THE LINGUISTIC HISTORY OF SISUUMBWA, KISUKUMA AND KINYAMWEEZI IN BANTU ZONE F

CENTRE FOR NEWFOUNDLAND STUDIES

TOTAL OF 10 PAGES ONLY MAY BE XEROXED

(Without Author's Permission)

BALLA F.Y.P. MASELE







THE LINGUISTIC HISTORY OF SISUUMBWA, KISUKUMA AND KINYAMWEEZI IN BANTU ZONE F

By

Balla F.Y.P. Masele

A thesis submitted to the School of Graduate Studies in partial fulfilment of the requirements for the degree of Doctor of Philosophy

Department of Linguistics

Memorial University of Newfoundland

July 2001

St John's Newfoundland

ABSTRACT

This research describes the linguistic history of SiSuúmbwá (F23), KiSukumá (F21) and KiNyámwézi (F22) (henceforth SSN). Two areas are investigated, phonology and vocabulary. In phonology, the comparative method is used, focussing on five processes: Bantu Spirantization (BS), seven to five vowel system reduction (7 > 5); Dahl's Law (DL), glottalization, and voiceless nasal formation. Vocabulary is used to examine quantitative and qualitative evidence. Quantitative evidence uses lexicostatistics to determine lexical retention and sub-grouping. The comparative method is employed in analysing shared lexical innovation as a measure of qualitative evidence, and hence genetic relationship.

In SSN, the varieties investigated are ten: SiSúúmbwá (F23): SiSlióombó (F23a), SiVóómbó (F23b), and Kidongó (F23c), KiSlúcimá (F21c), Elliv Rimánsákbúmá (F21a), GinkiNúzú) (F21b), JináKítyá (F21c); and KiNyámwéézi (F22): KiNyámyéémbé (F22a), KiDakama (F22b), SiGálágaánzá (F22d) and KiKonóloggó (F22e). SSN is part of Guthrie's (1967-1971) Bantu Zono F. The rest of Zone F languages are also discussed for comparison: KiTóöngwé KiBéende (F10), KiKítímbó (F24), ICIWőöngő (F25), Kinil.áámbá (F31), KiRmí (F32), KiRnági (F33) and KéeMbúwé (F34).

The contact models of language development after Thomason and Kaufman (1988) are used, while the family tree model illustrates the results of lexicostatistics.

The analysis of the data and historical interpretation of the linguistic patterns suggest that Zone F is a result of linguistic convergence by geographical adjacency. Guthrie (1948-73) asserts that the zones are mainly geographical entities. But using linguistic criteria to group them implies that they are also linguistic and hence genetically valid (Guthrie 1948-73) asserts of 20 me F, including the core of Kthyamwéezi (F22a, F22d, F22e), and not in the rest of Zone F, including the core of Kthyamwéezi (F22a, F22d, F22e) (Glottalization is found mainly in F23. In the rest, especially P21 and F22, borrowing is suggested, by evidence of double reflexes: Proto Bantu *p → /p/ and /h/. Voiceless masalization is also found in the DL languages only, F21 and F22b. Most of the lexical innovations are not unique to Zone F. They are areal, shared by other zones. Combined with the phonological facts, this suggests the death of linguistic Zone F.

ACKNOWLEDGEMENTS

Many people facilitated in various ways in the completion of this project, in their personal and/or official capacities, sometimes their permanent contributions and influences stretching years back. I will mention only a few. The crucial role played by those I do not mention for any reason is unforgettable: as elsewhere, some of their impressions are discernible in the following pages, while some of their far-reaching impact is only felt, invisible. However, the final result and especially its faults are entirely my interpretation and assimilation of their innut. Among these are Derek Nurse, my supervisor, who absorbed all the major earthquakes: Marguerite MacKenzie, Head of the Denartment of Linguistics, Memorial University of Newfoundland (MUN); Sandra Clarke, Irene Mazurkewich, Sandra Clarke, Carrie Dyck, Aleksandra Steinbergs, Vit Bubenik, Harold Paddock, Philip Branigan, John Hewson and James Black, all professors in the Department of Linguistics, MUN; Gregory S. Kealey, the Dean of the School of Graduate Studies, MUN, for his dedication in paying close attention to individual graduate student concerns beyond the call of duty; Sarah Rose; Christa Beaudoin-Lietz: Evelyne Namaemba Kisembe for clarification with Luβukusu and Luhya in general: Jana Novotna, for her insightful comments in typology and morphology; Douglas Wharram, who was ready to be there, even in emergencies like that day. Linda Harris, Jane Bannister, Laurel-Anne Hasler, Susan Mugford, Anna Muselius, Amanda Newhook, Tracy O'Brien, Dawn Richards, Chris Wood, Mark Scott; Coster P. Mahuwi for his cartographic services at the University of Dar Es Salaam: Dean O'Reilly for help with the maps with MapInfo: Jouni Maho, for his work on revised Guthrie: Irene Zadnik of the House of Solutions, Faculty of Arts, MUN, for her role in disentangling the frequent computer software glitches (especially of word processing) which kept me sleepless; Colleen Porter, of the Linguistics Department, MUN, for being there to handle all the hassles of theses, at short notice; Darren Newton and Brenda Kitchen of the GSU, for their presence.

I thank the School of Graduate Studies, Memorial University of Newfoundland and the Directorate of Postgraduate Studies, University of Dar Es Salaam for their financial and moral support, especially during the most trying moments of my studies. The people in various responsibilities there made a lot of difference in several impossible situations.

The Gllowing deserve my appreciation for the data, ideas and/or their stabilizing influence in various ways: boseph Kulva (KDRahama); Horan Kimolo and Michael Kimolo (KiRangs); Magreth Busheesha (JinaKItya); Gasiano Sumbai (GiAhi); Mikael F. Hadu and Jeremia Nyampala (GIRwana); Herbert Makoye and Jared Dorllo (KimunaSukuma), Ally Rashid and Ermanuel Mbogo (KIKIImbo; South); Hamis Mpume (YmyaMunyiyanyi); Lucas Nizelela and Peter Kasele (KiNyanyeembe); Barthazar Benedicto (SiSisloombo); Beatus Benedictus Malando (SiYoombe); Madaalo Nzuumbt and Sigeela (GiraNutuz), Erick Zakayo (KiKonoongo); Alifed MdItma, (KIruLaamba (Central)); Samwel M. Salija (KIrtHaanza); Mariam B. Kakili (KIraul-Shoola); Hawa Saidi (SiGalaaganza): Gervas Maeoocozwa

(KiLoongo); Peter Mwansoko (KIKIImbt North); Flourine Francis (KeeMbuwe); Kapepwa Tambila (or properly Táámbilá) (KiBende/KiToongwe); Kidyamali Msago (ICIWUUngu); Yôlixờ Màlàjà of Mitóo, Manyoni, for his clarifications with GiAhi when the first draft of the data was being edited: Joseph L. Mbele and Heribertha Mbele for clarifications with KiMatengo, Henry R.T. Muzale: Saida Yahya-Othman: H.J.M. Mwansoko: Justinian C. Galabawa;; Gertrude N. Malai; Joseph K. Kyobe; Lameck Masele Lutoonia; Naamhala Thobias Bustga Seembo; Kulikovela Kahigi; Nathan Ogechi; L.K. Kingalu, E. Lyagala; Sumanta Buana; Eginald P.A.N. Mihanjo; Wing Hendrorasetyo; Miklós Krész, Judit Tóth; Kevin Cassell; Melissa and Michael Regular; Jacqueline Carey; Charles Chonza; Rose Sallema; Richard Kangalawe; Sufian Bukurura; Cyril August Chami; Jerome Beaudoin; Lawrence Greening; Mohamed Uvuruge; Elikana Daudi Nyolooβi; Wajira Srinanda Rathnavake: Anthonia Mwapili na Wachania Mbuga Wengine Wote: Hamza Mustafa Niozi: Elias Manandi Songooyi for the inspiration from earlier on; Thomas Kaloki Nzvimi; Adam Korogoto; Aldin Kaizilege Mutembei; Gamba Nkwengulila; Mwita Charles Tete: Juma Manyama Warioba; Hadija Maggid Mchatta; Ng'wanaaNsamaka, for his role of reminding and impressing on me about doing something about these languages, especially KISukuma, although we met only once in 1993. The Tygr CP Group, for giving direction when sections of our data made no sense; Ernest Kahindi, for availing me a linguistic work which inspired me; Peter Manyama Kairanya, for his inspiration in writing a people's history; PalUla NwanIpóóndéjo, Masanja Palula, Elisha Zeengo Masele for their dedication in times of our greatest need during the formative years; Kuumba Ŋwanamhiiya Ŋkuβa; James Pyaagu Lujiga; Joseph Goleha; Daudi Elias Nyangzindu; Gaandi Magima; Dwaandu Masania; Tumai Chandalŏβa; Alfred Mbooje; Mataalo Sheeli Gaamba; Patrice Ŋkoβa; Maalwâ Masele and her family, who constantly reminded me of duty in diversity; Tambílíja Masele who waited, but the days turned into years and he had to remind us of time. Pagati and his family, Zeengo Seembeiiwe Masele; Shiida Ng'wanaGabaadi and her family; Geeni Ng'wanaNgusa.

Hoogā, Shiijā, Madina, Hussein, Hassan (also called Wananchi), for their exemplary care, understanding and discipline in the face of long absenteeism in the family; Kulwa (Bogt)t; Masele Ng' wanāSaayī, for growing up too quickly because of massive responsibilities of keeping our extended family in Ng' walaala functioning, despite his tender chronological are.

My mother, Kwaangô Ng'wanāGabáádi, for disappointing her almost always in many ways, with the pipelining of dreams of a better tomorrow, which never arrived and had no intention of arriving. She has been there for me.

TABL			

Page

Abstract	ii
Acknowledgements	iii
Table of contents	v
List of Tables	xiv
List of Figures	XVIII
List of Maps	xviii
List of Abbreviations, Symbols and Definitions	xix
Dedication	xxvii
CHAPTER ONE: INTRODUCTION	1
1.0 INTRODUCTION	1
1.1 THE PROBLEM	6
1.1.1 Background of the problem	6
1.1.2 Statement of the problem	11
1.1.3 Research objectives	11
1.1.4 Significance of the problem	12
1.1.5 Limitations of the study	14
1.2 RESEARCH QUESTIONS	16
1.3 METHODOLOGY	17
1.3.1 Data collection	17
1.3.1.1 Fieldwork	18
1.3.1.2 The informants	19
1.3.2 Research instruments	19
1.3.3 Data analysis	21
1.3.4 problems in data collection	23
1.3.4.1 Ambiguous words used in the English and KiSwahili glosses .	24
1.3.4.2 Informant's expected linguistic competence	26
1.3.4.3 An informant refusing to answer some questions	26

TABLE OF CONTENTS	Page
1.3.4.4 Desirability of trilingual speakers	26
1.3.4.5 Rejection of some words during data revision	28
1.3.5 The methods	29
1.3.5.1 The comparative method	29
1.3.5.1.1 The procedures of the comparative method	29
1.3.5.1.2 The aims of the comparative method	31
1.3.5.1.3 Limitations of comparative reconstruction	31
1.3.5.2 Lexicostatistics/Glottochronology	33
1.3.5.2.1 Overview of lexicostatistics	33
1.3.5.2.2. Arguments against lexicostatistics	36
1.3.5.2.3 Merits of lexicostatistics	40
1.3.5.2.4 Merits of lexicostatistics: a summary	41
1.3.5.3 Other methods	43
1.4 CHAPTER PREVIEW	44
CHAPTER TWO: LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK	45
2.0 INTRODUCTION	45
2.1 LITERATURE REVIEW	45
2.1.1 Bantu, Zone F and SSN linguistic description	45
2.1.2 Phonological studies	51
2.1.2.1 Bantu Spirantization (BS) and 7 > 5	51
2.1.2.2 Dahi's Law (DL)	52
2.1.2.3 Glottalization	53
2.1.2.4 Voiceless nasal formation	54
2.1.3 Lexical studies	55
2.1.4 Earlier Zone F and SSN classification	56
2.1.4.1 Doke	57
21428	50

TABLE OF CONTENTS	Page
2.1.4.3 Guthrie I	60
2.1.4.4 Guthrie II	65
2.1.4.5 Guthrie III	68
2.1.4.6 Nurse and Philippson	68
2.1.4.7 Nurse	70
2.1.4.8 Classification in SSN and Zone F: a synthesis	72
2.1.5 Historical interpretation in SSN and Zone F	74
2.2 CONCEPTUAL FRAMEWORK	76
2.2.1 The models of language development	84
2.2.1.1 Family tree model	84
2.2.1.2 The contact models	86
2.2.1.3 Theories and models: Dynamism in SSN and Zone F	88
2.3 CONCLUSION	80
CHAPTER THREE: PHONOLOGICAL DEVELOPMENT	90
3.0 INTRODUCTION	90
3.1 GENERAL OVERVIEW OF PHONOLOGICAL CHANGE FROM PB TO THE TARGET ZONE F LANGUAGES	92
3.1.1 Vowel systems in Zone F: 7V and 7 > 5	92
3.1.2 Bantu Spirantization (BS)	105
3.1.2.1 Reflexes of *p /_ V [-superclose]	107
3.1.2.2 Reflexes of *p /_ i [+superclose]	109
3.1.2.3 Reflexes of *p /_ u [+superclose]	110
3.1.2.4 Reflexes of *b /_ V [-superclose]	111
3.1.2.5 Reflexes of *b /_ i [+superclose]	112
3.1.2.6 Reflexes of *b /_ u [+superclose]	112
3.1.2.7 Reflexes of *t /_ V [-superclose]	114

3.1.2.8 Reflexes of *t /_ i [+superclose]....

114

	TABLE OF CONTENTS
;	3.1.2.9 Reflexes of *t / _u [+superclose]
:	3.1.2.10 Reflexes of *d /_ V [-superclose]
	3.1.2.11 Reflexes of *d /_ i [+superclose]
3	3.1.2.12 Reflexes of *d /_ u [+superclose]
3	3.1.2.13 Reflexes of *k /_ V [-superclose]
1	3.1.2.14 Reflexes of *k /_ i [+superclose]
3	3.1.2.15 Reflexes of *k /_ u [+superclose]
3	3.1.2.16 Reflexes of *g /_ V [-superclose]
3	3.1.2.17 Reflexes of *g /_ i [+superclose]
3	3.1.2.18 Reflexes of *g /_ u [+superclose]
3	3.1.2.19 Reflexes of *c /_ V [-superclose]
3	3.1.2.20 Reflexes of *c /_ i [+superclose]
3	3.1.2.21 Reflexes of *c /_ u [+superclose]
3	3.1.2.22 Reflexes of *j /_ V [-superclose]
3	3.1.2.23 Reflexes of *j /_ i [+superclose] and j /_ u [+superclose]
	5.1.2.24 Explanation and interpretation of Bantu Spirantization in Cone F
	3.1.2.24.1 Phonetic/Phonological explanation and
	interpretation of Bantu Spirantization in Zone F
i	3.1.2.24.2 The Contact model explanation and nterpretation of Bantu Spirantization in Zone F
	3.1.2.24.2.1 The Contact models: loan words
	3.1.2.24.2.2 The Contact models: capacity to
	absorb newcomers and demographics
	3.1.2.24.3 Synthesis: Bantu Spirantization in Zone F
1.3 Dat	n's Law
.4 Oth	er processes

TABLE OF CONTENTS	Pa
3.1.4.2 Lenition of *k (*k →x)	1
3.1.4.3 Split of *d into /l/ and /r/	1
3.1.5 Similarities and differences with other zones	1
3.1.6 BS, 7 > 5, DL in Zone F: Uniting or dividing criteria?	1
3.1.7 Unity of Zone F: Synthesis	1
3.2 SISUUMBWA-KISUKUMA-KINYAMWEEZI PHONOLOGICAL DEVELOPMENT	1
3.2.1 BS and 7 > 5 in SiSuumbwa, KtSukuma and KtNyamweezi	1
3.2.1.1 Analysis of Bantu Spirantization in SiSuumbwa, KıSukurna and KıNyarnweezi	1
3.2.1.1.1 PB *pi	1
3.2.1.1.2 PB *pu	1
3.2.1.1.3 PB *bi	1
3.2.1.1.4 PB *bu	1
3.2.1.1.5 PB %	1
3.2.1.1.6 PB tu	1
3.2.1.1.7 PB *di	1
3.2.1.1.8 PB *du	2
3.2.1.1.9 PB *ci	2
3.2.1.1.10 PB *cu	2
3.2.1.1.11 PB *ki	2
3.2.1.1.12 PB *ku	2
3.2.1.1.13 PB *gi	2
3.2.1.1.14 PB *gu	2
3.2.1.2 BS in SiSuumbwa, KrSukuma and KrNyamweezi: Summary	2
3.2.2 Dahl's Law in KrSukuma, KrNyamweezi and SiSuumbwa	2
3.2.2.1 Dahl's Law in KrSukuma	2
3.2.2.1.1 Dahl's Law in KımunaSukuma	2

TABLE OF CONTENTS	Page
3.2.2.1.2 Dahl's Law in JinaKrrya	236
3.2.2.1.3 Dahl's Law in GrnaNtuzu	238
3.2.2.2 Dahl's Law in KtNyamweezi	239
3.2.2.2.1 Dahi's Law in KıDakama	242
3.2.2.2.2 Dahi's Law in KrKonoongo and KrNyanyeembe	245
3.2.2.2.3 Dahl's Law in SiGalagaanza	245
3.2.2.3 Dahl's Law in SiSuumbwa	247
3.2.3 Other processes in SiSuumbwa, KıSukuma and KıNyamweezi	249
3.2.4 Homogeneity between SiSuumbwa, KrSukuma and KrNyamweezi	251
3.2.5 Relative chronology in SiSuumbwa, KtSukuma and KtNyamweezi	255
3.2.6 Conclusion: SSN phonological change and grouping	261
3.3 CONCLUSIONS	262
CHAPTER FOUR: LEXIGAL DEVELOPMENT	265
4.0 INTRODUCTION	265
4.1 QUANTITATIVE EVIDENCE: SHARED VOCABULARY AND COMMON ANCESTRY	266
4.1.1 Method used	267
4.1.2 Lexicostatistics of language pairs	270
4.1.2.1 Lexicostatistical subgrouping: procedure and results	273
4.1.2.2 Lexicostatistical subgrouping: analysis and discussion of results	290
4.1.2.3 Lexicostatistics, absolute chronology and linguistic grouping in Zone F	294
4.2 QUALITATIVE EVIDENCE IN LEXICAL INNOVATION	302
4.2.1 Survey of qualitative evidence in Zone F	308
4.2.1.1 Dialects: 'buds' in the linguistic tree	308
4.2.1.2 Dialect clusters: hierarchical nodes of historic languages	312

TABLE OF CONTENTS	Pag
4.2.1.2.1 Ntuzu/Krrya (Nk) (90%) (GrnaNtuzu (F21b) + JinaKrrya (F21c)	31
4.2.1.2.2 KISukuma - (Sk) (89%) (GınaNtuzu + JinaKııya + KımunaSukuma	31
4.2.1.2.3 KrSukuma + KrDakama - (Sd) (86%) (GrnaNtuzu + JinaKrrya + KrmunaSukuma + KrDakama) = KrSukuma2	324
4.2.1.2.4 KtNyamweezi proper - (Nz) (84%) (KtNyanyeembe + KtKonoongo + SiGalagaanza)	320
4.2.1.2.5 SiSuumbwa - (Sy) (84%) (SiSiloombo + SiYoombe).	330
4.2.1.2.6 Qualitative evidence and patterns in KıSukuma, KıNyamweezi and SiSuumbwa	342
4.2.1.2.7 UI (83%) (KrnaUshoola + KrnrLaamba C)	34
4.2.1.2.8 KIKIIMbt (Km) (82%) (KIKIIMbt North + KIKIIMbt South)	346
4.2.1.2.9 SN (81%) (KrSukuma2 + KrNyamweezi)	350
4.2.1.2.10 Ar (80%) (GiAhi + GIRwana)	353
4.2.1.2.11 KınıLaamba (Lm) (78%) (KınaUshoola + KınıLaamba C + KınıHaanzu)	354
4.2.1.2.12 KıRımi (Rı) (78%) (GiAhi + GıRwana + yınyaMunyinanyi)	356
4.2.1.2.13 NM (78%) (KıKıımbo + KıSukuma + KıNyamweezi)	360
4.2.1.2.14 NL (76%) ((KıKıımbo + KıSukuma + KıNyamweezi+ KınıLaamba)	361
4.2.1.2.15 NR (76%) ((KıKıımbo + KıSukuma + KıNyamweezi+ KınıLaamba + KıRımi)	363
4.2.1.2.16 Zone F	365
4.2.1.2.17 Other groups: KınıLaamba and KıRımi	375
4.2.1.2.18 Other groups: KınıLaamba, KıRımi, KıKıımbo	378
4.2.1.2.19 Other groups: KiiRangi and KeeMbuwe	379
4 2 1 2 20 Other groups: KeekMhuuse	20.

