The above number of persons also involved those whose wordlists were used to judge or measure the distance between those of second language speakers' wordlists.

Those diretctly involved in the assessment proper were 80 in number; beginning with the recorded texts testing (RTTs). Those that were assessed using the visual stimuli and wordlists were 29 and 21 respectively because after the recorded text testing method, some of the testees were not competent in any of the languages except theirs. As a result, their active competences could not be further tested in languages they already proved not to know. What we consider active competence here, is when a speaker is able to speak or produce a wordlist in a given language.

Passive competence on its part was measured from those who could only understand these languages but could not speak or provide a wordlist in the languages. As earlier said, terms like "near passive" and "active competence" were also used in scoring the respondents.

Apart from the consultants for the RTT tests, visual stimuli and wordlist, thirteen others who were native speakers of one of the eight languges were asked to produce wordlists in their respective 'languages'. These wordlists were to be used to judge those collected from non-native speakers. That is, wordlists produced by L1 speakers were used to measure the distance between those produced by their L2 counterparts.

As far as the language representativeness in the sample population was concerned, ten persons each represented their language. Languages with variations due to the geographical settings, had representstives from each village or setting.

Though speakers of Naki claimed the language was exactly the same in all its six geographical settings, we considered them dialects of the same language (Di Carlo 2011). Among the six varieties, we were only able to get speakers from Mekaf, Small Mekaf (Batieh) and Mashi.

We should be reminded that, like Edu-Buandoh (2006), the criteria for selection were based on their ability to speak many languages. Next is the distribution of sample population.

2.5 The Distribution of the Sample Population

The sample population that was used for direct assessment was 80 and this population decreased as one moved from the RTT method to the visual stimuli and the wordlist methods. What we mean by direct assessment here are those whose passive and active competences were tested while other consultants were used as judges (direct and indirect judges).

In all, 29 people were involved in the visual stimuli and 21 in the wordlist. Some of the consultants appeared as many times as possible in both the visual stimuli and the wordlists depending on the number of languages they proved having active competency in. We had in all a total number of 80 people drawn from all the various age groups; 45 men and 35 women in the RTT method.

Initially, our target was aimed at 40 men and 40 women but this was not possible because only three women were interviewed from Koshin because they were being intimidated by one of their village elders since he thought our mission was political. So, only the men were courageous to come and book an appointment with us and where they had to meet us at my base (Yemgeh). Getting access to the Mungbam women too was not very easy. This explains why we had seven men and three women in this language. However, with the uneven representation of our sample, results obtained here are a representative of the sample because all who claimed multilingual competences were all represented. Below, we are going to give a detailed presentation of the population from which our data was collected.

The population for this research was divided into five groups based on the roles they played in data collection. See table 4 below.

TABLE 4: Sample

Group	Method	Role	No of persons involved
1	Recorded Text Testing	Passive competences	80
2	Visual stimuli	Active competences	29
3	Wordlist	Lexical and morphological competences	21
4	Visual stimuli	Physical judges	08
5	Wordlist	Non physical judges	13

Table 4 above summarises the number of persons involved in the research. Those we termed physical judges are those who judged directly were the ones involved in the assessment done using the visual stimuli method. That is, they came in to evaluate what was said by non-native speakers of their languages while non physical judges provided wordlists in their different languages which we later used to measure the distance between them and those produced by L2 speakers.

After the visual stimuli interpretations gotten from non-native speakers of the languages under test were transcribed using ELAN; Eudico Linguistic Annotator, the transcribed ELAN files were now presented to the judges who had to listen to them and say if a given individual performed well or not. The method for scoring was borrowed from Di Carlo (2015) who scored consultants with values that ranged from 0 to 5 based on their self-reported competences. Though adopted, it was not used directly in the same way. Judges had to listen to what consultants interpreted from the pictures and say if they scored a zero or not and if not what score?

Statements like ‘this is really a Kung person, or Mungbam person based on how well the visual stimuli were interpreted were made. Such statements meant that the speaker had native speaker’s competence in that language. We could also hear ‘hai’ that is not a Kung or Mungbam language. From such statements, we could also know that the speaker is a bad speaker.

We also had statements from the judges like ‘he/she has spoken well though one can tell that he/she is not a native speaker’ (that is speaking the language with an accent that is not of the language).

If a consultants code mixed; that which was under test and any other code, he/she was given 2 points and a 3 meant that he/she spoke the language well though with some very limited code mixing.

If a judge declared that this person emplored just few phrases of his/her language in his/her interpretations, the mark allocation given to this type of person was a 1on 5.

All the values used in scoring each individual were a consensus between the judge and the researcher herself though the judges’ statements on the performances could still help her in scoring by herself. Though we initially planned to have eight judges representing the eight different languages of LF, we ended up having more persons because the exercise attracted so

many native speakers especially as it had to do with audios that had been transcribed using ELAN.

The fifth group of persons was those that were indirectly used in the judgment of the wordlists collected from L2 speakers. These were those who were native speakers of the eight languages of LF and judged competent by other native speakers of those languages. These people provided us with wordlists in their languages where the wordlists were used to compare with those produced by second language speakers. It was sometimes difficult to tell who a native speaker of a given language was since we sometimes had people who were native speakers of two or more languages. These were people whose parents came from different linguistic backgrounds since inter-marriage is very common in this area. But these reference wordlists we got them from real native speakers of LF languages.

Table 4 gives a list of consultants from whom data was obtained. All consultants were gotten from all walks of life, literates and non-literates. Initially, we started with 80 consultants who were all involved in the RTT method; a method used in assessing passive competences. Those for the visual stimuli and the wordlist tests were chosen among this sample after they had scored well and further claimed that they had active competences in the languages they mentioned. The codes assigned to each consultant were those that featured in the questionnaire. That is, each questionnaire carried information about a given consultant. We numbered the questionnaires from 24 to 144 and carried the initial letters of the researcher's two name. One seeing this could tell if the questionnaire was done by X or Y. The Q we find all through refers to questionnaire, while AT, AD or PP were initials of those who collected the data including the questionnaire number. See details about this in the annex.

As earlier said, 80 consultants were chosen from the eight languages of LF, ten persons each from these language communities. They were made up of 45 men and 35 women. They included people of all walks of live; farmers, traders, catechists, motorcycle riders, students etc. The ages for females ranged from 18 to 65 yrs, while men fell between the ages of 22 to 80 yrs. Initially, we planned working with 40 men and 40 women, but due to circumstances beyond our control, we were not able to get in touch with the 40 women we wanted. Table 5 below summarises the target population. To see the details go to the appendix 4.

2.6 Sample Size

As far as the sample size is concerned, 80 people with self-proclaimed individual multilingualism were selected from all the eight languages of LF. Here, they were to be tested using the RTTs after which they could then be tested on the visual stimuli and the wordlist if only those L2 speakers scored well in the RTT and still claim they could speak those languages.

In the sampling technique, adults from all walks of life from the ages of 18 years and above were selected to represent their linguistic communities. Also, these L2 speakers must have lived in LF for atleast 15 years.

2.7 Purposive Sampling Technique

This research made use of the purposive sampling technique whose conditions are outlined below:

Condition 1: For you to be a qualified participant in this study you must have proclaimed

competent in a number of languages (achived through the pilot study).

Condition 2:You must have lived in LF for atleast 15 years

Condition 3: You must be competent in your native language.

Condition 4: You must be 18 years and above.

TABLE 5: CONSULTANTS' PERSONAL DETAILS

Languages	**No of participants**	**Sex**	
		Males	**Females**
Buu	10	6	4
Kung	10	5	5
Fang	10	5	5
Koshin	10	7	3
Mufu-Mundabli	10	5	5
Mungbam	10	7	3
Naki	10	5	5
Ajumbu	10	5	5

Total	80	45	35

2.8 Research procedures

Data collection for the study started in July 2013 after a pilot study had been done in (2012). The researcher went to the field thrice. The first trip was a pilot study carried out with colleagues (Pierpaolo Di Carlo and Angiachi Demitris). It is during this trip that declarations about the people's linguistic competences were made. During the second trip, the researcher tested the people's actual competences in the languages under study. The testing included: test using recorded narratives in the various LF languages (RTTs), test using pictures in which respondents had to interpret into the various languages they claimed they could speak (visual stimuli) and the last test was for them to produce a word list each in all the languages they had been tested to be competent in and why they invest time learning these languages.

Some of the factors have already been explored by Angiachi (2013), Di Carlo (2015). However, most of the time, they could not be separated from the actual test since some consultants, after being tested, went further narrating stories on how these languages were acquired or learnt.

In the third trip, data was verified and incomplete information on data collected during the previous trips was added. It was also during this trip that the multilingual levels of the consultants were assessed. This is because the files that were transcribed using the ELAN tool were checked by judges for the multilingual assessment.

The data was mostly elicited on non-farming, on market days or in the evening periods of the farming days because most of the consultants were not ready to forgo their farming activities because they wanted to be available for the test except for the Buu speakers who wilfully stayed at home a whole day waiting for us. That is, we sent them written notes informing them on how important their presence for the test was. We did this because from our pilot study, we found out that all the Buu speakers who reported self-reported multilingual competences, said they could speak at least five out of the eight LF languages. They were considered as 'core consultants' as our mission this time was to assess their linguistic competences. The people's presence was very imperative in this research since they were amongst those who provoked our findings.

Due to the difficult exercise, some potential consultants who were not tested on that same day willingly stayed back at home for the next day just to have their knowledge in these languages tested. The task was not easy due to the difficult terrain of LF which made accessibility to all the consultants difficult. That notwithstanding, we were able to have all the consultants needed for the study especially those that were found in the pilot study. These persons, no matter how difficult it was to get to them, we did our best to have them tested since they could not have been substituted with others because they were the back bone of our research.

We visited homes, and market squares which were mostly venues where consultants could easily be gotten. We also booked appointments with some consultants to meet at specific locations and at fixed times due to their busy schedules. Some of them had to meet us at our base (Yemgeh). It was also an opportunity for me to be received by the chief of Missong, regents of Buu and Ajumbu, who were not only very proud to see me come to work in their languages, they also facilitated access to the target persons.

2.9 Data Collection Techniques and Research Instruments

The methods for data collection included four instruments: (1) a sociolinguistic questionnaire, (2) Recorded Texts Testing, which was made up of both the standard RTT and RTT retelling methods, (3) the visual stimuli and (4) a wordlist. The following subsections show (5) how these instruments were administered are discussed below.

2.9.1 Sociolinguistic Questionnaires

The use of a questionnaire in this study was very brief as some of the consultants had been contacted earlier, and some details about them known. Some consultants who had been contacted before our research, and their linguistic backgrounds sampled, were still interrogated in order to confirm their reports. They were then complemented with new consultants in order to make up the sample population that was needed.

2.9.1.1 Procedure of Administering the Sociolinguistic questionnaire

During the data collection procedure, people were interviewed concerning how well they understood or speak particular languages. Some of them declared how they could understand just a bit of that language, some said they understood and could not speak; others declared they could speak a little, while others said they could speak like native speakers of those

languages. These questionnaires were presented in the form of semi-structured interviews because the consultants were mostly illiterates.

During the testing proper, those who openly declared that they were not competent or did not understand these languages were not tested at all. Only those who declared having either a passive or an active competence in particular languages were tested.

Since these sociolinguistic questionnaires could not be more explicit or could not really unravel to us how well these people understood or spoke these languages, that is, showed no proofs of their actual competences, we went further to recording texts in different languages and asking them to interpret. Respondents who also claimed they could speak these languages, were presented visual stimuli where they were asked to interpret in the languages they claimed they could speak. We also went further to elicit word lists from these same people. All these were recorded and taken to our judges to evaluate how well these people could speak these languages or how well they could provide valid word lists.

This instrument gave room for the researcher to understand and know the consultants better. Here, a series of questions were asked to elicit some sociocultural and background knowledge about the respondents. This method is very imperative because it helps the researcher, especially in sociolinguistics studies, to get ethnographic information about the informant and to know whether he or she is fit to provide good data for the study. questionnaire was used in the form of interview because the informants were mostly illiterates. So the researcher jotted down responses about their backgrounds. The researcher's reason for the choice of a semi-structured interview was to create a conducive and friendly background with the respondents.

This was the initial stage of our research which involved coming to know who our consultants were. In the questionnaire consultants ages, sex, village, quarter, names, parents and spouses' provenances and languages were mentioned. This also enabled us to understand the complicated and interconnected relationships that exist among the people. It was very common to find people with two or more names given by paternal and maternal relations even if there are not from the same village or linguistic entity. There was a lot of flagging (where people wanted to be identified in so many linguistic groups). I belong to this language, we belong to that language. It was very common to meet speakers who were fans of three to four languages for the reasons being: my grandmother came from language A, my mother is from B and marries to a man from language X and my spouse is from Z language community. This

is usually the normal situation as there is a very high rate of intermarriages and women who have experienced a lot of contract marriages.

The collection of data for this study was based on natives of Lower Fungom who had resided within this area atleast the past fifteen years. The questionnaire comprised 27 questions which were divided into four parts. The first part with 5 questions, concerned details about the researcher, the date, file name and place where the interview took place.

The second section of the questionnaire was made up of 15 questions which contained informants' personal details, parents' provenance including the languages spoken by both of these parents and if possible those spoken by children if the consultant is married.

The third section comprised 2 questions based on consultants' self-reported degree of competence; the language name and degree of competence each of these consultants had of a given language.

The last part was made up of 5 questions; which had to do with the reasons why a given consultant is able to understand or speak a given language, when he/she uses this language, the advantages he/she obtains in knowing a language, the special occasions in which the languages are used was elicited.

Summarilly, in the sociolinguistics questionnaires,

- Questions were asked related to the social variables
- Self-reported language proficiencies
- Reasons for language repertoire

2.9.1.2 Procedure for Scoring the Sociolinguistic questionnaire

The questionnaire was scored in two phases. The first phase was based on the self-reported degree of competences, that is, based on how many people could understand/speak a given language. The scoring ranged from 0 to 5 and with 0 meaning that the consultant reported he/she did not understand a language not to talk of speaking it.

Someone who reported that he/she could hear a language a bit was given a score of 1 while a score of 2 meant the informant could understand a language but could not speak it. Scores of 3, 4 and 5 were accorded to those who reported they could speak a bit, were fluent, and a native-like competences, respectively. The self proclaimed rating scale is presented below.

TABLE 6: SELF PROCLAIMED RATING SCALE

Scores	**Description**
0	no competence
1	understands a bit;
2	understands but cannot speak;
3	speaks a bit;
4	= fluent;
5	native speaker's competence

The second phase for the scoring of the questionnaire was concerned with reasons given by consultants on why they understood certain languages. Reasons given included: blood relations, friendship ties, commerce, trade, for security reasons etc.

After information about our consultants and their reported degrees of competences were known, there was the need to start testing them. This test began with testing passive competences before active. These passive competences were tested using the Recorded Text Testing tool (RTT) as discussed in 2.7.2.

2.9.2 The Recorded Text Testing

This tool was developed by Casad in (1974) in his work entitled "Dialect Intelligibility Testing". He did an intelligibility testing between dialects to see how near or distant his target varieties were to each other. In his application, when two varieties are considered dialects of

the same language, two stories were registered in each of the varieties. These stories are personal stories based on events lived by the author and not from folklore or history. That is, the RTT consists of a registered text in dialect A, which is listened to by the speaker of dialect B. After which, the text is interrupted by questions asked in this dialect B. In addition, for every question, there is a mark allocation. The results obtained determine whether there is intelligibility or not. An earlier version of this variation of the standard RTT method was developed by Ring (1981, 1995) and subsequently refined by Boafo *et al*. (1996), Kluge and Hatfield (2002), and Tompkins *et al*. (2002).

To assess comprehension levels of speech varieties other than their own, respondents were required to listen to recorded segmented passages of speech and to paraphrase the passages they had just listened to in their L1.

The former is concerned with answering questions based on a given recorded text while the latter, is concerned with a consultant listening to a recorded text and retelling the story in his/her own words. Most researchers have conditioned the use of this tool for intelligibility testing, that is, to measure the distances between two or more related varieties in order to find out the degree of mutual intelligibility between them. Both the standard and retelling RTT methods were employed in the assessment of passive competences as it both made use of retelling the recorded stories and the answering of questions connected to the texts.

As earlier mentioned above, the goal of RTT in this work was to test passive competences in the languages of LF from non-native speakers of these languages. Borrowing from Casad's method, we decided to use this instrument in testing the multilingual competences of individuals since we know that having competence in a given code does not mean that these codes are dialects of the same language as seen in Casad (1974). He concluded that the fact that an individual scores high in a given dialect under test meant those dialects were automatically considered dialects of the same language. He left out the aspect of one's multilingual competence. Multilingual competence in the sense that an individual having a good score in a dialect/language does not mean that those two are intelligible since people could still understand and speak two or more unrelated languages..

2.9.2.1 Procedure for Administering the RTT

We should be reminded that, the aim of this study is to assess competences in the eight languages of Lower Fungom as recognised by linguistic studies, namely Ajumbu, Buu, Fang,

Koshin, Kung, Mufu-Mundabli, Mungbam, and Naki. This required selecting one native speaker for each of these languages and record texts that they produced. Stories on familiar topics were written in English by the researcher and taken to LF where they were interpreted by native speakers of the languages in question and then recorded. The translations were done by native speakers of those languages who were judged competent by other speakers of the languages in question. This was done using a "Hometown" testing quoted in Jess and Peggy Thompson (2002). "Hometown" in that, the translated and recorded texts were taken to native speakers of these languages while in Lower Fungom to listen to and interpret them. This "Hometown" method was done to ensure that the narratives were well interpreted into the intended languages.

Though our translators and interpreters of texts were all native speakers of the languages under test, we should be reminded that they too were multilingual speakers who understood and spoke languages spoken in and out of Lower Fungom. For example, the Kung speaker who interpreted the Kung text, could speak; Kung, Naki, Isu, English and Pidgin English.

The recorded texts were played for native speakers of these languages to listen, identify the language and judge if they were well translated or not.

Non-native speakers of these languages were to listen to the narratives and interpret them in Pidgin English what they understood from the records. After interpreting the stories, questions based on the texts were asked to respondents who had to provide responses. The researcher therefore involved both the RTT standard method and the RTT retelling method as quoted in Kluge (2006). Though Kluge in her work discouraged the use of both methods, the researcher saw the need to use them in her research in that, each method helped respondents in recalling the entire texts. A respondent who was not good at narrating stories or who easily forgot was stimulated during the question and answers sessions and vice versa. The analysis of this RTT texts and responses given by the respondents are given below.

After confirming that the texts were well translated, we then went for the consultants. Consultants were tested in the languages other than theirs. These informants were made to listen to the recorded texts at least twice and retell the stories to the researcher in Pidgin English since that was the only language that they both shared. They had to listen to the texts in the different Lower Fungom languages and interprete them in Pidgin English. Pidgin English was used because we found out that those with self-reported multilingual

competences could all speak this language. This language was used so that we could score these consultants without a mediator.

We also preferred them to use this language so that their real competences could be judged since the researcher understood the content of each text because she was the author. This was to avoid the possibility of the consultants misjudging or mis-assessing. After retelling the stories, questions were asked to them based on the texts. The scores for the texts were on 100. The scoring exercise was based on the following:

The first was identification of the language, the second was, interpreting the content of the recordings into Pidgin English and the last, was answering of questions based on various texts. We have been able to show how the RTT tool was administered for peoples' passive competences to be tested. It should be noted here that the method of scoring was designed by the researcher. See sample of an original text below and the questions that were asked.

Naki RTT TEXT and Questions (English version)

Last week, Mr Kulo got up very early in the morning before the sun could rise.

He heard his friend's voice, and immediately jumped out of bed because he remembered they were to go hunting together. He immediately picked up his bag, a cutlass, a gun and jumped out calling his friend. His friend, who had just passed by, pretended not to have heard him calling. Mr Kulo immediately dived on the friend and got him well beaten. His friend shouted for help where he was rescued by some young boys who were going to school. These boys ceased Mr Kulo's properties and took him to the chief's palace. On reaching the chief's compound, the chief immediately came out and ordered Mr Kulo to sit on the ground. Mr Kulo immediately pleaded and asked for forgiveness from his friend. His friend looked at him in the eyes to see if he was really remorseful and then asked him to get up.

Naki RTT TEXT and Questions (English version)

1) Last week, Mr Kulo got up very early in the morning before the sun could rise.
   Question: At what time did Mr Kulo get up?
2) He heard his friend's voice,
   Question: Whose voice did he hear?
3) - and immediately jumped out of bed because he remembered they were to go hunting together.
   Question: Where were they to go to?

4) He immediately picked up his bag, a cutlass, a gun and jumped out calling his friend.
   Question: What did he pick up?
5) His friend, who had just passed by, pretended not to have heard him calling.
   Question: What did Mr Kulo's friend do when he was called?
6) Mr Kulo immediately dived on the friend and got him well beaten.
   Question: What did Mr Kulo do when his friend refused responding to his call?
7) His friend shouted for help where he was rescued by some young boys who were going to school.
   Question: Who rescued Mr Kulo's friend?
8) These boys ceased Mr Kulo's properties and took him to the chief's palace.
   Question: What did the young boys do?
9) On reaching the chief's compound, the chief immediately came out and ordered Mr Kulo to sit on the ground.
   Question: What did the chief do immediately when he came out?
10) Mr Kulo immediately pleaded and asked for forgiveness from his friend.
    Question: What did Mr Kulo do when he was asked to sit on the ground?
11) His friend looked at him in the eyes to see if he was really remorseful and then asked him to get up.
    Question: What did his friend ask him to do after looking into his eyes?

2.9.2.2 Procedure for Scoring the RTT

Scores for RTTs were rated based on the length of the texts. These scores ranged from 2.4. to 4.8 depending on the number of sentences each text had or on the length of the text. These scores were later multiplied to give a hundred percent. The scoring exercise was based on the following: Language identification earned 2 points, interpretation of the content of the texts earned 48 points while the remaining 50 points were for question answering. It should be noted here that the method of scoring was designed by the researcher. That is, the scores were partitioned as follows:

TABLE 7: MARK DISTRIBUTIONS ON RTTs

SCORES/POINTS (pts)	DESCRIPTION
2.4-4.8 pts	Scores per sentence
2 pts	Language identification
48 pts	Text interpretation
50 pts	Question answering

As far as scoring was concerned, texts like the Naki and Kung were all made up of ten sentences each. A well-interpreted sentence earned a mark of 4.8 giving a total of 48 marks for text interpretation. If a person could identify the language under test, give the idea that runs through each text well and in order, he/she was entitled to score a 50/50.

Buu and Ajumbu texts were both made up of 11 sentences each, where a sentence earned 4.54 points while the Mungbam, Koshin, and Fang texts contained 20 sentences each. A well-interpreted sentence was scored on 2.4. For the total, 2.4 marks per sentence x 20 sentences gave a total of 48 points.

The Mufu-Mundabli text was made up of 13 sentences each. Each well-interpreted sentence earned 3.69 giving a total of 47.97/48. The 47.97 points were rounded up to 48. While the Ajumbu text contained 11 sentences. Each sentence earned a score of 4.36, giving a total of 47.96 which was then rounded up to 48.

Questions concerning the content of RTT tests ranged from 10-12 depending on the length of text. While scores for the various sentences ranged from 4.16 to 5 points per question.

The Naki, Ajumbu, Buu and the Mungbam languages had 11 questions and were divided thus: 50/11 = 4.54 points x 11 = 49.94.

The Mufu-Mundabli and Fang languages contained 12 question each which were then divided into; 50/12 = 4.16 points x 12 = 49.92. While the Kung language contained 10 questions and each well answered question earned 5 marks. 50/10 = 5 x 10 = 50/50. This is the section that dealt with the answering of questions based on the various texts. The first 50 points we had were from the identification and narration of the content of texts while the remaining 50 was based on question answering. After they narrated the contents of texts, the next step was for them to answer questions based on these texts.

Judging the scoring of texts, they was no bias since all the testees were tested in all the languages no matter how they were scored. For example, a text that was considered difficult or simple, affected all the testees since no special people were considered for special texts.

Everyone was tested and graded the same on both the difficult and the simple texts. What we mean here is that the fact that sentences in some languages earned higher marks than others did not affect anybody since they were all tested in all the languages. The information above has been summarised on the table we find below.

TABLE 8: SCORES OF RTT TEXTS PER LANGUAGE

Languages	**No of sentences per text**	**Score per sentence**	**No of questions per text**	**Score per question**
Naki [mff]	10	4.8 pts	11	4.8 pts
Kung [kff]	10	4.8 pts	10	05 pts
Buu	11	4.54 pts	11	4.8 pts
Ajumbu [muc]	11	4.54 pts	11	4.8 pts
Mungbam [mij]	20	2.4 pts	11	4.8 pts
Fang [fak]	20	2.4 pts	12	4.16 pts
Mufu-Mundabli [boe]	13	3.69 pts	12	4.16 pts
Koshin [kid]	12	04 pts	12	4.16 pts

As far as the above method was concerned, some people who claimed were competent in particular languages, when asked to interpret what they understood from the recorded texts, some of them lied and framed up stories claiming to be interpretations the texts under test. This is because we made them understand that the researcher did not understand any of the languages and knew nothing about the contents of those texts. She gave them the opportunity to say whatever they could say concerning these texts without interrupting them. This was because she did not want to hurt their emotions had it been she told them straight that they were not telling the truth. What we notice here is that speakers of LF have a very positive attitudes towards knowing so many languages. Another tool that was used in our work for the assessment of active competences was the visual stimuli (VS). Below, we are discuss how this tool was used in data collection.

2.9.3 Visual Stimuli (VS)

A visual stimulus is an instrument that was used to match the visual and mental knowledge of a consultant in a given language under test. As earlier said above, visual stimuli were used to test consultants' active competences. As far as testing the the active competences

were concerned, consultants were made to interpret pictures and later wordlists in the languages they claimed competences in.

2.9.3.1 Procedure for Administering the visual stimuli (VS)

This method seeks to test consultants' active competences. It was only implemented in a case where a person proved to have active competence in a given language. The method is fairly simple: We used twelve pictures taken from a collection of drawings created in 1990's by SIL Cameroon of locally salient day-to day activities such as scenes depicting farming using techniques commonly employed in Cameroonian farms, tapping of palm trees, nursing mothers, etc. Paticipants were asked to comment on the visual Stimuli using languages that they reported being able to speak. These recordings were then segmented into different topics of discussion so that they could be presented to native speakers of the relevant languages who would serve as judges of the speech produced by the participants, as well as to aid the comprehension of the researcher. The segmented portions were transcribed using the ELAN tool. After listening to the transcribed data using ELAN, the assessor could easily tell if a given L2 speaker was good or bad in a language.

For clarity purposes, ELAN means: Eudico Linguistic Annotator. It is a professional tool for the creation of complex annotations on videos and audio resources. That is, it is an annotation tool which allows you to create, edit, visualize and search. This tool was used as an instrument in all the eight languages. As earlier said, the visual stimuli was the first instrument that was used in testing speakers' active competences; what Chomsky considered as 'performance'. We found out that, in most cases, when a consultant had a high score in a particular language in the RTT method, it was obvious that he/she would have active competence in this language except for one very rare case which we noticed with a man from Buu who when tested in Ajumbu language using the RTT method, could not say anything from the text which means, he was unable to interpret the text from this language but insisted he could speak it. See QAD28 in chapter five for details on his scores.

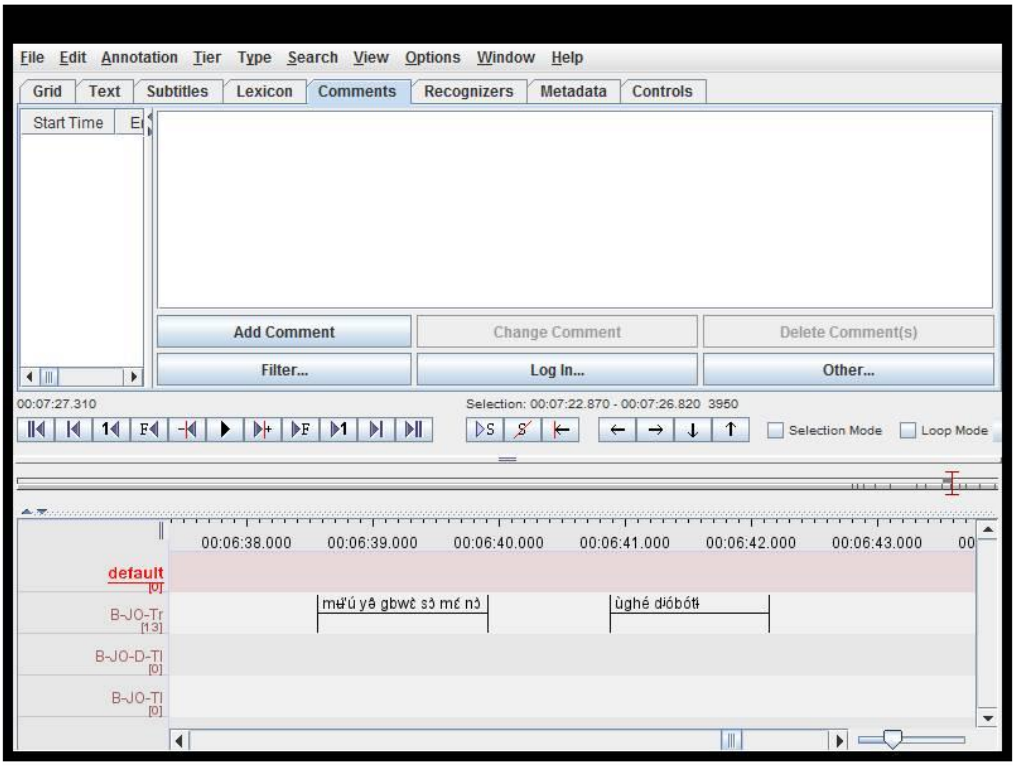
Though the researcher's aim was for respondents to interpret these pictures by describing what they saw; declarative statements were expected from the testees. But some consultants seem not to have understood what was demanded of them, instead of saying what they think the pictures were expressing, they instead posed questions to those pictures.

Since our aim was to find out if truly they could speak these languages, they were judged in their levels of proficiencies in those languages and not in the rule of the method; which was interpretation. Since the judge immediately understood and interpreted what was said and confirmed they were good speakers, their competences were judged in their levels of proficiencies and not in the rule of the method which was interpretation. A picture of a visual stimulus will be presented below.

FIGURE 2: SAMPLE OF A VISUAL STIMULUS

The interpretations consultants gave for example, about figure 2 above, were transcribed using the ELAN tool before being presented to judges who could now judge these L2 speakers' competences. A screen shot of an ELAN is presented below:

FIGURE 3: SAMPLE OF THE ELAN TOOL WITH TRANSCRIBED SEGMENTS



After the administration of the visual stimuli, data obtained, we then had to give scores to these L2 respondents as seen in the procedures for scoring the visual stimuli below.

2.9.3.2 Procedure for Scoring the Visual Picture

Twelve pictures were presented to our consultants. A well-interpreted picture earned 5 marks giving us a total of 60 marks. In order to calculate the percentage scored, the following formula was used. Individual score/total mark allocated. That is, if an individual scored a mark like 30/60 (30/60 x 100 = 50%).

Out of the 29 consultants elicited for the picture test, at least 25 of them had active competences in the languages they chose.

Total performance of the population involved in the visual stimuli:

25/29 x 100 = 86.2%

If a consultant scored between 50-60, it meant the speaker could speak the language a bit. Scores between 61-79 meant the testee really mastered the language but not having a native speaker's competence (near-native speaker's competence) while scores between 80 and 100 meant interviewee had native speaker's competence. We noticed many people with native speakers' competences as many of them scored between 80 and100. It should be noted that, the scoring scale was self-made. That, is designed by the researcher herself. Below, we will find a table of scoring which will make us better understand how these consultants were scored.

TABLE 9: SCORING VISUAL STIMULI

SCORES	**DESCRIPTION**
0-29	Not competent
30-49	Near active competence
50-60	Speaks a bit
61-79	Near native speaker competence
80-100	Native speaker's competence

Since assessment during the visual stimuli was not totally controlled by the researcher, she deemed it necessary to emplore the wordlist in which she will be in absolute control of.

Some samples of wordlists and how it was administered are discussed below. Like the RTT tool, wordlists in our work were not used in the same way for the purpose for which they were invented. Wordlists which were designed to bring out genealogical relatedness between languages, but they were used in our work to assess the degree of L2 speakers' multilingual competences.

2.9.4 Wordlists

To further test participants' active competences, a wordlist was elicited from them in the languages in which they claimed to have active competence. A wordlist is a classic compilation of basic concepts for the purposes of historical-comparative linguistics. This tool was borrowed from Swadesh known as the Swadesh wordlist (1952). It is used in lexicostatistics, that is, the quantitative assessment of the genealogy relatedness of languages and glottochronology which is the dating of language divergence. This instrument in our work as mentioned above, was not used for the purpose in which Swadesh developed it. It was used to find out how far our respondents could produce words in languages that were not theirs even if such languages are not related. We used this tool to complement the visual stimuli whose role was to test L2 speakers' active competences.

During data collection, consultants were given the choice of accepting or refusing being tested or interviewed. They were given the leeway to say what they understood or knew of a language without any influence. These L2 speakers were assessed in two phases in the wordlists. The first phase targeting whole words without any segmentations, the second involved assessing them on their knowledge of prefixes and suffixes in those languages which enabled us to check if these L2 speakers mastered the noun class systems of these languages. The words were words that were very familiar to the setting of LF. Words fell in the following parts of speech; nouns, verbs, adjectives and numerals.

If a speaker was able to score half the scores that were allocated for the wordlists, it meant he/she could speak those languages in question. The testing was done in two sections as seen below:

The first section targeted all the words including affixes while the second section for the assessment of wordlists included breaking the words into lexical stems, prefixes, suffixes and infixes as seen in the following two words in the Fang examples below: details about wordlists analyses will be seen in chapter six of this work.

EXAMPLE 1: SAMPLES OF WORDLISTS IN FANG

L2 speakers	Words from L2 speakers	L1 speaker	Words from L1 speaker	Scores
Head	QAT139	kwú	QAT108	kwú	1.00
Head	QAD25	no response	QAT108	kwú	-1.00
Head	QAT101	kwú	QAT108	kwú	1.00
Head	QAT135	kú	QAT108	kwú	0.50
Head	QAD23	kú	QAT108	kwú	0.50
Head	QAD28	kwú	QAT108	kwú	1.00
Heads	QAT139	tə́kú	QAT108	tə̀kwú	0.43
Heads	QAD25	no response	QAT108	tə̀kwú	-1.00
Heads	QAT101	no response	QAT108	tə̀kwú	-1.00
Heads	QAT135	kútígbwìm	QAT108	tə̀kwú	-0.64
Heads	QAD23	tə́kú	QAT108	tə̀kwú	0.43
Heads	QAD28	tə̀kwú	QAT108	tə̀kwú	1.00
Eye	QAT139	wúsə̂	QAT108	wúsə̂	1.00
Eye	QAD25	no response	QAT108	wúsə̂	-0.80
Eye	QAT101	yísə̂	QAT108	wúsə̂	0.33
Eye	QAT135	wúsə̂	QAT108	wúsə̂	1.00
Eye	QAD23	yí	QAT108	wúsə̂	-0.67
Eye	QAD28	wùsə́	QAT108	wúsə̂	0.33
eyes	QAT139	dzí	QAT108	dzí	1.00
eyes	QAD25	no response	QAT108	dzí	-1.00
eyes	QAT101	no response	QAT108	dzí	-1.00

eyes	QAT135	dzítɛ́	QAT108	dzí	0.00
eyes	QAD23	kə́yitə́	QAT108	dzí	-0.50
eyes	QAD28	ídzí	QAT108	dzí	0.20

Above are two words for “head/heads” and “eye/eyes” in Fang. The codes we see attributed to them are codes identifying different L2 speakers and the scores we find beside are scores these L2 had when the words for “head” and “eye” were compared with those produced by native speakers of those languages. Codes on the left column indicate L2 speakers while those on the right are those of an L1 speaker. We will see that on the left there are different codes representing different L2 speakers involved in the test while we have a similar code appearing at the right column of the sample data. The one with a similar code is a native speaker of the language in question whose words were used to judge or use to compare words that were produced by these L2 speakers. We will notice all through the data that L2 speakers occupy the left column while those of L1 will always occupy the right column. Details of this will be seen in chapter six which gives every detail of wordlists. How the wordlists were administered will be seen below.

2.9.4.1 Procedure for administering the wordlists

Two hundred words were presented to L2 speakers by the researcher in English and they were asked to provide the corresponding words in the languages that were under test. Each L2 consultants had to produce different wordlists based on the number of languages they claimed they could speak. At this level, tests were no longer based on claims but based on proofs on scores these individuals had during the visual stimuli. Unlike the visual stimuli where L2 speakers interpreted pictures without necessarily proving their competences in the listening (RTT) part of the test, wordlists could only be provided by those who had proven during their scores of the visual stimuli that they could actually speak these languages. Wordlists were considered the most difficult part of the assessment though the number of consultants was the least during this test. The procedure for scoring these wordlists will be seen below.

2.9.4.2 Procedure for scoring wordlists

As earlier mentioned in 2.6.4.1, total of 200 words was used. A correct word produced by a respondent with no mis-matches earned him/her a score of 1 point. The wordlists were first of all transcribed using excel where we then calculated the distance between words

collected from non-native speakers and those given by the indirect judges (native speakers) of the targeted languages. The scores were all calculated as follows:

First: Each pair of pronunciations for each pair of speakers is scored. The pair of words is aligned and scored in a simple way so that a match is one point, and a mis-match is -1 point, then the score is normalized by dividing it by the number of transcription symbols in the longest word. An example is shown below. Two words for "heads" in Kung have three symbols in common (a, f, i) and two (the two tones) that do not match. The score is then (1 + 1 + 1 - 1 -1) / 5.

Heads QAD23 áfí QAT155 àfì 0.20

Second: Individual word-level scores are added up to get a final score for each pair of speakers. Scores are calculated using the Needleman-Wunsch alignment algorithm, with an identity similarity matrix. That is, each language tested for a given participant, scoring was based on how similar words produced by the second-language speakers were to those produced by native speakers. Cases where there was a perfect match between the word produced by a participant and the one produced by a native speaker were assigned a score of 1, the score decreased to -1 for cases where there were no matches. Both segments and tones were considered. See the raw scores in the appendix.

Our above exposure of tools used in the study shows that we based our work only on the assessment of grammar. We focused on grammar because the languages of LF are still little described and as a result, what is done is a prerequisite research.

The above section has presented to us the instruments that were used in collecting data, how these instruments were administered and how data was also scored. Below, we will see the flaws of the RTT which was the instrument used to test passive competences. It should be borned in mind that the RTTs were of two kinds (RTT Standard and RTT Retelling method).

2.10. Flaws of both the RTT Standard and the RTT Retelling Methods

Kluge (2006) presents to us the disadvantages of using both the RTT standard and the RTT retelling methods as seen below;

Kluge recommended that the survey team or researcher choose one of the two approaches (RTT Standard and RTT Retelling Methods) before starting the hometown panel pre-testing and subsequently maintain consistency in the testing procedures throughout the

research project. That is, the researcher or the survey team from the very beginning should choose the kind of RTT to use before meeting the "hometown" panel. "Hometown panel" are native speakers of the languages under test who will play the role of judges, interpreters and translators.

Respondents have to retell or paraphrase a given segment of the text in their L1 with someone who will act as an interpreter who will intend interpret the responses into the survey team's working language. The researcher is supposed to write down the complete answers and not just writing down 'right' or 'wrong' since sometimes right or wrong answers could sometimes turn out to be half-correct. When testees responses are incomplete or incorrect, the researcher may probe for missing parts and replay the particular segment. Again, it is important to maintain consistency across researchers and throughout the entirety of the research project in terms of the extent of probing and the number of replays. All probing question and answer exchanges as well as replays should be well documented so that the researchers can review and discuss them if necessary.

As far as scoring the respondents is concerned, Kluge proposed that once the testing phase has been concluded, each response is compared to the respective base-line response that has been established during the hometown panel pre-testing. To obtain full credits, RTT respondents are expected to mention all elements included in base-line responses. Thus, each response that provides the required core element is immediately assigned the full segment score.

Variations from the base-line responses are listed on a separate sheet of paper or in a separate Word document which includes the respondents' reference number, reference to the respective RTT text, and the segment number. Once all responses have been reviewed, the researchers assemble to discuss and score deviating responses.

Evaluating one RTT text at a time the research team discusses deviating responses segment by segment. Comparing these responses to the established core elements and the responses given by other informants, the deviating responses may be given a score of half mark (0.5) or 0 point. Elements that were not included in the base-line responses are not expected to be mentioned by RTT respondents. Likewise, respondents are not given extra credits if they do provide these elements.

Once all deviating responses have been discussed and evaluated, the scoring of the RTT responses can be completed, and for each respondent the segment score can be added up to obtain the overall score for a given RTT text. Also, once the overall scores have been calculated for each RTT and for each subject, each script should be re-checked by a second surveyor or to ensure scoring reliability.

New deviating responses and their assigned scores need to be added to the already established electronic document so that they are available as scoring guidelines for further future research. After having gathered from Kluge´s work and her proposals given by her on how a successful RTT retelling test is supposed to be administered and based on this research, we are going to find out which of the choices we still decided to use both methods for the following reasons; we decided to use both methods in my assessment of multilingual competences. Our reason for using both methods was to have every respondent rooted in the test. A respondent who could not interpret the texts could at least answer questions based on them and vice versa.

As seen in Kluge stand against the RTT standard method which to her it is easier to interpret a text than responding to questions based on that text, this rule does not apply to every respondent, as some of them will prefer questions-answers. A respondent could forget narrating something that was said some seconds/minutes ago but when questions concerning that text are asked, this can even enable the respondent to recall what was just said, which therefore mean that, a person who could not perform well during the narration process could do a cover up in the questions-answers session and vice versa.

2.11 Our choice of both Standard RTT and RTT Retell Methods

The first flaw of both techniques was noticed at the level of its aim, which is intelligibility testing. Researchers have designed and limited its use for intelligibility testing which consists of a registered text in dialect A, which is made, listened to by the speaker of dialect B. After which, the text is interrupted by questions asked in this dialect B. For every question, there is a mark allocation. The result obtained determines whether there is intelligibility or not which will also help them to determine which of the varieties is to be used as a reference dialect.

We do not think that this tool should be limited to intelligibility testing since based on people´s multilingual competences, they could still be able to understand and interpret stories recorded in two unrelated languages.

Also, the aspect of respondents interpreting these stories into their L1 which is a language that the researcher does not understand and an interpreter interpreting their responses for the researcher is another big problem as this makes the scoring procedure not real since it means that scores are determined by the interpreter. This therefore pushed us to make subjects listen to the stories in the target languages and interpret them into Pidgin English in order to enable us follow up respondents' scores directly and not rely on interpreters.

Again, the issue of core elements being a base line for scoring is another problem. The fact that scores are based on core elements is not authentic because language is dynamic and could not be used the same way by every individual. The way speaker A will express an idea must not necessarily be the way B will do. For example, in this work, the story in Kung which talks about the author going to the market to buy salt, fish, pepper and maggi could just mean the author has gone to the market to buy what she needs in order to prepare her soup which is still in the context of the things cited above.

The hometown pre-testing is out of place since before the test proper, some respondents would have asked the content of the stories from those who understand them well and with the knowledge they already have about these stories, they would be able to interpret or give responses to questions even if they normally do not understand the varieties under test. False conclusions could be made on their comprehension levels and intelligibility levels between the dialects. We did not consider this hometown pre-test since we wanted to avoid the possibility of testees being able to interpret or answer questions in languages that they do not know. Therefore, the testing was spontaneous and really could tell those who understood the languages well, and those who could not.

Furthermore, the issue of survey team here entails that this tool cannot be handled or well administered by an individual. This therefore means that a tool of this nature is not supposed to be administered in a dissertation or thesis. This tool though handled just by the researcher gave her the expected results and also met up with the aim for which it was used (to assess passive competences).

2.12 THE ISSUE OF RELIABILITY AND VALIDITY

Traditionally, "validity in testing and assessment has been understood to mean discovering whether a test measures accurately what it is intended to measure" (Hugues, 1989:22). Henning (1987:170), states that 'the view of validity presupposes that when we write a test we have an intention to measure something, that the 'something' is 'real', and that validity enquiry means finding out whether a test actually does measure what is intended. These are assumptions that were built into the language of validity studies from the early days which will be questioned in this write-up.

We should be reminded here that these L2 speakers were tested in three different tools; the RTTs, Visual stimuli and wordlists. How reliable and valid the tests were will be viewed from the different tools or methods used to assess them.

2.12.1 Assessment: Issues of Reliability and Validity during Recorded Texts Testing

- **Reliability**

The researcher had a key role because she made a lot of choices on her own. One very salient criterion for the choice of participants was that they must have reported self-proficiency in these languages. They must all be LF speakers; males and females who had lived here for at least 15 years and who were also judged by other LF speakers to master their own native languages.

- **Stimuli Make-Up**

The researcher was the one deciding the stories. The goal of the test was to assess basic understandings of the language and not knowledge of specific grammatical features. The stories for the RTT had different lengths. The stories were not based on a specific lexical or grammatical feature of languages or for particular themes. Not specialised in a special knowledge. That is, those were just common experiences. Just to find out if they have a general or basic knowledge of the languages. These stories carried different themes as seen on table 10 below.

Table 10: Different Themes For Different Languages during Recorded Text Testing (RTTs)

Languages	Topics of the recordings	Number of questions for assessment
Mungbam	Infidelity	11
Kung	Daily activities	10
Ajumbu	Visit from strangers	11
Fang	Hatred and witchcraft	12
Buu	Early marriage	11
Koshin	Polygamy	12
Mufu-Mundabli	Snakes	12
Naki	Fighting	11

2.12.2 Test sessions: issues of reliability

- **Reliability**

During the testing process, most at times the researcher was only with the participant. This was in order to avoid noise and distractions on the part of both the consultant and researcher especially as the exercise had to do with that which has been recorded from someone and by someone else. Only those with self-reported proficiencies were tested since it was due to their statements that we decided to carry out this study. Some of these participants for the study had been contacted before in 2012 where their multilingual competences were sampled. This is when the people claimed very high degrees of multilingual competences.

Below, we are going to see how reliable and valid the visual stimuli tests were.

2.12.3 Assessment: issues of reliability and validity during visual stimuli

- **Reliability**

We didn't assess active competences in different domains. Our assessment of active competences was focused on the general knowledge L2 speakers had of those languages. These people were exposed to drawings representing scenes of common daily lives which were all based on common and familiar themes known by all of them. The judges gave us detailed feedbacks which were not only to give the degree of competences; they also gave us

details about the linguistic repertoires of some of the consultants. That is, the judges didn't just say if a given speaker was competent or not, they went further to tell us the different languages some of the speakers spoke and which were most at times mixed up with the languages under test. Statements made by the judges were very explicit in a way that one could easily score those consultants without any problem.

- **Validity**

Since pictures used in testing L2 speakers' competences concerned familiar topics, they could easily be understood and interpreted by both testees and judges. Each visual stimulus was scored on 5 points. The score 5 was chosen because judges could easily score speakers with scores ranging from 0-5 than from 20 and above. After they had scored each visual stimulus, the researcher now did the addition where she had to add the scores each consultant had in his/her visual stimuli which gave her a total of 60 points since they were 12 visual stimuli. After the scores were added up to 60, they were then multiplied to give us scores on 100.

Judges helped us in the assessment process were not presented the content of what they had to assess beforehand. That is, these visual stimuli were not presented to them before they could judge these L2 speakers. What we did was to tell them we had some recordings in their languages provided to us by L2 speakers where they had to tell us what they understood from them. This was done in order to enable objectivity in that if they had been exposed to these visual stimuli before the assessment sessions, they could give judgements that were subjective.

2.12.4 Assessment: Issues of Reliability and Validity of Wordlists Tests

- **Reliability**

The choice of participants here depended on the scores he/she had during the visual stimuli test and his/her willingness to continue with wordlists. This is because it was possible to have people scoring high during the visual stimuli and not being able to provide wordlists in those languages. That is, some consultants could easily use groups of words in sentences but unable to use those same words in isolation.

Table 11: Stimuli Make-Up for wordlists

Lexical concepts	Body parts	numerals	adjectives	nouns	verbs

- **Validity**

As validity is concerned, scores were calculated using the Needleman-Wunsch alignment algorithm, with an identity similarity matrix and not designed by the researcher as was the case with other tests (RTTs and visual stimuli). Both segments and tones were considered.

2.12.5 Reliability in the three language assessment tools

As far as reliability here is concerned, we selected testees who had no speech pathology and hearing impairment. This is because they had been sampled during the administration of the sociolinguistic questionnaire and we noticed that their articulatory organs and hearing senses had no problem.

The choice of concepts used here was that of the researcher. Concepts, stories and pictures were based on the knowledge of the people of this area. That is, all three tests were on themes and things that were familiar to the people of LF. We did this in order to avoid testing them with words nd concepts that they knew nothing about.

These speakers were all recorded using the H1 Handy Recorder. During testing sessions, the researcher pleaded with the testees to be audible enough so that it will enable her and others to clearly get what they were saying since she had to record and later evaluate or score them. The recording exercise was done in MP3 formats with high quality files. They were no microphones during the recording sessions as a result; we depended on the audibility of the participants to make recordings clear and understandable.

2.13 Recording

Recording was a method used in collecting data which enabled us to get every detail that was given by our consultants. This was the most popular technique in our study since it was done in all the methods that were implored in data collection. Data from the sociolinguistic questionnaire, the RTTs, visual stimuli and wordlists were all recorded. Below, we will be looking at when and how our data was treated and presented.

2.14 Data Treatment and Presentation

During the collection of data for this study, due to time constraints and the dispersed nature of our interviewees, acute care was not taken to ensure that data was orderly collected and presented. That is why immediately after the collection of data, it was

scrutinized to ensure that the data was not only enough but rightly collected. So, data for this study was arranged and distributed according to variables. Our data was transcribed following the general orthography of Cameroonian languages (Tadadjeu & Sadembouo 1984). Below, we will discuss how our data was preserved in a the Meta data.

2.15 Meta Data

Meta data concerns recordings and notes that were jotted in the field. Here, information about the informants was noted down on the excel sheet of data description. Two kinds of Meta data were collected: One concerning the sociolinguistic backgrounds of the consultants, and the other, the scores recorded by each L2 speaker in the targeted language.

It enabled us to keep tract of our consultants and what we actually write and the possibilities for our supervisors and readers to check if what is actually portrayed is what exist. The recordings lasted depending on the number of languages an informant reported he/she could speak.

For any scientific work to be effectively carried out, the researcher needs to consider ethical issues in order not to hurt the respondent's feelings. How these issues were handled will be seen below.

2.16 Ethical Issues

As far as ethical issues were concerned, Bowern (2008) quoting (Hyman, 2001), emphasizes that linguists do not just 'dig up' the grammar of a language to put it in a grammar book. We work with real people, and become part of the data collection process ourselves. As a result, consultants' opinions about certain issues about their language and community need to be given a pride of place. With this in mind, the researcher made sure she respected the authorities and opinions of her consultants. Here, Bowern insists that if these issues are not well handled, we might end up hurting the consultants and as a result, data collected will not really reflect the results.

Once we took off for LF for the first trip, the first stop was to meet a political authority who is the SDO of Zhoa, of Fungom Subdivision for his accord before moving to LF. Our base being Abar, we had to meet the chief and our intentions were made known to him. In all the villages we visited, the first thing we did was to meet the chiefs and inform them of what our mission was all about.

During the second trip, the researcher who lodged with the parish priest of Yemgeh quasi parish as Yemgeh was her base, after her arrival, she immediately visited the quarter head of Yemgeh and announced her intentions for coming. Satisfied with her explanations, the quarter head gave her the authorization needed to carry on with research in this area. The villages of of Abar, Kung, Ajumbu, Missong, Munken and Buu were visited where the researcher startd by first of all meeting their rulers. Since we had had pre-contact with most of the consultants that had to be tested, we still made sure the reasons for our coming were explained to them. Their opinions had to be sought on this in order to find out if they were ready for the exercise or not.

For those who were not involved during the first encounter, we explained to them what actually took place during our first trip and the relationship these two trips had with each other. Most of them accepted that their competences be assessed. While some people categorically refused to be tested for fear of the fact that they might run into trouble since it was a period that was characterized by a lot of tension in the Cameroonian territory. We were fortunate that all the consultants who rejected the idea of being tested were not involved in our first trip and as a result, could be substituted with others without any problem. After working with them, some remunerations were given them acknowledging their time and hearty thanks were tendered. Below, we will give a conclusion of the chapter.

2.17 Conclusion

So far, we have presented the methodological mechanism put in place to have ample data to realize this empirical research study. We have focused our attention on the target population, the research procedures and the data collection techniques and research instruments, the Meta data too was not left out. Chapter three will therefore focus on data treatment, presentation and analysis of data collected through the RTT method.

CHAPTER THREE: DATA TREATMENT, PRESENTATION AND ANALYSIS OF RTT DATA

3.1 Introduction

The chapter presents findings on the passive competences of L2 speakers of LF languages. That is, how well a given consultant understood and interpreted a given text. The declared and actual competences of these L2 speakers will also be presented. Before we continue, we want to remind ourselves of the main objective of this work which was to assess individual multilingual competences (passive and active competences).

Eighty participants were each tested in the seven languages of LF. These languages included: the Fang, Mufu-Mundabli, Koshin, Naki, Kung, Buu, Ajumbu and the Mungbam. We divided these languages into two groups for easy presentation.

Although, eight languages are present in LF, each consultant was tested in the seven other languages which are not his/her mother tongue.

The participants were 18 years and above. This age range enabled us to compare the degree of competences reported by different age groups.

Our consultants were divided into three groups: the first ranging between 18 and 32yrs (youths). The second group comprised participants between the ages of 33 and 56 (middle age) and the third group included people from the ages 57 and above (old age).

In this chapter, respondents were made to listen to recorded texts in the target languages. After which they were asked to interpret those texts in Pidgin English. This exercise enabled the researcher to test their passive competences in languages that were not theirs. After the resumé we proceed with the presentation of the results of the RTT test in Fang.

Table 12a: Passive competence in Fang by Native language

Native language	**Self-reported competence**	**RTT Competence**	**Percentage**
Ajumbu	5	5	100
Koshin	2	0	0
Buu	9	7	77.8
Mufu-Mundabli	2	2	100
Kung	1	1	100
Total	**19**	**15**	**78.9**

Table 12a reveals that 78.9% of those who claimed competence in Fang are actually competent in it. All the Koshin speakers were found not competent. This means that the majority of those with self-reported competence are really competent on the RTT test.

Table 12b: Passive competence in Fang by Gender

Sex	**Self-reported competence**	**RTT competence**	**Percentage**
Male	11	9	81.8
Female	8	6	75.0
Total	**19**	**15**	**78.9**

Table 12b demonstrates that of those who claimed competence in Fang, **81%** (9) of males were competent and 75 (6) of females were competent. In both sexes, some of those with self-reported competences were not competent. Competence was based on simple percentages as seen below:

$$\frac{\text{Number of persons competent in a language}-}{\text{Total number involved in a test}} \text{ X } \frac{100}{1}$$

Table 12c: Passive competence in Fang by Age

Age	Self-reported competence	RTT Competence	Percentage
18-32	4	2	50.0
33-56	7	7	100.0
57+	8	6	75.0
Total	**19**	**15**	**78.9**

Table 12c shows that out of the different age groups with self-reported competence, the middle age (33-56) is the most competent in Fang, 100% (7), followed by the old age group (57 years and above) who were 75% (6) competent in this language. Amongst them, the youths (18-32 yrs) is the least competent 50% (2). We notice here that, most of the people with self-reported competence are really competent as none of the age groups scored below 50%.

Table 12d: Passive competence in Fang by Grade/Degree

Ddegree of Competence	Self-reported competence	RTT competence	Percentage
Passive	19	15	78.9
Near passive	0	3	15.78
No competence	0	1	5.25
Total	**19**	**19**	**100**

Table 12d demonstrates that out of the the 19 persons with self-reported competence in Fang, 15 of them proved they were really competent, 3 (15.78 %) amongst them had near passive competence while 1 (5.25%) person had no competence level at all. As earlier said, people with near passive or active competence were those who scored between 30 and 49% in

the RTT and visual stimuli. There is no column for the active competence because at this level, we are still concern with testing passive competences.

After seeing the level of passive competences L2 speakers have in the Fang language, we will find out the various degrees of competences in Mungbam. Mungbam is a language with five varieties. The variety used here is that of Missong. Therefore, Missong will represent the Mungbam language. Since we are dealing with assessment of multilingual and not multilectal competences, there was the need for just one variety to be considered and not the five varieties of the Mungbam language.

Table 13a: Passive competence in Missong by Native language

Native language	**No. of self-reported competence**	**RTT Competence**	**Percentage**
Buu	9	9	100
Mufu-Mundabli	6	4	66.66
Total	**15**	**13**	**86.66**

Table 13a above shows that only speakers from Buu and Mufu-Mundabli claimed they understood the Mungbam (Missong) language. Majority of those with self-reported competence in Mungbam, 86.66% (13) out of 15 people were competent in it. All the Buu speakers (9) with self-reported competence in this language are actually competent, 100%, Mufu-Mundabli on her path, scores 66.66% (4). Below, we will find out which of the sex with self-reported competence in missing is the more competent.

Table 13b: Passive competence in Missong by Gender

Sex	**Self-reported competence**	**RTT competence**	**Percentage**
Male	8	6	75.0
Female	7	7	100
Total	**15**	**13**	**86.66**

Table 13b above shows that among those with self-reported competence in Mungbam (Missong), females are more competent, 100% (7) than males, 75% (6).

Nevertheless, what we should bear in mind is the fact that, our hypothesis on the degree of competences between males and females is based on the general situation of LF and not on individual languages. Since one of the variable in this study is age group, we turn to this with reference to Mungbam in the next section.

Table 11c: Passive competence in Missong by Age

Age	**Self-reported competence**	**RTT competence**	**Percentage**
18-32	1	1	100
33-56	7	6	85.71
57 and above	7	6	85.71
Total	**15**	**13**	**86.66**

Table 13c above reveals that the middle and old age group of persons have equal competence in the Mungbam language as both of them score, 85.71% (6) each, while the speaker with self-reported competence among the youth shows that she is really competent in it, 100% (1). We can see from the results that majority of the people with self-reported competence among the different age groups are really competent in Mungbam with a total score of 86.66%. We will find below details of the missing scores with various degrees of competences. It is considered as such because, the entire scores of these L2 speakers will be revealed including competent, non competent and near competent speakers.

Table 13d: Passive competence in Missong by Grade/Degree

Degree of Competence	**Self-reported competence**	**RTT competence**	**Percentage**
Passive	15	13	86.66
Near passive	0	1	6.66
No competence	0	1	6.66
Total	**15**	**15**	**100**

Table 13d above shows that while 13 out of 15 people with self-reported competence were really competent in Missong, we had a speaker with a near passive competence level, 6.66% and one with no competency level at all, 6.66%. The section above has shown us the competence levels by native speakers in Missong, gender, age and the different grades we noticed from L2 speakers in this language. Below, various performances in Buu will be demonstrated. Buu, which was formerly considered as one of the Ji group, that is to be linguistically connected to Mufu and Mundabli (Good 2011) and proven by recent researchers like (Ngako 2013) to be a separate language from these two varieties, is known to be an "indigenous language" of LF.

Table 14a: Passive competence in Buu by Native language

Native language	**No. of self-reported competence**	**RTT competence**	**Percentage**
Mungbam	4	2	50
Mufu-Mundabli	5	3	60
Total	**9**	**5**	**55.55**

Table 14a shows that only Mungbam and Mufu-Mundabli claimed competence in Buu. Out of those with self-reported competence in this language, Mufu-Mundabli scores

60% (3) and Mungbam 50% (2). We notice here that more than half of those with self-reported competence are really competent, 55.55%. Since gender was one of the variables in our work, we will find scores on that in the next section.

Table 14b: Passive competence in Buu by Gender

Sex	**Self-reported competence**	**RTT competence**	**Percentage**
Male	4	3	60
Female	5	2	50
Total	**9**	**5**	**55.55**

Table 14b above demonstrates that of those who claimed competence in Buu, 60% (3) of males were competent and 50% (2) of females were competent. In both sexes, some of those with self-reported competences were not competent. But if we have to compare scores of both sexes, we will see that males are slightly more competent than females in Buu.

Table 124: Passive competence in Buu by Age

Age	**Self-reported competence**	**RTT competence**	**Percentage**
18-32	0	0	0
33-56	5	3	60
57 and above	4	2	50
Total	**9**	**5**	**55.55**

Table 14c shows that only the middle and old age groups claimed competence in Buu. Among the two age groups who claimed competence in this language, the middle age is slightly more competent with scores 60%, (3) and the old age group scores 50% (2). Below,

we will find different grades the people of Mungbam and mufu-Mundabli had in Buu, including those with near and no competence level at all.

Table 14d: Passive competence in Buu by Grade/Degree

Degree of Competence	**Self-reported competence**	**RTT competence**	**Percentage**
Passive	9	5	55.55
Near passive	0	1	11.11
No competence	0	3	33.33
Total	**9**	**9**	**100**

Table 14d above shows that an individual, (11.11%) had a near passive competence in Buu while three (33.33%) of those with self-reported competence were not competent. Below, we will find the degree of competences people have in the Naki language.

The Naki [mff] language, one of the languages spoken in and out of LF is an Eastern Beboid language. It is spoken in Mashi, Mekaf, Small Mekaf (presently known as Batieh) Mashi Over side, Ngang, Nser, and in other small settlements within Furu-Awa subdivision to the north of LF. This language is not only spoken in LF but also exceeds it bounds. Di Carlo (2015) declares that some of the varieties are spoken in the Furu-Awa sub-division in the villages of Nser, Nkang. Wherever this language is spoken, our emphasis is laid on the varieties that are spoken in LF and the reference variety here is that of Small Mekaf. The degree of competence in Naki will be seen below.