TABLE OF CONTENTS	Pag
4.2.1.2.21 Other groups: KiiRangi	38
4.2.1.2.22 Other groups: KiLoongo	38
4.2.1.2.23 Other groups: ICtWaanga	38
4.2.1.2.24 Other groups: KiBende	39
4.2.1.3 Contribution of non-Bantu languages to Zone F	39
4.2.1.3.1 Contributions of non-Bantu languages: Iraqw	39
4.2.1.3.2 Contributions of non-Bantu languages: Barbaig	39
4.2.2 Conclusions: Lexical status of Zone F members from qualitative evidence	40
4.3 CONCLUSION	41
4.3.1 The lexical unity of KrSukuma, KrNyamweezi and SiSuumbwa	41
4.3.2 Does Zone F exist lexically?	41
CHAPTER FIVE: CONCLUSION: LANGUAGE AS A TOOL OF HISTORY	41
5.0 INTRODUCTION	41
5.1 LINGUISTIC EVIDENCE: THE RESULTS	41
5.1.1 Evidence from phonology	41
5.1.1.1 BS and 7 > 5	418
5.1.1.1.1 BS and 7V/5V in KıSukuma2, KıNyamweezi and SiSuumbwa	419
5.1.1.1.2 BS and 7V/5V in Zone F	420
5.1.1.2 Dahl's Law (DL)	420
5.1.1.2.1 DL in KrSukuma2, KrNyamweezi and SiSuumbwa	422
5.1.1.2.2 DL in Zone F	424
5.1.1.3 Glottalization and voiceless nasal formation	425
5.1.1.4 Phonological evidence for SSN and Zone F: concluding remarks	428
5.1.2 Evidence from vocabulary	429
5.1.2.1 Quantitative evidence: Lexicostatistics	429

TABLE OF	CONTENTS
5.1.2.1.1 KrSukum Lexicostatistics	a2, KtNyamweezi, SiSuumbwa and
5.1.2.1.2 Zone F la	inguages and Lexicostatistics
5.2 RESULTS: DIVERGENCE SINCE PB A	AND GROUPINGS
5.2.1 Areal influences	
5.2.2 Classification by areal vocabu	ulary
5.3 RESULTS: INDIVIDUAL LANGUAGES PB	
5.3.1 Areal influences	
5.3.2 Classification	
5.4 RESULTS: CONVERGENCE AND CON	NTACT MODELS
5.5 LANGUAGE, ARCHAEOLOGY AND HI	ISTORY
5.5.1 Soper and Golden (1969), Od	iner (1971)
5.5.2 Itandala (1979, 1983)	
5.5.3 Ehret (1994, 1999)	
5.5.4 Other sources: ethnography,	oral history and linguistic history
5.5.4.1 History of SiSuumb	wa
5.5.4.2 History of KtKttmbo	5
5.5.5 Conclusions from the various	sources
5.6 DIRECTIONS FOR FUTURE RESEAR	СН
5.7 CONCLUSION	
5.7.1 Answering the research quest	tions
5.7.2 Concluding remarks	
REFERENCES	
APPENDICES	
APPENDIX 1 ZONE F WORD-LIST	
ADDENION A DUONOL GOICE HINENTO	0150 OF 1 F

TABLE OF CONTENTS	Page
Appendix 2a Vowels	757
Appendix 2b Stops and prenasalized stops	758
Appendix 2c Fricatives and prenasalized fricatives	759
Appendix 2d Nasals, liquids, semi-vowels and voiceless counterparts, where relevant	760
APPENDIX 3 DAHL'S LAW IN ZONE F	762
APPENDIX 4 LEXICOSTATISTICS: 100 WORD-LIST OF 28 LANGUAGE VARIETIES	773
LIST OF TABLES	Page
Table 1.1. Language varieties of Zone F (SSN is shaded)	4
Table 1.2 Proto Bantu consonant phonological inventory	15
Table 1.3. Sample data used to elicit responses	20
Table 2.1 Work done in Zone F languages	49
Table 2.2 Voiceless nasals in F21c	54
Table 2.3. Evolution of linguistic classification in Zone F: C. M. Doke (1943/1945)	58
Table 2.4. Evolution of linguistic classification in Zone F: Bryan (1959)	59
Table 2.5 Phonological differentia defining ZoneF?	62
Table 2.6. Evolution of linguistic classification in Zone F: Guthrie I(1948)	64
Table 2.7. Evolution of linguistic classification in Zone F: Guthrie II (1967)	67
Table 2.8. Evolution of linguistic classification in Zone F: Guthrie III (1970)	69
Table 2.9. Evolution of linguistic classification in Zone F: Nurse & Philippson (1980a).	69
Table 2.10. Evolution of linguistic classification in Zone F: Derek Nurse (1999)	72
Table 3.1. 7V and 5V varieties in Zune F: Itl test	98
Table 3.2. 7V and 5V varieties in Zone F: /d/ test	98
Table 3.3 /s/ and /o/ change in KeeMbuwe	99
Table 2.4 Evalution of Onlin Tons E and TI/EI/	400

LIST OF TABLES	Page
Table 3.5. Evolution of /*e/ in Zone F and 7V/5V	102
Table 3.6. Status of Dahl's Law in Zone F individual varieties	149
Table 3.7. Dahl's Law in Zone F and linguistic grouping	151
Table 3.8 Dahl's Law outside KıSukuma, KıNyamweezi and SiSuumbwa	154
Table 3.9 BS, 7 > 5 and DL in Zone F and other zones	161
Table 3.10 BS, 7 > 5 and DL in Zone F: Summary of significant classificatory criteria.	162
Table 3.11 BS, 7 > 5. DL: Phonologically-based linguistic groups of Zone F?	164
Table 3.12 Reflexes, innovations, extraneous sounds and their possible sources, PB *p/_i	169
Table 3.13 Reflexes, innovations, extraneous sounds and their possible sources, PB *pu	174
Table 3.14 Reflexes, innovations, extraneous sounds and their possible sources, PB *b/.i	180
Table 3.15 Reflexes, innovations, extraneous sounds and their possible sources, PB	182
Table 3.16 Reflexes, innovations, extraneous sounds and their possible sources, PB %	186
Table 3.17 Reflexes, innovations, extraneous sounds and their possible sources, PB tu	191
Table 3.18 Reflexes, innovations, extraneous sounds and their possible sources, PB *di	197
Table 3.19 Reflexes, innovations, extraneous sounds and their possible sources, PB *du	206
Table 3.20 Reflexes, innovations, extraneous sounds and their possible sources, PB	211
Table 3.21. Similarity of most frequent reflexes in SSN from PB *di and PB *ci	211
Table 3.22 Reflexes, innovations, extraneous sounds and their possible sources, PB	215
Table 3.23 Reflexes, innovations, extraneous sounds and their possible sources, PB	219
Table 3.24 Reflexes, innovations, extraneous sounds and their possible sources, PB	
†gu	223

LIST OF TABLES	Pag
Table 3.25 Bantu Spirantization in SiSuumbwa, KrSukuma and KrNyamwezi *p	22
Table 3.26 Bantu Spirantization in SiSuumbwa, KıSukuma and KıNyamwezi PB *b	22
Table 3.27 Bantu Spirantization in SiSuumbwa, KıSukuma and KıNyamwezi PB "t	22
Table 3.28 Bantu Spirantization in SiSuumbwa, KıSukuma and KıNyamwezi PB *d	22
Table 3.29 Bantu Spirantization in SiSuumbwa, KıSukuma and KıNyamwezi PB *c	22
Table 3.30 Bantu Spirantization in SiSuumbwa, KıSukuma and KıNyamwezi PB *j	23
Table 3.31 Bantu Spirantization in SiSuumbwa, KıSukuma and KıNyamwezi PB *k	23
Table 3.32 Bantu Spirantization in SiSuumbwa, KıSukuma and KıNyamwezi PB *g.	23
Table 3.33 Dahl's Law in SiSuumbwa	24
Table 3.34 Voiceless nasals and linguistic sub-grouping in SiSuumbwa, KıSukuma and KıNyamweezi	25
Table 3.35 Comparison of Zone D/DJ, and EJ languages with KiLoongo, SiSuumbwa and JinaKırya	25
Table 3.36 Status of Glottalization and BS in SiSuumbwa, KıSukuma and KıNyamweezi	26
Table 4.1. Lexicostatistical relationships between Zone F and some adjacent languages	27
Table 4.2. Collapsing highest percentage of Table 4.1 (90%)	27
Table 4.3. Collapsing highest percentage of Table 4.2 (89%)	27
Table 4.4. Collapsing highest percentage of Table 4.3 (86%)	27
Table 4.5. Collapsing highest percentage of Table 4.4 (84%)	27
Table 4.6. Collapsing highest percentage of Table 4.5 (83%)	28
Table 4.7. Collapsing highest percentage of Table 4.6 (82%)	28
Table 4.8. Collapsing highest percentage of Table 4.7 (81%)	28
Table 4.9. Collapsing highest percentage of Table 4.8 (80%)	28
Table 4.10 Collapsing highest percentage of Table 4.9 (78% -SN + Km)	28
Table 4.11 Collapsing highest percentage of Table 4.10 (78%-UI + Ha)	28
Table 4.12 Collapsing highest percentage of Table 4.11 (78%-Ar + Mu)	28
Table 4.13 Collansing highest percentage of Table 4.13 (76%): Peagranging MN// m	284

LIST OF TABLES	
Table 4.14 Collapsing highest percentage of Table 4.13 (76%)	
Table 4.15 Collapsing highest percentage of Table 4.14 (72%)	
Table 4.16 Time estimates of language separation using index of .86 for 1000 ye expressed as a percentage rate of retention (Ret) of shared vocabulary	
Table 4.17 Language, dialect, time of separation and shared percentage (After Crowley 1997:182, 184)	
Table 4.18 Median rating and retention dates between languages (After Ehret 2000:288)	
Table 4.19 Infinitive *kʊ- as an important dialect morphological marker in KrSuku	ıma.
Table 4.20 'Urine' and 'sperm' in F21 and EJ16, EJ17, and EJ34	
Table 4.21 Difference of unique vocabulary source between F21 and F22	
Table 4.22 Phonological affinity between Rutara, Suguti, Western Highlands, KiLoongo and SiSuumbwa from qualitative evidence	
Table 4.23 Difference of unique vocabulary sources between F21, F22 and F23.	
Table 4.24 Variety and frequency of occurrence of the 19 words shared in Zone brackets) (1 word 'old male person' as unique to Zone F)	
Table 4.25 Lexical analysis of Zone F shared vocabulary	***
Table 4.26 Total number of language-specific vocabulary in Zone F linguistic gro	ups.
Table 4.27 Lexical innovation in Zone F and genetic affiliation	
Table 4.28 Shared vocabulary between Zone F members and other languages	
Table 4.29 Lexical innovation in nodes outside the Zone F tree and genetic affilia	tion
Table 5.1 Percentage of DL candidate words which do NOT undergo DL (From swords used)	
Table 5.2 Percentage of words violating DL in Zone F (From 58 words used)	
Table 5.3 K ₂ Sukuma2, K ₂ Nyamweezi, SiSuumbwa and other Zone F languages' retention rates	
Table 5.4. Percentages of retention rates of K ₂ Sukuma2/K ₂ Nyamweezi (SN) in relation to other Zone F languages	
Table 5.5. Percentages of retention rates of Zone F	
Table 6.7. Regults of levicostatistical argunings in Zone E	

IST OF FIGURES	
Figure 3.1 Relative chronology of phonological processes in SSN	255
Figure 4.1 Linguistic tree from retention rates for Zone F	291
Figure 4.2 Areal frequencies between F21b/c and other languages	321
Figure 4.3 Areal frequencies between F21 and other languages	323
Figure 4.4 Areal frequencies between F21/F22b and other languages	326
Figure 4.5 Areal frequencies between F22 (-F22b) and other languages	329
Figure 4.6 Areal frequencies between F23a/b and other languages	337
Figure 4.7 Areal frequencies between F31b/c and other languages	346
Figure 4.8 Areal frequencies between F24 and other languages	349
Figure 4.9 Areal frequencies between SN and other languages	352
Figure 4.10 Areal frequencies between F31 and other languages	356
Figure 4.11 Areal frequencies between F32 and other languages	360
Figure 4.12 Areal frequencies between NR and other languages	365
Figure 4.13 Areal frequencies between Zone F and other languages	372
Figure 4.14 Areal frequencies between F31/F32 and other languages	378
Figure 4.15 Areal frequencies between F33/F34 and other languages	381
Figure 4.16 Linguistic tree from retention rates for Zone F	404
LIST OF MAPS	Page
Map 1.1 SSN in Zone F	2
Map 1.2 Study Area, SSN and Zone F	
Map 1.3 Some language varieties of ethnic communities in Tanzania and E. Africa	8

LIST OF ABBREVIATIONS. SYMBOLS AND DEFINITIONS

(i) Abbreviations and symbols

```
<kIIya> = grapheme <> graphic representation
[kIIva]
          = phone
                        [ ] phonetic representation
/kIIva/
          = phoneme
                        // phonemic representation
{kIIya} = morpheme {} morphemic representation
          = becomes, goes to (diachronic process/derivation)
<
          = comes from, derives from (diachronic change)
          = is realized as (synchronic derivation)
PB *x
          = Proto Bantu reconstruction, mainly by Guthrie (x = any word)
?
          = unconfirmed, uncertain or doubtful case
σ
           = syllable
           = any number of syllables
           = any consonant
V
           = any vowel
           = syllable boundary
           = separating different forms of a lexeme or concepts in different languages
cf
          = compare with these forms, which may be related or not (Chapter 4)
11
          = enclosing languages which do not form the complete set (Chapter 4)
()
          = enclosing related languages being compared to the rest (Chapter 4)
           = explanation follows, especially type of innovation (Chapter 4)
vi intransitive verb
vt transitive verb
          = personal communication
D.C.
Si
          = SiSiloombo, SiSiloombo (F23a)
Vο
          = SiYoombe, SiYoombe (F23b)
Lo
          = KiLoongo, KiLoongo (F23c)
Su
          = KīmunaSukuma, KimunaSukuma (F21a)
Nt

    GīnaNtuzu, GînàNtùzù (also GîmunàNtùzù) (F21b)

Ki

    JinaKīīya, JinaKīīyâ (also JimunaKīīyâ) (F21c)

Da

    KIDakama, KÌDàkámà (F22b)

Nv
          = KINyanyeembe, KinyaNyeembe (F22a)
Ko
           = KIKonoongo, KìKônôôngô (F22e)
Ga
          = SiGalagaanza, SiGálágáánzá (F22d)
Be
           = KiBende/KiTongwe, KiTongwe/KiBende (F10)
```

```
Us

    KīnaUshoola, KīnàŪshòolà (F31a)

La

    KInīLaamba (Central), KinīLāāmbā (F31b)

Ha
          = KınıHaanzu, Kinihaanzu (F31c)
Ah
           = GiAhi, GiAhi (F32b)
Rw

    GIRwana, GìRwàànà (F32a)

Mu

    yInyaMunyinanyi, YinyaMunyinanyi (GhinyaMunyinanyi) (F32c)

Kn
           = KIKIImbt North (F24a)
Ks
           = KIKIImbu South (F24b)
Wii
           = ICIWUUngu, iCiWùòngù (F25)
           = KiiRangi, KiiRangi (KiiLangi) (F33)
Ra
Mb

    KeeMbuwe (KiMbugwe), KeeMbuwe (F34)

Sk

    KīSukuma, KìSukuma

Nz

    KINvamweezi, KÎNvâmwéézi

Km
           = KIKIImbu, KìKíímbù
1.m
           = KInILaamba language (not the dialect)
RT
           = KIRImi (or KINvaturu)
Nk = GInaNtuzu + JinaKIIva
Sk = Nk (GInaNtuzu + JinaKIIya) + KImunaSukuma (KISukuma)
Sd = Sk (Nk (GInaNtuzu + JinaKIIya) + KImunaSukuma) + KIDakama
Nz = KINvanveembe + KIKonoongo + SiGalagaanza (KINvamweezi)
Sv = SiSiloombo + SiYoombe = (SiSuumbwa, SiSúúmbwa)
UI = KInaUshoola + KInILaamba C (Central)
Km = KIkIImbu North + KIKIImbu South (KIkIImbu), KiKffmbu
SN = Sd + Nz
Ar = GiAhi + GIRwana
NM = SN + Km
```

Lm = Ul + KInIHaanzu RI = Ar + YInvaMunvinanvi, KìRìmi

NL = NM + LmNR = NL + RI

The following groupings are adapted from the inspirations of Nurse (1979b), Nurse and Philippson (1980a), Nurse (1988), Nurse and Hinnebusch (1993), Schoenbrun (1997), Muzale (1998), Ethret (1999), Schadeberg (2000) and Maho, Nurse and Philippson (2000) with slight modifications where relevant. They are open for better modification because information is not yet complete, sometimes it is inaccurate, or it is both.

Western Highlands (DJ60) = KinyaRwanda (DJ61), KiRundi (DJ62), iKiFuliiru (DJ63), KiShuβi (DJ64), KiHangaza (DJ65), iGiHa (DJ66), KiVinza (DJ67)

North Rutara (EJ11-14) = Runyoro (EJ11), RuTooro (EJ12), oLuNyankole (EJ13),

oLuCiga (EJ14)

South Rutara = oRuNyambo (EJ21), oRuHaya (EJ22 (RuZiba (EJ22a), RuHamba (EJ22b), Runyalhangiro (EJ22c), RuHyoza (EJ22e), RuZinza (EJ23), RuKereβe (EJ24)

Suguti (EJ25) = KiJita (EJ25a), KiKwaaya (EJ25b), KiRegi (EJ25c), CiRuri (EJ25d)

North Nyanza (EJ15-EJ17) = LuGanda (EJ15), oLuSoga (EJ16), oLuGwere (EJ17)

Luhya (EJ30 and EJ41) = LuMasaaβa (EJ31) = LuGisu/LuKisu (EJ31a/b), Luβukisu (EJ31c1), oLuSyan (EJ31d), oLuTachon (EJ31e), LuDadrin (EJ31f), LuBuya (EJ31d), LuKuson (EJ32b), LuMana (EJ32c), LuKisa (EJ32d), LuKabarasi (EJ32e), LuNyore (EJ32b), LuManama (EJ32e), LuKisa (EJ32d), LuKyore (EJ33b), oLuSaamia (EJ34) = LuXaayo (EJ34a), LuMarachi (EJ34b), oLuSonga (EJ34c), LuNyini (EJ35), LuLogooli/LuRagooli (EJ41), LuMaxo (EJ41a), LuMaxo (EJ41a), LuMaxo (EJ41a), LuMaxo (EJ41a), LuMaxo (EJ41a), LuMaxo (EJ41b), oLuTinik (EJ41c)

East Nyanza (EJ42-EJ45) = KiNgurimi (EJ401), KiKuria (EJ43), iKiZanaki (EJ44) including varieties like iKiJsenyi (EJ44b), KiNdali (EJ44c), KiSiora (EJ44d), KiSweta (EJ44e), KiRoba (EJ44h), Kilkizu (EJ44g), KiRoba (EJ44h), KiIkizu (EJ44g), KiRoba (EJ44h), KiRoba (EJ44h), KiRoba (EJ44h), KiRoba (EJ45h), KiRoba (EJ45h),

Thagicu/Central Kenya (E50) = GIkūyo (E51), KiEmbu (E52), KiMeru (E53), KiTharaka (E54a), KiCuka (E54b), KiKamba (E55) and KiSonio (E46)

Chaga/Kilimanjaro-Taita (E60, with or without E74) KiRwo/KiMeru (E61), KiSiha (E61), KiChaga (E62), KiMachame (E62a), KiWunjo (E62b), KiRombo (E62c), KiWoso (KiBosho) (E62d), KiSeri (E62e), KiKeni (E62f), KiArusha (E63f), KiKahe (E64), KiGweno (E65f), KiTaita (E74) = KiDalida (E74a), KiSagala (E74b)

(E65), KiTaita (E74) = KiDaþida (E74a), KiSagala (E74b) Seuta (some G20), (some G30) = KiShambala (G23), KiBondei (G24), KiZigula (G31), KiTæulu (G34)

West Ruvu (G10, G39) = CiGogo (G11), KiKagulu (G12), KiSagala (G39)

East Ruvu (G30) = Kilhwele (G32), KiDoe (G321), KiZalamo (G33), iKiLugulu (G35), KiKami (G36), KiKutu (G37), G38 CiVidunda

Sabaki (G40 and E71, E72, E73) – Kiliwani (G401), Kiliakwe (G402), CiFundi/KiShirazi (G403), KiTikulu (G41) – (Kitikulu (G41) a, Kitikulu (G41) – (Kitikulu (G41) a, Kitikulu (G41) a, Kitikulu (G41) a, Kitikulu (G42), Kiliwina (G42), Kiliwina (G42), Kiliwina (G42), Kiliwina (G42), Kiliwina (G42), Kiliwina (G43) – (Kifiami Kikialimulu Kidakunduchi (G43), Kiliwina (G43) – (Kifiami (G43), Kiliwina (G44), Kiliwina (

KiLombero (G50) = KiPogolo (G51), KiNdamba (G52)

Southern Highlands (G60) = eSiSangu (G61), eKiHehe (G62), eKiBena (G63), KiPangwa (G64), KiKinga (G65), KiWanji (G66), KiKisi (G67)

Corridor (M10 = Corridor-Fipa, M20 = Corridor-Nyiha) = iCiPimbwe (M11), KiLungwa (M12), CiFipa (M13), CiLungu (M14), iCiMambwe (M15), iCiWanda (M21), CinaMwanga (M22), iJiNyiha (23), iJiMalia (M24), iJiSafwa (M25), Iwa (M26), Tambo (M27), iCiCiWuongu (F25))

Nyakyusa (M30) = IKINyakyusa (M31), CiNdali (M32)

Tanzanian Cifigoni (N10) = KiNdendeule (N101), KiNindi (N102), CiManda (N11), Cifigoni (N12), CiMatengo (N13), CiMpoto (N14)

Rufiji (P10) = KiNdengeleko (P11), KiRuihi (KiRufiji) (P12), KiMatumbi (P13), Kiljgindo (P14)

Ruvuma (P20) = CiYao (P21), CiMwera (P22), CiMakonde (P23), CiMaciinga (M231), CiMaßiha (P25)

Northeast Coast Bantu (NEC) = Sabaki (G40 and E71, E72, E73); Seuta (G23, G24, G31, G34); Ruvu (West and east as shown above); and Pare (G21, G22) (Nurse and Hinnebusch 1993)

The following symbols can be used and/or interpreted interchangeably as follows, when they occur:

```
= IPA [j] (palatal semi-vowel)
              = IPA [4] (voiced palatal stop)
c, ch
              = IPA [c] (voiceless palatal stop)
sh
             = IPA [f] (voiceless palatal fricative)
              = IPA [n] (voiced palatal nasal)
nv
              = IPA [ng] (prenasalized [g])
ng
              = IPA [n] (voiced velar nasal)
ng'
mh
              = IPA [m] (voiceless bilabial nasal /m/)
nh
              = IPA [n] (voiceless alveolar nasal /n/)
nvh
              = IPA [n] (voiceless palatal nasal /n/)
nh, ngh
              = IPA [fi] (voiceless velar nasal /n/)
gh
              = IPA [v] (voiced velar fricative)
+1
              = IPA [+]
th
              = [PA [θ]
BS
               = Bantu Spirantization
DI.
               = Dahl's I aw
Glott
               = Glottalization
PAL
               = Palatalization
```

(ii) Definitions

Conservative language or variety: a language which has remained stable across time as to closely resemble its ancestor. KIXImbū is sometimes called 'a walking Proto Bantu of modern times' because of maintaining many features of its ancestor.

Core or basic vocabulary: lexical items in a language for concepts which are not context-dependent, for example, head, leg, water, eat, cry, you. I, mother, two, expected to be found

in all languages of the world as universal givens.

Cultural vocabulary: words in the lexicon of a language expressing concepts which dependent on place of domicile, human activity, need for detail, innovation, invention, often influenced by geographical, technological or economic context, in a continuum between the universal and the cultural, for example, horse, ship, aadvark, snow, cow, lake/sea/ocean, shoe, shield, most non-primary colours (outside red. white black) freeze, etc.

Dialect: a linguistic variety in a continuum of several varieties belonging to a larger unit, the language. Close mutual inter-comprehensibility enables the speakers of each variety to use their individual varieties without the need for an interpreter

Genetic language relationship: a connection of languages descended directly from an immediate proto language, depending on the level of analysis. For example, oRuHaya and iClGogo, or KintLaamba (F31) and KtSukuma (F21) are not genetically related because they do not branch from an immediate ancestor, although they are both Bantu. classified in Zone F.

Glottalization: change of CPlace feature of a sound to the glottal stop [?] or [h]. In our context, it refers to change of PB *p to hb. It suggests that the quality of the plosive was [ph], and it involved loss of occlusion and retention of the aspiration, as in SiSuumbwa, which is a regular diachronic phonological process.

Glottochronology: the next step in the use of Lexicostatistics for absolute dating of languages. Lexicostatistics uses the same formula and therefore assumptions about the nature of language.

Language: a speech variety linguistically distinct from other varieties whereby intercomprehension is severely limited, requiring an interpreter for meaningful communication to occur. Within the same language family or group like two Bantu languages, the boundaries between languages may be fuzzy, and therefore it is a relative term, while across other linguistic families and groups, like KiSwahlii and Iraqw, it is an absolute term because the differences of the languages are sharply defined. In this study, 'language' is sometimes used in this distinctive sense, while in others it is synonymous with 'dialect'.

Lenition: weakening of sounds in the strength hierarchy continuum from voiceless stops to complete sound loss as an inverse of the sonority hierarchy: voiceless obstruents → voiced obstruents → nasals → liquids → glides → vowels → total loss, or stop → affricate → fricative → approximant → zero (or stop → affricate → fricative → approximant → zero)

Lexicostatistics: a statistical analysis of vocabulary for relative chronology and grouping.

Loan, Loanword or borrowed word: a lexical item which is not native to a language but is adopted and/or adapted from other languages or dialects to become part of its own lexicon, never to be returned to the source language, contrary to the sense of terms 'loan' and 'borrow' which suggest returning or refunding the word after use.

Names of languages: while the traditional writing conventions have been maintained faithfully wherever it was feasible, some customary representations of the names were simply not correct. For instance, the name "Takama" is outh' was not used because in KiSukuma and KiNyamweezi, the phonemes $Id_i I M$ and I M exist independently from each other shall in some cases they may derive from each other as a result of processes like Dahl's Law where plosives become voiced as in I M - Id M -

Narrow Bantu: languages of Zones A to S according to Guthrie (1967-1967) and the justification of doing so, including the split of Zones D/E into D. E. J. Those languages which are unambiguously D or E, where applicable, are represented with one letter only, while those in-between use the two-letter convention of either DJ or EJ. These language varieties are like D28a (West Holoholo DRC), D28b (East Holoholo (Tanzania), D43 Nyanga, D44 oLuKoonzo, D42 calulande, DJ5 KiHuunde, DJ52 KiHaavu, DJ53 KiTembo, D54 KiBembe, DJ56 KaBwari. DJ66 KiRundt-KinyaRwanda (DJ6 KinyaRwanda, DJ62 KiRundt, DJ63 KiRundt-KinyaRwanda (DJ6 KinyaRwanda, DJ62 KiRundt, DJ63 KiRundt-KinyaRwanda (DJ6 KinyaRwanda, DJ62 KiRundt, DJ63 KiRundt-KinyaRwanda (DJ6 KinyaRwanda, DJ62 KiRundt, DJ67 KiVinza), Zone EJ (EID RuNyoro-LuGanda Group; EJ11 RuNyoro, EJ12 RuToro, EJ12 RuToro, EJ13 CulvyaRkole (GiHima), EJ14 RuCiga, EJ20 (RuNyambo, oKuHaya, RuZinza and RuKer@b6, EJ30 Luhya, EJ40 East Nyanza, E46 KiSionje, E50 Thasicu, E50 Chaza etc

Orthography and phonological representation: There are some standardized forms, mainly following the IPA system. But many pronunciations have been affected by writing conventions where it is difficult to trace a sound as originating from a regular sound change or from the writing system. For instance, the orthographies for t, t, ϕ , ϕ , ϕ , and ϕ were simplified to accommodate the simple typescripts and printers in use in Europe then. These simplified and sometimes distorted sounds became ie for t, u/o for t, ϕ for ϕ ; ϕ for ϕ , ϕ how for ϕ and mw for ϕ . This can be illustrated by the case of KIRmi whose dialects have a high frequency of $i\theta$ instead of the expected ϕ . Other examples include the case of country names like "Malawi" which should be $MalaaB_i$, or the famous Tanzanian towns located in ∂t 0 but with all t1 and t2 and t3 and t4 and t5 and t5 are some factors of the expected t5. Whose t6 are some famous Tanzanian towns located in t60 buttom all t6 whose t6 are t7 and t8 are t8 and t8 are t8 and t9 and t9 and t9 are t1 and t1 are t1 and t1 are t1 and t2 are t1 and t2 are t3 and t4 are t4 and t6 are t1 are t1 are t2 and t3 are t4 are t6 and t6 are t6 are t7 and t8 are t8 and t8 are t9 and t8 are t9 and t9 are t1 are t1 are t1 and t2 are t1 are t2 are t1 are t2 and t3 are t4 are t3 and t4 are t4 are t5 are t6 and t7 are t8 are t9 and t9 are t1 are t1 are t1 and t1 are t2 are t1 are t2 are t3 and t4 are t4 are t4 are t6 are t8 are t9 and t9 are t9 are t1 and t1 are t1 are t1 are t2 are t3 are t4 are t4 are t4 and t5 are t6 are t6 are t8 are t8 are t8 are t8 are t9 and t9 are t1 are t1 are t1 and t2 are t1 are t1 are t1 are t2 are t3 are t4 are t4 are t5 are t6 are t6 are t8 are t9 are t8

Palatalization: effect of front or high vowels as a secondary articulatory addition to other sounds, mainly on stops, making their place of articulation more palatal. This is contrasted with Bantu Spirantization which deletes the CPlace features of stops by replacing them with the [+consonantal] features of the superclose vowels PB *i and *u, making the fricatives (See Zoll 1995:542). In KISukuma and KINyamweezi, the conditioning vowels for palatalization are the superclose *i and *u (or *i and *u, are represented by Guthrie (1967-71). The end results of palatalization and Bantu Spirantization may be identical.

Place names in SSN, like β USukuma simply mean 'the land of KISukuma speakers' or 'Sukumaland'. β U- is the prefix signifying 'land of'

Prefixes in the names of languages and their varieties: The short forms commonly used in Bantu languages can be compared to the two figures for the dates when the computers started. Like the 2vk bug scare-cum-hoax, the fewest characters possible were used for economy of memory. In this study, the names are written in full with their prefixes. The use of the prefix Ki-, and its varieties Kee, KI, Ci-(Chi-), Shi-, Si-, or Ji-, to designate a language in the Bantu group of languages has always been ignored as redundant by earlier researchers (mostly European) of Bantu languages and linguistics who assumed and some still assume that the prefixes serve no purpose when rendered into languages like English. Some of the researchers who followed maintained that tradition of prefix omission. Because of this. proper phonological and orthographic records of languages and their varieties was not adhered to because of the limitations experienced by earlier researchers who imposed their perceptions and preferences. For example, they normally approximated most of the words, proper- and place- names to the closest alphabet they knew, normally the Roman alphabet adopted in KiSwahili writings. Thus, most of the language names were written in the KiSwahili format, with uniform prefixes even when they were not used. For instance, a language like SiSuumbwa is sometimes referred to as KiSuumbwa. One undertaking in subsequent research should be to correct such generalizations and refer to the languages by means of their proper Bantu names. The language varieties investigated therefore follow as far as possible, the phonological or orthographic format closest to how the native speakers pronounce them, unless space is not available, especially in tables.

Proto Bantu: reconstructed, hypothetical language thought to be the ancestor of all modern Bantu languages and their dialects.

Tone marks in words are avoided in most cases unless it is necessary for making a point related to tone. Tone marks are indicated mainly when introducing the names of the language varieties under investigation. Subsequently, the tones are not marked on those languages.

Traditional: accepted from earlier analyses without significant modification. Eg. traditional anguage labels and their boundaries: these are also synonymous with 'tribes' and the boundaries which were drawn more or less following the limits of each 'tribe' (See Map 1.3 from which Map 1.1 and 1.2 are based). Real life speech communities have no borders and hence languages have fluid boundaries which continuously interact with other languages.

Variety: any speech form, either a language or dialect. In the study the term is used to refer to either language or dialect or both.

Voiceless nasals: there are four, as counterparts of the voiced nasals, /m, n, p, g, h, g, h, g, also represented orthographically as mh, nh, nyh or ph, ngh or gh, where ny and ng represent p and g respectively. They are mainly found in K1Sukuma (F21) and K1Dakama (F22b).

Vowels from other sources use the 7-vowel system of the cardinal vowels of the International Phonetic Alphabet (IPA), which Guthrie (1967-1971) used: $\hat{\gamma}_i$, $\hat{\mu}_i$, $\hat{\nu}_i$, $\hat{\nu}_i$, e. e., a, aa, 0, oo, u, uu, μ_i , μ_i . We are using the convention $\hat{\gamma}_i$, $\hat{\mu}_i$, $\hat{\nu}_i$, $\hat{\nu}_i$, e. e., a, aa, 0, oo, u, Uu, μ_i (ike Nurse (1979a) for West Tanzania, Maganga and Schadeberg (1992) for KiNyamwezi who represent the sounds as $(\hat{\nu}_i$, $\hat{\nu}_i$, $\hat{\nu}_i$, $\hat{\nu}_i$, e., e., e., aa, o, oo, u, uu, μ_i with the requisite tones placed where relevant, possible or necessary. The recommended transcription by the International Institute of African Languages and Cultures for the seven vowels was $\hat{\gamma}_i$, e. e. a. 2. o.

Vowels (double): represent vowel length, equivalent to to /2/ or /"/ as in /a2/ or /a/ whether as contrastive or phonetically determined

Vowel reduction from 7 to 5 (7 > 5): Process of loss or merger in Bantu languages where the Proto Bantu vowel system of seven vowels, for instance, \hat{h} , e, e, e, o, o, u' is reduced to five, \hat{h} , e, e, o, u' or \hat{h} , e, e, o, u'. The process is associated with Bantu Spirantization, as explained in Chapter 3.

Dedication

For Masele Lindege [Ihalaangtii Poondejo, my father, Daudi Nyoloojii; Saayi [I wanalimenye Masele; jiUumbū: Taimbaalū MshamtIndt I JwanāGabādii TaambtItja Kulwa; Dooto [I wanaMasele; Naamala [I wanati]huungiulimë; Gigwā [I wanlpioöndejo; George Mattao; Saffari Sanka; Averil Ralph Pye; Milembe Masele; Hajjat Hawa Mwanaidi Mufuruki. Yod departed quickly before us, and we followed. A microcosm of humanity and eternity.

The tribes. For their tenacity to survive in the jungles. Hopefully they will maintain their languages a little longer while the notes are still being taken with this faded ink, slowly.

Copyright @ Balla F.Y.P. Masele 2001

CHAPTER ONE

INTRODUCTION

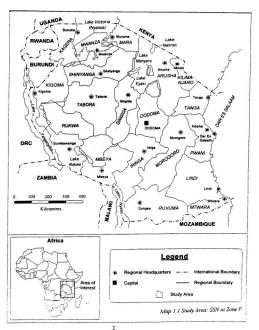
1.0 INTRODUCTION

This research describes the linguistic history of SiSuumbwa¹. KfSuküma² and KžNyamwėėzi (henceforth SSN). The three languages are part of what Guthrie (1967-1971) calls Bantu Zone F¹ (also known as West Tanzania) (See Map 1 and 2). The varieties investigated are ten. These include the following three from SiSuumbwa (F23): SiSidoombo (F23a), SiYoombo (F23b), and KiLoongo (F23c); three from KžSukuma (F21): KžmunaSuküma (F21a), GžmunaNtužrū (also GžnaNtužu) (F21b), JinaKžtya (also JimunaKžtya) (F21c); and four from KžNyamwėėzi(F22): KžNyamyėėmbė (F22a), KžDakama (F22b), SiGalagaanza (F22d) and KiKonoongo (F22e). Hitherto, SSN has been considered a valid genetic grouping by Guthrie (1967-1971), Nurse (1979a, 1999), Kahigi (1988), Ehret (1999) and

¹ The forms of the language names with long vowels have been adopted in order to record the names phonetically, rather than phonemically. The aim is to avoid ambiguities. For instance, K1Nyamweezi and JinaK11ya have long /e/ and /t/ both phonologically and phonetically, although they are erroneously written with a short /e/ and /t/ respectively.

² Another name is KtGwe, presumably, the original core of the KtSukuma language around which speakers from other speech communities amalgamated and later became known as KtSukuma speakers. KtSukuma is a recent name originally used by outsiders. It is paradoxical though, that the original name, KtGwe, is not used now, except as a cross-reference in archives, and many speakers do not even know of its existence. Its reference is also restricted to one location near Lake Victoria rather than the whole KtSukuma speaking area (See Guthrie 1967-11).

Guthrie's work on classification is a classic in Bantu linguistics. His system of classification is also the most popular, and hence he forms a point of departure for this study.



others. But there are reasons now to doubt this. Thus, the relationship of F23 to SSN will be investigated in detail. The labels "SSN" and "Zone F" are therefore only referential at this point.

Furthermore, Zone F contains not only SSN, but also has other languages and their varieties, the total list under our investigation of which is 22, as shown in *Tuhle 1.1*. For comparative purposes all those varieties' data are included in order to put SSN in proper perspective. Where appropriate, these other varieties outside SSN are discussed at some length.

In this study, a comparison is made between the SSN within Zone F to trace its phonological and lexical evolution observed across time, from as far back in history as we can go for each variety, to the present. As the variety's written forms are quite recent, or virtually non-existent, and since most of the varieties are still essentially oral, going back in time is only possible by examining the varieties by means of available synchronic data. In unwritten languages, it is usually necessary to obtain maximally accurate synchronic data for all known varieties and variations within varieties so as to make the projections into the past as valid as possible.

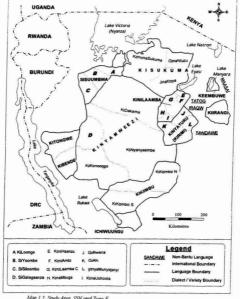
Table 1.1. Language varieties of Zone F (SSN is shaded)

"Language"	"Dialect"	"Language"	"Dialect"
F10 KìTôôŋgwê/ KiBêêndê	F10 KiBééndé ⁵		F24a KìKíímbò North
F21 KiSùkúmà	F21a KimunaSükuma	F24 KìKíímbò	F24b KìKíímbò South
	F21b GinàNtúzů	F25 iCiWààngà	
	F21c JinàKîîyâ	F31 KiniLaamba ⁶	F31a Kînáởshóòlá
F22 KiNyámwéézi	F22a KiNyànyêêmbê		F31b KřnřLáámbá (Central
	KžDákárná		F31c KiniHaanzù
	F22d SiGàlàgàànzà		F32a GìRwànà
	F22e KiKônôôngô	F32 KiRimi	F32b GiÅhi
F23 SiSúúmbwá	F23a SiSilóómbó		F32c yînyàMûnyiŋànyi
	F23b SiYoombé	F33 KiiRáŋgi	
	F23c KiLóòngó	F34 KèèMbùwè	

⁴ "Language" and "dialect" are used in their imprecise form to mean both linguistic and socio-political entities, "dialects" being subordinate to the superordinate. "language". As shown in Map 1.2 below, the language varieties written in italics are dialects. Where space was not sufficient, a key using arbitrary letters from A to I was used to represent them.

⁵ The group label of F10 was taken rather than F11 KiTööngwe and F12 KiBeende. Only one language was used with the assumption that the two are in fact one language, as explained below.

[&]quot;KînaNdaago , KînaMbûga, Kîn'lambî are not discussed



Map 1.2 Study Area, SSN and Zone F.

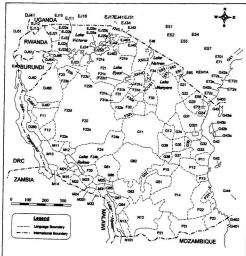
The geographical locations of the varieties under investigation are contiguous, found mainly in Mwanza, Shinyanga, Tabora and Rukwa Regions (See Map 1, 2 and 3). The primary data were first collected in Tanzania in the 1970s. The informants wrote their responses in the questionnaires given to them. In order to improve their quality, the data were revised by audio recordings in 1999 with the aim of including as accurately as possible not only the segmental tier comprising of consonants and vowels, but also the tonal tier showing all the surface tones heard for each variety. The tonal tier was especially included in this revision of the data as a resource for future use by other researchers who might be interested in tonology. In this study, however, the tonal aspect is only mentioned in passing where relevant because it is a vast research area in its own right.

1.1 THE PROBLEM

1.1.1 Background of the problem

Dead languages as linguistic artefacts are often viewed as cultural resources only with insignificant practical utility. However, the importance of all languages without exception remains multidimensional when they are extant. For instance, the internal dynamics of language change like the effect of Tanzania's language policy on ethnic community languages is well known (Rugemalira 1994;2-6, Rubagumya 1997, Mekacha 1997, Mkude 1999) and ceases to be an academic question only. Many of the more than 120 ethnic community languages and dialects in Tanzania are going to disappear without trace if a concerted effort is not undertaken now to record what data are currently available, not only in languages nor to not undertaken now to record what data are currently available, not only in languages nor service. se, but also in other fields where indigenous-based knowledge is accessible through language only. Nishida and Uehara (1981:109) observe this with regard to KiToʻongwe plant names, that such a culture was vanishing rapidly and a record of indigenous-based knowledge like ethnobotany was urgently required. Some dialects are going to have very few speakers, while a few may have none left not far in the foreseeable future. The language varieties under such real threat include some in SSN. For example, KiLoongo's status is not known, because only occasional mention is made in non-linguistic literature, without any clear idea of how many speakers are there now, and where they live. Others in this category include F31c and F34, with only a few hundreds speakers remaining, while the environment for ethnic languages thriving is so hostile.

In addition, the impact of globalization as a powerful external influence south of Lake Victoria in the long run is likely to further shrink the languages of ethnic communities, both geographically and functionally, while making others extinct. This phenomenon is not confined to SSN alone. As a political, economic as well as a cultural resource for disseminating knowledge and information, these ethnic community languages and their varieties play a central role in the preservation and transmission of culture at grassroots level. Before this language attrition and/or extinction happens while we are still at the threshold of major changes in the area, it is imperative to start studying and recording these languages before it is too late.



Map 1.3 Some language varieties of ethnic communities in Tanzania and E. Africa

Key to Map 1.3. ('odes and their languages (after Guthrie's scheme)

Code	Language	Code	Language	Code	Language
D25	KıLega	EJ31g	LuBuya	E54b	KiCuka (E57?)
D28	KiHoloholo	EJ32a	LuWanga	E61	KiRwo/KiMeru
D28b		EJ32b	oLutsotso	E611	KiSiha
D41	oLuKoonzo	EJ32c	LuMarama	E62	KiChaga
DJ51	KiHuunde	EJ32d	LuKisa	E62a	KiMachame
DJ61	KinyaRwanda	EJ32e	LuKabarasi	E62b	KiWunjo
DJ62	KiRundi	EJ32f	LuNyala	E62c	KiRombo
DJ63	iKiFuliiru	EJ33	LuNyore	E62d	KiWoso (KiBosho)
DJ64	KiShuβi	EJ34	oLuSaamia	E62e	KiSeri
DJ65	KiHangaza	EJ34a	LuXaayo	E62f	KiKeni
DJ66	iGiHa	EJ34b	LuMarachi	E63	KiArusha
DJ661	KiUjiji	EJ34c	oLuSonga	E64	KiKahe
DJ67	KiVinza	EJ35	LuNyuli	E65	KiGweno
EJ11	RuNyoro	EJ41	LuLogooli	E701	killwana/Malako
EJ12	RuTooro	EJ41a	Lwidaxo	E71	Κiφokomo
EJ13	oLuNyaŋkole	EJ41b	Lwisuxa	E72	KiNyika
EJ14	oLuCiga	EJ41c	oLuTiriki	E72a	KiGiryama
EJ15	LuGanda	EJ401	Gifgoreme	E72b	KiKauma
EJ16	oLuSoga	EJ403	KiSuba	E72c	KiConyi
EJ17	oLuGwere	EJ404	SiZaki	E72d	KiDuruma
EJ21	oRuNyambo	EJ42	eKiGusii	E72e	KiRabai
EJ22	oRuHaya	EJ43	GiKuria	E72f	KiRibe
EJ22a	RuZiba	EJ44	lkeZanaki	E72g	KiJibana
EJ22b	RuHamba	EJ44b	Ikilsenyi	E72h	KiKambe
EJ22c	Runyalhangiro	EJ44c	KiNdali	E73	KiDigo
EJ22e	RuHyoza	EJ44d	KiSiora	E74	KiTaita
EJ23	RuZinza	EJ44e	KiSweta	E74a	KiDaßida
EJ24	RuKereße	EJ44f	KiRoba	E74b	KiSagala
EJ25a	CiJita	EJ44g	Kelkizu	F11	KiTongwe
EJ25b	KiKwaaya	EJ44h	GiRango	F12	KiBende
EJ25c	KiReki (KiRegi)	EJ44k	KiSimbiti	F21	KrSukuma
EJ25d	CiRuri	EJ44I	KiShaashi	F21a	KımunaSukuma
EJ25e	KiKara	EJ44m	KiHacha	F21b	GınaNtuzu
EJ30	Luhya Masaaßa	EJ45	KeNata/Ikoma	F21c	JinaKırya (F22c)
EJ31ab	LuGisu/LuKisu	E46	KiSonjo	F22	KıNyamweezi
EJ31c	Lußukusu	E51	Gikoyo	F22a	KıNyanyeembe
EJ31d	oLuSyan	E52	KtEmbu	F22b	KıDakama
EJ31e	oLuTachon	E53	KiMeru	F22d	SiGalagaanza
EJ31f	oLuDadiri	E54a	KiTharaka	F22e	KiKonoongo

Code	Language	Code	Language	Code	Language
F23	SiSuumbwa	G40	KiSwahili	M15	iCiMambwe
F23a	SiSiloombo	G41	KiTikulu	M201	iCiLambya
F23b	SiYoombe	G41a	KiTikulu (Socotra)	M21	iCiWanda
F23c	KiLoongo (EJ10/20)	G41b	KiMbalazi	M22	CinaMwanga
F24	KıKıımbu	G42a	KiAmu	M23	ifiNviha
F24a	KıKıımbo N	G42b	KiMvita	M24	ifiMalila
F24b	KıKıımbu S	G42c	KiMrima	M25	ifiSafwa
F25	1CtWaadda	G42d	KiUnguja	M31	tKtNvakvusa
F31	KınıLaamba	G42e	KiMalindi	M32	CiNdali
F31a	KınaUshoola	G42f	CiFundi	M41	CiTaabwa
F31b	KınıLaamba C	G42g	Cwaka	N101	KiNdendeule
F31c	KınıHaanzu	G42h	CiVumba	N102	KiNindi
F31d	Kınlambi	G42i	Nosse Be	N11	CiManda
F31e	KınaMboga	G43	KiPemba	N12	CiNgoni
F32	KıRımi	G43a	KiPhemba	N13	CiMatengo
F32a	GIRwana	G43b	KiTumbatu	N14	CiMpoto
F32b	GiAhi	G43c	KiMakunduchi	N15	CiTonga (CiSiska
F32c	yınyamunyiŋanyi	G43d	KiMafia	P11	KiNdengereko
F33	KiiRangi	G44	KiKomoro	P12	KiRuihi/Rufiji
F34	KeeMbuwe	G44a	ſiNgazija	P13	KiMatumbi
G11	CiGogo	G44b	KiNjuani	P14	Ki∏gindo
G12	CiKagulu	G44c	KiMwani	P15	KiMbunga
G21	KiTuβeta/Taveta	G44d	KiMaore	P21	CiYao
G22	CiAsu/Casu/KiPare	G51	KiPogolo	P22	CiMwera
G23	KiShambala	G52	KiNdamba	P23	CiMakonde
G24	KiBondei	G61	eSiSangu	P231	CiMaciinga
G31	KiZigula	G62	eKiHehe	P24	CiNdonde
G32	KiNghwele	G63	eKiBena	P25	CiMaßiha
G321	KiDoe	G64	KiPangwa	P31	iMakua
G33	KiZalamo	G65	KiKinga	X	Non-Bantu
G34	KiNgulu	G66	KiWanji	XCUS1	Iragw
G35	iKiLugulu	G67	KiKisi	XCUS2	Mbugu
G36	KiKami	M11	iCiPimbwe	XKHO	Hadza
G37	KiKutu	M12	KiRungwa	XNIL1	Dholuo
G38	CiVidunda	M13	CiFipa	XNIL2	II-Maasai
G39	KiSagala	M14	CiLungu	XNIL3	Datog*

XCUS = Cushitic, non-Bantu XNIL = Nilo-Saharan, non-Bantu

*Not all dialects, languages, or language groups have been included, because of either lack of space or fragmentary information, although most languages are represented.