Table 15a: Passive competence in Naki by Native language

Native language	No. of self-reported competence	RTT competence	Percentage
Mungbam	3	2	66.66
Kung	1	1	100
Buu	2	1	50
Ajumbu	1	0	0
Total	**7**	**4**	**57**

Table 15a presents scores of those with self-reported competence in Naki. Majority of the people who claimed competence in thus language are really competent in it as we can see that Mungbam had 66.66% (2), Kung 100 (1) and Buu 50% (1). The Ajumbu speaker with self-reported competence was not competent.

Table 15b: Passive competence in Naki by Gender

Sex	Self-reported competence	RTT competence	Percentage
Male	1	1	100
Female	6	3	50
Total	**7**	**4**	**57**

Table 15b shows that thoe who claimed competence in Naki, 100% (1) of males were competent and 50% (3) females were competent. In both sexes, 43% (3) of those with self-reported competence were not competent. Age which was one of the variables will be presented below.

Table 15c: Passive competence in Naki by Age

Age	Self-reported competence	RTT competence	Percentage
18-32	3	1	33.33
33-56	4	3	75
57 and above	0	0	0
Total	**7**	**4**	**57**

Table 15c above shows that 57% of those with self-reported competence in Naki were really competent. Only the youths and middle age group claimed competence in the language. Among the two age groups with self-reported competence, we noticed that the middle age is more competent than the youths as they scored 75 (3) and 33.33% (1) respectively.

Table 15d: Passive competence in Naki by Grade/Degree

Degree of Competence	Self-reported competence	RTT competence	Percentage
Passive	7	4	57
Near passive	0	2	28.57
No competence	0	1	14
Total	**7**	**7**	**100**

Table 15d shows the different degrees of competences in Naki. We can see that the people with self-reported competence fell in three levels of competences. We had people were competent 57% (4) as earlier demonstrated in the above three tables, 28.57% (2) of those with self-reported competence had near passive competence, while 14% (1) had no competence level. Below, we find scores in Kung.

Table 16a: Passive competence in Kung by Native language

Native language	No. of self-reported competence	RTT competence	Percentage
Naki	2	1	50
Koshin	1	1	100
Mufu-Mundabli	1	1	100
Ajumbu	9	6	66.66
Buu	3	1	33.33
Mungbam	2	0	0
Total	**18**	**10**	**55.55**

Table 16a above demonstrates that out of the 18 L2 speakers with self-reported competence in Kung, 55.55% (10) were competent. Koshin and Mufu-Mundabli speakers score 100% (1) each, Ajumbu, 66.66% (6) and Buu, 33.33% (1). All Mungbam speakers were found not competent. We notice a phenomenon of non-reciprocal competences between Kung and Ajumbu (Voegelin and Harris 1951). While Ajumbu speakers understood Kung, Kung speakers see no need learning this language.

Table 16b: Passive competence in Kung by Gender

Sex	Self-reported competence	RTT competence	Percentage
Male	9	5	55.55
Female	9	5	55.55
Total	**18**	**10**	**55.55**

Table 16b demonstrates that both males and females have the same degree of competence in Kung, 55.55% (5). We can see that more than half of those with self-reported competent were actually competent, 55.55% (10).

Table 16c: Passive competence in Kung by Age

Age	Self-reported competence	RTT competence	Percentage
18-32	9	6	66.66
33-56	7	3	42.85
57 and above	2	1	50
Total	**18**	**10**	**55.55**

Table 16c demonstrates that more than half of those with self-reported competence in Kung, the youth are the most competent in Kung, 66.66% (6), with the old age group being second, 50% (1). The middle age group is the least competent, 42.85% (3). From our scores, we can say that Kung is a language for youths because this is the only language where youths take the lead.

Table 16d: Passive competence in Kung by Grade/Degree

Degree of Competence	Self-reported competence	RTT competence	Percentage
Passive	18	10	55.55
Near passive	0	3	16.66
No competence	0	5	27.77
Total	**18**	**18**	**100**

Table 16d demonstrates degrees of competence at all levels. Out of those with self-reported competence, 55,55% (10) were actually competent in the language, 16.66% (3) had near passive competence as they scored between 30 and 40%. Five (27.77%) of the people were found not competent. Below, we are going to measure the level of competence of L2

speakers in Koshin. That is, see how well these people could interpret and answer questions based on the Koshin text.

Table 17a: Passive competence in Koshin by Native language

Native language	**No. of self-reported competence**	**RTT competence**	**Percentage**
Buu	4	2	50
Mufu-Mundabli	2	1	50
Naki	1	1	100
Total	**7**	**4**	**57**

Table 17a above reveals that 57% of those with self-reported competence in Koshin are actually competent in the language. Speakers who came from Buu, Mufu-Mundabli and Naki all had 50% and above.

Table 17b: Passive competence in Koshin by Gender language

Sex	**Self-reported competence**	**RTT competence**	**Percentage**
Male	5	4	80
Female	2	0	0
Total	**7**	**4**	**57**

Table 17b demonstrates that out of those with self-reported competence in Koshin, only the males were competent, 80% (4) while no female was found competent. The degree of competences according to age will be presented on the table below.

Table 17c: Passive competence in Koshin by Age

Age	Self-reported competence	RTT competence	Percentage
18-32	0	0	0
33-56	3	1	33.33
57 and above	4	3	75
Total	**7**	**4**	**57**

Table 17c shows that only the middle and old age groups claimed competence in Koshin. Old people are more competent, 75% (3) than middle age, 33,33 (1).

Table 17d: Passive competence in Koshin by Degree/Grade

Competence	Self-reported competence	RTT competence	Percentage
Passive	7	4	57
Near passive	0	1	14.28
No competence	0	2	28.57
Total	**7**	**7**	**100**

Table 17d reveals that 57% (4) of those with self-reported competence in Koshin are actually competent. One (14.28%) had a near passive competence, while 28.57% (2) had no competence. The next table below will be presenting scores on Mufu-Mundabli RTT test. The Mufu-Mundabli language is spoken in the two villages of Mufu and Mundabli. Situated to each other in LF's northeast periphery was formerly known as the (Ji group) with the inclusion of Buu as one of them (Hombert 1980, Good et al. 2011). The variety representing this language is the Mufu variety.

Table 18a: Passive competence in Mufu-Mundabli by Native language

Native language	**No. of self-reported competence**	**RTT competence**	**Percentage**
Buu	6	6	100
Mungbam	3	1	33.33
Total	**9**	**7**	**77.77**

Table 18a shows that only Buu and Mungbam speakers claimed competence in Mufu-Mundabli. Results reveal that 77.77% of those with self-reported competence in Mufu-Mundabli are actually competent in it. This means that the majority of them reported competent are really competent on the RTT test. The gender variable will also be shown in Mufu-Mundabli as seen below.

Table 18b: Passive competence in Mufu-Mundabli by Gender

Sex	**Self-reported competence**	**RTT competence**	**Percentage**
Male	6	4	66.66
Female	3	3	100
Total	**9**	**7**	**77.77**

Table 18b demonstrates that of those who claimed competence in Fang, 100% (3) of females were competent and 66.66% (4) of males were competent. In both sexes, some of those with self-reported competence were not competent. The age variable in Mufu-Mundabli will be demonstrated below.

Table 18c: Passive competence in Mufu-Mundabli by Age

Age	Self-reported competence	RTT competence	Percentage
18-32	1	1	100
33-56	3	2	66.66
57 and above	5	4	80
Total	**9**	**7**	**77.77**

Table 18c shows that majority of those with self-reported competence among different age groups were really competent because the different age groups all scored above 60%.

Table 18d: Passive competence in Mufu-Mundabli by Degree/Grade

Degree of Competence	Self-reported competence	RTT competence	Percentage
Passive	9	7	77.77
Near passive	0	1	11.11
No competence	0	1	11.11
Total	**9**	**9**	**100**

Table 18d shows that out of 9 speakers with self-reported competence in Mufu-Mundabli, 77.77% (7) were competent in it, 11.11% (1) each had near and no competences.

Below we are going to find out how LF speakers performed in the Ajumbu language. Ajumbu is a one- village language associated with ISO 639-3 [muc] and described in earlier sources (Hamm et al. 2002) under the name "Mbu' and Mbuk". But recent works like Good et *al.* 2011, Di Carlo 2011, 2015 give it the name Ajumbu. (Eberhard *et al.* (2019).

Table 19a: Passive competence in Ajumbu by Native language

Native language	No. of self-reported competence	RTT competence	Percentage
Fang	1	0	0
Kung	1	0	0
Total	**2**	**0**	**0**

Table 19a above shows that two L2 speakers who claimed competence in Ajumbu were tested on the RTT and none of them was competent in this language as they both scored 0% each. That is, both genders, age groups had neither a passive nor a near passive competence. This also goes a long way to confirm the fact that the Ajumbu language is 'strong' as they all declared. Most of the speakers declared that this language was very difficult. See details about this at the appendix.

Table 19b: Passive competence in Ajumbu by Gender

Sex	Self-reported competence	RTT competence	Percentage
Male	2	0	0
Female	0	0	0
Total	**2**	**0**	**0**

Table 19b shows that the male L2 speakers with self-reported competence were found not competent in the language.

Table 19c: Passive competence in Ajumbu by Age

Age	Self-reported competence	RTT competence	Percentage
18-32	0	0	0
33-56	0	0	0
57 and above	2	0	0
Total	**2**	**0**	**0**

Table 19c shows that the only L2 speakers with self-reported competence in Ajumbu were from the old age group. Their scores in this language shows that they are not competent in the language.

Table 19d: Passive competence in Ajumbu by Degree/Grade

Degree of Competence	Self-reported competence	RTT competence	Percentage
Passive	2	0	0
Near passive	0	0	0
No competence	0	0	0
Total	**2**	**0**	**0**

Table 19d above reveals that the speakers with self-reported competence in Ajumbu had neither a passive competence nor a near passive competence in this language. Their scores demonstrates that he has no competence in the language. Below, we will do a synthesis of the chapter.

3.2 Recapitulation of the Chapter

From foregone discussions, we can notice that most of the LF speakers are multilingual. We noticed in our work that these people are very flexible as far as acquiring/learning new languages is concerned. This is demonstrated in the number of times they occur in different languages and the percentages each individual scores. We had people who had passive competences in at least four of the LF languages including theirs. We also noticed that some languages attract more L2 speakers than others.

Below we are going to present all the different LF languages and the number of competent persons per language following different sexes.

TABLE 20: TOTAL PERFORMANCES BY GENDER PER LANGUAGE DURING RTT

LANGUAGES	**MALES**		**FEMALES**	
	Self-reported competence	**RTT competence**	**Self-reported competence**	**RTT competence**
Fang	11	9	8	6
Missong	8	6	7	7
Buu	4	3	5	2
Naki	1	1	6	3
Kung	9	5	9	5
Koshin	5	4	2	0
Mufu-Mundabli	6	4	3	3
Ajumbu	2	0	0	0
Total	44	32	40	26
Percentage	**100**	**72.7**	**100**	**65**

Table 20 demonstrates that that of those with self-reported competence in all LF languages, 72,7% (32) of males were competent and 65% (26) of females were competent. We can see here that in both sexes, some with self-reported competences were found not competent in some of these languages.

In the next section, we will find the total performances according to different age groups in all the languages.

TABLE 21: TOTAL PERFORMANCES BY AGE GROUP PER LANGUAGE DURING RTT

LANGUAGES	**18-32**		**33-56**		**57+**	
	Self-reported competence	**RTT competence**	**Self-reported competence**	**RTT competence**	**Self-reported competence**	**RTT competence**
Fang	4	2	7	7	8	6
Missong	1	1	7	6	7	6
Buu	0	0	5	3	4	2
Naki	3	1	4	3	0	0
Kung	9	6	7	3	2	1
Koshin	0	0	3	1	4	3
Mufu-Mundabli	1	1	3	2	5	4
Total	18	11	36	25	30	22
Percentage	**100**	**61.1**	**100**	**69.4**	**100**	**73.3**

Table 21 demonstrates that of those with self-reported competence, 73.3% (22) of those from the old age group were competent, 69.4% (25) from the middle age and 61.1% of the youths were also competent in these languages. We can say that among the different age groups with self-reported competence, the old age group is the most competent group of persons.

Below, we are going to place the languages in a hierarchical order starting with that which attracts more L2 speakers to the least thus giving a response to one of our research questions which seeks to find out which language attract more speakers.

TABLE 22: HIERARCHICAL PRESENTATION OF PASSIVE COMPETENCES PER LANGUAGE

Languages	**Self-reported competence**	**RTT competence**
Fang	19	15
Mungbam	15	13
Kung	18	10
Mufu-Mundabli	9	7
Buu	9	5
Koshin	7	4
Naki	7	4
Ajumbu	2	0
Total	86	58
Percentage	**100**	**67.4**

Table 22 above shows that of those with self-reported competence, Fang attracts more L2 speakers (15) L2 speakers who actually understood this language, Mungbam (Missong) being second position attracted 13 L2 speakers, Kung 10, Mufu-Mundabli 8 while Koshin and Naki had 4 persons each and Ajumbu does not attract any L2 speakers from this area thus confirming the assertion by all LF speakers that Ajumbu is 'strong'. Like Voegelin and Harris (1951) terms like "non- reciprocal and "reciprocal" will be employed in interpreting our results. These two terms were used during their intelligibility testing. But we will apply them based on the scores individuals demonstrated in the various languages in which their knowledge were tested and the relationships speakers of given languages handle with those of other languages.

We notice that, of those with self-reported competences, they were non-reciprocal competences between Fang and Buu, Ajumbu and Kung. This is seen where, Buu speakers with self-reported competences in Fang scored a 100% but Fang though they did not claim competences in Buu, when tested they all scored 0% in Buu. All the Buu speakers that were tested in the Fang language proved that they had passive competences in this language while no Fang speaker had even a near passive or active competence in Buu. This was also noticed with the Ajumbu and Kung languages. Out of the 9 Ajumbu speakers tested on RTT in Kung, 6 were competent and 2 had near passive competences with only one speaker who was found

not competent. No case of individual competence was also noticed in the Ajumbu language by the Kung speakers while all but one person in Ajumbu were competent in Kung.

One very interesting point here is the relationship handled between the Buu and the Mufu-Mundabli speakers. There is reciprocal competences between speakers of these languages. They are both competent in the languages in question.

As far as the levels of competences between the males and the females are concerned, in most cases the males were more competent than the females except in the Naki language where the females outnumbered the males with a total of 5 goes to 1. The men in general were more competent than women. This also confirms what is said in Di Carlo (2015) which says that men are more multilingual than women. However, if we have to base our results on the differences in age groups, the olde age group was the most competent in these languages, followed by the middle while the youths showed a very low profile in their levels of competences.

Fang attracts many speakers though no Fang speaker can really demonstrate competence in any language other than theirs while Ajumbu has very little or no speaker of LF interested in the acquisition/learning of their language. This aspect raises questions like:

What attracts people to the Fang language?

Why are others especially the Buu people interested in acquiring the Fang language why Fang does not show interest in their language? These questions came up because all the Buu people were competent in the Fang language. They ranged from 70 to100% competency in the Fang language when their passive competences were tested in this language. Is it because the Buu language is inferior to the Fang speakers, while that of Fang prestigious? Is it having a market value over the others or is it considered powerful?

When one looks at the Buu, Mungbam and the Mufu-Mundabli languages, one would be forced to conclude that proximity is the reason for people acquiring/learning a particular language. However, this is not true of Fang and Buu on one-hand and Kung, Naki, and Koshin languages on the other hand. Some of the LF speakers are competent in these languages whereas they are not proximal to their language communities as is the case of Decker (2010) who says languages become more and more unintelligible as one moves away from one language community to the other and vice versa. Speakers of LF do not necessarily acquire languages because they are intelligible or proximal to theirs.

This section has been concerned with assessing the passive competences of L2 speakers in the different LF languages. We have been able to present the passive competences of the total population. That is, everybody that was involved in the test including those whose declared competences were not made mentioned in the pilot study. This is because they were not among those whose competences were sampled in the afore-mentioned work.

We notice from the scores that Fang is widely comprehended, followed by Mungbam, then Mufu-Mundabli while Ajumbu is understood only by its native speakers. Below we find a table showing what informants declared of their competences and their actual competences in these languages. These are some of the people who pushed us into our findings. Here, we will find out if what they declared is what is actually happens. The next section we are going to see is L2 speakers' declared competences and what they actually portrayed in their scores.

3.3 Reported (Declared) vs Actual Passive Competences

This section of the work has to do with a comparison between speaker's declared competences in various languages and their actual competences. Basing our analyses on the constant comparative method of Glacer and Strauss (1967), our target is to contrast their declared competences and their actual passive competences in the languages. That is, verification of the declared competences in the pilot study, and also what we saw in Angiachi (2013), Di Carlo's (2015) works.

Passive competency is when the informant understands a language even if he/she does not necessarily speak it. Here, our judgment is based only on what they reported and their actual competences after the RTT test was conducted.

Our confirmation of these reported competences will be limited only to some 7 Buu speakers, 2 Mungbam (Missong) speakers and a Mufu-Mundabli speaker and not to the whole population. This is because our motivation for this thesis was especially based on their declarations.

From these declarations, we come to realize that they could speak at least five out of the eight languages of this area and even including some that were spoken out of LF. We were therefore touched by these reported level of competences and deemed it necessary assessing their actual competences and not just rely on their claims. The codes we see below are those of the actual competences have to do with only the passive competences of these languages. Codes we had for files in the assessment of the active competences will be seen on the

subsequent pages during the assessment of the active competences. Whatever code we find here is that giving details of the passive competences of individuals. We will notice here that each individual code contain all the languages reported and spoken by the respondents as seen below.

TABLE 23: REPORTED VERSUS ACTUAL PASSIVE COMPETENCES BY QAT25

Speaker A (ZOOM0035)	**Declared competences on 5**	**Old code**	**Actual competences on 100**	**Old and new Codes**	**Village**	**Sex**	**Age**
					Buu	**Female**	**45yrs**
		QAT 25		**QAT25**	Mufu	-	-
	Naki (4)	-	Naki (10)	-	-	-	-
	Mungbam (3)	-	Mungbam (96)	-	-	-	-
	Koshin (3)	-	Koshin (0)	-	-	-	-
	Kung (2)	-	Kung (2)	-	-	-	-
	Ajumbu (3)	-	Ajumbu (0)	-	-	-	-
	Buu (5)		Buu (80)	QAT25	-	-	-
	Fang (4)	-	Fang (95)	-	-	-	-

What we see as ZOOM 00…indicates the file name one can find in the audio files. In the collection of data, an MP3 recorder was used in order to record whatever the consultants said.

Table 23 above shows the declared and the actual competence a Mufu-Mundabli speaker has of LF languages. The dashes (-) show that it is the same like the caption. Therefore, they is no need repeating so as to avoid monotony. For example, the dashes under the code's caption show that, apart from the Fang language, the other languages´ competences are also found in the same file like that of Fang, same applies to the village, sex and age.

The values of 2-5 above were those that were used in Di Carlo (2015) in scoring the informant's declared competences. They ranged from 0-5. A zero meant the person reported not to have any competence in the language (either passive or active).

A score of 1 meant that the informant could understand a bit of the language interrogated. A score of 2 meant that speaker could understand the language very well but

could not speak. While a 3 meant he/she did not only understand but could at least speak a bit of it.

A score of 4 meant that, that person could speak the language very well but does not have native speaker's competence. His/her speech might vary from that of a native speaker at the level of phonological features like accent or tone.

Whereas, a person who scored 5 in the language under test showed that he/she had native speaker's competence in the language.

In table 23 above, the consultant's claim of being competent in the Fang, Mungbam and Buu is true while that of Naki, Koshin, Kung and Ajumbu proves her false.

She declared competence in the Naki language saying that she could not only hear the language but also actually speaks the language very well. In the assessment of her actual competence, it was noticed that she could understand just a bit of that language.

The reported competences we get of Koshin and Ajumbu is that she could at least speak a bit of these languages. However, in the assessment of the actual competences, we come to realise that she could not even identify the languages not to talk of understanding and even speaking them. The questions we haveare: Was she distracted when these recordings/files were being played? Or were the recordings not audible enough?

In the judgment of the Kung language, the speaker could only identify the language but understood nothing in the content of the text whereas her declared competence was that of actually understanding this language very well. The speaker above happens to be from the Mufu-Mundabli speaking community, married to a Buu man and living in Buu village. When she was tested in Buu language which happens to be her husband's language, she scored 80%. This mean that native speaker's competence in her husband́s language (Buu).

Therefore, out of the 7 languages that speaker QAT 25 above declared she understood, she actually proved to be competent in three of these languages. The competences of speaker B will be seen on the table below.

TABLE 24: REPORTED VERSUS ACTUAL PASSIVE COMPETENCES OF QAD25

Speaker B, QAD25	**Declared competences on 5**	**Old Code**	**Actual competences on 100**	**Old and new codes**	**Village**	**Sex**	**Age**
		QAD 25		**QAD25**	**Buu**	**-**	**-**
	Mungbam (3)	-	Mungbam (70)		-		
	Mufu-Mundabli (3)	-	Mufu-Mundabli (78)	-	-		
	Kung (3)	-	Kung (0)	-	-		
	Koshin (3)	-	Koshin (0)	-	-		
	Ajumbu (3)	-	Ajumbu (0)	-	-		
	Fang (3)	-	Fang (40)	-	-		

Table 24 shows that the informant's reported competences of the Mungbam and Mufu-Mundabli languages are true and false with the Kung, Koshin, Ajumbu and Fang languages. In reporting her competences for all the above-mentioned languages, we were made to understand that not only did she understand the languages but could speak a bit of them too. Our test has proven that the speaker was not even able to identify the languages of Kung, Koshin and Ajumbu. She only understands just a bit of Fang and cannot speak it.

Summarily, the speaker above claimed she was competent in 6 languages; results have proven that she is actually competent in three of these languages. However, what we should bear in mind here is that, the speaker is a plurilingual speaker because apart from being able to speak three other LF languages, he can also speak his native language very well which was a measuring rod before a person could be assessed in other languages. This is contrary to what we notice in Mc Intosh (2005:1928) who suggests that by speaking Kigiriama when you are not from Giriama was perceived as threatening and unnatural. The ideology above is sharply contrasted to the case of LF since these people willingly accept that their languages be learnt and vice versa. Speaker C's competences will be revealed below

TABLE 25: REPORTED VERSUS THE ACTUAL PASSIVE COMPETENCES OF QAD28

Speaker C, QAD28	**Declared competences on 5**	**Old Code**	**Actual competences on 100**	**Old and new codes**	**Village**	**Sex**	**Age**
					Buu	**Male**	**61yrs**
		QAD 28		**QAD28**	**Buu**	**-**	**-**
	Mungbam (3)	-	Mungbam (70)		-		
	Mufu-Mundabli (3)	-	Mufu-Mundabli (0)	-	-		
	Kung (1)	-	Kung (0)	-	-		
	Koshin (3)	-	Koshin (0)	-	-		
	Naki (2)	-	Naki (0)		-		
	Fang (3)	-	Fang (60)	-	-		

Table 25 above presents the competences the informant has of the various languages of LF. His passive competence level for the Fang language can be viewed in the above file glued to the Fang language. While those of the other languages are found in the other file different from that of Fang (**QAD28**). Basing our judgement on the grounded theory (comparative method). We notice from the table that what the speaker declared of his competences in the above mentioned languages do not really match his declarations. He has passive competences in the Mungbam and Fang languages as declared whereas his competences of the rest of the languages have no correspondences. He reported he could understand and speak at least the Mufu-Mundabli, Koshin languages and understand a bit of Kung with a complete passive competence in the Naki language. But the results gotten from his actual competences are that he could not even identify these languages thus scoring him a 0 each in those languages. He declared that he was competent in 5 LF languages and when his competences in these languages were tested, he proved competency in 2 L2 languages. Below, the actual competence of speaker D will be demonstrated.

TABLE 26: REPORTED VERSUS ACTUAL PASSIVE COMPETENCES OF QAD23

Speaker D, QAD23	**Declared competences on 5**	**Old code**	**Actual competences on 100**	**Old and New codes**	**Village**	**Sex**	**Age**
					Buu	**Male**	**60yrs**
		QAD 23		**QAD23**	**Buu**	**-**	**-**
	Mungbam (3)	-	Mungbam (90)		-		
	Mufu-Mundabli (3)	-	Mufu-Mundabli (70)	-	-		
	Kung (2)	-	Kung (0)	-	-		
	Koshin (3)	-	Koshin (0)	-	-		
	Naki (2)	-	Naki (0)	-	-		
	Fang (3)	-	Fang (80)	-	-		

On table 26 above, we notice that speaker D reported competences in the Mungbam, Mufu-Mundabli and Fang languages is confirmed in the assessment of his actual competences in these languages. Though not true with those of Kung, Koshin and the Naki languages. His reported competences for these languages were: while he could understand and speak a bit of Koshin, his competences in the languages of Kung and Naki languages were reported to be complete passive competences. That is, understanding these languages very well though not being able to speak them. But the table shows that he was unable to identify recorded texts in these languages. Glacer and Strauss grounded theory (1967) with it comparative method has helped us in comparing declared competences by this speaker with his their actual competences.

In conclusion, he claimed he could understand 6 languages that were spoken in LF apart from his own native Buu language. Test results show that he is actually competent in 3 of these languages. Another speaker's declared versus actual competences will also be further presented below.

TABLE 27: REPORTED VERSUS ACTUAL PASSIVE COMPETENCES OF QAT27

Speaker E, QAT27	**Declared competences on 5**	**Old Code**	**Actual competences on 100**	**Old and New Codes**	**Village**	**Sex**	**Age**
					Buu	**Male**	**68yrs**
		QAT 27		**QAT27**	**Buu**	**-**	**-**
	Mungbam (4)	-	Mungbam (85)	-	-		
	Naki (3)	-	Naki (0)	-	-		
	Kung (3)	-	Kung (0)	-	-		
	Koshin (3)	-	Koshin (90)	-	-		
	Ajumbu (3)	-	Ajumbu (0)	-	-		
	Fang (4)	-	Fang (85)	-	-		
	Mufu-Mundabli		Mufu-Mundabli (80)	-			

During the speaker's declared competences, the language of Mufu-Mundabli was not included. This explains why no mark is allocated for his reported competence in this language. However, during the testing proper, since the researcher tested them in all the languages even in those the informants did not report to have competences in, it was discovered that the above informant had active competence in the Mufu-Mundabli language with a score of **80%** in this language.

The consultant's claim was that of being competent in 7 languages of LF including his language with an exemption of that of Mufu-Mundabli. As is the case of the grounded theory, the table shows that the consultant's claims to be competent in the Mungbam, Koshin, and Fang has been proven true while those of Naki, Kung and Ajumbu is contrastive to these claims for he was not able to identify these languages in his actual assessment test. The grounded theory has helped us in making judgements between what was declared in the pre-survey phase and with what actually takes place. That is, he declared he was competent in 6 other LF languages of this area. During his declared competency, the language of Mufu-Mundabli was not mentioned either because it slipped off his mind and from that of the researcher. Nevertheless, when his actual competence was tested, his results showed that he was competent in 4 of these languages including Mufu-Mundabli. Scores of speaker F will be viewed below.

TABLE 28: REPORTED VERSUS ACTUAL PASSIVE COMPETENCES OF QAD24

Speaker F, QAD24	**Declared competences on 5**	**Old code**	**Actual competences on 100**	**Old and New codes**	**Village**	**Sex**	**Age**
					Buu	**Female**	**56yrs**
		QAD 24		**QAD24**	**Buu**	**-**	**-**
	Mungbam (3)	-	Mungbam (98)	-	-		
	Mufu-Mundabli (3)	-	Mufu-Mundabli (90)	-	-		
	Kung (2)	-	Kung (0)	-	-		
	Koshin (3)	-	Koshin (0)	-	-		
	Fang (3)	-	Fang (80)	-	-		
	Naki (2)		Naki (0)	-			

On table 28 above, and basing our analyses on the grounded theory (constant comparative method), it can be noticed that there is a one to one correspondence between what the informant reported of her competences in the Mungbam, Mufu-Mundabli and Fang languages. While those of Kung, Koshin and Naki do not correspond with her claims. This is because in the test proper, she could not identify the Kung, Koshin and the Naki languages though her claim was that she actually understood the Kung and the Naki languages very well and could speak a bit of Koshin. The speaker who is a Buu woman claimed she could understand 6 other LF languages and her results show that she could actually understand just 3 of these languages. This comparative method proposed by Glacer and Strauss (1965) has enabled us to know the multilingual nature of the consultants. That is, the number of languages in her linguistic repertoire. The competences of speaker G will be seen below.

TABLE 29: REPORTED VERSUS ACTUAL PASSIVE COMPETENCES OF QAT22

Speaker G, QAT22	**Declared competences on 5**	**Old code**	**Actual competences on 100**	**Old and New codes**	**Village**	**Sex**	**Age**
					Buu	**Male**	**55yrs**
		QAT22		**QAT22**	**Buu**	**-**	**-**
	Ajumbu (2)	-	Ajumbu (0)	-	-		
	Koshin (2)	-	Koshin (10)	-	-		
	Fang (4)	-	Fang (60)	-	-		
	Mungbam (3)	-	Mungbam (0)	-	-		
	Mufu-Mundabli (4)	-	Mufu-Mundabli (80)	-	-		
	Naki (3)	-	Naki (0)	-	-		
	Kung (3)	-	Kung (50)	-	-		

Table 29 above shows speaker's claim of being competent in the Fang, Mufu-Mundabli and Kung languages have been proven real while those of Ajumbu, Koshin, Mungbam and Naki do not correspond with his reported level of competences. Focusing the analyses on the grounded theory which had to do with constantly comparing incidences as seen in the comparative method, the speaker reports that, he understood the Ajumbu and Koshin languages and could speak a bit of Naki.

In the assessment of his actual competences in these languages he could not identify the Ajumbu, Mungbam and Naki languages while instead of understanding Koshin very well as he claimed, he could pick just very limited utterances or words in the language. Though his scores for the Fang and Kung languages do not really reflect his reported competences in the languages, we are convinced that his performances in the assessment of the active competences will match with that which was declared. This is because his average scores in these languages could be that, he was a bit distracted that is why he could not really pick up the amount necessary for his declared competences. But one good thing about this is that the speaker scores at least a 50% in the assessment of his passive competences. The Buu man above declared that apart from his L1, he was competent in 7 other languages of this area. His scores show that he is competent in 3 of these languages. The results of speaker H will be seen below.

TABLE 30: REPORTED VERSUS ACTUAL PASSIVE COMPETENCES OF QPP22

Speaker H, QPP22	**Declared competences on 5**	**Old code**	**Actual competences on 100**	**Old and New codes**	**Village**	**Sex**	**Age**
					Mufu	**Female**	**48yrs**
		QPP22		-	-	-	-
	Buu (4)	-	Buu (60)	-	-		
	Koshin (1)	-	Koshin (0)	-	-		
	Fang (3)	-	Fang (75)	-	-		
	Mungbam (3)	-	Mungbam (70)	-	-		
	Naki (4)	-	Naki (0)	-	-		
	Kung (1)	-	Kung (0)	-	-		

The speaker's declared competences for the Buu, Fang and Mungbam languages correspond to her actual competences as she scored above 50% as she claimed but this is not true of the Naki, Koshin and Kung languages which she claimed she could speak and understood them. The speaker claimed to be able to understand and speak the Naki language. While she could understand a bit of Koshin and Kung. But it is rather ironical that she could not even identify these languages. For the first thing one does in acquiring a language is first of all by identifying it, understanding a bit of it, understanding it well and can then start speaking depending on the level of his/her active competence in the language. It becomes surprising when an individual declares that he/she is able to speak a language very well but ends up not even being able to identify that language and not even picking a word them. As is the case in Scotton (1976), African peers from inter-ethnic groups abandon even their native languages in order to pick up a neutral language like English, we notice a very interesting phenomenon in the declarations made by these speakers as they are comfortable knowing other indigenous languages with no prestige or job market attached to them. Speaker's I competences will be shown below.

TABLE 31: REPORTED VERSUS ACTUAL PASSIVE COMPETENCES OF QAT16

Speaker I, QAT16	**Declared competences on 5**	**Old code**	**Actual competences on 100**	**Old and New codes**	**Village**	**Sex**	**Age**
					Missong	**Male**	**70yrs**
		QAT16		**QAT16**		**-**	**-**
	Ajumbu (2)		Ajumbu (0)	-	-		
	Koshin	-	Koshin (0)	-	-		
	Fang (2)	-	Fang (0)	-	-		
	Buu (2)	-	Buu (90)	-	-		
	Mufu-Mundabli (3)	-	Mufu-Mundabli (60)	-	-		
	Naki (2)	-	Naki (0)	-	-		
	Kung (2)	-	Kung (0)	-	-		

On table 29 above, we notice that just two of the languages out of the seven languages the speaker reported to be competent in is true while in five of the languages, the speaker scores a 0 because he was not even able to identify these languages he had earlier report to understand well. The comparative method has made us to understand that he is competent only in the Buu and Mufu-Mundabli languages as claimed while he is not competent in the Ajumbu, Koshin, Fang, Naki and Kung languages.

The Mufu woman above claimed she was competent in 4 other LF languages. When her competences in these languages were tested, she proved to be competent in 3 of the languages. In the same light, the above male speaker from Missong declared to have passive competences in 6 other languages of this area, and when his actual competences were tested, it showed that he was actually competent in 2 of these languages.

Below, we will be seeing the competences of the last informant who is also a Mungbam speaker.

TABLE 32: REPORTED VERSUS ACTUAL PASSIVE COMPETENCES OF QAT17

Speaker J, QAT17	**Declared competences on 5**	**Old code**	**Actual competences on 100**	**Old and New codes**	**Village**	**Sex**	**Age**
					Missong	**Male**	**68yrs**
		QAT17		**QAT17**		**-**	**-**
	Koshin (3)	-	Koshin (0)		-		
	Fang (2)	-	Fang (0)	-	-		
	Buu (3)	-	Buu (80)	-	-		
	Mufu-Mundabli (3)	-	Mufu-Mundabli (40)	-	-		
	Naki (3)	-	Naki (0)	-	-		

From table 32 above, the grounded theory (comparative method (1965)) has demonstrated that, only the declared competence in the Buu language corresponds to the actual competence. There is a near passive competence in the Mufu-Mundabli language which could still be that his declared competence of this language is true reason being that his scoring below 50% could still be that he was not very keen in listening to the Mufu-Mundabli text when it was being played. But he is completely not competent in the Koshin, Fang, and Naki languages as he claimed. He could not even identify these languages when he was being tested in them.

From the comparison, one can see that what they all declared is not actually what is happening. They happened to be very enthusiastic when reporting their degrees of competences. This explains why they enumerated even languages they knew nothing about. If we relied only on these reported competences, we would have concluded that they could all at least have passive competences in 6 of the LF languages including theirs. Nevertheless, the above method propounded by Glacer and Strauss (1965) has given us the reality of what actually takes place. But in the same line, if we conclude by saying that these people are not multilingual because their degrees of actual competences do not exactly tie with their claims, this would be an over statement.

The least amongst them is competent in three languages including his/her own native language while speaker E is the most multilingual of all as he shows competence in five of the

LF languages with his language inclusive not counting the Pidgin English that was a means of communication between us and other languages that are spoken out of LF.

In the following diagram, we will give a summary of the number of languages each of the core consultants understood.

TABLE 33: SUMARIZING SCORES OF COMPETENT CORE L2 SPEAKERS DURING RTT TEST (PASSIVE COMPETENCES)

Old Codes	**Languages**	**Reported degrees of competences on 5**	**Tests conducted on 100**	**Old and New codes**	**Village**	**Sex**	**Age**
						Male	
QAT25	Mungbam(Missong)	4	96	**QAT25**	**Mufu**	**Female**	**45yrs**
-	Buu	5	80	-	-	-	-
-	Fang	4	95	-	-	-	-
QAD25	Mungbam(Missong)	3	70	**QAD25**	Buu	Female	65yrs
	Mufu-Mun	3	78	-	-	-	-
	Fang	3	40	-	-	-	-
QAD28	Mungbam(Missong)	3	70	**QAD28**	Buu	Male	61yrs
	Fang	3	60	-	-	-	-
QAD23	Mungbam(Missong)	3	90	**QAD23**	Buu	Male	60yrs
	Mufu-Mun	3	70	-	-	-	-
	Fang	3	80	-	-	-	-
QAT27	Mungbam(Missong)	4	85	**QAT27**	Buu	-	68yrs
	Koshin	3	90	-	-	-	-
	Fang	4	85	-	-	-	-
	Mufu-Mun	-	80	-	-	-	-
QAD24	Mungbam(Missong)	3	98	**QAD24**	Buu	Female	56yrs
	Mufu-Mun	3	90	-	-	-	-

	Fang	3	80	-	-	-	-
QAT22	Fang	4	60	**QAT22**	Buu	Male	55yrs
	Mufu-Mun	4	80	-	-	-	-
	Kung	3	50	-	-	-	-
QPP22	Buu	4	60	**QPP22**	Mufu	Female	48yrs
	Fang	3	75	-	-	-	-
QAT16	Buu	2	90	**QAT16**	Missong	Male	70yrs
	Mufu-Mun	3	60	-	-	-	-
QAT17	Buu	3	80	**QAT17**	Missong	Male	68yrs
	Mufu-Mun	3	40	-	-	-	-

Table 33 gives a summary of scores recorded by L2 speakers in languages they claimed they could understand. We notice here that most of the speakers who declared in the pilot study that they understood the languages above actually proved that they had passive competences in these languages. The figures we find above are scores of their self-reported competences while the scores on 100 were arbitrary calculations designed by the researcher during the RTT test. The village names we find indicate respondents' linguistic backgrounds. We can see that every speaker understood at least two other LF languages apart from their native languages. We notice here that most of the L2 speakers had native speakers' proficiency levels of understanding RTTs in their L2 as most of them scored 80% and above.

The table shows that speaker QAT25 who is a Mufu speaker living in Buu understands three languages which include: Mungbam, Buu and Fang.

Also, speaker QAD25**,** a Buu speaker understands Missong, Mufu-Mundabli and Fang.

QAD28 is also a Buu speaker, he knows Mungbam and Fang,

QAD23 from Buu understands Mungbam, Mundabli and Fang.

QAT27 understands Mungbam, Koshin, Fang and Mufu-Mundabli.

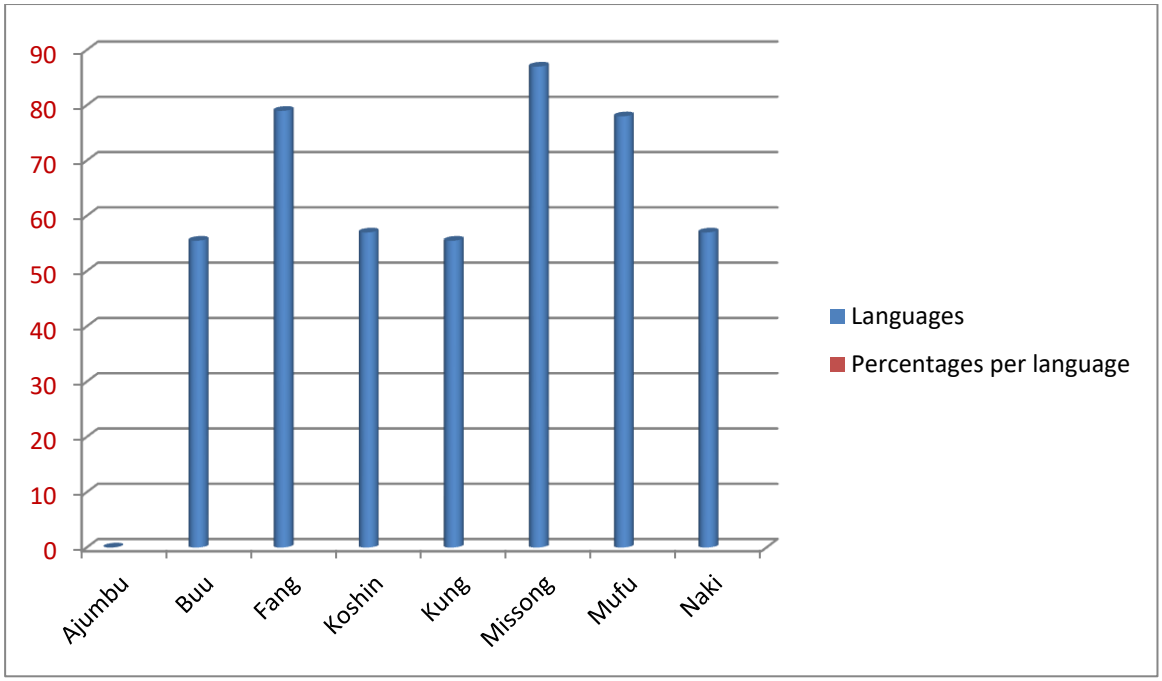
QAD24 understands Mungbam, Mufu-Mundabli and Fang including her native language Buu.

QAT22 from Buu knows Fang, Mufu-Mundabli and Kung.

QPP22 is a Mufu female speaker understands Buu and Fang including her native Mufu-Mundabli language while QAT16 and QAT17 understand Buu and Mufu languages as seen on the table above. We notice here that most of these L2 speakers have native speakers' understanding of these languages. What we found out was that, in most cases, when an informant had a high score in a particular language in the RTT method, it was obvious that he/she would have active competence in this particular language except for a very rare case which we noticed with a man from Buu who, when tested in the Ajumbu language using the RTT method, could not say anything from the text which means, he was unable to interpret the text from this language but insisted he could speak it. When he was presented with pictures to interpret in this language, he was able to do it.

Our work has been to assess multilingualism in LF. This exercise was done in order to verify the claims made by L2 speakers in earlier works such as the pilot study, Angiachi (2013) and Di Carlo (2015). More about the scores will be exemplified on the charts below.

FIGURE 4: PASSIVE INDIVIDUAL MULTILINGUALISM IN LOWER FUNGOM



The chart above gives the percentages experienced at the level of individual's passive assessment in L2 languages per language. These percentages were gotten by dividing the number of persons who went in for a test in a given language by the number who actually proved competency. We see that both Buu and Fang had 55.5% level of competency by L2 speakers. Fang attracts 79% from individual competences, Koshin and Naki 57% each, Mufu experienced 78% and Missong 87%. This is to say that, out of the total number of L2 speakers who went in for an RTT test in Fang, Mufu and Missong, almost everybody tested proved that he/she understood these languages; while in the other languages, some L2 speakers too demonstrated their comprehension of these languages, except for Ajumbu where no L2 speaker understood the language as seen on the chart.

This section deals with the sex and age variables in all languages. Here, we are going to find out which sex was more competent in these languages and at the same time see which age group with self-reported competence was also the most competent group in different languages. It should be borne in mind that the competences we are talking here is that of the passive competences. This has to do with L2 speakers being able to understand a given language without necessarily being able to speak it.

FIGURE 5: PASSIVE COMPETENCES IN BOTH SEXES PER LANGUAGE

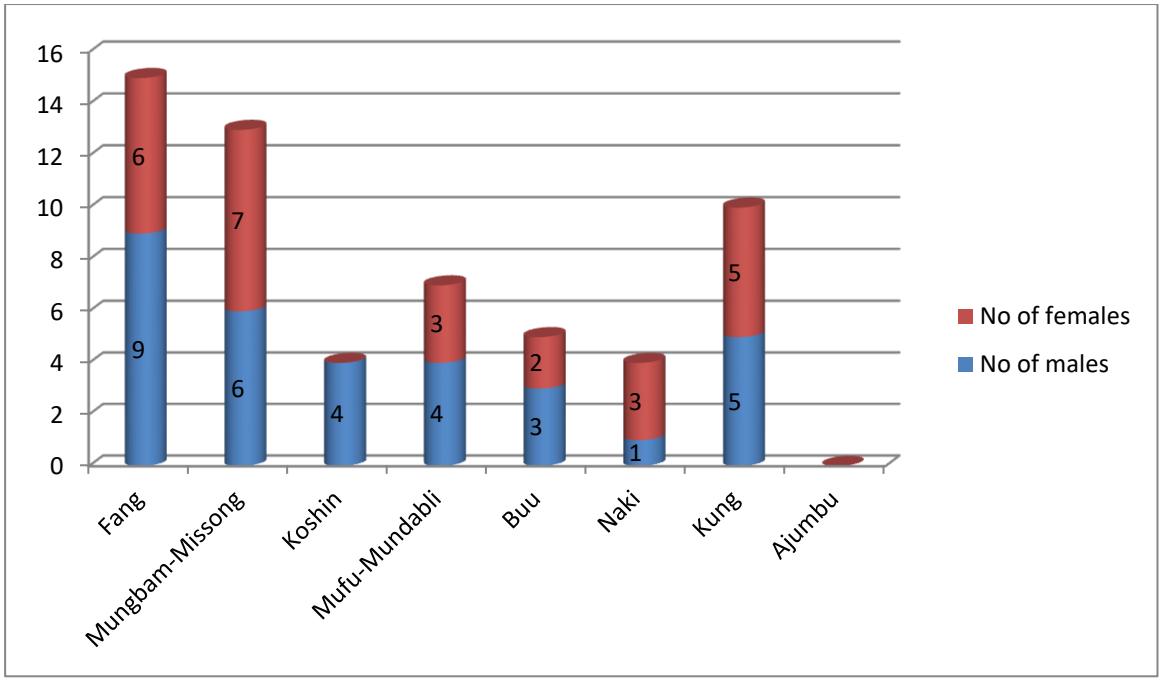


Figure 5 above shows the performances noticed by the different sexes in the various languages. It can be seen that in Fang, Koshin, Mufu-Mundabli, Buu and Naki, men are more competent than women while women being more competent than men only in Missong. Both sexes have equal competence levels in Kung. The Ajumbu language attracts no L2 speaker as both men and women have 0 each in the language. That is, Fang has 9 men and 6 women who understood the language, Missong with 6 men and 7 women. In Koshin, 4 men understood this language with no woman being able to comprehend it. In Mufu-Mundabli, we have 4 men and 3 women who understood this language, 3 men and 2 women in Buu, 1 man and 3 women in Naki and 5 men, 5 women in Kung.

The above has been concerned with demonstrating sex in relation to individual languages. Below, we are still going to see sex in relation to all the language put together. That is, the general scenario of LF.

As far as this variable is concerned, men possess more passive competences in the languages of LF than women as they score a 72.7% and women 65% in all LF languages. This has been done by simply adding the number of males and females from each language, where the number of males or females is divided by the total population x 100.

FIGURE 6: PASSIVE COMPETENCES IN RELATION TO SEX IN ALL LANGUAGES

Figure 6 shows the total number of passive competences of males and female in LF. As earlier mentioned in Di Carlo (2015) and being one of our objective, which is to find out which of the sexes in this area is more multilingual. Our results are in line with what we hypothesized at the beginning of this study. We can see here that, 72.7 % males have passive competences in all the LF languages, while 65% females are multilingual. Looking at sex on individual languages, we will see that some languages attract females than males. Since our objective is based on the general situation of LF, we can see that the males in LF are more competent than the females.

Below, we will be looking at passive competences in relation to different age groups. That is, to find out which of the age group with self-reported competence is the most or least multilingual.

FIGURE 7: PASSIVE COMPETENCES OF DIFFERENT AGE GROUPS PER LANGUAGE

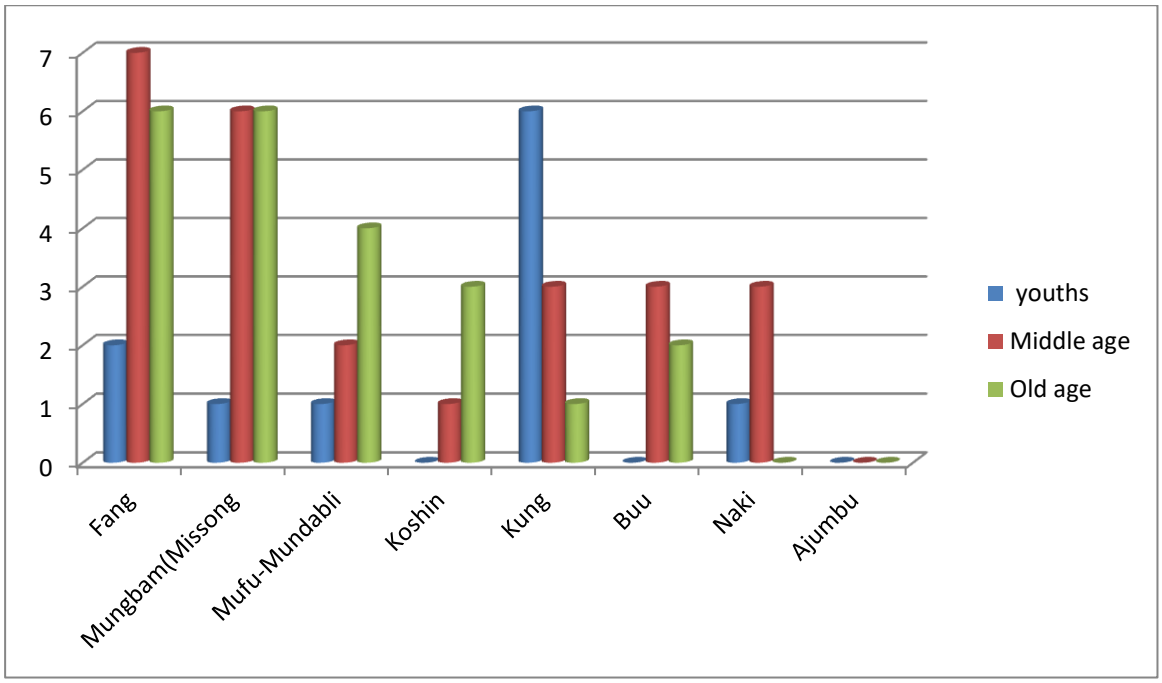


Figure 7 above reveals scores of different age groups in all LF languages**.** As earlier said, age groups were divided into three: the youths ranging from 18-32 yrs, the middle age group ranging from 33-56 yrs and the last known as the old age group which ranged from 57yrs and above**.** The three colours we find on the chart represent the three different age groups, the youths being represented by the blue colour and the middle age with red and old age group with the green colour.

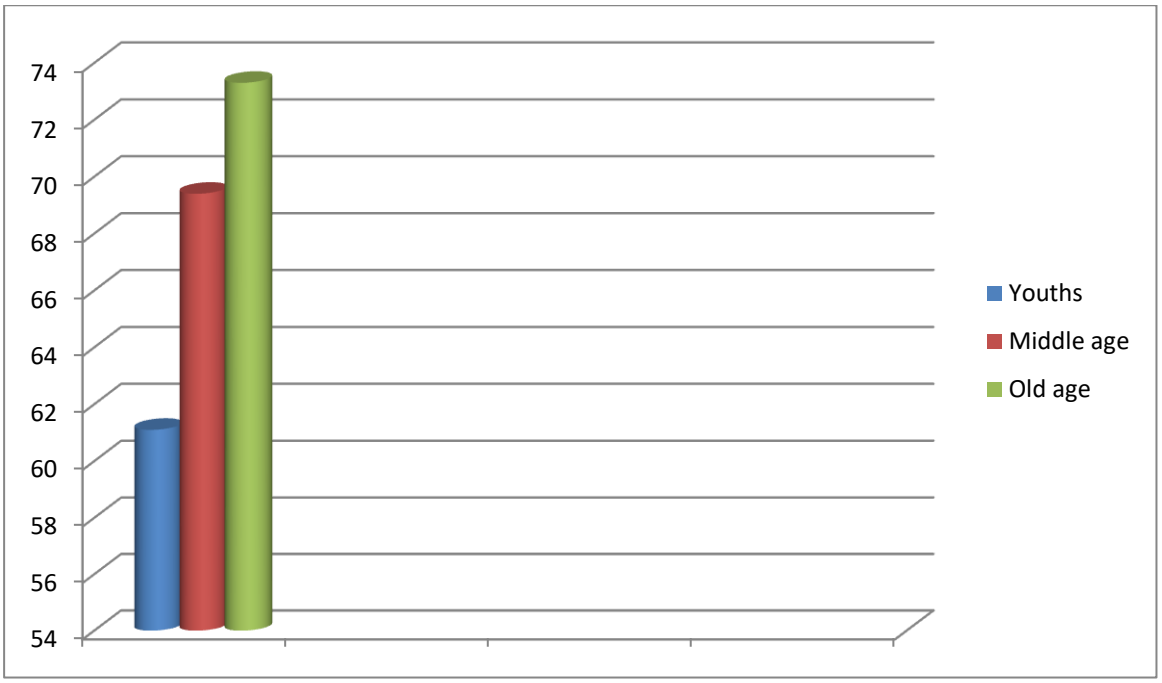
We can see on the chart that the middle age group has the highest level of competency level in Fang with 7 persons who understand Fang, 6 old aged persons and just 2 youths. In Missong, both the middle and old aged group scores the same as we see 6 persons from each from both age groups understand Missong and just 1 youth. We notice that, in the Mufu-Mundabli language where Mufu was the reference variety, the old age group had the highest competency level with 4 persons to 2 for the middle age and 1 for the youths. While in Koshin, the old age group was also more competent than the youths and the middle age groups. Three (3) persons from the old age group understood Koshin, 1 from the middle age. No youth understood both Buu and Koshin as a result, they didn't make claims on these languages. That is, when self-reported competences were sampled on LF languages, youths did not claim they understood or spoke Buu and Koshin. The middle age group had the highest competency level as 3 persons and 2 for the old age groups could comprehend Buu. In

Naki, only the youths and the middle age groups could understand Naki. We had 3 persons from the middle age and 1 from the youth group who understood Naki and none from the old age group because they never claimed competence in this language.

We have presented scores based on both the sex and age variables which were noticed that men were more competent than women thus confirming Di Carlo (2015) who says men in LF are more competent than women. The Kung language can be considered as a language of the youths as it is the only language in this area with the highest claims and scores from youths. Above, we have presented scores according to age per individual languages. That is, which age group is the most/least competent in which language?

As far as the age variable in our study is concern, the old age group has the highest competency level followed by the old group and the youths occupying the last position with 73.3, 69.4 and 61.1% respectively as seen on the chart below. This has also been done by simply adding the number of persons per age group from each language. Where the number of persons per age group is divided by the total population x 100.

FIGURE 8: PASSIVE COMPETENCES IN ALL LANGUAGES ACCORDING TO DIFFERENT AGE GROUPS



The chart we find in figure 8 above gives us the results we got after testing speakers in RTTs in all LF languages. It has been noticed that the old age group are the most multilingual in this area with a percentage of 73.3, followed by the old or elderly people who scores 69.4 while the youths are the least multilingual with 61.1. We should be reminded that these scores are based on the sample population for this study. That is, only those with self-reported competences. The next section we are going to see is hierarchy in known languages. What we mean by hierarchy here is for us to know the languages which are more understood than others or the languages which attract many L2 speakers.

FIGURE 9: THE HIERARCHICAL PRESENTATION OF KNOWN LANGUAGES

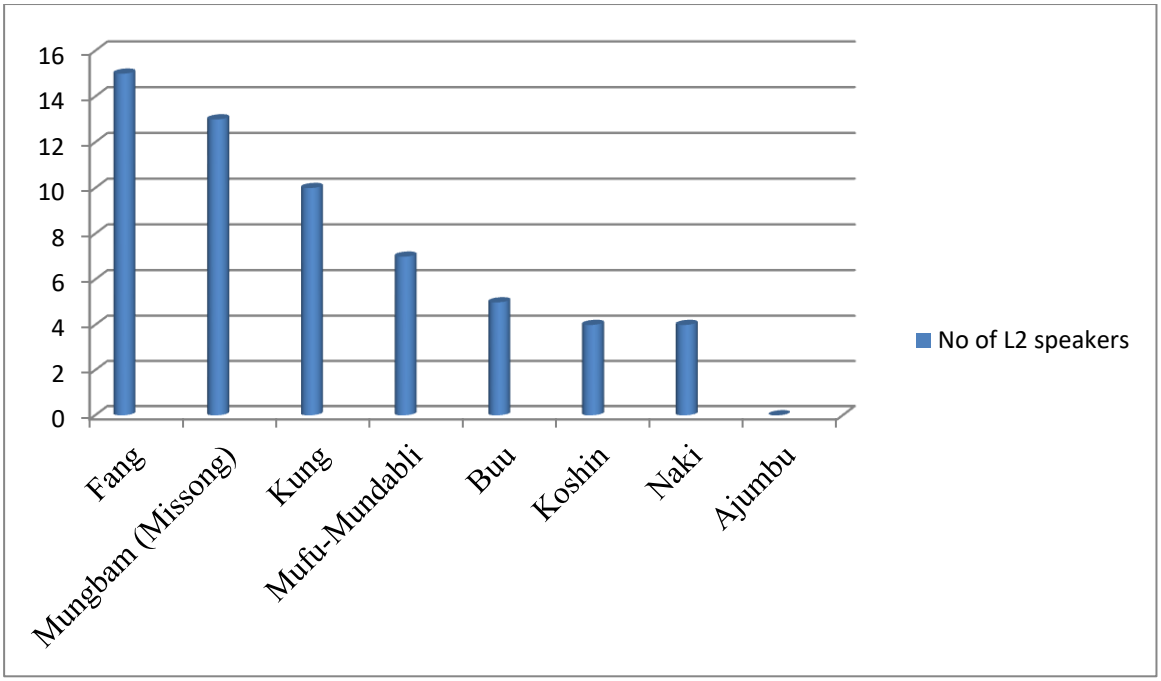


Figure 9 above shows a hierarchical presentation of known languages on percentages by L2 speakers. That is, which of the LF languages are widely understood and which are not. We can see from the chart that Fang is the first language that is widely understood by many L2 speakers of LF (15), followed by Missong (13), then Kung, Mufu-Mundabli with Naki and Koshin having the same number of L2 speakers. We also see that Ajumbu does not attract any L2 speakers, as no speaker of LF could understand this language.

This section has presented the number of L2 speakers who could understand languages that were not theirs. Below, a conclusion of the chapter will be given.

3.4 CONCLUSION

All along, we have been interested in analysing data carried out through the RTT technique which had to do with assessing passive competences of the speakers. The comparative method proposed by Glacer and Strauss (1965) has also been very vital for our analyses as it gave us the actual situation at hand. This method has enabled us to frequently cross-check and consult old memos and to find out if what these speakers declared in the pilot study and previous works (Angiachi (2013), Di Carlo (2015) is what actually happens. Most of these speakers have proven that they have passive competences in the languages of LF as claimed. Thus giving a positive response to our main research questions which states: Are they really as competent as they claim? We are now going to see how data was collected using the visual

stimuli tool which was one of the tools used in assessing active competences of these L2 speakers.

In the next chapter, we will present and analyse data via the visual stimuli The aim of collecting data through this technique was to test speaker's active competences. Thatis, we are going to treat, present and analyse data that was collected via the VS method. The aim of collecting data through this method is to bring a correlation between findings obtained via the RTTs and those that would be obtained through the visual stimuli and to assess if truly claims given by L2 speakers in their ability to speak these LF languages correspond with what actually happens. In the chapter, we will be handling speakers' active competences in Kung, Koshin and Fang.

CHAPTER FOUR: PRESENTATION, ANALYSES AND TREATMENT OF DATA OBTAINED THROUGH THE VISUAL STIMULI IN KUNG, KOSHIN AND FANG LANGUAGES

4.1 Introduction

This chapter deals with the test that was done using visual stimuli. This was the first tool used in assessing the active competences also known as communicative competences.

Results from tests conducted through the use of the visual stimuli will be presented in both chapters four and five. In chapter four, we will present data based on the Kung, Koshin and Fang languages. While in chapter five, data on Mufu, Missong, Naki and Ajumbu will be presented and analysed because Fang and Kung attracted many people in the will be extremely long while the other chapter will be very short because very few people actually demonstrated active competences in those languages.

4.2 Near Native Competence

"Near-native" or "Native-like" competence means that there is little or no perceptible difference between their language performances and those of native speakers. While 'near active' competence means the speaker exercise some knowledge of being able to speak the language. His/her scores were not as poor to the point that he/she could be termed incompetent and at the same time, not as good to be termed competent in the language. For example, an L2 speaker who could score between 30-49% during the interpretation of the visual stimuli, was considered to have 'near active' competence in the language under test. These terms were also noticed during the assessment of passive competences. While in the previous chapter which was based on the assessment of passive competences, if an L2 speaker could also score between 30-49 during the interpretation of the RTTs, he/she was considered to have 'near passive' competence in that particular language.

Experimental stimuli or Visual stimuli according to Drager (2012) are the triggers in the experiment that cause (or could cause) a response. In speech perception work, these usually include auditory tokens of sounds, words, or sentences, but they can also include images or video. The stimuli we used contained images that provoked responses through interpreting them. These images were interpreted differently based on how the interviewee viewed them. What we mean here is that, consultants perceived the images differently and

therefore had different interpretations of them. That which was considered as garden egg, was considered cocoa or cocoyam by other consultants. They were not penalized for giving a different name to an object. What we were interested in, was to see if their sentences made sense. Some for example, instead of saying what they think the pictures were expressing, they instead posed questions to those pictures.

For example, we had a case of a Buu speaker who instead of interpreting pictures, he went on asking questions. For example, instead:

1-This man is going hunting with his dog

2-This boy/man is praying.

What he said was:

1-Are you going hunting comrade?

2-Are you praying to God?

Since our aim was to find out if truly they could speak these languages, he was judged in his level of competence in those languages and not in the method of picture interpretation. Since the judge immediately understood and interpreted what he said and confirmed he was a good speaker, his competence was judged in his level of proficiency and not in the rule of the method which was interpretation.

Below, we will find scores of transcribed texts of those who were tested in the various languages. These scores were given to them by the judges who were all native speakers of one of the languages. We got statements like this is really a native speaker of language X or Y, this is not language X or Y he/she is speaking. He/she has done a lot of mix-up of languages etc. From these statements, the researcher herself could be able to score the interviewees but she decided to do that with the judge's contributions so that whatever marks that were allocated should reflect reality. It should be noted that, all the judges were all native speakers of the languages they represented or they were judging. For example, you could hear a Kung judge (a native speaker of Kung) after listening to an L2 speaker interpret pictures in Kung saying: this is really a Kung man/woman. Such statements were immediate clues that the L2 speaker in question had a 'native-like' competence in this language.