1.1.2. Statement of the problem

Most Bantu linguistic varieties are still undescribed and information about them is lacking (Polomé 1980:5; Kahigi 1988:6, 7; Brenzinger, Heine, & Sommer 1991:24, Nurse 1995b:467; 1999:10, 11). Uncovering their historical roots in a more systematic way using a technique like the Comparative Method, described below, will contribute towards a better understanding of the larger groups which they form.

1.1.3. Research Objectives

The study has one aim: tracing the linguistic history of SSN using phonological and lexical data, and relating that history to that of neighbouring languages. This involves using the two assumptions of comparative reconstruction: the relatedness and the regularity hypotheses. The relatedness hypothesis assumes that close similarity between two or more varieties can be best explained by assuming their historical relatedness and derivation from a single protoform. It also assumes that their linguistic histories can be explained by examining the phonological, lexical or morphosyntactic differences between them. The regularity hypothesis states that it is possible to reconstruct a protolanguage on the assumption that sound changes in languages are regular and predictable, and any irregularity caused by internal or external factors like contact with other languages or varieties can be accounted for.

While it is possible to arrange the varieties in relative chronology as their vocabularies depart in form and meaning from the protolanguage, it is difficult, if not impossible to determine a precise unit of absolute chronology, e.g. of years, decades, centuries, or millennia to such classified members of a category if no other supporting external evidence like specimens of material culture is available to corroborate those dates (Worsley and Rumberger 1949.46; Nurse 1997.366).

Thus, the objective of this research can be summarized as the description of the evolution of the phonological and lexical aspects of SSN. From the results, a possible classification of the varieties is made based on the historical interpretation of the observed patterns and their implications for Zone F in general, and for SSN in particular.

1.1.4. Significance of the problem

As a single unit, Zone F or West Tanzania in general, and SSN in particular has not been investigated systematically enough apart from a few studies, mainly by Nurse (1979a, 1999). Ehret (1984, 1994, 1999) and the seminal but general work by Guthrie (1967-71) on the whole of Bantu. This study is therefore significant in three ways. First, it is the first of its kind to compare features of these 22 varieties at once. The study provides linguistic data for use by others in genetic classification and/or any other purposes. For instance, F21 is traditionally formed by the F21a, F21b, and F21c varieties while F22a, F22b, F22d and F22e belong to F22. On the other hand, F21 and F22 are highly intercomprehensible, implying that they might have undergone more or less the same innovations from a common ancestor not far back in the past. The data highlight the questions of whether it is valid to view F21 and F22

as discrete groups instead of one, and whether it is therefore necessary to adjust the internal sub-groups according to the patterns revealed by the data.

Secondly, the research is needed as a contribution to closing the gaps between the lower and higher levels of linguistic analysis in Bantu, namely, from today's varieties (dialects and languages) to Proto-Bantu. In the hierarchy of the Bantu linguistic tree, Proto-Bantu is at the highest level and is much discussed, whereas most intermediate proto-nodes have not been reconstructed and these levels are numerous⁷. The lower varieties are the only existing forms of a language, as a bridge to higher branches in the linguistic trees. Indeed, intermediate levels of well-studied languages, like those of the Indo-European phylum, still have gaps (Nurse 1995a:71). The challenge to do even more work in Bantu is greater.

Lastly, the study of the Bantu languages at the beginning of the 20th century was utilitarian rather than merely academic, as summed up by one of the earliest and greatest scholars of Bantu, Meinhof (1932: Preface), that Bantu was playing "such a great part in colonisation, trade and missionary work in the continent of Africa." Instead of being externally oriented along the lines mentioned by Meinhof, this study aims at contributing a further understanding for the benefit not only of outside scholars and other interested parties, but particularly, as a tool for the speakers of those languages themselves to understand their past, examine their

⁷ Although there is still no consensus on the organization of the hierarchies from Proto-Bantu to today's varieties, one common version is: Proto-Bantu+estern Bantu+Proto-Zone F+Proto-KiSukuma +JinaKIIva

present and think about their future in a different light.

1.1.5. Limitations of the study.

Five limitations characterize the current study. Firstly, only ten varieties from SSN are investigated; namely, SiSilóòmbó (F23a), SiYòòmbó (F23b), KiLòòngó (F23c), KhmunáSukumá (F21a), GhmunáNtúzú (also GhaNtúzú) (F21b), Jinákltyá (F21c), KiDakámá (F22b), KiNyányéémbó (F22a), KiKonòòngó (F22e), and SiGalágáanzá (F22d). The rest of Zone F languages and varieties are not discussed in great detail except where relevant.

Secondly, only eight proto sounds are used to illustrate the history of SSN rather than the entire phonological system of Zone F. These sounds are PB *p. *b. *t. *d. *c. *j. *k. *g. The Proto-Bantu phonological inventory is composed of the reconstructed consonant phonemes shown in *Tuhle 1.2*, after Guthrie (1967-71)*. The vowel phonemes are *j. *i. *e. *a. *o. *u. *y. long and short. The eight target sounds show more clearly five phonological developments addressed in the thesis: Bantu Spirantization, 7 > 5, Dahl's Law, glottalization and voiceless nasal formation. Sound changes are best shown by plosive sounds rather than by others like vowels, or nasals since the latter have chanced very little, if at all. This aspect

[&]quot;Adjustments have been made in the representation of some phonemes, especially vowels. Instead of Guthrie's "i, "u, "e, "a, "o, "u, "u we adopted the following convention for them, which is also used by Maganga and Schadeberg (1992) and Batibo (2000) and in their other publications: "i, "I, "e, "a, "o, "u, "u

and the next are addressed in detail in Chapter 3.

Table 1.2 Proto Bantu consonant phonological inventory

	Bilabial	Alveolar	Palatal	Velar
Plosive	*p, *b	*t, *d	*c, *j [ɟ]	*k, *g
Nasal	*m	*n	*ny [ɲ]	*9
Prenasalized	*mp, *mb	*nt, *nd	*лј, *лс	*ŋk, *ŋg
Semivowel			*v	

Thirdly, another closely related limitation concerns the area of phonology where only three major aspects are covered: vowel systems, especially 7 vowel to 5 vowel reduction (7 > 5); Bantu Spirantization (BS), especially as related to 7 > 5; and Dahl's Law (DL). Other processes such as glottalization and voiceless nasal formation are added as secondary aspects.

Fourthly, the discussions are based on an original list of 1036 lexical items rather than on an unlimited number of linguistic data from the grammar, or entire vocabulary of Proto Bantu or Zone F (See Appendix 1). The list used contains both common core and cultural vocabulary. While every care was taken to transcribe the data as accurately as possible, some items were not usable for several reasons, including inaccurate transcription due to mishearing, repetition of concepts or words in the original list which resulted in deletions that in turn reduced the final total of the words used: misinterpretation of some questions asked

in the questionnaire by both the researcher and informant resulting in giving unexpected, and therefore irrelevant responses. These shortcomings were however few.

And finally, only the segmental level is fully treated, while the tonological systems of the varieties are not part of this study, since such an inclusion would make the work overly ambitious

1.2. RESEARCH OUESTIONS

The following questions guided this research. They take into account some of the questions raised by Nurse (1999:32) as a direction for future research in the area. While some are empirical research questions, others are social in nature:

- (1). What are the concrete criteria for the classification of Bantu languages into zones? Are they historical, areal or typological?
- (2). How many of the criteria mentioned in number (1) above should a language or variety possess in order to qualify for membership into a zone?
- (3). What rigorous features define Zone F, excluding all other zones?
- (4). Within Zone F, what features distinguish one group of languages from others in exclusion of all others, justifying the isolation of those groups?

1.3. METHODOLOGY

Two methods are employed. Firstly, primary lexical data from field research was used as collected by Nurse and Philippson in the 1970s and which I revised in 1999, as explained below. The procedure is divided into three components. The first component is a general overview of the sound systems and vocabularies of Zone F languages as described in the above. The features that distinguish Zone F from the rest of Eastern Bantu, modelled after Nurse (1979b) are identified. The second component identifies the phonological and lexical differences and similarities between Zone F and SSN as a subgrouping within Zone F, while the last analyses the phonological as well as the lexical differences and similarities inside the SSN varieties. The last part forms the major focus of the study. The phonological and lexical parts form chapters of their own, chapter three and four respectively.

Secondly, secondary data is obtained by documentary review of other linguistic sources. Oral and recorded folklore and folk histories are also examined when available, and their merit appraised as legitimate sources of history and knowledge. In addition, archaeological and historical sources are also consulted as they relate to (historical) linguistics.

1.3. 1 Data collection

From an original list of 1036 words, I omitted 40 or so words in discussions for various reasons. These are shown with an asterisk in Appendix 1. This list of words was originally used by Guthrie (1967-71) and modified by Polome (1980). It was further modified again by

Nurse and Philippson in the 1970s when they compiled a general list of 1036 words for the Bantu languages of East Africa (Nurse: personal communication). Where there were no apparent cognates or there was an obvious error in the datum, the lexical item was not used in comparisons. This reduced considerably the total number of usable words. The shortcomings in the data were similar to those experienced by Guthrie (1948 (1967); 5, 8). While in Guthrie's case the lexical items were collected, recorded and copied/recopied by others, using orthographies familiar to the research assistants rather than accurate phonological or phonetic versions of what exists in the varieties in question. I recorded all the data myself using mainly one informant for each variety. Whenever an informant got stuck. it affected the quality of the data significantly, especially because some informants found the questionnaire rather long, with many unfamiliar words and concepts. On the other hand, while I speak one of the SSN varieties, JinaKIIya, I was not conversant at all with some of the dialects. The informants' responses were relied upon in this case, some of which would qualify to be called second-hand. The use of data which is second- or third-hand, and therefore of indeterminate reliability, leads to conclusions which are essentially tentative.

1.3.1.1 Fieldwork

Fieldwork involved having one tape recorder with two microphones for the researcher and the informant. The taping took four months, from March 1999 to July 1999. The questionnaire was 28 pages long, taking an average of three hours and 14 minutes, with a range of 2 to 6 hours per informant.

1.3.1.2 The informants

The informants were aged between 25 and 55 years, largely trilingual in their ethnic community language. KiSwahili and English so that there was no need for interpreters. A few were bilingual in KiSwahili and their ethnic community language. Occupational groups included University of Dar Es Salaam students and professors, employees in the government and private sector and peasants. Each informant answered the questionnaire alone except for F24b, F21c, F24a, and F32a dialects where two of them helped each other. Where there were two informants working together, any disagreements were useful and significant, for they helped clarify fuzzy areas and hence improved the data. In addition, out of the total 26 informants, only three females volunteered for the interview. One significant observation of this gender difference occurred with a few items which reflected a division of labour and therefore experience. Terms for hunting, wild animals and foods, for instance, drew confident answers more readily with people who interacted more with the named environment. Such items were few and their significance minimal, since knowledge of items in one area was compensated by ignorance over another item.

1.3.2 Research instruments

The list of 1036 words was printed, starting with English glosses arranged in alphabetical order, followed by the KiSwahili ones as illustrated in Tuhle 1.3. Guthrie's original list was rearranged where an item for a word was available, to match the English glosses. The serial numbers found in Guthrie (1967-71:118-145, Part 1, Volume 2) were retained for easy reference, just as Nurse and Philippson's list retained its serial numbers for the same reason, as shown in Table 1.3.

Table 1.3. Sample data used to elicit responses

Serial No	English	KiSwahili	Zone F Variety
133"	abdomen, stomach, belly	tumbo	
495	abscess, boil	jipu (pl. majipu)	
786	abundant	tele	
786a	abundant/abound	tele	
571	abuse, insult	(ku)tukana	
252	abuse	(ku)amba	
809	accustomed (get)	(ku)zoea	
274	act (vt)	(ku)tenda	
229	add up	(ku)jumlisha	
927	adjacent (be); border (vi)	(ku)pakana	
662	adze, carpenter's	tezo	

A copy of the questionnaire was given to each informant. During the interview, the researcher had his own copy, and he read out the list to the informant who responded orally through a microphone s/he held in her/his hands. The researcher held another for his own, and they recorded their turns as they spoke, without having to share one microphone. The lists were read in either language, although the majority of the informants preferred them read in KiSwahili. Many of the informants had demanded that they take the questionnaires home to familiarize themselves with the content for some time before the actual interview. During the time of familiarization, some even volunteered to write their responses in the blanks, and

[&]quot;These serial numbers refer to Nurse and Philippson's list

that subsequently speeded up the interviews, because they just read out the responses, stopping only when an ambiguous word, an unknown item, an inappropriate or unacceptable response was heard.

In the final version of the word-list after the interviews were completed, the KiSwahili column was removed and the English glosses simplified reference to items

1.3.3 Data analysis

When the tapes were ready, 69 in all, the work of transcription started. A Sanyo TRC9010 transcriber was used. First, the data was transferred from the audio tapes by listening and writing them onto paper using IPA symbols for each of the 22 language varieties for every 28-page questionnaire. That made a total of 616 pages of A4 paper, comprising a total of approximately 22,792 words. The transcribed data were then entered into a word processor with the surface tone markings for every word.

Comparisons of the reflexes of the 8 target sounds, namely PB *p. *b, *t, *d, *c, *j, *k, *g, were then made. The reflexes of each sound in each language variety was observed and recorded. The totals of these reflexes for each sound were then added to see their frequency and distribution in each of the 22 varieties. Exceptions to the regular patterns were noted as irregular requiring an explanation. The regular reflexes formed the basis for finer internal organization of the dialects in SSN and in Zone F. Patterns were noted and conclusions

drawn.

These phonological patterns were examined to evaluate three major and two minor phonological processes. First, the 7V and 5V distinction in SSN and Zone F was done by identifying all relevant words with the target vowels. These vowels are mainly /t/ and /t//, which usually merge with /i/ and /u/ respectively in all 5V languages. The cases were counted and then tabulated. Secondly, Bantu Spirantization (BS) involving the superclose PB *j and *y vowels isolated BS and non-BS languages in SSN and Zone F. BS languages had spirants in that superclose vowel context, while non-BS ones did not show any change of reflex from the non-superclose vowels. Thirdly, Dahl's Law involving two adjacent syllables with voiceless obstruent onsets was examined. If the first obstruent was voiced, DL was confirmed, and the DL and non-DL languages identified.

Glottalization as a secondary focus area treated PB *p and its /h/ reflex. The distribution of glottalization cases was noted and the language varieties involved identified. And finally, voiceless nasal formation involved prenasalized voiceless consonants. In languages displaying this pattern, the prenasalized consonants changed into homorganic voiceless nasals when the CPlace feature was deleted from the consonants while retaining the laryngeal feature [-voice]. The results in each of the five areas appear in Chapter 3.

The second part involving lexical data to derive quantitative and qualitative evidence for the

validity of SSN and Zone F appears in Chapter 4. Quantitatively, lexicostatistics was used. A list of 100 words was taken from Nurse (1979a) the majority of which were in the 1036 word list. Twenty eight language varieties in all were used, the target 22 and 6 more outside Zone F as control cases. Cognates were identified for each pair of languages, the number shared between them noted and their percentages tabulated. Finally, a tree was constructed from those percentages. These percentages formed the nodes where linguistic branches diverged or converged. Conclusions were drawn based on which varieties qualified for entry into the tree. Some of these varieties were excluded from the tree because a cut off percentage had to be made.

Qualitatively, the vocabulary from the 1036 word list was examined for cases of shared lexical innovation by unique invention, borrowing or areal influence. Innovation is a measure of genetic relationship.

The overall patterns from all areas of the analysis were finally evaluated for making conclusions about SSN and Zone F generally.

1.3.4 Problems in data collection

While the data collection exercise was expected to be smooth and straightforward, as it was a revision of an existing, ready-made list, the following major observations might prove useful in avoiding similar pitfalls in future data collection:

1.3.4.1 Ambiguous words used in the English and KiSwahili glosses.

Sometimes it was difficult to ask or elicit the expected words:

(a) because the informants had several words at their fingertips and they were not sure which one(s) the researcher wanted. For instance, an entry like 'to harvest' and kurunu in KiSwahili was extremely ambiguous when a farming community member was asked. The natural question was usually 'To harvest what?'. With such single-meaning words in either English or KiSwahili and their several senses in the other varieties, a general term of 'harvesting' in many of Zone F languages was not available. A choice of a lexical item by an informant in such ambiguous concepts would tend to automatically skew the results because a uniform lexeme would depend only on chance where as many as ten possibilities were available. This situation is illustrated clearly by JinakStlyā, just as it would be in the other varieties where farming is the mainstay of their subsistence:

- (1) "to harvest" kuvuna
 - (a) 'maize' gờ-bùk ớớ là
 - (b) 'groundnuts-peanuts' gờ-kùlà, gờ-tônă
 - (c) 'cotton', 'tamarind fruit' gờ-yòβà
 - (d) 'groundnuts', 'hardnuts' gù-kula
 - (e) 'millet' gờ-gèsà
 - (f) 'sweet potatoes' gờ-sììmbà,
 - (g) 'beans (Phaseolus vulgaris)' gò-sòlà.

- (h) 'vegetables to store for the dry season' gr-hbibla
- (i) 'second harvests after major harvests, gleaning' gờ-pờờmbà
- (i) 'baobab fruit' gờ-saànzá
- (k) 'simsim or sesame' gữ-têmã
- (l) 'lentil' gờ-dùbờlà
- (b) when an informant chose one context in which a word could be used, leaving out all the other contexts. To casual observers of the data, a non-cognate word appearing in a column might suggest that the variety in question had innovated or no cognates like the other varieties in the group could be found, and hence that variety or the word had a different history. For instance, an item like 'to be quiet', kn-nyumaca in KiSwahili, may be ambiguous to a speech community which distinguishes between the quietness of humans versus that of non-humans. In JinaKityā, 'to be quiet' can be gô-hiùmôth (for people who were talking, then stop), gô-leemheelat (for winds or animals, which were previously making noise), gô-fulikid (for a person who was crying), gô-chiliéid (for a noisy, heavy rain).
- (c) when a choice was required between formal versus informal words, the question was 'which style was required to use for research purposes especially with oral languages with no established canons for standard usage? To an informant, any word would be produced here.

1.3.4.2 Informant's expected linguistic competence

Perhaps due to Tanzania's multilingual setting where KiSwahili tends to be dominant, some informants tended to forget some words more readily than others. How would one treat such cases of frequent and long silences? Would one engage other competent speakers or would one just continue with many blank spaces left in the questionnaires as a consequence? Blank spaces therefore sometimes imply that no item was found in the language, while it might in fact only mean that the informant forgot it and there was no time to go back to record the recalled word.

1.3.4.3 An informant refusing to answer some questions

For cultural reasons, understandably, some informants refused to tell a word because it was a taboo and embarrassing. For words like 'testicle, sperm, sexual intercourse, and penis', euphemisms were used instead of the referential ones expected. Respectively, the euphemisms favoured included equivalent metaphors like 'bells' (testicles), 'water of males' (sperm), 'sleeping' (sexual intercourse).

1.3.4.4 Desirability of trilingual speakers

This requirement was the most desirable since some words were only clearer even to the researcher if they were explained in both KiSwahili and English so as to be translated by the informant in his/her third language. For instance, some of the palm trees mentioned in the questionnaire were not known to the researcher himself in all the languages he knew. In other cases the KiSwahili word was different in meaning from the English gloss. For instance, while the entry for KiSwahili was *indexi* as particular kind of rat, for English it was only 'kind of rat'. On its own, that English noun phrase was almost meaningless because any type of rat fitted. When asked by the informants to be specific, the researcher himself did not know which rat was being talked about. Another example had *chungu* in KiSwahili and 'small ant' in English. The English gloss was again almost meaningless because there are many types of small ants. In addition, *chungu* also means 'bitter', or 'heap' in KiSwahili. So informants reading one gloss only would respond differently from both those who preferred the other language, or who used both.

Sometimes words could not have equivalents in both the ethnic variety and KiSwahili, although it might be clear in English, and vice versa. For instance 'number' is mrungu, or mulangu in KiSwahili. But that word is no longer used in KiSwahili, and many languages have no such word. A monolingual informant would not grasp what the researcher was talking about in such cases.

With the names of mammals and birds especially, most informants were not sure which animal or bird was being referred to, because most of the informants had never physically seen the animals, while others have seen them, but were not sure which name to attach to which animal. To save face and to appear committed to the interview, some informants did not like to admit that they did not know. They said something, sometimes so obviously unacceptable

even to the researcher who spoke a different language because of having some understanding of some of the common names, that it was almost funny. This reflects what Whybrow (1948:56) observed when he was compiling a list of bird names in βösukümä (Sukumaland):

There is rather a tendency for Sukuma, and doubtless other tribesmen, to invent names on the spur of the moment for the sake of pleasing the enquirer. A regular informant is soon cured of this, but one must be on guard with the casual.

1.3.4.5 Rejection of some words during data revision.

The original data used in this study were taken from 12 language varieties. The second version included ten more which were obtained by differentiating the varieties within groups originally represented with fewer members or viewed as mono-dialectal as in KiniL aamba (two additional dialects). KiKifmb0 (one additional variety). SiSuumbwa (two more varieties), and KiNyamwéézi (three more varieties). While KiRimi had originally two varieties, another was added. On the other hand one variety was completely new to the list, and this was iCiWônno.

The major problem in this revision and update exercise was that some words found in the original list were rejected as alien in the informant's language. In other cases, some new words were added, while in other instances the words expected were not known in the language (at least to the informant). Since the original data did not include tones, the whole original list was not incorporated into the new one apart from its use during elicitation and confirmation of whether a word was available for the concept being asked, or whether the earlier words supplied were acceptable. Surprisingly, some of the words were rejected as improper, either because they did not belong to the language, or their meanings were simply wrong. But this alone did not guarantee that all the new words were acceptable in the contexts given. Thus, caution is to be exercised while analysing the words, for errors of choice by informant, perception and recording by the researcher might show up in the data and skew or taint the results.

1.3.5 The methods

The comparative method was employed in Chapter 3 in analysing the phonological development of SSN and Zone F generally. Part of Chapter 4 employed lexicostatistics in establishing the internal relationships within SSN and Zone F as a quantitative measure, while the remaining part used the comparative method again to trace the qualitative similarities and differences in the target varieties and surrounding languages of eastern Africa.

1.3.5.1 The comparative method

1.3.5.1.1 The procedures of the comparative method

The comparative method in Bantu was first applied consistently and to a large scale by Bleek. Meinhof, Dempwolf, Bourquin and Greenberg. Guthrie (1962a, 1967-71, 1970) acknowledges those predecessors generally for their inspiration in his own work in Bantu (Guthrie 1962a.2). Others who followed the pioneers elaborated and continued to refine and apply the method, for example, Lestrade (1948), Meeussen (1973); Bynon and Mann (1973); Nurse and Hinnebusch (1993). Nurse 1999), among others. As Meinhof himself had

said when utilizing the method, it is applied as it had worked in Indo-European languages (Meinhof 1932:21, Guthrie 1962a:2)

Guthrie (1962a:4-23) characterizes his version of the procedure as involving two stages, as Meeussen (1973:16-18) also elaborates:

- (a) Every rule formulated is to be free from exceptions.
 - (i) comparative series: setting up completely regular sound correspondences.
 - (iii) starred forms: symbolizing the proto-phonemes to represent the sound correspondences obtained in (i) as underlying forms, (although strictly speaking, protoforms are not underlying forms, although they are often identical).

This can be illustrated from Zone F, thus:

(1) ashes *-bu

F21a ì-βû/mà-βū	F23a mà-vú	F31a mà-û	F34 yú-ú
F21b-βű/mä-βű	F23b i-vú/mà-vú	F31b mà-ù	F33 Ì-vù
F21c Ì-βú/mà-βù	F23c í-zù/mà-zù	F31c mà-ù	
F22b i-βú/mà-βú	24b má-ù	F32a mà-ù	F10 (i/ma-füúndú)
F22d i-vú/mà-vú	24a má-ù	F32b mà-ù	F22a (mà-tùùndè)
F22e i-wú/mà-wú		F32c mà-ù	F25 (i-twiitwi)

(b) from the cognates obtained in (a) by the sound correspondences, it is possible to assign phonetic values to the proto-phonemes and classify the comparative series into well-defined categories of reconstructions, although this assignment is not easy.

1.3.5.1.2 The aims of the comparative method

As can be observed from the brief description of the comparative method, the aims of the procedure are to establish genetic relationships between languages claimed to descend from a single ancestor. This assumes that languages are monogenetic. Guthrie (1970:23) himself was aware of this monogenetic assumption of the method as he antly noints out:

It is the total collection of material of this kind that gives rise to the presumption of some kind of genealogical relationship among the various Bantu languages, but it would be an oversimplification of the problem to decide outright that therefore all the Bantu languages should be treated as direct descendants of a single ancestor language. It may not be out of place here to consider for a moment the significance of a family tree as a representation of the inferred prehistorical development of various languages from a common ancestor. Sometimes several languages are shown as all being genealogically related to a single parent language, but this could in fact be a considerable oversimplification. [Emphasis added].

With this caution sounded by Guthrie in mind, it is only becoming to look at the limitations of the comparative method, albeit very briefly.

1.3.5.1.3 Limitations of comparative reconstruction

Like all methods in both natural and social sciences, the comparative method does not represent a panacea in historical and comparative linguistics, able to handle all questions of application and interpretation arising theoretically or in the field in relation to Bantu, and indeed, to linguistics in general. While the method is practical and useful, criticisms relate to both the method itself and the interpretation of the results obtained through it. With regard to method, its application depends to a large extent on earlier data of a language in order to ascertain the validity of the reconstructions. In oral cultures like most of Bantu, such earlier, written forms of language are absent, and therefore applying the method is relatively more difficult and challenging. In addition, for the method to succeed, it requires quality data of enough quantity in order to obtain reliable and valid results. But this could be said of any method.

Secondly, interpretation of the results obtained through the method may be difficult because an accurate, historical interpretation requires, as a precondition, sound assumptions about the nature of language, language change, historical processes and human agency, including all the factors affecting that combination of phenomena.

Thirdly, there is considerable debate which has continued for years about the relative role of inheritance versus language contact/convergence in explaining current situations in languages. The comparative method cannot address language contact because it favours monogenetic treatment of data. The method only handles some type of data, and leaves the rest. If one allows for the existence of dialects in languages, then proto languages should not be an exception. This implies that, it is one method among several rather than being the method. It is useful without being perfect, like lexicostatistics, its efficiency in application being only

relative.

1.3.5.2 Lexicostatistics/Glottochronology10

1.3.5.2.1 Overview of lexicostatistics

This overview considers the criticisms against lexicostatistics and the reasons why it has been used despite those criticisms, and hence warranting this lengthy treatment. Some excellent literature exists in the field of lexicostatistics (and glottochronology) dealing with both its theory and practice, either in its support, neutral application or criticism as in all scientific endeavors. Among these are Swadesh (1950, 1955) who first popularized the method, Fairbanks (1955), Gudschinsky (1955, 1956), Kroeber (1955), Taylor and Rouse (1955). Hymes (1960a, 1960b, 1964); Amstrong (1962), Bergsland and Vogt (1962), Grace (1964). Dyen (1965, 1975), Henrici (1970), McElhanon (1970), Hinnebusch (1976, 1999), Nurse and Philippson (1980a), Schadeberg (1986), Embleton (1986), Dyen, Kruskal and Black (1992), Ross (1998), Ehret (2000), among others.

In the earliest stages of the method, lexicostatistics and glottochronology were used interchangeably. While lexicostatistics is the statistical study of a restricted vocabulary in two or more languages for historical inference and/or relative chronology, glottochronology is the same thing, but only estimates exact time depths between a pair of languages or groups

¹⁶ When lexicostatistics is mentioned, glottochronology is excluded, unless explicitly stated.

as a measure of absolute chronology, for historical interence (Hymes 1960a:4, Hinnebusch 1999:174). The focus in this study is lexicostatistics, while the application of glottochronology is also attempted to test the lexicostatistical results, since lexicostatistics is a process which gives output to be used by glottochronology as its input. That is, glottochronology is a technique of dating the nodes of shared vocabulary generated by lexicostatistics. As can be seen, the connection between the two is inevitable and important in many ways.

In its evolution, glottochronology (at the time) or lexicostatistics as it became to be known later, was inspired by Carbon 14 (C¹⁴) dating technology (Gudschinsky 1956:1, Embleton 1986:43, Hock and Joseph 1996:531). The method uses a formula which has been refined over the years, as shown in (2), where t, expressed in millennia, is elapsed time since 2 languages that are compared separated, C' is the percentage of the shared cognates between the compared languages, and r is the standard rate of core vocabulary retention per 1,000 years, or the index, recommended at 86% in a 100-word list and 81% (80.5%) in a 200-word list (Swadesh 1950-158, Embleton 1986:49).

(2)

log C

1=---

 $2\log r$

Since many of the support of and/or objections to the reliability and validity of the results of glottochronology and hence lexicostatistics are based on the assumptions of C¹⁴ and the above formula, it is essential to provide four assumptions here as aptly summarized by Gudschinsky (1956:177-8):

- (a) Basic core vocabulary is assumed to be less subject to change than other types:
- (b) The rate of retention in basic core vocabulary is constant through time, (although no evidence was provided to substantiate that claim (Kroeber 1955:91));
- (c) The rate of loss of basic vocabulary is approximately the same in all languages (11 Indo European and 2 other language family test languages were used to arrive at that generalization);
- (d) A known percentage of shared vocabulary between two languages can yield the length of time that has elapsed since their divergence from their common ancestor, provided that there was no interference through migrations, conquests, or other social contacts with other speech communities which would slow or speed up the divergence.

With that scenario, it makes sense now to examine some of the comments which have been made concerning the application and interpretation of the results of lexicostatistics and glottochronology. This helps in appreciating the merits and shortcomings of the method by avoiding exaggerating its shortcomings or undermining its usefulness. On the one hand, lexicostatistics has been adequately applied to SSN and Zone F languages by Nurse (1979a, 1979b), Nurse and Philippson (1980a). In those studies, one finds patterns of linguistic groupings which do not depart very much from the results of other, more traditional methods. Such corroboration indicates that lexicostatistics does indeed work and is useful in internal classification where relatedness is shown clearly among members of a subgroup (Nurse 1997:364). To put this in perspective, the criticisms put forward against lexicostatistics are discussed first. There then follows a justification for using this method in this study despite such strong criticisms, indicating that we are aware of the problems.

1.3.5.2.2 Arguments against lexicostatistics

Many scholars see both sides of the coin in judging the method by giving credit where it is due, without failing to point out any weaknesses. Some take one stand only, for or against the method. For instance, while recognizing the usefulness of the method, Nurse (1997:364-6) directs some specific criticisms against lexicostatistics, and four are more serious because they concern the method itself rather than how it is applied:

- (a) the method does not clearly distinguish true cognates from mere resemblances, but depends on how an individual researcher recognizes and excludes non-cognates.
- (b) it forces binary splits even when a three split might be more appropriate.
- (c) it allows geographically proximate languages to behave lexicostatistically similar as if they are genetic relatives even when they are not (Henrici 1970:89-91) and

(d) there is no agreed upon cut-off percentage for languages to be classified as daughters of a proto language.

Apart from those specific problems, more general shortcomings of lexicostatistics were recognized early by Swadesh himself and many others when they were dealing with linguistic dating (Swadesh 1950, 1955; Taylor and Rouse 1955). The problems relate to both the quality of the data and the mathematical derivation and hence mechanism of the method itself.

Both the data and method undermine the basic assumptions of lexicostatistics in significant ways, which in C¹⁴ terms, introduce contamination in the linguistic samples. Among these weaknesses include inaccurate transcription of the phonetics of the vocabulary collected; errors in translations which result in unexpected meanings, the absence of worked out phonological systems as a check for errors; and over-or-underestimation of time depths, etc. For some linguists, such shortcomings are unwelcome, justifying a rejection of the whole enterprise as unredeemably hopeless. In this scenario, the method is dismissed as unfit of serious attention because of its many misleading errors.

For instance, Bergsland and Vogt (1960:125-9) represent the skeptical school which views the reliance on the method to calculate time depths as premature due to the vagueness of the procedure. To prove their point, they point out that basic vocabulary does not change at a constant rate; a few vocabulary items in a few languages cannot be generalized to human language as a whole; and a study of vocabulary was more complex than glottochronology could handle. The controversy is summarized well by Embleton (1986). Dixon (1997-4, and footnote), gives a verdict that lexicostatistics was a short cut which failed and was discredited because it was based on illicit assumptions like uniform replacement of vocabulary, or that core and non-core lexemes behaved differently. Dixon concludes that the method has already been discarded by serious linguists. Similarly, Hock and Joseph (1996-530-31) dismiss the method as unreliable because it depends on interpretation rather than facts alone. In addition, its findings are often disconfirmed by empirical evidence.

Another criticism is the argument of forcing statistical or mathematical precision in a social science like linguistics in an attempt to make it a respectable discipline deserving attention like those in the natural sciences.

While the twin methods are different in their aims, the attack on glottochronology was especially encouraged by its association with lexicostatistics. The terms were sometimes used synonymously, although a distinction between them is clear, namely that glottochronology deals with an absolute measure between points A and B of language development while lexicostatistics' value is relative. It was that absolute measure that drew the most criticism because in known cases, the margin of error was so vast that many linguists doubted it, while others rejected the method as flawed in its mathematical assumptions (Bergsland and Vogt (1962); Grace (1964:64-5), Herbert and Huffman (1993:64). For instance, Armstrong (1962:284-5) shares the same sentiments about glottochronology in its tendency to

underestimate the time depths being considered. Armstrong argues that it is difficult and controversial to determine the rate of change of basic vocabulary and prove empirically that it is the same for all languages. In addition, it is tricky to assume that because a few languages with written records changed at a certain pace in a certain number of centuries, therefore their rate of change was the same during their past unwritten period. Rather, it is the case that such a rate cannot be uniform for all other languages in all places in the world in all millennia. While appreciating the merits of the method for its immense value, he also acknowledges that glottochronology is a speculative and hazardous intellectual venture whose results and methods are not satisfactory.

Overall, most of the criticisms which dismiss lexicostatistics completely fail to appreciate the fact that almost all scientific methodologies, while proven to be practical, have their drawbacks. Instead of rejecting lexicostatistics out of hand, some latitude can be usefully allowed as better ways are searched to perfect the method, as a core of the evolution of science. Fair criticism, therefore, implies not only the recognition of the weaknesses of a method, but it also involves an appreciation of its practical utility, since, as in the case of lexicostatistics, there is ample room for improvement. That benefit of doubt has not been granted fully by trying the method on many languages, as the following school of thought suggests.

1.3.5.2.3 Merits of lexicostatistics

From earlier on, such usefulness of lexicostatistics was appreciated by many linguists (Swadesh (1955), Gudschinsky (1956), Hymes (1960a, 1960b, 1964); Henrici (1970), Hinnebusch (1976, 1999), Schadeberg (1986), Embleton (1986), Renfrew (1997), Nurse (1999) and Ehret (2000)) who view the enterprise as practical enough since no method is perfect and cannot be used alone as a panacea for providing all the solutions to all problems. For instance, Hymes (1960a,b) recognizes and discusses many problems, starting with the test list itself which had mainly Indo European words at first, some of which were found irrelevant in some non-Indo European languages; the control cases were not satisfactory since most han one earlier documentation; the retention rate was doubtful, since the lists used are normally not identical in terms of vocabulary items and length, with the 100 and 200 word-lists giving different retention rates; the statistics and mathematics are based on assumptions which are only hypotheses, giving even more hypothetical results since the rates of lexical change, for instance, are not known in the majority of world languages. He concludes that there is room for improvement.

Although Ross (1998:142) points out that glottochronology as a direct application of lexicostatistical output is unreliable in many languages, in the rare cases of languages like those of Polynesia, the twin methods work quite well because the languages were almost isolated from contact with other languages outside their family. Hinnebusch (1999:177) commends another advantage of the method, that of providing evidence for contact, apart from determining levels of retention alone. Similarity between language varieties cannot be by genetic affiliation from a proto-language alone. It can also be due to borrowing through contact and lexicostatistics can show that.

In most of Africa where the dating of prehistorical events is difficult, the questions raised against glottochronology become important. Many dates have been suggested for the ages of artefacts and events in Africa, but the major contention revolves around the methods of dating them and the assumptions inherent in those methods. The methodological problems of dating archaeological artefacts and establishing time periods and sequences for them is a major problem where there is no evidence of written records of dates attached to them. Hence, in this study, absolute chronologies in linguistics, history and archaeology are approached cautiously since the dating techniques are not reliable.

1.3.5.2.4 Merits of lexicostatistics: a summary

All methods are essentially hypotheses trying to account for something which is unknown. Their chances of success are only matters of degree and preference rather than absolute dichotomies of right and wrong. They only aim at as objective truth and as reasonable success in providing answers as possible.

For instance, the comparative method as a practical enterprise has its own serious problems,

although it has been used for years. Because languages do not exist in a vacuum, its monogenetic implication is definitely flawed. In real life, languages are spoken by people and speech communities in constant interaction, and total isolation is an exception than the rule. For instance, Indo European is only one intermediate node in the linguistic tree of its ancestors, Nostratic. Even Nostratic did not exist alone. There were other languages influencing it. Although this might sound speculative, the scenario of language contact in prehistory is not handled well by the comparative method.

In addition, lexicostatistics suffers from lack of engaged evaluation from most of the linguists themselves. The mathematics involved in the lexicostatistics formula deals with advanced probability theory which for many linguists is not their area of competence. The result is continued reliance on the judgement of others, which is not always accurate either. For instance, Embleton (1986:62) points out that the criticisms by Chréstien (1962) were known by statisticians and mathematicians to be flawed, but those statisticians and mathematicians could not contribute to the debate because they were not certain what linguistic arguments were involved in that formula. A team of individuals each trained as a linguist, programmer, statistician and mathematician could do a better job by researching the area over a period of time.

The bottom-line with lexicostatistics is that some particular methodologies like the comparative method tend to be privileged even when they have their limitations, while equally

promising ones tend to be dismissed because they remain "new" for lack of wider application and continual improvement.

1.3.5.3. Other methods

As hinted earlier, a method like mass comparison is not used in this study. One reason is that mass comparison, for instance, best suits analyses at macro-, rather than at micro-level where dialects are compared, as in this study. By using mass comparison whereby the vocabulary and morphology of many languages are compared to determine similarities, Greenberg (1963) succeeded in drawing up a convincing taxonomy of the four language phyla then predominant in Africa, namely, Khoisan, Afro-Asiatic, Nilo-Saharan and Niger-Congo.

The methods used in archaeology and which furnish evidence of chronology. pose a special challenge in many societies in Africa. The evolution of human societies in the past relied on harmony with nature where the environment was rarely altered. In such cases, no traces could be found of any artefact. This implies that dating has a long way to go in prehistoric studies, but especially in societies which left no objects to fall back on when all else failed. But also, the age of human existence tends to be underestimated and linguists and historians alike talk of Bantu migrations and expansion in terms of a few hundred years ago based on material objects found on the ground. Such objects depend on human agency, and when they are not made, then any dating relying on them fails. The absence of such finds tells us nothing

of the history of the people living there except that they did not alter nature or leave their implements. Gathering societies which depend solely on plants and insects for their livelihood may leave no trace of their activities. Many Bantu societies might have lived in such an environment of abundant natural resources for an unknown number of centuries.

1.4 CHAPTER PREVIEW

The rest of the chapters in this study are arranged with the following content. Chapter 2 contains the literature survey, including overviews, that of the linguistic research undertaken in the area and the theoretical framework. The linguistic component surveys three areas: phonology, lexical analysis and classification in SSN and Zone F. The major theoretical framework adopted is the contact models of language development as suggested by Thomason and Kaufman (1988), along with the family tree model.

Chapter 3 maps the phonological development of Zone F generally, and SSN in particular, and finally, attempts a historical interpretation of the linguistic patterns, especially the chronology of the phonological processes defining the linguistic groups in the target languages. Chapter 4 maps the development of lexis, looking into quantitative and qualitative evidence for Zone F and SSN, while Chapter 5 concludes the study by synthesizing the foregoing. It also makes final observations, recommendations, and points out avenues for further research. looking briefly at language as a tool of history in the area.

CHAPTER TWO

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.0 INTRODUCTION

This survey of the literature reviews what has been written about SSN. Zone F and where relevant, Bantu in general. In particular, it focuses on what has been done in phonology and lexis. In phonology, it reviews work done on BS, 7 > 5, DL as major areas, and glottalization and voiceless nasal formation as minor processes, especially within SSN. With respect to the lexicon, lexicostatistics and its classificatory results are discussed in relation to the role of the method as an ordering tool where there is still taxonomic chaos due to the sometimes enormous knowledge gaps in Bantu studies. Finally, classification in SSN and Zone F generally is examined as it relates both to our phonological and lexical focus, as well as to other criteria used by other scholars. The aim of this chapter, therefore, is to see what is known about the area with regard to what has been done and its merit, what criticisms can be levelled against that knowledge, where the contribution of this thesis fits in, and therefore why the work is worth doing.

2.1 LITERATURE REVIEW

2.1.1 Bantu, Zone F and SSN linguistic descriptions

From the pioneers of Bantu linguistics like Bleek (1862-9) and Meinhof (1932), the major work on Bantu comparison and classification is represented by two undertakings, the seminal work of Guthrie (1967-71), on which Nurse (1979b.43) states supersedes all previous work, and Meeussen (1980). Guthrie makes a referential classification of the majority of the Bantu

languages based on phonological, grammatical, and lexical criteria by listing all known Bantu languages and their dialects. He goes on to reconstruct about 2300 Bantu roots (Guthrie1962b:274, 1962c:13). Meeussen, on his part, reconstructs about 1200 Bantu roots. Following in the footsteps of these two, many historical linguists have compared several languages and language groups, mainly using vocabulary, verbal morphemes and phonological systems, although they have not attempted any work of reconstruction of the magnitude of Guthrie and Meeussen. For an overview of the evolution of Bantu scholarship, especially on classification, see Nurse (1995) who summarizes the achievements attained so far, especially by Henrici (1973), Heine (1973), Mohlig (1981), Bastin (1983), Coupez, Mann and Vansina (was in progress*), and Ehret (1994). He gives a critique of each work, and then identifies the work required to be done in the future to fill the gaps observed in those works, pointing out five areas, four of which are relevant here (Nurse 1995:71-3).

First, Nurse says, linguists should obtain good quality data of sufficient quantity rather than continuing with the prevailing practice of using incomplete and inadequate information to make global generalizations. This aim has not been realized yet in full, since the data used are still mainly second-hand, often collected many years ago when transcription was not yet fully standardized and knowledge of Bantu was still generally poor. This fact is illustrated by the case of Bantu Spirantization or Dahl's Law, in which some languages are said to have those processes, when in fact they do not. This is addressed fully in Chanter 3.

¹ Work was in progress then (1995), involving many Bantu languages/dialects (450+) based on lexicostatistics, interpreted historically. Published and became Bastin, Coupez and Main (1999).

Secondly, new approaches not based on lexicostatistics were needed to tackle intermediate levels of Bantu instead of concentrating on the lowest and highest, at dialect and Proto-Bantu stages respectively. These new approaches would then be compared with the results of other methods like lexicostatistics. This recommendation has not been realized too. One problem here is that the majority of the lower level dialects have not been subjected to lexicostatistics to establish their internal relationships so as to move to the intermediate levels with solid lower level linguistic cohesion and grouping. Normally, one dialect was taken to represent two or more dialects, as in the case of KtNyamweezi or SiSuumbwa. Without proper analysis of all dialects, it is impossible to have accurate information on the intermediate levels. This study tries to address precisely that, using lexicostatistics.

Thirdly, linguists and other scholars working in different areas of Bantu needed to cooperate so as to simplify such a daunting task as Bantu research. Working in isolation led to duplication and dissipation of effort and slowing of new knowledge generation. This recommendation has seen a lot of activity, one example being the revision of Guthrie's coding system with a view to improving it by incorporating excluded languages and their varieties².

And finally, Nurse also recommends that those interested in Bantu linguistics be multidisciplinary in their approach in order to be informed of how other related fields view and use their disciplines. As we have observed in 1.3.5.2.4, a multi-disciplinary approach in linguistics will go a long way in areas like evaluating effectively methods like lexicostatistics

² D. Nurse and J. Maho, p.c. (2001)

which are not linguistic in nature but which linguists find quite useful.

With that scenario in mind, a survey of some relevant work is in order here. The earliest classification of Bantu as a big, unified group was most likely the work started by Dr Peters who collected some vocabularies and gave them to Dr Bleek in 1852. For his part, Bleek, who was trained in Indo-European philology, studied these manuscripts, translated, edited and published them (Meinhof 1932:21, Doke 1959:26). That was the beginning of the term "Bantu" and the study of the language group using purely linguistic criteria. Bleek had isolated 18 noun classes of Bantu nouns, spurring other linguists to classify the various members of the group into patterns of similar sub-groups, including Zone F and SSN.

Most of the work done in the Zone F languages has been mainly synchronic, that is, as they are spoken at a given single point in time. The work has been general, describing the grammar, vocabulary and sound systems of individual languages or their individual varieties rather than analysing all varieties comparatively. For some of these varieties, the lack of linguistic scholarship in this regard still continues since they are only mentioned, and in many cases some are not even mentioned.

J' These include F21b, F22a, F22d, and F23e from SSN. From the rest of Zone F the following are only mentioned without any description whatsoever, while some are not even included, as far as this author is aware: F10, F31a, F31e. For instance, the bibliographies of Bantu language materials in general held by individuals and public libraries are seriously lacking, as shown by Downing (1989). Without specifying dialects, Downing shows for instance that only two general works mention SiSúumbwá (F23) since 1880; seventeen sources appear for KiSúkúmb (F21), thirteen documents for KiSkúmb (F21), thirteen documents for KiSkúmb (F22), two mention KiKífmbò (F24) and nothing appears for the other varieties of Zone F. Polome

In all the languages studied, most of the word lists were compiled by missionaries and adventurers who were language enthusiasts keen on obtaining quick, practical results rather than elaborately accurate phonological descriptions of trained philologists. Hence they cut corners, approximating what they saw and heard to what they already knew, without any rigorous method of systematic categorization. Doke (1959:1-2) also points out that few of these travellers had any real ability in correct observation and recording, and most of their records were only interesting relics of no philological value. With such compilations, one would normally only find some bits and pieces of linguistic description, reconstruction, classification and historical interpretation done amateurishly. Among others, this linguistic work has included the following, shown in Table 2.1.