On the tables below, we are going to see how these pictures were interpreted in the Kung language. It should be noted that, each well-interpreted picture earned a score of 5 marks. The pictures for assessment were 12 in number giving it a total of 60 points. The individual's score was then divided into the total score (60) x 100 in order to give us the scores on 100.

Table 34 details on scores of visual stimuli

No. of visual stimuli	**Score per visual stimulus**	**Total scores for visual stimuli**	**Final scores**
12	**5**	**60**	**100**

Table 34 we find above is a summary of how visual stimuli were scored. Below, we will present scores from L2 speakers in Kung. See detailed transcribed texts from various L2 speakers in the annex.

Table 35a: Active competences in Kung

Consultants	Sex	Scores/60	%	L1	L2	Comments
QAT170	F	53	88.33	Koshin	Kung	Code switching and code mixing
QAT147	M	0	0	Mufu-Mundabli	Kung	Spoke Aghem
QAT 125	M	38	63.33	Ajumbu	Kung	Used language not known by the judge
QAT 22	M	31	51.66	Buu	Kung	Gave many incomplete sentences
QAT120	F	56	93.33	Ajumbu	Kung	Native speaker's competence
QAT138	M	43	71.66	Ajumbu	Kung	Spoke Kung with a foreign accent
QAT143	F	38	63.33	Naki (Mashi)	Kung	Some pictures were not interpreted
QAT137	M	43	71.66	Ajumbu	Kung	Code mixing
QAT121	F	34	56.66	Ajumbu	Kung	Code mixing
QAT126	F	35	58.33	Ajumbu	Kung	
TOTAL		10				
PERCENTAGE		**90**				

Table 35a reveals that 90% of those who claimed competence in Kung are actually competent in it. Out of 10 persons who were assessed in this language, 9 out of them had active competence in this language as they all scored from 51% and above. All the Koshin, Ajumbu, Buu and Naki speakers who claimed they could speak this language are really competent in the language. The only speaker with self-reported competence in this language

who was found not competent is a Mufu-Mundabli speaker. He scored 0% in the visual stimuli in Kung because he could not interpret the pictures in this language. The only picture he tried interpreting was done in Aghem, a language spoken out of LF, precisely in Menchum division. Among those who proved competent, we noticed some aspects of code mixing and switching with a speaker actually having a native speaker's competence.

On the two last table above, we have seen the different levels showing the active competences in the Kung language.

Table 35b : Active competences in Kung by Gender

Sex	**Self-reported active competences**	**Actual active competences**	**Percentage**
Male	5	4	80
Female	5	5	100
Total	**10**	**9**	**90**

Table 35b above shows that of those with self-reported competence in Kung, all the females, 100 (5) could speak the language as they were able to interpret visual stimuli in this language and 80% (4) of males also have active competences in this language. Only one male was found not competent.

Table 35c: Active competences in Kung by Age

Age	**Self-reported active competences**	**Actual active competences**	**Percentage**
18-32	6	6	100
33-56	3	2	66.66
57 and above	1	1	100
Total	**10**	**9**	**90**

Table 35c shows that of those with self-reported active competences in Kung, 100% (6) of the youths and the old age group (1) were actually competent. Only a very few number of those with self-reported competence were found not competent, 66.66 (1). We can still see

here that Kung attracts a lot of youths as out of the 6 youths who claimed they speak Kung, all of them are really competent in it.

Table 35d: Active competences in Kung by Degree/Grade

Degree of Competence	**Self-reported active competences**	**Actual active competences**	**Percentage**
Active competence	10	9	90
Near active competence	0	0	0
No active competence	0	1	10
Total	**10**	**10**	**100**

Table 35d reveals that out of those with self-reported competences in Kung, 90% (9) really have active competence in it, no speaker had a near active competence in this language while 10% (1) had no competency level at all.

Below, we are going to see L2 speakers' competences in the Koshin language. That is, we will present scores from L2 speakers in Koshin.

Table 36a: Active competences in Koshin

Consultants	**Sex**	**Scores/60**	**%**	**L1**	**L2**	**Comments**
QAT27	M	44	73.33	Buu	Koshin	Posed questions to visual stimuli
QAT142	M	29	48.33	Naki	Koshin	Code mixing
Total		2				
Percentage		**50**				

Table 36a above reveals scores from two L2 speakers from Buu and Naki. Results show that out of these two persons, one was actually competent in Koshin while the other had a near active competence in this language as he scored 48.33% in the visual stimuli.

The speaker QAT27 who is from Buu has active competence in the Koshin language as earlier reported. If we were to assess him on how well he follows the rule of the game, he would have been considered incompetent because he went out of the rules of interpreting the pictures. Instead of doing this, he considers the 3 pictures to be animate and at the contrary asked questions to them maybe expecting to get answers. From his action, we can say that the person who did the art succeeded greatly in putting up the pictures so much so that the Buu speaker considers them as human beings who could walk and even talk. The pictures were so real to him to be considered humans. Thus, instead of interpreting the pictures, he asked questions to them.

We can not say that he is not competent in the language since the questions were well posed. He just did not understand what was needed. The judge confirmed that he was competent when it comes to the rules of asking questions. This explains why he does not score below 3/5. He obtains a score of 73.33% showing he actually speaks this language because he made mention of all the themes that were being portrayed on these pictures. For example, the theme of hunting, praying, dancing, were portrayed in the form of questions, which included: Are you going for hunting? Are you praying to God? Are you harvesting maize? Instead of the following expected responses: this man is going hunting, this man is praying (to God) and these people are harvesting maize respectively. The consultant in question, does not have a relation from Koshin; he also does not bear a name from this place nor marry to a woman from Koshin. His knowledge of this language results from the fact that he lived in Koshin for 7 years with his sick father who was receiving treatment in Koshin. The reason he advances for having learnt this language is for the mere fact that, he wanted to ease communication between him and Koshin speakers while he was living there.

While the Naki speaker QAT142 scores **48.33%**. He declared he could speak a bit of Koshin because he lived with father there for two years. Apart from that, he does not have a relation from Koshin nor bears a name from here. The English interpretations we get under the 0 scores is due to judge's knowledge of the other languages spoken around him. There is the mixture of Naki and Fang languages in the place of Koshin. His scores shows that the interviewee uses a lot of code mixing between the Fang and the Koshin languages.

The above section has been concerned with assessing the competences of a Buu and a Naki speaker in the Koshin language. We have a total of 50% score from the two interviewees as one of them has active competence while the other who has near active competence in the language. Below, we are going to see how the different sexes scored in this language.

Table 36b: Active competences in Koshin by Gender

Sex	**Self-reported active competences**	**Actual active competences**	**Percentage**
Male	2	1	50
Female	0	0	0
Total	**2**	**1**	**50**

Table 36b above demonstrates that only males claimed they could speak Koshin. Out of the 2 speakers with declared competences in this language, 1 speaker had active competence in it while the other speaker had a near active speaker in the language since he scored 48.33% in it.

Table 36c: Active competences in Koshin by Age

Age	**Self-reported active competences**	**Actual active competences**	**Percentage**
18-32	0	0	0
33-56	0	0	0
57 and above	2	1	50
Total	**2**	**1**	**50**

Table 36c shows that no youth and middle age claimed they could speak Koshin. That is, only the old age group reported competence in this language. Out of those with self-

reported competence in this language, one person proved to have active competence in the language while the other has a near passive competence.

Table 36d: Active competences in Koshin by Degree/Grade

Degree of Competence	**Self-reported active competences**	**Actual active competences**	**Percentage**
Active competence	2	1	50
Near active competence	0	1	50
No active competence	0	0	0
Total	**2**	**2**	**100**

Table 36d above presents the degree of competences L2 speakers have in Koshin. As earlier said, of those with self-reported competence in this language, 50% (1) have active competence and 50% (1) has a near active competence. None among them was considered incompetent.

Below we are going to see the competences people had of the Fang language. Oral history states that; Fang is a 'new comer' in LF but it was noticed that Fang attracts many L2 speakers than any other language of LF from self-reported competences. In the following section, the active competences of L2 speakers will be seen in Fang.

Table 37a: Active competences in Fang

Consultants	**Sex**	**Scores/60**	**%**	**L1**	**L2**	**Comments**
QAT102	M	27.5	45.83	Buu	Fang	Code mixing and code switching
QAD25	F	38	63.33	Buu	Fang	
QAT135	M	54	90	Kung	Fang	Native speaker's competence
QAD24	F	48	80	Buu	Fang	Code mixing
QAT25	F	33	55	Buu	Fang	Code mixing
QAT125	M	1	1.66	Ajumbu	Fang	No competence
QAD28	M	41	68.33	Buu	Fang	
QAD23	M	10	16.66	Buu	Fang	No competence
QAT27	M	34	56.66	Buu	Fang	Posed questions to visual stimuli
QAT22	M	37	61.66	Buu	Fang	Code mixing
QAT101	M	37	61.66	Buu	Fang	
QAT103	F	6	10	Buu	Fang	No competence
Total		12				
Percentage		**58**				

Table 37a above demonstrates scores in Fang. Out of those with self-reported competences in Fang, 58% (12) have been proven competent in the Fang visual stimuli. Majority of the speakers though from diverse linguistics background, are really competent in this language. Very few of those people from Buu and Ajumbu were found not competent as they had no competence in this language.

Table 37b: Active competences in Fang by Gender

Sex	Self-reported active competences	Actual active competence	Percentage
Male	8	5	62.5
Female	4	3	75
Total	**12**	**8**	**66.66**

Table 37b above shows that of those with self-reported competence in Fang, 75% (3) of females were really competent and 62.5% (5) of males were also competent. In both sexes, some of those with self-reported competences were found not competent.

Table 37c: Active competences in Fang by Age

Age	Self-reported active competences	Actual active competence	Percentage
18-32	1	0	0
33-56	3	2	66.66
57+	8	5	62.5
Total	**12**	**7**	**58.33**

Table 37c demonstrates that of those with self-reported competences in Fang, 66.66% (2) of those from the middle age were really competent and 62.5% (5) from the old age group were also competent. The youths were found not competent in Fang.

Table 37d: Active competences in Fang by Degree/Grade

Degree of Competence	**Self-reported active competences**	**Actual active competences**	**Percentage**
Active competence	12	8	66.66
Near active competence	0	1	8.33
No active competence	0	3	25
Total	**12**	**12**	**100**

Table 37d above reveals that of those with self-reported competence in Fang, 66.66% (8) were really competent in it, while 8.33% (1) had near active competence and 25% (3) of these people were found with no competency levels.

4.3 The use of multilingualism

The use of multilingualism in LF encourages code switching and code mixing. We noticed during the interpretation of visual stimuli where L2 speakers in course of interpreting these pictures into target languages, they consciously or unconsciously bring in words or utterances from other languages found in their linguistic repertoires. We will discover L2 speakers switched and mixed codes based on the languages available at that time without regard to whether the language is spoken in or out of LF. Below, we will see those speakers who employed these two phenomena.

4.3.1 Analyses in Kung

The Koshin speaker QAT170 scored 88.33% in Kung. Though her father is from Koshin, mother from Fungom, because she lives in the Kung speaking section of Yemgeh, she has acquired the language with native speaker's accent. She has no relation from Kung and does not also bear a Kung name.

The 5/5 we see in her scores shows that the speaker produced utterances with a native speaker's accent. While 0/5 score she has in one of the pictures is because instead of using the Kung language, she interpreted the visual stimuli using the Fungom language which is one of the languages in which she has active competence in. She scored 3 because she emplores a bit

of Fungom in her interpretation. We see that, though she has a native speaker's competence in this language, she code switches and code mixes. Code switching is done where she completely abandons the Kung language and switches to Fungom which scored her a 0/5 in that utterance. While code mixing is noticed where she uses a bit of Fungom and Kung in an utterance which earned her a 3/5 in that utterance. Fungom is a language spoken out of Lower Fungom; very close to the Mmen language.

Speaker **QAT147** who is a Mufu-Mundabli male speaker claimed he could speak a bit of Kung. He scores a **0%** in the Kung visual stimuli test. Though he claimed he could speak a bit of Kung, scores demonstrate that he could not utter a word in Kung as what is produced is an utterance in the Aghem language, a language spoken in Wum which is located out of LF. See detail scores on visual stimuli in appendix 5.

4.3.2 Analyses in Fang

The table shows that the Buu speaker QAT10s speaks a bit of Fang as declared because he has a near active competence in this language. He uses a lot of code mixing and code switching in the place of Fang where we see scores like 0. His little knowledge of this language is due to the fact that he has Fang friends. Moreover, since he wants to maintain his relationship with these friends, he tried learning their language. He does not have a relation from Fang, nor a spouse from this place.

QAD24 speaker who is a Buu woman scored **48/60 x 100 =80%** in Fang during the assessment of her active competence in this language. Her scores in this language show that she has a native speaker competence in the language though she did some sort of mixing between the Fang and Mungbam language which she masters very well too. No matter her mixing of codes, she really demonstrates active competence in the target language. Her reasons for learning Fang are due to constant visits to Fang and would want to have discount in prices while there in Fang. She does not bear a name from Fang nor has a Fang relation. We will also be seeing scores from another speaker who is from Mufu, who claimed could also speak Fang.

The speaker QAT25 on the table above demonstrates that she has active competence in the Fang language. This is seen through her score as she scores above 50%. We notice a lot of code mixing between the Fang, Buu, Mungbam and Mufu-Mundabli languages in which she too is also competent. This explains why she has a series of 1, 2 and 3 which are scores

given when an interviewee does some sort of mixing of codes. She learns Fang through constant visits and as a result, wants to ease communication between her and Fang speakers. She declared that apart from Fang and Pidgin English, Fang speakers are not willing to learn other people's languages and it would sound abnormal if she starts using Pidgin English with them there though it is the only language they both share. She then resorted to learning Fang in order to ease communication between her and Fang people.

QAT22 who declared that he was competent in the Fang language actually have active competence in this language, as he is able to score a 61.66%. The speaker emplores a lot of code mixing with languages that are spoken in and out of LF, the speaker's scores show that he is competence in the language.

The Buu speaker QAT103 is not competent in the Fang language as she claimed. She has a score of 10% in this language. Due to her incompetency in the language, she was unable to interpret all the visual stimuli**.** Even with the few that she attempted, she does a lot of code mixing of Fang with Buu which is her father's language and Mufu, which is also her mother's language. While in others, she used different languages that are not even spoken in L F in interpreting the pictures in Fang.

4.3.3 Analyses in Naki

QAT105 who is a Mungbam (Biya) speaker in the Naki language proves he has some competency in the language with a score of **56.66%** though he used a lot of code mixing in his speeches but could at least speak the language.

The section above has revealed to us how multilingual speakers use languages and how their knowledge of other languages can sometimes influence their production of speech in languages they think they master.

4.4 Conclusion

In this chapter, we have been able to treat, present and analyse data in Kung, Fang and Koshin using the visual stimuli method. Results show that most of these L2 speakers can speak Fang. In the next chapter which is chapter five, we will deal with the rest of the data in the Mufu-Mundabli, Mungbam (Missong), Naki and Ajumbu languages. It should be borne in mind that, chapter five still has to do with assessing active competences in different languages of LF other than those that have just been assessed.

CHAPTER FIVE: TREATMENT, PRESENTATION AND ANALYSES OF DATA OBTAINED THROUGH THE VISUAL STIMULI IN THE MUFU-MUNDABLI, MUNGBAM, NAKI, BUU AND THE AJUMBU LANGUAGES

5. 1 INTRODUCTION

This chapter also captures data carried out through the use of the visual stimuli tool in the languages of Mufu-Mundabli, Mungbam, Naki and Ajumbu. The languages of Mufu-Mundabli, Mungbam and Naki are languages that are made up of more than one variety; they will be represented by the Mufu, the Missong and the Small Mekaf varieties respectively.

To begin with, speakers' competences will be assessed in Mufu-Mundabli. Mufu-Mundabli is a two-village language spoken in the villages of Mufu and Mundabli. Speakers of this language and even L2 speakers of the language claim that the two varieties are very identical. The variety that represented this language is known as Mufu. So scores that will be seen below will represent knowledge of Mufu.

Table 38a: Active competences in Mufu-Mundabli

CONSULTANTS	**SEX**	**SCORE/ 60**	**%**	**L1**	**L2**	**COMMENTS**
QAT102	M	49	81.66	Buu	Mufu-Mundabli	Native speaker's competence
QAD24	F	58	96.66	Buu	Mufu-Mundabli	Native speaker's competence
QAD23	M	48	80	Buu	Mufu-Mundabli	Native speaker's competence
QAT22	M	41	68.33	Buu	Mufu-Mundabli	
Total		**4**				
Percentage		**100**				

Table 38a demonstrates that of those with self-reported competences in Mufu-Mundabli, all of them, 100% (4) who are all Buu speakers were actually competent in this language and 75% (3) among them had native speakers' competences in this language as they scored 80% and above.

Table 38b: Active competences in Mufu-Mundabli by Gender

Sex	**Self-reported active competences**	**Actual active competences**	**Percentage**
Male	3	3	100
Female	1	1	100
Total	**4**	**4**	**100**

Table 38b above demonstrates that of those with self-reported active competences, males score 100% (3) and females also score 100% (1) in Mufu-Mundabli.

Table 38c: Active competences in Mufu-Mundabli by Age

Age	**Self-reported competences**	**Actual active competence**	**Percentage**
18-32	0	0	0
33-56	2	2	100
57 and above	2	2	100
Total	**4**	**4**	**100**

Table 38c above reveals that youths did not claims active competences in Mufu-Mundabli. Those with self-reported competences in this language were from the middle and old age groups and both age groupd were actually competent in this language as they all scored a 100% in the visual stimuli.

Table 38d: Active competences in Mufu-Mundabli by Degree/Grade

Degree of Competence	**Self-reported active competences**	**Actual active competences**	**Percentage**
Active competence	4	4	100
Near active competence	0	0	0
No active competence	0	0	0
Total	**4**	**4**	**100**

Table 38d above reveals that of those with self-reported competences in Mufu-Mundabli, all of them possess active competences in this language as they all scored 68.33% and above.

Below we are going to see how far L2 speakers could speak Mungbam. This is a language that is made up of five varieties of: Munken, Ngun, Abar, Biya and Missong. Since we are not concerned with multilectal assessment, L2 speaker's knowledges could not be measured in all the five lects. The Missong variety was chosen to act as a reference dialect to represent the Mungbam language. Reason being that some of the Missong speakers were among those who motivated our findings.

Table 39a: Active competences in Mungbam

CONSULTANTS	SEX	SCORES/ 60	%	L2	L1	COMMENTS
QAD25	F	56	93.33	Buu	Mungbam	Native speaker's competence
QAT25	F	46	76.66	Mufu-Mundabli	Mungbam	
QAT27	M	50	83.3	Buu	Mungbam	Native speaker's competence
QAT22	M	48	80	Buu	Mungbam	Native speaker's competence
QAT101	M	55	91.66	Buu	Mungbam	Native speaker's competence
QAT102	M	50	83.33	Buu	Mungbam	Native speaker's competence
QAD24	F	60	100	Buu	Mungbam	Native speaker's competence
Total		7				
Percentage		**100**				

Table 39a shows that of those with self-reported competences in Mungbam, all of them could actually speak the language as they scored a 100% (7). Majority of those with self-reported competences had native speakers' competence in this language, 85.71% (6) and were all Buu speakers. Buu speakers seem to be very interested in the Mufu-Mundabli and Mungbam (Missong) languages. This is because many Buu speakers appeared in the languages and their scores have proven their competences in the languages.

This speaker QAD24 scores: 60/60 x 100 = 100% in Mungbam (Missong). The judge attests that this speaker has native speaker's competence in the Mungbam language and went further saying that her mother is from Missong. This explains why she has this native competence. Meaning she acquired this language as a child though father is from Buu and she too is married to a Buu man. As earlier said above, it was discovered that; there is a high rate of interaction between people of LF so much so that they are able to identify a speaker just by hearing his or her voice even in recorded format.

This aspect of consultants identifying others' voices was noticed during the assessment exercise with the judges who at times after giving us the scores of a particular individual, they went further telling us who the individual was. Test-takers most at times also told us who our translators of the recorded tests were. The recorded texts that were used in the assessment of the passive competences through the RTT method.

Table 39b: Active competences in Mungbam by Gender

Sex	**Self-reported competences**	**Actual active competence**	**Percentage**
Male	4	4	100
Female	3	3	100
Total	**7**	**7**	**100**

Table 39b above reveals that of those with self-reported active competences in Mungbam, 100% (4) of males were really competent and 100% (3) of females too proved competent. That is, all of them were competent in the visual stimuli test.

Table 39c: Active competences in Mungbam by Age

Age	**Self-reported active competences**	**Actual active competences**	**Percentage**
18-32	0	0	0
33-56	2	2	100
57+	5	5	100
Total	**7**	**7**	**100**

Table 39c above reveals that only the middle and old age groups claimed they could speak Mungbam. Both age groups scored a 100% in this language.

Table 39d: Active competences in Mungbam by Degree/Grade

Degree of Competence	**Self-reported active competences**	**Actual active competences**	**Percentage**
Active competence	7	7	100
Near active competence	0	0	0
No active competence	0	0	0
Total	**7**	**7**	**100**

Table 39d demonstrates that out of those with self-reported competences in Mungbam, all of them had active competences in this language. We did not notice a near active nor no competency levels from these people.

Below we will be seeing how people's competences were assessed in the Naki language and the performances recorded.

Table 40a: Active competences in Naki

CONSULTANTS	**SEX**	**SCORES/60**	**%**	**L2**	**L1**	**COMMENTS**
QAT106	F	41	68.33	Mungbam	Naki	
QAT25	F	16	26.66	Buu	Naki	No competence
QAT105	M	34	56.66	Mungbam	Naki	Code mixing
Total		3				
Percentage		**66.66**				

Table 40a above shows that of those with self-reported active competences in Naki, 66.66% (2) of them were actually competent. Some of those with self-reported competences in this language were found not competent.

Table 40b: Active competences in Naki by Gender

Sex	Self-reported active competences	Actual active competences	Percentage
Male	1	1	100
Female	2	1	50
Total	**3**	**2**	**66.66**

Table 40b above demonstrates that of those with claims of speaking the Naki language, 100% (1) of males and 50% (1) of females were really competent. Among them, 50% (1) of females were found not competent.

Table 40c: Active competences in Naki by Age

Age	Self-reported actual competences	Actual active competences	Percentage
18-32	0	0	0
33-56	3	2	66.66
57 and above	0	0	0
Total	**3**	**2**	**66.66**

Table 40c above shows that both youths and the old age group did not claim active competences in Naki. Those with self-reported competences were all from the middle age group and majority of them were actually competent in this language.

Table 40d: Active competences in Naki by Degree/Grade

Degree of Competence	Self-reported active competences	Actual active competences	Percentage
Active competence	3	2	66.66
Near active competence	0	0	0
No active competence	0	1	33.33
Total	**3**	**2**	**66.66**

Table 40d above shows that of those with self-reported active competences, 66.66% were really competent and 33.33 of them were found not competent. There was no L2 speaker with a near passive competence level in the language.

Below we will be seeing a Buu speaker who was the only person out of the total population who attempted interpreting visual stimuli in the Ajumbu language. As a result, his scores in Ajumbu will be seen below.

Table 41a: Active competences in Ajumbu

CONSULTANT	SEX	SCORES/60	%	L2	L1	COMMENTS
QAD28	M	42	70	Buu	Aumbu	
Total		1				
Percentage		**100**				

The Buu male speaker QAD28 who attempted visual stimuli in Ajumbu scored: 42/60 x 100 =70%. The speaker above shows some competency level in the Ajumbu language with a score of **70%**. He has been so far the only LF speaker who does not only have passive competence in Ajumbu but has shown that he could actually speak it. No other speaker had neither passive nor active competence in the language.

Table 41b: Active competences in Ajumbu by Gender

Sex	Self-reported active competences	Actual active competences	Percentage
Male	1	1	100
Female	0	0	0
Total	**1**	**1**	**100**

Table 41b above reveals that the only L2 speaker wih self-reported cactive competence in Ajumbu was a male from Buu. His scores in this languages shows that he is actually competent in it.

Table 41c: Active competences in Ajumbu by Age

Age	Self-reported active competences	Actual active competences	Percentage
18-32	0	0	0
33-56	0	0	0
57 +	1	1	100
Total	**1**	**1**	**100**

Table 41c reveals that the only L2 speaker with self-reported competence in Ajumbu is from the old age group. He scores a 70% in the visual stimuli in this language. Though he did not claim that he understood this language during the pilot study, when the time for assessing real multilingual competences came which was during our second trip, he insisted he could speak this language and as a result, he had to interpret visual stimuli and even wordlists in the language.

Table 41d: Active competences in Ajumbu by Degree/Grade

Degree of Competence	Self-reported active competences	Actual active competences	Percentage
Active competence	1	1	100
Near active competence	0	0	0
No active competence	0	0	0
Total	**1**	**1**	**100**

Table 41d shows that the L2 speaker tested in Ajumbu had active competence in the visual stimuli. This explains why we have no speaker with near active and no competency levels.

From the presentations above, we will notice that Buu speakers with self-reported multilingualism are very multilingual. We will also notice that there is a Buu speaker who appeared in almost all the languages of LF with the exception where their representative of

Buu in this language could not score up to half of the total mark. The best scores so far have been demonstrated by Buu speakers who scored 96 and a 100%.

With the scores recorded by the Buu speakers in these languages, one may be tempted to conclude that proximity is an instrument for language acquisition/learning seen through their performances in the Fang, Mungbam and Mufu-Mundabli languages but how come these people do not reciprocate this? The Fang, Mufu-Mundabli and the Mungbam speakers could not even attempt to speak Buu. Does it mean Buu is closer to these language communities while they are not proximal to Buu? This could be seen whereby all the Buu speakers who attempted speaking the Mufu-Mundabli and Mungbam languages performed so well in them with scores ranging from 68.33%-96.66% and 76.66-100% respectively. Below, we are going to find out which sex group was more competent than the others.

TABLE 42: TOTAL PERFORMANCES BY GENDER PER LANGUAGE DURING VISUAL STIMULI

LANGUAGES	**MALES**		**FEMALES**	
	Self-reported competences	**Visual stimul competences**	**Self-reported competences**	**Visual stimuli competences**
Fang	8	5	4	3
Missong	4	4	3	3
Buu	0	0	0	0
Naki	1	1	2	1
Kung	5	4	5	5
Koshin	2	1	0	0
Mufu-Mundabli	3	3	1	1
Ajumbu	1	1	0	0
Total	24	19	15	13

Table 42 above reveals that of those with self-reorted active competences, 19 out of 24 were actually competent and 13 out of 15 females were also competent in all LF languages. In both sexes, some of those with self-reported competences were found not competent.

We can see that males are more multilingual than women in most of the languages as we see in the languages of Fang, Mungbam, Koshin, Mufu-Mundabli and Ajumbu. We notice only very few cases where women are being more competent than men like in the Kung language. Above, we have been focused on knowing which sex is more multilingual than the other, below, we will be presenting the age group that possess competences in many languages than the others. As earlier said above, our target population was divided into three age groups: the youths, the middle and old age groups. Our concern here is to know which amongst these three is the most competent.

TABLE 43: TOTAL PERFORMANCES BY AGE GROUP PER LANGUAGE DURING VISUAL ATIMULI

LANGUAGES	18-32		33-56		57+	
	Self-reported competences	**Visual stimuli competences**	**Self-reported competence**	**Visual stimuli competence**	**Self-reported competences**	**Visual stimuli competences**
Fang	1	0	3	2	8	5
Missong	0	0	2	2	5	5
Buu	0	0	0	0	0	0
Naki	0	0	3	2	0	0
Kung	6	6	3	2	1	1
Koshin	0	0	0	0	2	1
Mufu-Mundabli	0	0	2	2	2	2
Total	7	6	13	10	18	14

Table 43 proves to us that, apart from the Kung language where youths could speak and possess the highest degree of competences than the other two groups, youths do not speak any other language of LF apart from their native languages. If we have to draw a conclusion from this, we will say that, youths have passive competences in most of the LF languages with no active competences except in Kung.

We can also see that the old people are multilingual than the middle age. These old age group was the most competent of all the groups both in their assessment of passive and active competences.

Conclusively, youths possess some sort of passive competences in some of the languages of LF but could only speak the Kung language even more than middle and old people.

FIGURE 10: ACTIVE COMPETENCES IN RELATION TO SEX IN ALL LANGUAGES

Figure 10 above shows the performances of both the males and females. It can be seen that males are really more competent than females thus confirming previous works like Angiachi (2013), Di Carlo (2015), who worked on the reported rates of individual multilingualism showed that males are more competent than females.

On the chart, of those with self-reported in all the languages of LF, 19 of them were males and 13 females This also falls in line with what we find researchers like O Barr (1971), Warnier (1979) and Scotton (1982**)** who all agree to the fact that men are more multilingual than women as a result, more expose to languages because they are more mobile than women as they move about in search of job opportunities and for trade reasons. Below, we are going to see how the different sex performed.

FIGURE11: ACTIVE COMPETENCES IN RELATION TO AGE IN ALL LANGUAGES

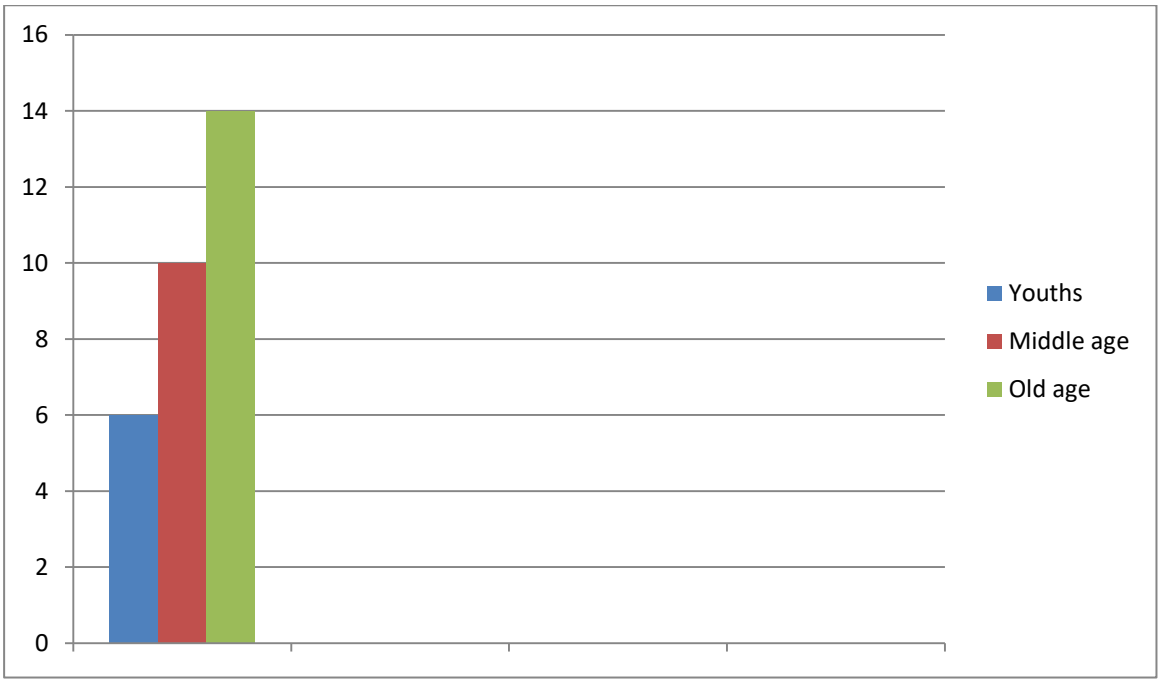


Figure 11 presents the degree of competences per age group. It can be seen that, the elderly persons (old age) is the most competent group of persons as far as assessing active competences of these languages are concern. We see that 14 people from the old age groups have active competences in all the languages of LF. While the middle age and the youths have 10 and 6 L2 speakers respectively. We will now place these languages according to the levels by which they attract L2 speakers.

FIGURE 12: HIERARCHICAL PRESENTATION OF SPOKEN LANGUAGES

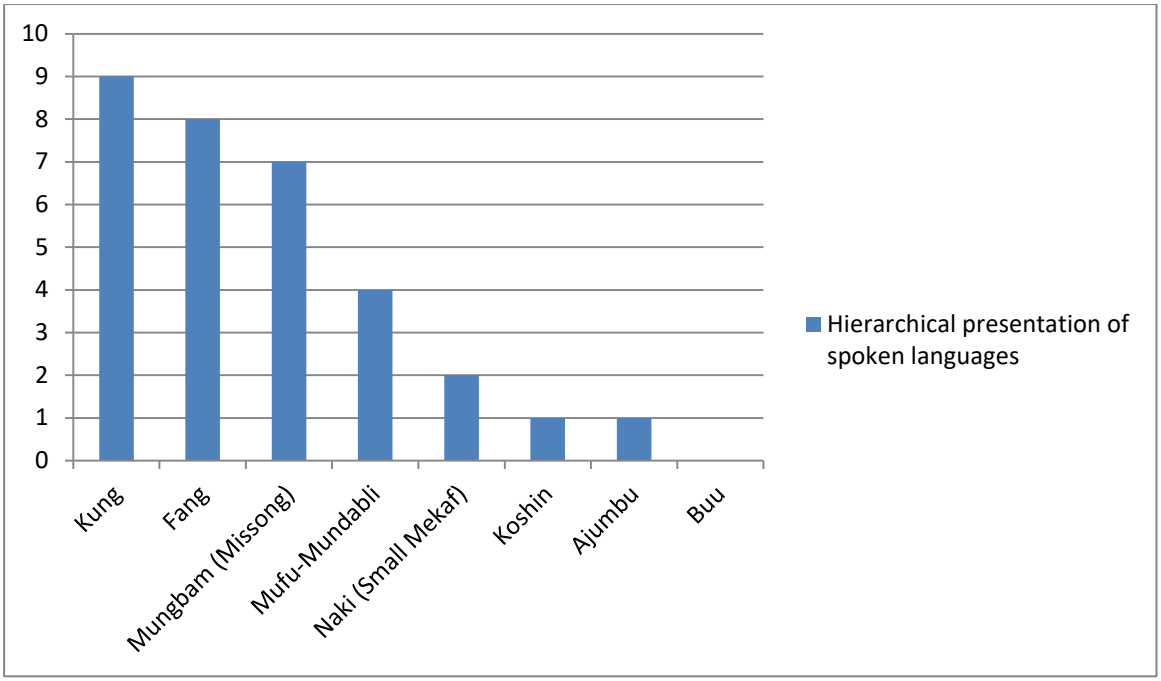


Table 43 and figure 12 show that of those with self-reported Kung is the most widely spoken languages in this area as they attract more L2 speakers than any other language of this area. The Fang language which is th highest known language here, is the secondly widely spoken by L2 speakers. The third most widely spoken language is that of Mungbam, represented by the Missong variety. Mufu-Mundabli occupies the fourth position as far as number of L2 speakers are concern. While Naki falls at the firth position with 2 speakers. Both Koshin and Ajumbu attract an L2 speaker each. It is very surprising to find that Ajumbu which did not attract any L2 speaker during the passive competency test, now has someone from Buu who has demonstrated that he can speak the language. When people's passive competences were tested in this language, nobody could understand the text that was recorded in the language. Most responses from those who could even identify the language in the tape ended up saying that Ajumbu was too difficult. Also, Buu people who happen to be some of those who understood and spoke many LF languages, did not attract any L2 speaker. That is, no L2 speaker could speak Buu though it is proximally affined to Fang, Abar and Missong.

In the next section, we will compare self-reported active competences with actual competences in the visual stimuli which was out to test active competences of multilingual L2 speakers of LF.

TABLE 44: DECLARED VS ACTUAL ACTIVE COMPETENCES BY QAT25

QAT25 (F)	**Declared competences on 5**	**Old code**	**Actual passive competences on 100**	**Old and Newcodes**	**Village**	**Sex**	**Age**	**Actual active competences/100**
					Mufu	**Female**	**45yrs**	
		QAT 25		**QAT25**	**Mufu**	**-**	**-**	
	Naki (4)	-	Naki (10)	-	-	-	-	**26.66%**
	Mungbam (3)	-	Mungbam (96)	-	-	-	-	**76.66%**
	Koshin (3)	-	Koshin (0)	-	-	-	-	**0**
	Ajumbu (3)	-	Ajumbu (0)	-	-	-	-	**0**
	Mufu-Mundabli (5)	-	Buu (80)	-	-	-	-	**95%**
	Fang (4)	-	Fang (95)	-	-	-	-	**55%**

Table 44 above shows the declared and the actual competence a Buu speaker has of LF languages. The dashes (-) show that it is the same like the caption. So they is no need repeating so as to avoid monotony. For example, the dashes under the code caption show that, apart from the Fang language, the other languages competences are also found in the same file like that of Fang, same applies to the village, sex and age. The speaker demonstrates active competences in Mungbam, Mufu-Mundabli and the Fang languages with a score of 76.66%, 95% and 55% respectively. In her reported competences, she declared that she could speak just a bit of Mungbam whereas she could really speak it very well seen in her score of 76.66%. Her reported competence in the Mufu-Mundabli language actually matches with her actual competences while that of Fang does not match with what she reported in this language. In her report, she said she could speak this language very well but her actual active competence proves that she could only speak a bit of it as seen in the scores she has in this language which are; of 55%.

In a nutshell, the Buu female above claimed she could speak 6 languages spoken in LF, her scores show that she can actually speak 4 including her L1. Below, we will be

presenting declared competences and the actual performances of another Buu speaker will be demonstrated on the table below.

TABLE 45: DECLARED COMPETENCES ACTIVE COMPETENCES BY QAD25

QAD25 (F)	**Declared competences on 5**	**Old code**	**Actual passive competences on 100**	**Old and New codes**	**Village**	**Sex**	**Age**	**Actual active competences/100**
					Buu	**Female**	**65yrs**	
		QAD 25		**QAD25**	**Buu**	-	-	
	Mungbam (3)	-	Mungbam (70)	-	-			**93.33%**
	Mufu-Mundabli (3)	-	Mufu-Mundabli (78)	-	-			**0**
	Kung (3)	-	Kung (0)	-	-			**0**
	Koshin (3)	-	Koshin (0)	-	-			**0**
	Ajumbu (3)	-	Ajumbu (0)	-	-			**0**
	Fang (3)	-	Fang (40)	-	-			**63.33%**

Table 45 above shows that the informant's reported competences of the Mungbam and Mufu-Mundabli languages are true. While those he made of Kung, Koshin, Ajumbu and Fang languages are false. In reporting her competences for all the above-mentioned languages, we were made to understand that not only did she understand the languages but could speak a bit of them too. Our assessments have proven that the speaker was not even able to identify the languages of Kung, Koshin and Ajumbu. She only understands just a bit of Fang and cannot speak it. She performed more than what she reported in the Mungbam language. In her report, we were made to know that she could speak just a bit of this language but in the test of her actual performances, we see that she has native speaker's competence in the language. While she actually speak a bit of Fang as reported though she scored below average in the testing of her passive competence. The Buu female speaker we see above can speak 2 out of the 6 languages she claimed she was competent in. It should be borne in mind that conclusions given about L2 speakers' competences exclude his/her L1 since we already know that for a

consultant to be involved in the test, he/she must also be competent in his/her L1. Below, we will find scores of another core consultant who is still a speaker of Buu.

TABLE 46: DECLARED COMPETENCES VS ACTUAL ACTIVE COMPETENCES QAD 28

ZOOM0053 (M)	**Declared competences on 5**	**Old code**	**Actual pssive competences on 100**	**New Code**	**Village**	**Sex**	**Age**	**Actual active competences**
					Buu	**Male**	**61yrs**	
		QAD 28			**Buu**	**-**	**-**	
	Mungbam (3)	-	Mungbam (70)	**ZOOM0053**	-			**0**
	Mufu-Mundabli (3)	-	Mufu-Mundabli (0)	-	-			**0**
	Koshin (3)	-	Koshin (0)	-	-			**0**
	Ajumbu (4)	-	Ajumbu (0)	-				**70%**
	Fang (3)	-	Fang (60)	**ZOOM0054**	-			**68.33%**

Table 46 presents the competences the informant has of the various languages of LF. His passive competence level for the Fang language can be viewed in the above file glued to the Fang language. While those of the other languages are found in a file different from that of Fang (**ZOOM0053**).

We notice from the table that what the speaker declared of his competences in the above mentioned languages do not really match his declarations. He has passive competences in the Mungbam and Fang languages. He reported he could speak a bit of Mufu-Mundabli, Koshin languages and understand a bit of Kung with a complete passive competence in the Naki language. However, results gotten from his actual competencies are that he could not even identify these languages thus scoring him a 0 in each of those languages. However, his declared competences of the Ajumbu and Fang languages match his declarations with scores: 70 and 68.33% respectively.

In the test of his passive competence in the Ajumbu language, he understood nothing from the test and could not also identify this language that is why he scored a (0%) but insisted that he could speak the Ajumbu language. And when he was tested in the language, he proved that he was actually competent in the language (can speak it very well) as seen in his scores above.

Basing our analyses on his declared active competences, the Buu man above claims he could speak 5 other LF languages including his native Buu language. However, results reveal that he can speak just 2 out of the 5 he claimed he could speak. Using the constant comparative method of Glacer and Strauss (1967), scores of another Buu speaker will also be compared with his previous declarations.

TABLE 47: DECLARED COMPETENCES VS ACTUAL ACTIVE COMPETENCES BY QAD23

QAD23 (M)	**Declared competences on 5**	**Old code**	**Actual passive competences on 100**	**Old and New codes**	**Village**	**Sex**	**Age**	**Actual active competences**
					Buu	**Male**	**60yrs**	
		QAD 23		**QAD23**	**Buu**	**-**	**-**	
	Mungbam (3)	-	Mungbam (90)		-			**0**
	Mufu-Mundabli (3)	-	Mufu-Mundabli (70)	-	-			**80%**
	Kung (2)	-	Kung (0)	-	-			**0**
	Koshin (3)	-	Koshin (0)	-	-			**0**
	Naki (2)	-	Naki (0)	-	-			**0**
	Fang (3)	-	Fang (80)		-			**16.66%**

On table 47 above, we notice that this speaker reported competences in the Mungbam, Mufu-Mundabli and Fang languages are confirmed in the assessment of his actual passive competences in these languages. Though not true with those of Kung, Koshin and the Naki languages. His reported competences for these languages were that, while he could

understand and speak a bit of Koshin, his competencies in the languages of Kung and Naki languages were reported to be complete passive competences. That is, understanding these languages very well though not being able to speak them. However, results demonstrate that he has a native speaker's competence in the Mufu-Mundabli language though during his report in the pilot study of 2012, he declared he could speak just a bit of Mufu-Mundabli.

In sum, table 47 we find above shows that this speaker who is a man from Buu declared that he could speak 5 languages of the LF area, his results show that he is actually competent in two of these languages. Declared competences of another Buu speaker will be compared below with what he actually possess.

TABLE 48: DECLARED COMPETENCES VS ACTUAL ACTIVE COMPETENCES BY QAT27

QAT27 (M)	**Declared competences on 5**	**Old code**	**Actual passive competences on 100**	**Old and New codes**	**Village**	**Sex**	**Age**	**Actual active competences**
					Buu	**Male**	**68yrs**	
		QAT 27		**-**	**Buu**	**-**	**-**	
	Mungbam (4)	-	Mungbam (85)	-	-			**83.33%**
	Naki (3)	-	Naki (0)	-	-			**0**
	Kung (3)	-	Kung (0)	-	-			**0**
	Koshin (3)	-	Koshin (90)	-	-			**73.33%**
	Ajumbu (3)	-	Ajumbu (0)	-	-			**0**
	Fang (4)	-	Fang (85)	-	-			**56.66%**
	Mufu-Mundabli		Mufu-Mundabli (80)	-				**0**

During the speaker's declared competences, the language of Mufu-Mundabli was not included. This explains why no mark is allocated for his reported competence in this language. Nevertheless, during the testing proper, since the researcher tested them in all the languages even in those the informants did not report to have competences in, it was

discovered that the above informant had passive competence in the Mufu-Mundabli language with a score of **80%,** though he does not have active competence in the language as seen on the table above.

The consultantt's claim was that of being competent in 7 languages of LF including his language with an exemption of Mufu-Mundabli. From the table, it is seen that his claim for being competent in the Mungbam, Koshin, and Fang has been proven true in the passive competence test while those of Naki, Kung and Ajumbu is contrastive to those claims for he was not able to identify these languages in his actual assessment test.

Although the speaker reported that he could speak the Mungbam language very well, we found out that he really has native speaker's competence in the language with a score of **83.33%** and his claims that he could actually speak Fang very well, has shown that he can only speak a bit of it, as seen in his scores **(56.66%)** above.

His declared competences were in 6 languages that were not his native languages and the result we find above show that he is having active competence in 3 languages. We will find below, another speaker whose declared competences were compared with her actual competences.

TABLE 49: DECLARED COMPETENCES VS ACTUAL ACTIVE COMPETENCES BY QAD24

QAD24 (F)	**Declared competences on 5**	**Old code**	**Actual passive competences/100**	**and codes**	**Village**	**Sex**	**Age**	**Actual active competences/100**
					Buu	**Female**	**56yrs**	
		QAD 24		**QAD24**	**Buu**	-	-	
	Mungbam (3)	-	Mungbam (98)	-	-			**100%**
	Mufu-Mundabli (3)	-	Mufu-Mundabli (90)	-	-			**96.66%**
	Koshin (3)	-	Koshin (0)	-	-			**0**
	Fang (3)	-	Fang (80)	-	-			**80%**

Table 49 above shows that this speaker claimed she could speak 4 other languages of LF. The scores she obtains show that she speak 3 out of 4 of these L2. She reported in the pilot study that she could speak just a bit of the Fang, Mufu-Mundabli and the Mungbam languages. But in the test of her actual active competences in these languages, she proves to have native speaker's competencies in the languages with scores: 80%, 96% and a 100% respectively. This means that the interviewee has native speaker's competences in four of LF languages including her language (Buu) though she declared she could speak 5 of the languages. Her case is really different from others as they always report high degrees of competences which always come out to be the reverse. She claims her knowledge of these languages was very limited. This explains why she reports that she could speak just a bit of the languages whereas, she had native speaker's competences in those languages. Declared versus actual competences of another Buu speaker will be seen below.

TABLE 50: DECLARED COMPETENCES VS ACTUAL ACTIVE COMPETENCES BY QAT22

QAT22 (M)	**Declared competences on 5**	**Old Code**	**Actual passive competences/ 100**	**Old and New codes**	**Village**	**Sex**	**Age**	**Actual active competences/100**
					Buu	**Male**	**55yrs**	
		QAT22		**QAT22**	**Buu**	-	-	
	Fang (4)	-	Fang (60)	-	-			**0**
	Mungbam (3)	-	Mungbam (0)	-	-			**80%**
	Mufu-Mundabli (4)	-	Mufu-Mundabli (80)	-	-			**68.33%**
	Naki (3)	-	Naki (0)	-	-			**0**
	Kung (3)	-	Kung (50)	-	-			**51.66%**

Table 50 shows that the speaker's claim of being competent in the Mungbam, Mufu-Mundabli and Kung languages have been proven to be true while those of Fang and Naki do not correspond with the speaker's reported competences.

The above speaker reported that he could speak Fang and Mundabli very well, a bit of Mungbam and a bit of Kung. We discovered that his claims on the Kung and the Mufu-Mundabli languages came out to be true while he underestimated his capacity in the

Mungbam language where he has proven native speaker's competence. In this language, the speaker reported that he could speak just a bit of it but in the actual test, he showed native speaker's competence. And at the same time, it is surprising that the interviewee declared he speaks a bit of this language, but in his test of his passive competence, he scored a **(0%)** meaning that he could not even identify the language but proved native speaker's competence **(80%)** when his active competence in this language was tested. The result we find above show that the Buu male speaker we find here claimed competences in 6 languages and the above analyses have proven that he can speak 4 languages from this area of LF. Both declared and actual competences of a Mufu-Mundabli speaker will be seen below.

TABLE 51: DECLARED COMPETENCES VS ACTUAL ACTIVE COMPETENCES BY QPP22

QPP22(F)	**Declared competences / 5**	**Old Code**	**Actual passive competences/100**	**Old and New codes**	**Village**	**Sex**	**Age**	**Actual active competences/100**
					Mufu	**Female**	**48yrs**	
		QPP22		**QPP22**	**-**	**-**	**-**	
	Buu (4)	-	Buu (60)	-	-			0
	Fang (3)	-	Fang (75)	-	-			0
	Mungbam (3)	-	Mungbam (70)	-	-			0
	Naki (4)	-	Naki (0)	-	-			0

The speaker's declared competences for the Buu, Fang and Mungbam languages correspond to her actual passive competences as she scored above 50% as she claimed but this is not true of the Naki, Koshin and Kung languages which she claimed could speak and understand respectively. The speaker claimed to be able to understand and speak the Naki language while she could understand a bit of Koshin and Kung. But it is rather ironical that she could not even identify these languages. Normally, in language acquisition/learning, the first thing one does in acquiring a language is first of all by identifying it, understanding it a bit, understanding it well and can then start speaking depending on the level of his/her

exposure and motivations toward the language. It becomes very provocative when an individual declares that she is able to speak a language very well but ends up not even being able to identify that language and not even picking a word from it. From the scores, we can see that the speaker has passive competences in Buu, Fang and Mungbam languages but do not have any level of active competences in them as seen above. In previous works, this Mufu woman claimed she could speak 5 LF languages, results have proven that out of the 5 languages she claimed she could speak, she could only actually speak her native language which is that of Mufu-Mundabli. The competences of a Missong speaker will also be compared below.

TABLE 52: DECLARED COMPETENCES VS ACTUAL ACTIVE COMPETENCES BY QAT16

QAT16 (M)	**Declared competences/ 5**	**Old code**	**Actual passive competences/100**	**Old and New Codes**	**Village**	**Sex**	**Age**	**Actual active competences/100**
					Missong	**Male**	**70yrs**	
		QAT16				**-**	**-**	**-**
	Ajumbu (2)		Ajumbu (0)	-	-			-
	Koshin	-	Koshin (0)	-	-			-
	Fang (2)	-	Fang (0)	-	-			-
	Buu (2)	-	Buu (90)	-	-			-
	Mufu-Mundabli (3)	-	Mufu-Mundabli (60)	-	-			-
	Naki (2)	-	Naki (0)	-	-			-
	Kung (2)	-	Kung (0)	-	-			-

On table 52 above, we notice that just two of the languages out of the seven languages the speaker reported to be competent in are true in five of the languages, the speaker's scores a 0 because he was not even able to identify these languages he had earlier reported to understand well. He only has passive competences in the Buu and Mufu-Mundabli languages as claimed while he is not competent in the Ajumbu, Koshin, Fang, Naki and Kung languages. As far as testing his active competences in the languages are concerned, the speaker openly told the researcher that he could not speak the language (Mufu-Mundabli)

though he reported he could speak a bit of it. The dashes (empty spaces) under the actual active competence column is because the speaker's active competence was not tested in any language. The Missong speaker above, declared to be having active competences in one LF language which is that of Mufu-Mundabli, including his Missong variety which is a variety of Mungbam. The analyses we find above have shown that he is only competent in his native Missong as he refused to be tested in Mufu-Mundabli declaring that he could not speak it. Competences of a speaker from Missong will be compared below.

TABLE 53: DECLARED COMPETENCES VS ACTUAL ACTIVE COMPETENCES BY QAT17

QAT17 (M)	**Declared competences on 5**	**Old Code**	**Actual passive competences on 100**	**Old and New Codes**	**Village**	**Sex**	**Age**	**Actual active competences/100**
					Missong	**Male**	**68yrs**	**-**
		QAT17		**QAT17**		**-**	**-**	**-**
	Koshin (3)	-	Koshin (0)		-			-
	Fang (2)	-	Fang (0)	-	-			-
	Buu (3)	-	Buu (80)	-	-			-
	Mufu-Mundabli (3)	-	Mufu-Mundabli (40)	-	-			-
	Naki (3)	-	Naki (0)	-	-			-

From table 53 above, one can see that only the declared competence in the Buu language correspond to the actual passive competences. There is a near passive competency level in the Mufu-Mundabli language which could still be that his declared competence of this language is true reason being that his scoring below **50%** could still be that he was not very keen in listening to the Mufu-Mundabli text when it was being played. But he is totally not competent in the Koshin, Fang, and Naki languages as he claimed because he could not even identify these languages when he was being tested. The Mungbam speaker like the one above declared that he did not have active competences in any of the languages. This explains why the column that had to do with the actual active competence is filled with dashes. He reported

that he could speak a bit of koshin, Buu, Mufu-Mundabli and the Naki languages but ended up not being able to produce anything in these languages.

The Missong man we find in **QAT17** above declared he could speak 5 LF languages but results show that he speaks just his L1.

On figure 13 below, we are going to find scores declared by all the core consultants and their actual competences.

FIGURE 13: DECLARED PASSIVE VERSUS ACTUAL PASSIVE COMPETENCES OF ALL SPEAKERS

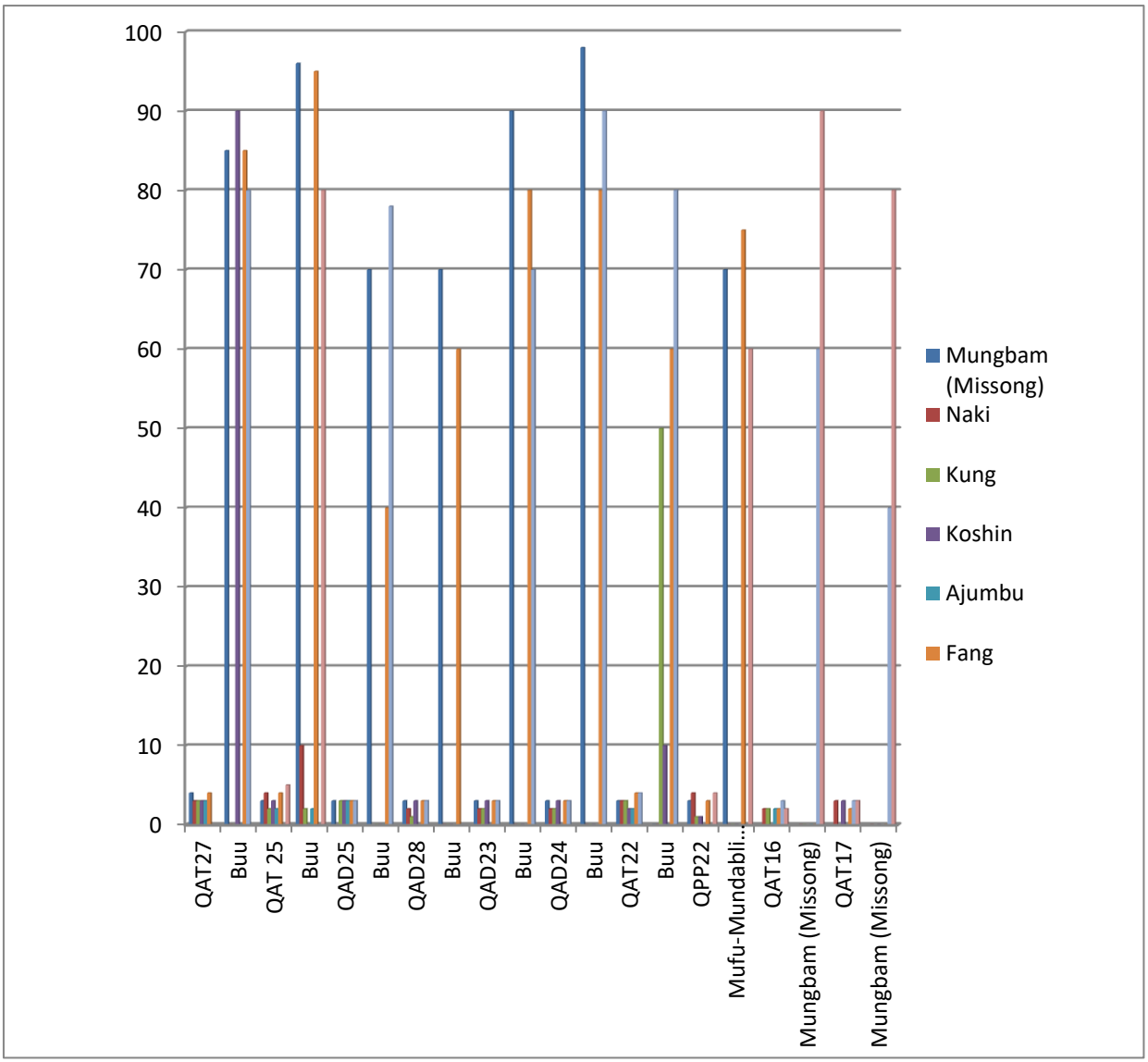


Figure 13 above presents results on the declarations of L2 speakers and their actual performances. When we talk of actual competences at this juncture, we are still concerned with the passive competences because results of declared active competences and speakers' actual performances will be shown on the subsequent figures.

From the comparison, one can see that what they all declared is not actually what is happening. They happened to be too enthusiastic when reporting their competences. This explains why they enumerated even languages they knew nothing about. If we relied only on these reported competences, we would have come to the conclusion that they all at least had

passive competences in 6 of the LF languages including theirs. But if we also conclude by saying that these people are not multilingual because they are not as multilingual as they claimed, this would be an over statement. The least amongst them has at least passive competences in three languages including his/her own native language while speaker E is the most multilingual of all as he shows passive competences in five of the LF languages with his language inclusive not counting the Pidgin English that was a means of communication between the consultant and the researcher, not leaving out those languages they also know that are spoken out of LF. The above chart gives a general view of what consultant declared and their performances. The figure below, clearly show the number of languages each of these 'core' consultants understood.

FIGURE 14: NUMBER OF KNOWN LANGUAGES PER CORE CONSULTANTS

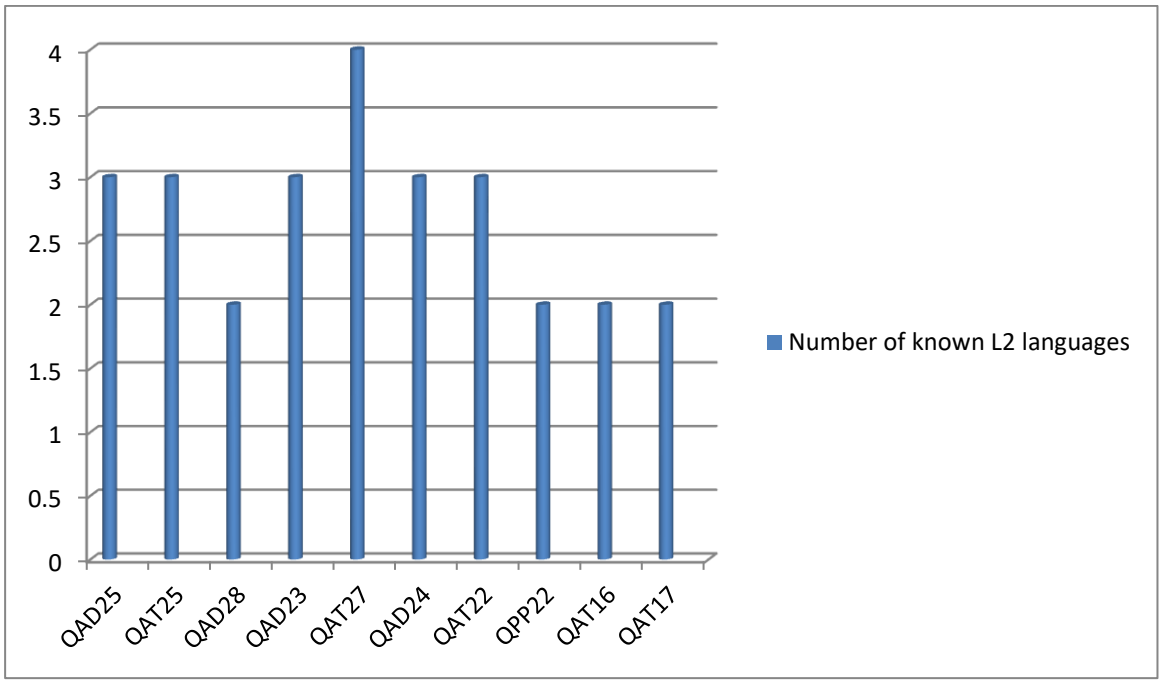
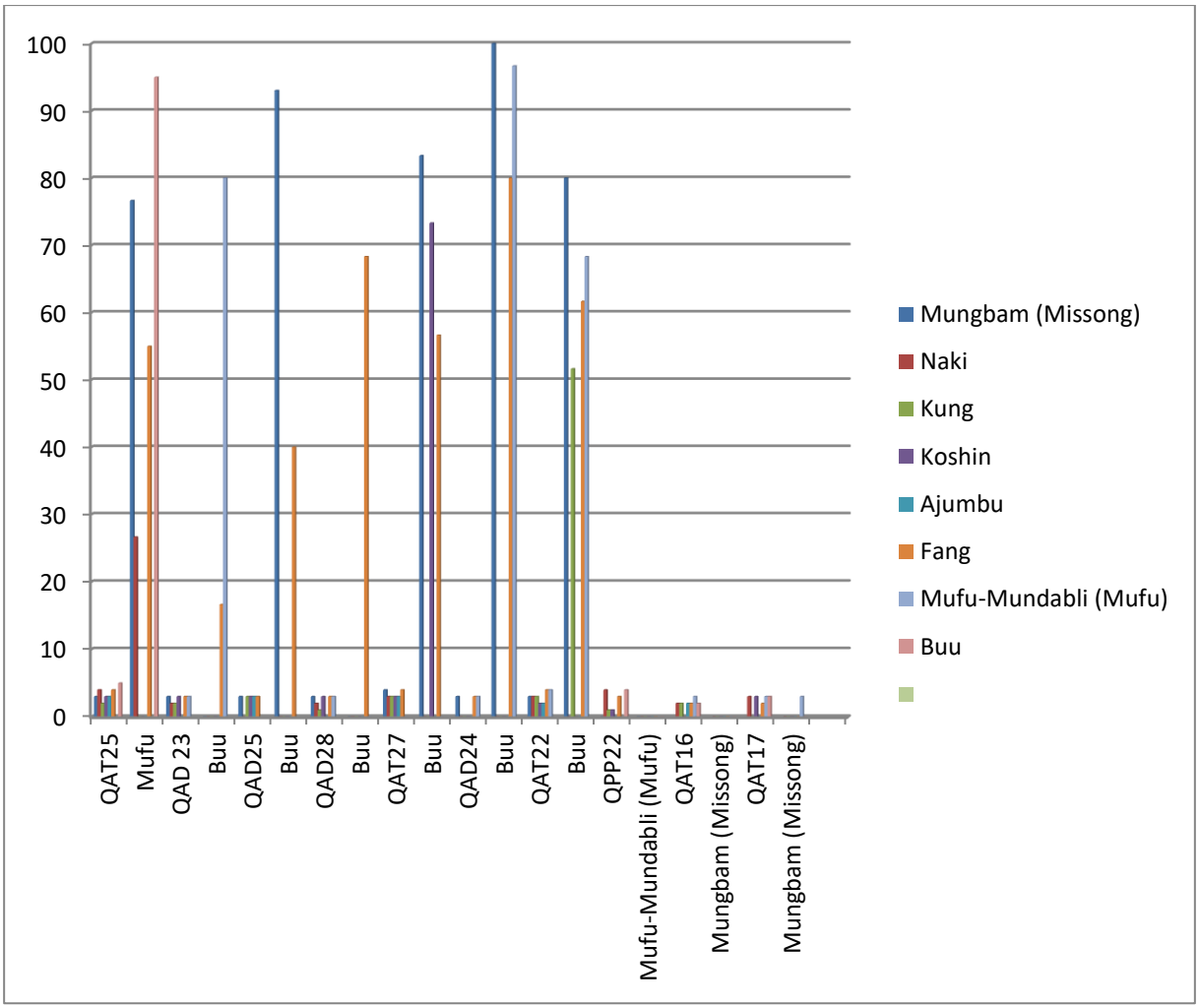


Figure 14 above presents scores of our core consultants. They are considered core consultants because this study was provoked by their claims. They make claims of being able to understand between 8 to 17 languages. (See also Angiachi (2013), Di Carlo (2015). These claims also included those languages that were spoken out of LF, and since our study was based on assessing multilingualism in LF, we decided to tackle just those languages whose linguistic communities are found here. The languages include, Ajumbu, Kung, Naki, Buu, Mufu-Mundabli, Mungbam, Fang and Koshin. The chart therefore demonstrates that core consultants have passive knowledge of these languages as they could actually understand recorded texts in two or more of the languages listed above. On the chart, we notice that four

speakers understood two other LF languages. Other four consultants showed proves of being able to comprehend three other languages of this area and one speaker could understand four other LF languages. It should be noted that, these people were not tested in their languages since one of the criteria for choosing them were that they must be very competent in their languages.