Table 2.1 Work done in Zone F languages

Language	Author	Area	Focus
F21	Richardson (1959)	phonology-tone	JináKířyá
	Richardson and Mann (1967)	vocabulary list	JináKììyā
	Masesa (1978)	verbal morphology	Kimunadakama ⁴

F21 '(...continued)

⁽¹⁹⁸⁰⁾ lists fourteen sources for KISukümä since 1945, six of which are typewritten manuscripts. Most of these manuscripts are not dated, do not show place of composition and are written anonymously. Reviewing publications in F23, Kahigi (1988.6.7) comments that, like all Bantu languages, F23 does not have a long written tradition as a starting point, as the case with other language groups like Proto Indo-European and its daughter languages. The earliest published record for F23 is that of Last (1885), a collection of several Bantu language vocabularies, including that of F23, with a 250 word libra.

^{*}Masesa does not indicate the exact location of this dialect, although by the examples

(continued...)

Language	Author	Area	Focus
	Goldsmith (1985)	phonology, tone	KîmûnàSûkûmà?
	Batibo (1985)	morphology and phonology	KîmûnàSûkûmà
	Yukawa (1989)	tonological	General F21 ⁵
	Maddieson (1991)	voiceless nasals ('aspirated' nasals)	KîmûnáSûkûmá
	Batibo (1991a, 1991b	phonology, tone	KîmûnāSûkûmā
	Masele (1993)	phonetics, voiceless nasals	JinàKììyā
	Masele (1996)	phonology, homorganic voiceless nasals	JináKříyá
	Masele (2000)	phonology, tone	JinàKityā
F22	Maganga and Schadeberg (1992)	grammar, vocabulary and phonology	KìNyàmwéézi or KìDàkámà?
	Silanda (1978)	phonology	KřKônôôŋgô
	Schadeberg (1991 1994)	phonology, high tone	KîNyâmwéézi general?
F23	Kahigi (1977, 1988)	phonology	Lunzewe (F23a)
	Olson (1964)	phonology, morphology	GìRwànà
F32	Schadeberg (1979)	phonology, nominal tones	KìRìmi general?
	Nurse (1979a)	syntax, morphology, phonology	F21, F22, F23, F31, F32
Zone F	Nurse and Philippson (1980a)	lexicostatistical	F21, F22, F23, F24, F31, F32, F33
Bantu	Meinhof (1899/1932)	phonology, lexis	Sample Bantu

^{4(...}continued)

he gives, his Klmūnādākāmā is our JināKlītyā which adjoins our Klmūnādākāmā, and his JināKlītyā our Gīnāntūzū. This is the problem of directional names which only indicate position relative to speaker 's/writer's location.

⁵ General F21 or any other language refers to a situation where an author did not explicitly say what dialect s/he was analyzing, or when we are not sure which dialect.

2.1.2 Phonological studies

2.1.2.1 Bantu Spirantization (BS) and 7 > 56

Bantu Spirantization is a weakening process in some Bantu languages whereby plosive consonants change into spirants before the superclose PB *j and *y vowels, making their reflexes different from reflexes of plosives in other vowel environments [-superclose]. Hinnebusch, Nurse and Mould (1981:17), Nurse (1988:29) suggest that BS was only beginning in F21 and F22 because of the evidence of both complete and incomplete forms of BS being attested in words, in addition to the strong 7 yowel system, indicative of an ongoing process. But Nurse (1999:21), while sure about the absence of BS in F24, F31, F32, states that the evidence is ambiguous in F21/F22. This observation of indeterminate BS in F21/F22 is also made by Batibo (2000:25-26) who suggests that BS has become inactive, although it operated in the past. Since the observations made so far are based on general data from these languages, this study examines the details in the individual dialects to determine to what extent these observations are true, whether there is ongoing BS, inactive BS, or ambiguous BS in F21/F22, for example. Some of these statements are confusing and contradictory since they refer to the same phenomenon in the same languages. What do such differing observations mean historically, especially when innovations like BS co-exist with 7V systems?

Using Guthrie's inventory, Schadeberg (1995:83) surveyed representative languages from all Bantu zones. In Zone F, 4 languages were selected: F10, F21, F31, and F33. His results

⁶ A full treatment of BS and 7 > 5 is found in Chapter 3. They are treated together because of their close causal relationship.

indicate that F31 has neither BS nor 7 > 5, while F10 has both. On the other hand, F21 and F33 do not show 7 > 5, but they have BS. Since Schadeberg's concern was a summary of a general area, he did not go into the details of each individual language to examine how the twin processes worked. In addition, only a few Zone F languages were used, and only one of the three from SSN. The work therefore offers a challenge to explore BS details in all Zone F languages to determine how the results of the 4 languages used by Schadeberg can be weneralized for Zone F or SSN.

On her part, Labroussi (1999) mentions the case of F25 which shows clear BS with some words in the same environment failing to undergo BS. This casts doubts on whether F25 has real BS or some other process mimicking BS. Another doubt cast is the status of the vowel inventory: while the young informant shows a 5-vowel system, the older informant indicates clear 7V. Labroussi (1999:370) then concludes that, F25 has a conservative 7V system, adding that it is an abnormal pattern of BS in an innovative language needing an explanation. This might possibly be a result of contact with BS languages. Such uncertainty of BS in F25, as elsewhere in Zone F is a good reason to re-examine Labroussi's conclusions, which may cast crucial light on BS in the rest of Zone F vis-ā-vis the observations made by the studies mentioned above.

2.1.2.2 Dahl's Law (DL)

Dahl's Law is a dissimilation process of two adjacent syllables with voiceless obstruent onsets in a root, found in some eastern Bantu languages, whereby, the first obstruent, usually a

plosive, becomes voiced, as in PB *-kopa → F21c/-gopa/ 'borrow'. It is realized differently by different languages, as explored fully in Chapter 3. According to Nurse (1999:20-21), DL is found in six groups in eastern Bantu. The codes in brackets indicate the rough individual groups involved according to Guthrie's zones: Proto Central Kenya (E46, E50), Proto Kilimanjaro-Taita (E60, E74), Proto Great Lakes (D40, DJ50, DJ60, EJ10, EJ20, EJ30 EJ40), Proto Northeast coast (NEC) (G10, G20, G30, G40, parts of E70), Proto West Tanzania (Zone F), and Proto Southern Tanzania Highlands (G60, N11). In Zone F, some languages have DL, others have none. For instance, in F24, F31, F32, F33, there are no traces; in F23, there are limited traces; while in F21/F22 there are many traces (Nurse 1979b:422). Those with no DL pose no immediate problem. It is F21/F22 and F23 which form SSN that are interesting. In our preliminary data, most of F22 shows doubtful DL or none at all, except in loans. However, Maganga and Schadeberg (1992:23) suggest that DL in F22 (KINyamweezi) is almost exceptionless. On the other hand, our data suggest that F23 does not have DL except in a few loanwords (See Appendix 3). In light of these inconsistent reports, the examination of all dialects within Zone F, but especially in SSN hopes to clarify the fuzzy picture of DL in the area and aid in a more robust fashion the classification of the language varieties.

2.1.2.3 Glottalization

Glottalization as a change of PB *p to /h/ in many Bantu languages is not significant on its own. Its importance lies with regard to SSN when one finds reflexes of PB *p being both /p/ and /h/, which is a marked situation. Addressing this situation, Batibo (2000:27-8) observes

that glottalization has ceased to be active in F21/22, with /p/ becoming more widely distributed than /h/. Like BS and DL, the inactivity of glottalization suggests two scenarios: on-going process or the presence of loans (Batibo:ibid). Such indeterminacy needs clarification by examination of the various dialects as proposed by this study.

2.1.2.4 Voiceless nasal formation

Within Zone F, only F21 and F22 display this feature. Voiceless nasals /m, n, f, n, f, are in opposition with their voiced nasal counterparts /m, n, f, n, g/. The evolution of these voiceless nasals seems to have first started as pre-nasalized consonants /mp, nt, f/c, g/k/ respectively. With time, they were phonologized so that they are now phonemes which can be contrasted with both the plosives and voiced nasals. The voiceless nasals from KtmunaSukuma are discussed in Maddieson 1991 and from JinaKIIya in Masele (1993, 1996). Some examples are shown in Table 2.2, with contrastive minimal pairs or similar words with voiced nasals where available. The tones given are underlying for each word, low where tones are not marked.

Table 2.2 Voiceless nasals in F21c

m	ŋ	ĵì	ŋ
naamală 'old man'	muunα 'person'	muujhă 'maiden'	Igoono 'etched log'
melă 'rhinoceros' -melă w 'tease'	nIga 'giraffe' -niga 'strangle'	βaa∱lâ 'female proper name'	ŋ̃IIndá 'bell' ŋ̂iindâ adj 'half full'
-Iguumá vi 'trip'	-daana 'climb & creep'	-nuujha vt 'smell'	-nuuŋa vi 'smell'

Our preliminary results suggest that it is only F21 and F22b which have voiceless nasals, while the core dialects of F22 and F23 do not. This distribution within F21/F22 prompts a closer look, since DL also seems to follow the same pattern, where only F21/F22b are involved fully. Maganga and Schadeberg (1992:16-7) do not say whether these voiceless nasals are also found in all the KINyamweezi dialects. This study makes that distinction clear by noting the behaviour of each individual variety.

By combining these phonological processes: BS, 7 > 5, DL, glottalization and voiceless nasal formation in SSN and Zone F from the dialects, it is hoped that some concrete classification can be suggested, especially if it departs from the current affiliations.

2.1.3. Lexical studies

In this area, it is the seminal work by Nurse (1979a, 1979) and Nurse and Philippson (1980a, 1980b) which feature prominently. These studies employed lexicostatistics to analyse broader coverage of eastern Bantu languages, including Zone F and SSN.

Among these, Nurse and Philippson (1980a) is the most relevant. In this study, a 400 wordlist was used, and 76 languages/dialects were compared for both internal and external relationships. Inter- and intra-zone comparisons were made, and the results for Zone F were as follows: Zone F without KiiRangi was a strong unit, although when KiiRangi was added,

⁷ The long vowel [ii] in KiiRangi is a result of two short vowels from two syllables ki-as a marker of language, and the initial [i] in i-Ra-ngi, the root. In SiSuumbwa, as in many (continued...)

it became weak because of the distant relationship. The zone (which they called West Tanzania) divided into two: F21, F22, and F23 on the one hand, and F24, F31 and F32 on the other. Of these, F21/F22 formed the strongest unity, prompting Nurse and Philippson (1980a:48) to state confidently that they were 'dialects' of one language. In the other group, F24 displayed interference from West Ruvu (G10 and G39), while F31 and F32 were closer, forming another unit.

On the other hand, there were some problems of internal cohesion. For instance, F23 (SiSuumbwa) did not fit quite well within F21/F22, since its shared vocabulary percentage was higher with both DJ60 and EJ20 than it was with any of the Zone F languages to which F23 was purported to belong. The interpretation given by Nurse and Philippson (1980a:40) was that F23 was heavily influenced by both DJ60 (Western Highlands) and EJ20 (Southern Rutara). A second problem was that F10, F25, and F34 were not included in their study because there were no data for the languages. And finally, only one language variety/dialect was picked for each language, as if these languages are strictly mono-dialectal. These three problems justify our study in which we reexamine the claims made utilizing all members of Zone F, by including the majority of their dialects.

2.1.4 Earlier Zone F and SSN classification

The evolution of Zone F language classification generally, and SSN in particular can be

^{7(...}continued)
other such environments it is the following [m] which triggers vowel length.

illustrated in Tables 2.3, 4, 6, 7, 8, 9, 10 below. Table 2.3 shows attempts represented by two periods in the work of Doke, that of 1943 and 1945 (Doke 1961:77, Cole (1961:85-6)). Others who followed him include Bryan (1959), Guthrie (1959, 1967), Nurse and Philippson (1980a) and Nurse (1999). In all these studies, the orthographic conventions of the authors have been adopted as far as possible, since the writing system has not been uniform among them, especially in representing language/dialect names. They are quoted verbatim.

2.1.4.1 Doke

The works of Guthrie and Doke are contemporary, and they might have influenced each other in significant ways, since their maps of the Bantu area seem identical except for a few details (Herbert & Huffman 1993:56-7). The following are the main features of Doke's work, as antly summarized by Herbert & Huffman (1993):

- (a) Doke did not confuse genetic and referential classification in his scheme. Genetic classifications mirror history, whereas referential ones do not.
- (b) He distinguished between group and zone, whereby group refers to linguistic affinity, and zone more to geographical proximity than to linguistic phenomena.
- (c) Doke's aim was not to provide an exhaustive list of all Bantu languages, but rather a list of the more important ones in a continuous work of improvement as information became available (Cole 1959;197).

Because of those features. Doke's work as one of the pioneers in the area was mainly tentative in an emerging Bantu specialization, without any rigid prescriptions, showing difference in detail from what we know today, as indicated in Tahle 2.3. Much of the information known today was not available in his time. Doke's scheme is also used in other scholars' classifications for consistency's sake.

In Doke's 1943 work, Nyamwezi and Iramba are both in the Eastern Zone, forming two separate language clusters, while the rest of Zone F languages are not mentioned. The 1945 classification has Zone 50 or Eastern, with 11 groups. Nyamwezi forms a major grouping, 50/1, with two language clusters, Nyamwezi (50/1/1) and Iramba (Ilamba) (50/2/1. Sukuma, Sumbwa. Nyaturu, Galaganza, Konongo, Nyanyembe and Kimbu make up the dialects of Nyamwezi, and no dialects are indicated for Iramba. The other member, Irangi (50/7/4), belongs to 50/7 which is the East Central group, with members in that cluster including Zaramo. Sagara, Gogo and Irangi itself. The other Zone F languages like iCiWòūngò, KiTòōngwe/KiBeènde and KèeMbūwė do not appear.

Table 2.3. Evolution of linguistic classification in Zone F: Doke (1943-1945)

Major Classification	Language or cluster	Dialects
1943 (V) EASTERN ZONE	(a) Nyamwezi, etc (c) Iramba	
1945 ZONE 50 (EASTERN) 50/1 NYAMWEZI	50/1/1 Nyamwezi	50/1/1a Sukuma 50/1/1b Sumbwa 50/1/1c Nyaturu 50/1/1d Galaganza 50/1/1e Konongo 50/1/1f Nyanyembe 50/1/1q Kimbu
50/2 - 50/7 EAST-CENTRAL	50/2/1 Iramba(Ilamba) 50/7/4 Irangi	:

2.1.4.2 Bryan

The classification by Bryan (1959) does not aim at genetic relationship, but rather groups are presented as autonomous divisions and single units (Herbert and Huffman (1993;55), as shown in Tuble 2.4. Dialects are shown where relevant, as is the case with Nyamwezi with 4 dialects, including Sumbwa (also shown as KtnaMweri), which other linguists regarded as a separate language. Sukuma has only one dialect, Kiya. The major problem here was lack of information. For instance, it is not clear why some languages were shown with dialects, while others were not. The method used is not explicit as to whether those languages without any dialects were designated so by field research nor whether they were recorded as informants reported them. It is also not clear whether the criteria for sub-grouping are linguistic or geographical, since geographically, these languages are adjacent.

Table 2.4. Evolution of linguistic classification in Zone F: Bryan (1959)

Major Classification	Language or cluster	Dialects
	Sukuma	Kıya
SUKUMA GROUP	Nyamwezi (kr-)	Nyanyembe (kr-)
		Takama (Garaganza)
	1	Mweri (kɪ-na-) (or
	1	Sumbwa)
		Kananga
	Kımbo	
	Bongo	-
	Nilyamba	
NILYAMBA GROUP	Rımi (kı-rımi)	-
	Langi (kɪ-)	-
	?Mbugwe	

2.1.4.3 Guthrie I

Guthrie (1967:5, 6) was careful enough in advancing his caveat from the outset that the aim of his monograph was two-fold, (a) to establish some framework for future reference in identifying and classifying Bantu languages, (b) to throw into prominence the places where knowledge of a language is fragmentary or even non-existent. In addition, he stated categorically that his work was essentially tentative, and that some well-informed person might find some groupings quite unjustified (Guthrie ibid.).

Borrowing from Doke, Guthrie (1948:73) made a distinction between language groups and language zones whereby a group was a unit with a purely linguistic significance, whereas the zone was mainly geographical. This implies that zones refer to language taxonomy based on geographical contiguity or proximity rather than on genetic affiliation. That is a very important distinction to make especially in Bantu languages which are essentially all similar, except when distance and other factors like contact with other groups make them less similar. The work of Guthrie forms the major point of departure and will be quoted at some length to provide the background of the concept of Zone F which permeates this study. The following are the methods he used to arrive at his conclusions.

In grouping the Bantu languages, Guthrie suggested two methods of classification, the historical and the empirical. He dismissed the historical as impossible to apply in the African context because there was 'no historical records', so we may hypothesize that by 'historical' perhaps he only meant 'written' records, thus assuming that history and the writing tradition are synonymous, and that without writing, history is impossible (Guthrie:ibid), something which is unfortunately not true.

His empirical method included drawing isoglosses on a map to show the distribution of linguistic features. These are lexical, grammatical, phonological, phonetic and tonal (Guthrie, ibid). He identified the criteria for isolating languages as Bantu, dividing them into two groups, one based on principal criteria, which he said were straightforward to apply, and a second based on subsidiary criteria, which were less easy to apply because a language's forms change so much by contraction and attrition. For the principal criteria, he isolated two, grammatical and lexical. The subsidiary criteria included firstly, roots, 'invariable cores' or 'radicals' from which most of the words are formed by agglutination, and secondly, a balanced vowel system in the radicals (roots) consisting of one open vowel /a/ with an equal number of back and front vowel's.

The relevant criteria for this study are lexical and phonological. However, the lexical part is less relevant for the purposes of this study since Guthrie's concern was retention in the daughter languages rather than innovation. Retention would be handled by lexicostatistics, a method which was used by others, as described in 2.2.4.6 and 2.2.4.7 below in the discussion of Nurse and Philiposon (1980a) and Nurse (1999).

In classifying Zone F, Guthrie (1967:46) admits that it is not a unique zone, because many of the features are not peculiar to it. He goes on to enumerate the distribution of some 17

characteristics which he views as the most important when they are taken together, although they are neither unique to nor distributed evenly in all Zone F languages, some not found in some languages. The list of these differentia contains mainly grammatical features, an area beyond the scope of this work.

The relevant phonological differentia include the following, as set out in Table 2.5 (Guthrie 1948:23, 1967:46-47). Some are either common to other Bantu languages, are not found in Zone F or are simply obscure. For example, the alternations of Ie and σo in suffixes are not distinctive in some languages, while they are different phonemes in other languages.

Table 2.5 Phonological differentia defining Zone F?

Feature	In Zone F, found in
Distinction between i and I, and u and v	All except F10, F23, F34
Long/short vowels	All
Every language is 7V	All except F10, F23, F34
Unusual alternance Vr/s	F32
k/c, l/r, d/l alternations	Mixed picture, like other zones

To classify these Bantu languages into finer groups of similar featured languages, Guthrie (1967:27, 28) suggests two possibilities:

(a) Classification by fragmentation, starting with the whole of Bantu and then subdividing it into sections of closely related regions until the smallest indivisible, useful unit is reached. This however was the technique attempted earlier and did not yield good results.

(b) Classification by taking one individual language as a core, starting point, then grouping

all those languages adjacent to the core language displaying similar characteristics. According to Guthrie, these characteristics are selected for practical reasons rather than taking all possible features to be shared by the languages in one zone. A wider selection of features will imply the inclusion of fewer languages, while a few shared features will admit more languages into a zone. This means that in some members of the group an important feature may be missing. This method modifies his empirical method involving use of what he calls the practical method. The arbitrariness of the features selected is an essential modifying technique to his empirical method, a method that he used to classify all the Bantu languages into 16 zones: A, B, C, D, E, F, G, H, K, L M, N, P, R, and S, where D and E were later reconfigured by other scholars to obtain Zone J distributed into DJ and EJ. By zone, Guthrie (1967:28) therefore meant, 'primarily a set of groups which have a certain geographical contiguity and which display a number of common linguistic features as well'.

Such a process is contradictory in one sense. At the beginning, Guthrie said zones are not linguistic. When he implemented the procedure, zones became geographical and linguistic entities at the same time because zoning was based on linguistic criteria rather than defining areas arbitrarily for purely geographical convenience. And it is for this change of procedure for which Guthrie is criticized, because he did not follow through his excellent caveat quoted above. To avoid this error, Guthrie would surely have admitted that some geographical overlap in the distribution of speech communities is a regular and sometimes necessary correlation between people and territory. As a major linguistically based classification then, Guthrie's attempt marked the beginning of well-grounded work, since some of these zones are linguistically valid. The members of Zone F in this scheme were those shown in *Tuble 2.6*. This early classification did not include any F31, F32, F33 and F34. In the SSN group, all the dialects belonged to F22, while F21 stood alone as a mono-dialectal entity.

Table 2.6. Evolution of linguistic classification in Zone F: Guthrie I (1948)

Major Classification	Language or cluster	Dialects
	Tongwe F.10	Tongwe F.11 Bende F.12
Zone F	Sukuma (kɪ-) F.21 Nyamwesi (kɪ-) F.22	Nyanyembe F.22 Takama F.22 Mweri F.22 (Sombwa) Kiya
	Sombwa (kɪ-) F.23 Kɪmbʊ (kɪ-) F.24 βσηgσ (ɪkɪ-) F.25	:

A major criticism of questionable classification can be levelled against Guthrie's finer classification in SSN. If "Sukuma", "Takama", "Kiya", and "Mweri" all refer to the four cardinal points, North, South, East and West respectively, how can Guthrie's Nyamwezi include all the cardinal points as its dialects and exclude one, Sukuma 'north' as a separate language?

In addition, how can Mweri (or (kI-) SUmbwa (in F22)) be different from (kI-) SUmbwa F23?

This might have been a problem of relying on informants' responses without cross-checking to be certain what they meant by the labels they used. To say that "so-and-so is eastern, western, northern, or southern", does not automatically mean that they belong to the same genetic language. It may simply mean "people living there, the others", regardless of linguistic, ethnic, cultural or biological affiliations. For instance, it is common for F21b speech communities to call all those on their west "βanaŋweeli" which simply means, "people who are on our west". These western people include every speech community to their west. including some F21a, F23 and EJ23 (RuZinza) speakers. The F21 speakers regard all people to their south as 'BàDàkama, without any specific reference to linguistic affiliations. It is such situations of self-reporting by the informants which might have swelled the number of languages and made the distinction between "language" and "dialect" even more difficult when these artificially created identities, the 'tribes' took root. As many have commented, some languages appear to be dialects of one language linguistically, although regarded as separate languages when broader social identities are referred to, especially when outsiders had to label communities, as happened in colonial situations or when African societies named their neighbours according to their perceptions and points of view rather than according to the facts at hand.

2 1.4.4 Guthrie II

The classification shown in *Table 2.7* is a revised version of Guthrie's 1948 scheme, and it shows some alterations, like the introduction of F31, F32, F33 and F34.