Below, we will also see those core consultants who claimed they were able to speak these languages and the results obtained thereafter.

FIGURE 15: DECLARED ACTIVE COMPETENCES VERSUS ACTUAL ACTIVE COMPETENCES BY ALL CONSULTANTS



5.2 Interpretation of chart

Figure 15 shows that speaker QAT27, QAT25, QAD25, QAD28, QAD23, QAD24, QAT22, QPP22, QAT16, QAT17 declared competency in almost all the LF languages but

their performances proved that not all the languages could be understood by them. Nevertheless, we see that they are really multilingual as each L2 speaker could understand at least two or more Other LF languages.

The chart shows that ten speakers from Buu, Mufu and Missong were selected based on their previous declarations. These ten were selected to act as core consultants or 'pioneer' group to our research. L2 declared competences were rated on 5 while actual performances were on 100. We see here that one person who is a male speaker from Buu understand 4 other lower Fungom languages, six other L2 speakers from Buu and Mufu had passive competences in 3 other LF languages while three others could understand two other L2 languages spoken in LF.

It should be borne in mind that, these are our initial targeted speakers whose passive competences were tested. Those whose declarations provoked our findings. Previous works like Di Carlo (2015) and Angiachi (2013) presents findings on the declared rates of multilingualism by these L2 speakers. Paraphrasing Di Carlo (2015) people declared their competences in many languages including those that were spoken out of LF. He tells us that people in this limited area of land justify their multilingual competences through multiple affiliations, personal interests, and spiritual insecurity.

From an individual-centred point of view, they will to be part in a group ensuring cooperation, loyalty, and solidarity on the part of fellow members can be seen as a response to a basic, universal drive: that of securing personal well-being and interests. He compared ideologies of the Western world to those of LF where westernised world as secularised worlds based their well-being and personal interest in relation to material gains and not just because they want to index through cooperation, being loyal, and because of solidarity. The chart therefore presents what L2 speakers declared about their levels of competences and the actual competences they have of these languages. What they declared were scored on 5, while their actual competences were measured on 100 percentages.

Below, we will find a summary concerning the number of languages spoken by each core consultants.

TABLE 54: TABLE SUMARIZING SCORES OF CORE COMPETENT L2 SPEAKERS DURING VISUAL STIMULI TEST

Old codes	**Languages**	**Declared competences on 5**	**Actual competences on 100**	**Old and New codes**	**Village**	**Sex**	**Age**
						Male	
QAT25	Mungbam(Missong)	3	76.66	**QAT25**	**Mufu**	**Female**	**45yrs**
-	Buu	5	95	-	-	-	-
-	Fang	4	55	-	-	-	-
QAD25	Mungbam(Missong)	3	93.33	**QAD25**	Buu	Female	65yrs
	Fang	3	63.33	-	-	-	-
QAD28	Ajumbu	3	70	**QAD28**	Buu	Male	61yrs
	Fang	3	68.33	-	-	-	-
QAD23	Mufu-Mun	3	80	**QAD23**	Buu	Male	60yrs
QAT27	Mungbam(Missong)	4	83.33	**QAT27**	Buu	-	68yrs
	Koshin	3	73.33	-	-	-	-
	Fang	4	56.66	-	-	-	-
	Mufu-Mun	-	80	-	-	-	-
QAD24	Mungbam(Missong)	3	100	**QAD24**	Buu	Female	56yrs
	Mufu-Mun	3	96.66	-	-	-	-
	Fang	3	80	-	-	-	-
QAT22	Mungbam	4	80	**QAT22**	Buu	Male	55yrs
	Mufu-Mun	4	68.33	-	-	-	-
	Kung	3	51.66	-	-	-	-

	Fang	4	61.66	-	-	-	-

Table 54 presents results of core consultants during the visual stimuli that had to do with testing actual competences. Looking at the table, we can see that, the least speaker had a score of 3, meaning, speaks well while the greatest majority proved that they spoke the languages very well as they scored 4. They were also some of them with native speakers' competences as they scored 5. We can see that it is possible to have native speaker's competency level in more than one language.

The table presents results of core consultants during the visual stimuli that had to do with testing actual competences. Looking at figure 15 and the table above, it can be seen that 3 persons who declared to be able to speak some of these languages do not appear on the table because their results show that they could not speak them as declared. These speakers include a Mufu woman with code QPP22 and 2 Missong men with codes QAT16 and 17 respectively. During the pilot study, the above three consultants claimed they could speak some of the languages of this area but during the testing proper they refused being tested declaring that they could not speak those languages as they claimed. Whatever be the case, we have noticed that in this area of LF, there many case of individual multilingualism as most of our L2 speakers could not only understand two or more languages of LF, they could actually speak them with some having native speakers' competences in some of those languages.

Table 54 will be further clarified on the figure 16 below.

FIGURE 16: NUMBER OF SPOKEN LANGUAGES PER CORE CONSULTANTS

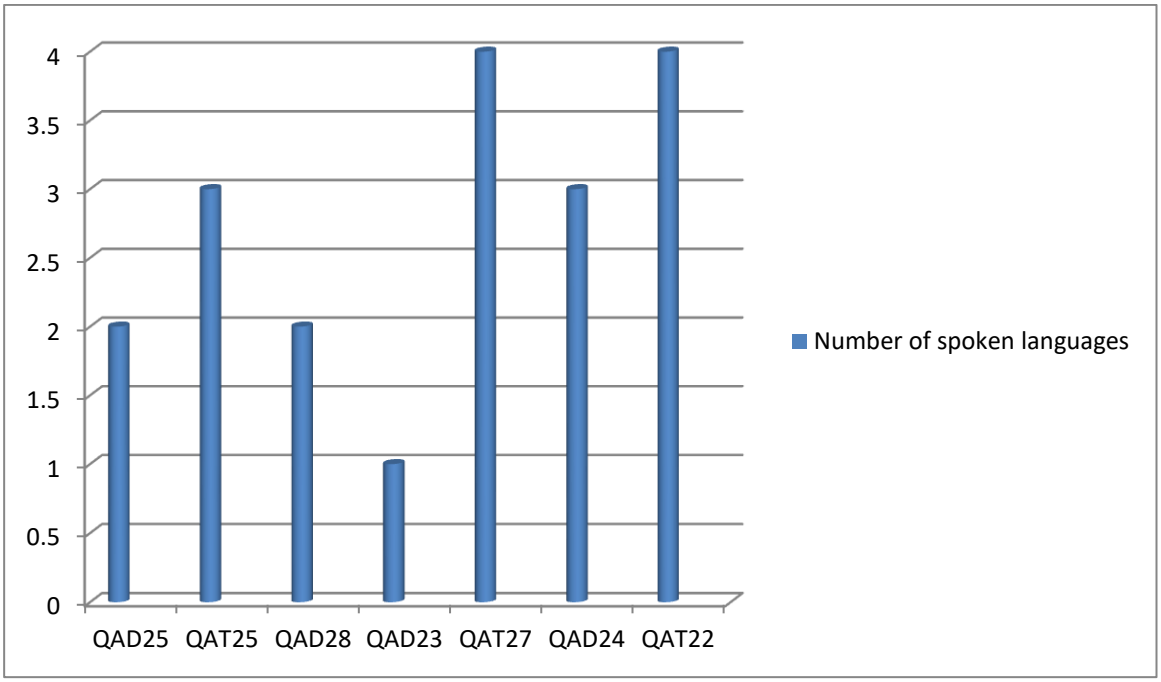


Figure 16 we find above presents core speakers' active competences in LF languages. We have two L2 speakers whom apart from their languages could speak 4 other languages of LF, one speaker can speak 3 languages that are not his, while two of them speak two other LF languages each.

Note: One very overwhelming thing about the people of LF is their abilities of not only being able to identify, interpret and speak languages of the others, but they go a long way to identify not only the language, the speaker and his or her linguistic background. Most at times, you will hear an interpreter immediately he starts listening to a recorded text saying; is that not that man or woman from village/language A or B married to a man or woman from language Y or Z? Their level of interaction and solidarity in this area is so strong that almost everybody is known. People from thirteen villages who all claim have their own 'languages' without considering the fact that some are mutually intelligible or not behave like people from the same community, knowing each other by name. Statements like the one identifying the speakers helped the researcher to immediately imagine what takes place here and some of the reasons why some of the languages are learnt.

There are no monolinguals in LF, although our results show that some speakers were competent only in their L1, this is true for the fact that we limited our test only to LF languages. If the general linguistic repertoire of LF was to be considered as portrayed in

Angiachi (2013), Di Carlo (2015) and the pilot study, we would have discovered that almost all would be proficient in three to six languages. See chapter one above. This is because languages like Mungaka came in through religion. Many people who embraced religion automatically embraced Mungaka because Bible teachings and religious songs were mostly done using this language. Most of the people here believe in the existence of the almighty God though that aspect of their African gods cannot be completely wiped out. But what is interesting here is the fact that those who claimed that they were multilingual in LF languages, at least proved their competences in two or more languages. The language of communication between us was Pidgin English.

Reasons given by these speakers as to why they are able to speak some of these languages will be seen below. One will see here the issue of essentialism has no place in the language ideology of these people. Indexicality play a great role here as these learned the languages of their neighbours not because they have some economic values, prestige or because they are dominant languages, they learn these languages just because of social affiliations as seen below.

QAT25 speaks Mungbam (Missong), Buu and Fang.

Her knowledge in Mungbam (Missong) is through constant visits to Missong and reason being that brings her and Missong speakers closer to each other.

She learns Buu because she is married to a Buu man and has been living in Buu for 30 years. She learns it to show love to husband who is from Buu.

She learns Fang due to constant visits to Fang and this is just to ease communication between her and Fang speakers.

QAD25 speaks Mungbam (Missong) and Fang.

She learns Missong just by going there, reason being to intercept in case they tried to cheat her.

She learns Fang by going there and the reason for learning it is to intercept in case they tried to cheat her.

QAD28 speaks Ajumbu and Fang.

He learnt Ajumbu by living with Ajumbu speakers in uncle's house in Wum and the reason for doing this was to intercept in case of danger.

The speaker learns Fang by going there and the reason is that, he says he feels fulfilled when using Fang.

QAD23 speaks Mufu-Mundabli.

The speaker learnt Mufu-Mundabli by going there and the reason for this is to intercept in case any negative thing is said against him.

QAT27 speaks Mungbam (Missong), Koshin, Fang and Mufu-Mundabli.

The speaker above reported to have learnt Missong through friends and the reason he advanced was just to intercept.

He also speaks Koshin because he lived there for 7 years with his sick father who was receiving treatment there and the reason for learning this language was just to ease communication.

He learnt Mufu-Mundabli through constant visits to Mufu and the reason for doing this was just to ease communication between him and these speakers.

The above speaker learnt Fang by living in Fang for many years and have relatives in Fang and reason for learning this language was just to ease communication.

QAD24 speaks Mungbam (Missong), Mufu-Mundabli and Fang.

She learnt Mungbam (Missong) by living there with husband who is from Missong. Her reason for this competency is that her husband loves her more because of her knowledge in his language.

The speaker also learnt Mufu-Mundabli through constant visits to friends who are speakers of this language. Her reason for learning it is to maintain friendship with these friends.

She learns Fang through constant visits to Fang and reason for learning this language is to have discounts in prices.

QAT22 speaks Mungbam (Missong), Mufu-Mundabli, Kung and Fang.

The speaker reported to have learnt Mungbam (Missong) from classmates and the reason he did this was just to ease communication between him and these classmates.

The speaker learnt Mufu-Mundabli from his uncle who was from Mufu and the reason for doing so, was just to ease communication between him and this uncle of his.

The speaker learnt Kung from his grandmother and the reason for doing this was because of sense of belonging since that is where his paternal grandmother came from.

This speaker learns Fang due to constant visits to Fang and the reason for learning this was just to ease communication between him and Fang speakers since he is the regent of Buu.

The above section has given us some of the reasons advanced by LF speaker as to why they understand/speak particular languages. It can be seen that these reasons sharply contrast with what we experience in urban centres where essentialism is the order of the day. That is, essentialism has no place in the language ideologies of the people of LF. Their reasons for learning/acquiring languages have to do with indexicality as they acquire such language not because of prestige, power or the market value these languages have; they do this just because of social affiliations. They want to be members of many linguistic communities.

5.3 Conclusion

This chapter has been able to give us the levels of active competences L2 speakers have of the different LF languages. Pictures were interpreted through a technique known as the visual stimuli which had to assess actual proficiencies of the L2 speakers. The reasons why these speakers were competent in some of the languages were given.

In the next chapter, we are going to see the second method that was used to further test speakers' active competences (wordlist).

CHAPTER SIX: OVERVIEW, ANALYSES AND INTERPRETATION OF WORDLIST DATA

6.1 INTRODUCTION

This chapter consists of data treatment, presentation and analyses of the wordlists from the L2 speakers. Below, we overview wordlist data, (6.2) analysis and interpretation of wordlist data, (6.2.1) lexical differences (100% different words), (6.2.2) lexical items with 50% differences or less, (6.2.3), L2 speakers' with well-produced wordlists, (6.3) morphological differences, (6.4) phonological differences, (6.4.1) phonological processes, (6.4.1.1) vowel lowering in Fang, (6.4.1.2) vowel lowering in Koshin, (6.4.1.3) vowel raising in Fang, (6.4.1.4) voicing in Kung, (6.4.1.5) vowel deletion in Kung, (6.4.1.6) vowel insertion in Kung, (6.4.1.7) vowel insertion in Missong, (6.5) attempt at quantitative analyses, (6.6) prefixes in Kung, (6) establishing the threshold of "normal variance" among L1 speakers, (6.7) problems encountered, (6.8) data treatment, presentation of the Kung language, (6.9) flaws in the script, (6.10) competence in closed (grammatical morphomes) vs. open set (vocabulary, (6.11) interpretation of chart, (6.12) morphology, and (6.13) a conclusion.As earlier said in chapter three, the reasons for including wordlists in our test were because in all the other dimensions of assessment used in this thesis (i.e. RTT and visual stimuli) the researcher had to rely on the assessment of other speakers. Wordlists, instead, provided us with the possibility to directly observe and analyse speakers' performances, and evaluate them on the background of what is already known about the languages of Lower Fungom, essentially relying on Good *et al.* (2011) and on other data collected by the members of the research team.

In this section, we will summarize the main outcomes of such a superficial overview of the data collected in the field, and this will lay the foundations for the following sections of this chapter. At a first glance, these are the main differences one identifies which are lexical and morphological. Before going to that, we will first of all present a sample of the data from each language and show how the distances between L2 and L1 were calculated before taking us to the conclusion of the above two mentioned differences. We have chosen just three words as sample to our calculations because in order to avoid the possibility of much data representation in this section. Find the entire data at the appendix. The more the number of L2 speakers in a language, the longer the calculation process in that language as each word from an L2 speaker is being compared to that of the judge and after comparing all the 200 words

from each L2 speaker, a sum total of the score he/she has is given, which then determines if he/she has competency in that language or not. It should be noted here that, conclusions about people's competences in these languages were not based on just few words. It involved the entire wordlist produced by an individual L2 speaker for his/her degree of competence to be concluded on. A sample of three words each will be presented in each of the languages and the distances between words produced by L2 speakers and those of L1 were calculated as seen below.

Scores are calculated using the Needleman-Wunsch alignment algorithm, with an identity similarity matrix as we will find in subsequent sections. Below, we are going to find the differences that were noticed in L2 speakers' words when compared with those produced by native speakers.

All the speakers we find on the left columns are all L2 speakers while those on the right are L1 speakers whose words served as judging tools/ instruments were compared with those of L2.

6.2 Analyses and Interpretation of wordlist data

This section has to do with analyses and interpretes wordlists. When we talk of analyses and wordlists interpretation, we will show how well L2 speakers could or could not produce words in the target languages. We will present words that were quite different from words produced by native speakers of these languages, others with 50% similarities words will also be presented, which show that these L2 speakers were not completely blank as far as producing wordlists in these languages were concerned. We will further present words produced by the L2 speakers that were exactly the same like those produced by their Ll counterparts. We will notice that the length of data will depend of the number of L2 speakers a language attracts.

6.2.1 Lexical differences (100% different words)

This section deals with the lexical differences between L1 and L2 speakers. During the assessment of wordlists, some L2 speakers produced completely different words that had no relationship with the target words in L1 speakers' performances. Here are some examples in this regard coming from the comparison of words produced in Fang by QAT108 (L1 speaker) and two L2 speakers, namely QAT139 and QAD28. Where possible I will attempt to trace the source or the likely reasons for their lexical mistakes. It should be noted that, the differences we will present come up as a result of measuring the distances between words produce by L2

speakers and those produced by L1 speakers. The Levenshtein distance will therefore help us to know if differences are 100%, 50 or what.

TABLE 55: LEXICAL DIFFERENCES IN FANG

QAT139 (Ajumbu) L2 speaker	**QAD 28 (Buu) L2 speaker**	**QAT108 (Fang) L1speaker)**	**Gloss**
	kàlə	Tsìŋ	Hand
	kàlə	Tsíŋ	Hands
kásə́	kàsə	yəŋ	Leg
kásə́	mbàsə	yə́ŋ	Legs
	nyúŋbə	Kà	Finger
	núŋbə́	Ká	Fingers
Tshwè	kpwóló	bvənə̂	Buttock
Tshwé	kpwóló	bvənə̂	Buttocks
ywə̌	yú ́ə̀	zʉ̌	Bee
ywə̂	yúə́	zʉ́	Bees
ŋkɛ̀m	fəkɛ̀	kèkʲê	Cocoyam
ŋkɛ̂m	fəkɛ̀	kʲəm	Cocoyams

In table 55 above words, the word for “hand” in Fang, QAD28 who is a Buu speaker produces *kàlə* for “hand” and *kàlə* for “hands” instead of *tsìŋ* and *tsíŋ*, respectively and ‘*nyúŋbə* and *núŋbə́* for “finger” and “fingers” instead of *kà* and *ká*, respectively. QAT 139 who is an Ajumbu speaker and QAD28, from Buu, give different words to mean leg and cocoyam in Fang.

Both QAT139 and QAD28 who are Ajumbu and Buu speakers, respectively, in trying to give the word for “bee” in Fang, produce it in Missong because of their shared knowledge of the language. We notice here that, knowledge of other languages by L2 speakers influences

the production of words in target languages. An Ajumbu speaker exports a Missong word for "bee" into the Fang language. This same phenomenon is also noticed by the Buu speaker who tries to bring in this same Missong word for bee into Fang because she has though very limited knowledge of lexical items of Missong. We will also see a 100% differences in words produced by L2 speaker in Kung.

TABLE 56: LEXICAL DIFFERENCES IN KUNG

QAT138	**QAT170**	**QAT130 (L1 speaker)**	**Gloss**
	ù̵kàlàŋmwâ	kə́sɔ̀ŋ	Louse
	m̀kàlàmwâ	úsɔ̀ŋ	Lice
ukɔ́	úkwɔ́'ɔ́	Mbwá	Hill
úkɔ́	sə́kɔ́'ɔ́	símbwá	Hills
kə̀tsàtsà		kɨ́bwá'á	Rattle
Ùtsàtsà		úmbá'á	Rattles
kə̋́sɔ̀		úswà'à	Comb
ísɔ̀		sə́swà'à	Combs

Table 56 above also demonstrates the same lexical mistakes in Kung as noticed in Fang. This phenomenon is very common among all the L2 speakers. We can say that QAT170 above who is a native speaker of both Koshin and Fungom languages because her father is from Koshin and mother from Fungom. She brings in the rule of over generalization from other languages when she produced the word for "lice" and "louse". What we mean here is that Fang, Missong, Mufu, Ajumbu and Buu have similar appellations for the word for lice, though with very minimal variations. She must have concluded that, since almost all the LF languages call it that way, it could also be the case with Kung or she must have learnt it from her boyfriend who is from Ajumbu. In the same light, we notice the same thing happening not only with the Koshin speaker, but also with an Ajumbu speaker in the words for "hill and hills". The words they both gave for hill and hills in Kung have a different connotation. This

refers to “ladder”. Since both speakers are competent in Kung, they must both have been focused on the verb that is employed when these two words (hill and ladder) are concerned. That is, the verb “to climb”.

Below we present some lexical mistakes done by an L2 speaker in Koshin.

TABLE 57: LEXICAL DIFFERENCE IN KOSHIN

QAT27-Buu	QAT107-Koshin	Gloss
Dzwà	ndwî	River
Dzwá	ndwî	Rivers
mbʲɛ̂	Ntì	Water
kû	fɨ̌mə̌lə́	Compound
Kú	fɨ́sə̌lə́	Compounds
Yán	Bèyài	Vomit
kə̀ŋgwásɨ	kətsə̀	Rattle
bə̀ŋgwásɨ	bətsə̀	Rattles
kèfwɔ̀sɨ́	Kéfú	Cap
bə́fwɔ̀sɨ́	bəfú	Caps

Table 57 shows the mistakes a Buu speaker makes in the production of wordlists in Koshin. This L2 speaker might have imported the words for ‘river’, rivers’ and water from other languages spoken not even in LF. He claimed he knew Aghem, Munggaka and Weh which are languages spoken out of LF. Words like ‘compound’, ‘cap’ and ‘caps’ from Ajumbu, while ‘vomit’, ‘rattle’ and ‘rattles’ are brought in from Fang. If we were to judge the speaker based only on the noun classes in Koshin, we will see that he masters classes 7 and 8 in words for ‘rattle and ‘rattles’, ‘cap’ and ‘caps’ and classes 9 and 10 in water but have some problems in the lexical items of this language. The Ajumbu lexical differences will be presented below:

TABLE 58: LEXICAL DIFFERENCE IN AJUMBU

QAD28-Buu	QAT126-Ajumbu	**Gloss**
Ngwúŋá	Vú	Nose
Kpwòwá	shənə	Leg
Nyúwá	ŋwɔ́	Knee
Ànýwá	ánwɔ́	Knees
íkʲɛ́	ngᴶəŋ	Water
Túdzà	kᴶɛ́	Stone
kwɔ́	kɨ́dələ́	Wound
tŭfɨbùs	fədàmu	Cat
kəkùl	kəkwĭn	Rat
bəkùl	bəkwîn	Rats

Nose, water, rat, rats, stone and wound might have been brought in from languages spoken elsewhere. His sociolinguistic profile reveals that he knows more than four languages that were not languages of LF. Whereas the word for cat has been brought in from Missong, a language he also claims competency in. His claim was that he learnt Ajumbu from Ajumbu speakers who were living with his uncle in Wum where he grew up.

The above words must have been borrowed either from the Aghem language or other languages spoken around or from languages like Bum, Ntsha', Mmen, Fungom etc. We see how an individual with a multilingual repertoire can sometimes transfer words from one language to another either consciously or unconsciously since vocabularies of languages one knows are not classified under each language in the brain. If this were to happen, we think a multilingual speaker will say ok now am dealing with language X and the number of words or utterances he or she knows in this language queue up while he or she picks what is needed at that time. We can conclude that the above mentioned speaker was not competent as far as producing these words are concerned. We will present competent speakers in the Missong

language below as we will find words they produced with 50% and 100% similarities with those of L1 speaker (judge).

Before we forge ahead, we should bear in mind that lexical differences and grammatical differences were brought out after the distance between words of L2 and L1 speakers through the use of a tool known as the Levenshtein distance. The 100% differences between words of L1 and those of L2 speakers were also noticed in Mungbam (Missong).

TABLE 59: LEXICAL DIFFERENCES IN MISSONG

QAT25-Buu	QAD23-Buu	QAT102-Buu	QAT155-Mufu	QAT167-Missong	**Gloss**
			ùkŭŋ	Úmá	Neck
			íkúŋsə́	Ímá	Necks
nyɛ́mùntɨ	búŋfĩ			Mbù	River
bínîm				úfîn	Grass
kə̀nìm				Ífín	Grasses
Kìkànyàm		Kìkànyàm		Kikwúm	Horse
kíyŭyí				íyɔ́'ɔ́	Bee
Kìnàŋbì	Kínàŋ	Kìnàŋ	Bìkúŋ	kímwă	Bed
Bìnàŋbì	Bìnàŋbì	Bìnàŋbì	bìkúŋbî	bímwă	Beds

Table 59 above shows lexical differences encountered through L2 speakers in Missong. Where we find an empty space, it means that these speakers produced either the right forms or something very close to it. We have presented all lexical mistakes with 100% differences. One the table, we find 3 Buu speakers, 1 Mufu speaker and a Missong speaker whose words have been used to compare with those produced by these L2 speakers. Buu speakers have borrowed the word 'bed' from the Naki language which they claim they are competent in. The appellation they give for bed and beds is very similar to the Naki word for bed. The speakers QAT25 and QAT102 bring in the Buu appellation for horse into Missong.

Above, we have showed some lexical mistakes committed by some L2 speakers. It can be seen that while some L2 speakers are incompetent in particular words, there are some who actually produced the words well like those produced by native speakers of these languages. We have also noticed many cases of code- mixing either by speakers importing their languages into the target languages, or bringing in words they know in other languages into those under test. This section has given us the lexical differences attested in L2 speakers' words. We also have a group of people with minimal lexical differences from those of L1 speakers. Here, these speakers scored a 0.50 and above. This shows that they did not produce completely different words from those of L1 speakers but produced words that were in some ways similar to those of the native speakers. Such examples include:

6.2.2: Lexical items with 50% differences or less

Below is data showing words that were produced by L2 speakers which were not very different from those produced by native speakers of these languages. We will see some of these examples in just the Kung and Fang languages.

Kung raw data

Head	QAT170	kə́twú	QAT130	kə́tú	0.71
Heads	QAT125	útù	QAT130	útú	0.60
Heads	QAT126	útwú	QAT130	útú	0.67
Heads	QAT170	útwú	QAT130	útú	0.67
Eye	QAT125	ìsî	QAT130	ísî	0.60
Eye	QAT120	ísí	QAT130	ísî	0.60
Ear	QAT138	kə́túŋé	QAT130	kə́túŋə́	0.78
Ear	QAT170	kə́tùŋnə́	QAT130	kə́túŋə́	0.60
Ear	QAT120	kə̀tŭŋə́	QAT130	kə́túŋə́	0.56
ears	QAT125	útùŋə́	QAT130	útúŋə́	0.75
ears	QAT126	útûŋə̀	QAT130	útúŋə́	0.50

ears	QAT170	útûŋə́	QAT130	útúŋə́	0.75
ears	QAT120	útŭŋə́	QAT130	útúŋə́	0.75

When we talk of 50% differences, it means the words that are being compared have 50% similarities and 50% differences after the Levenshtein distance was used to calculate those words. The scores were all calculated as follows:

Each pair of pronunciations for each pair of speakers is scored. The pair of words is aligned and scored in a simple way so that a match is one point, and a mis-match is -1 points, then the score is normalized by dividing by the number of transcription symbols in the longest word. The scores obtained will then prove if a given speaker is a good or bad speaker.

Individual word-level scores are added up to get a final score for each pair of speakers. Scores are calculated using the Needleman-Wunsch alignment algorithm, with an identity similarity matrix..

Fang raw data

Head	QAT135	kú	QAT108	kwú	0.50
Head	QAD23	kú	QAT108	kwú	0.50
ears	QAD23	kə̀twúŋ	QAT108	bə́twúŋ	0.50
ears	QAD28	bə̀twúŋ	QAT108	bə́twúŋ	0.75

The data we find above shows that there are no great differences between words produced by L2 speakers and those of their L1 counterparts. The above section has been concerned with bringing out lexical differences between wordlists from L2 speakers and those from L1. We are also going to show how some L2 speakers actually produced words like native speakers of these languages. We will call them competent wordlist producers.

6.2.3: L2 speakers' with well-produced wordlists

Kung wordlist

Head	QAT125	kə́tú	QAT130	kə́tú	1.00
Head	QAT126	kə́tú	QAT130	kə́tú	1.00
Head	QAT138	kə́tú	QAT130	kə́tú	1.00
Head	QAT120	kə́tú	QAT130	kə́tú	1.00
Heads	QAT138	útú	QAT130	útú	1.00
Heads	QAT120	útú	QAT130	útú	1.00
Eye	QAT138	ísî	QAT130	ísî	1.00
Eye	QAT170	ísî	QAT130	ísî	1.00
eyes	QAT125	ásî	QAT130	ásî	1.00
Ear	QAT126	kə́túŋə́	QAT130	kə́túŋə́	1.00

The above are words produced by L2 speakers in Kung. It can be seen that these words were produced exactly like those produced by native speakers of the language. This means that these L2 speakers are actually competent as far as producing wordlists in this language is concerned. Below, we will also find real Fang words produced by L2 speakers.

Fang raw data

Head	QAT139	kwú	QAT108	kwú	1.00
Head	QAT101	kwú	QAT108	kwú	1.00
Head	QAD28	kwú	QAT108	kwú	1.00
Heads	QAD28	təkwú	QAT108	təkwú	1.00
Eye	QAT139	wúsə̂	QAT108	wúsə̂	1.00
Eye	QAT135	wúsə̂	QAT108	wúsə̂	1.00
eyes	QAT139	dzí	QAT108	dzí	1.00

ears	QAT135	bə́twúŋ	QAT108	bə́twúŋ	1.00

Above, we have seen how some L2 speakers produced words like native speakers of Fang. Below, we will also how a Buu man produced words that were the same like those of Ajumbu.

Ajumbu raw data

eyes	QAD28	kə́dzísə́	QAT126	kə́dzísə́	1.00
Ear	QAD28	kə́túŋ	QAT126	kə́túŋ	1.00

As ealier said, the data in the Ajumbu language will appear the shortest because it had to do with just one person. This is immediately contrastive to that of Missong as seen below.

Missong raw data

Head	QAT155	ifì	QAT167	ifì	1.00
Heads	QAT155	àfì	QAT167	àfì	1.00
Eye	QAT155	ídzə́sə́	QAT167	ídzə́sə́	1.00
eyes	QAD23	àdzə́sə́	QAT167	àdzə́sə́	1.00
eyes	QAT155	àdzə́sə́	QAT167	àdzə́sə́	1.00
Ear	QAD23	kìntsúŋ	QAT167	kìntsúŋ	1.00
Ear	QAT155	kìntsúŋ	QAT167	kìntsúŋ	1.00
ears	QAD23	bìntsúŋ	QAT167	bìntsúŋ	1.00
ears	QAT155	bìntsúŋ	QAT167	bìntsúŋ	1.00

The data we see above are words produced by L2 speakers in (Mungbam) Missong. These words have been produced the same way like those of native speakers of this language. Such a sample will also be seen in the Koshin language below.

Koshin raw data

Heads	QAT27	tə̀kə́	QAT107	tə̀kə́	1.00
eyes	QAT27	dzí	QAT107	dzí	1.00

Like Ajumbu, we also notice that the Koshin data is also very short, reason being that only one L2 speaker was involved in this language. Correctly produced words of L2 speakers in Naki will also be seen below.

Naki raw data

Head	QAT105	fwú	QAT12 2and QAT157	fwú	1.00
Heads	QAT158	fúŋ	QAT122 and QAT157	fúŋ	1.00
Heads	QAT105	fúŋ	QAT122 and QAT157	fúŋ	1.00
Eye	QAT158	yə́d	QAT122 and QAT157	yə́d	1.00
Eye	QAT105	yə́d	QAT122 and QAT157	yə́d	1.00
eyes	QAT106	yə́nə́	QAT122 and QAT157	yə́nə́	1.00
eyes	QAT105	yə́nə́	QAT122 and QAT157	yə́nə́	1.00
Ear	QAT158	átwú	QAT122 and QAT157	átwú	1.00

Since our objective is to assess the proficiencies of L2 speakers, we could not only limit our data to those who produce wordlists more or less than L1 speakers. That is, we were not only interested in L2 speakers who could not produce wordlists or could not produce them perfectly. We also saw the need to show how some L2 speakers are able to produce words exactly the same way like L1 speakers of these languages. The above data shows L2 speakers who actually produced words that were like theirs of their L1 counterparts thus proving their competences in wordlist production. As earlier said above, each well-produced word was scored on 1.00.

The results we find above, reveal the distances measured through the Levenshtein distance brought out a category of three persons; the first set of persons being those with 100% lexical differences with those produced by L1 speakers. This shows that they could not produce words in the target languages but brought in completely different words in different

languages they have in their linguistic repertoires. While others produced words in their mother tongues claiming to be words in these target languages, others produced words from other languages which were also their second languages.

Also, a second group of persons were those who had a 50% lexical differences and less. Here, words produced by L2 speakers had a 50% similarity and above. We can say that this set of L2 speakers were competent in wordlist production.

We also had a category of persons who had native speakers' competences in their production of wordlists. That is, when the distance between their words and with those of native speakers of the target languages, their words were exactly the same with no differences. As earlier said, some L2 speakers could be competent in lexical bases (words) while they were not competent in noun classes (respect the affixes of these languages) known as morphological differences.

The part above has been involved in Lexical differences and similarities, below, we will be seeing morphological differences.

6.3: Morphological differences

As far as this section is concerned, what we will do is look at noun class prefixes in languages presented in Good *et al.* (2011). Kung language will also be represented though an in-depth study of the noun class systems has been carried out by these authors in the languages of LF, little or nothing has been done as far as that of Kung is concerned. Below, we will have some morphological differences attested.
In this section, we tried to find out how far L2 speakers respected noun classes in their L2s.

There is logic in using noun class; one could be very proficient in words but not proficient in noun classes. Here, consultants were assessed on how well they could respect the noun classes which were realized from the production of singular and plural markers. This entailed separating the noun class affixes from the lexical stems. That is, one and the same person might have different degrees of competences in two sets. One may know many words but make mistakes with noun classes or may know noun classes pretty well but perform poorly with lexical stems. In our assessment of morphological noun classes, we will have just two groups of persons: those with morphological differences and those who were competent in providing the noun classes. We will start by presenting those with morphological differences, followed by those of competent speakers.

Table 60: Morphological difference in Fang

QAT139	QAD25	QAT101	QAT135	QAD23	QAD28	QAT108	Gloss
Ajumbu	**Buu**	**Buu**	**Kung**	**Buu**	**Buu**	**Fang**	
kə́-	No word	bè-	kə́-	bə́-	-kə́	Φ-	Ear
	No word	No word		kə̀-		bə́-	Ears
kè-	kə̀-				kə̀-	Φ-	Jaw
				tə̀-		bə̀-	Jaws
kɨ-		No word	kə̀	No word	kəN	fɨ-	Frog
Φ-	ə́-	fə̀-			fə̀	ŋ-	Louse
bə̀-	kə́-	m̀-	kə́-	bə̀-		mə̀-	Lice
Φ-	Φ-		Φ-	Φ-	Φ-	kə́-	Shoe
tə́-	tə́-	No word	tə́-	tə́-		Φ-	Firewood(pl)
			bə̀-	kè-		fɨ-	Corn

Table 60 shows some morphological differences noticed from L2 speakers in Fang. We notice here that, different prefixes were imported into this language by L2 speakers due to either their multilingual repertoires or because of hypercorrection. In the word for ear, the singular marker has a zero prefix/zero marker (ϕ), though we see the Ajumbu speaker employing kə́-, a Kung speaker also uses kə́- while Buu speakers employed bè-, bə́- and a zero morpheme though with the insertion of a suffix respectively. The use of kə́- by the Ajumbu and Kung speakers respectively have been influenced by some sort of borrowing from the Kung language which is the singular prefix for ear in Kung. The sociolinguistic profile of the Ajumbu speaker shows that he speaks Kung. While Buu speakers might have employed bè-, bə́-, -kə́ due to over generalisation in the sense that, since the suffix forms of ear and ears in Buu is -bə́-, by implications, should be a prefix in Fang.

The empty spaces we find on the table, demonstrate that these speakers were competent in the target words. That is, they produced exactly the same like those of the L1

speaker. While ‘no word ‘means the speakers did not provide any word at all as a result, their knowledge of prefixes on these words could not be assessed. In the same line, in the word for ‘jaw’, the Ajumbu speaker employs kè- and Buu speakers kə̀- as prefix marker for ‘jaw ‘. Though from two different linguistic backgrounds, the use of almost a similar prefix by these speakers is because of shared knowledge of the Kung language whose singular prefix form for this word is kə́-. We see here that knowledge of other languages can influence the structure of a language. If these three speakers were to migrate to a new location I think this aspect of prefix transfer would have been infused into the noun class system of their new language that could have developed thus giving birth to new languages.

The section above has been concerned with providing L2 speakers words with morphological differences. What can be seen here is that, some speakers actually know the noun class prefixes of their L2s even if they do not produce the words normally as they were supposed to be. We will notice that examples on both lexical and morphological differences did not come from all the varieties because this work is based on assessing multilingualism and not multilectalism.

We will notice that assessing adult’s second language acquisition is very complex because we cannot say with exactitude why a given segment is inserted or deleted. As we will see, some phonological processes were also attested in their speech.

6.4 Phonological differences

During our analysis, some phonological differences were also attested. That is, though I have not done the phonological analyses, am talking about what I saw, phonological processes due to sounds change were also noticed.

6.4.1 Phonological Processes

Phonological processes are predictable speech errors produced by learners of a language. For example, they may reduce consonant clusters to a single consonant like, “pane” for “plane” or delete the weak syllable in a word saying, “nana” for “banana.” There are many different patterns of simplifications or phonological processes. These processes were also attested in adult L2 speakers of LF. When we start having these processes in adults’ speech, questions are asked on how these came about. With this in mind, we will want to know their sociolinguistic backgrounds, and find out if these are in fact not attributable to interference within multilingual speakers most especially, speakers’ repertoire.

Below are some phonological processes noticed during the production of words by non-native speakers of this area of LF. We will start by giving words produced by the L1 speakers, and then we will now compare them with those given by L2 speakers and show where a phonological process has taken place. We will begin with words from Kung given by Kung L1 speaker, and then compare them with those of an L2 speaker in order to show how L2 speaker's words were affected by phonological processes. Though we have earlier said that no indept study has been carried out in Kung, what we are presenting here is just what we noticed between words produced by a Kung speaker and those that were produced by L2 speakers.

6.4.1. 1 Vowel lowering in Fang

In the words below, we noticed a phonological process of vovel lowering from the L2 speaker.

Mouth	QAT125	ítsə̂	QAT130	ítsɨ̂	0.60
House	QAT125	ndə̂	QAT130	ndɛ̌	0.00

Vowel lowering is the process whereby a high vowel is lowered to occupy a position that is lower than its normal one.

We notice above that -ɨ → ə
-ɛ → ə
when produced by an L2 speaker.

The high central vowel ɨ becomes low ə when produced by an L2 speaker, while the mid low vowel ɛ becomes a mid-low central vowel when still produced by an L2 speakers.

The above has demonstrated vowel lowering in Kung. Where L2 speaker either consciously through hypercorrection or unconsciously through their multilingual repertoires and phenomena like fossilization have lowered the tongue less than what is expected of an L1 speaker. Below we will find out how this same process was attested with speakers trying to provide words in Fang.

6.4.1. 2 Vowel lowering in Koshin

Mouth	QAT101	dzɛ̂	QAT108	dzî	0.33

Mouth	QAD28	dzʲɛ	QAT108	dzî	-0.33
tooth	QAD28	wə̌n	QAT108	wʉ̌n	0.50
Stone	QAT101	tsê	QAT108	tsî	0.33

ɪ ⟶ -ɛ,e / when produced by L2 speakers.

Also, ʉ ⟶ ə / when produced by an L2 speaker.

That is, the high front vowel [ɪ] becomes mid low and mid high [ɛ, e] respectively when they are produced by L2 speakers.

Similarly, the high central vowel [ʉ], becomes a mid-low [ə] when produced by an L2 speaker.

Mud	QAT27	shə̀	QAT107	shì	0.33
Bag	QAT27	bà	QAT107	bɛ̀	0.33

i ⟶ ə

ɛ ⟶ a / When produced by L2 speakers.

The high front and mid-low front vowels [ɪ, ɛ] become low central and front vowels [ə, a] when produced by L2 speakers.

Above we have been able to see some cases of vowel lowering attested in some of the languages by L2 speakers. Vowel highering were also noticed in the Fang and Koshin as seen below.

6.4.1. 3 Vowel raising in Fang

Teeth QAT139 yéŋ QAT108 yə̂n -0.50

ə → e / When produced by an L2 speaker. That is, the mid-low central vowel becomes a mid-high front vowel when produced by a non-L1 speaker.

The process of vowel raising was attested in the Koshin language as seen below.

Breast QAT27 m̀bè QAT107 m̀bɛ̀ 0.60

ɛ → e / When produced by an L2 speaker.

The mid-low front vowel becomes mid high when produced by a non-native speaker.

In the above section, we have shown the process of vowel raising that was attested in both the Fang and Koshin languages in words that were produced by L2 speakers. Below, we will demonstrate another phonological process (voicing) attested in an L2 speaker's speech.

6.4.1. 4 Voicing in Kung

Cat QAT126 fədàmú QAT130 fətàmú 0.78

cats QAT125 m̀dàmú QAT130 mtàmú 0.50

Moon QAT126 dzɔ́ŋ QAT130 tsɔ̀ŋə̂ -0.33

t → d / at intervocalic positions

ts → dz / #-

In the production of the word for cat by a Koshin female speaker (QAT126) resident in Yemgeh, the voiceless alveolar stop becomes voiced at intervocalic position. While in the word for moon above, the voiceless palatal affricate becomes voiced at word initial position. Also, from the Ajumbu male speaker (QAT125), the voiceless alveolar stop becomes voiced at intervocalic position.

6.4.1.5 Vowel deletion in Kung

In the Kung words for 'moon' and 'clean below, L2 speakers demonstrated the process of deletion. That is, vowels are deleted at word final positions.

Moon	QAT126	dzɔ́ŋ	QAT130	tsɔ̀ŋə̂	-0.33
Clean	QAT120	zwɔ̀l	QAT130	swɔ̀lí	0.14

In the word for ‘moon’ and ‘clean above, vowels are deleted by L2 speakers at word-final positions. While in ‘corn’ and ‘barn’, vowels are deleted or become zero morphemes at word initial positions as seen below.

Ə ⟶ ɸ /--#

i ⟶ ɸ/ --#

Corn	QAT170	sə̀f	QAT130	ísèf	0.00
Barn	QAT138	taî	QAT130	útái	-0.17

i ⟶ ɸ / #-

u ⟶ ɸ / #-

6.4.1.6 Vowel insertion in Kung

Fry	QAT125	káŋí	QAT130	káŋ	0.33
Tooth	QAT143	sɔ̀ŋɔ̀	QAT130	ísɔ́ŋ	-0.33

6.4.1.7 Vowel insertion in Missong

QAT167			Gloss		
Ùfàn			Mouth		
Mouth	QAT25	ùfànə́	QAT167	ùfàn	0.50

In the word for ‘mouth’ in Missong, the L2 speaker produces it with a process of vowel insertion.

ɸ ⟶ Ə/ -#

A zero morpheme becomes mid-low central vowel at word-final position

ɸ ⟶ i / -#

ɸ ⟶ / ə - #

ɸ ⟶ ɔ / -#

Above, the process of final vowel insertion by both an Ajumbu speaker and a Buu speaker respectively. Zero morpheme becomes front high vowel i, low central [ə], mid-low back vowel at word final position. These are some of the phonological processes due to sound change that were noticed in L2 speakers' words. Below, we are going to attempt a quantitative analysis.

6.5 Establishing the threshold of "normal variance" among L1 speakers

This section deals with two L1 speakers that were compared in Missong. As we all know, two speakers can never speak exactly in the same way and as a result, we noticed some differences between two L1 speakers that were used in order to prove this assertion. The variance between these speakers is discussed below. We will first start by presenting the results based on their similarities in lexical bases (LB), Prefixes and suffixes. The data below captures two L1 speakers from Missong.

QAT167LB_QAT181LB 130.94/323=0.405
QAT167NC-Pref_QAT181NC-Pref 113.16/217=0.521
QAT167NC-Suff_QAT181NC-Suff 4.32 / 7 = 0.617

The results we find here, present scores that were obtained after comparing two L1 speakers. The similarity level in their lexical bases is 0.405, noun class prefixes and suffixes 0.521 and 0.617 respectively. It can be seen that these scores are lower than expected of L1 speakers.

However, emphasis should not be laid on the results of these two L1 speakers because first of all, Missong is a language spoken by multilingual speakers, it is not yet standardized or documented, not used in school. Recent works like Di Carlo (2011, 2015) suggest that Missong is relatively a new comer in this area of LF.

Since it is impossible to develop a case-specific script in our thesis (which already includes a lot of dimensions of variance); what we want to do here is to offer some closer quantitative analyses on the wordlist data. These variances were noticed at two levels as seen on the tables below.

TABLE 61: LEXICAL VARIANCE BETWEEN TWO MISSONG SPEAKERS

QAT167	QAT181	Gloss
bwànù̀	Gbwă	Body
bwánù̀	Gbwă	Bodies
bě	bɛ̂	Stomach
bě	bɛ̂	Stomachs
bú'ú	Bwà	Buttock
bú'ù	Bwà	Buttocks
kífɔ́'ɔ́	úbwá'á	Wind
kífɔ́'ɔ́	úbwá'á	Wind

Table 61 shows normal variance between L1 speakers. There are all Missong speakers whose words were to act as reference to those gotten from L2 speakers. During the scoring procedure, after scoring the L2 speakers basing our judgments with one L1 speaker, we then decided to include another L1 speaker before giving absolute values to show the degree of competences. The second L1 speaker was included because we thought that scores could be misleading just by using one reference speaker. We see that variance between two L1 speakers and these variance were not only limited to lexical variance, some morphological variance was also noticed as seen on the table below.

TABLE 62: MORPHOLOGICAL VARIANCE

QAT167	QAT181	Gloss
í-	á-	Bodies
í-	á-	Necks
í-	kì-	Buttock
á-	bì-	Buttocks
á-	kí-	Roads
í-	ú-	Grasses
kì-	fì-	Lizard
bì-	mù-	Lizards
bí-	m̀-	Birds

Table 62 above presents morphological variance between two L1 speakers of Missong. We can see that QAT167 who is a male and a teacher by profession gives ‘i, i, i, a, a, ki, bi and bi as the prefixes for ‘bodies ‘, ‘necks’, ‘buttock’, ‘buttocks’, ‘roads’ ‘grasses’ ‘lizard ‘, ‘lizards and ‘lizards respectively while another L1 speaker of this language, a male and a farmer by profession produces “a, a, ki, bi, ki, u, fi, mu and m as prefix markers for the same words we find here; ‘bodies ‘, ‘necks’, ‘buttock’, ‘buttocks’, ‘roads’ ‘grasses’ ‘lizard ‘, ‘lizards and ‘lizards respectively.

TABLE 63: REVIEW OF NOUN CLASS SYSTEMS OF SOME LF LANGUAGES

Singular			Plural		
Cl.1	ù-/ɸ-	ὼ-	Cl2	ba-	Bý
Cl.3	ú-	ώ -	Cl4	í-	ý-
Cl.5	í-	ỳ-	Cl6	a-	ώ-
Cl.4a	í	ý-	Cl7a	ki-….cə	ḱ-
Cl.7	ki-	ḱ-	Cl8	bi-	bý-
Cl.9	ì	ỳ-	Cl10	í-	Ý-
Cl.14	bu-	Bώ-	Cl18	mu-	mώ-
Cl1.9	fi-	f̀-			
Cl.6a	aN	Mý			

Adapted from Good *et al.* (2011)

The noun classes on the table above were attested in Missong by Good *et al.* (2011). These were the various ways in which noun classes could be realized. Below, we are going to find a table of some noun classes that were not found in *Good et al*. These noun classes were produced by two L1 speakers of Missong. Though at some levels, they have different noun classes attributed for the same nouns. Our focus at this juncture will be to see those noun classes that were common to both speakers. And in the subsequent section, we will see how lexical and morphological differences in words produced by speakers of the same language.

TABLE 64: AJUMBU NOUN CLASS

Singular			Plural		
Cl.1	ɸ-	ὼ-	Cl.2	a-	ƀ-
Cl.5	ɸ-	ý-	Cl.6 a-	ba-	ý-
Cl.5	ɸ-	ý-	Cl.7(a)	kə-..(lə)	ќ-
Cl.9	ˈ-	ỳ-	Cl.10	-′	ý-
Cl.19	fə-	f̀-	Cl.18	m-	ḿ-
Cl.6 a	m-	ḿ-	Cl.10	í-	ý

Adapted from Good *et al.* (2011)

TABLE 65: KOSHIN NOUN CLASSES

Singular			Plural		
Cl.1	ɸ-	ὼ-	Cl.2	bə-	b-
Cl.3	w-	ώ -	Cl.4	y-	ý-
Cl.5	ɸ -	ώ-	Cl.13	tɛ-	ƭ-
Cl.7	ki-	ќ-	Cl.8	bə-	ƀ-
Cl.9	ˈ-	yˈ-	Cl.10	′-	ý-
Cl.19	fə (N)-	f̀-	Cl.18	N-	m-
Cl.6(a)	N-	m-			
Cl.14	bə-	b-			

Adapted from Good *et al.* (2011)

As seen in Good *et al*. (2011), the noun class system of Koshin has been presented above, while we will find those of Fang on the table below.

TABLE 66: FANG NOUN CLASSES

Singular			Plural		
Cl.1	ɸ-	w-	Cl.2	bə-	b-
Cl.3	w-	w -	Cl.4	ˠ-	y-
Cl.5	ɸ -	w-	Cl.13	tə-	t-
Cl.7	ɸ /kə-	k -	Cl.8	bə-	b-
Cl.9	ˈ-	y-	Cl.10	ˊ-	y-
Cl.19	fə -	f-	Cl.18	mə-	m-
Cl.6 (a)	N-	m-			
Cl.14	bə-	b-			

Adapted from Good *et al.* (2011)

6.6 Prefixes in kung

Good *et al.* (2011) overviewed the noun class systems of Lower Fungom including some of the varieties, and reported that Kung which has been considered as a central ring language has not yet been studied extensively except for few studies that have been carried out in this language by Roland Kieβling. Since it cannot be said with exactitude which part of a word belongs to which class of nouns in Kung, a tentative presentation of the prefixes that were attested in Kung will be presented which could then be used by future researchers to precise which of the prefixes fall under which class. Kung prefixes are seen below.

TABLE 67: KUNG PREFIXES

Singular	Plural	Gloss
kə́-	ú-	Head/heads
í-	á-	Eye/eyes, mouth/mouths, Buttock/buttocks
kə́-	ú-	Ear/ears
í-	ə́-	Nose/noses, knee/knees, tooth/teeth, breast/breasts, stone/stones
kə́-	ə́	Hand/hands
ú-	wéŋ-	Body/bodies
ké-	ə́-	Leg/legs
ú-	m̀-	Neck/necks, stomach/stomachs
ɸ-	sə-	Shoulder/shoulders, goat/goats
ɸ-…(kə)	ɸ-	Finger/fingers
kə́-	sə́-	Jaw/jaws
ɸ-	sí-	Hill/hills
ɸ-	tə́-	River/rivers
ú-	sə́-	Road/roads
ké-	ú-	Mud/mud(s)
ú-	n-	Bridge/bridges
fə́-	m̀-	Tree/trees
kə́-	ú-	Grass/grasses

kə̀- ù- Pig/pigs

We have been able to establish the normal variance between two L1 speakers and a review of noun class of some of the languages of this area reviewed; below we are going to see scores from L2 speakers in the different LF languages.

6.7 PROBLEMS WITH OUR METHOD/WORDLISTS AND SOLUTIONS

The second L1 speaker whose words were also collected in Missong, was included because we thought that scores could be misleading just by using one reference speaker. This was done thanks to Ngako Doriane, a ph.D student whose thesis is also centered on LF languages. This student helped us in clooecting data from the second Misson speaker. As a result, the following problems were raised.

The low scores we find in the wordlists might seem very low because our only reference for similarity was arithmetical, it was '1'.

We had scores describing distances between L2's and L1́s but not scores identifying thresholds. We were left just with the numbeŕ1̀ as the only reference to measure scores but we know that two L1 speakers will never have a score of́1.

And how do we discover what the average score of similarity among native speakers (reference similarity score) is?

As seen above, it is possible to find words from two native speakers with similarities score below 0.8/1. Bearing this in mind, we could not say which was a good speaker and which one was not. Meaning that, if an L2 speaker could score 0.3 in a language that is not his/hers, he/she should be considered competent in that language. Below are grades on how L2 speakers were scored in wordlists.

0.1 99/1 and below means no competence
0.2 -0.299/1 means near active competence
0.3 – 0.399/1 means competent
0.4 -0.599/1 means near native competence
0.5 and above /1 means native competence

6.8 DATA TREATMENT, PRESENTATION OF THE KUNG LANGUAGE

Here, L2 speakers' wordlists were compared with those of L1 whose words were considered as the reference/judges for those provided by non-native speakers/L2 speakers. This will be done by bringing out the maximum matches between each pair. The maximum match is the numerical value we get after deleting mis-matches. That is, after deleting segments that do not match with those of the L1 speaker.

The data below shows the scores non-native speakers of Kung had in the wordlist test. The framework used in the analyses of wordlists is as follows: the higher the score between pairs of speakers, the higher the similarity between their performances. L1 speaker's performance sets the reference to measure the other (i.e. L2) speaker's performance. If value is close to 1, then this means the L2 speaker is highly competent (actively). The lower the score, the less competent the L2 speaker is.

Scores in the Kung language are presented below. To begin with, a sociolinguistic profile of L2 speakers that undertook the wordlist test will be presented before presenting their scores in each language. This also includes the profile of the L1 speaker whose words were used as reference to judge those of L2.

TABLE 68. A SOCIOLINGUISTIC PROFILE OF L2/REFERENCE SPEAKERS IN KUNG

Code	Main Linguistic Identity	Age	Sex	Residence	Role	S'Prov	M'prov
QAT 170	Koshin	18yrs	Female	Yemgeh	Respondent	Not married	Fungom
QAT120	Ajumbu	21yrs	Female	Yemgeh	Respondent	Not married	Fungom
QAT143	Naki-Mashi	42yrs	Female	Yemgeh	Respondent	Mashi	Mekaf
QAT138	Ajumbu	31yrs	Male	Ajumbu	Respondent	Ajumbu	Ajumbu
QAT125	Ajumbu	47years	Male	Yemgeh	Respondent	Ajumbu	Ajumbu
QAT126	Ajumbu	32yrs	Female	Yemgeh	Respondent	Kung	Ajumbu

!QAT130 Kung 34yrs Male Kung Referential/judge Kung Fang

Table 68 shows that six speakers of varying linguistic backgrounds provided wordlists in the Kung language. These wordlists were to test their competences in this language. Out of six persons that took part in the wordlist test, four were females and two males. These included speakers from Ajumbu, Mashi and Koshin. It should be noted that the speaker with code QAT130 is a Kung speaker whose wordlists have been used as reference to those collected from non-Kung native speakers/L2 speakers. We will start by presenting all the scores each speaker had in this language before giving the details on how this language was acquired by each individual.

KUNG SCORES

QAT170_QAT130 140.43 / 288 = 0.488

QAT120_QAT130 145.9 / 294 = 0.496

QAT143_QAT130 74.87 / 255 = 0.294

QAT138_QAT130 99.24 / 301 = 0.330

QAT125_QAT130 80.22 / 240 = 0.334

QAT126_QAT130 74.84 / 283 = 0.264

Table 69a: Individual scores in Kung on wordlists

L1 speaker	Elements from L1 speaker	L2 speakers	Elements from L2 speakers	Scores from L2 speakers	Comments
QAT130	140.43	QAT170	288	0.488	Near native active competence
QAT130	145.9	QAT120	294	0.496	Near native active competence
QAT130	74.87	QAT143	255	0.294	Near active competence
QAT130	99.24	QAT138	301	0.330	Active competence
QAT130	80.22	QAT125	240	0.334	Active competence
QAT130	74.84	QAT126	283	0.264	Near active competence
Total		6			
Percentage		**66.66%**			

Kung data shows that more than half of those L2 speakers with self-reported competences in this language had active competence in the language, Kung is a one village language spoken by about 600-800 speakers. Kung is classified as a central ring language and very close to the Isu language of Fungom sub division in the North West Region. Why I say this is because I as an Isu speaker, in my first contact with speakers of this language during my first field trip, I was able to comprehend almost everything that wads said in the language not because I was exposed to it but naturally.

From the above analyses, we have been able to see scores non-Kung speakers had in the production of wordlists in the Kung language. The speakers declared they were not having relatives in Kung and do not have Kung names with the exception of speaker **QAT 126** who is married to a Kung man and lives with husband in Yemgeh where Kung is spoken. The reasons for them having knowledge of the Kung language is because they live in Yemgeh,

which is a village harbouring many Kung speakers while speaker **QAT138** reveals that he learns Kung through constant visits to Yemgeh and in the Yemgeh market.

Table 69b: Wordlists competences in Kung by Native language

Native language	**No. of self-reported competence**	**Wordlists competence**	**Percentage**
Ajumbu	4	3	75
Koshin	1	1	100
Naki	1	0	0
Total	**6**	**4**	**66.66**

Table 69b shows that out of those with self-reported active competences in Kung, after the administration of the wordlist,100% (1) Koshin and 75% (3) of Ajumbu were actually competent. The Naki speaker who attempted the wordlist was found not competent. Majority of those with self-reported competence in this language were really competent in it.

Table 69c: Wordlist competences in Kung by Gender

Sex	**Self-reported competence**	**Wordlists competence**	**Percentage**
Male	2	2	100
Female	4	2	50
Total	**6**	**4**	**66.66**

Table 69c shows that of those with self-reported competence in Kung, 100% (2) of males were competent and 50% (2) of females were also competent in it. Some of the females with these self-reported competence were found not competent.

Table 69d: Wordlist competences in Kung by Age

Age	Self-reported competence	Wordlists competence	Percentage
18-32	4	3	75
33-56	2	1	50
57 and above	0	0	0
Total	**6**	**4**	**66.66**

Table 69d demonstrates demonstrates that people from the old age group did not report competency in Kung. Of those with self-reported competence in the language, 75% (3) of youths were really competent in it and 50% (1) from the middle age were actually competent. In both age groups (youths and middle age) some of those with self-reported competences were found not competent.

Table 69e: Active competences in Kung by Degree/Grade

Degree of Competence	Self-reported competence	Wordlists competence	Percentage
Active competence	6	4	66.66
Near active competence	0	2	33.33
No active competence	0	0	0
Total	**6**	**6**	**100**

As far as the competences in degree/grade is concerned, of those with self-reported competences in this language, 66.66% (4) actually had active competences in the wordlists and 33.33 (2) among them had near active competences. None of them were found with no competency level.

The above section has demonstrated scores of wordlists of Kung, by individuals, by native language, gender and different age groups. Below, we will see performances in Fang.

Fang too is a one-village language spoken in the south eastern part of LF. It is considered as the most populated in this area with a population of about 4,000-6,000. It is known to be one of the new comers in the area.