However, the dialects of F21 and F22 remain the same, while the status of Mweri (F22d) and SUmbwa (kI-) (F23) continues to be ambiguous as to whether Mweri was the same as in the 1948 classification, belonging to both F22 and F23, or it was different. As many others have observed, the subsequent researchers have not taken Guthrie's caveat into account and they have continued to regard Mweri (F22d) and Sumbwa (F23) as separate and the same entity at the same time, hence being caught in a dilemma of whether to view F23 as a dialect of F22. of F21 or as an autonomous language. Part of the problem is Guthrie's violation of his own caveat by promising to use geographical criteria and ending up employing linguistic ones. Kahigi (1988:2,3) traces this ambiguity of classification to Dahl (1915:xii) and Bryan (1959:119). However, it is the case that Bryan (1959:119) does not mention Sumbwa at all, but rather she foot-notes her source of information that it was supplied by Chief Lugusha of Tabora who mentioned to her that (ki)Nyamwezi had 4 dialects, (ki)NyanyEmbE, Takama, (ki-na-)Mweri, and Konongo. Where she does mention Sumbwa, it is in connection with the classification by Guthrie in which she was only a compiler, and which she labels MG3. Quoting Guthrie, she records one dialect of (ki)Nyamwezi as "Mweri F.22 0, other names Sumbwa" where "M(i3" refers to Guthrie's revised classified list of Bantu languages manuscript, then (1959), while the "0" refers to a language about which Guthrie did not have first-hand knowledge. Such languages of which he had second hand knowledge include Mweri (Sumbwa, the dialect), Takama (also called Garaganza) and Ktya (Bryan 1959:ix (acknowledgements and explanatory notes), 119).

This revised list of languages included dialects for which Guthrie himself had only second-

hand information, supplied by some speakers of SSN who gave their native speaker intuitions with all their other socio-cultural perceptions, biases, attitudes of and affiliations to the other surrounding speech communities, etc. Such attitudes and perceptions dividing F22 dialects did not necessarily coincide with purely linguistic classification within SSN.

The SSN classification, therefore, while trying to be as linguistically based as possible, was also largely areal. It took into account the possible geographical spread and proximity of the Bantu languages, just as Guthrie (1962b:5) himself notes, and Dalby (1970:162) and Nurse (1979:43) observe about the role of proximity. The members of Zone F were thus more or less fixed at 11 major language groups, as shown in Tables 2.7 and 2.8, although that was not meant to be the final classification by Guthrie.

Table 2.7, Evolution of linguistic classification in Zone F: Guthrie II (1967)

Major Classification	Language or cluster	Dialects
	Group 10	
	F.10 Tongwe	F.11 Tongwe, kr- F.12 Bende
	Group 20	F. 12 Delige
	F.21 Sukuma, kı-	-
	F.22 Nyamwesi, kr-	F.22a Nyanyembe kı-
		F.22b Takama
Zone F		F.22c Kıya F.22d Mweri
Lone		-
	F.23 Sombwa, kı-	1.
	F.24 Kimbo, ki-	-
	F.25 βongo, Iki-	
	Group 30	-
	F.31 Nilamba, Iki- (llamba)	
	F.32 Rimi, ki- (Nyatoro)	

2.1.4.5 Guthrie III

The final stage in the classification of Bantu languages, and Zone F and SSN in particular by Guthrie saw some discernible stages of development in Bantu classification (Table 2.8) Modifications are introduced as perceptions change significantly, while other alterations undertaken are only minor where the linguistic groups remain essentially the same. This implies that the eleven members of the Zone spring from the same node of the tree, using the tree-model metaphor, because of the linguistic criteria used.

2.1.4.6 Nurse and Philippson

Among others, Nurse and Philippson (1980a, 1980b) are sceptical about the unity of Zone F, as introduced in 2.2.3 above. Using the lexicostatistical method, they divide the Zone into two parts, West Tanzania and Langi. In their scheme, Langi is composed of Langi itself and Mbugwe. They separate Langi and Mbugwe from the rest of West Tanzania because the connection is mainly lexical, whereas syntactically, Langi/Mbugwe resemble the Ruvu languages. West Tanzania is further sub-divided into two, SSN and Nilyamba/Nyaturu/Kimbu, as illustrated in Table 2.9, below.

Table 2.8. Evolution of linguistic classification in Zone F: Guthrie III (1970)

Major Classification	Language or cluster	Dialects
	Group 10	
	F.11 Tongwe	-
	F.12 Bende	
	Group 20	
	F.21 Sukuma, kı-	-
	F.22 Nyamwesi, kı-	3
Zone F	F.23 Sombwa, kı-	-
	F.24 Kimbo, ki-	-
	F.25 βσηgσ, 1k1-	1 *
	Group 30	
	F.31 Nilamba, Iki- (llamba)	-
	F.32 Rimi, kr- (Nyatoro)	10
	F.33 Langi, kr- (Irangi)	-
	F.34 Mbggwe	1-

Table 2.9. Evolution of linguistic classification in Zone F: Nurse & Philippson (1980a)

Major Classification	Language or cluster	Dialects
WEST TANZANIA/LANGI	A. West Tanzania 1. SSN	Sumbwa Sukuma Nyamwezi
	2a. NNK	Nyaturu Nilyamba Isanzu Nyambi
	2b Kimbu	Kimbu
	B. Langi	Langi Mbugwe

Furthermore, Kimbu is separated from Nilyamba/Nyaturu because of having some influences from West Ruvu languages.

The major criticism regarding this division is that Sumbwa and Kimbu, and indeed Langi and Mbugwe, cannot be set apart from the rest of Zone F simply because they have been influenced by their neighbours. Another more important point of contention with this division is that the authors did not have enough data for some of the members, notably Mbugwe and Kimbu (Nurse & Philippson 1980a:47-8), in addition to the fact that they did not include Tongwe, Bende and βungu without any strong justification apart from the fact that they did not have data for those languages. A third objection is the raised status of Isanzu and Nyambi as coordinate with Nilyamba and Nyaturu. Table 2.9 gives the impression that all the possibilities were explored and that the languages shown represent the complete and accurate configuration of Zone F, including their internal hierarchies.

2.1.4.7 Nurse

The classification of Zone F by Nurse (1999) while not significantly different from that of Nurse and Philippson (1980a), differs substantially in that Nurse suggests not only that Tongwe, Bende, ßungu and Sumbwa be excised from Zone F, but also that Langi and Mbugwe be excluded as well (Nurse 1999:10-1). Labroussi (1999:360) shares Nurse's reservations about ßungu (Wungu). She describes the language as belonging peripherally to

^{*} More data are available now and the situation of 1980 was noted by Nurse (1999) himself almost two decades latter, by including more languages/dialects, thus helping make more concrete statements.

all its neighbours, but differing from them in significant ways so much so that it cannot be grouped with them. She prefers to place it lexicostatistically with the macro Mwika-Nyika group (Zone M).

The status of SiSuumbwa is questioned because, like KiBende, it has BS and 7 > 5, while the rest have neither. Nurse bases his arguments on a survey of the lexical, phonological and lexicostatistical literature. No definite answer is also given as to where these excised languages/dialects should belong. Since assigning membership of those languages was not the aim of his paper, an answer was not expected, just as it is not our central aim to trace the roots of any group which does not fit in Zone F and place it where it belongs.

What remains of Zone F therefore, is what Nurse (1999:10) calls 'core group of West Tanzania', namely F21/F22 (KISukuma/KINyamweezi), which he calls 'dialects of one language'; F24 (KIKIImbu), F31 (KInILaamba); and F32 (KIRImi, or KINyaturu, properly known as KINyaRuu by the native speakers).

One main reason why these other language varieties are excluded by Nurse is that they still lack sufficient information (Nurse and Philippson 1980a:47, Nurse 1999:11).

Table 2.10. Evolution of linguistic classification in Zone F: Nurse (1999)

Major Classification	Language or cluster	Dialects
WEST TANZANIA or TAKAMA or Zone F	Sukuma/Nyamwezi ? Sumbwa Kimbu Nilyamba Nyaturu	
? Tongwe/Bende ? Langi/Mbugwe ? Bungu		

The reason is not strong enough since what is needed is more research first before conclusions are made, although Nurse (1999:10-1) correctly calls for a reexamination of such unknown languages. It is the aim of this study to redress that shortcoming by including all members of Zone F as presented by Guthrie (1967-71), using data to test the suggestions of excision given.

2.1.4.8 Classification in SSN and Zone F: a synthesis

From the foregoing, it is evident that the reexamination and possible reclassification in SSN and Zone F is quite in order. While the work of the pioneers cannot be faulted, this study endeavours to reexamine SSN and Zone F, given the unsatisfactory manner in which the subject has so far been treated, especially in the area of research in undescribed dialects. The earlier studies laid a solid foundation for future scholars and students of Bantu. But the majority have also continued using the schemes of Bantu classification without questioning whether those languages were indeed mono-dialectal or not, and whether adding undescribed dialect(s) would make any significant difference. This issue of unquestioning acceptance of

Guthrie's contribution is also raised by Nurse (1999:10) in reference to Zone F having historical validity. With this inquiry it is felt that some languages are not members of Zone F and should be removed. However, data for some of them were totally missing and reconciling the different observations made is possible only by using the comparative method and lexicostatistics in addition to phonological criteria based on comparable data for all dialects.

A minor issue concerns orthography. Each author writes the names of the varieties according to his/her perception and competence in phonology and graphemics rather than how the natives of that community understand the names. These names which depart from the conventions used in this study are quoted as they appear in those works. This unsystematic representation is unfortunate. For instance, as an extreme case, most of the Zone F languages have no 'r' in their phonological inventories, but it appears in Ciaraganza. Most Zone F languages have a 7-vowel system with a short-long vowel contrast, but many of the scholars do not show vowel length in their writings nor the 7 vowels. All the languages in the zone are also tonal, but the tones are not always shown partly because of the excuse that it is difficult to mark them and the context can always disambiguate words. It is this problem of misrepresentation which creates some of the problems of phonological analysis. In addition, the received nomenclature from the earlier times has not been modified to match the expansion of knowledge. This contributes to the indeterminate number of Bantu languages, since what some of the names refer to are non-existent entities while others are simply misleading. Take for instance the concepts of directional names such as diskimal.

'south', also written as *Tukuma* to refer to entities which are not linguistic. It is one of the lesser aims of this study to clarify such issues where possible.

2.1.5. Historical interpretation in SSN and Zone F

The role of linguistic studies in understanding history and culture cannot be overemphasized, as Dickens (1995:32-3) correctly observes and Wilmsen (1995) and Barnard (1995) agree when referring to the same subject:

It is perhaps unfortunate, but it is certainly true, that a good knowledge of the target language cannot be achieved without at least the ability to perceive (and riculate) its phonological contrasts and the ability to classify its morphemes grammatically. Of course, if one is to make historical inferences about a culture from its language, then a background of how languages change over time is also necessary.

For instance, Abrahams (1967b:1) comments that, although F23 is located within F22 administratively and is treated in the literature as if it belonged there, it had a cultural affinity with western neighbours like the βaha (DJ66). In the map of Unyamwezi, Abrahams excludes the βaSuumbwa. By 'cultural affinity' he might have meant 'linguistic affinity' as well, which is attested by our preliminary findings.

Historical interpretation in SSN and Zone F therefore suggests taking into account all pieces and bits of information like that anthropological work by Abrahams. Such works go a long way in filling the gaps or resolving contradictions which linguistics alone might not handle. For instance, there are few words within Zone F which are also found in N10, Tanzanian Citygoni. The Walygoni's migratory history from southern Africa is recent in areas like Lake

But significantly, the Lake Nyasa (Malawi) area into which the WaTJgoni entered. was also famous as a source of slaves by slaving expeditions to and from the Indian Ocean coast during the 1860s to the 1880s. Slave narratives are normally common with people who have first hand experience of slavery within their clans, even after many generations have passed. During a recent survey in the area, many people did not remember anything about the slave trade. They remembered the WaTJgoni warriors only (Mihanjo, Mapunda and Luanda 1999). Such communal loss of memory seems to suggest two things (a) oral history of such places would not reveal the past if the first inhabitants emigrated and completely new ones occupied their areas, with no one to tell any story. This is an unlikely explanation, because some people survived and remained within the area (Mihanjo, Mapunda and Luanda 1999.3); (b) because the experiences of slavery are associated with the shame of defeat and humiliation, the people would conceal that part of history, although archival sources confirm the presence of slavery up to 1895 (Mihanjo, Mapunda and Luanda 1999.3). The absence of story tellers does not mean the absence of events, and hence absence of history in the area.

When there are knowledge gaps like this slave trade case, especially in relation to Bantu. Zone F and SSN, any source might shed new light. Works in ethnobotany, folk history, oral traditions, or myths should not be dismissed. For example, the contributions by Musso (1968), Chubwa (1979), Mabala (1988), Kairanya (1990), Mdachi (1991), Mkirya (1991), Abdallah (1991), among others, are welcome. They deal with records of oral traditions elicited from communities the authors know well, supplemented by a few external sources. Such contributions should be complementary rather than be dismissed out of hand before complete evidence is gathered and compared with them. The usefulness of myths, oral traditions and folk histories is corroborated by Schmidt (1978:273), who, working in Buhaya, Kagera Region, excavated prehistoric artefacts from sites mentioned in oral traditions only. The correlation between oral tradition and archaeological find were one-to-one. Such inclusion also takes care of the pitfalls of interpretation, which are normally influenced greatly by the theoretical framework one chooses to use to formulate a research problem, gather data, analyse it and integrate the results with known knowledge.

2.2 CONCEPTUAL FRAMEWORK

This study analyses both quantitative and qualitative evidence in tracing the linguistic history of SSN within Zone F. The evidence comes from phonological and lexical features shared by the target languages. Because of this scope, the family tree model fits the comparative method and lexicostatistics as methods of subgrouping, while the contact models of language development are reflected well by qualitative analyses of vocabulary, especially areal features and loanwords. The comparative method is essentially qualitative and lexicostatistics is quantitative. Indo-European philology gave birth to the comparative method, especially with the work of Schleicher and Grimm (Meinhof 1932:19-21). The method or its close version was later introduced in Bantu studies. Later, lexicostatistics was added to deal with matters of statistical measures and chronology, in addition to the role of sub-grouping. These two methods or reactions against them and their evolution wave rise to all the major models

of language development, namely, the tree, wave, and contact approaches. In this study the family tree and contact models are used.

The wave model is not used, although it handles overlapping features in cases of mixed languages, pidgins or creoles. The model was meant to address the questions raised by the tree model. It views innovations as originating from one source, in one language or dialect, and then they radiate in all directions like a pebble thrown into a pond of water, creating ripples which travel afar, but weaken as they move away from the source. Different innovations may start from different sources and criss-cross at language and dialect boundaries, making some varieties share features with others, which can be traced as isoglosses. A tree model would not show that overlap (Anttila 1972).

The wave model, while it accounts for convergence in language development, is not compatible with the comparative method. Its power rests in accounting for contact.

Significantly, the two models, family tree and contact. correlate well with shifts of paradigm" in archaeology and history over the decades as the perceptions of phenomena shifted due to improved horizons in the development of knowledge generally. The major paradigms have been migrationist, processual, and contextual, in that order, although not in a one-to-one relationship with the models (for a full discussion of these paradigms, see

⁹ Paradigm in this sense is borrowed from Kuhn (1970) from his seminal work in the philosophy of science. It refers to a set of models, concepts, theories, methodologies and methods used by a scientific community in describing and explaining phenomena.

Chami 1994, Trigger 1994, Renfrew and Bahn 1996, Harke 1998). It is worth mentioning here that paradigm shift does not mean complete rejection of earlier paradigms. It only means that new approaches emerge to challenge the old, with each approach having adherents because of its merits, so that parallel paradigms can co-exist and compete, creating different schools of thought in the larger scientific community.

Since these approaches in archaeology and history have had a great impact on linguistics, a brief description is in order because they influence greatly the way our data is described and interpreted historically.

Some scholars working or having an interest in linguistics have also been working or interested in archaeology, history, anthropology, philosophy, and ethnology, among many disciplines, and the methods from those other disciplines have found their way into and influenced linguistic thinking in important ways. The approaches are not mutually exclusive nor monolithic, but rather they complement each other as they attempt to explain historical events from different angles. In addition, each paradigm or model best handles one type of data than another. For instance, the family tree model works well with lexicostatistics and the comparative method because these two assume monouenv.

The contact models which emerged with the development of sociolinguistics are suited for analysing qualitative data in phonology, syntax, semantics, morphology or lexis, in examining areal features and/or loans. In the contact models, lexical distribution is explained in terms of the interaction of contiguous speech communities and the notential for one-way or mutual influence. The situation that obtains in SSN and Zone F is that captured by Thomason and Kaufman (1988:35-95) about changes occurring in languages without any shift. Since changes are relative, depending on many dependent variables, they may include borrowing vocabulary new sounds derivational affixes phonological features inflectional affixes followed by major structural features. The cases of BS and DL processes within SSN and Zone F generally for instance can be explained in these terms where some core members appear to originate the process, and other adjacent languages borrow words. By borrowing lexical items, they introduce BS- or DL-like processes in their systems. These processes tend to be unproductive in their new environment because they are difficult to adapt fully. The tendency of horrowing is greater when the power relations between languages in contact are asymmetrical: the period of contact is long; their numerical strengths differ; and the typological fit is closer. In the case of Bantu speakers, asymmetrical power, for instance may be medicine related to the supernatural, specialized knowledge in animal husbandry, as in the case of borrowing colour terms of cattle from Southern Cushitic by Zone F communities

The migration and diffusion paradigm, though heavily criticized for its ethnomorphic¹⁰ leaning, especially in the past, has some important relevance in our study, since synchronic movements of some Kt5ukuma (F21) speakers supports that possibility. Starting from the

The fallacy of ethnomorphism refers to the conceptualization of the attributes of other groups in terms of one's own (Fischer 1972:224-226), which differs from ethnocentrism which refers to the exaggeration of the role of one's group in the interaction with other groups (Fischer 1972:226-230).

early 1070s, when there was a great drought in the region, some communities of βaSukuma moved and settled in Morogoro, Mbeya, Iringa and Rukwa regions¹¹. They were refused the permission to cross into Zambia with their herds of cattle because of the new political boundaries, which the βaSukuma did not recognize. Wherever they settled, these migrant communities were large enough to continue using KtSukuma amongst themselves, as they continued to keep in touch with the larger KtSukuma communities they had left behind. Three decades on, they began to intermarry with the communities they had found, resulting in mutual borrowing of some lexical items. Contrary to the military and conquest model of migration explained below, these KtSukuma migrants have tended to blend well in their new settlements, with only minor skirmishes between them and the predominantly agricultural communities they found. Since they both keep cattle and cultivate cash and food crops, they solve their problems without resorting to war. This state of affairs might have existed even in the past where the resources were likely to be even more abundant.

Migrationist (also known as traditional, evolutionary or diffusionist) archaeology is an approach with a tendency to explain cultural change, different phenomenon or similarity of material culture of one society as an adoption from foreigners, neighbours or trading partners¹². For instance, where "Hamitic" languages were not spoken, it was argued that the "Hamitic" overlords had adopted the languages of the conquered Bantu and that their own

For some more discussion on βaSukuma recent migrations, see Masele (1996).

¹² For a comprehensive summary and review of these paradigms in archaeology, see Chami (1994), Fagan et al (1996), Renfrew and Bahn (1996), Härke (1998).

speech had disappeared without trace (Trigger 1994;328)¹³. In archaeology, the ruins of Zimbabwe were thought to have been the work of civilized foreigners from the north, the Phoenicians of the Middle East, rather than the work of the Shona themselves because of the spectacular structures found there (Renfrew and Bahn 1996;443-4). The migrationist paradigm was an approach common to archaeologists who were trained in classics and history. While diffusion does not necessarily imply movement or replacement of peoples migration implies precisely that. Migrations have indeed existed from time immemorial. Even in Bantu studies, it is often assumed that the Bantu migrated from parts of western Africa and expanded to central and southern Africa because of iron technology and the superiority it conferred on them to conquer other communities.

For instance, Hock (1991:467-70), gives an account of migrations, taking some Indo European languages as his point of departure, elaborating on the theory by Dyen (1956). According to this idea, migrations as massive movements of people from one place to another are a common phenomenon throughout human history. Speech communities migrate to new territories where they find native people with their own different languages, resulting in at least four effects.

¹¹ The case of ethnicity in Rwanda and Burundi is intriguing. The Batuutsi are thought to be Nilotic or Afro-Asiatic from the north, possibly Ethiopia, although there is no evidence whatsoever so far because they speak Kin'yarwanda, fülfia or KiRundi, which are Bantu languages. In these languages, there are also no known traces of foreign linguistic or cultural influences, Nilotic or Afrosaistic. This would only suggest that there was ethnocide which left no trace (see Kimenyi 1979: 1 who suggests that the Batuutsi and Batwa lost their languages and adopted that of the Babuu. a Bantu majority group.

First, if a migrating speech community finds no native linguistic competitor in the new area, the possibilities of dialect/language expansion are limitless as the native dialects/languages are replaced by those of the immigrants. With time, variation emerges as speakers spread in their new territory. Where there is no prehistoric evidence, such dialectal spread is suggestive of migration from an original homeland. In the area under study, linguists and historians alike suggest that the Bantu groups migrated and spread into the area and became dominant both culturally and economically (Batibo 1992b-47).

Secondly, migrating speech communities tend to have smaller linguistic diversity than those left behind as the speakers in the new environment are forced to forget their differences in order to survive. For instance, English in the Americas or Australia shows less heterogeneity than English in Great Britain where the dialectal variations are enormous. In this regard, homogeneity of several Bantu varieties in one location is suggestive of immigration. This hypothesis is difficult to accept as universally true since homogeneity is brought about by factors other than immigration alone. For instance, in societies like the United States, class distinction is based on property, colour, race, or geographical origin of immigrants. In this situation, regular contact between speakers of one variety of a language like English is discouraged. As a result, each class of people evolves or maintains their own peculiar form of English, as is the case of Ebonics for the majority of Americans of African origin.

Thirdly, decreased contact between the homeland and the emigrants in their new home results in innovations in the homeland which fail to reach the emigrants in their entirety, or fail to

Lastly, a complete separation with the homeland may ultimately result in the appearance of new, different languages. In the absence of written documents, only traces of linguistic features may constitute proof that the migrant groups did indeed originate in a certain area. Schmidt (1978:287-97) and Chami (1999), among others, doubt the migratory explanation for Bantu extension, since archaeological studies find no evidence. The migration explanation is also highly speculative because it is treated as a fact instead of being a hypothesis only. Chami (1999:205-9) points out that the trade explanation linking East Africa and the Graeco-Roman world in antiquity might explain some of the rapid spread of material culture in East Africa rather than migrations of people. The spread of iron, for example, started in the Lacustrine region of East Africa rather than West Africa where the Bantu are thought to have originated. In Africa, as elsewhere, military superiority in prehistoric times might have been irrelevant, because it is only one source of power.

As a challenge to traditional archaeology, processual (or new, behavioural) archaeology refers to the dynamic relationship between socio-economic aspects of culture and the environment as determinants of cultural processes and change. It was a reaction against conceptions of the world based on culture history as practised by historians trained in classics and history. This alternative paradigm aimed at placing credit where it was due, rather than attributing change and innovation predominantly to invaders or conquerors (Itandala 1979:148, 1983:43-4, Chami 1994:19). In the case of the Bahutu and Batuutsi cited above, the "Hamitic/Cushitic myth" remains a myth, since there is no evidence to substantiate that
the Batuutsi who are thought to be probably Nilotic or Afro-Asian indeed lost their language
without trace.¹⁴

It was from the backdrop of such paradigms that the family tree model of language development evolved. It was an analogy from the evolutionary nature of biological organisms which start from one source and expand into new territories. Because the migratory paradigm is not dead, and sometimes migrations do indeed take place as explained by Hock (1992), it is important to mention the models used in this study since they are inevitably influenced by the migrationist paradigm.