FANG SCORES

QAT139_QAT108 145.52 / 302 = 0.482

QAT135_QAT10864.36 / 286 = 0.225

QAD25_QAT108 152.51 / 244 = 0.625

QAD23_QAT108 13.98 / 201 = 0.070

QAT101_QAT108 94.94 / 272 = 0.349

QAD28_QAT108 68.14 / 328 = 0.208

TABLE 70: THE SOCIOLINGUISTIC PROFILES OF L2/REFERENCE SPEAKERS IN FANG

Codes	Main Linguistic Identity	Age	Sex	Residence	Role	S'prov	M'prov
QAT139	Ajumbu	80yrs	Male	Ajumbu	Respondent	Ajumbu	Mmen
QAT135	Kung	34yrs	Male	Kung	Respondent	Kung	Fang
QAD25	Buu	65yrs	Female	Buu	Respondent	Buu	Buu
QAD23	Buu	60yrs	Male	Buu	Respondent	Buu/Buu	Buu
QAT101	Buu	65yrs	Male	Buu	Respondent	Fang/Buu	Buu
QAD28	Buu	61yrs	Male	Buu	Respondent	Buu	Abar
QAT108	Fang	38yrs	Male	Fang	Referential/judge	Fang	Fang

The section presents the sociolinguistics profiles of L2 speakers with self-rported proficiencies in Fang. The speaker with code **QAT108** is a Fang speaker whose data was used as a reference to L2 speakers. Below, scores will be presented on individual and on variables.

Table 71a Individual scores in Fang on wordlists

L1 speaker	Elements from L1 speaker	L2 speakers	Elements from L2 speakers	Scores from L2 speakers	Comments
QAT108	145.52	QAT139	302	0.482	Near native active competence
QAT108	64.36.9	QAT135	286	0.225	Near active competence
QAT108	152.51	QAD25	244	0.625	Native speaker competence
QAT108	13.98	QAD23	201	0.070	No competence
QAT108	94.94	QAT101	272	0.349	Active competence
QAT108	68.14	QAD28	328	0.208	Near active competence
Total		6			
Percentage		**50%**			

Table 71a above give scores at individual levels in Fang. It could be seen that 50% of those with self-reported competences in this language were actually competent in it and 50% of those people were also found not competent. All except two speakers declared that they had no relatives in Fang and as a result, they did not bear Fang names. Their knowledge of the Fang language is through friends and constant visits to Fang.

QAT139 learnt Fang because he lived there for 7yrs with father who was sick and was being treated in Fang.

Speaker **QAT135** learnt Fang from his mother who is from Fang. He also bears a Fang name given by a maternal uncle.

QAD25 learnt Fang from Fang friends and she constantly visit Fang.

QAD23 learnt Fang from Fang friends and as the regent of Buu, Fang people constantly visits him since Fang is nearer Buu.

QAT101 learnt Fang through first wife; he also lived in Fang as a child for 7 years with his sick father who was being treated in Fang. Though his Fang wife is of late, he constantly

visits Fang because of friends and in-laws. He did confirm that he has Fang neighbours in the farm.

QAD28 learnt Fang because he lived in Fang for two years with mother's friend who is from Fang. Below, we will present details per linguistic communities, including the different variables.

Table 71b: Wordlists competences in Fang by Native language

Native language	**No. of self-reported competences**	**Wordlists competences**	**Percentage**
Ajumbu	1	1	100
Kung	1	0	0
Buu	4	2	50
Total	**6**	**3**	**50**

Table 71b above presents the various L2 speakers who took part in the Fang test. It can be seen that, out of the six persons involved, they were speakers from Ajumbu, Kung and 4 from Buu. Total percentage score in Fang = 3/6 = 50%

Based on the Fang scores above, we notice that half of L2 speakers were competent in Fang while some of the L2 speakers were not competent in this language.

Table 71c: Wordlist competences in Fang by Gender

Sex	**Self-reported competences**	**Wordlists competences**	**Percentage**
Male	5	2	40
Female	1	1	100
Total	**6**	**3**	**50**

Table 71c above reveals that of those with self-reported competences, 100% (1) females were actually competent and 40% (2) of males were also competent. We see that some of the males with self-reported competences were found not competent.

Table 71d: Wordlist competences in Fang by Age

Age	Self-reported competences	Wordlists competences	Percentage
18-32	1	0	0
33-56	0	0	0
57 and above	5	3	60
Total	**6**	**3**	**50**

Table 71d above shows that nobody from the middle age group claimed competency in Fang. Out of the two age groupd (youths and old age) with self-reported competences in this language, 60% (3) of those from the old age were actually competent. Youths were found not competent.

Table 71e: Active competences in Fang by Degree/Grade

Degree of Competence	Self-reported competences	Wordlists competences	Percentage
Active competence	6	3	50
Near active competence	0	2	33.33
No active competence	0	1	16.66
Total	**6**	**6**	**100**

Table 71e shows that of those with self-reported competences in this language, 50% (3) were really competent, 33.33% (2) of them had near active competences in the language and 16.66% (1) had no competency level in the language. Scores on Koshin will be seen below. Koshin is also a one–village language spoken in the eastern part of LF with a population of 3,000-3,500. It is also said to be one of the new comers in LF.

KOSHIN

QAT27_QAT107 59.69 / 269 = 0.222

TABLE 72: THE SOCIOLINGUISTIC PROFILES OF L2/REFERENCE SPEAKERS IN KOSHIN

Code	Main Linguistic Identity	Age	Sex	Residence	Role	S'prov	M'prov
QAT27	Buu	68yrs	Male	Buu	Respondent	Buu	Buu
QAT107	Koshin	23yrs	Female	Ngun	judge	Ngun	Koshin

The aboves section presents the sociolinguistics profiles of both the L2 speaker in Koshin and the judge.

Table 73a: Individual scores in Koshin on wordlists

L1 speaker	**Elements from L1 speaker**	**L2 speakers**	**Elements from L2 speakers**	**Scores from L2 speakers**	**Comments**
QAT107	59.69	QAT27	269	0.222	Near active competence
Total		1			
Percentage		**0%**			

Table 73a shows that the only speaker with self-reported competence in this language had a near active competence in this language. Total percentage score in Koshin is 0%. The only speaker who attempted providing a wordlist in the Koshin language is not competent in the language. The little knowledge he acquires in this language is through constant exchange visits with Koshin friends. Apart from friendship ties, he has no other relationship with Koshin and does not bear a Koshin name.

Table 73b: Wordlists competences in Koshin by Native language

Native language	**No. of self-reported competences**	**Wordlists competences**	**Percentage**
Buu	1	0	0
Total	**1**	**0**	**0**

Table 73b shows that only a Buu speaker claimed competence in this language though scores show that the speaker had no competency level in this language.

Table 73c: Wordlist competences in Koshin by Gender

Sex	**Self-reported competences**	**Wordlists competences**	**Percentage**
Male	1	0	0
Female	0	0	0
Total	**1**	**0**	**0**

Table 73c reveals that no females claimed competence in this language. The only speaker with self-reported competence in this language was a male.

Table 73d: Wordlist competences in Koshin by Age

Age	**Self-reported competences**	**Wordlists competences**	**Percentage**
18-32	0	0	0
33-56	0	0	0
57 and above	1	0	0
Total	**1**	**0**	**0**

Table 73d above demonstrates that the youth and middle age groups did not claim they could speak Koshin. The only speaker with self-reported competence in this language was from the old age group. Results show that he was not competent in the language as scores in this language are 0%.

Table 73e: Active competences in Koshin by Degree/Grade

Degree of Competence	**Self-reported competences**	**Wordlists competences**	**Percentage**
Active competence	1	0	0
Near active competence	0	1	
No active competence	0	0	0
Total	**1**	**0**	**0**

Table 73e shows that the Buu speaker with self-reported competence in Koshin had a near active competence. He was not competent in the language and did not also possess a no competency level in the language. Next, we are going to see peoplés performances in Missong, a variety of Munbam.

Mungbam is a language with five varieties which include: the Munken, Ngun, Biya, Abar and Missong varieties. The name Mungbam is an appellation given by Lovegren (2010) which is an acronym of the five varieties above. The Mungbam variety that was used was that of Missong. Lovegren's label of this language as Mungbam is a scholarly fiction, does not correspond to actual situation on the ground. Missong and Abar differ in quite substantial ways, especially (but not only) in lexicon.

TABLE 74: A SOCIOLINGUISTIC PROFILE OF L2/REFERENCE SPEAKERS IN MUNGBAM

Codes	**Main Linguistic Identity**	**Age**	**Sex**	**Residence**	**Role**	**S'prov**	**M'prov**
QAD23	Buu	60yrs	Male	Buu	Respondent	Buu	Buu
QAT102	Buu	68yrs	Male	Buu	Respondent	Buu	Buu
QAD25	Buu	65yrs	Female	Buu	Respondent	Buu	Buu
QAT155	Mufu-	35yrs	Female	Mufu	Respondent	Mufu	Abar

Mundabli

QAT167 Missong 26yrs Male Missong judge Not married Missong

Table 74 demonstrates the sociolinguistic profiles of Missong including that of the judge who is a native speaker of Mmissong.

SCORES IN THE MISSONG

QAD23_QAT167 117.14 / 262 = 0.447

QAT102_QAT167 113.04 / 295 = 0.383

QAD25_QAT167 87.81 / 288 = 0.305

QAT155_QAT167 173.44 / 288 = 0.602

Table 75a: Individual scores in Mungbam (Missong) on wordlists

L1 speaker	**Elements from L1 speaker**	**L2 speakers**	**Elements from L2 speakers**	**Scores from L2 speakers**	**Comments**
QAT167	117.14	QAD23	262	0.447	Near native active competence
QAT167	113.04	QAT102	295	0.383	Active competence
QAT167	87.81	QAD25	288	0.305	Native speaker competence
QAT167	173.44	QAT155	288	0.602	Native speaker competence
Total		4			
Percentage		**100**			

Mungbam scores show that all L2 speakers had active competences. Total percentage score in Mungam =4/4 x 100 = 100%. All except one has no name from Missong. Speaker QAD23 has no Missong name. He learnt Missong from Missong friends.
Speaker QAT102 has no Missong name. Learn Missong through constant visits to Missong. Speaker QAD25 by constantly going there. Though married to a Buu man and lives in Buu, she speaks Missong with mum whenever they come together and with Missong speakers.

Speaker QAT155 has no name from Missong. Learns Missong because mother is from Abar. Both Abar and Missong as of now are considered as dialects of Mungbam. Missong too is nearer to Mufu and she constantly visits friends in Missong.

Table 75b: Wordlists competences in Mungbam by Native language

Native language	**No. of self-reported competences**	**Wordlists competences**	**Percentage**
Buu	3	3	100
Mufu-Mundabli	1	1	100
Total	**4**	**4**	**100**

Table 75b shows that only Buu and Mufu-Mundabli speakers claimed competence in Mungbam (Missong). Out of those with self-reported competences, all of them are actually competent in the language as they score 100%.

Table 75c: Wordlist competences in Mungbam by Gender

Sex	**Self-reported competences**	**Wordlists competences**	**Percentage**
Male	2	2	100
Female	2	2	100
Total	**4**	**4**	**100**

Table 75c above shows that both males and females score 100% (2) each.

Table 75d: Wordlist competences in Mungbam by Age

Age	**Self-reported competences**	**Wordlists competences**	**Percentage**
18-32	0	0	0
33-56	1	1	100
57 and above	3	3	100
Total	**4**	**4**	**100**

Table 75d above table shows that youths did not claim competences in Mungbam. Of the two age groups with self-reported competences in Mungbam (middle and old age gropus), they both score 100% each (1 and 3), respectively.

Table 75e: Active competences in Mungbam by Degree/Grade

Degree of Competence	**Self-reported competences**	**Wordlists competences**	**Percentage**
Active competence	4	4	100
Near active competence	0	0	0
No active competence	0	0	0
Total	**4**	**4**	**100**

The table shows that none of the L2 speakers had neither a near active nor no competency levels. These speakers all active competences in the language. Scores in Ajumbu will be presented below.

Ajumbu scores will be seen below. Ajumbu is also a one-village language. It is located on the southern fringe of LF which puts it in contact with the Mmen language, in particular the Mmen speakers in the village of Fungom. It is spoken by 200-300 speakers.

TABLE 76: A SOCIOLINGUISTIC PROFILE OF L2/REFERENCE SPEAKER IN AJUMBU

Codes	**Main Linguistic Identity**	**Age**	**Sex**	**Residence**	**Role**	**S'prov**	**M 'prov**
QAD28	Buu	61yrs	Male	Buu	Respondent	Buu	Buu
QAT126	Ajumbu	32yrs	Male	Yemgeh	Judge	Kung	Ajumbu

Table 76 above presents the sociolinguistic profiles of an L2 speaker in Ajumbu and that of the judge who is an L1 speaker of Ajumbu.

AJUMBU SCORES

QAD28_QAT126 23.51 / 268 = -0.088

Table 77a: Individual scores in Ajumbu on wordlists

L1 speaker	Elements from L1 speaker	L2 speakers	Elements from L2 speakers	Scores from L2 speakers	Comments
QAT126	23.51	QAD28	268	-0.088	No competence
Total		**1**			
Percentage		**0%**			

The table shows that the L2 speaker is not competent in Ajumbu. Total percentage score in Ajumbu = 0 %. This speaker does not does not bear an Ajumbu name nor married to an Ajumbu woman but claims he grew up with uncle in Wum who used to lodge Ajumbu students.

Table 77b: Wordlists competences in Ajumbu by Native language

Native language	No. of self-reported competences	Wordlists competences	Percentage
Buu	1	0	0
Total	**1**	**0**	**0**

The Ajumbu scores show that only one person attempted producing wordlists in the language and he was not competent in the language thus confirming the assertion made by almost all LF speakers that Ajumbu is difficult. This therefore brings to mind questions such as:

1-How is a language considered difficult?

2-Have they been exposed to it before discovering that it is difficult?

3-If yes, why is more difficult than the other languages?

Table 77c: Wordlist competences in Ajumbu by Gender

Sex	**Self-reported competences**	**Wordlists competences**	**Percentage**
Male	1	0	0
Female	0	0	0
Total	**1**	**0**	**0**

Table 77c above reveals that only a male reported competence in Ajumbu. His scores show that he was not competent in this language.

Table 77d: Wordlist competences in Ajumbu by Age

Age	**Self-reported competences**	**Wordlists competences**	**Percentage**
18-32	0	0	0
33-56	0	0	0
57 and above	1	0	0
Total	**1**	**0**	**0**

Table 77d shows that only the old age group reported competences in Ajumbu. This speaker was found not competent.

Table 77e: Active competences in Ajumbu by Degree/Grade

Degree of Competence	**Self-reported competences**	**Wordlists competences**	**Percentage**
Active competence	1	0	0
Near active competence	0	0	0
No active competence	0	1	0
Total	**1**	**1**	**0**

As far as the degree of competence is concerned, the speaker with self-reported competence in this language has neither an active nor a near active competence in this

language. His score reveals that he has no competency level in this language. The next language we are going to see is the Naki language.

Naki is a language made up of six varieties Mekaf, Small Mekaf/Batieh, Mashi, Mashi overside, Nser and Nkang spoken in upper and Lower Fungom and also in the Fur-Awa subdivision. Speakers of this language claim that the varieties are exactly the same though work has not yet been carried out to prove this assertion.

TABLE 78: A SOCIOLINGUISTIC PROFILE OF L2/REFERENCE SPEAKERS IN NAKI

Codes	Main Linguistic Identity	Age	Sex	Residence	Role	S'prov	M' Prov
QAT158	Kung	53yrs	Female	Yemgeh	Respondent	Kung	Mekaf
QAT105	Biya	47yrs	Male	Biya	Respondent	Biya	Biya
QAT106	Ngun	46yrs	Female	Ngun	Respondent	Ngun	Ngun
QAT157	Small Mekaf	28yrs	Female	Mekaf	Judge	Mekaf	Small Mekaf

Table 78 above shows the sociolinguistic pfofiles of L2 speakers in Naki.

The Variety of Small Mekaf

QAT158_ QAT157 115.38 / 284 = 0.406

QAT105_ QAT157 96.06 / 266 = 0.361

QAT106_ QAT157 148.94 / 266 = 0.560

Table 79a Individual scores in Naki on wordlists

L1 speaker	Elements from L1 speaker	L2 speakers	Elements from L2 speakers	Scores from L2 speakers	Comments
QAT157	115.38	QAT158	284	0.406	Near native competence
QAT157	96.06	QAT105	266	0.361	Active competence
QAT157	148.94	QAT106	266	0.560	Native competences
Total		**3**			
Percentage		**100%**			

The table demonstrates that out of those with self-reported competences in Naki, all were actually competent in it. Speakers **QAT105** and **QAT106** declare that though they have relatives from Mekaf, they do not bear Mekaf names. They both learnt Naki/Mekaf from grandmothers. While speaker **QAT158** says that her grandmother is from Mekaf and that she bears a Mekaf name given by her grandmother.

Total percentage score in Naki = 3/3 x 100 = 100%.

Table 79b: Wordlists competences in Naki by Native language

Native language	**No. of self-reported competences**	**Wordlists competences**	**Percentage**
Kung	1	1	100
Mungbam	2	2	100
Total	**3**	**3**	**100**

Table 79b above shows that of those with self-reported competences in Naki, (Kung and Mungbam speakers), all were actually competent in this language as they all scored 100% each.

Table 79c: Wordlists competences in Naki by Gender

Sex	**Self-reported competences**	**Wordlists competences**	**Percentage**
Male	1	1	100
Female	2	2	100
Total	**3**	**3**	**100**

Table 79c shows that both males and females with self-reported competences in Naki, both sexes were really competent as males scored 100% (1) and females 100% (2).

Table 79d: Wordlist competences in Naki by Age

Age	Self-reported competences	Wordlists competences	Percentage
18-32	0	0	0
33-56	3	3	100
57 and above	0	0	0
Total	**3**	**3**	**100**

On table 77d, the youths and the old age group did not claim they could speaker Naki. Of those with self-reported competences which were all from the middle age group, all were actually competent in this language.

Table 79e: Active competences in Naki by Degree/Grade

Degree of Competence	Self-reported competences	Wordlists competences	Percentage
Active competence	3	3	100
Near active competence	0	0	0
No active competence	0	0	0
Total	**3**	**3**	**100**

Table 79e above reveals that of those with self-reported competences, all L2 speakers were actually competent in this language as none of them had neither a near active competence nor no competency level. The next language we are going to see is the Buu language.

Buu which belonged to the Ji group made up of Buu, Mufu and Mundabli has in recent works been considered as a one-village language. See Ngako (2013). It is a language with a population of about 100-200. Below is the score a Mufu-Mundabli scored in Buu.

QPP22_QAD24 119.75 / 268 = 0.447

TABLE 80: SOCIOLINGUISTIC PROFILE OF AN L2/REFERENCE SPEAKER IN BUU

Code	Main Linguistic Identity	Age	Sex	Residence	Role	S'prov	M'prov
QPP22	Mufu	48yrs	female	Buu	Respondent	Buu	Mufu
QAD24	Buu	56yrs	female	Buu	judge	Missong	Buu

Table 80 above, we have been able to show the performances gotten by L2 speakers in languages they claimed they could speak scoring them based on wordlists. Some reasons have also been given to how some of these speakers acquire these languages.

Table 81a: Individual scores in Buu on wordlists

L1 speaker	Elements from L1 speaker	L2 speakers	Elements from L2 speakers	Scores from L2 speakers	Comments
QAD24	119.75	QPP22	268	0.447	Near native competence
Total		1			
Percentage		**100**			

Table 81a above shows that this speaker has a near native speaker competence in Buu.

Table 81b: Wordlists competences in Buu by Native language

Native language	No. of self-reported competences	Wordlists competences	Percentage
Mufu-Mundabli	1	1	100
Total	**1**	**1**	**100**

Table 81b reveals that the only L2 speaker with self-reported competence in Buu is a Mufu-Mundabli speaker. It has been seen that she is actually competent in this language. Results show that this Mufu speaker is competent in Buu. Her sociolinguistic profile reveals that she does not have a name from Buu. She learnt this language because she is married to a Buu man and she has been living in Buu since she got married (20yrs) in Buu.

Table 81c: Wordlist competences in Buu by Gender

Sex	Self-reported competences	Wordlists competences	Percentage
Male	0	0	0
Female	1	1	100
Total	**1**	**1**	**100**

Table 81c above shows that only a female claimed she could produce wordlists in Buu. Her scores in this language show that she is actually competent in it.

Table 81d: Wordlist competences in Buu by Age

Age	Self-reported competences	Wordlists competences	Percentage
18-32	0	0	0
33-56	1	1	100
57 and above	0	0	0
Total	**1**	**1**	**100**

Table 81d reveals that the only speaker with self-reported competence in Buu is of the middle age group. No youth and old age speakers gave self-reported competences in this language.

Table 81e: Active competences in Buu by Degree/Grade

Degree of Competence	Self-reported competences	Wordlists competences	Percentage
Active competence	1	1	100
Near active competence	0	0	0
No active competence	0	0	0
Total	**1**	**1**	**100**

We can see on table 81e that the speaker with self-reported competence in this language neither has a near active competence nor no competency level in the language. She actually master the language.

Quoted in Edu-Buandoh (2006), Fillmore (1991) maintained that when children use the native language with their families, an intimate bond is created within the family. Parents could then convey their culture to their children, and socialize the children into cultural self-esteem. This school of thought is very remarkable in LF as speakers revealed that learning this or that language shows some sense of belonging. The notion of flagging is very common as most relatives who come from diverse linguistic backgrounds try to inculcate their language and culture to their love ones and the love ones in turns reciprocate that by willingly accepting to learn these languages. We have seen scores of L2 speakers above in the

production of wordlists. We notice that many L2 speakers were equally competent in the production of wordlists in different languages. Their sociolinguistic backgrounds have given us the "raison d'être" of their knowledges in these languages.

TABLE 82: TOTAL PERFORMANCES BY GENDER PER LANGUAGE DURING WORDLISTS

LANGUAGES	**MALES**		**FEMALES**	
	Self-reported competence	**Wordlist competences**	**Self-reported competence**	**Wordlist competences**
Fang	5	2	1	1
Missong	2	2	2	2
Buu	0	0	1	1
Naki	1	1	2	2
Kung	2	2	4	2
Koshin	1	0	0	0
Mufu-Mundabli	0	0	0	0
Ajumbu	1	0	0	0
Total	12	7	10	8
Percentage	**100**	**58.33**	**100**	**80**

Table 82 demonstrates that of those with self-reported competence in all LF languages, 80% (8) of males were competent and 58.33% (7) of females were competent. We can see here that in both sexes, some with self-reported competences were found not competent in some of these languages.

In the next section, we will find the total performances according to different age groups in all the languages.

TABLE 83: TOTAL PERFORMANCES BY AGE GROUP PER LANGUAGE DURING WORDLISTS

LANGUAGES	**18-32**		**33-56**		**57+**	
	Self-reported competence	**wordlist competence**	**Self-reported competence**	**wordlist competence**	**Self-reported competence**	**wordlist competences**
Fang	1	0	0	0	5	3
Missong	0	0	1	1	3	3
Buu	0	0	1	1	0	0
Naki	0	0	3	3	0	0
Kung	4	3	2	1	0	0
Koshin	0	0	0	0	1	0
Mufu-Mundabli	0	0	0	0	0	0
Total	5	3	7	6	9	6
Percentage	**100**	**60**	**100**	**85.71**	**100**	**66.66**

Table 83 demonstrates that of those with self-reported competences, 85.71% (6) of those from the middle age group were competent, 66.66% (6) from the middle age and 60% (3) of the youths were also competent in these languages. We can say that among the different age groups with self-reported competence, the middle age group is the most competent in the production of wordlists in these languages.

Below, we are going to place the languages in a hierarchical order starting with that which attracts more L2 speakers to the least thus giving a response to one of our research questions which seeks to find out which language attract more speakers.

TABLE 84: HIERARCHICAL PRESENTATION OF COMPETENCES PER LANGUAGE DURING WORDLIST

Languages	**Self-reported competence**	**wordlist competences**
Kung	6	4
Mungbam	4	4
Fang	6	3
Naki	3	3
Buu	1	1
Koshin	1	0
Ajumbu	1	0
Mufu-Mundabli	0	0
Total	22	15
Percentage	**100**	**68.1**

Table 84 above shows that of those with self-reported competence, Kung and Mungbam languages attract more L2 speakers (4) each. Fang and Naki both occupy the second position as far as hierarchical presentations of these languages are concerned, followed by Buu. No L2 speaker could provide wordlists in Koshin, Ajumbu and Mufu-Mundabli languages.

FIGURE 17: WORDLISTS COMPETENCES IN BOTH SEXES PER LANGUAGE

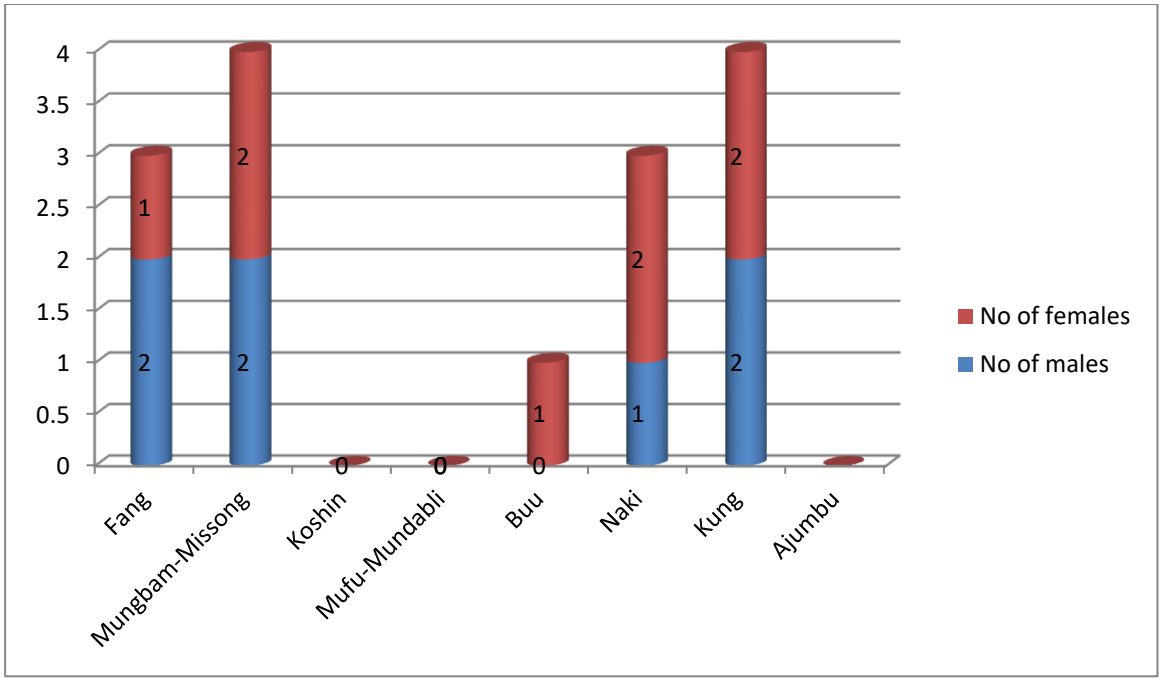


Figure 17 above shows the performances noticed by the different sexes in the various languages. It can be seen that in Fang, men are more competent than women while women being more competent than men in Naki and Buu. Both sexes have equal competence levels in Mungbam, Kung. The Ajumbu, Koshin and Mufu-Mundabli languages attract no L2 speaker as both men and women have 0 each in these languages.

FIGURE 18: WORDLIST COMPETENCES IN RELATION TO SEX IN ALL LANGUAGES

Figure 18 shows the total number of wordlist competences of males and females in LF. Being one of our objectives, we can see here that females are more competent than males in wordlists 80% and while 58.33%, respectively. These results are contrary to what we have during the RTT and visual stimuli tests where men are more competent than women.

FIGURE 19: WORDLISTS COMPETENCES OF DIFFERENT AGE GROUPS PER LANGUAGE

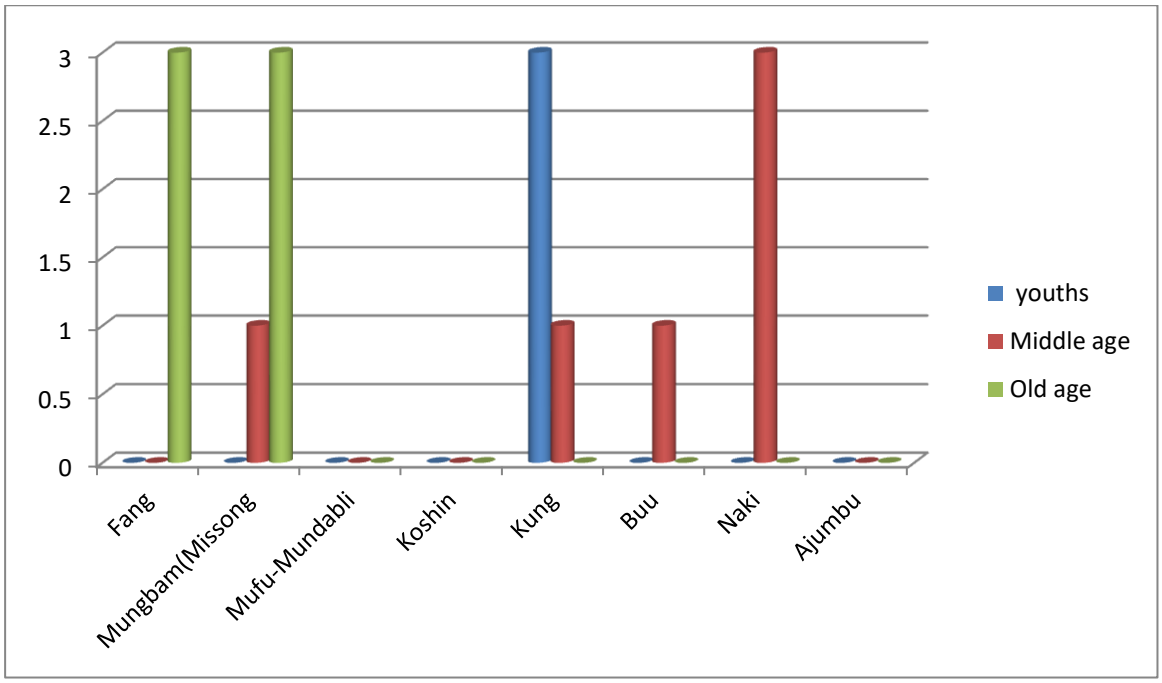


Figure above reveals that no age group is competent in Mufu-Mundabli, Koshin and Ajumbu. Also, the youths have no competency levels in Fang, Mungbam, Buu and Naki. We can see that the old age group is the most competent in Fang and Mungbam while the middle age is the most competent in Naki and youths in Kung.

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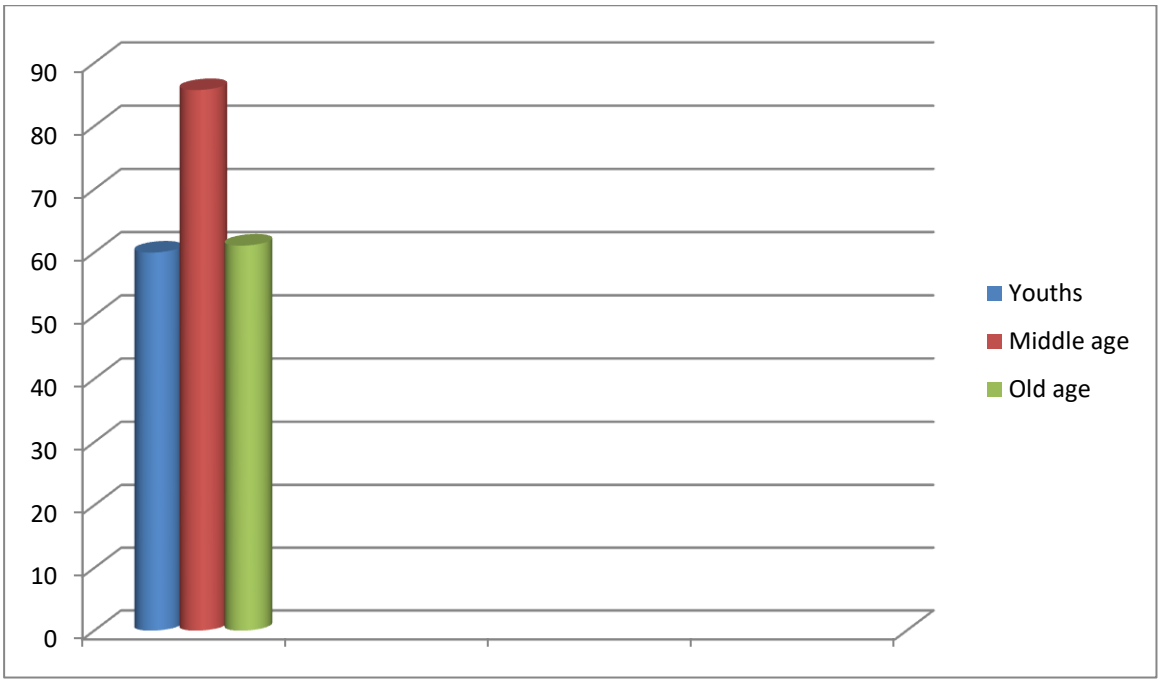
FIGURE 20: WORDLIST COMPETENCES IN ALL LANGUAGES ACCORDING TO DIFFERENT AGE GROUPS



On figure 20 we find above gives us the results we got after testing speakers during wordlists in all LF languages. It has been noticed that the middle age group is the most multilingual in this area with a percentage of 80%, followed by the old who score 61.1 while the youths are the least multilingual with 60% in wordlists production in all languages. The next section we are going to see is hierarchy in known languages. What we mean by hierarchy here is for us to know the languages which are more understood than others or the languages which attract many L2 speakers.

FIGURE 21: THE HIERARCHICAL PRESENTATION OF SPOKEN LANGUAGES DURING WORDLISTS

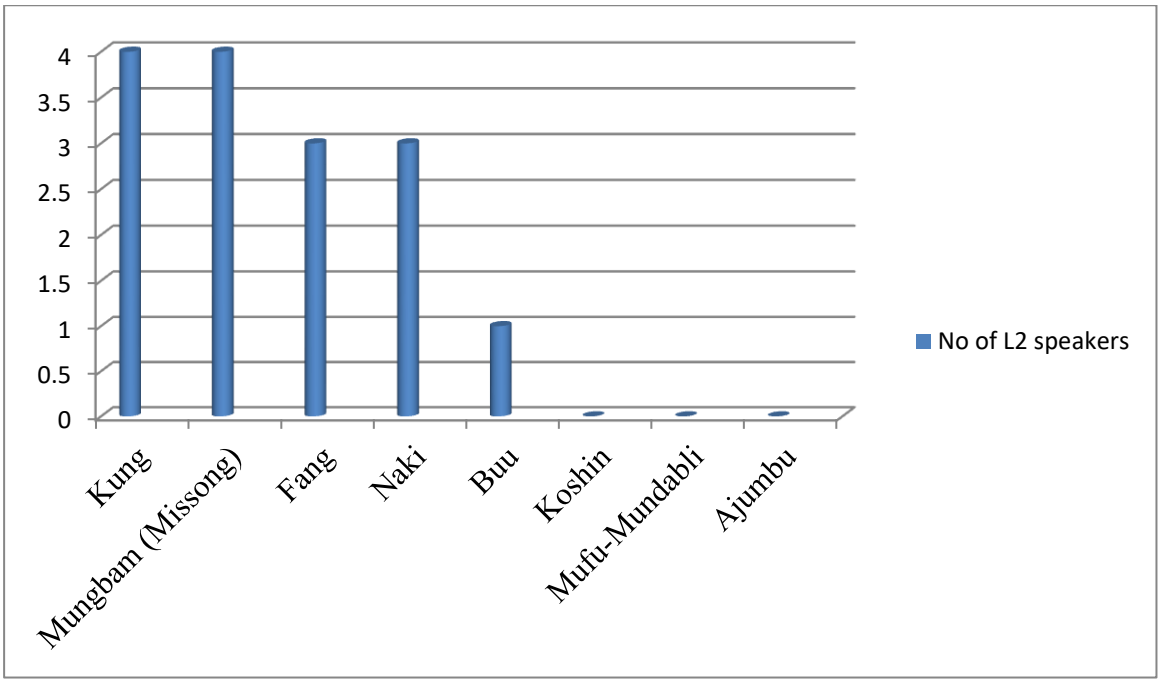


Figure 21 above shows a hierarchical presentation of spoken languages on percentages by L2 speakers during the production of wordlists. That is, which of the LF languages attract more L2 speakers and which are not. We can see from the chart that Kung and Mungbam attract more L2 speakers who could produce wordlists in these languages. Fang and Naki are the most widely spoken in terms of wordlists production. We also see that Koshin, Mufu-Mundabli and Ajumbu do not attract any L2 speakers, as no speaker of LF could provide wordlists in these language. We notice here that L2 speakers could interpret visual stimuli in these three languages but none could provide wordlists in these languages.

Though the script that was used in the calculating the distances of these languages with those of their counterparts have been able to portray or give us degrees of competences of these L2 speakers, we noticed some flaws in the application of the script as seen below.

6: 9 Flaws in the script

From the explanation above, the script followed a chronological order where sounds occupying the same positions in two words are compared and the scores are given based on this order and not in terms of resemblances. With this method used, we noticed a lot of bias in the results obtained. Words like ‘anyom’ vs. ‘nyom’, bə́twuŋ vs twúŋ, tə́dzú vs dzú, whose difference is on the whole little, the way in which the script was used, comparing the above

words will yield 0% similarity. This explains why some assessment work was to be done by separating words from their prefixes and suffixes in order to find out on what part of the words they were competent in.

All Lovegren's script can also lead to a negative value. It would be better if values (-values is termed zero (0) because the scores of the L1 Missong speakers are lower than some L2 speakers. Scores become too low. The last calculation of Jesse is used to establish the thresholds of a fluent speaker.

Missong is a language spoken by speakers who are multilingual. They will never be two speakers who could speak the same. So we had to come out with a threshold between L1 speakers.

Assessing multilingual competence should be done using a different approach because even two L1 speakers could speak quite differently. Therefore, the way we used in assessing L2 could also have some flaws because we could not tell with exactitude if there are good or bad speakers. This therefore takes us to the open and close sets also known as grammatical morphemes versus vocabulary as seen below.

6.10 Competence in closed (grammatical morphemes) vs. open set (vocabulary)

Word classes may be either open or closed. An open class is one that commonly accepts the addition of new words, while a closed class is one to which new items are very rarely added.

The open-closed distinction is related to the distinction between lexical and functional categories, and to that between content words and function words, and some authors consider these identical, but the connection is not strict. Open classes are generally lexical categories in the stricter sense, containing words with greater semantic content. Carnie (2012). Open is a term in grammar which denotes a class which does not have a pre-determined number of members while closed classes are normally functional categories, consisting of words that perform essentially grammatical functions.

In the case of our data, open sets involve just nouns while close sets involve noun prefixes. In terms of acquisition, these two sets were acquired differently and at varying degrees by L2 speakers. We will demonstrate what open and closed sets are all about in both

the Kung and Fang languages. The charts summarize all the codes to describe mistakes like LB100, Pr 50, etc. The two charts summarize these codes in Kung and Fang.

Below, we are going to find competences in closed (grammatical morphemes) vs. open set (vocabulary) in both Fang and Kung languages.

FIGURE 22: LEXICAL AND MORPHOLOGICAL DIFFERENCES IN FANG

	QAT139	QAD28
LB100	32	71
LB50	57	58
Pr100	4	6
Pr50	10	13
PrTHERE	17	6
NoPr	15	5
Suff100	0	0
Suff50	0	1
SuffTHERE	2	4
NoPrSuff	0	0
PrSuffInv	0	0
NoSuff	0	0
OK forms	156	148
Errors	137	164
LB errors	89	129
NC errors	48	35

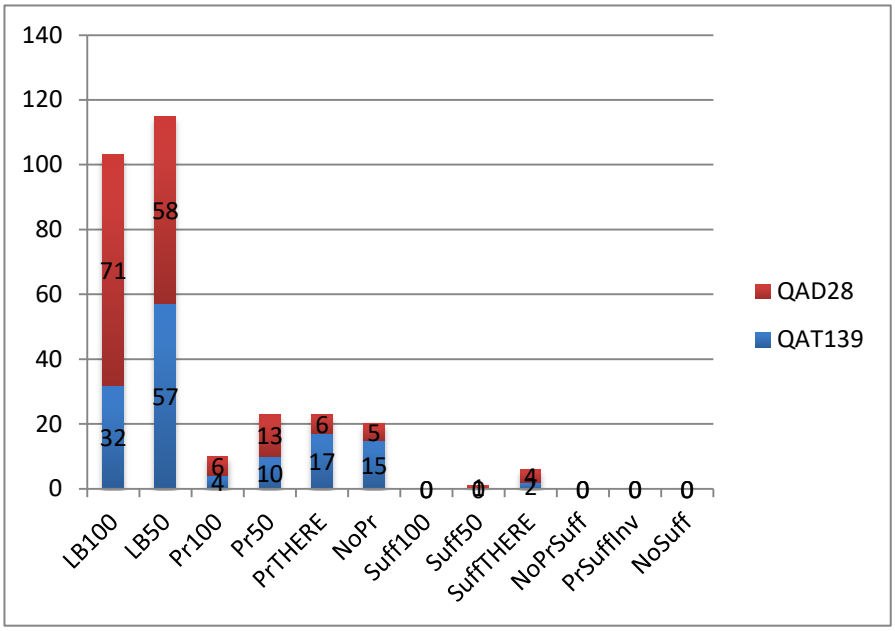


Figure 22 above shows performances of two L2 speakers in Fang (QAT139 and QAD28) in the production of wordlists. Speaker QAT139 is an Ajumbu man with knowledge in Ajumbu, Mmen, Kung, Mekaf, Pidgin English and Missong languages. While speaker QAD28 is a Buu speaker with knowledge in Abar, Fang, Koshin, Kung and Pidgin English.

To begin with, the symbols above will be explained in order to give a better understanding of the charts. The symbols (LB, Pr and suff) stand for lexical base, prefix and suffix, respectively.

LB100 means that the lexical base or word produced by an L2 speaker was completely different from that in the target language. Also, for Pr/suff100 shows that the prefix or suffix given by the L2 speaker has no similarity with that of the target language.

On the other hand, forms like LB50, Pr50 and suff50 mean that they was a 50% resemblance between the lexical bases, prefixes and suffixes of L2 speakers with those of L1.

PrTHERE/ SuffTHERE denote the case where an L2 speaker inserts a prefix or suffix in a word that normally does not have a prefix in the target language. While NoPr/ NoSuff is when an L2 speaker omits a prefix or suffix in target words and PrSuffInv stands for prefix and suffix inversion. The ok forms are those that are produced exactly the same like in the target language.

6.11 Interpretation of chart

We notice here that QAT139 makes 32 errors in the lexical base and QAD28 makes 71 errors.

Speaker QAT139 has 57 words that were a bit similar to the target words while QAD28 produces 58.

Also, QAT139 produces 4 wrong prefixes while QAD28 produces 6 wrong prefixes. That is, the prefixes they produced here had no similarities with those of the target language. QAT139 produced 10 words whose prefixes had 50% similarities with the target words and QAD28 produces 13 words that were also similar to those of target words. Again, we also noticed some aspects of segment deletion and insertion. This was seen where QAT139 inserted 17 prefixes and 2 suffixes in words that do not have prefix or suffixes, while QAD28 pronounced 6 words with prefixes and 4 suffixes where no prefixes or suffixes were present.

As far as segment deletion is concern, QAT139 omitted 15 prefixes while his counterpart omitted 5 prefixes in words that had prefixes. Both speakers respected the above rules of Suff100, NoPrSuff, PrSuffInv and NoSuff as they both did not produce them.

From the results above, speaker QAT139 seem to be a better speaker than QAD28 as he had 156 ok forms and 137 errors while QAD28 had 148 ok forms and 164 errors in both lexical bases and noun classes. Below we are also going to find performances of two L2 speakers in Kung.

FIGURE 23: LEXICAL AND MORPHOLOGICAL DIFFERENCES IN KUNG

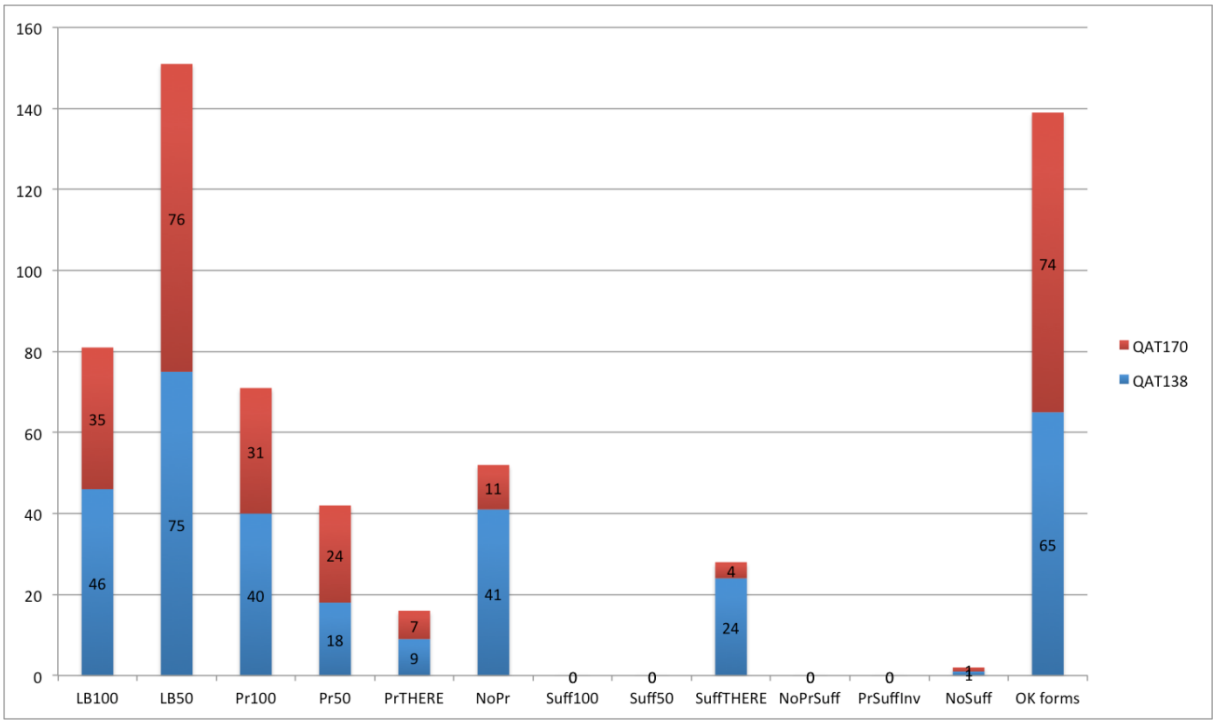


Figure 23 we find above gives wordlists scores of two L2 speakers who are native speakers of Ajumbu and Koshin. The speaker QAT170 is a female speaker from Koshin and Mmen because her father is from Koshin and her mother is from Fungom, a Mmen speaking village located just outside of Lower Fungom. Mmen is closely related to Kung and shares many lexical and grammatical features with it that are otherwise not common in Lower Fungom's languages. This speaker is resident in the market settlement of Yemgeh, where the Kung language is commonly spoken. The speaker QAT138 is a male speaker from Ajumbu who still lives there. According to their responses the sociolinguistic questionnaire, QAT170 knows Koshin (5), Fungom (5), Kung (4), English (3), Pidgin English (5) and Ajumbu (2), QAT138 knows Ajumbu (5), Kung (4), English (3) and Fungom (3). In the chart, the first two columns include errors produced. All the red values are QAT170 while that in blue are QAT138. The two speakers perform more or like the same way though QAT170 is a better speaker than QAT138. Relatively, QAT170 speaker seems to be a better speaker than QAT138 because she has 74 ok forms in both the lexical and noun classes while QAT138 has

65 and also, following the other mistakes he produces, his mistakes are lower than those of QAT138.

The ‘ok forms’ (perfect match) is when the non-native speaker’s words are the same as the referential native speaker). Non-matching or LB100, Pr100 and Suff100 (when the words, prefix or suffix neither match precisely or closely), Prefix There (when the non-native speaker uses a prefix but the referential native speaker does not), No prefix (when the non-native speaker did not use a prefix but the referential native speaker does). Suffix There (when the non-native speaker uses a sufffix but the referential native speaker has not), No Suffix (when the non-native speaker did not use a suffix but the referential native speaker does).

6.12 Morphology

QAT138 behaves in a different way. Following the prefixes, QAT138 pronounces 41 totally wrong prefixes while QAT170 pronounces 31 wrong ones.

QAT170 may have some phonological competence problems. Her problem is mostly at tone level. She has a falling or high tone and vowel quality problem. Her errors are minimal than those of QAT138.

There are some cases of similarities between both speakers. PrThere (very few errors in PrThere but it is very important to know which of the prefixes inserted are from which language. They both inserted prefixes in Kung in words that do not have prefixes. From their sociolinguistic backgrounds, both speakers know Fungom which might have influenced the acquisition of Kung. They both have relatives from Fungom. While QAT170's mother is from Fungom, QAT138 says his maternal grand mum too was from Fungom.

NoPrThere (no prefix there or No SuffThere (no suffix there is quite interesting. QAT138 is doing something we can hypothesis (he is doing hypercorrection for SuffThere). QAT138 has pronounced 24 times suffix there using an emblem to identify himself as a good Kung speaker (hypercorrection). Linguistic hypercorrection can lead to making errors. Quoted in Demuth (2003), Demuth (1988) states that the relatively early and 'error free' acquisition of Bantu noun class and agreement systems suggests that learning complex morphological paradigms is easy when they are phonologically transparent. Further support for this hypothesis comes from the acquisition of languages where errors consist of phonological overgeneralizations like the Swati class 11 > 5. This hypothesis has been attested in the L2 speaker (QAT170) who overgeneralizes rules in the production of words in Kung. Here, suffixes are emblematic in Kung because there are no suffixes in the other LF languages but the speaker uses these suffixes more than Kung speakers since he knows that the Kung language has suffixes and is a ring language.

The same thing too for NoPref (no prefix), QAT138 also use hypercorrections. While this speaker for 41 times does not put prefixes. Before we continue, we will recall some literature language acquisition in Bantu languages and see if some of the features noticed in LF do also occur in other Bantu languages. We will try to show if knowledge of L1 or other languages also affect the acquisition of second languages in other Bantu languages.

Orie (2006) examined the production of data from a number of L1 English speakers and found that the learners appeared to transfer their use of stress in English to the tonal system in Yoruba. That is, they equated high tone with stressed syllables and low tones with unstressed syllables; mid-tones were generally not used. And at the same time, Spinner (2011) poses a question on above findings of Orie to know whether this pattern of L1 influence extends to the acquisition of Bantu languages.

In linguistics or usage, hypercorrection is a non-standard usage that results from the over-application of a perceived rule of grammar or a usage prescription. A speaker or writer who produces a hypercorrection generally believes that the form is correct through misunderstanding of these rules, often combined with a desire to appear formal or educated.

Linguistic hypercorrection occurs when a real or imagined grammatical rule is applied in an inappropriate context, so that an attempt to be "correct" leads to an incorrect result. It does not occur when a speaker follows "a natural speech instinct", according to Otto Jespersen and Robert J. Menner.

Hypercorrection is sometimes found among speakers of less prestigious language varieties who produce forms associated with high-prestige varieties, even in situations where speakers of those varieties would not. Some commentators call such production hyperurbanism. Below, we will find the implications and contributions of the study.

Though our study did not focus on Indo-European or Germanic languages, that is some transfer in the acquisition of L2 by our target population was not due to their knowledge in either English, French or Pidgin, it was noticed that the transfer of morphology and lexicon from other languages were common. In the acquisition of words by multilingual speakers in this area of LF, their knowledge in other languages influenced the acquisition of their L2. It was very common to find speakers who brought in words from two to three different languages based on how full their linguistic repertoires were. Speakers who were more multilingual experienced a lot of transfer more than those that were less multilingual. Here are some examples of words in Koshin that have experienced some interference from other languages known by the speakers who is Buu.

TABLE 85: INTERFERENCES IN LEXICAL BASES IN KOSHIN

QAT27-Buu	**QAT107-Koshin**	**Gloss**
Yán	Bèyài	Vomit
kə̀ŋgwásɨ̀	kə̀tsɔ̀	Rattle
bə̀ŋgwásɨ̀	bə̀tsɔ̀	Rattles
kèfwɔ̀sɨ́	Kéfú	Cap
bə́fwɔ̀sɨ́	bəfú	Caps

The mistakes in the production of these words by this L2 speaker has been conditioned by his knowledge of Ajumbu and Fang languages which he also claims to know. While words like compound, ‘cap’ and ‘caps’ from Ajumbu, words such as ‘vomit’, ‘rattle’ and ‘rattles’ are brought in from Fang. Other examples of transfer were seen in the noun class of L2 speakers still in Fang.

TABLE 86: INTERFERENCES IN PREFIXES IN FANG

QAT139	QAD25	QAT101	QAT135	QAD23	QAD28	QAT108	Gloss
Ajumbu	**Buu**	**Buu**	**Kung**	**Buu**	**Buu**	**Fang**	
kə́-	No word	bè-	kə́-	bə́-	-kə́	Φ-	Ear
	No word	No word		kə̀-		bə́-	Ears
kè-	kə̀-				kə̀-	Φ-	Jaw
				tə̀-		bə̀-	Jaws
kɨ-		No word	kə̀	No word	kən	fɨ-	Frog
Φ-	ə́-	fə̀-			fə̀	ŋ-	Louse
bə̀-	kə́-	m̀-	kə́-	bə̀-		mə̀-	Lice
Φ-	Φ-		Φ-	Φ-	Φ-	kə́-	Shoe
tə́-	tə́-	No word	tə́-	tə́-		Φ-	Firewood(pl)
			bə̀-	kè-		fɨ-	Corn

Table 86 shows some morphological differences noticed from L2 speakers in Fang. We notice here that, different prefixes were imported into this language by L2 speakers due to either their multilingual repertoires or because of hypercorrection. In the word for ear, the singular marker has a zero prefix/zero marker (ϕ), though we see the Ajumbu speaker employing kə́-, a Kung speaker also uses kə́- while Buu speakers employed bè-, bə́- and a zero morpheme though with the insertion of a suffix respectively. The use of kə́- by the Ajumbu and Kung speakers respectively have been influenced by some sort of borrowing from the Kung language which is the singular prefix for ear in Kung. The sociolinguistic profile of the Ajumbu speaker shows that he speaks Kung. While Buu speakers might have employed bè-, bə́-, -kə́ due to hypercorrection in the sense that, since the suffix forms of ear and ears in Buu is -bə́-, by implications, should be a prefix in Fang.

In the same line, in the word for ‘jaw’, the Ajumbu speaker employs kè- and Buu speakers kə̀- as prefix marker for ‘jaw ‘. Though from two different linguistic backgrounds,

the use of almost a similar prefix by these speakers is because of shared knowledge of the Kung language whose singular prefix for the singular form for this word is kə́-. We see here that knowledge of other languages can influence the structure of a language that is there is some sort of interferences from one language to another. Interference is the transfer of certain phenomena from one language to another where they are not considered grammatical. This may happen at an individual level (during second language learning, for example) or collectively in which case it often leads to language change.

This is done here because the section hear tackles noun class in LF languages and how competent non-native speakers of these languages could respect these rules.

6:13 CONCLUSION

The chapter has been concerned with assessing L2 speakers using wordlists in what are known as the lexical and morphological enquiries. In the chapter, we have been able to see how some L2 speakers are able to produce words competently in languages that are not theirs though we also noticed some lexical and morphological errors committed by some of these speakers. Some phonological processes were also noticed in adult's speeches in their production of wordlists in their non-native languages. Unlike children, during language acquisition some of these processes come about as a result of them trying to suppress some sounds either because their articulatory organs are not yet well developed, these processes were provoked in adults by either their knowledge of other languages and/or the phenomenon of hypercorrection. The next chapter concludes the thesis.

GENERAL CONCLUSION

INTRODUCTION

The chapter focuses on the review of main points that have been discussed, the relationship between the sociolinguistic questionnaire, recorded text testing, visual stimuli and wordlist and how they were used in line with our theories. To begin with, we shall start with the chronological recapitulation of main points discussed commencing with (1) the general findings will be given, and they will be followed by (2) specific findings and (3) research outcome, (4) implications and contributions of the study, (5) recommendations, (6) difficulties encountered and (6) closing remarks.

CHRONOLOGICAL RECAPITULATION OF MAIN POINTS DISCUSSED

In chapter one, we have the general introduction where we have situated the problem under study which is (1) to view the relationship between these linguistic communities, (2) how languages could be acquired in a traditional setting, each of which is examined in relation to time, a given context and motivational ideology. The objectives of our work were enlisted; the scope and delimitation of the study was examined and the significance of the study were also enlisted.

In chapter two which is titled methodology, we started with the target population. Our focus was on natives of LF who had lived here for at least fifteen years and were judged by other native speakers to be very competent in their languages as well as their cultures. Data was collected from 80 consultants whose competences were tested: 13 from L1 speakers whose data/wordlists were used to assess those collected from L2 speakers and 8 other consultants played the role of judges in their respective languages. We reviewed some of the data collection techniques in empirical research in order to find out the most suitable data collecting methods for our present study. We used sociolinguistic questionnaires which gave us an in-depth of how most of these languages were acquired and the linguistic backgrounds of these consultants. We also collected data through the use of the recorded text technique, the visual stimuli and the collection of wordlists from L2 speakers. These methods permitted us to collect a large amount of data for our analyses. Finally, we had a briefly concluded the chapter.

In chapter three which is one of the most important chapters of our study, our data collected through the RTT was treated, presented and analysed. Our analysis was based on how well L2 speakers could interpret a text they had listened to and answer some questions in relation to that text. We did a qualitative and quantitative analysis of the passive competences

of speakers in targeted languages. It was noticed that most of the speakers understood almost all the LF languages. And that those who scored high in this section of the test were likely to have active competences in those languages.

Chapters four and five dealt with data that was collected using the visual stimuli method. This was done to see if what obtained here had a correlation with that collected during the RTT and also to confirm if what was declared about their competences was what actually takes place. Here we found out that these speakers were really multilingual as they claimed as they could at least speak more than two LF languages. Finally, a conclusion of the chapter was made. In this chapter, we had two types of consultants; those who declared in former works that they were competent in LF languages. Here, their declared competences were compared with their actual competences in order to see if they were a correlation.

Chapter six dealt with data that was collected using wordlists which were also used to test speakers' active competences.

Chapter seven recapitulated the study, general findings of the study, its implication and contributions concerning multilingualism in general and language assessment in particular and finally, a general conclusion of the study.

THE GENERAL FINDINGS

The types of multilingualism we find in LF are individual and communal multilingualism. The individual multilingualism centres only on a particular person; by focusing on the number of languages found in the linguistic repertoire of a given speaker. Results were gotten using the following tools and techniques:

This was done through the use of a sociolinguistic questionnaire, the recorded text testing (RTT), visual stimuli and wordlists which were all administered not only for us to know our informants well, their linguistic backgrounds, but also to test and assess their actual competences in languages they claimed they could understand and speak.

The RTT was used to test/assess their passive competences in these languages while two tools were used to assess active competences because the researcher had no absolute control over the first tool that was used (visual stimuli), so using a second tool (wordlists) to assess active competences was just to complement the first tool used. Below, we synthesize what the tools were all about.

The sociolinguistic questionnaire enabled us to know the sociolinguistic backgrounds of consultants. Questions were asked:

- Related to social variables (age and sex)
- Self-reported proficiencies (number of known and spoken languages)
- Reasons for language repertoire (how these languages were acquired/learnt)

Some of the reasons for their language proficiencies included: friendship, blood relation, through marriage, for commercial purposes, proximity and for solidarity purposes. These reasons have given us a different picture of what actually takes place in urban centres which has been the focus of many researchers involved in multilingual studies. The key words we hear in urban areas to be reasons why people acquire new languages would be for power, market value, prestige and job market etc.

Just because people here want to maintain friendship ties with their friends, and also because they have relatives from different linguistic backgrounds, they will want to learn their languages to learn their languages in order to maintain these relationships.

Also, high rates of intermarriage in this area encouraged the acquisition/learning of additional languages. That is, the fact that a man or woman's spouse is from a linguistic community different from his or hers encourages the learning of that spouse's language.

Some of the multilingual speakers learned additional languages because of commercial purposes. That is, they think that learning the languages of their business partners, will authomatically encourage the seller to sell to them at cheaper prices or the buyer to be motivated to buy their goods. It should be noted that, when we talk of business partners here, it does not include the type of businesses we find in towns. The businesses we are talking here is trading in palm oil, palm kernel, garri, cocoyams, pigs and goats etc.

Another reason that was given as to why these people invest time in learning new languages was for solidarity purposes. We see an ideology of "naturalization" in LF. L2 speakers declared they learn particular languages because they want to be affiliated to those language communities so that at one point when they cease from being a member of their linguistic communities, they can be integrated in the communities whose languages they speak. Some said they learned a given language in order to intercept in case something bad is said or planned against them.

The above centred on reasons why a sociolinguistic questionnaire was used in our study and the results gotten thereafter. We can see that, it was the backbone to our findings

since what we got here pushed us into further findings using different methods as will be seen below.

As earlier said, the RTT tool enabled us to test L2 passive competences. Results after the administration of the tool show that most of these people understood three to four languages. That is, they were able to interpret texts and even answer questions related to those texts in three to four languages thus confirming their claims which were that of being multilingual.

People who showed proof of having passive competences in the languages under test were further tested using the visual stimuli, which was tool that was used to assess active competence. The visual stimuli also revealed that most of the people could speak three to four LF languages including others that were spoken out of LF thus confirming their claims of being multilinguals.

The wordlist also proved that these people were not only competent in producing utterances and interpretation of texts, but they could actually produce words in isolation. Some of them could actually bring out the difference between a word base and it affixes though we also experienced some 'phonological processes' caused by the numerous languages found in the linguistic repertoires of the people.

They were also a lot of code mixing and code switching noticed in the speeches of these L2 speakers. Some of them though had native speakers' competences in some languages as they were able to score up to an 80% and above in those languages but at some point they switched from the language under test to another language they knew or mixed up codes in a single sentence.

The above tools have enabled us to get ample data for our study. They have also been able to bring a link between the work and the theories used. Most of the hypotheses that were tested using these tools came up during data collection, as the theory we used was the grounded theory. The Levenshtein distance has helped us to see the distance that existed between words produced by L2 speakers and those of their L1 counterpart. This tool has helped us know the degree of competences these L2 speakers have in producing words in languages other than theirs. This tool was a perfect tool to judge with exactitude the distance between these speakers since it permitted us to see the different words produced by both L1 and L2.

Our findings have also enabled us to consult old data that were written by other researchers reporting on the claims of these people multilingual competences. As it is the case with grounded theory, there is always a link between what was said by predecessors concerning a particular topic and the actual situation at hand. What was reported in Angiachi (2013), Di Carlo (2015, 2016), Good (2011) has been verified and proven to be true. This explains why there was a section in our work termed "declared vs actual" competences, reported by the above-mentioned researchers, crosschecked and tested by us in this work (see this in chapter five tables 41, 42, 43, 44, 45,46, 47,48, 49 and 50.

The above tools enabled us to have ten general findings. The sociolinguistic questionnaire gave us six general findings, recorded text testing and visual stimuli gave us one general finding each because we were able to know the people's passive and active competences in the languages under test. Wordlists gave us two general findings where through it, we came to know that these people could actually produce words in isolation. It also made us to know that phonological processes could be attested in adults' speech.

SPECIFIC FINDINGS

- There are many cases of individual multilingualism. Many LF speakers understand and even speak more than three languages of LF including theirs with some having native speakers' competences.
- As far as our sample is concerned, Fang is widely known while Kung is widely spoken by L2 speakers.
- As the sample I worked with is concern, men are more multilingual than women thus confirming Di Carlo (2015) findings.
- The old age group has a high degree of passive competences and active competences as compared to the middle age and the youths.
- There are also many cases of L2 speakers with near passive and active competences in these languages.
- Errors in lexical bases (LB) are much more frequent than errors on grammatical bases (GB). LB talks about the vocabulary morphemes, while no prefix (no pr) no suffix (no suff) are grammatical errors. (LB with 100% errors are 32 and 71 respectively, while grammatical bases with 100% errors are 4 and 6 respectively for the sampled speakers (QAT139 and QAD 28).
- Results shows that the L2 speaker QAT138 inserts suffixes in an attempt to produce words in Kung. This should be based on hypercorrection or on his sociolinguist background which is something emblematic, hypercorrection. It could also be because of the languages he knows or spoken around them.
- We noticed that Fang men do not go for women out of Fang while women are flexible as we had Fang women married to Kung and Buu men. Here, intermarriage is the only concern of women. For example, two Kung speakers were interviewed and they revealed that their mothers were from Fang, while a Buu man in our interview also said his first wife was from Fang and never the reverse. But we find Koshin and Ajumbu men marrying from Fungom, a Kung man marrying from Ajumbu and a Ngun man marrying a Koshin woman, a Buu man with one wife from Kung while the other from Ajumbu etc.
- Some of the L2 speakers could actually bring out the differences between a word base and it affixes though we also experienced some 'phonological processes' caused by the numerous languages found in the linguistic repertoires of the people.

- There is a lot of code switching and code mixing in the speeches of L2 speakers of LF though they can speak these languages too well.
- As fas as our sample is concerned, Buu speakers were very competent in Mufu and vice versa.
- In Bantu languages, every noun is a member of a particular class, which is indicated by a prefix on the noun root. As mentioned above, most Bantu languages have between 12 and 20 classes (Nurse and Philippson 2003), where singular and plural nouns belong to different classes.

In this section, we have come to realize that, though code switching is common in almost all L2 speakers, they will not import words into their own languages. They could bring in these words to fill in lapses in their L2, but one would hardly see an L1 speaker bring in a word in another language to fill a gap in his/her own language. Knowledge in two or more languages at times encourages the issue of hypercorrection.The implications and contributions of the study will be viewed below

IMPLICATIONS AND CONTRIBUTIONS OF THE STUDY

This study is focused on the endangered languages of LF where very little is known of them. It has added value to these languages, the people and cultures and as a result, given them a self-image. That is, the development of the linguistic varieties of this area will make them gain confidence in their languages which is also an asset to them and will therefore continue to motivate them to maintain and keep them alive.

The successful use of an RTT tool which for the past decades has been used for intelligibility testing in assessing the degree of proficiency is a thing to be reckoned with. This therefore will awaken the spirits of young researchers not to be glued to canonical ideas.

The transcripts of this study could be used in transmitting the Cameroonian languages in general and the LF languages in particular from one generation to another. And this will also enable people who have never gone to LF to live the realities of what normally happens there. This work like any other scientific work could not have been void of mistakes and some lapses. As earlier said, it was a tentative study and a first of it is kind in this area of LF. The limitation noticed here will be seen below.

LIMITATIONS

The study was limited only to adults. That is, children from 17 years and below were not represented in the study which could in some way influence the results.

It is possible that some of the findings we arrived at be looked upon. This is because a human being is such a complex being that one need to draw conclusions about a person's linguistic attitude after having been with that person for a long time. We would not have given conclusions on people's competency within the limited time in which our data was collected. This is because people act differently in the presence of an audience especially when they are aware that what they do or say is being recorded.

Also, some of the people with poor performances in some of these languages could be that they have problems with speakers of those linguistic communities, as a result decide not to hear or speak their languages. An example is what we noticed in the Missong man who refused he could did not understand Abar though it is a variety of Mungbam which Missong too is a variety. But before we left from there, it was discovered that he does not only hear Abar, but he could actually speak it.

RECOMMENDATIONS

Assessing multilingual competences should be done using a different approach because even two L1 speakers could speak quite differently. So the way we used in assessing L2 could also have some flaws because we could not tell with exactitude if there are good or bad speakers.

Since this study is the first of its kind here and due to the complexity of sociolinguistic studies in general and language assessment in particular especially when it has to do with undocumented languages. It would also be good that a study of this nature be conducted here but by using different tools so that we could see if they yield same results. The methodology could be better designed to collect data thus capturing other languages out of LF which are also found in their linguistic repertoires.

To find out if the Naki varieties of Nser and Nkang could still be considered varieties of Naki though they are out of this area. This is because the Naki speakers claim all Naki varieties are exactly the same no matter the geographical location.

If they are to document the Mungbam language, which will be considered as the reference dialect? Could do a research to find out Mungbam's speakers opinions about a reference dialect.

Another study could be done where children's competence between the ages of 7 to 17 years are assessed and to find out if multilingualism here affects everyone. This is because our work did not consider assessing children's competences. Alternatively, carry out a comparative study by assessing competences between children and adults.

Also, a study could be done in order to get the variations within languages. This is because two Naki speakers (a boy and a girl) same age group and all from Small Mekaf, both gave me a wordlist in the Naki language (Mekaf) file ZOOM0119 and ZOOM0213 respectively. They were a lot of differences between their elicitations). See whether females use words or languages differently from men in this village.

A study could also be conducted to find out why Fang is widely known and also spoken by many L2 speakers while Fang people are not interested in learning the languages of others.

It is recommended that some work be done to find out why there are a lot of similarities between Kung and Isu, could they not be dialects of the same language? Or were the founders of Isu and Kung brothers?

DIFFICULTIES ENCOUNTERED

Realising a study as such could not have just glided on a smooth path without hurdles, as it appears to be the first of this nature in the LF languages.

Working with a population that was mostly illiterate was not an easy task, as some of them did not understand the rule of the game especially during the administration of the visual stimuli as one was constantly forced to remind them of what was needed. To some, we had to constantly recall to them not to pose questions to the pictures because some of the informants considered the pictures so real that they thought these pictures could even talk. This also led to time consumption as our informants were very ignorant about the techniques of data collection. Most of them had been exposed to the collection of data through questionnaires and wordlists but they were not familiar with RTT and visual stimuli techniques.

Another very serious problem was getting through the difficult terrain of LF in order to get consultants represent all the eight languages of LF especially as the researcher had to go to most of the villages alone and for her first time. And the fact that most of her research was carried out during the month of July and August which are periods of unceasing rains made movements from one village to another very difficult.

The hostile nature of some of the people was another difficulty encountered in the course of the research. Some hostilities were noticed in the field from a Koshin man who almost beat the researcher up and he prevented Koshin women from further coming to be interviewed.

Some of the consultants were very old. So, it was difficult to decode what they were saying since their articulatory organs had weakened while some had lost their teeth.

CLOSING REMARKS

We have been able to assess the degree of multilingual competences of L2 speakers in the Naki, Kung, Ajumbu, Buu, Mungbam, Mufu-Mundabli, Koshin and Fang languages through the administration of a sociolinguistic questionnaire, the Recorded Text Testing method, the visual stimuli method and through a wordlist. Our results have proven that, LF speakers are multilingual speakers with very few monolinguals when considering only languages of this area and all being multilingual if other languages spoken out of LF are considered. Since our work was limited only to the assessment of L2 speaker's in these languages, we can say, only Fang speakers have been proven to be monolinguals. Apart from their language, they see no need going for another language that is spoken in this area. So they prefer learning other languages spoken out of LF.

We also noticed people who were not only multilingual, but also have native speakers' competences in their L2's.

The analyses we have done enlightened us by providing substantial and functional insight of multilingualism in this area of LF. It is hoped that this study would sound like a bell of invitation to other researchers in the field of linguistics to discover more as far as these languages are concerned and to fill some loopholes we caused due to human inability to reach perfection.

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APPENDIX 1

Multilingualism project – Questionnaire

Researcher

Date

Audio files

Village

Quarter

Personal details

Paternal name

Maternal name

Other names

Gender

Date of birth

Occupation

Paternal affiliation

Maternal

Affiliation(s)

Spouses' provenance

Spouses' languages

Parents' provenance

Parents' languages

Known languages

Date……Village …….

Consultant's paternal name…….

Language name Degree of competence

1= hears a bit 2= hears but no talk 3= talks a bit 4= native or near-native

Language sheet /Village…… Consultant's paternal name……

Language name

Where did you learn it?

When do you use it?

Are there any special occasions in which you use it?

(e.g. prayers, songs, invocations, formulas)

Language name

Where did you learn it?

When do you use it?

Are there any special occasions in which you use it?

(e.g. prayers, songs, invocations, formulas)

Language name

Where did you learn it?

When do you use it?

Are there any special occasions in which you use it?

(e.g. prayers, songs, invocations, formulas)

APPENDIX 2: THE RECORDED TEXT TESTING (RTTs) WITH ASSOCIATED QUESTIONS

Naki RTT TEXT and Questions (English version)

Last week, Mr Kulo got up very early in the morning before the sun could rise.

He heard his friend's voice, and immediately jumped out of bed because he remembered they were to go hunting together. He immediately picked up his bag, a cutlass, a gun and jumped out calling his friend. His friend, who had just passed by, pretended not to have heard him calling. Mr Kulo immediately dived on the friend and got him well beaten. His friend shouted for help where he was rescued by some young boys who were going to school. These boys ceased Mr Kulo's properties and took him to the chief's palace. On reaching the chief's compound, the chief immediately came out and ordered Mr Kulo to sit on the ground. Mr Kulo immediately pleaded and asked for forgiveness from his friend. His friend looked at him in the eyes to see if he was really remorseful and then asked him to get up.

Naki RTT TEXT and Questions (English version)

1) Last week, Mr Kulo got up very early in the morning before the sun could rise.

Question: At what time did Mr Kulo get up?

2) He heard his friend's voice,

Question: Whose voice did he hear?

3) - and immediately jumped out of bed because he remembered they were to go hunting together.

Question: Where were they to go to?

4) He immediately picked up his bag, a cutlass, a gun and jumped out calling his friend.

Question: What did he pick up?

5) His friend, who had just passed by, pretended not to have heard him calling.

Question: What did Mr Kulo's friend do when he was called?

6) Mr Kulo immediately dived on the friend and got him well beaten.

Question: What did Mr Kulo do when his friend refused responding to his call?

7) His friend shouted for help where he was rescued by some young boys who were going to school.

Question: Who rescued Mr Kulo's friend?

8) These boys ceased Mr Kulo's properties and took him to the chief's palace.

Question: What did the young boys do?

9) On reaching the chief's compound, the chief immediately came out and ordered Mr Kulo to sit on the ground.

Question: What did the chief do immediately when he came out?

10) Mr Kulo immediately pleaded and asked for forgiveness from his friend.

Question: What did Mr Kulo do when he was asked to sit on the ground?

11) His friend looked at him in the eyes to see if he was really remorseful and then asked him to get up.

Question: What did his friend ask him to do after looking into his eyes?

Kung RTT TEXT and Questions (English version)

I will be going to the market this afternoon. While in the market; I might buy some salt and smoked fish for my grandmother. From there, I will be visiting a friend of mine who lives just near the market. While in her place; I will tell her of the trouble that befell me. Then I will ask her to lend me money so that I could go for a death celebration in Ngun. After leaving my friend's house, I will pass by my farm and harvest some huckleberry. Back home, I will prepare corn fufu for my husband which he loves so much. While cooking, I will send my children to go and fetch water so that I could use to cook. They won't eat if they refuse going to fetch water. What is good about me is that I will always share my food with my neighbours.

Kung RTT TEXT and Questions (English version)

1) I will be going to the market this afternoon.

Question: Where will she be going to this afternoon?

2) While in the market, I might buy some salt and smoked fish for my grandmother.

Question: What might she buy for her grandmother?

3) From there, I will be visiting a friend of mine who lives just near the market.

Question: Who will she be visiting?

4) While in her place, I will tell her of the trouble that befell me.

Question: What will she do while in her friend's house?

5) Then I will ask her to lend me money so that I could go for a death celebration in Ngun.

Question: Where does she want to go to if she is borrowed money?

6) After leaving my friend's house, I will pass by my farm and harvest some huckleberry.

Question: What will she harvest from her farm?

7) Back home, I will prepare corn fufu for my husband which he loves so much.

Question: What will she prepare back home?

8) While cooking, I will send my children to go and fetch water so that I could use to cook.

Question: What will she ask her children to do while cooking?

9) They won't eat if they refuse going to fetch water.

Question: What will be her children's punishment if they do not go to fetch water?

10) What is good about me is that I will always share my food with my neighbours.

Question: What is good about her?

Ajumbu RTT TEXT and questions (English version)

Tomorrow morning, the chief will be receiving some strangers from Europe. The chief and the council of elders are to meet this evening to talk about the visitor's coming. While in the meeting, the people are to share palm wine and kola nuts. After the sharing of kola nuts and palm wine, they will be consulting the gods telling them about their supposed visitors. These gods will be the ones to tell them if those who are coming to visit have evil or good intentions. If the gods report that the strangers are coming with evil intensions, the entrance to the village would be blocked to prevent them from entering. If proven that the strangers are coming with good intentions, they will be no farming tomorrow and dance groups would go and stand at the entrance to the village to welcome them. Days like these are very rare to the people of Ngun. The chief on this day can benefit by asking for foreign aids through these strangers if they prove to be of good faith. There is merry making on this day as villagers gather their food together and share as a family. After the merry making ceremony, there is reconciliation between those who had problems with one another.

Ajumbu RTT TEXT and questions (English version)

1) Tomorrow morning, the chief will be receiving some strangers from Europe

Question: Who will the chief be receiving tomorrow.

2) The chief and the council of elders are to meet this evening to talk about the visitor's coming.

Question: Who is the chief supposed to meet with this evening?

3) While in the meeting, the people are to share palm wine and kola nuts.

Question: What are they to share during the meeting?

4) After the sharing of kola nuts and palm wine, they will be consulting the gods telling them about their supposed visitors.

Question: What will they do after the sharing of the kola nuts?

5) These gods will be the ones to tell them if those who are coming to visit have evil or good intentions.

Question: What are the gods supposed to tell them?

6) If the gods report that the strangers are coming with evil intensions, the entrance to the village would be blocked to prevent them from entering.

Question: What will happen if the gods report the strangers' intentions to be evil?

7) If proven that the strangers are coming with good intentions, they will be no farming tomorrow and dance groups would go and stand at the entrance to the village to welcome them.

Question: What will happen tomorrow if these strangers are proven good?

8) Days like these are very rare to the people of Ngun.

Question: What is rare to the people of Ngun?

9) The chief on this day can benefit by asking for foreign aids through these strangers if they prove to be of good faith.

Question: What does the chief do on this day?

10) There is merry making on this day as villagers gather their food together and share as a family.

Question: What happens on this day?

11) After the merry making ceremony, there is reconciliation between those who had problems with one another.

Question: What happens after merry making

Mufu-Mundabli RTT TEXT and Questions (English version)

When I was young I used to follow my mother to the farm. One morning on going to the farm, I saw a big black snake. I shouted and skipped and the food I was carrying poured on the ground. My mother was very disappointed since we won't have food to eat while on the farm. When we reached the farm, my mother asked me to harvest some potatoes from the farm, lit a fire and roast them. I decided to go and fetch some drinking water from a nearby stream before doing what my mother had asked me to do. On reaching the stream, I saw a green snake drinking water. When I saw the snake, I remembered we are not supposed to kill green snakes because children always transform into them and follow their relatives to the

farm. I allowed it to drink to it satisfaction since I knew it was one of our children. After the snake had finished drinking, I smiled and waved at it bidding it farewell and it immediately left. When I returned from the stream, I saw a hole which resembled that of a cricket and decided to dig it so that I could eat my potatoes with the roasted cricket. On digging, I saw a very big snake lying in the hole. I shouted "snake" and this day was termed a "snake day".

Mufu-Mundabli RTT TEXT and Questions (English version)

1) When I was young I used to follow my mother to the farm.

Question: What did she use to do with her mother when she was young?

2) One morning on going to the farm, I saw a big black snake.

Question: What did she see one morning while going to the farm?

3) I shouted and skipped and the food I was carrying poured on the ground.

Question: What happened when she skipped?

4) My mother was very disappointed since we won't have food to eat while on the farm.

Question: How was her mother when this happened?

5) When we reached the farm, my mothers asked me to harvest some potatoes from the farm, lit a fire and roast them.

Question: What did her mother ask her to do?

6) I decided to go and fetch some drinking water from a nearby stream before doing what my mother had asked me to do.

Question: What did she decide to do first when she was asked to harvest potatoes and roast?

7) On reaching the stream, I saw a green snake drinking water.

Question: What did she see at the stream?

8) When I saw the snake, I remembered we are not supposed to kill green snakes because children always transform into them and follow their relatives to the farm.

Question: What did she recall?

9) I allowed it to drink to it satisfaction since I knew it was one of our children.

Question: What did she do to the snake?

10) After the snake had finished drinking, I smiled and waved at it bidding it farewell and it immediately left.

Question: What did she do when the snake had finish drinking?

11) When I returned from the stream, I saw a hole which resembled that of a cricket and decided to dig it so that I could eat my potatoes with the roasted cricket.

Question: What did she plan to eat her potatoes with?

12) On digging, I saw a very big snake lying in the hole. I shouted "snake" and this day was termed a "snake day".

Question. What was the name given to this day?

Koshin RTT TEXT and Questions (English version)

I am from a polygamous home. My father had four wives. Before their dead, they will always fight. Each time they are fighting, their children start crying. When this happened, my mother used to call us to come into the house and not to sit out there listening to what the women were saying. Each time they fight when my father is present, he would always encourage them to fight, telling them to kill one another. On this faithful day, as they began their usual fighting, they fought and fought and both fell on stones that were in our compound hitting their heads and died. My father heard a funny sound and rushed out only to find his two wives all dead. He fell to the ground. After a while, he got up and said "these are the ills that I went and brought home as wives" and I know a curse has been placed on me because of the way these women died. When they were to be buried, my father advised all who were present never to take more than one wife. The next day, my father too died though he had not shown signs of sickness.

Koshin RTT TEXT and Questions (English version)

1) I am from a polygamous home

Question: From which type of home is she from?

2) My father had four wives

Question: How many wives did her father have?

3) Two of his wives died last year

Question: How many of her father's wives died last year?

4) Before their dead, they will always fight

Question: What as their attitudes before their death?

5) Each time they are fighting, their children start crying.

Question: What always happened to their children each time these women start fighting?

6) When this happened, my mother used to call us to come into the house and not to sit out there listening to what the women were saying.

Question: What would her mother always do when these women start fighting?

7) Each time they fight when my father is present, he would always encourage them to fight, telling them to kill one another.

Question: What will her father always encourage them to do?

8) On this faithful day, as they began their usual fighting, they fought and fought and both fell on stones that were in our compound hitting their heads and died.

Question: What happened this faithful day?

9) My father heard a funny sound and rushed out only to find his two wives all dead. He fell to the ground.

Question: What happened when her father found out that his two wives were dead?

10) After a while, he got up and said "these are the ills that I went and brought home as wives" and I know a curse has been placed on me because of the way these women died.

Question: What did he say was to befall him because of the women's death?

11) When they were to be buried, my father advised all who were present never to take more than one wife.

Question: What did her father advice men not to do?

12) The next day, my father too died though he had not shown signs of sickness.

Question: What happened the next day?

RTT in Buu (English version)

Once upon a time, they lived a young maiden whose father was a farmer. When this girl was 15, her father who had more than two wives wanted this young maiden to get marry to a very old man of 60. This girl's mother was not in support of her husband's idea and this led to their separation. The woman took her children and left. The husband did not bother about the wife's absence since his interest was on the daughter's bride price and not on his family. The maiden and the younger sister went to live with an uncle who sent them to school. The children from the other wives got married while they were very young and have become child-bearing machines and no future. As a result of this, they all hate their father for putting them through all these. The young maiden and her younger sister have grown up to be very influential women. They are the ones now taking care of their father today. Their father keeps on regretting his acts.

RTT in Buu and questions (English version)

Once upon a time, they lived a young maiden whose father was a farmer.

1) **Question:** What was the young maiden father's occupation?

When this girl was 15, her father who had more than two wives wanted this young maiden to get marry to a very old man of 60.

2) **Question:** How old was the girl when the father wanted her to get marry?

3) **Question:** How old was the man the maiden's father wanted her to get marry to?

This girl's mother was not in support of her husband's idea and this led to their separation.

4) **Question**: Was the maiden's mother in support of her husband's idea?

5) **Question:** What was the consequence of the girl's mother refusing this proposed marriage?

The woman took her children and left. The husband did not bother about the wife's absence since his interest was on the daughter's bride price and not on his family.

6) **Question:** Did the maiden's father go to look for them when they left?

7) **Question:** Why did her father not go to look for them?

The maiden and the younger sister went to live with their maternal uncle who sent them to school.

8) **Question:** With whom did the maiden and her younger sister go to live when they left their father's house?

The children from the other wives got married while they were very young and have become child-bearing machines and no future. As a result of this, they all hate their father for putting them through all these. The young maiden and her younger sister have grown up to be very influential women.

9) **Question:** Do the children who got married following their father's decision love their father today?

10) **Question:** Why do they not love their father?

11) **Question:** What have become of the young maiden and her younger sister today?

They are the ones now taking care of their father today. Their father keeps on regretting his acts.

RTT in Mungbam (English version)

There once lived a woman who was married. One day, her husband decided to go on a trip to a nearby village. Before leaving, he told his wife he was going to be away for two days. The woman, who has been having a love affair with another man, immediately informed her boyfriend about her husband's supposed travelling and invited her boyfriend to be at home that same evening. When the man left, on reaching the village, the program for the meeting

for which he was going to attend had changed and postponed to a later date. He decided to come back home that same day. On his way, he met a hunter holding a cutting grass for sale. He happily bought it since he knew will be good meat for his wife. When he arrived home, the wife was with her boyfriend in their bed room. The husband came knocking at the door. The woman asked her boyfriend to climb up the barn. He immediately climbed to the barn. The owner of the house came in, embraced his wife and started recounting how his trip was fruitless. He told his wife how he couldn't stay without coming back that same day because he knew his wife needed him so badly. He went further to tell the wife "I know you were not happy when I was leaving and being a loving and faithful wife as you are...." At this point, he heard a heavy laughter from the barn. "Faithful indeed" The man on the barn immediately came down and moved out. The woman's husband collapsed. When he regained consciousness, he sent his wife away.

RTT in Mungbam and questions (English version)

There once lived a woman who was married. One day, her husband decided to go on a trip to a nearby village.

1) **Question:** What did this woman's husband decided to do one day?

Before leaving, he told his wife he was going to be away for two days.

2) **Question:** For how long was the man going to be away?

The woman, who has been having a love affair with another man,

3) **Question:.** What has the woman been having with another man?

Immediately informed her boyfriend about her husband's supposed travelling and invited her boyfriend to be at home that same evening.

4) **Question:** What did the woman ask her boyfriend to do that same evening?

When the man left, on reaching the village, the program for the meeting for which he was going to attend had changed and postponed to a later date. He decided to come back home that same day. On his way, he met a hunter holding a cutting grass for sale.

5) **Question:** Why did the woman husband had to come back that same day?

He happily bought it since he knew will be good meat for his wife. When he arrived home, the wife was with her boyfriend in their bed room.

6) **Question:** Where was the woman when her husband arrived home?

The husband came knocking at the door. The woman asked her boyfriend to climb up the barn.

7) **Question:** Where did the woman ask her boyfriend to go and hide himself?

He immediately climbed to the barn. The owner of the house came in, embraced his wife and started recounting how his trip was fruitless.

8) **Question:** What did the man do when he came in?

He told his wife how he couldn't stay without coming back that same day because he knew his wife needed him so badly.

9) **Question:** Why could the husband not stay back without coming home?

He went further to tell the wife "I know you were not happy when I was leaving and being a loving and faithful wife as you are...."

10) **Question:** How did the man say his wife was?

At this point, he heard a heavy laughter from the barn. "Faithful indeed" The man on the barn immediately came down and moved out. The woman's husband collapsed. When he regained consciousness, he sent his wife away.

11) **Question:** What happened when the man regained consciousness?

RTT in Fang (English version)

When I was in the primary school, I used to live with my elder sister who was very jealous of me. My elder sister had four children at that time with just one daughter who was of my age. She hated me so badly because I was more intelligent than her daughter. But on the contrary, many people loved me. Each time they appreciated me, my sister will felt like dying. The hatred grew so badly that she wanted me dead. When I discovered that, I became very stubborn because I wanted her to take me back to my mother who loved me so much. My mother was a very poor woman in the village. She solely depended on her children. Though

my other siblings considered me stubborn, I was my mother's best child because I was very obedient to her. My mother would always support me in everything I do no matter my siblings' feelings. My brothers and sisters would never give her something if they know am beside her. This was because she would prefer to go without food for me to have enough food. This attitude of her annoyed my elder brothers and sisters to a point that they went and join occult groups and the first person they wanted to sacrifice was me. They struggled killing me to no avail. This was not because I was more powerful than their cult members but because God was by my side. They sacrificed my education, my finances, my marriage, my health and my peace and made me to always suffer from loss of memory so that I could become dull and abandon school but I never did that. I struggled moving from one prayer house to the other looking for solution. They were frustrated because they never succeeded in their missions. This is because I said to myself that I am not afraid of someone who could only torment my flesh and not my soul.

RTT in Fang and questions (English version)

When I was in the primary school, I used to live with my elder sister who was very jealous of me.

1) **Question:** With whom did she use to live with while in the primary school?

My elder sister had four children at that time with just one daughter who was of my age.

2) **Question:** How many children did her elder sister have?

She hated me so badly because I was more intelligent than her daughter.

3) **Question:** Why did her elder hate her?

But on the contrary, many people loved me. Each time they appreciated me, my sister will felt like dying. The hatred grew so badly that she wanted me dead. When I discovered that, I became very stubborn because I wanted her to take me back to my mother who loved me so much.

4) **Question:** When she discovered that her elder sister hated her so badly, what did she do?

My mother was a very poor woman in the village. She solely depended on her children. Though my other siblings considered me stubborn, I was my mother's best child because I was very obedient to her.

5) **Question:** How was her relationship with her mother?

My mother would always support me in everything I do no matter my siblings' feelings. My brothers and sisters would never give her something if they knew I was beside her.

6) **Question:** What would her siblings always do when they know she is beside her mother.

This was because she would prefer to go without food for me to have enough food. This attitude of hers annoyed my elder brothers and sisters to a point that my sisters went and join occult groups and the first person they wanted to sacrifice was me.

7) **Question:** Who was the first to be sacrificed when her sisters joined the occult group?

They struggled killing me to no avail. This was not because I was more powerful than their cult members but because God was by my side.

8) **Question:** Why were the girl's sisters unable to kill her?

They sacrificed my education, my finances, my marriage, my health and my peace .

9) **Question:** Which of her things did her sisters sacrificed?

And made me to always suffer from loss of memory so that I could become dull and abandon school but I never did that.

10) **Question:** What was their reason for causing her loss of memory?

Because of this, I moved from one prayer house to the other looking for solution. They were frustrated because they never succeeded in their mission.

11) **Question:** Why did she go to in search of solutions to her problems?

This is because I said to myself that I am not afraid of someone who could only torment my flesh and not my soul. This is because the devil easily gets people who are afraid of them.

12) **Question:** Who are those people the devil easily gets?

APPENDIX 3: SAMPLE VISUAL STIMULI


MBANE

APPENDIX 4: CONSULTANTS' PERSONAL DETAILS

SERIAL NUMBER	LIST OF INFORMANTS	SEX	AGE	STATUS	VILLAGE	RESIDENCE	PLACE OF TEST
1	QAT25	Female	45yrs	Farmer	Buu	Buu	Buu
2	QAT27	Male	68yrs	Farmer	Buu	Buu	Buu
3	QAD25	Female	65yrs	Farmer	Buu	Buu	Buu
4	QAD28	Male	61yrs	Farmer	Buu	Buu	Buu
5	QAD24	Female	56yrs	Farmer	Buu	Buu	Buu
6	QAD101	Male	65yrs	Farmer	Buu	Buu	Buu
7	QAD23	Male	60yrs	Regent	Buu	Buu	Buu
8	QAT102	Male	68yrs	Farmer	Buu	Buu	Buu
9	QAT103	Female	19yrs	Student	Buu	Buu	Buu
10	QAT22	Male	55yrs	Farmer	Buu	Buu	Buu
11	QAT130	Male	34yrs	Farmer	Kung	Kung	Kung
12	QAT131	Female	58yrs	Farmer	Kung	Kung	Kung
13	QAT132	Female	38yrs	Farmer	Kung	Kung	Kung
14	QAD133	Female	45yrs	Farmer	Kung	Kung	Kung
15	QAT134	Male	45yrs	Farmer	Kung	Kung	Kung
16	QAT135	Male	34yrs	Farmer	Kung	Kung	Kung
17	QAT140	Female	57yrs	Farmer	Kung	Kung	Kung
18	QAT158	Female	53yrs	Farmer	Kung	Yemgeh	Yemgeh
19	QAT159	Male	50 yrs	Farmer	Kung	Kung	Kung

20	QAT160	Male	57yrs	Quarter head (Yemgeh)	Kung	Yemgeh	Yemgeh
21	QAT120	Female	21yrs	Trader	Ajumbu	Yemgeh	Yemgeh
22	QAT121	Female	31yrs	Farmer	Ajumbu	Yemgeh	Yemgeh
23	QAT124	Female	68yrs	Farmer	Ajumbu	Ajumbu	Yemgeh
24	QAT125	Male	47yrs	Farmer	Ajumbu	Yemgeh	Yemgeh
25	QAT126	Female	32yrs	Farmer	Ajumbu	Yemgeh	Yemgeh
26	QAT127	Female	44yrs	Trader/Farmer	Ajumbu	Yemgeh	Yemgeh
27	QAT136	Male	69yrs	Farmer	Ajumbu	Ajumbu	Ajumbu
28	QAT137	Male	32yrs	Farmer	Ajumbu	Ajumbu	Ajumbu
29	QAT138	Male	31yrs	Farmer	Ajumbu	Ajumbu	Ajumbu
30	QAT139	Male	80yrs	Farmer	Ajumbu	Ajumbu	Ajumbu
31	QAT108	Male	38yrs	Farmer	Fang	Fang	Abar
32	QAT109	Male	34yrs	Farmer	Fang	Fang	Abar
33	QAT110	Male	34yrs	Farmer	Fang	Fang	Abar
34	QAT111	Male	43yrs	Farmer	Fang	Fang	Abar
35	QAT112	Female	52yrs	Farmer	Fang	Fang	Abar
36	QAT113	Female	45yrs	Farmer	Fang	Fang	Abar
37	QAT114	Female	22yrs	Farmer	Fang	Fang	Abar
38	QAT115	Female	55yrs	Farmer	Fang	Fang	Abar
39	QAT119	Male	44yrs	Farmer	Fang	Fang	Abar

40	QAT123	Female	23yrs	Student	Fang	Fang	Yemgeh
41	QAT149	Male	30yrs	Farmer	Mufu	Mufu	Abar
42	QAT150	Female	48yrs	Farmer	Mufu	Mufu	Abar
43	QAT153	Male	62yrs	Farmer	Mufu	Mufu	Abar
44	QAT155	Female	35yrs	Farmer	Mufu	Mufu	Abar
45	QPP22	Female	48yrs	Farmer/trader	Mufu	Buu	Buu
46	QAT147	Male	45yrs	Council worker	Mundabli	Zhoa	Yemgeh
47	QAT148	Female	65yrs	Farmer	Mundabli	Mundabli	Abar
48	QAT151	Male	63yrs	Farmer	Mundabli	Mundabli	Abar
49	QAT152	Male	43yrs	Farmer	Mundabli	Mundabli	Abar
50	QAT154	Female	36yrs	Farmer	Mundabli	Mundabli	Abar
51	QAT107	Female	23yrs	Farmer	Koshin	Koshin	Yemgeh
52	QAT116	Male	23yrs	Farmer	Koshin	Koshin	Abar
53	QAT117	Male	45yrs	Farmer	Koshin	Koshin	Abar
54	QAT145	Male	51yrs	Farmer	Koshin	Koshin	Abar
55	QAT146	Male	30yrs	Farmer	Koshin	Koshin	Abar
56	QAT156	Male	34yrs	Farmer	Koshin	Koshin	Abar
57	QAT170	Female	18yrs	Student	Koshin	Koshin	Yemgeh
58	QAT171	Female	50yrs	Farmer	Koshin	Koshin	Yemgeh
59	QAT172	Male	26yrs	Teacher	Koshin	Koshin	Yemgeh
60	QAT174	Male	43yrs	Farmer	Koshin	Koshin	Yemgeh

61	QAT122	Male	26yrs	Motorcycle rider	Mekaf	Yemgeh	Yemgeh
62	QAT125	Female	32yrs	Teacher	Mekaf	Mekaf	Yemgeh
63	QAT141	Female	53yrs	Catechist	Mekaf	Mekaf	Yemgeh
64	QAT142	Male	60yrs	Farmer	Mashi	Yemgeh	Yemgeh
65	QAT143	Female	42yrs	Farmer	Mashi	Yemgeh	Yemgeh
66	QAT157	Female	28yrs	Farmer	Mekaf	Mekaf	Yemgeh
67	QAT161	Male	68yrs	Farmer	Small Mekaf	Small Mekaf (Batieh)	Batieh
68	QAT162	Female	40yrs	Farmer	Small Mekaf	Small Mekaf (Batieh)	Batieh
69	QAT163	Male	22yrs	Farmer	Small Mekaf	Small Mekaf (Batieh)	Batieh
70	QAT164	Male	71yrs	Farmer	Small Mekaf	Small Mekaf (Batieh)	Batieh
71	QAT17	Male	68yrs	Farmer	Missong	Missong	Missong
72	QAT16	Male	70yrs	Farmer	Missong	Missong	Missong
73	QAT168	Female	65yrs	Farmer	Abar	Abar	Abar
74	QAT104	Male	50yrs	Farmer	Ngun	Ngun	Yemgeh
75	QAT106	Female	46yrs	Farmer	Ngun	Ngun	Yemgeh
76	QAT105	Male	47yrs	Farmer	Biya	Biya	Yemgeh
77	QAT169	Female	32yrs	Farmer	Biya	Biya	Yemgeh
78	QAT118	Male	49yrs	Farmer/Night guard	Abar	Abar	Abar

79	QAT129	Male	34yrs	Farmer	Munken	Munken	Kung
80	QAT144	Male	30yrs	Farmer	Munken	Munken	Kung

APPENDIX 5: INDIVIDUAL SCORES ON RTT PER LANGUAGE

RTT TEST IN FANG

Serial number	**File names**	**Level of individual competences on percentage**	**Gender**	**Age**	**Native speakers**
1	QAT125	70	M	47yrs	Ajumbu
2	QAT126	90	F	32yrs	Ajumbu
3	QAT127	85	F	44yrs	Ajumbu
4	QAT136	50	M	69yrs	Ajumbu
5	QAT139	80	M	80yrs	Ajumbu
6	QAT107	30	F	23yrs	Koshin
7	QAT146	40	M	30yrs	Koshin
8	QAD25	40	F	65yrs	Buu
9	QAD28	60	M	61yrs	Buu
10	QAT101	85	M	65yrs	Buu
11	QAD23	80	M	60yrs	Buu
12	QAT102	85	M	68yrs	Buu
13	QAT27	15	M	68yrs	Buu
14	QAD24	80	F	56yrs	Buu
15	QAT103	60	F	19yrs	Buu
16	QAT22	60	M	55yrs	Buu
17	QAT25	95	F	45yrs	Mufu-Mundabli
18	QPP22	75	F	48yrs	Mufu-Mundabli

19	QAT130	80	M	34yrs	Kung
TOTAL	19				

TABLE 8: RTT TEST IN MUNGBAM (MISSONG)

Serial No.	File names	Level of individual competence on percentage	Gender	Age	Native speakers
1	QAT102	85	M	68yrs	Buu
2	QAD25	70	F	65yrs	Buu
3	QAD28	70	M	61yrs	Buu
4	QAD23	98	F	56yrs	Buu
5	QAT101	100	M	65yrs	Buu
6	QAD23	90	M	60yrs	Buu
7	QAT27	85	M	68yrs	Buu
8	QAT22	98	M	55yrs	Buu
9	QAT103	70	F	19yrs	Buu
10	QAT25	96	F	45yrs	Mufu-Mundabli
11	QAT154	90	F	36yrs	Mufu-Mundabli
12	QAT153	10	M	62yrs	Mufu-Mundabli
13	QAT155	100	F	35yrs	Mufu-Mundabli
14	QAT147	30	M	45yrs	Mufu-Mundabli
15	QPP22	70	F	48yrs	Mufu-Mundabli
TOTAL	15				

TABLE 11: RTT TEST IN BUU

Serial No.	**File names**	**Level of competence**	**Gender**		**Age Native speakers**
1	QAT 25	15	F	45yrs	Mufu-Mundabli
2	QAT155	98	F	35yrs	Mufu-Mundabli
3	QPP22	60	F	48yrs	Mufu-Mundabli
4	QAT147	70	M	45yrs	Mufu-Mundabli
5	QAT148	20	F	65yrs	Mufu-Mundabli
6	QAT165	80	M	68yrs	Mungbam
7	QAT166	90	M	70yrs	Mungbam
8	QAT168	8	F	65yrs	Mungbam
9	QAT118	40	M	49yrs	Mungbam
TOTAL	9				

RTT TEST IN NAKI

Serial No.	**File names**	**Level of individualevel of competence on percentage**	**Gender**	**Age**	**Native speakers**
1	QAT15	90	F	53yrs	Kung
2	QAT25	10	F	45yrs	Buu
3	QAT103	80	F	19yrs	Buu
4	QAT121	30	F	31yrs	Ajumbu
5	QAT169	40	F	32yrs	Mungbam
6	QAT106	60	F	46yrs	Mungbam
7	QAT105	50	M	47yrs	Mungbam
TOTAL	7				

RTT TEST IN KUNG

Serial No.	File names	Level of individual competence on percentage	Gender	Age	Native speakers
1	QAT143	80	F	42yrs	Naki
2	QAT163	15	M	22yrs	Naki
3	QAT170	100	F	18yrs	Koshin
4	QAT147	50	M	45yrs	Mufu-Mundabli
5	QAT120	90	F	21yrs	Ajumbu
6	QAT121	80	F	31yrs	Ajumbu
7	QAT125	40	M	47yrs	Ajumbu
8	QAT126	60	F	32yrs	Ajumbu
9	QAT127	40	F	44yrs	Ajumbu
10	QAT138	80	M	31yrs	Ajumbu
11	QAT136	6	M	69yrs	Ajumbu
12	QAT137	90	M	32yrs	Ajumbu
13	QAT139	70	M	80yrs	Ajumbu
14	QAT25	2	F	45yrs	Buu
15	QAT103	6	F	19yrs	Buu
16	QAT22	50	M	55yrs	Buu
17	QAT169	6	F	32yrs	Mungbam
18	QAT11	30	M	49yrs	Mungbam
TOTAL	18				

RTT TEST IN KOSHIN

Serial No.	**File name**	**Level of individual competences on percentage**	**Gender**	**Age**	**Native speakers**
1	QAT102	90	M	68yrs	Buu
2	QAD25	30	F	65yrs	Buu
3	QAT27	90	M	68yrs	Buu
4	QAT22	10	M	55yrs	Buu
5	QAT147	50	M	45yrs	Mufu-Mundabli
6	QAT154	8	F	36yrs	Mufu-Mundabli
7	QAT142	80	M	60yrs	Naki
TOTAL	7				

RTT TEST IN MUFU-MUNDABLI

NUMBER OF CONSULTANTS	**FILE NAMES**	**LEVEL OF INDIVIDUAL COMPETENCE ON PERCENTAGE**	**SEX**		**AGE**	**NATIVE SPEAKERS**
			MALE	**FEMALE**		
1	QAD25	78	-	+	65yrs	Buu
2	QAD24	90	-	+	56yrs	Buu
3	QAD23	70	+	-	60yrs	Buu
4	QAT102	80	+	-	68yrs	Buu
5	QAT103	85	-	+	19yrs	Buu
6	QAT22	80	+	-	55yrs	Buu
7	QAT165	40	+	-	68yrs	Mungbam
8	QAT166	60	+	-	70yrs	Mungbam
9	QAT118	20	+	-	49yrs	Mungbam
TOTAL		9	6	3		

RTT TEST IN AJUMBU

Serial No.	**File names**	**Level of individual competence on percentage**	**Gender**	**Age**	**Native speaker**
			FEMALE		
1	QAT111	10	M	43yrs	Fang
2	QAT130	6	M	34yrs	Kung
TOTAL		2	2		

APPENDIX 6: INDIVIDUAL SCORES ON ACTIVE COMPETENCE (VISUAL STIMULI) PER LANGUAGE

TABLE 37: THE ACTIVE COMPETENCE IN THE KUNG LANGUAGE BY QAT170

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAT170 (F)	ghí kəmə́ səsɔ̀f They breaking corn	Koshin	Kung	5	They are harvesting corn
	ù sɔ̀ məlɨ́ He/she tap wine	Koshin	Kung	0	He is going to tap palm wine
	ghĭ í bé bənə́ ndzàŋ They dance “ndzang”	Koshin	Kung	5	They are dancing (ndzang)
	ghé bɨ̂ wá ndwə̀ ndù nə́ ndɛ́ They carry children go home	Koshin	Kung	5	The are carrying children and going back home
	ù tsəghə̀ nɔ̀	Koshin	Kung	5	He is praying
	ghʉ́ ká'á lʉ̂ He/she fetch bamboo	Koshin	Kung	5	They are fetching firewood
	bě wé tə̌ nɔ̀ Man that clear	Koshin	Kung	5	That man is clearing
	wù wè só'ó bwɔ́m Man that go hunt	Koshin	Kung	5	This man is going hunting
	ù kɔ̀'ɔ̀ únyá'á He/she harvest garden eggs	Koshin	Kung	5	He/she is harvesting garden egg
	ù kwúlú kà'm̀ He/she tie firewood	Koshin	Kung	5	He/she is tying firewood
	we' kɔ́'ɔ́ sɔ́m Man climb palmtree	Koshin	Kung	5	That man is climbing up the palmtree
	nè wéʲ mə̂ fɨtsɔ́ŋɔ̂ Mother that drink pipe	Koshin	Kung	3	Mother is smoking pipe

TOTAL/ 60				**53**	

TABLE 38: SHOWS ACTIVE COMPETENCE OF QAT147 IN KUNG

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAT147 (M)	á kɔ́ á kɔ́'ɔ́ ndzà lî kpwò tsú ɓaŋkɔ́ We climb, we climb to go and cut palmnuts	Mundabli	Kung	0	We are going to harvest palmnuts
	-			0	
	-			0	
	-			0	
	-			0	
	-			0	
	-			0	
	-			0	
	-			0	
	-			0	
	-			0	
	-			0	
TOTAL	**-**			**0**	

TABLE 39: ACTIVE COMPETENCE BY QAT12 IN KUNG

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAT125(M)	wù wè kpwə ɜè kpwʉ́ ílʉ́ wə̀'ə̀ lə́ wù man that tap tap him wù mɔ́'ɔ́ bvɨ́ əpwə kə̀ bìlə́ nʲə́ tái where drink is	Ajumbu	Kung	2	That man is tapping palm wine
	wə́ wé tsə̀ŋə̀ lɛ̂ zhɨ̀fə́ nyétɛ̂ man that pray (prog) God	Ajumbu	Kung	5	That man is praying to God
	wùzə́n wɔ̀ mə́ lɔ̀'ɔ́ tsɔ́ŋɔ̀ fínə̀ tɛ̂ woman this drink pipe her	Ajumbu	Kung	5	This woman is smoking pipe
	zhə̀wa zhɔ̂ ndàtsʲɔ́ nursing mothers go house medicine	Ajumbu	Kung	3	Nursing mothers are going to the hospital
	zə́ŋ ghə́ ghɨ́ kʲə̀ sə̀sɔ̀f women those are break corn	Ajumbu	Kung	3	Those women are harvesting corn
	wə́ wə̀ wé sə́'ə́ fɨ́tɛ̂ lə̀ children those go to rafia	Ajumbu	Kung	5	Those children are going to the rafia bush
	ghɨ́ ghə́ nə̀ lɔ̀ bɛ̌ ghɨ̂ bɛ̌ nù ghɨ̂ bɛ̂ nù people those dancing, they dancing	Ajumbu	Kung	0	Those people are dancing
	wù wʲə̀ kʲə̀ ì kwúlə́m nkà man that tie firewood			5	That man is tying firewood
	wù wé kɔ́m tə́ lɔ́'ɔ́ bɔ̀'ɔ̀ nə́ tɛ̂ mə́ kòì	Ajumbu	Kung	0	-

	àní sə́ ápə́ apə́				
	wù wé kɔ́'ɔ́ló sɔ́ŋə́ nə́ tɛ̂ man that climb	Ajumbu	Kung	2	That man is climbing up a palmtree
	wù wé só'ó ló búm man that go hunt	Ajumbu	Kung	4	That man is going hunting
	wù wé tə́mə́ ìtə́mə́ nù man that clear he clear prog	Ajumbu	Kung	4	That man is clearing
TOTAL				**38/60**	

TABLE 40: ACTIVE COMPETENCE BY QAT22 IN KUNG

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAT22 (M)	wà wé nû wʉ́sí wɔ̂ à nə̀ child that carry gun in wɔ̀ à nə̀ wànù ù tɨ́m nyɔ̀m hands and he go shoot meat/animal	Buu	Kung	5	That child is carrying a gun in his hand and he is going to hunt an animal.
	ə̀wàzə̀ŋù mɔ̀ vâ lɨ́ tʲə̀ nə́ tʲɔ́ it is a woman who	Buu	Kung	2	Its a woman who is .....
	nyè frá wɔ̂ no meaning	Buu	Kung	0	-
	à nə̀ wá yə̀ŋə̀ ù tʲə̀nə̀ ə̀tʲé it is child female who	Buu	Kung	2	It a girl who is.....
	à ní wànù ù kwɔ́ nùtsɔ̀ sáŋ it is child male he climb palmtree	Buu	Kung	5	Its a boy climbing up to go and cut palmnut.
	à ní wàyíŋì ù ní wɔ̀ fɔ̀ it is child female who sit	Buu	Kung	3	Its a girl that is sitting.
	à ní wànŭ fɛ̀ ù kɔ̌'ə̀ nù ù it is child male he climb to pfɨ́nù kókɔ̀ cut cocoa	Buu	Kung	4	Its a boy climbing up to go and harvest cocoa
	à nə́ zhə̀ŋə̀ mbə̀ nə̀ wái ghé it is women with children their ábâm ú kʲíŋì kə́ mótɔ̀ on backs they look for a	Buu	Kung	5	They are two women carrying babies on their backs and going to

	car				look for a car.
	nú bɔ̀ lɛ̀ ù ngwú bádzhì'í no meaning	Buu	Kung	0	-
	frɨ́ fài nâ tsɔ̀kɔ̀ no meaning	Buu	Kung	1	-
	tóŋɔ̀'ɔ nù fwàkə́ tú	Buu	Kung	2	-
	ǹní wà zíŋì ù nǐ wáfə̀ they child females with children	Buu	Kung	2	Girls with children
TOTAL				**31/60**	

TABLE 41: ACTIVE COMPETENCE IN BY QAT120 KUNG

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAT120 (F)	ghě ndù ngwán sí ndù people go farm to go káŋ kàmà ghě kɨ káŋmà look firewood they look finish sɨtsá kàmà tɛ̌ when firewood the	Ajumbu	Kung	5	People have gone to the farm to fetch firewood. When will they finish fetching the firewood?
	wè wé ní mà tím ngúsɨ́ child that has shoot knees ùtsɨ́ fədzì he pray God	Ajumbu	Kung	5	That child is kneeling down and praying to God
	ně ní mà tsə'ə̀ ù mà fɨtsô grandmother smoke prog pipe	Ajumbu	Kung	4	That mother is smoking pipe
	ghé nì mɨ̌ bà wá ghê ghí people those they carry children their ndû ndɛ̀ fù go house medicine	Ajumbu	Kung	4	Those people have carried their children and they are going to the hospital
	ghè lì ngwún ghě tsù people are farm they cut səsɔf sɨ́ bè'è corn and carry	Ajumbu	Kung	5	Some people are in the farm harvesting corn and carrying them
	bè ní mŭ bè'è fɛ̀dzí ù father who has carry callabash sò'ò ngwán going farm	Ajumbu	Kung	5	That father has carried a calabash and he is going to the farm
	ghé ní ndɛ̀ ndzàŋ ghé	Ajumbu	Kung	5	These are some

	people those show ‘ndzang’ bɨnə ndzàŋ ghè lé'é tɔŋɔ́ dance ‘ndzang’ others blow kàswíŋ bʊ̀'ú tsə tsùm flute, hitting pl drum				people who are dancing (ndzang), some are blowing flutes while others are beating the drums.
	wá wé ní mə kə́ŋ màsɨ child that has look finish kàmɨ̀ mè dzə kɔ́lɔ́ mài mə firewod he tie all sə kɔ́lɔ́ mài mə́ dɛ́ he tie finish	Ajumbu	Kung	5	That child has finished fetching firewood, he has almost finished tying
	ɔ̀ nɨ̀ə ngwún ù kòi ú nyá'á it is mother in farm harvesting garden eggs.	Ajumbu	Kung	5	He/she is in the farm harvesting garden eggs
	ŭ sʉ́ ù dzɨ kɔ́'ɔ̀ ùkŭsɔ̀ ù sɨ̀ dù he/she climb up he climb up to kɔ̀i kɨbâŋ cut palmnut	Ajumbu	Kung	4	He/she is climbing with a palm cord to cut palmnut.
	wà wĕ nʉ́m mə bé'è wúsɨ wí child than male carry gun he ù sə́ ndû tɨ́m nyàm á ngwún is go shoot meat/animal in the bush	Ajumbu	Kung	5	That boy is carrying a gun and he is going to shoot an animal in the bush
	bàbá ni mə nè fĕdzî ù dzɨ father thisprog clear tɨ̆nə	Ajumbu	Kung	5	This father is clearing
TOTAL				**56/60**	

TABLE 42: ACTIVE COMPETENCE BY QAT13 IN KUNG

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAT138 (M)	wú wé dzéní ù wə́ tsə̀ fə̀dzhə̀ Man there pray him God	Ajumbu	Kung	3	That man is praying to God
	wù wé dzhə̀lí ù tə́ŋə́ sə́ŋ ntɛ̀f ndɛ̀l Man that mă kúmə̀ wĕ tíbê	Ajumbu	Kung	2	-
	zê ghè ghé ndù ghĕ ndɛ́ mə̀ kə̌ Mothers those are go house medicine mə̌ tsɨ́mə̌ bə́ kî and carrying two children	Ajumbu	Kung	5	Those women are going to the hospital and carrying two children.
	ghè ghé kúl bè nɔ̀m sɔ̀m sɨ́ ghɛ̌ sɔ̀ Men those are in farm they ə́kʲə̀kə̀ mə̀'ə́ bè'è have cutlasses two	Ajumbu	Kung	3	Those two men are in the farm with two cutlasses.
	ə̀nə́ ghɨ̌nə̀ tùkù sə̀sɔ̀f They are people cutting corn	Ajumbu	Kung	3	These are some people harvesting corn
	wù wĕ ə̀só'ó wĕ lə̀ sɨ́ sʉ̀lə̀m Man this going to the farm to tap wine	Ajumbu	Kung	3	This man is going to tap wine
	zé ghá nyí zê ghɨ́ bə́nə̂ ótsə́ŋ Peole those are dancing, some m̀shwìn kə́ghèkə̀ m̀kàfə̀ blowing flutes, others beating drums	Ajumbu	Kung	4	Those people are dancing, some are blowing flutes while others are beating drums
	wù wé nù kɔ́lɔ́ kàmĭm Man this is tying firewood	Ajumbu	Kung	4	This man is tying firewood
	zé ghé úkə̀'ə̀ bɔ́ ə́kúfù'ù	Ajumbu	Kung	3	That mother is

	Mother that she cut fruited pumpkin				harvesting fruited pumpkin.
	ù kɔ́'ɔ́ sɔ́m He/she climb palmtree	Ajumbu	Kung	5	He is climbing up a palm tree
	tshɔ́ wè tshɔ́ wè nɔ́ tə̂ nə̀ mbî Father that, father that is taping wine	Ajumbu	Kung	4	That father is tapping wine.
	wòsô kpwə̀m mà'à kàfə̀ You going hunting	Ajumbu	Kung	4	He is going hunting.
TOTAL				**43/60**	

TABLE 43: ACTIVE COMPETENCE BY QAT14 IN KUNG

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS /5	ENGLISH INTERPRETATION
QAT143 (F)	u'zəŋ wé kɔ̀ì nù únyă Woman that cut prog garden eggs	Mashi	Kung	3	That woman is harvesting garden egg
	ù kwə́lə̌mù nká He/she tie prog firewood	Mashi	Kung	5	He is tying firewood
	ù kə̌ sə̌ He/she climb palm tree	Mashi	Kung	3	He/she is climbing up a palm tree.
	wù só ndísə̀ ùsə́ ndù tɨ́m Person go prog to go shoot nyámsə́ animal/meat	Mashi	Kung	2	Man is going (farm) to go and shoot an animal
	ù tə̂ nù	Mashi	Kung	0	-
	wú kpwélə̀ ḿká'ə̀ They fetch prog firewood	Mashi	Kung	5	They are fetching firewood
	ghé bə́nə́ nù They dance prog	Mashi	Kung	5	They are dancing
	ə̀u ndù sɨ́ ndû sɔ́í ǹlə̌ He/she go to go tap wine	Mashi	Kung	3	He/she is going to tap wine
	ghé kɯ́ bè sə̀fsə̀ They cut prog corn	Mashi	Kung	3	They are harvesting corn
	ghé ndú'ù ghé ndù ndètsí They go them go house medicine	Mashi	Kung	2	They are going to the hospital
	ù mwɔ̀ tsə̌fífə̀ He/she drink pipe	Mashi	Kung	3	He/she is smoking pipe
	ù tsə̌ nù He/she pray prog	Mashi	Kung	4	He/she is praying
TOTAL				**38/60**	

TABLE 44: COMPETENCE BY QAT13 IN KUNG

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAT137 (M)	wə tsənù ùtsə fədzə He/she pray prog God	Ajumbu	Kung	4	He/she is praying to God
	ù fə mə fítsə He/she drink pipe	Ajumbu	Kung	3	He/she is smoking pipe
	ànə zə bə ə ndû ndɛ́ fəzhì They women two who go house God ə ndwú'ə ndɛ̀ pfù or they go house medicine	Ajumbu	Kung	3	They are two women going to church or to the hospital
	ànî zê mə'gə́ bə'ə sìsəf They are mothers who carry prog corn ghʉ́ lé'é bə́ kʲə́mə́ nù others who cut prog	Ajumbu	Kung	3	They are mothers who are harvesting corn while some are carrying them
	ànə́ wə nùmə́ ù kí tə́ ŋə̀ It is man who has callabash kə́mfə̂ fə́ fə́ fə́ kí kɨ́ləm go prog prog prog tap wine	Ajumbu	Kung	4	Its a man with a calabash going to tap wine
	ànî wə̀ nùmə̌ ù bú'ú fəkà It is man who clap firewood dèzê tə́ŋə́ səsə́ŋ another blow flute	Ajumbu	Kung	4	It is a man who is beating a drum while the other one is blowing a flute
	ànî wànə̀m ù kə́lə́ kàmĭm It ia child male who tie firewood	Ajumbu	Kung	3	Its a boy who is tying firewood
	ànĭ wɛ̀zəŋ mə́ wɛ́ ní wè	Ajumbu	Kung	5	It a woman who

	It is woman one who go her kífù'ù farm				is in the farm
	àní wànɔ̀m mɔ́ kɔ́'ɔ sɔ́	Ajumbu	Kung	4	It is a boy who is climbing up a palmtree
	It is child male one climb prog palmtree				
	àní wànùm mɔ́ ù bŭ dùnù	Ajumbu	Kung	3	Its a boy hunting
	wənŭ mɔ́ ù kpwɔ́ fíkà	Ajumbu	Kung	4	Boys who are cutting wood
	àní ghə̂ wɔ̀nù ghĕ wàimə̀ kə́ní ə́lə ghí sə̀ nù	Ajumbu	Kung	3	Its a man that is clearing.
TOTAL				43/60	

TABLE 45: ACTIVE COMPETENCE BY QAT12 IN KUNG

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAT121 (F)	wù wé tɨ́ím fɨ̀è ù nɨ́í fə̀ tì lɨ̀ù Man this stand here he has here kɔ́sɨ̀ wókɨ̌ fɨ́nyî hold hand cutlass	Ajumbu	Kung	2	This person standing here is holding a cutlass in his hand
	wù wé tɨ̀èmfɛ̀ mǔ tɨ́m ngúsə́ Man this kneel prog tɨ̀ə̀ à ndù kɨ́lə̀ kə̀ wǔ ghìyə̀ wí tsɨ́ he go pray him God	Ajumbu	Kung	3	This person is kneeling and praying to God
	wù wé tɨ̀èmfɛ̀ mǔ tɨ́m nyí ghə́ Person this stand ghîtsɨ́ ù tsə̌	Ajumbu	Kung	2	-
	nè nĕ mù nə́ˈə́ mù tsèˈè fɛ̃tî ù Mother mother is sit prog on the ground mə́ wɨ́n ǹtsɔ́fɨ́ she drink pipe.	Ajumbu	Kung	1	That grandmother is sitting and smoking pipe
	zĭ ghè ní mə̌ ní núm mə̌ kí bà Mothers these are returning back kə̀ wûn ndù nɨ́ ndɛ́ mə́ bəˈí wán carry prog children on the back and go house	Ajumbu	Kung	3	These two women are going to the house while carrying their children on their backs
	zè ghè ə́ gɨ̀ùgə̀ sɨsɔ̀f fú fù People those find prog corn	Ajumbu	Kung	4	Those people are harvesting corn
	ghé né ghè nyə́ à fɨtĕ nà ghì People those are there who	Ajumbu	Kung	2	Those people are dancing, one is

	are bə́nə̀ ùlè tɔ́ŋɔ́ kɨshú ùlè úbú'ú fɨkà dance prog them, another blow flute, other hit drum				blowing a flute while the other is beating the drum
	wàinó wé dí'ə́ ù nyə̀ ngwún ù Chile male that is in bush he kúlə́ kàmə̀ ù mɨ́ kíŋ kámə̀ ù tie firewood he was fetch prog firewood he has kwúlə́ tied	Ajumbu	Kung	4	That boy is in the bush, he has finished fetching firewood and he is now tying
	nĕ wé wù nʲə́ ə́ ə́ ə́tsɨ ndɛ̀ ù Mother that is is is there she kɔ̀ órèsh cut orange	Ajumbu	Kung	3	That mother is harvesting orange
	wài nĭ wé nʲə́ á ngwún ù kŏ Child that is in bush he climb sóm sɨ́ gbʉ̀ báŋkə́ palmtree to cut palmnuts	Ajumbu	Kung	4	That boy is in the bush. He has climbed up a palmtree to cut palmnuts
	wàiní sò'ó á ngwùn ì sɨ́ ndù Child go prog to bush he want go tɨ́m nyàm shoot animal/meat	Ajumbu	Kung	4	That child is going to the bush to go and shoot an animal
	bĕ́ só'ó ə́ á ngwún ù sə́ tɨ́m Man this go prog bush to tap fúkə́	Ajumbu	Kung	2	This man is going to the bush to tap.
TOTAL				**34/60**	

TABLE 46: ACTIVE COMPETENCE BY QAT12 IN KUNG

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAT126 (F)	mĭ kè'ɛ̀ bɛ̀'ɛ̀ wólé mò tsɔ́ zɛ́'ɛ̀ ə̀sə́ liŋə́	Ajumbu	Kung	1	-
	bɛ̀ lí kɔ́'ɔ́ sɔ́m man a climb palm tree	Ajumbu	Kung	4	A man climbing up a palm tree
	ní lí ù kɔ̀ì únyà'à mother a she harvest garden egg	Ajumbu	Kung	4	A mother harvesting garden egg
	wă lé ù kwúlə́m nkà child a he/she tie firewood	Ajumbu	Kung	4	A child who is tying firewood
	ghə̂ lé'è bɨ́nə́ nù people some dance prog wə̀ lé tsə̀m ùm tshésɨ́m lə́mə́ another one he/she singing others beat wú drum	Ajumbu	Kung	4	Some people are dancing, one singing while others are beating the drum.
	ghə̀ lê tù sə̀sə̀f people some harvest maize	Ajumbu	Kung	2	Some people are harvesting maize
	nà wài mwài tsɨ́mə́ mother a drink pipe nê tùnŭ lè mə́ mɨ̂ tsɔ̂ when sit prog on ground	Ajumbu	Kung	2	A mother is smoking pipe while sitting on the ground
	wă nù'ù mə́ tsə̀nù wànŭ mə̀ child male who pray child male who tsə̀m tsɨ́ zhə̀fə̀ pray prog God	Ajumbu	Kung	3	A boy who is praying to God
	wănù mè só'íbwɔ́m ùmú sú'ú	Ajumbu	Kung	4	A boy who is

	chile male who go hunting				going hunting
	tshə'ə́ lí' mù mù ká'úfwɔ́ father a who go tap	Ajumbu	Kung	3	A father going to tap.
TOTAL				**35/60**	

TABLE 47: ACTIVE COMPETENCES BY QAT27 IN THE KOSHIN LANGUAGE

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAT27(M)	wɔ̌n gbwà nâ tshókú You cut prog what, banana?	Buu	Koshin	3	What are you cutting, banana?
	kwə̀ ná fə̀nâ úwə̀ you were do prog what?	Buu	Koshin	4	What were you doing?
	ábə̀ náwɔ́ bə̀nə̀ So you dance	Buu	Koshin	3	So are you dancing?
	wə́n nə̀mə̀nâ wə́nə wə́nə̀ You do prog hid what away málǎnə́ kpwə̀ŋkə̀n inlaw your	Buu	Koshin	4	What are you doing that you are hiding away from your mother inlaw?
	wə́n yálə́ swâm This one climb palm tree	Buu	Koshin	5	This one is climbing up a palmtree
	wɔ̌m mbɛ́lə́ wɔ̌m bɛ́lə̀lə̌ You count, you count	Buu	Koshin	3	Are you counting?
	wə̌n lʲàlə̀lô wə̌n lʲàlə̀ bû You go, you go hunt?	Buu	Koshin	4	Are you going hunting?
	bə̌n mbìnə́ lə̌ You (pl) dance prog?	Buu	Koshin	3	Are you dancing?
	wə̌m mbə̀lə̀ tsɨ́yá tʲə̀kú You (pl) drink wine grandfather?	Buu	Koshin	4	Are you drinking palmwine grandfather?
	wɔ̌m mbà nɨ́ kə̀dzʲə̀ tʲəkú You pray prog God up	Buu	Koshin	3	Are you praying to God Almighty?
	mĭŋ kwă ùŋgə̀ tsɛ́ləgbwə̂ You return prog farm?	Buu	Koshin	4	Are you coming back from the farm?

	wɔ̌ mɔ̌ fəyɛ̂fǐá You drink pipe?	Buu	Koshin	4	Are you smoking pipe?
TOTAL				**44/60**	

TABLE 48: ACTIVE COMPETENCES BY QAT14 IN THE KOSHIN LANGUAGE

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAT142 (M)		Naki	Koshin		
	wŭ nəgé bídzí	Naki	Koshin	0	-
	ú'ú kwúlə́ tsə́n He/she tie firewood	Naki	Koshin	4	He is tying fetching firewood
	ŭ yâlí swám He/she climb palm tree	Naki	Koshin	4	He is climbing up a palmtree
	ùví là búmə Man that go hunt	Naki	Koshin	4	That man is going hunting
	ŭ gbwàlə tsín bàmbó lʲàlə tsín They harvest prog corn some carry	Naki	Koshin	4	They are harvesting corn and some are carrying corn
	bəkí bəbìné nə̌ People these dance prog	Naki	Koshin	4	These people are dancing
	wàn wè lílʲàlələ Child this harvest bàŋ bənŭgă prog garden eggs	Naki	Koshin	4	This child is harvesting garden egg
	bə kîbə́ íghâm gbɛ̀'à tsʲa tsâmá No meaning	Naki	Koshin	0	Two women are carrying babies on their backs
	kpwĭ wə̌ mú fəyɛ̌ Woman this drink pipe	Naki	Koshin	0	This woman is smoking pipe
	Wà wɛ̌ gbwəlí gbwəm Child this pray God	Naki	Koshin	2	This child is praying to God
TOTAL				**29/60**	

TABLE 49: ACTIVE COMPETENCES BY QAT10 IN THE FANG LANGUAGE

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAT102 (M)		Buu			
	mʉ'ú yô gbwɛ̀ sɔ̀ mɛ́ nɔ̀ No meaning	Buu	Fang	0	-
	ù ghé dʲóbótɨ́ He/she catch garden eggs	Buu	Fang	2	He/she is harvesting garden eggs
	ú bə́ŋgənə̀ fɨyì He/she pray God	Buu	Fang	5	He/she is praying to God
	ù mwɔ̌ tɨ'ə́ fəyâŋ He/she drink pipe	Buu	Fang	0	He/she is smoking pipe
	wɔ̀ ndɔ̀lô ɨ́ yɔ́sɔ́ Man this go tap	Buu	Fang	3	This man is going to tap
	mwâ kàŋ kwɛ̀ à ntɨ́ntə̀ People these harvest corn	Buu	Fang	5	These people are harvesting corn
	mɔ̌ gbwîm Person hunt	Buu	Fang	5	A hunter
	ŭ nkwɔ̀dɔ̀t mɛ̀twɔ̂ No meaning	Buu	Fang	0	-
	ə̀gbwə̀ vɔ̌ wɔ́ bínə́ People those are dance	Buu	Fang	0	Those people are dancing
	kɔ̀ ntɔ̌ŋkɔ̀lɔ̀kɔ̀ mbɨ́lɔ̀ŋ He/she tie bamboo	Buu	Fang	4	He/she is tying bamboo
	bə̀ bɛ̌vɨ́ bú kɔ̀lɔ̀ gìkɔ́ gbwə́ Father/man this prog climb	Buu	Fang	3.5	This father is climbing up to

	cut bə̀kpwà palmnuts				cut palmnuts
TOTAL				**27.5/60**	

TABLE 50: ACTIVE COMPETENCES BY QAD25 IN THE FANG LANGUAGE

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAD25 (F)					
	nămwàt mwàt kpwégă gmwô Mother mother this drink fàyáŋ pipe	Buu	Fang	4	This grandmother is smoking pipe
	nă gmwáláso ŭgbwàgà fíbêlí They some women carry children	Buu	Fang	3	They are some women carring children.
	má gmwè láso ûgbwàvì Person this	Buu	Fang	2	-
	ŭn nkílí bà dìktà	Buu	Fang	2	-
	ní gmwà láso nyô sóm Man this climb prog palm tree	Buu	Fang	4	This man is climbing a palm tree
	mábà kéwón kòtó vàpwà ná Woman this is in gmwà lísùŋ ùn tím fânyá sit farm she harvest garden egg	Buu	Fang	4	This woman is in her farm harvesting garden egg.
	ná gmwà lísò wíê ŭn gbwà pl peopl are in cutting tàkún firewood	Buu	Fang	4	These people are fetching firewood
	mă bà kéŋ má bà kăvà it man with he with dog	Buu	Fang	3	It is a man with a dog.
	ùn shəmkâ mbílóp He tap wine	Buu	Fang	5	He is tapping wine

	nɨ̂m gmwə̌n mbə̀ntə̀nə̀ fɨdzhì Child male pray God	Buu	Fang	4	This boy is praying to God
	vɨ̂ yə̀'ə́ yù və̀tímɛ́ It a man clear	Buu	Fang	3	It is a man that is clearing.
TOTAL				**38/60**	

TABLE 51: ACTIVE COMPETENCES BY QAT13 IN THE FANG LANGUAGE

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS /5	ENGLISH INTERPRETATION
QAT135 (M)					
	wú wə nə́ gbə̀ŋ gbwím It is person male gbwá vù̀à kà gbwá ngèfə́ go to he go hunt wɨ́nə́tə́	Kung	Fang	5	It' s a man going hunting.
	wù nə́ gbwə̀ ù dŭ They are people who are ngwə́nə́nyí pwáfə́ bélá kà fetch firewood ùfə̀ntə̀ bush	Kung	Fang	5	There are people fetching firewood in the bush.
	fí ná túŋ mɛ́ ànə́ gbwə̀m pl mother them on back bə̀fɛ̀lí bə̀ gwə̀fínə̀ kə́tsɨ́'ə̀ carry prog children their əbɛ́yù	Kung	Fang	3	They are mothers with children on their backs.
	à wùlə́ ŋgbə̀ wù yúŋ'ú It man who is climb físɔ́mɛ́ á gbwá kɨ́bə̂là palm tree to cut palm nuts kɨ́bə́nə́ lɛ́mə̂	Kung	Fang	5	Its a man climbing up a palmtree to go and harvest palm nuts
	ŏ wə́nə́ náyù əgbwə̀ It child male with àwù kùmsɨ́ ə̀ kúlúk ŏ hand break PT stay kə̂lə̀ kwĭnə́		Fang	4	Its a boy with a broken hand tying firewood

	prog firewood				
	à yə́nə́ kwí â wùnə́ kᵻ̀ə̌ kwí The people there are wù kʉ́ tə bá nɨ́ŋə́ bɨ́nə́ they one is hit prog fɨ́kɛ́lá bàgə́ bàyà bənyù drum beating dancing bə̀ àì ànə́ ndzàŋ when it is ‘ndzang’	Kung	Fang	4	Those people are dancing (ndzàŋ), one is hitting a drum, another is blowing a flute.
	à wú nə́ kpwú'ə́ tìmtə́ It person who clear prog	Kung	Fang	5	A man clearing
	wú nə́ gbə̀ ùshəmnə́ wú person who carry calabash sə̀'è shɨ́ mbləm to tap wine	Kung	Fang	4	This man is carrying a calabash to go and tap wine
	à nì nə́ gbwə̀ bùŋ kɔ̀ì bə́ It is a woman who cut kpwà à bə̀ kpwàì nə́ ntô harvest/cut prog garden egg	Kung	Fang	5	Its a woman harvesting garden egg
	yənə́yə̀ bətɨ́'ɨ́ bənə́ bə́kɛ́ women two carry umbrellas bəfí bàŋ mə́ mâdzə́m come back with babies bən bəyù bətɨ́'ɛ́ go house medicine	Kung	Fang	4	These two women are carring umbrellas and coming with babies on their backs and going to the hospital
	wùnə́ mbɛ̀ àwù gmwù woman some who drink fùyáŋ pipe	Kung	Fang	5	Its a woman smoking pipe
	wùnə́ wɛ́ fɨ́ lìsùŋ ú dù'úyù It is a child male he pray	Kung	Fang	5	Its a boy praying to God

	fɨdzɛ̌ God				
TOTAL				**54/60**	

TABLE 52: ACTIVE COMPETENCES BY QAD24 IN THE FANG LANGUAGE

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAD24 (F)	ghŭ yən yə people these are yìkətímɛ́ harvest	Buu	Fang	3	These people are harvesting
	ŭ bəŋə́ fədzì He/she pray God	Buu	Fang	4	He/she is praying to God
	û mú fəyɛ̌ He/she drink pipe	Buu	Fang	4	He/she is smoking pipe
	à lə wùŋ gbwà it is person go fíbálə̂ hunt	Buu	Fang	3	It is a man going hunting
	ú nkɨ̀ésɨ́ kwún He/she tie firewood	Buu	Fang	5	He/she is tying firewood
	wè yən npfwèntɨ́ Person this clear	Buu	Fang	5	This man is clearing
	ùn nkɨ́ésɨ̌ mənsɨ́ He/she harvest garden eggs	Buu	Fang	5	He/she is harvesting garden egg
	wə nyə̌ŋ gbwà Person this climb sɔ́m palmtree	Buu	Fang	4	This man is climbing up a palm tree
	ŭn shí ígbím He/she go hunt	Buu	Fang	5	He is going hunting
	wə nɨ̀ə́ nkù kún Children these fetch firewood	Buu	Fang	4	These children are fetching firewood firewood
	bə nyán ntùŋə̀	Buu	Fang	2	-

	People these blow kəbvú ká bákʲəlà flute.....				
	bə̀ bŭŋ nkɔ̀ People these break bə̀kpwà maize	Buu	Fang	4	These people are harvesting maize
TOTAL				**48/60**	

TABLE 53: ACTIVE COMPETENCES BY QAT25 IN THE FANG LANGUAGE

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAT25 (F)	î fwɔ̂ntɔ̂ He/she clear	Buu	Fang	4	He/she is clearing
	wŭ mbwɔ̀lɔ̀ bə̀ ndɔ̀tshí mə́ He/she harvest prog potatoes	Buu	Fang	4	He/she is harvesting potatoes
	ŭ mbwà tə̀ bə̀pílə̀ He/she tie prog bamboo	Buu	Fang	4	He/she is tying wood
	ŏn ndzì má shìnə̀ He/she drink prog pipe	Buu	Fang	2	He/she is smoking pipe
	ôŋ nkùtɔ̀bɔ́ bə̀dzɔ̂ŋ	Buu	Fang	1	-
	wŭŋ nkɛ̀kə̀'ə̀ Person this hunt	Buu	Fang	2	This man is hunting
	wŭn mbɛ̀tə́nə̀ fə̀yì Person this pray God	Buu	Fang	4	This man is praying to God
	wŭn yɔ̀ dzìghə̌ yŭ kə̀yímə́ Person this are sing prog 'kə̀yímə́'	Buu	Fang	3	These people are singing 'kə̀yímə́' (A type of female dance)
	à nə́ gú fə̀gíyə́ŋ ngú mú'ú They are people fetch prog firewood	Buu	Fang	2	They are people fetching firewood
	ùná'á mwă mother pl children	Buu	Fang	4	Mothers of children
	ànə́ mbə́lə́m wútsí ə̀dzwûyə́ They are people who harvest ásàŋ né mbə́lə́ corn in farm	Buu	Fang	3	They are people harvesting corn in the farm

TOTAL				**33/60**	

TABLE 54: ACTIVE COMPETENCES BY QAT12 IN THE FANG LANGUAGE

NAME	**SPEECH**	**VILLAGE**	**TARGET LANGUAGE**	**POINTS/5**	**ENGLISH INTERPRETATION**
QAT125 (M)	okwə okwì wènə̂ ə́sĭ lò'ò ə́sĭ He/she harvest harvest..... ə́gbwə̀			1	-
	-	Ajumbu	Fang	-	-
	-	Ajumbu	Fang	-	-
	-	Ajumbu	Fang	-	-
	-	Ajumbu	Fang	-	-
	-	Ajumbu	Fang	-	-
	-	Ajumbu	Fang	-	-
	-	Ajumbu	Fang	-	-
	-	Ajumbu	Fang	-	-
	-	Ajumbu	Fang	-	-
	-	Ajumbu	Fang	-	-
	-	Ajumbu	Fang	-	-
TOTAL				**1/60**	

TABLE 55: ACTIVE COMPETENCES BY QAD28 IN THE FANG LANGUAGE

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAD28 (M)		Buu	Fang		
	mî yə yù fə̀dzì mê̌ People these they going farm	Buu	Fang	3	These people are going to the farm
	à nə wá wúŋ mbə̀ŋtə̀ fɨdzhĭ It is child this pray God	Buu	Fang	5	It is this child praying to God
	à nɨ́nə́ yŭ mú fə̀yɨ̌ It is mother drink pipe	Buu	Fang	2	It is a mother smoking pipe
	à nə wà ngwŭŋànə wà It is women with children ngwŭŋ ŭn mbwàtə́k ŭ their they carry their mbwàtə́vŭ ŭn pfwĭntə à nə́ carry their in the backs wà wú pfwə̌ntə̀ children their backs	Buu	Fang	3	They are women carrying their two children on their backs
	à nə́ tɛtùŋ mò gbwà túkpú it is man one climb tree	Buu	Fang	4	It is a man that is climbing a tree
	ŏ gbwàté nyàm pínò He/she hunt meat/animal right	Buu	Fang	5	He is hunting meat/animal right?.
	ùn pfwɔ́ntɔ̌ He/she clear	Buu	Fang	4	He is clearing
	à nə́ ná wă wúŋùŋ gwə̀ntə̀dè It is mothers of children who bə̀wánə́ bə̀ghà harvest maize.			4	They mothers harvesting maize

	à nə́ tátú mɔ̌ nkù dú kúm	Buu	Fang	3	They are some

	It is fathers one look prog firewood				fathers fetching firewood.
	à nə́ vîn ná fə̀m wɛ̂ It is person who tap wine	Buu	Fang	3	It is a man that is tapping wine
	à nə́ ngwúŋ à nə́ gwúŋ They are women, they are women tshə̀nán kwɔ̂ yù párísh go prog them parish	Buu	Fang	2	They are women going them to the parish
	wù ŋyə̀ wù ŋyə̀ wɔ́ people these, people these they fɨ́n kúŋ nyì bɨ́mbə́nɔ̂ àŋ kʲə̀lɨ́k hit stick/tree/firewood then dance with joy	Buu	Fang	3	They are people hitting drums and dancing with joy.
TOTAL				41/60	

TABLE 56: ACTIVE COMPETENCES BY QAD23 IN THE FANG LANGUAGE

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAD23 (M)		Buu	Fang		
	wŭn yə̀ núnú gbwít gbwít gbwə́ Person this dzɔ̀nmɛ́	Buu	Fang	2	-
	ŭn lìmkə̀ gbwə́n gbwə̀ mí	Buu	Fang	1	
	wɔ̌n yɔ̀ sɔ́m wɔ̂ person this climb palm tree	Buu	Fang	3	He is climbing up a palm tree
	wŭ shí gbwím Person this go hunt	Buu	Fang	4	He is going hunting
	-	Buu	Fang	-	-
	-	Buu	Fang	-	-
	-	Buu	Fang	-	-
	-	Buu	Fang	-	-
	-	Buu	Fang	-	-
	-	Buu	Fang	-	-
	-	Buu	Fang	-	-
TOTAL				**10/60**	

TABLE 57: ACTIVE COMPETENCES BY QAT27 IN THE FANG LANGUAGE

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAT27(M)		Buu	Fang		
	ə ə́ á fwán ndə nyə̌ bâ You are return house comerade?	Buu	Fang	3	Are you people returning home comrades?
	ví nlìm bə̀ nyə̂ bâ Peron some who...	Buu	Fang	2	-
	á yó'ósúm mâ bâ You climb palm tree comrade?	Buu	Fang	2	Are you climbing up a palmtree comrade?
	bɨ́bə̀ bə̀nyì yì'ì nyə́ ǎyì fá'á bâ You people are are work comrade?	Buu	Fang	3	Are you people working, comrade?
	à nə̀ gbwîm àŋ yə̀ fà You are hunt where here	Buu	Fang	4	Where are you going hunting?
	wɛ́ nkù dùnyĭ You dig potato?	Buu	Fang	2	Are you digging potato?
	wê nkʲà kă bâ You cut firewood comrade?	Buu	Fang	3	Are You cutting firewood comerade?
	wé nsɨ́ wă bâ You want tap comrade?	Buu	Fang	3	Do you want to tap comrade?
	wì mbèlə̀ fədzʲə̌ bâ You pray God comrade?	Buu	Fang	3	Are you praying to God comrade?
	wín yəfá'á kpwéyû What out with arm?	Buu	Fang	2	What happened to your arm?

	à nə́ gʲá nʲâ wésɨ́'ə̀ bà You are mother for children, comrade?	Buu	Fang	2	You are
TOTAL				**34/60**	

TABLE 58: ACTIVE COMPETENCES BY QAT22 IN THE FANG LANGUAGE

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAT22 (M)	wŭ mə kpwə́ ḿfínyə̌ Perosn who pray God	Buu	Fang	4	A person who is praying to God
	ŭm ngwà sù bə́ gwɔ́ kâ He/she go to fetch firewood	Buu	Fang	3	He/she is going to fetch firewood
	ùm wà sùm wɔ́bɛ́lá úm He/she in farm he pfwə̌ntâ clear	Buu	Fang	4	He/she is in the farm clearing
	bə́m bɛ̀ kʉ́ bɛ̀fɛ́ bíŋkɛ́kə́ Dance prog has climb stand	Buu	Fang	3	The dance is hot.
	úm mwà sɔ̀ŋɔ̀ ù kúbàŋ wə́wî He/she climb harvest palmnuts his	Buu	Fang	2	He is climbing up a palm tree to harvest his palmnuts.
	bə̌ mbàb kɛ́ bàpfɛ́ bə́ bí bə́ pl women this they carry mwá dzə̀ŋ bə́dzɛ́ gàp mútŏ their backs go prog look car	Buu	Fang	4	These two women are carrying babies on their backs and going to look for a vehicle
	ùghəmə kpwɛ́gwù dzùŋù A man going to kítsû farm	Buu	Fang	4	It is a man going to the farm
	mə́ gmwàsɔ̂ ŭ kwɔ́ ún kɔ̀ Woman this she harvest	Buu	Fang	3	This woman is harvesting

	kókwù ù dzɨghà fwɔ́ntɔ̂ cocoa from farm her				cocoa from her farm.
	ú wé gbwɔ̂ û kwûntə́ bɨ́ sə̀ŋwàkà	Buu	Fang	2	-
	kɨ́ gmwà sə́ŋ wɔ̀ yì wɔ̀sɔ́ This child male you cut hand?	Buu	Fang	3	This boy, have you wounded your hand?
	bə́ mə̌ gbwə́fɛ́ bwɔ́ nɔ̀ŋɔ̂ fî ù This pl people are harvest mə̀ gmwɔ̀fĭ mɔ̂ bə̀ kwîn bə̀fɛ́ some harvest prog maize, bə́ twŭshí bɨ́ tŭ gbwə̀ others are carry prog	Buu	Fang	3	These people are harvesting maize. While some are harvesting others are carrying
	û mwɔ̀ dzhó'ó fídzhó He/she drink prog pipe vótsó kɨ́sə̀ kɨ́álɛ̂ when sit ground.	Buu	Fang	2	He/she is smoking pipe while sitting on the ground.
TOTAL				**37/60**	

TABLE 59: ACTIVE COMPETENCES BY QAT101 IN THE FANG LANGUAGE

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAT101 (M)		Buu	Fang		
	bwàkə́ gbwə́ŋ bìtsínù bíŋ yəyə̂'ə́ əbwíníny̌	Buu	Fang	1	-
	gmwá ú gbwə́nə́ dzə̀ŋ People these dance 'dzang'	Buu	Fang	4	These people are dancing dzang dance
	Kwì wúŋ bə̀ŋtə̀nə̀ fə̀dzì Child this pray God	Buu	Fang	4	This child is praying to God
	ə́ nə́ fáŋ ə́k kə̀tɛ̀wúŋ mú fə̀dzîŋ it is mother who sit drink pipe	Buu	Fang	3	Its mother who is sitting and smoking pipe
	à nə̌ kpwéŋ ù gmwə̀ tʲə̀ It is someone who clear prog úfwə̀ntə̀	Buu	Fang	5	Its someone clearing
	ə̌k kpwɛ̌ wŭŋ kŭ bù kúkù It is woman who cut prog cocoa	Buu	Fang	3	Its a woman harvesting cocoa
	à nə́ kpwə́ŋ kə̀tɛ̀ wûŋ kŭ ə̀ It is woman who is cut prog ə̀mə̀ mə̀sɨ́ garden egg	Buu	Fang	4	It is a woman harvesting garden eggs
	à nə́ gbwə̀ lə̀ fə̀yúŋ mí yə̀ It is man who is climb prog sə́mə́ àmə̀ kpwí mîmə́ Palmtree to tap wine	Buu	Fang	4	Its one man climbing up a palm tree to tap wine
	ă gmwə̀ lə̀sɨwù nkwù tìkʲún it man who tie firewood	Buu	Fang	3	Its a man tying firewood with

	ódùbá tìmwɔ̌ in one hand				one hand
	à nɨ́ vɨ́kɛ̀rə wɔ́túmɨ́yî ámwɔ̀wɔ́n sìghí ú fwɔ̂nɔ́	Buu	Fang	2	-
	à mə́ gmwɔ̀ bɨ́mkû kɔ̀ kpwă They are men who look for wood	Buu	Fang	4	They are some men fetching firewood
TOTAL				**37/60**	

TABLE 60: ACTIVE COMPETENCES BY QAT103 IN THE FANG LANGUAGE

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS /5	ENGLISH INTERPRETATION
QAT103 (F)		Buu	Fang		
	wú nə́ ngènə́ ə́wú sə́lí	Buu	Fang	1	-
	wù nɔ́ ngɔ̀ntə́ nù Man who pray prog	Buu	Fang	0	A man is praying
	bwú nû fwûntɔ̂ Man this clear prog	Buu	Fang	2	This man is clearing
	ù nə́ sí ê kə̀ tɨ́m nyàm He/she go prog shoot meat/animal	Buu	Fang	3	He/she is going to shoot meat/animal
	ù nə́ dzə́ wù ù sí kwí	Buu	Fang	-	
	wúnɔ́ mbíntɔ́	Buu	Fang	-	-
	-	Buu	Fang	-	
	-	Buu	Fang	-	
	-	Buu	Fang	-	
	-	Buu	Fang	-	
	-	Buu	Fang	-	
TOTAL				**6/60**	

TABLE 61: ACTIVE COMPETENCES BY QAT102 IN THE MUFU-MUNDABLI LANGUAGE

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS /5	ENGLISH INTERPRETATION
QAT102 (M)	bə́ tsébó ghàŋ gbwà Women those carry babies dzwàmə́ backs	Buu	Mufu-Mundabli	5	Those women are carrying babies in their backs.
	wə̀ nghàfà ù gbwùŋ gwŭ Child male is pray prog gbwə̀m God	Buu	Mufu-Mundabli	5	This boy is praying to God.
	wŭn tsè tábà He/she drink tobacco	Buu	Mufu-Mundabli	3	He/she is smoking tobacco
	gbwà dzɔ́'ɔ̀m mbí Father tap wine	Buu	Mufu-Mundabli	3	Father is tapping wine
	nù'ú kím ə'ə̀ ù gbwà sòyífán	Buu	Mufu-Mundabli	2	-
	dɔ̀ŋɔ̀ nə̀ námbí Go prog harvest	Buu	Mufu-Mundabli	5	They are going to harvest.
	ù mù yá shwám He/she who climb palmtree	Buu	Mufu-Mundabli	5	A man is climbing up a palm tree
	wɔ̀ mə̀ kŭŋ Person tie firewood	Buu	Mufu-Mundabli	5	A person tying firewood
	ù mə̀ ghì nə̀ nshà'à nyí He/she harvest garden eggs	Buu	Mufu-Mundabli	4	They are harvesting garden eggs
	mwà kpwə̀ bí ú bíním Man this go hunting	Buu	Mufu-Mundabli	4	This man is going hunting
	wə̌ mə̌ əm bí mú	Buu	Mufu-	5	They are people

	People who are dance prog		Mundabli		dancing.
	mə tə̂ dzəmbò kə́kwɛ̂ They are in raffia	Buu	Mufu-Mundabli	3	They are in the rafia.
TOTAL				**49/60**	

TABLE 62: ACTIVE COMPETENCES BY QAD24 IN THE MUFU-MUNDABLI LANGUAGE

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS /5	ENGLISH INTERPRETATION
QAD24 (F)	mbɛ̀bá nə́ gàŋ gbwà Women those carry their children gbwə̀mə́ backs	Buu	Mufu-Mundabli	5	Those women are carrying children in their backs.
	wə́n mbɔ̀ŋnə̀ gbwə̀m Person pray God	Buu	Mufu-Mundabli	5	This person is praying to God
	wə̌n mù kpwɛ̀ tábə̌ Person this drink tobacco	Buu	Mufu-Mundabli	5	This one is smoking tobacco
	mə̀ wĭn kə́ə̀ gbwà nɨ̀m Man that is clear prog tshám farm	Buu	Mufu-Mundabli	5	That man is clearing in his farm.
	wĭn fwánám Perosn this working	Buu	Mufu-Mundabli	5	This person is working
	wĭn kɔ̀nə̀m dzɔ̀ŋ Person this tie wood	Buu	Mufu-Mundabli	5	This person is tying wood.
	wĭn gbwà'à shwám Person this climb palmtree	Buu	Mufu-Mundabli	5	This person is climbing up a palm tree.
	wĭn lʲà'à ə̀ ə̀ ə̀ ɨb ɨbʲámlə́	Buu	Mufu-Mundabli	5	This one is going hunting.
	wɨ́n kʲì̀mə̀m tshwá This person go hunt	Buu	Mufu-Mundabli	3	This person is going hunt.
	bə̀bá mbʲĭnɨ́m They are dance	Buu	Mufu-Mundabli	5	They are dancing.
	wɛ̀ sə̀ŋ ə̀m mbí He/she tap prog wine	Buu	Mufu-Mundabli	5	He/she is tapping wine

	bəbá nkwə gə'ə They fetch wood	Buu	Mufu-Mundabli	5	They are fetching firewood.
TOTAL				**58/60**	

TABLE 63: ACTIVE COMPETENCES BY QAD23 IN THE MUFU-MUNDABLI LANGUAGE

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS /5	ENGLISH INTERPRETATION
QAD23 (M)	gbwú gàŋ gbwà Carry Children their dzɔ̀mɛ̂ backs	Buu	Mufu-Mundabli	5	Carrying their children on their backs
	ù bɔ̀ŋ ù dɛ̀ bɔ̀ŋ nɔ̀m He/she is pray prog gbwɔ̀m God	Buu	Mufu-Mundabli	2	He/she is praying to God.
	ù mwɔ́ nùm fɔ̀nshɔ́fí He/she drink prog pipe	Buu	Mufu-Mundabli	2	He/she is smoking pipe.
	ù shɔ̀ŋ mbífɔ̀ mbítsɔ̀n He/she clears him his farm	Buu	Mufu-Mundabli	4	He is clearing his farm.
	ù fwɔ́ nɔ̀m nyó nyo'ú He/she cut prog garden eggs	Buu	Mufu-Mundabli	4	He/she is harvesting garden eggs.
	ù kɛ̀nɔ̀m ndzɔ̀mbi He/she look wood	Buu	Mufu-Mundabli	4	He/she is fetching firewood.
	ù yà nshùwɔ̀ He/she climb palmtree	Buu	Mufu-Mundabli	5	He/she is climbing up a palm tree
	ù là bɨ́ám He/she go hunt	Buu	Mufu-Mundabli	5	He/she is going hunting
	ù kùnɔ̀m tsúmbí He/she hit drums	Buu	Mufu-Mundabli	5	He/she is hitting drums.
	bɔ́bînɔ̀ mbíbín	Buu	Mufu-Mundabli	4	They are dancing.
	ù gàŋɔ̀wɔ̀ nsɔ̀ŋ mbí He/she go tap wine	Buu	Mufu-Mundabli	5	He/she is going to tap wine

	ù kɔ̀nə̀ŋ nkɛ̀yí He/she tie wood	Buu	Mufu-Mundabli	3	He/she is tying firewood
TOTAL				**48/60**	

TABLE 64: ACTIVE COMPETENCES BY QAD23 IN THE MUFU-MUNDABLI LANGUAGE

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAT22 (M)	è mbémbé bànyà	Buu	Mufu-Mundabli	0	-
	mə bəkán bənŏ	Buu	Mufu-Mundabli	4	
	mbə́ bəfá bìbíbəndé	Buu	Mufu-Mundabli	4	These people are dancing.
	wà nŭ tûŋ ûkài ú dzàmnə́ Child male tie wood with dzàmbɔ́ knees	Buu	Mufu-Mundabli	3	This boy is tying firewood while in his knees.
	kpwà dzədzəd kpwàdzəmú ùnàŋă nàmbí	Buu	Mufu-Mundabli	3	
	wɔnə̌ mànŭ wɔfwɔ́ nəm ɔ́ ɔ́ twúbəbímə́	Buu	Mufu-Mundabli	2	-
	bənə̀ mənɔ̀ ənə̀ məndzɔ́ tshàs mànɨ́	Buu	Mufu-Mundabli	5	
	bàŋbə̀ yà nshwù à pfí Father this cut wine	Buu	Mufu-Mundabli	3	This father is tapping wine.
	à nə́ kpwə̂ bwòdzwó bənyú ǹfwànə̀	Buu	Mufu-Mundabli	5	They are people fetching wood.
	mbànə́ mwənû ù kʲə̀ kwókwù Mother this is harvast cocoa	Buu	Mufu-Mundabli	3	This mother is harvsting cocoa
	wànə́ kpwèp nɨmə̀ ndzɨ́'ə́	Buu	Mufu-Mundabli	2	-
	ə̀ləm màdzɔ̀k ù kúbáŋ wŭŋwú	Buu	Mufu-Mundabli	2	-
TOTAL				**41/60**	

TABLE 65: ACTIVE COMPETENCES BY QAD25 IN MISSONG

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAD25 (F)	àtsɨlɨ́ wú wŭn tsɔ̀ hɔ̀spʹtə̀ hɔ̀spʹtslə̀ nà wétì for Missong? úgbwé wútûm	Buu	Mungbam	3	These women are going to the hospital
	nɔ̀'ɔ̀ bàŋ tsə́lən yàŋ person this pray prog kìgbwə̀m God	Buu	Mungbam	4	This person is praying to God
	ə̀tsílə̂ mwùnyə̌ tsûŋ people these fetch firewood	Buu	Mungbam	5	These people are fetching firewood.
	nə̀ wə́nlá'á gbwĭ kpwô	Buu	Mungbam	5	
	nù wúŋ fwùnì nyáŋ Mother this drink pipe	Buu	Mungbam	5	This mother/woman smoking pipe
	nɔ̀'ɔ́ là'á gbwěk íbá wùyî pùyĭbá	Buu	Mungbam	3	
	nɔ̀'ɔ́ là'à tímíshʲà Man this shoot meat/animal	Buu	Mungbam	4	This man is shooting an animal.
	ghɔ́nɔ̀'ʉ́ pà'ànĭkwàà	Buu	Mungbam	4	
	tshə̀ gɨbûm mɔ́ŋ go hunt with nyìnyáŋ dog	Buu	Mungbam	3	He is going for hunting with a dog.
	dòwŋ́ shə̀ŋ nyə̆bá cut prog garden eggs	Buu	Mungbam	5	He/she is harvesting garden eggs.
	frɔ̀nɔ́ kʲànyə̆ dzá'à	Buu	Mungbam	5	These people are

	people here break maize				harvesting corn
TOTAL				**56/60**	

TABLE 66: ACTIVE COMPETENCES BY QAT25 IN THE MUNGBAM LANGUAGE

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAT25 (F)	wɔ̌ nùŋfâ wɔ̌ mbùŋfâ	Mufu	Mungbam	2	-
	ù lʲà'ànə́ íbʲámnə́ He/she go prog hunting	Mufu	Mungbam	4	He is going hunting
	a bìtèwú ùkàsə́lă	Mufu	Munbam	3	
	â bə̀ làŋú wûwù wù wù lá'ù It is a person who who bù kô kúbû go climb palmtree	Mufu	Mungbam	3	It is someone climbing up a palm tree.
	púnyìyáŋ fúnyiyáŋ pú mwɔ̌ŋ nyìnyáŋ	Mufu	Mungbam	5	
	ù kùm nìwù á wáŋàwə̀ He/she bent back in farm fə̀mbə́ɛ́ kìshò kə̀ ùtûŋ nyà'à look see prog cut garden egg nkí (pl)	Mufu	Mungbam	5	He/she has bent her back on the farm to see if he/she can harvest garden eggs.
	ə̀ gbwàŋ tsílə̀ kìgbwə̀m He/she pray prog God	Mufu	Munbam	5	He/she is praying to God
	bú tsɔ̀ kígbwé kə̀g bwámní They are carry children back	Mufu	Mungbam	3	They are carrying children on the backs.
	ù mwúnyàŋ wú tsùŋ wú He/she drink pipe while sit prog	Mufu	Mungbam	4	He/she smokes pipe while sitting.
	fə̀lá'á wísɛ̀ síŋbáyâ	Mufu	Mungbam	5	
	ămbá wə̀lá'á wútsə̀síŋ	Mufu	Mungbam	3	
	wù yù'ù nàmbʲánə́ Person this go tap	Mufu	Mungbam	4	This man is going to tap.

TOTAL				**46/60**	

TABLE 67: ACTIVE COMPETENCES BY QAT27 IN THE MUNGBAM LANGUAGE

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAT27 (M)	ɔ̀ múyà wútsɔ̀wà He/she drink pipe	Buu	Mungbam	5	He/she is smoking pipe.
	à kì nyà'à kə́ gwá'à Is it garden eggs he/she cut?	Buu	Mungbam	5	Its garden eggs he/ she is harvesting?
	ə́'ə̂l tsòlì náŋ	Buu	Mungbam	5	
	à nɔ̀mnìyă àkân nən nɔ̀mâ	Buu	Mungbam	5	
	è lə́ bʲáfʲà gbwánə́ kwúkwù It is someone harvest prog cocoa	Buu	Mungbam	0	He/she is harvesting Cocoa
	ə́ bàŋ nyàŋi dzá'à They harvest prog maize	Buu	Mungbam	4	They are harvesting maize
	ə̀ ló kúŋú'ɨ́ ú lá nàbá'á It is someone who climb palmnut	Buu	Mungbam	4	It is someone climbing on the palmnut.
	ə̀ tó'ə̀ tànyàŋíkwăbʲá	Buu	Mungbam	5	He is climbing up a palm tree to harvest palmnuts
	bə̂ mɨ́ múŋə̀ (pl)	Buu	Mungbam	5	
	ə̀ tswòlì kɨ́mbə́	Buu	Mungbam	4	
	à gbwàŋyà ki gbwə̀ghə̀wâ	Buu	Mungbam	4	
	kwŭ báá	Buu	Mungbam	4	
TOTAL				**50/60**	

TABLE 68: ACTIVE COMPETENCES BY QAT22 IN THE MUNGBAM LANGUAGE

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAT22 (M)	kànyă bwə́mə́bó bwó bwó bwó bíbànyì	Buu	Mungbam	2	-
	kən wɔ́ lɔ́kə́tə́ shəlímbùkàì	Buu	Mungbam	4	
	məbwúmbə́ bíbə́lə́ sábàsà búkwələnyə̂	Buu	Mungbam	4	
	wă mfâ kəvɔ́ wă mfâ kə̂và Child male this child male tie wŭ mwə́nə̂ one one hand firewood	Buu	Mungbam	3	This boy is tying firewood with his one hand
	útswɔ́ ùnɔ́vrɔ̀n ú kú wáí Women those have children nûwú their	Buu	Mungbam	4	Those women have their children
	mətwúví mbwàfá kə́ləbwàŋdzáŋ mətswà dzá mítwù bígbá'á	Buu	Mungbam	5	These people here are harvesting maize
	mwù tsúlə́ nyɔ̌ tàn Person hold prog calabash	Buu	Mungbam	4	This man here is holding a calabash.
	wúŋ nɔ́ nyúŋɔ́ ú kəányáŋ Person this him/her has Kúkùwù Cocoa	Buu	Mungbam	5	This person has cocoa.
	mwɔ̂ nyɔ́ tsúlə́ kə́fədzâ Grandmother this hold pipe fwúfwɔ́ nyɔ́ mwɔ́ wú	Buu	Mungbam	4	This grandmother is holding a pipe

	and here drink prog				and she is here smoking
	wɨnlə nyúŋú úbʲənù mbʲɨnə́	Buu	Mungbam	5	
	wûnlə twùlɨ́ twùlə́ twŭtàn	Buu	Mungbam	4	
	kwùnù yɔ́ŋɔ́ úfwùnyùmùwú	Buu	Mungbam	4	
TOTAL				**48/60**	

TABLE 69: ACTIVE COMPETENCES BY QAT101 IN THE MUNGBAM LANGUAGE

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS /5	ENGLISH INTERPRETATION
QAT101 (M)	ɔ'ɔ́ ùtsɨlə̀ wù ù nyɔ'ɔ́ ŭkpwè	Buu	Mungbam	4	Its a man holding a cutlass
	á nə̀ nyùŋŭ bàŋə̀ tsà'à It is person pray prog kìgbwə̀m God	Buu	Mungbam	5	Its a man that is praying to God
	ə̌ tsùlŭ wù dəndə̂ mwùnyăŋ útsŭŋ	Buu	Mungbam	4	
	ə̌ tsùlŭ wù dəndə̂ mwùnyăŋ útsŭŋ wŭnɔ̀ fwɔ̂nyáŋ	Buu	Mungbam	5	It is a person sitting and smoking her a pipe.
	ú nùwɔ̀ kɔ́têyà kɨmbə'ə̀ wú	Buu	Mungbam	4	
	ă nɔ̀wù tənə̌ úfwú nyɔ̂ It woman is farm garden eggs ngwúmə́wú cut	Buu	Mungbam	5	It is a woman who is in the farm harvesting garden eggs.
	ə̌tsɔ́lɨ́ wúlə́ úkwɔ̀ nyàŋɔ̀ bìdzùŋgú	Buu	Mungbam	4	
	à nə̀ nyə̀wɔ̀ mbʲáŋ They are women children mbʲɨ́nə́ with	Buu	Mungbam	5	They are women with their children
	ɛ́nù'ú gúsɔ̀ ăyàŋ	Buu	Mungbam	5	
	àì nɔ̀kə́ tswàì mù wúkàlə́kwâ	Buu	Mungbam	5	
	ngăvìd dzà'à bətsúlɔ́bwɔ́	Buu	Mungbam	5	

	mwɔ̀nyàŋmɨ́ tsúm				
	bwùmbə̀ tsílí ghɔ́ nɔ̀n nă yàŋ ká dzí dzíyă ádzà'à	Buu	Mungbam	3	Those people are harvesting corn
TOTAL				**55/60**	

TABLE 70: ACTIVE COMPETENCES BY QAT102 IN THE MUNGBAM LANGUAGE

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS /5	ENGLISH INTERPRETATION
QAT102 (M)	ànà ndɛ̌ nîm ghɔ́kɔ̀tsɔ̀ kpwé ìgbwɔ́mí	Buu	Mungbam	0	-
	wɔ̀ gbwàŋ tsàŋ kìgbwɔ̀m	Buu	Mungbam	5	This child is praying God
	wɔ̀ mwɔ́ nyàŋɔ̀ tʲɛ́wû	Buu	Mungbam	5	You are smoking pipe while sitting?
	gmwó kɔ̀ mbìnɔ̀ mbìnákɔ́ wáwŭ	Buu	Mungbam	4	These ladies are carrying their children.
	ànùwù kà kìm nyàm bìdzúwú	Buu	Mungbam	5	It ‘s a man going to shoot an animal.
	wŭ tsùlŭ wùkà kànyàŋ bĭ dzú'ú	Buu	Mungbam	5	The tapper is going to the rafia to tap.
	bɔ̂ndù'ɔ́ kàdzúnɔ́ bʲánăŋ wù tùsháŋ	Buu	Mungbam	5	Those people are in the farm harvesting corn.
	wûnù ɔ́bʲám	Buu	Mungbam	4	A hunter (man)
	wŭnù fɔ́k kàsɔ̀nʲàm bìndzúwú	Buu	Mungbam	4	A person that is clearing.
	wùbɔ̀nâ kɔ́ bĭ móŋ níwúkɔ̂ bɔ̀tsɔ́lɔ́wú	Buu	Mungbam	4	They are dancing joyfully.
	mɔ̀ndùkɔ́ kìkpwáŋ gbwɔ́ wúkɔ̂			4	A male child who has bandaged his hand.
	wùgbwɛ̀ tsúlɔ́wú kàŋgbwí dzhúwú bíkɔ́tɛ̀	Buu	Mungbam	5	

TOTAL				**50/60**	

TABLE 71: ACTIVE COMPETENCES BY QAD24 IN THE MUNGBAM LANGUAGE

NAME	**SPEECH**	**VILLAGE**	**TARGET LANGUAGE**	**POINTS /5**	**ENGLISH INTERPRETATION**
QAD24 (F)	gbwábwə́nə́bútsɔ̀ kpwé kə̀gbwàmámí	Buu	Mungbam	5	
	nə̀ wə́ gbwàŋ tsə̀lə̀ Person this prays prog kìgbwə̀m God	Buu	Mungbam	5	This man is praying to God
	ùwín mŭ nyà'à tsŭŋ	Buu	Mungbam	5	Its a man clearing
	dŭwúŋ kìnàŋíkwáá	Buu	Mungbam	5	The man is climbing up a palm tree
	ə̀wɨ̀n pfwə̀nyàyáŋ	Buu	Mungbam	5	
	wín kàyàà mbìtsɔ̀ŋ	Buu	Mungbam	5	
	wín fùyàŋíbá	Buu	Mungbam	5	
	nə̀wín là úbʲám	Buu	Mungbam	5	That man is going hunting
	nə̀wín dzɔ̀nyàŋíkwă	Buu	Mungbam	5	
	mə́bwún mùŋ nyàyá	Buu	Mungbam	5	He/she is harvesting garden egg
	ndín nə̀wə́n sə̀ŋyàŋá mbá	Buu	Mungbam	5	This man is tapping wine
	tɔ́ghɔ́n kàdzú'á	Buu	Mungbam	5	
TOTAL				**60/60**	

TABLE 72: ACTIVE COMPETENCES BY QAT106 IN THE NAKI LANGUAGE

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAT106 (F)	bìmbwɔ́ dɔ̀ŋɔ̀ tìkɛ́ví bímbwɔ́là	Ngun	Naki	4	This man is going to the rafia.
	mwɔ̀nɛ́ ɛ́ ɛ́bɔ̂ lùnì nɔ̀wú úgɔ̀kɔ́	Ngun	Naki	3	The woman is smoking pipe.
	wɔ̀mŋkɛ́'ɔ̀ sígɛ́ ndûmwɔ̀sé	Ngun	Naki	5	These mothers are ccarrying babies.
	bwɔ̀nɔ̀vúvɛ́ bìmwɔ́zɔ̀m bwɛ̆gɛ̀	Ngun	Naki	5	These people are dancing joyfully.
	bwɔ̀nɔ̀ vúvúbìntɔ́k wɔ̀nɔ́shùk ɔ̀kɔ̀mstáŋyɔ̂ mɛ̀ ndɔ̀ŋdzúŋyɔ̀nɔ́	Ngun	Naki	4	
	mɔ̀ŋwɔ̀d bɔ́shùwí ɔ̀níkó	Ngun	Naki	2	
	pă wɔ̀là wɔ̀ŋsɔ̀ŋ mbìmwɔ́	Ngun	Naki	3	
	pă là bùfì kɔ̀nténàfɛ́ bùfi ndéfì lɔ̀nɛ́ ngɔ̀mú ngŭ bànɛ̀	Ngun	Naki	4	This father is clearing with his cutlass.
	bwɔ̀nɔ̀ búbŭ bìnɔ̀bwɔ́n ndɛ̀kɔ̀lɔ̀ kɔ̀nɔ̀kíkɔ̀n ìfɛ̀kí lɔ̀nílɔ̀nílɔ̀fũ fũ mɛ́ ndɔ́ŋgwɔ̂ ndɛ̀kɛ̆ úmàdélà	Ngun	Naki	2	
	wɔ̀ nɛ̆ làkán dùŋkànɛ́ní bŭ kàmbû úgbwɛ́wɔ́	Ngun	Naki	4	The man is sitting and tying firewood with one hand
	wɔ̀ nɔ́ là dŭŋú ɔ̆ ndéwò kɔ̀ Man this here go prog with	Ngun	Naki	3	This man here is going to shoot meat (animal)
	tɔ́m nyàm mĭmɔ́nɛ́				

	shoot meat/animal gun				with a gun
	ù mbʲáŋlə nílə bŭkràŋ ùbəbàníyə níyùgbwà bʲáŋyə́	Ngun	Naki	3	
TOTAL				**41/60**	

TABLE 73: SHOWING ACTIVE COMPETENCES BY QAT25 IN THE NAKI LANGUAGE

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAT25 (F)	ḱwɔ̀tsŭ nú a bɛ̀nà Climb prog to palmtree	Buu	Naki	2	He is climbing up a palm tree
	ghâ bínà They dance	Buu	Naki	2	They are dancing
	ghâ tsə́lə́ gbwə̀m They pray God	Buu	Naki	2	They are praying God
	wâ tsə̀gɛ̀yì ùgbwɔ́ tsɔ̂ Child female carry gbwə̀mtí children	Buu	Naki	3	Some girls carrying children
	wɔ̌ gmwɔ̀ŋsí Person hunt	Buu	Naki	2	A hunter
	wâ làshí He/she tap prog	Buu	Naki	4	He/she is tapping
	wâ sáŋmbî	Buu	Naki	1	-
TOTAL				**16/60**	

TABLE 74: ACTIVE COMPETENCES BY QAT105 IN NAKI LANGUAGE

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAT105 (M)	lá kɛ́nəlɛ̌ lùkə́	Biya	Naki	1	-
	mwă səmɛ́kɔ́d	Biya	Naki	1	-
	mwă bàŋədzɛ́ lăd sìsháŋ Women these here children carry bàŋə dzɛ̀mə́ backs	Biya	Naki	3	These women here are carrying children on their backs
	dɔ̀ŋɔ́ sì'álà mwă gədzɔ́	Biya	Naki	4	This man is praying to God.
	bùkàbənə məməbím búládzəm	Biya	Naki	4	
	wùnák tùntàk áfᶩô	Biya	Naki	3	
	wùnă mɛ́wɛ́ wùnă mɛ̌gᶩə̌ ndᶩá dókəyà fwìghí	Biya	Naki	4	This person is hqrvesting gqrden eggs.
	mă kànà àbɛ̌ ádzítə kăbɛ́ àmùnə̌ mùkà'à	Biya	Naki	3	
	wùnă tɔ́ŋ ànswôn wùnă person some blow flute, person some blow rattle tɔ́ŋɔ́ sɔ̌n kə kɨ tɔ́ŋɔ́ sɔ̌n kə́sɔ́ drum	Biya	Naki	3	Somebody is blowing a flute, another is beating the rattles and the other a drum
	mú ngwɔ̀'à mɛ̀símúná'á Man this dzɛ̀	Biya	Naki	4	
	mwă səkwàŋgwɔ̀ làì íbí	Biya	Naki	2	
	mwă dùŋ kpàwələ́yə̌	Biya	Naki	2	The man is

	Man prog hold lăshíkɔ̋d sɨ́mê éé é é gun ə́bwámnánîgɔ̋d				holding a gun and going to hunt
TOTAL				**34/60**	

TABLE 75: ACTIVE COMPETENCES BY QAD28 IN AJUMBU

NAME	SPEECH	VILLAGE	TARGET LANGUAGE	POINTS/5	ENGLISH INTERPRETATION
QAD28 (M)	bə́ ywɔ̀gə̀ yìd wɔ̀ nə́má They carry them children their backs	Buu	Ajumbu	3	They are carrying their children on their backs
	ɔ̀ bɔ̀kə̀ fədzì He/she pray prog God	Buu	Ajumbu	5	He/she is praying to God
	ɔ̀ ngwɔ́ghɔ̀ fətsɔ́fə̀ He/she smoke prog pipe	Buu	Ajumbu	5	He/she is smoking pipe
	ù kɔ̀kɔ̀ mə́ máŋkrɔ̀ He/she harvest prog pl mango	Buu	Ajumbu	4	He/she is harvesting mangoes
	bə́ gbwɔ̀ kə̀kpwín Father climb palmtree	Buu	Ajumbu	3	Father is climbing up a palm tree
	ù tîŋ kə̀yìshì He/she tie firewood	Buu	Ajumbu	4	He/she is tying firewood
	ù ká'á nə̀kə̀ ngwá'ánə́kwɔ́ He/she go prog to rafia	Buu	Ajumbu	3	He/she is going to the Rafia
	wə̀ nə́ kə̀bvə̀fâ Man that clear prog	Buu	Ajumbu	2	That man is clearing
	wɔ̀ tə́m kámbɔ̂ŋ Man shoot meat/animal	Buu	Ajumbu	3	A man who shoots meat/animals
	ù kàsə̀skə̀ kwí He/she harvest prog garden egg	Buu	Ajumbu	2	He/she is harvesting garden eggs
	bú bîŋkə̀ ù nyɔ̀gátɔ́ bə́mə́mbí They go prog to fetch firewood	Buu	Ajumbu	4	They are going to fetch firewood

	mú kɔ̀kə̀ bàsáŋ They harvest prog maize	Buu	Ajumbu	4	They are harvesting corn
TOTAL				**42/60**	

APPENDIX 7: A SAMPLE WORDLISTS

FANG DATA

Head	QAT139	kwú	QAD25	no response	-1.00
Head	QAT139	kwú	QAT101	kwú	1.00
Head	QAT139	kwú	QAT135	kú	0.50
Head	QAT139	kwú	QAD23	kú	0.50
Head	QAT139	kwú	QAD28	kwú	1.00
Head	QAT139	kwú	QAT108	kwú	1.00
Head	QAD25	no response	QAT101	kwú	-1.00
Head	QAD25	no response	QAT135	kú	-1.00
Head	QAD25	no response	QAD23	kú	-1.00
Head	QAD25	no response	QAD28	kwú	-1.00
Head	QAD25	no response	QAT108	kwú	-1.00
Head	QAT101	kwú	QAT135	kú	0.50
Head	QAT101	kwú	QAD23	kú	0.50
Head	QAT101	kwú	QAD28	kwú	1.00
Head	QAT101	kwú	QAT108	kwú	1.00
Head	QAT135	kú	QAD23	kú	1.00
Head	QAT135	kú	QAD28	kwú	0.50
Head	QAT135	kú	QAT108	kwú	0.50
Head	QAD23	kú	QAD28	kwú	0.50
Head	QAD23	kú	QAT108	kwú	0.50
Head	QAD28	kwú	QAT108	kwú	1.00

Heads	QAT139	tə́kú	QAD25	no response -1.00
Heads	QAT139	tə́kú	QAT101	no response -1.00
Heads	QAT139	tə́kú	QAT135	kútígbwìm -0.64
Heads	QAT139	tə́kú	QAD23	tə́kú 1.00
Heads	QAT139	tə́kú	QAD28	tə̀kwú 0.43
Heads	QAT139	tə́kú	QAT108	tə̀kwú 0.43
Heads	QAD25	no response	QAT101	no response 1.00
Heads	QAD25	no response	QAT135	kútígbwìm -1.00
Heads	QAD25	no response	QAD23	tə́kú -1.00
Heads	QAD25	no response	QAD28	tə̀kwú -1.00
Heads	QAD25	no response	QAT108	tə̀kwú -1.00
Heads	QAT101	no response	QAT135	kútígbwìm -1.00
Heads	QAT101	no response	QAD23	tə́kú -1.00
Heads	QAT101	no response	QAD28	tə̀kwú -1.00
Heads	QAT101	no response	QAT108	tə̀kwú -1.00
Heads	QAT135	kútígbwìm	QAD23	tə́kú -0.64
Heads	QAT135	kútígbwìm	QAD28	tə̀kwú -0.64
Heads	QAT135	kútígbwìm	QAT108	tə̀kwú -0.64
Heads	QAD23	tə́kú	QAD28	tə̀kwú 0.43
Heads	QAD23	tə́kú	QAT108	tə̀kwú 0.43
Heads	QAD28	tə̀kwú	QAT108	tə̀kwú 1.00
Eye	QAT139	wúsə̂	QAD25	no response -0.80
Eye	QAT139	wúsə̂	QAT101	yísə̂ 0.33

Eye	QAT139	wúsə̂	QAT135	wúsə̂	1.00
Eye	QAT139	wúsə̂	QAD23	yí	-0.67
Eye	QAT139	wúsə̂	QAD28	wùsə́	0.33
Eye	QAT139	wúsə̂	QAT108	wúsə̂	1.00
Eye	QAD25	no response	QAT101	yísə̂	-0.80
Eye	QAD25	no response	QAT135	wúsə̂	-0.80
Eye	QAD25	no response	QAD23	yí	-1.00
Eye	QAD25	no response	QAD28	wùsə́	-0.80
Eye	QAD25	no response	QAT108	wúsə̂	-0.80
Eye	QAT101	yísə̂	QAT135	wúsə̂	0.33
Eye	QAT101	yísə̂	QAD23	yí	0.00
Eye	QAT101	yísə̂	QAD28	wùsə́	-0.33
Eye	QAT101	yísə̂	QAT108	wúsə̂	0.33
Eye	QAT135	wúsə̂	QAD23	yí	-0.67
Eye	QAT135	wúsə̂	QAD28	wùsə́	0.33
Eye	QAT135	wúsə̂	QAT108	wúsə̂	1.00
Eye	QAD23	yí	QAD28	wùsə́	-0.67
Eye	QAD23	yí	QAT108	wúsə̂	-0.67
Eye	QAD28	wùsə́	QAT108	wúsə̂	0.33
eyes	QAT139	dzí	QAD25	no response	-1.00
eyes	QAT139	dzí	QAT101	no response	-1.00
eyes	QAT139	dzí	QAT135	dzítɛ́	0.00
eyes	QAT139	dzí	QAD23	kə́yitə́	-0.50

eyes	QAT139	dzí	QAD28	ídzí	0.20
eyes	QAT139	dzí	QAT108	dzí	1.00
eyes	QAD25	no response	QAT101	no response	1.00
eyes	QAD25	no response	QAT135	dzítɛ́	-1.00
eyes	QAD25	no response	QAD23	kəyitə́	-1.00
eyes	QAD25	no response	QAD28	ídzí	-1.00
eyes	QAD25	no response	QAT108	dzí	-1.00
eyes	QAT101	no response	QAT135	dzítɛ́	-1.00
eyes	QAT101	no response	QAD23	kəyitə́	-1.00
eyes	QAT101	no response	QAD28	ídzí	-1.00
eyes	QAT101	no response	QAT108	dzí	-1.00
eyes	QAT135	dzítɛ́	QAD23	kəyitə́	-0.25
eyes	QAT135	dzítɛ́	QAD28	ídzí	0.00
eyes	QAT135	dzítɛ́	QAT108	dzí	0.00
eyes	QAD23	kəyitə́	QAD28	ídzí	-0.25
eyes	QAD23	kəyitə́	QAT108	dzí	-0.50
eyes	QAD28	ídzí	QAT108	dzí	0.20
Ear	QAT139	kətwû	QAD25	no response	-1.00
Ear	QAT139	kətwû	QAT101	bètwə́ŋ	-0.50
Ear	QAT139	kətwû	QAT135	kətwúŋ	0.50
Ear	QAT139	kətwû	QAD23	bətwuŋ	0.43
Ear	QAT139	kətwû	QAD28	twə̀ŋkə́	-0.75
Ear	QAT139	kətwû	QAT108	twúŋ	-0.29

Ear	QAD25	no response	QAT101	bètwɔ́ŋ	-0.80
Ear	QAD25	no response	QAT135	kə́twúŋ	-1.00
Ear	QAD25	no response	QAD23	bə́twuŋ	-1.00
Ear	QAD25	no response	QAD28	twɔ̀ŋkə́	-1.00
Ear	QAD25	no response	QAT108	twúŋ	-1.00
Ear	QAT101	bètwɔ́ŋ	QAT135	kə́twúŋ	0.00
Ear	QAT101	bètwɔ́ŋ	QAD23	bə́twuŋ	0.00
Ear	QAT101	bètwɔ́ŋ	QAD28	twɔ̀ŋkə́	-0.38
Ear	QAT101	bètwɔ́ŋ	QAT108	twúŋ	0.00
Ear	QAT135	kə́twúŋ	QAD23	bə́twuŋ	0.50
Ear	QAT135	kə́twúŋ	QAD28	twɔ̀ŋkə́	-0.62
Ear	QAT135	kə́twúŋ	QAT108	twúŋ	0.25
Ear	QAD23	bə́twuŋ	QAD28	twɔ̀ŋkə́	-0.62
Ear	QAD23	bə́twuŋ	QAT108	twúŋ	0.00
Ear	QAD28	twɔ̀ŋkə́	QAT108	twúŋ	-0.25
ears	QAT139	bə̀twɔ̌	QAD25	no response	-1.00
ears	QAT139	bə̀twɔ̌	QAT101	no response	-1.00
ears	QAT139	bə̀twɔ̌	QAT135	bə́twúŋ	0.00
ears	QAT139	bə̀twɔ̌	QAD23	kə̀twúŋ	0.00
ears	QAT139	bə̀twɔ̌	QAD28	bə̀twúŋ	0.25
ears	QAT139	bə̀twɔ̌	QAT108	bə́twúŋ	0.00
ears	QAD25	no response	QAT101	no response	1.00
ears	QAD25	no response	QAT135	bə́twúŋ	-1.00

ears	QAD25	no response	QAD23	kətwúŋ	-1.00
ears	QAD25	no response	QAD28	bətwúŋ	-1.00
ears	QAD25	no response	QAT108	bətwúŋ	-1.00
ears	QAT101	no response	QAT135	bətwúŋ	-1.00
ears	QAT101	no response	QAD23	kətwúŋ	-1.00
ears	QAT101	no response	QAD28	bətwúŋ	-1.00
ears	QAT101	no response	QAT108	bətwúŋ	-1.00
ears	QAT135	bətwúŋ	QAD23	kətwúŋ	0.50
ears	QAT135	bətwúŋ	QAD28	bətwúŋ	0.75
ears	QAT135	bətwúŋ	QAT108	bətwúŋ	1.00
ears	QAD23	kətwúŋ	QAD28	bətwúŋ	0.75
ears	QAD23	kətwúŋ	QAT108	bətwúŋ	0.50
ears	QAD28	bətwúŋ	QAT108	bətwúŋ	0.75
Mouth	QAT139	dzî	QAD25	kədʲéɓwú	-1.00
Mouth	QAT139	dzî	QAT101	dzɛ̂	0.33
Mouth	QAT139	dzî	QAT135	dzíkɛ̂	0.00
Mouth	QAT139	dzî	QAD23	kədzé	-0.67
Mouth	QAT139	dzî	QAD28	dzʲɛ	-0.33
Mouth	QAT139	dzî	QAT108	dzî	1.00
Mouth	QAD25	kədʲéɓwú	QAT101	dzɛ̂	-1.00
Mouth	QAD25	kədʲéɓwú	QAT135	dzíkɛ̂	-0.82
Mouth	QAD25	kədʲéɓwú	QAD23	kədzé	-0.09
Mouth	QAD25	kədʲéɓwú	QAD28	dzʲɛ	-1.00

Mouth	QAD25	kədʲéɓwú	QAT108	dzî	-1.00
Mouth	QAT101	dzɛ̂	QAT135	dzíkɛ̂	0.00
Mouth	QAT101	dzɛ̂	QAD23	kədzé	-0.67
Mouth	QAT101	dzɛ̂	QAD28	dzᴶɛ	0.00
Mouth	QAT101	dzɛ̂	QAT108	dzî	0.33
Mouth	QAT135	dzíkɛ̂	QAD23	kədzé	-0.67
Mouth	QAT135	dzíkɛ̂	QAD28	dzᴶɛ	-0.33
Mouth	QAT135	dzíkɛ̂	QAT108	dzî	0.00
Mouth	QAD23	kədzé	QAD28	dzᴶɛ	-0.67
Mouth	QAD23	kədzé	QAT108	dzî	-0.67
Mouth	QAD28	dzᴶɛ	QAT108	dzî	-0.33
mouths	QAT139	bədzəgə	QAD25	no response	-1.00
mouths	QAT139	bədzəgə	QAT101	bədzɛ́	-0.11
mouths	QAT139	bədzəgə	QAT135	bədzígə	0.78
mouths	QAT139	bədzəgə	QAD23	kədzétə	0.33
mouths	QAT139	bədzəgə	QAD28	bədzəkə	0.56
mouths	QAT139	bədzəgə	QAT108	bədzəgə	1.00
mouths	QAD25	no response	QAT101	bədzɛ́	-1.00
mouths	QAD25	no response	QAT135	bədzígə	-1.00
mouths	QAD25	no response	QAD23	kədzétə	-0.90
mouths	QAD25	no response	QAD28	bədzəkə	-1.00
mouths	QAD25	no response	QAT108	bədzəgə	-1.00
mouths	QAT101	bədzɛ́	QAT135	bədzígə	-0.11

mouths	QAT101	bədzɛ́	QAD23	kədzétə	-0.33
mouths	QAT101	bədzɛ́	QAD28	bədzəkə	0.11
mouths	QAT101	bədzɛ́	QAT108	bədzəgə	-0.11
mouths	QAT135	bədzígə	QAD23	kədzétə	0.33
mouths	QAT135	bədzígə	QAD28	bədzəkə	0.33
mouths	QAT135	bədzígə	QAT108	bədzəgə	0.78
mouths	QAD23	kədzétə	QAD28	bədzəkə	0.11
mouths	QAD23	kədzétə	QAT108	bədzəgə	0.33
mouths	QAD28	bədzəkə	QAT108	bədzəgə	0.56
Nose	QAT139	wû	QAD25	no response	-1.00
Nose	QAT139	wû	QAT101	wû	1.00
Nose	QAT139	wû	QAT135	yû’ə	-0.33
Nose	QAT139	wû	QAD23	no response	-1.00
Nose	QAT139	wû	QAD28	wú	0.33
Nose	QAT139	wû	QAT108	wû	1.00
Nose	QAD25	no response	QAT101	wû	-1.00
Nose	QAD25	no response	QAT135	yû’ə	-1.00
Nose	QAD25	no response	QAD23	no response	1.00
Nose	QAD25	no response	QAD28	wú	-1.00
Nose	QAD25	no response	QAT108	wû	-1.00
Nose	QAT101	wû	QAT135	yû’ə	-0.33
Nose	QAT101	wû	QAD23	no response	-1.00

Nose	QAT101	wû	QAD28	wú	0.33
Nose	QAT101	wû	QAT108	wû	1.00
Nose	QAT135	yû’ə́	QAD23	no response	-1.00
Nose	QAT135	yû’ə́	QAD28	wú	-0.33
Nose	QAT135	yû’ə́	QAT108	wû	-0.33
Nose	QAD23	no response	QAD28	wú	-1.00
Nose	QAD23	no response	QAT108	wû	-1.00
Nose	QAD28	wú	QAT108	wû	0.33
noses	QAT139	tùwûkə́	QAD25	no response	-1.00
noses	QAT139	tùwûkə́	QAT101	təwú	-0.11
noses	QAT139	tùwûkə́	QAT135	tənyúkə́	0.11
noses	QAT139	tùwûkə́	QAD23	no response	-1.00
noses	QAT139	tùwûkə́	QAD28	təwú	-0.11
noses	QAT139	tùwûkə́	QAT108	téwúkə́	0.33
noses	QAD25	no response	QAT101	təwú	-1.00
noses	QAD25	no response	QAT135	tənyúkə́	-1.00
noses	QAD25	no response	QAD23	no response	1.00
noses	QAD25	no response	QAD28	təwú	-1.00
noses	QAD25	no response	QAT108	téwúkə́	-0.90
noses	QAT101	təwú	QAT135	tənyúkə́	0.11
noses	QAT101	təwú	QAD23	no response	-1.00
noses	QAT101	təwú	QAD28	təwú	1.00
noses	QAT101	təwú	QAT108	téwúkə́	0.11

noses	QAT135	tə́nyúkə́	QAD23	no response	-1.00
noses	QAT135	tə́nyúkə́	QAD28	tə́wú	0.11
noses	QAT135	tə́nyúkə́	QAT108	téwúkə́	0.56
noses	QAD23	no response	QAD28	tə́wú	-1.00
noses	QAD23	no response	QAT108	téwúkə́	-0.90
noses	QAD28	tə́wú	QAT108	téwúkə́	0.11
Hand	QAT139	tsìŋ	QAD25	tìŋ	0.50
Hand	QAT139	tsìŋ	QAT101	kàrə̀	-0.67
Hand	QAT139	tsìŋ	QAT135	kákɛ́	-1.00
Hand	QAT139	tsìŋ	QAD23	tsìn	0.50
Hand	QAT139	tsìŋ	QAD28	kàlə̀	-0.67
Hand	QAT139	tsìŋ	QAT108	tsìŋ	1.00
Hand	QAD25	tìŋ	QAT101	kàrə̀	-0.67
Hand	QAD25	tìŋ	QAT135	kákɛ́	-1.00
Hand	QAD25	tìŋ	QAD23	tsìn	0.00
Hand	QAD25	tìŋ	QAD28	kàlə̀	-0.67
Hand	QAD25	tìŋ	QAT108	tsìŋ	0.50
Hand	QAT101	kàrə̀	QAT135	kákɛ́	-0.33
Hand	QAT101	kàrə̀	QAD23	tsìn	-0.67
Hand	QAT101	kàrə̀	QAD28	kàlə̀	0.67
Hand	QAT101	kàrə̀	QAT108	tsìŋ	-0.67
Hand	QAT135	kákɛ́	QAD23	tsìn	-1.00
Hand	QAT135	kákɛ́	QAD28	kàlə̀	-0.33

Hand	QAT135	kákɛ́	QAT108	tsìŋ	-1.00
Hand	QAD23	tsìn	QAD28	kàlə	-0.67
Hand	QAD23	tsìn	QAT108	tsìŋ	0.50
Hand	QAD28	kàlə	QAT108	tsìŋ	-0.67
hands	QAT139	tsíŋ	QAD25	tíŋ	0.50
hands	QAT139	tsíŋ	QAT101	no response	-1.00
hands	QAT139	tsíŋ	QAT135	kàrəkíŋgbwim	-0.57
hands	QAT139	tsíŋ	QAD23	no response	-1.00
hands	QAT139	tsíŋ	QAD28	kàlə	-1.00
hands	QAT139	tsíŋ	QAT108	tsíŋ	1.00
hands	QAD25	tíŋ	QAT101	no response	-1.00
hands	QAD25	tíŋ	QAT135	kàrəkíŋgbwim	-0.57
hands	QAD25	tíŋ	QAD23	no response	-1.00
hands	QAD25	tíŋ	QAD28	kàlə	-1.00
hands	QAD25	tíŋ	QAT108	tsíŋ	0.50
hands	QAT101	no response	QAT135	kàrəkíŋgbwim	-0.86
hands	QAT101	no response	QAD23	no response	1.00
hands	QAT101	no response	QAD28	kàlə	-1.00
hands	QAT101	no response	QAT108	tsíŋ	-1.00
hands	QAT135	kàrəkíŋgbwim	QAD23	no response	-0.86
hands	QAT135	kàrəkíŋgbwim	QAD28	kàlə	-0.29
hands	QAT135	kàrəkíŋgbwim	QAT108	tsíŋ	-0.57
hands	QAD23	no response	QAD28	kàlə	-1.00

hands	QAD23	no response	QAT108	tsíŋ	-1.00
hands	QAD28	kàlə̀	QAT108	tsíŋ	-1.00
Body	QAT139	ghʉ́	QAD25	wútú	-0.67
Body	QAT139	ghʉ́	QAT101	bvʉ́tê	-0.43
Body	QAT139	ghʉ́	QAT135	yûtə́	-0.67
Body	QAT139	ghʉ́	QAD23	no response	-1.00
Body	QAT139	ghʉ́	QAD28	nyùtɛ́	-0.67
Body	QAT139	ghʉ́	QAT108	wètɛ̂	-1.00
Body	QAD25	wútú	QAT101	bvʉ́tê	-0.43
Body	QAD25	wútú	QAT135	yûtə́	0.00
Body	QAD25	wútú	QAD23	no response	-1.00
Body	QAD25	wútú	QAD28	nyùtɛ́	0.00
Body	QAD25	wútú	QAT108	wètɛ̂	-0.33
Body	QAT101	bvʉ́tê	QAT135	yûtə́	-0.71
Body	QAT101	bvʉ́tê	QAD23	no response	-0.90
Body	QAT101	bvʉ́tê	QAD28	nyùtɛ́	-0.71
Body	QAT101	bvʉ́tê	QAT108	wètɛ̂	-0.43
Body	QAT135	yûtə́	QAD23	no response	-1.00
Body	QAT135	yûtə́	QAD28	nyùtɛ́	0.00
Body	QAT135	yûtə́	QAT108	wètɛ̂	-0.67
Body	QAD23	no response	QAD28	nyùtɛ́	-1.00
Body	QAD23	no response	QAT108	wètɛ̂	-1.00
Body	QAD28	nyùtɛ́	QAT108	wètɛ̂	0.00

bodies	QAT139	ghŭmwìm	QAD25	no response	-1.00
bodies	QAT139	ghŭmwìm	QAT101	no response	-1.00
bodies	QAT139	ghŭmwìm	QAT135	yûgbwìm	0.00
bodies	QAT139	ghŭmwìm	QAD23	no response	-1.00
bodies	QAT139	ghŭmwìm	QAD28	yú	-1.00
bodies	QAT139	ghŭmwìm	QAT108	íyŭŋí	-0.75
bodies	QAD25	no response	QAT101	no response	1.00
bodies	QAD25	no response	QAT135	yûgbwìm	-1.00
bodies	QAD25	no response	QAD23	no response	1.00
bodies	QAD25	no response	QAD28	yú	-1.00
bodies	QAD25	no response	QAT108	íyŭŋí	-1.00
bodies	QAT101	no response	QAT135	yûgbwìm	-1.00
bodies	QAT101	no response	QAD23	no response	1.00
bodies	QAT101	no response	QAD28	yú	-1.00
bodies	QAT101	no response	QAT108	íyŭŋí	-1.00
bodies	QAT135	yûgbwìm	QAD23	no response	-1.00
bodies	QAT135	yûgbwìm	QAD28	yú	-0.50
bodies	QAT135	yûgbwìm	QAT108	íyŭŋí	-0.50
bodies	QAD23	no response	QAD28	yú	-1.00
bodies	QAD23	no response	QAT108	íyŭŋí	-1.00
bodies	QAD28	yú	QAT108	íyŭŋí	-0.25
Leg	QAT139	kásə́	QAD25	shən	-0.83
Leg	QAT139	kásə́	QAT101	kùlɔ́	-0.33

Leg	QAT139	kásə́	QAT135	ləŋwɛ́	-0.67
Leg	QAT139	kásə́	QAD23	yín	-0.67
Leg	QAT139	kásə́	QAD28	kàsə	0.33
Leg	QAT139	kásə́	QAT108	yəŋ	-0.83
Leg	QAD25	shən	QAT101	kùlɔ́	-0.67
Leg	QAD25	shən	QAT135	ləŋwɛ́	-0.67
Leg	QAD25	shən	QAD23	yín	-0.50
Leg	QAD25	shən	QAD28	kàsə	-0.60
Leg	QAD25	shən	QAT108	yəŋ	0.00
Leg	QAT101	kùlɔ́	QAT135	ləŋwɛ́	-0.67
Leg	QAT101	kùlɔ́	QAD23	yín	-0.83
Leg	QAT101	kùlɔ́	QAD28	kàsə	-0.33
Leg	QAT101	kùlɔ́	QAT108	yəŋ	-0.67
Leg	QAT135	ləŋwɛ́	QAD23	yín	-0.83
Leg	QAT135	ləŋwɛ́	QAD28	kàsə	-1.00
Leg	QAT135	ləŋwɛ́	QAT108	yəŋ	-0.50
Leg	QAD23	yín	QAD28	kàsə	-1.00
Leg	QAD23	yín	QAT108	yəŋ	-0.50
Leg	QAD28	kàsə	QAT108	yəŋ	-0.60
legs	QAT139	kásə́mĭyafə̀	QAD25	no response	-0.93
legs	QAT139	kásə́mĭyafə̀	QAT101	no response	-0.93
legs	QAT139	kásə́mĭyafə̀	QAT135	lèŋgbwìm	-0.79
legs	QAT139	kásə́mĭyafə̀	QAD23	kəyíŋtə́	-0.29

legs	QAT139	kásə́mĭyafə̀	QAD28	mbàsə	-0.64
legs	QAT139	kásə́mĭyafə̀	QAT108	yə́ŋ	-0.71
legs	QAD25	no response	QAT101	no response	1.00
legs	QAD25	no response	QAT135	lèŋgbwìm	-0.90
legs	QAD25	no response	QAD23	kə́yíŋtə́	-1.00
legs	QAD25	no response	QAD28	mbàsə	-0.80
legs	QAD25	no response	QAT108	yə́ŋ	-1.00
legs	QAT101	no response	QAT135	lèŋgbwìm	-0.90
legs	QAT101	no response	QAD23	kə́yíŋtə́	-1.00
legs	QAT101	no response	QAD28	mbàsə	-0.80
legs	QAT101	no response	QAT108	yə́ŋ	-1.00
legs	QAT135	lèŋgbwìm	QAD23	kə́yíŋtə́	-1.00
legs	QAT135	lèŋgbwìm	QAD28	mbàsə	-0.89
legs	QAT135	lèŋgbwìm	QAT108	yə́ŋ	-0.78
legs	QAD23	kə́yíŋtə́	QAD28	mbàsə	-0.80
legs	QAD23	kə́yíŋtə́	QAT108	yə́ŋ	-0.40
legs	QAD28	mbàsə	QAT108	yə́ŋ	-1.00
Neck	QAT139	tsə̀ŋ	QAD25	no response	-1.00
Neck	QAT139	tsə̀ŋ	QAT101	tsə̀ŋ	1.00
Neck	QAT139	tsə̀ŋ	QAT135	mə̀ŋgɛ́	-0.14
Neck	QAT139	tsə̀ŋ	QAD23	no response	-1.00
Neck	QAT139	tsə̀ŋ	QAD28	tsə̀ŋ	1.00
Neck	QAT139	tsə̀ŋ	QAT108	tsə̀ŋ	1.00

Neck	QAD25	no response	QAT101	tsə̀ŋ	-1.00
Neck	QAD25	no response	QAT135	mə̀ŋgɛ́	-1.00
Neck	QAD25	no response	QAD23	no response	1.00
Neck	QAD25	no response	QAD28	tsə̀ŋ	-1.00
Neck	QAD25	no response	QAT108	tsə̀ŋ	-1.00
Neck	QAT101	tsə̀ŋ	QAT135	mə̀ŋgɛ́	-0.14
Neck	QAT101	tsə̀ŋ	QAD23	no response	-1.00
Neck	QAT101	tsə̀ŋ	QAD28	tsə̀ŋ	1.00
Neck	QAT101	tsə̀ŋ	QAT108	tsə̀ŋ	1.00
Neck	QAT135	mə̀ŋgɛ́	QAD23	no response	-1.00
Neck	QAT135	mə̀ŋgɛ́	QAD28	tsə̀ŋ	-0.14
Neck	QAT135	mə̀ŋgɛ́	QAT108	tsə̀ŋ	-0.14
Neck	QAD23	no response	QAD28	tsə̀ŋ	-1.00
Neck	QAD23	no response	QAT108	tsə̀ŋ	-1.00
Neck	QAD28	tsə̀ŋ	QAT108	tsə̀ŋ	1.00
necks	QAT139	tsə̀ŋmĭyafə̀	QAD25	no response	-1.00
necks	QAT139	tsə̀ŋmĭyafə̀	QAT101	ntsə̀ŋ	-0.42
necks	QAT139	tsə̀ŋmĭyafə̀	QAT135	gbwíməŋməm	-0.75
necks	QAT139	tsə̀ŋmĭyafə̀	QAD23	no response	-1.00
necks	QAT139	tsə̀ŋmĭyafə̀	QAD28	tətsə̀ŋkə̀	-0.25
necks	QAT139	tsə̀ŋmĭyafə̀	QAT108	tsə́ŋ	-0.50
necks	QAD25	no response	QAT101	ntsə̀ŋ	-0.80
necks	QAD25	no response	QAT135	gbwíməŋməm	-1.00

necks	QAD25	no response	QAD23	no response	1.00
necks	QAD25	no response	QAD28	tətsəŋkə	-1.00
necks	QAD25	no response	QAT108	tsə́ŋ	-1.00
necks	QAT101	ntsə̀ŋ	QAT135	gbwíməŋməm	-0.67
necks	QAT101	ntsə̀ŋ	QAD23	no response	-0.80
necks	QAT101	ntsə̀ŋ	QAD28	tətsə̀ŋkə	-0.20
necks	QAT101	ntsə̀ŋ	QAT108	tsə́ŋ	0.20
necks	QAT135	gbwíməŋməm	QAD23	no response	-1.00
necks	QAT135	gbwíməŋməm	QAD28	tətsə̀ŋkə	-0.50
necks	QAT135	gbwíməŋməm	QAT108	tsə́ŋ	-0.50
necks	QAD23	no response	QAD28	tətsə̀ŋkə	-1.00
necks	QAD23	no response	QAT108	tsə́ŋ	-1.00
necks	QAD28	tətsə̀ŋkə	QAT108	tsə́ŋ	-0.40
Shoulder	QAT139	mɓwĭ	QAD25	no response	-1.00
Shoulder	QAT139	mɓwĭ	QAT101	mbwìmbwĭ	-0.20
Shoulder	QAT139	mɓwĭ	QAT135	mbə̀gə̀’wɛ́	-0.64
Shoulder	QAT139	mɓwĭ	QAD23	kə̀mbə̀ghə̀	-0.80
Shoulder	QAT139	mɓwĭ	QAD28	mbə̀ŋ	-0.60
Shoulder	QAT139	mɓwĭ	QAT108	mɓwĭ	1.00
Shoulder	QAD25	no response	QAT101	mbwìmbwĭ	-1.00
Shoulder	QAD25	no response	QAT135	mbə̀gə̀’wɛ́	-1.00
Shoulder	QAD25	no response	QAD23	kə̀mbə̀ghə̀	-1.00
Shoulder	QAD25	no response	QAD28	mbə̀ŋ	-1.00

Shoulder	QAD25	no response	QAT108	mɓwĭ	-1.00
Shoulder	QAT101	mbwìmbwĭ	QAT135	mbàgà’wɛ́	-0.36
Shoulder	QAT101	mbwìmbwĭ	QAD23	kàmbàghà	-0.60
Shoulder	QAT101	mbwìmbwĭ	QAD28	mbàŋ	-0.40
Shoulder	QAT101	mbwìmbwĭ	QAT108	mɓwĭ	-0.20
Shoulder	QAT135	mbàgà’wɛ́	QAD23	kàmbàghà	-0.18
Shoulder	QAT135	mbàgà’wɛ́	QAD28	mbàŋ	-0.27
Shoulder	QAT135	mbàgà’wɛ́	QAT108	mɓwĭ	-0.64
Shoulder	QAD23	kàmbàghà	QAD28	mbàŋ	-0.20
Shoulder	QAD23	kàmbàghà	QAT108	mɓwĭ	-0.80
Shoulder	QAD28	mbàŋ	QAT108	mɓwĭ	-0.60
shoulders	QAT139	mɓwĭmĭyafà	QAD25	no response	-1.00
shoulders	QAT139	mɓwĭmĭyafà	QAT101	no response	-1.00
shoulders	QAT139	mɓwĭmĭyafà	QAT135	bàbàgbwìm	-0.92
shoulders	QAT139	mɓwĭmĭyafà	QAD23	no response	-1.00
shoulders	QAT139	mɓwĭmĭyafà	QAD28	bàmbàŋ	-0.62
shoulders	QAT139	mɓwĭmĭyafà	QAT108	bàmɓwĭ	-0.46
shoulders	QAD25	no response	QAT101	no response	1.00
shoulders	QAD25	no response	QAT135	bàbàgbwìm	-1.00
shoulders	QAD25	no response	QAD23	no response	1.00
shoulders	QAD25	no response	QAD28	bàmbàŋ	-1.00
shoulders	QAD25	no response	QAT108	bàmɓwĭ	-1.00
shoulders	QAT101	no response	QAT135	bàbàgbwìm	-1.00

shoulders	QAT101	no response	QAD23	no response	1.00
shoulders	QAT101	no response	QAD28	bəmbəŋ	-1.00
shoulders	QAT101	no response	QAT108	bəmɓwĭ	-1.00
shoulders	QAT135	bəbəgbwìm	QAD23	no response	-1.00
shoulders	QAT135	bəbəgbwìm	QAD28	bəmbəŋ	0.00
shoulders	QAT135	bəbəgbwìm	QAT108	bəmɓwĭ	-0.09
shoulders	QAD23	no response	QAD28	bəmbəŋ	-1.00
shoulders	QAD23	no response	QAT108	bəmɓwĭ	-1.00
shoulders	QAD28	bəmbəŋ	QAT108	bəmɓwĭ	0.00
Stomach	QAT139	kŭm	QAD25	kŭm	1.00
Stomach	QAT139	kŭm	QAT101	kŭm	1.00
Stomach	QAT139	kŭm	QAT135	no response	-1.00
Stomach	QAT139	kŭm	QAD23	kú	-0.50
Stomach	QAT139	kŭm	QAD28	nkŭm	0.20
Stomach	QAT139	kŭm	QAT108	kŭm	1.00
Stomach	QAD25	kŭm	QAT101	kŭm	1.00
Stomach	QAD25	kŭm	QAT135	no response	-1.00
Stomach	QAD25	kŭm	QAD23	kú	-0.50
Stomach	QAD25	kŭm	QAD28	nkŭm	0.20
Stomach	QAD25	kŭm	QAT108	kŭm	1.00
Stomach	QAT101	kŭm	QAT135	no response	-1.00

Stomach	QAT101	kŭm	QAD23	kú	-0.50
Stomach	QAT101	kŭm	QAD28	nkŭm	0.20
Stomach	QAT101	kŭm	QAT108	kŭm	1.00
Stomach	QAT135	no response	QAD23	kú	-1.00
Stomach	QAT135	no response	QAD28	nkŭm	-0.80
Stomach	QAT135	no response	QAT108	kŭm	-1.00
Stomach	QAD23	kú	QAD28	nkŭm	-0.20
Stomach	QAD23	kú	QAT108	kŭm	-0.50
Stomach	QAD28	nkŭm	QAT108	kŭm	0.20
stomachs	QAT139	kúm	QAD25	no response	-1.00
stomachs	QAT139	kúm	QAT101	no response	-1.00
stomachs	QAT139	kúm	QAT135	no response	-1.00
stomachs	QAT139	kúm	QAD23	kəkútə	-0.33
stomachs	QAT139	kúm	QAD28	mkŭm	0.20
stomachs	QAT139	kúm	QAT108	mkŭm	0.20
stomachs	QAD25	no response	QAT101	no response	1.00
stomachs	QAD25	no response	QAT135	no response	1.00
stomachs	QAD25	no response	QAD23	kəkútə	-1.00
stomachs	QAD25	no response	QAD28	mkŭm	-1.00
stomachs	QAD25	no response	QAT108	mkŭm	-1.00
stomachs	QAT101	no response	QAT135	no response	1.00
stomachs	QAT101	no response	QAD23	kəkútə	-1.00
stomachs	QAT101	no response	QAD28	mkŭm	-1.00

stomachs	QAT101	no response	QAT108	mkŭm	-1.00
stomachs	QAT135	no response	QAD23	kəkútə	-1.00
stomachs	QAT135	no response	QAD28	mkŭm	-1.00
stomachs	QAT135	no response	QAT108	mkŭm	-1.00
stomachs	QAD23	kəkútə	QAD28	mkŭm	-0.56
stomachs	QAD23	kəkútə	QAT108	mkŭm	-0.56
stomachs	QAD28	mkŭm	QAT108	mkŭm	1.00
Finger	QAT139	wàfəkàlè	QAD25	no response	-0.83
Finger	QAT139	wàfəkàlè	QAT101	kàlə	-0.17
Finger	QAT139	wàfəkàlè	QAT135	wáŋkəkàlə̂	0.08
Finger	QAT139	wàfəkàlè	QAD23	kálə	-0.33
Finger	QAT139	wàfəkàlè	QAD28	kànyúŋbə	-0.58
Finger	QAT139	wàfəkàlè	QAT108	kàlə	-0.17
Finger	QAD25	no response	QAT101	kàlə	-1.00
Finger	QAD25	no response	QAT135	wáŋkəkàlə̂	-1.00
Finger	QAD25	no response	QAD23	kálə	-1.00
Finger	QAD25	no response	QAD28	kànyúŋbə	-1.00
Finger	QAD25	no response	QAT108	kàlə	-1.00
Finger	QAT101	kàlə	QAT135	wáŋkəkàlə̂	-0.23
Finger	QAT101	kàlə	QAD23	kálə	0.67
Finger	QAT101	kàlə	QAD28	kànyúŋbə	-0.20
Finger	QAT101	kàlə	QAT108	kàlə	1.00
Finger	QAT135	wáŋkəkàlə̂	QAD23	kálə	-0.38

Finger	QAT135	wáŋkə́kàlə̂	QAD28	kànyúŋbə̀	-0.62
Finger	QAT135	wáŋkə́kàlə̂	QAT108	kàlə̀	-0.23
Finger	QAD23	kálə̀	QAD28	kànyúŋbə̀	-0.20
Finger	QAD23	kálə̀	QAT108	kàlə̀	0.67
Finger	QAD28	kànyúŋbə̀	QAT108	kàlə̀	-0.20
Fingers	QAT139	wàfə̀kàlèmĭyafə̀	QAD25	no response	-0.90
fingers	QAT139	wàfə̀kàlèmĭyafə̀	QAT101	ká	-0.80
fingers	QAT139	wàfə̀kàlèmĭyafə̀	QAT135	kàyə̂	-0.50
fingers	QAT139	wàfə̀kàlèmĭyafə̀	QAD23	no response	-0.90
fingers	QAT139	wàfə̀kàlèmĭyafə̀	QAD28	bə̀núŋbə́	-0.70
fingers	QAT139	wàfə̀kàlèmĭyafə̀	QAT108	ká	-0.80
fingers	QAD25	no response	QAT101	ká	-1.00
fingers	QAD25	no response	QAT135	kàyə̂	-1.00
fingers	QAD25	no response	QAD23	no response	1.00
fingers	QAD25	no response	QAD28	bə̀núŋbə́	-1.00
fingers	QAD25	no response	QAT108	ká	-1.00
fingers	QAT101	ká	QAT135	kàyə̂	-0.33
fingers	QAT101	ká	QAD23	no response	-1.00
fingers	QAT101	ká	QAD28	bə̀núŋbə́	-0.80
fingers	QAT101	ká	QAT108	ká	1.00
fingers	QAT135	kàyə̂	QAD23	no response	-1.00

fingers	QAT135	kàyə̂	QAD28	bənúŋbə́	-0.60
fingers	QAT135	kàyə̂	QAT108	ká	-0.33
fingers	QAD23	no response	QAD28	bənúŋbə́	-1.00
fingers	QAD23	no response	QAT108	ká	-1.00
fingers	QAD28	bənúŋbə́	QAT108	ká	-0.80
Jaw	QAT139	kèmbàŋkə̀	QAD25	kəmbàŋ	0.27
Jaw	QAT139	kèmbàŋkə̀	QAT101	mbàŋ	-0.09
Jaw	QAT139	kèmbàŋkə̀	QAT135	mbwəpdzə̂	-0.36
Jaw	QAT139	kèmbàŋkə̀	QAD23	kəmbàŋ	0.27
Jaw	QAT139	kèmbàŋkə̀	QAD28	kəmbàŋkɛ̀	0.64
Jaw	QAT139	kèmbàŋkə̀	QAT108	mbàŋ	-0.09
Jaw	QAD25	kəmbàŋ	QAT101	mbàŋ	0.25
Jaw	QAD25	kəmbàŋ	QAT135	mbwəpdzə̂	-0.67
Jaw	QAD25	kəmbàŋ	QAD23	kəmbàŋ	1.00
Jaw	QAD25	kəmbàŋ	QAD28	kəmbàŋkɛ̀	0.45
Jaw	QAD25	kəmbàŋ	QAT108	mbàŋ	0.25
Jaw	QAT101	mbàŋ	QAT135	mbwəpdzə̂	-0.33
Jaw	QAT101	mbàŋ	QAD23	kəmbàŋ	0.25
Jaw	QAT101	mbàŋ	QAD28	kəmbàŋkɛ̀	-0.09
Jaw	QAT101	mbàŋ	QAT108	mbàŋ	1.00
Jaw	QAT135	mbwəpdzə̂	QAD23	kəmbàŋ	-0.67
Jaw	QAT135	mbwəpdzə̂	QAD28	kəmbàŋkɛ̀	-0.55

Jaw	QAT135	mbwàpdzə̂	QAT108	mbàŋ	-0.33	
Jaw	QAD23	kə̀mbàŋ	QAD28	kə̀mbàŋkɛ̀	0.45	
Jaw	QAD23	kə̀mbàŋ	QAT108	mbàŋ	0.25	
Jaw	QAD28	kə̀mbàŋkɛ̀	QAT108	mbàŋ	-0.09	
jaws	QAT139	bə̀mbàŋ	QAD25	bə̀mbàŋ	1.00	
jaws	QAT139	bə̀mbàŋ	QAT101	bə̀mbàŋ	1.00	
jaws	QAT139	bə̀mbàŋ	QAT135	mbwə̀mídzêyə̂	-0.43	
jaws	QAT139	bə̀mbàŋ	QAD23	tə̀mbàŋ	0.75	
jaws	QAT139	bə̀mbàŋ	QAD28	bə̀mbàŋ	1.00	
jaws	QAT139	bə̀mbàŋ	QAT108	bə̀mbàŋ	1.00	
jaws	QAD25	bə̀mbàŋ	QAT101	bə̀mbàŋ	1.00	
jaws	QAD25	bə̀mbàŋ	QAT135	mbwə̀mídzêyə̂	-0.43	
jaws	QAD25	bə̀mbàŋ	QAD23	tə̀mbàŋ	0.75	
jaws	QAD25	bə̀mbàŋ	QAD28	bə̀mbàŋ	1.00	
jaws	QAD25	bə̀mbàŋ	QAT108	bə̀mbàŋ	1.00	
jaws	QAT101	bə̀mbàŋ	QAT135	mbwə̀mídzêyə̂	-0.43	
jaws	QAT101	bə̀mbàŋ	QAD23	tə̀mbàŋ	0.75	
jaws	QAT101	bə̀mbàŋ	QAD28	bə̀mbàŋ	1.00	
jaws	QAT101	bə̀mbàŋ	QAT108	bə̀mbàŋ	1.00	
jaws	QAT135	mbwə̀mídzêyə̂	QAD23	tə̀mbàŋ	-0.57	
jaws	QAT135	mbwə̀mídzêyə̂	QAD28	bə̀mbàŋ	-0.43	

jaws	QAT135	mbwəmídzêyə̂	QAT108	bəmbàŋ	-0.43
jaws	QAD23	təmbàŋ	QAD28	bəmbàŋ	0.75
jaws	QAD23	təmbàŋ	QAT108	bəmbàŋ	0.75
jaws	QAD28	bəmbàŋ	QAT108	bəmbàŋ	1.00
Knee	QAT139	nyŭ	QAD25	no response	-1.00
Knee	QAT139	nyŭ	QAT101	no response	-1.00
Knee	QAT139	nyŭ	QAT135	ànyî	-0.60
Knee	QAT139	nyŭ	QAD23	no response	-1.00
Knee	QAT139	nyŭ	QAD28	nyu	0.33
Knee	QAT139	nyŭ	QAT108	nyŭŋ	0.50
Knee	QAD25	no response	QAT101	no response	1.00
Knee	QAD25	no response	QAT135	ànyî	-1.00
Knee	QAD25	no response	QAD23	no response	1.00
Knee	QAD25	no response	QAD28	nyu	-1.00
Knee	QAD25	no response	QAT108	nyŭŋ	-1.00
Knee	QAT101	no response	QAT135	ànyî	-1.00
Knee	QAT101	no response	QAD23	no response	1.00
Knee	QAT101	no response	QAD28	nyu	-1.00
Knee	QAT101	no response	QAT108	nyŭŋ	-1.00
Knee	QAT135	ànyî	QAD23	no response	-1.00
Knee	QAT135	ànyî	QAD28	nyu	-0.60
Knee	QAT135	ànyî	QAT108	nyŭŋ	-0.80
Knee	QAD23	no response	QAD28	nyu	-1.00

Knee	QAD23	no response	QAT108	nyŭŋ	-1.00
Knee	QAD28	nyu	QAT108	nyŭŋ	0.00
Knees	QAT139	tɨ́nyûŋ	QAD25	no response	-1.00
Knees	QAT139	tɨ́nyûŋ	QAT101	no response	-1.00
knees	QAT139	tɨ́nyûŋ	QAT135	ànyîgbwìm	-0.70
knees	QAT139	tɨ́nyûŋ	QAD23	no response	-1.00
knees	QAT139	tɨ́nyûŋ	QAD28	tə́nyu	0.14
knees	QAT139	tɨ́nyûŋ	QAT108	tɨ́nyùŋ	0.71
knees	QAD25	no response	QAT101	no response	1.00
knees	QAD25	no response	QAT135	ànyîgbwìm	-1.00
knees	QAD25	no response	QAD23	no response	1.00
knees	QAD25	no response	QAD28	tə́nyu	-1.00
knees	QAD25	no response	QAT108	tɨ́nyùŋ	-1.00
knees	QAT101	no response	QAT135	ànyîgbwìm	-1.00
knees	QAT101	no response	QAD23	no response	1.00
knees	QAT101	no response	QAD28	tə́nyu	-1.00
knees	QAT101	no response	QAT108	tɨ́nyùŋ	-1.00
knees	QAT135	ànyîgbwìm	QAD23	no response	-1.00
knees	QAT135	ànyîgbwìm	QAD28	tə́nyu	-0.90
knees	QAT135	ànyîgbwìm	QAT108	tɨ́nyùŋ	-0.70
knees	QAD23	no response	QAD28	tə́nyu	-1.00
knees	QAD23	no response	QAT108	tɨ́nyùŋ	-1.00
knees	QAD28	tə́nyu	QAT108	tɨ́nyùŋ	0.14

tooth	QAT139	yén	QAD25	yə̂n	0.00
tooth	QAT139	yén	QAT101	yə́n	0.50
tooth	QAT139	yén	QAT135	yə́ŋ	0.00
tooth	QAT139	yén	QAD23	yə́ŋ	0.00
tooth	QAT139	yén	QAD28	wə̌n	-0.50
tooth	QAT139	yén	QAT108	wŭn	-0.50
tooth	QAD25	yə̂n	QAT101	yə́n	0.50
tooth	QAD25	yə̂n	QAT135	yə́ŋ	0.00
tooth	QAD25	yə̂n	QAD23	yə́ŋ	0.00
tooth	QAD25	yə̂n	QAD28	wə̌n	0.00
tooth	QAD25	yə̂n	QAT108	wŭn	-0.50
tooth	QAT101	yə́n	QAT135	yə́ŋ	0.50
tooth	QAT101	yə́n	QAD23	yə́ŋ	0.50
tooth	QAT101	yə́n	QAD28	wə̌n	0.00
tooth	QAT101	yə́n	QAT108	wŭn	-0.50
tooth	QAT135	yə́ŋ	QAD23	yə́ŋ	1.00
tooth	QAT135	yə́ŋ	QAD28	wə̌n	-0.50
tooth	QAT135	yə́ŋ	QAT108	wŭn	-1.00
tooth	QAD23	yə́ŋ	QAD28	wə̌n	-0.50
tooth	QAD23	yə́ŋ	QAT108	wŭn	-1.00
tooth	QAD28	wə̌n	QAT108	wŭn	0.50
Teeth	QAT139	yéŋ	QAD25	yə̀n	-0.50
Teeth	QAT139	yéŋ	QAT101	bíyə́n	-0.43

Teeth	QAT139	yéŋ	QAT135	àdzíŋkɛ́	-0.56
Teeth	QAT139	yéŋ	QAD23	kəyə́ŋtə́	-0.40
Teeth	QAT139	yéŋ	QAD28	yə̂n	-0.50
Teeth	QAT139	yéŋ	QAT108	yə̂n	-0.50
Teeth	QAD25	yə̀n	QAT101	bɨyə́n	-0.14
Teeth	QAD25	yə̀n	QAT135	àdzíŋkɛ́	-0.89
Teeth	QAD25	yə̀n	QAD23	kəyə́ŋtə́	-0.60
Teeth	QAD25	yə̀n	QAD28	yə̂n	0.50
Teeth	QAD25	yə̀n	QAT108	yə̂n	0.50
Teeth	QAT101	bɨyə́n	QAT135	àdzíŋkɛ́	-0.67
Teeth	QAT101	bɨyə́n	QAD23	kəyə́ŋtə́	-0.20
Teeth	QAT101	bɨyə́n	QAD28	yə̂n	-0.14
Teeth	QAT101	bɨyə́n	QAT108	yə̂n	-0.14
Teeth	QAT135	àdzíŋkɛ́	QAD23	kəyə́ŋtə́	-0.40
Teeth	QAT135	àdzíŋkɛ́	QAD28	yə̂n	-1.00
Teeth	QAT135	àdzíŋkɛ́	QAT108	yə̂n	-1.00
Teeth	QAD23	kəyə́ŋtə́	QAD28	yə̂n	-0.60
Teeth	QAD23	kəyə́ŋtə́	QAT108	yə̂n	-0.60
Teeth	QAD28	yə̂n	QAT108	yə̂n	1.00
Buttocks	QAT139	tshwè	QAD25	tswɔ̀	0.00
buttocks	QAT139	tshwè	QAT101	tswə̀n	-0.20
buttocks	QAT139	tshwè	QAT135	tswə̀n	-0.20
buttocks	QAT139	tshwè	QAD23	no response	-0.80

buttocks	QAT139	tshwè	QAD28	kpwóló	-0.71
buttocks	QAT139	tshwè	QAT108	bvànə̂	-0.71
buttocks	QAD25	tswɔ̀	QAT101	tswàn	0.20
buttocks	QAD25	tswɔ̀	QAT135	tswàn	0.20
buttocks	QAD25	tswɔ̀	QAD23	no response	-1.00
buttocks	QAD25	tswɔ̀	QAD28	kpwóló	-0.71
buttocks	QAD25	tswɔ̀	QAT108	bvànə̂	-0.71
buttocks	QAT101	tswàn	QAT135	tswàn	1.00
buttocks	QAT101	tswàn	QAD23	no response	-0.80
buttocks	QAT101	tswàn	QAD28	kpwóló	-0.71
buttocks	QAT101	tswàn	QAT108	bvànə̂	-0.14
buttocks	QAT135	tswàn	QAD23	no response	-0.80
buttocks	QAT135	tswàn	QAD28	kpwóló	-0.71
buttocks	QAT135	tswàn	QAT108	bvànə̂	-0.14
buttocks	QAD23	no response	QAD28	kpwóló	-0.70
buttocks	QAD23	no response	QAT108	bvànə̂	-0.80
buttocks	QAD28	kpwóló	QAT108	bvànə̂	-1.00
buttocks	QAT139	tshwé	QAD25	no response	-0.80
buttocks	QAT139	tshwé	QAT101	no response	-0.80
buttocks	QAT139	tshwé	QAT135	tswíyə́	-0.43
buttocks	QAT139	tshwé	QAD23	no response	-0.80
buttocks	QAT139	tshwé	QAD28	tə́kpwóló	-0.60
buttocks	QAT139	tshwé	QAT108	bə̀bvànə̂	-1.00

buttocks	QAD25	no response	QAT101	no response	1.00
buttocks	QAD25	no response	QAT135	tswíyə	-1.00
buttocks	QAD25	no response	QAD23	no response	1.00
buttocks	QAD25	no response	QAD28	təkpwóló	-0.90
buttocks	QAD25	no response	QAT108	bəbvànə̂	-0.80
buttocks	QAT101	no response	QAT135	tswíyə	-1.00
buttocks	QAT101	no response	QAD23	no response	1.00
buttocks	QAT101	no response	QAD28	təkpwóló	-0.90
buttocks	QAT101	no response	QAT108	bəbvànə̂	-0.80
buttocks	QAT135	tswíyə	QAD23	no response	-1.00
buttocks	QAT135	tswíyə	QAD28	təkpwóló	-0.40
buttocks	QAT135	tswíyə	QAT108	bəbvànə̂	-0.80
buttocks	QAD23	no response	QAD28	təkpwóló	-0.90
buttocks	QAD23	no response	QAT108	bəbvànə̂	-0.80
buttocks	QAD28	təkpwóló	QAT108	bəbvànə̂	-0.80
Breast	QAT139	bînə́	QAD25	no response	-0.80
Breast	QAT139	bînə́	QAT101	bwə̌n	-0.50
Breast	QAT139	bînə́	QAT135	yíŋ	-0.50
Breast	QAT139	bînə́	QAD23	no response	-0.80
Breast	QAT139	bînə́	QAD28	bìnə̀	0.33
Breast	QAT139	bînə́	QAT108	bwín	-0.17
Breast	QAD25	no response	QAT101	bwə̌n	-0.80
Breast	QAD25	no response	QAT135	yíŋ	-1.00

Breast	QAD25	no response	QAD23	no response	1.00
Breast	QAD25	no response	QAD28	bìnə	-0.80
Breast	QAD25	no response	QAT108	bwín	-0.80
Breast	QAT101	bwə̌n	QAT135	yíŋ	-1.00
Breast	QAT101	bwə̌n	QAD23	no response	-0.80
Breast	QAT101	bwə̌n	QAD28	bìnə	-0.50
Breast	QAT101	bwə̌n	QAT108	bwín	0.20
Breast	QAT135	yíŋ	QAD23	no response	-1.00
Breast	QAT135	yíŋ	QAD28	bìnə	-0.67
Breast	QAT135	yíŋ	QAT108	bwín	-0.20
Breast	QAD23	no response	QAD28	bìnə	-0.80
Breast	QAD23	no response	QAT108	bwín	-0.80
Breast	QAD28	bìnə	QAT108	bwín	-0.17
breats	QAT139	təbînə́	QAD25	no response	-0.80
breats	QAT139	təbînə́	QAT101	təbînə́	1.00
breats	QAT139	təbînə́	QAT135	yíŋkə́	-0.33
breats	QAT139	təbînə́	QAD23	no response	-0.80
breats	QAT139	təbînə́	QAD28	təbìnə̀	0.33
breats	QAT139	təbînə́	QAT108	bînə̂	0.11
breats	QAD25	no response	QAT101	təbînə́	-0.80
breats	QAD25	no response	QAT135	yíŋkə́	-1.00
breats	QAD25	no response	QAD23	no response	1.00
breats	QAD25	no response	QAD28	təbìnə̀	-0.80

breats	QAD25	no response	QAT108	bînə̂	-0.80
breats	QAT101	təbînə́	QAT135	yíŋkə́	-0.33
breats	QAT101	təbînə́	QAD23	no response	-0.80
breats	QAT101	təbînə́	QAD28	təbìnə̀	0.33
breats	QAT101	təbînə́	QAT108	bînə̂	0.11
breats	QAT135	yíŋkə́	QAD23	no response	-1.00
breats	QAT135	yíŋkə́	QAD28	təbìnə̀	-0.67
breats	QAT135	yíŋkə́	QAT108	bînə̂	-0.43
breats	QAD23	no response	QAD28	təbìnə̀	-0.80
breats	QAD23	no response	QAT108	bînə̂	-0.80
breats	QAD28	təbìnə̀	QAT108	bînə̂	-0.11
one	QAT139	kə̀mù	QAD25	kə̀mù	1.00
one	QAT139	kə̀mù	QAT101	kàrə̀	0.00
one	QAT139	kə̀mù	QAT135	mù	0.00
one	QAT139	kə̀mù	QAD23	kə̀mú	0.67
one	QAT139	kə̀mù	QAD28	kə̀mù	1.00
one	QAT139	kə̀mù	QAT108	kə̀mù	1.00
one	QAD25	kə̀mù	QAT101	kàrə̀	0.00
one	QAD25	kə̀mù	QAT135	mù	0.00
one	QAD25	kə̀mù	QAD23	kə̀mú	0.67
one	QAD25	kə̀mù	QAD28	kə̀mù	1.00
one	QAD25	kə̀mù	QAT108	kə̀mù	1.00
one	QAT101	kàrə̀	QAT135	mù	-0.67

one	QAT101	kàrə	QAD23	kəmú	-0.33
one	QAT101	kàrə	QAD28	kəmù	0.00
one	QAT101	kàrə	QAT108	kəmù	0.00
one	QAT135	mù	QAD23	kəmú	-0.33
one	QAT135	mù	QAD28	kəmù	0.00
one	QAT135	mù	QAT108	kəmù	0.00
one	QAD23	kəmú	QAD28	kəmù	0.67
one	QAD23	kəmú	AT108	kəmù	0.67
one	QAD28	kəmù	QAT108	kəmù	1.00
two	QAT139	bəfí	QAD25	bəfí	1.00
two	QAT139	bəfí	QAT101	bəfí	1.00
two	QAT139	bəfí	QAT135	no response	-1.00
two	QAT139	bəfí	QAD23	bəfélí	0.33
two	QAT139	bəfí	QAD28	bəfé	0.67
two	QAT139	bəfí	QAT108	bəfí	1.00
two	QAD25	bəfí	QAT101	bəfí	1.00
two	QAD25	bəfí	QAT135	no response	-1.00
two	QAD25	bəfí	QAD23	bəfélí	0.33
two	QAD25	bəfí	QAD28	bəfé	0.67
two	QAD25	bəfí	QAT108	bəfí	1.00
two	QAT101	bəfí	QAT135	no response	-1.00
two	QAT101	bəfí	QAD23	bəfélí	0.33
two	QAT101	bəfí	QAD28	bəfé	0.67

two	QAT101	bəfĭ	QAT108	bəfĭ	1.00
two	QAT135	no response	QAD23	bəfélí	-0.90
two	QAT135	no response	QAD28	bəfé	-0.90
two	QAT135	no response	QAT108	bəfĭ	-1.00
two	QAD23	bəfélí	QAD28	bəfé	0.33
two	QAD23	bəfélí	QAT108	bəfĭ	0.33
two	QAD28	bəfé	QAT108	bəfĭ	0.67
three	QAT139	kâitə́	QAD25	bətɛ́	-0.43
three	QAT139	kâitə́	QAT101	karìtɨ́	0.25
three	QAT139	kâitə́	QAT135	təlí	-0.57
three	QAT139	kâitə́	QAD23	bəté	-0.43
three	QAT139	kâitə́	QAD28	bətə́	-0.14
three	QAT139	kâitə́	QAT108	bətɛ́	-0.43
three	QAD25	bətɛ́	QAT101	karìtɨ́	-0.25
three	QAD25	bətɛ́	QAT135	təlí	0.00
three	QAD25	bətɛ́	QAD23	bəté	0.67
three	QAD25	bətɛ́	QAD28	bətə́	0.67
three	QAD25	bətɛ́	QAT108	bətɛ́	1.00
three	QAT101	karìtɨ́	QAT135	təlí	-0.50
three	QAT101	karìtɨ́	QAD23	bəté	-0.25
three	QAT101	karìtɨ́	QAD28	bətə́	-0.25
three	QAT101	karìtɨ́	QAT108	bəté	-0.25
three	QAT135	təlí	QAD23	bəté	0.00

three	QAT135	tə̀lí	QAD28	bə̀tə́	0.00
three	QAT135	tə̀lí	QAT108	bə̀tɛ́	0.00
three	QAD23	bə̀té	QAD28	bə̀tə́	0.67
three	QAD23	bə̀té	QAT108	bə̀tɛ́	0.67
three	QAD28	bə̀tə́	QAT108	bə̀tɛ́	0.67
Four	QAT139	bə̀nyʲə̌	QAD25	bə̀nyʲə̌	1.00
Four	QAT139	bə̀nyʲə̌	QAT101	bə̀nyʉ̀	0.14
Four	QAT139	bə̀nyʲə̌	QAT135	ə̀nyə̌	0.43
Four	QAT139	bə̀nyʲə̌	QAD23	bə̀nyì	0.14
Four	QAT139	bə̀nyʲə̌	QAD28	bə̀nyə̀	0.43
Four	QAT139	bə̀nyʲə̌	QAT108	bə̀nyʲə̌	1.00
Four	QAD25	bə̀nyʲə̌	QAT101	bə̀nyʉ̀	0.14
Four	QAD25	bə̀nyʲə̌	QAT135	ə̀nyə̌	0.43
Four	QAD25	bə̀nyʲə̌	QAD23	bə̀nyì	0.14
Four	QAD25	bə̀nyʲə̌	QAD28	bə̀nyə̀	0.43
Four	QAD25	bə̀nyʲə̌	QAT108	bə̀nyʲə̌	1.00
Four	QAT101	bə̀nyʉ̀	QAT135	ə̀nyə̌	0.00
Four	QAT101	bə̀nyʉ̀	QAD23	bə̀nyì	0.67
Four	QAT101	bə̀nyʉ̀	QAD28	bə̀nyə̀	0.67
Four	QAT101	bə̀nyʉ̀	QAT108	bə̀nyʲə̌	0.14
Four	QAT135	ə̀nyə̌	QAD23	bə̀nyì	0.00
Four	QAT135	ə̀nyə̌	QAD28	bə̀nyə̀	0.33
Four	QAT135	ə̀nyə̌	QAT108	bə̀nyʲə̌	0.43

Four	QAD23	bànyì	QAD28	bànyə	0.67
Four	QAD23	bànyì	QAT108	bànyʲɨ̆	0.14
Four	QAD28	bànyə	QAT108	bànyʲɨ̆	0.43
Five	QAT139	tshɔ̀’ɔ̀	QAD25	tà	-0.67
Five	QAT139	tshɔ̀’ɔ̀	QAT101	tshɔ̀’ɔ̀	1.00
Five	QAT139	tshɔ̀’ɔ̀	QAT135	tshɔ̀’ɔ̀	1.00
Five	QAT139	tshɔ̀’ɔ̀	QAD23	tsá	-1.00
Five	QAT139	tshɔ̀’ɔ̀	QAD28	tsă	-1.00
Five	QAT139	tshɔ̀’ɔ̀	QAT108	tshɔ̀’ɔ̀	1.00
Five	QAD25	tà	QAT101	tshɔ̀’ɔ̀	-0.67
Five	QAD25	tà	QAT135	tshɔ̀’ɔ̀	-0.67
Five	QAD25	tà	QAD23	tsá	-0.33
Five	QAD25	tà	QAD28	tsă	-0.33
Five	QAD25	tà	QAT108	tshɔ̀’ɔ̀	-0.67
Five	QAT101	tshɔ̀’ɔ̀	QAT135	tshɔ̀’ɔ̀	1.00
Five	QAT101	tshɔ̀’ɔ̀	QAD23	tsá	-1.00
Five	QAT101	tshɔ̀’ɔ̀	QAD28	tsă	-1.00
Five	QAT101	tshɔ̀’ɔ̀	QAT108	tshɔ̀’ɔ̀	1.00
Five	QAT135	tshɔ̀’ɔ̀	QAD23	tsá	-1.00
Five	QAT135	tshɔ̀’ɔ̀	QAD28	tsă	-1.00
Five	QAT135	tshɔ̀’ɔ̀	QAT108	tshɔ̀’ɔ̀	1.00
Five	QAD23	tsá	QAD28	tsă	0.33
Five	QAD23	tsá	QAT108	tshɔ̀’ɔ̀	-1.00

Five	QAD28	tsă	QAT108	tshɔ̀’ɔ	-1.00
Six	QAT139	tɪ́tɪ̂	QAD25	tɪ́tɪ̂	1.00
Six	QAT139	tɪ́tɪ̂	QAT101	ɪ́tɪ́tɪ̂	0.50
Six	QAT139	tɪ́tɪ̂	QAT135	tɪ́tɪ̂	1.00
Six	QAT139	tɪ́tɪ̂	QAD23	no response	-1.00
Six	QAT139	tɪ́tɪ̂	QAD28	bətətə	-0.33
Six	QAT139	tɪ́tɪ̂	QAT108	tɪ́tɪ̂	1.00
Six	QAD25	tɪ́tɪ̂	QAT101	ɪ́tɪ́tɪ̂	0.50
Six	QAD25	tɪ́tɪ̂	QAT135	tɪ́tɪ̂	1.00
Six	QAD25	tɪ́tɪ̂	QAD23	no response	-1.00
Six	QAD25	tɪ́tɪ̂	QAD28	bətətə	-0.33
Six	QAD25	tɪ́tɪ̂	QAT108	tɪ́tɪ̂	1.00
Six	QAT101	ɪ́tɪ́tɪ̂	QAT135	tɪ́tɪ̂	0.50
Six	QAT101	ɪ́tɪ́tɪ̂	QAD23	no response	-1.00
Six	QAT101	ɪ́tɪ́tɪ̂	QAD28	bətətə	-0.33
Six	QAT101	ɪ́tɪ́tɪ̂	QAT108	tɪ́tɪ̂	0.50
Six	QAT135	tɪ́tɪ̂	QAD23	no response	-1.00
Six	QAT135	tɪ́tɪ̂	QAD28	bətətə	-0.33
Six	QAT135	tɪ́tɪ̂	QAT108	tɪ́tɪ̂	1.00
Six	QAD23	no response	QAD28	bətətə	-1.00
Six	QAD23	no response	QAT108	tɪ́tɪ̂	-1.00
Six	QAD28	bətətə	QAT108	tɪ́tɪ̂	-0.33
Seven	QAT139	nətɪ́	QAD25	nətɛ́	0.67

Seven	QAT139	nətɨ	QAT101	nətɛ	0.33
Seven	QAT139	nətɨ	QAT135	tɨtɨ̂	-0.33
Seven	QAT139	nətɨ	QAD23	bənyítɛ	-0.33
Seven	QAT139	nətɨ	QAD28	bənətə	-0.33
Seven	QAT139	nətɨ	QAT108	nətɛ	0.67
Seven	QAD25	nətɛ	QAT101	nətɛ	0.67
Seven	QAD25	nətɛ	QAT135	tɨtɨ̂	-0.67
Seven	QAD25	nətɛ	QAD23	bənyítɛ	-0.11
Seven	QAD25	nətɛ	QAD28	bənətə	-0.33
Seven	QAD25	nətɛ	QAT108	nətɛ	1.00
Seven	QAT101	nətɛ	QAT135	tɨtɨ̂	-0.67
Seven	QAT101	nətɛ	QAD23	bənyítɛ	0.11
Seven	QAT101	nətɛ	QAD28	bənətə	-0.11
Seven	QAT101	nətɛ	QAT108	nətɛ	0.67
Seven	QAT135	tɨtɨ̂	QAD23	bənyítɛ	-0.56
Seven	QAT135	tɨtɨ̂	QAD28	bənətə	-0.78
Seven	QAT135	tɨtɨ̂	QAT108	nətɛ	-0.67
Seven	QAD23	bənyítɛ	QAD28	bənətə	-0.11
Seven	QAD23	bənyítɛ	QAT108	nətɛ	-0.11
Seven	QAD28	bənətə	QAT108	nətɛ	-0.33
Eight	QAT139	nənə	QAD25	nənə	1.00
Eight	QAT139	nənə	QAT101	nənə	1.00
Eight	QAT139	nənə	QAT135	nənə	1.00

Eight	QAT139	nànà	QAD23	bànànà	0.33
Eight	QAT139	nànà	QAD28	bànănà	0.11
Eight	QAT139	nànà	QAT108	nànà	1.00
Eight	QAD25	nànà	QAT101	nànà	1.00
Eight	QAD25	nànà	QAT135	nànà	1.00
Eight	QAD25	nànà	QAD23	bànànà	0.33
Eight	QAD25	nànà	QAD28	bànănà	0.11
Eight	QAD25	nànà	QAT108	nànà	1.00
Eight	QAT101	nànà	QAT135	nànà	1.00
Eight	QAT101	nànà	QAD23	bànànà	0.33
Eight	QAT101	nànà	QAD28	bànănà	0.11
Eight	QAT101	nànà	QAT108	nànà	1.00
Eight	QAT135	nànà	QAD23	bànànà	0.33
Eight	QAT135	nànà	QAD28	bànănà	0.11
Eight	QAT135	nànà	QAT108	nànà	1.00
Eight	QAD23	bànànà	QAD28	bànănà	0.78
Eight	QAD23	bànànà	QAT108	nànà	0.33
Eight	QAD28	bànănà	QAT108	nànà	0.11
Nine	QAT139	búlúmŭ	QAD25	no response -1.00	
Nine	QAT139	búlúmŭ	QAT101	bwúlúmŏ 0.60	
Nine	QAT139	búlúmŭ	QAT135	bwúlúmŭ 0.80	
Nine	QAT139	búlúmŭ	QAD23	no response -1.00	
Nine	QAT139	búlúmŭ	QAD28	búlúmŭ	1.00

Nine	QAT139	búlúmʉ̆	QAT108	búlúmʉ̆	1.00	
Nine	QAD25	no response	QAT101	bwúlúmɔ̌	-1.00	
Nine	QAD25	no response	QAT135	bwúlúmʉ̆	-1.00	
Nine	QAD25	no response	QAD23	no response	1.00	
Nine	QAD25	no response	QAD28	búlúmʉ̆	-1.00	
Nine	QAD25	no response	QAT108	búlúmʉ̆	-1.00	
Nine	QAT101	bwúlúmɔ̌	QAT135	bwúlúmʉ̆	0.80	
Nine	QAT101	bwúlúmɔ̌	QAD23	no response	-1.00	
Nine	QAT101	bwúlúmɔ̌	QAD28	búlúmʉ̆	0.60	
Nine	QAT101	bwúlúmɔ̌	QAT108	búlúmʉ̆	0.60	
Nine	QAT135	bwúlúmʉ̆	QAD23	no response	-1.00	
Nine	QAT135	bwúlúmʉ̆	QAD28	búlúmʉ̆	0.80	
Nine	QAT135	bwúlúmʉ̆	QAT108	búlúmʉ̆	0.80	
Nine	QAD23	no response	QAD28	búlúmʉ̆	-1.00	
Nine	QAD23	no response	QAT108	búlúmʉ̆	-1.00	
Nine	QAD28	búlúmʉ̆	QAT108	búlúmʉ̆	1.00	
Ten	QAT139	kɨ́mɔ̀	QAD25	kɨ́mɔ̀	1.00	
Ten	QAT139	kɨ́mɔ̀	QAT101	ghɨ́mɔ̀	0.67	
Ten	QAT139	kɨ́mɔ̀	QAT135	kɨ́mɔ́	0.67	
Ten	QAT139	kɨ́mɔ̀	QAD23	kúmú	0.00	
Ten	QAT139	kɨ́mɔ̀	QAD28	kúmə̀	0.33	
Ten	QAT139	kɨ́mɔ̀	QAT108	ghɨ́mɔ̀	0.67	
Ten	QAD25	kɨ́mɔ̀	QAT101	ghɨ́mɔ̀	0.67	

Ten	QAD25	kɨmɔ̀	QAT135	kɨmɔ́	0.67
Ten	QAD25	kɨmɔ̀	QAD23	kúmú	0.00
Ten	QAD25	kɨmɔ̀	QAD28	kúmə̀	0.33
Ten	QAD25	kɨmɔ̀	QAT108	ghɨmɔ̀	0.67
Ten	QAT101	ghɨmɔ̀	QAT135	kɨmɔ́	0.33
Ten	QAT101	ghɨmɔ̀	QAD23	kúmú	-0.33
Ten	QAT101	ghɨmɔ̀	QAD28	kúmə̀	0.00
Ten	QAT101	ghɨmɔ̀	QAT108	ghɨmɔ̀	1.00
Ten	QAT135	kɨmɔ́	QAD23	kúmú	0.33
Ten	QAT135	kɨmɔ́	QAD28	kúmə̀	0.00
Ten	QAT135	kɨmɔ́	QAT108	ghɨmɔ̀	0.33
Ten	QAD23	kúmú	QAD28	kúmə̀	0.33
Ten	QAD23	kúmú	QAT108	ghɨmɔ̀	-0.33
Ten	QAD28	kúmə̀	QAT108	ghɨmɔ̀	0.00

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