2.2.1 The Models of language development

2.2.1.1 Family Tree model

As the name suggests, the family tree model, spurred by the theory of biological evolution of various species from one source, compares languages starting from a parent who gives birth to daughters who in turn give birth to children, in an endless cycle of change (See Vansina 1995 and Nurse 1997 for an overview of this model and others). Related dialects are considered to be co-ordinate, at the base of an invened tree, from where their ancestor is

¹⁴ The role of blood type and DNA analyses are unlikely to solve this problem since it is difficult to know if there exists any correlation between blood or DNA and language in the first place, although an open mind to entertain that possibility is better than out of hand dismissal.

posited as uniting them into a single node, forming their proto-language. That proto-language is itself considered to have had relatives at another co-ordinate level who were united to form another node higher up the hierarchy, forming yet another proto-language. The process is repeated until one super-ancestor is reached from which all the language varieties descended. The form of the tree resembles a tree trunk, with the dialects forming its finer branches.

The model, and hence the comparative method and lexicostatistics, assumes monogeny, with an inherent tendency to exclude all other words from a comparative series, because the aim is cognation only. The linguistic tree is assumed to have only one root which gives rise to many daughter languages. Existing speech communities however show that a language may arise out of many sources, as in the extreme cases of pidgins, creoles, and mixed languages like Tok Pisin. Ma'a (Thomason and Kaufman 1988). This indicates that proto languages should be thought of as having dialects, as in Proto Indo-European (PIE) 'warm' from 'gwerm- ~ Germós 'warm, hot' in Greek and PIE 'gworm- ~ formus 'oven' in Latin.

On the other hand, the criticisms are not fully justified because the aim of the tree model and its parent source, the comparative method, is the tracing of genetic relationships between languages rather than to find all the sources from which languages drew their resources. It is against this background of unexaggerated function that the model is used in our study. It is not an absolute or perfect model for a one-to-one relationship between historical event and its representation. Rather, it is only one way of representing reality in a simplified way, needing other tools and external sources to arrive at a historical interpretation.

2.2.1.2 The Contact models

The contact models are explained in detail by Thomason and Kaufman (1988). They view similarity between languages as a range of possibilities, one being genetic affiliation, and the other contact. Languages can be similar because the speakers have been adjacent for a long time, interacting and borrowing from each other.

In the area under investigation, groups like the Sandawe and Hatsa (also Hadza) of the Khoisan family are found, and they have been living there for an unknown number of centuries. As Ehret (1984:489) suggests with regard to the SSN speakers, the Hatsa and the Sandawe might have been earlier settlers in the area. They have remained without being assimilated by the immigrants by maintaining their way of life for the most part. However, who settled there first is a matter of relative chronology since Proto-KtSukuma-KtNyamweezi seems to have originated within the general area of JoSukuma (Ehret:ibid). Posnansky (1981:533) also comments on this problem of dating, that, although the dates obtained by the Carbon 14 (C ¹⁴) method are relatively accurate, "the variability for the period under review may range over several centuries". Linguistic evidence gives some clues to the interactions between Bantu groups and others, as the following JinaKtIya words compare with those from Sandawe, taken from Newman (1970).

(3)		
JinaKrrya (Bantu)	Sandawe (Khoisan)	Gloss
mbùùshi	bús'	(Wildebeest) gnu
ndàálà	dóró	Burchell's zebra
mòógá	mògà	Amaranthus graecizans (plant, green vegetable)

From such shared vocabulary, more hypotheses can be advanced. As the lexical items show, either group might have borrowed from the other, that is, Khoisan Sandawe borrowing from Bantu JinaKITya, and vice versa, showing a contact situation. The direction of borrowing can only be ascertained by comparing a large corpus of lexical items from the pair of languages in relation to the vocabulary of the other members of the varieties in contact. Vocabulary items representing tangible objects like working tools, utensils and ornaments are one of the easiest to borrow and diffuse from culture to culture (Anttila 1972:155). Within one group of languages, lexical diffusion from external sources results in lexical variation, double or irregular reflexes. It also results in dialect mixing. Dialect mixing is common in SSN.

When dialect mixing (or 'koineization') is between related languages, detection of loans is almost impossible without the help of marked features from one of the dialects in contact. It is also impossible to detect loans if the source language ceases to use a word, while the recipients continue using it. In (3), it may be the case that the Sandawe were assimilated, although they retained some words which then spread to the rest of the JinaKIIya immigrants. On the other hand, the Sandawe speakers might have borrowed from JinaKIIya some of the names for animals and plants. The evidence of this would come from other KISukuma or Bantu dialects. If they had the same words, then Sandawe would have borrowed them.

2.2.1.3 Theories and models: Dynamism in SSN and Zone F

SSN and Zone F communities in general have been very dynamic, with many movements of people characterizing the area. There have been internecine wars, famines, search for agricultural and pasture land, and slave raids. In prehistoric times, such movements might have been numerous. Recent history around the Great Lakes area calls to mind the movements of people from various places to sheltered enclaves either in mountainous areas or in plains where enemies could be seen from a distance. SSN speech communities could have taken shelter in those areas which were not slave routes nor reservoirs of slaves. That may partly explain the extent of SSN's mixed status, as people from diverse groups who have entered the area and conformed with the people they found in order to survive¹⁵.

Current research in historical linguistics promises and professes dynamism in intent, but fails to reach that dynamism in practice. Language communities continue to be cast in rigid geographical areas as shown in Map 1.3 which draws boundaries as if they are immutable enclaves enclosing ethnic communities. While locating linguistic communities without borders seems to promise capturing the identity of the fluid nature of speech communities and languages, the analyses lag behind and continue locating language varieties as rigid, isolated entities. Cases in point are the SiSuumbwa, KeeMbuwe, KiiRangi, XCHWUDINGU and

¹⁵ Mihanjo, Mapunda and Luanda (1999) discuss such a scenario of areas of refuge where the Wal]goni marauders are remembered more for their invasions than the slave raids, suggesting that those people might not have witnessed the slave raids because they ran away northward into the area currently occupied by the SSN speech communities. These came from different speech communities. The result was mixed features in the SSN languages.

KiBende/KiTongwe varieties which display that dynamism in their phonology and vocabulary as they interact and are influenced, so much so that many scholars treat them with suspicion when they are grouped in Zone F. It is within the aims of this study to examine their status in Zone F and SSN vis-à-vis their dynamism, and whether their exclusion is indicative of separate paths of historical development or contact only. While the family tree model shows relationships between languages/dialects, it is the contact model which promises a better interpretation in Bantu scholarship. The model treats languages as entities in perpetual motion, their dynamism shown by their maintenance, shift, or death, while others 'commit suicide or are murdered' (McMahon 1994/284-305)

2.3. CONCLUSION

This literature review surveyed what has been done in description, classification, and historical interpretation in SSN and Zone F. The weaknesses identified include gaps in the description, classification and interpretation of the available linguistic data. Thus, the following are areas of focus in this study: description of the historical development of SSN and Zone F with reference to BS, 7 > 5, DL, glottalization, voiceless nasal formation and vocabulary in order to give a new interpretation and improved classification.

CHAPTER THREE

PHONOLOGICAL DEVELOPMENT

3.0 INTRODUCTION

The Proto-Bantu phonological inventory is composed of the following reconstructed consonant phonemes: /*p, *b, *t, *d, *c,*j, *k,*g,*m, *n, *ny!, *ŋ, *y/. It also includes the pre-nasalized consonants /*np, *mb, *nt, *nd, *pj, *pc, *njk, njg/. The focus of this study is the eight non-nasal phonemes /*p, *t, *k, *b, *d *g, *c, *j/ in relation to three major phenomena: vowel systems, especially reduction of 7 vowel system to 5 vowels (7 > 5); Bantu Spirantization (BS), especially as related to 7 > 5; and Dahl's Law, one the one hand, and glottalization and voiceless nasal formation on the other. The study of the eight target sounds shows those phonological developments more clearly than others like nasals.

One issue which needs elucidation is the status of *d and the /d/ and /l/ reflexes in synchronic Bantu phonological inventories. Dealing with the stops versus continuants controversy, Kahiri (1987, 1988, 1995) also addresses the choice between /d/ and /l/ in reconstructions?

¹ The representation given by Guthrie (1967-71) *ny, is IPA *n. Some of the other conventions used by Guthrie are *y, which is IPA *j. The plosive *j which is also adopted in this study is IPA *1.

For a full discussion of this, see Kahigi (1988) who offers good arguments for both sides of *d and *I preferences. Ashigi favours the diachronic development of stop weakening by Homburger and Guthrie's PB *d > I rather than Meinhof's strengthening rule of *I > d (Kahigi 1988; 31, 150). Guthrie's solution is acceptable to Kahigi beause it is phonetically and typologically sound, and it is simpler. In contrast, Meinhof's strengthening solution gives

In the reconstructions by Guthrie, /l/ is absent. This assumed absence of *I in Proto Bantu is odd taking into account the synchronic distribution of laterals across Bantu, especially with regard to languages like KIKIImbu, which are still like Proto Bantu in their phonological systems. The reflex of *d being /l/ in many languages, including KIKIImbt (F24) and KINILaamba (F31) indicates that the Proto Bantu form might have been *1 rather than *d. The reconstruction with *d might be relevant in the parent of Proto Bantu. It is odd for KIKIImbu and KiniLaamba to have almost identical consonants with Proto Bantu, except for one or two phonemes like*d. This /l/ solution in part supports the proposal of positing PB *I by Meinhof (1932) as one important pointer to something amiss with the *d reconstruction. The findings of the UPSID3 sample of liquids in world languages also lends some solid support for PB *I. Out of a sample of 317 world languages in the UPSID, almost all (95.9%) had at least one liquid, while 72.6% had more than one liquid (Maddieson 1984:73). If this Proto Bantu *I and *d hypothesis is correct, then KISukuma's /d, I/ and KINyamweezi's /l/ are actually inherited reflexes from Proto Bantu. They did not change. just as the sounds like /k/, /p/, /t/, /g/ did not change from Proto Bantu. However, scholars posit PB *d or PB *l, but not both (See the discussion with some data in 3.1.2.10, 3.1.2.11. 3.1.2.12, 3.2.1.1.7, 3.2.1.1.8 and Table 3.28).

²(...continued) reflexes which violate both phonetic and typological plausibility.

³ UPSID is an abbreviation for the UCLA Phonological Segment Inventory Database.

Since the nasals and vowels are relatively stable in Zone F and have not changed much from Proto-Bantu, only a limited discussion of them is undertaken in the general overview of Zone F in the first part. SiSuumbwa, KISukuma and KINyamweezi are described in detail in the second part while the third is the conclusion.

3.1, GENERAL OVERVIEW OF PHONOLOGICAL CHANGE FROM PB TO THE TARGET ZONE F LANGUAGES

3.1.1. Vowel sytems in Zone F: 7V and 7 > 5

All 7 of the reconstructed PB vowels correspond quite well with Zone F vowel inventories
(See Appendix 2). The PB vowel system can be represented as:

(4)

FRONT	MID	BACK	
i/ii		u/uu	Super Close
I/II		α/αα	High
e/ee		0/00	Middle
	a/aa		Low

Guthrie (1967-71) represents the vowels as follows: i/ii_1 (i/ii_1), i/II_1 (i/II_1)

In Zone F, the languages which have retained the 7LS vowels are KtSukuma, KtNyamweezi, KtRtmi, KtntLaamba, KtKtmbu, KiiRangi, ICtWuungu and their varieties. Those which have merged or seem to be in the process of merging i/ii and 1/II into i/ii are mainly SiSuumbwa, KiBende, KeeMbuwe and their varieties. SiSuumbwa, KiBende, KeeMbuwe and their varieties have mainly merged superclose i/i/ and i/u/ with the high i/u and i/u/ vowels respectively into one quality of high i/i and i/u/, and retained the rest. On the other hand, in KeeMbuwe, i/I/ merged with i/e/ and i/u/ with i/o/, giving i/e/ and i/o/ respectively, as shown in (5)*.

The reduction from 7 vowels is rather surprising, especially taking into account Dempwolff's (1912:15) observation that, KeeMbuwe had 9 vowels, represented as \underline{i} (y), \underline{i} (y), \underline{e} , \underline{e} , a, \underline{e} , \underline{e} , \underline{u} (w), and \underline{u} . This may be explained by the fact that Dempwolff analyzed his data phonetically, not phonologically.

⁴ Although our data as shown in *Tahles 3.1, 3.2, 3.3, 3.4* and 3.5 demonstrate that KeeMbuwe is 5V, Mous (p.c.) and Nurse (p.c.) think the language has 7 contrastive vowels, while Dempwolff (1912) shows 9. These tables address F10, F23, F25 and F34, since the yowels in F21, F22, F24, F31, F32 and F33 are not controversial.

(5) KeeMbuwe



In SiSiloombo, SiYoombe, KiLoongo, and KiBende, /t/ and /t0/ were lost phonologically when the superclose and the high vowels merged, as shown in (6), although the high /t/ and /t0/ appeared occasionally phonetically. Of the five varieties which have changed from 7V to 5V languages, KiBende and KiLoongo are the most consistent. The others like SiSuumbwa borrow words with /t/ and /t0/, and appear to be 7V.

(6) SiSiloombo, SiYoombe, KiLoongo, and KiBende



This merging of the l/ii and l/l/l vowels to remain with 5LS is normally associated with a process known as Bantu Spirantization (BS) in some eastern Bantu languages. The process is a weakening of a stop whereby it became a fricative in front of the super close vowels l/l and l/l/l. On the other hand, a few spirantizing languages do not merge the two qualities. Because of that, it is not clear how and why an association is posited when there are such exceptions. The two processes may in fact be unrelated, co-occurring only fortuitously.

According to our data, the 7V/SV distinction divides Zone F in two groups, although this is not a unique Zone F feature. Many other zones have members with different vowel inventories in their membership (Nurse 1979), as is the case with the Southern Highlands group where the languages are predominantly TV, although KiBena, KiPangwa and KiHehe are 5LS; in M30, CiNdali is 5LS, while iKtNyakyusa is TV; P20 is divided equally into 5LS and 5S; in North Nyanza, LuGanda and LuSoga are 5LS, while LuGwere is 6LS with /// and /t/, but only /to/.

On the other hand, SiSuumbwa, KiBende and KeeMbuwe are 5(L)S resembling language groups like some G50, G40, G20, G30, EJ30, EJ20, EJ25 and DJ60, among others (Nurse

1979, 1988). In eastern Bantu the 7V languages are fewer, and these include the majority of Zone F, E50, P10, and some G60.

The presence of similar vowel systems in other zones makes the 5LS feature a poor candidate for a good diagnostic tool of classification, unless it is taken together with BS.

KiBende and SiSiLoombo, SiYoombe and KiLoongo have merged their super close /i/ and /u/ and high /t/ and /t/ vowels to /i/ and /u/ respectively, while KeeMbuwe has merged the high vowels /t/ and /t/ with the mid /e/ and /o/ vowels respectively, resulting in /e/ and /o/.

The following procedure was used to obtain the results:

- (i) From the list of the 1036 words used in the study, all words with /I/ and /U/ were counted.
- (ii) It was found that /I/ occurred in 184 words and /U/ in 279.
- (iii) Out of the 184 words with /t/, 34 or 18.5% were chosen, while for /ti/, 39 words or 14.0% out of the 279 words were selected.
- (iv) The justifications for choosing those words as a representative sample were that:
 - (a) they were likely to be represented in all 22 varieties;
 - (b) they were mainly from core vocabulary based on the assumption that its occurrence is expected in any language;
 - (c) the target vowels were not followed by other vowels so that no gliding would occur, so as to avoid the assimilatory influence of other adjacent vowels.

The total number of the selected words in each category was judged to be representative because each group contained more than 10% of the 184 and 279 word sample respectively. The conclusions were therefore expected to be reliable, at least for Zone F.

Based on the data, the following conclusions were drawn, as shown in Table 3.1 and 3.2, and in the following rule of thumb based on three conditions: (a) if all words with /t/ or /0/ are counted from a list of at least 1000 words from PB; (b) if at least 200 words are extracted for each phoneme; and (c) if from those 200 words at least 40 words are carefully chosen so that they represent equitably all the varieties, then the following will be true in Zone F where 200 on average were used and 35 selected and actually used:

- (i) 10 or less words consistently showing vowel/phoneme variation will indicate a stable 7V language;
- (ii) 11-14 words will indicate a possibly changing language from 7V to 5V;
- (iii) 15-35 words will indicate a clear 5V language.

From (i) to (iii), if half the phonemes change consistently away from the values of the protolanguage, then it indicates a 5V language. On the other hand, the cut-off point of how many words should be used may not be so precisely determined because it involves judgement based on the data being used. A shortcut method to determine whether a vowel system was 7V or 5V in other Bantu languages deriving from PB would be to take 30 common core items, do the counting and then test to see how many changes have taken place in that language or group of languages.

A modified chart as represented by Tahle 3.1 and 3.2 could be used to tally the results.

Table 3.1. 7V and 5V varieties in Zone F: /1/ test

Number of Vowel changes out of 34 words	Type and number of languages (varieties)	Examples with number of changes in brackets
0 - 6 (less than 18%)	7V (17)	F31a (1), F31b (1), F21a (2), F21c (2), F22a (2), F22b (3), F24a (3), F22d (3), F31c (3), F32a (4), F32b (4), F32c (4), F22e (4), F24b (4), F33 (4), F21b (4), F25 (6)
7 - 20 (less than 59%)	7V/5V (0)	*
21 + (more than 62%)	5V (5)	F10 (28), F23a (26), F34 (23), F23b (21), F23c (21)

Table 3.2. 7V and 5V varieties in Zone F: /0/ test

Number of Vowel changes out of 39 words	Type and number of languages (varieties)	Examples with number of changes in brackets
0 - 8	7V (17)	F31a (1), F31b (2), F22b (2), F21b (3), F22a (3), F32b (3), F21a (4), F21c (4), F31c (4), F32a (4), F24a (5), F22d (6), F25 (6), F24b (6), F33 (7), F32c (8), F22e (8)
11 - 14 (21-50%)	7V/5V (0)	•
15+ , (more than 51%)	5V (5)	F23b (26), F34 (21), F10 (21), F23a (21), F23c (20)

According to Tahle 3.1 and 3.2, on average, a consistent maximum of 8 phonemic changes would mean retention of clear 7V. A minimum 50% change pattern is required to qualify a language for a stable 5V. Such a formula can also be illustrated by KeeMbuwe's merging of the high with mid vowels. According to this formula as applied in Tahles 3.1 and 3.2, and summarized in Tahle 3.3 for /t/, from a total of 31 words used, 7 or less phonemes retaining their Proto Bantu quality are not significant to make a language 7V. Conversely, 23 phonemes out of those 31 words changing from their original Proto Bantu quality *I to /e/ is indicative of a clear 5V language, with a permanent shift to that status. Hence, because of the high figures of 71.9% and 65.6% scales of change in KeeMbuwe from i/I to /e/ and from u/U to /o/ respectively, such a change is regular.

Table 3.3 I and O change in KeeMhine

# of Words	with /t/ (31 out	34 or 91%)	# of Words	with /0/ (32 out o	of 39 or 82%)
1>1	1>i	1>e	σ> σ	σ>u	σ>0
7 (23.6%)	1 (3.2%)	23 (71.9%)	9 (28.1%)	2 (6.2%)	21 (65.6%

Table 3.4. Evolution of *I in Zone F and 7V 5V

PB Word and Gloss	Varieties with word	Varieties retaining /1/	Languages with a vowel other than /』/	Varieties with a different form
*-bɪ ˈbad'	21	8	F23a, F23b, F23c, F21a, F21c, F21b, F22b, F22a, F22e, F22d, F10, F25, F34 all have /i/ (13)	F33 (Used as a verbal) (1)
*-(n)yakı 'honey'	22	16	F23a /i/, F23b /i/, F23c /i/, F22e /i/, F10 /i/, F34 /e/ (6)	(0)
*bidi 'body'	21	17	F23a /i/, F23b /i/, F23c /i/, F34 /e/ (4)	F10 (1)
-yamı 'chief'	3	0	F23a /i/, F23b /i/, F10 /i/ (3)	The rest (19)
-ci 'country'	22	18	F23a /i/, F23b /i/, F10 /i/, F32c /e/ (4)	(0)
*-dɪm- 'cultivate'	22	17	F23a /i/, F23b /i/, F23c /i/, F10 /i/, F34 /e/ (5)	(0)
*-dɪd- 'cry, wail'	22	18	F23c /i/, F10 /i/, F32a /Ø/, F34 /e/ (4)	(0)
*-yanık- 'dry, vt'	21	9	F23a /i/, F23b /i/, F23c /i/, F21a /i/, F21b /i/, F22a /i/, F22e /i/, F10 /i/, F32b /i/, F24ba /i/, F25 /i/, F34 /e/ (12)	F31b (1)
*-gr 'egg'	20	17	F23a /i/, F23b /i/, F31c /ie/ (3)	F23c, F32c (2)
*-dido 'fire'	6	1	F23a /i/, F23b /i/, F23c /i/, F22d /i/, F10 /i/ (5)	F21a, F21c, F21b, F22b, F22a, F22e, F31a, F31b, F31c, F32a, F32b, F32c, F24ba, F24a, F33, F34 (16)
-yib(idid)- forget	14	10	F23c /e/, F22b/i/, F31a /i/, F34 /e/ (4)	F23a, F23b. F22a, F22e, F22d, F10, F33 F32b (8)

PB Word and Gloss	Varieties with word	Varieties retaining /1/	Languages with a vowel other than /ᢧ/	Varieties with a different form
*-pɪni 'handle, haft'	22	17	F23a /i/, F23b /i/, F23c /i/, F10 /i/, F34 /e/ (5)	(0)
*-cobi 'leopard'	17	15	F24a /i/, F24ba /i/ (2)	F23a, F23b, F23c, F10, F25 (5)
*-tɪma 'liver'	22	14	F23a /i/, F23b /i/, F23c /i/, F21b /e/, F10 /i/, F32b /i/, F24a /e/, F24ba/e/ (8)	(0)
*-yiŋgɪ 'many'	20	15	F23a /i/, F23b /i/, F23c /i/, F10 /i/, F25 /i/ (5)	F33, F31c (2)
*-jɪda 'path'	21	14	F23a /i/, F23b /i/, F32a /i/, F32b /i/, F32c /i/, F10 /i/, F34 /e/ (7)	F23c (1)
*-drp- 'pay'	22	17	F23a /i/, F23b /i/, F23c /i/, F10 /i/, F34 /e/ (5)	(0)
•-gadı 'stiff porridge'	21	14	F23a /i/, F23b /i/, F32b /i/, F32a /e/, F32c /e/, F10 /i/, F34 /e/ (7)	F23c (1)
-birk- 'put, place'	13	10	F23c /i/, F10 /i/, F34 /e/ (3)	F23a, F21a, F21b, F22b, F22a, F22e, F22d, F24a, F24ba (9)
-yɪm- 'pull up'	22	18	F23b /i/, F23c /e/, F10 /i/, F34 /e/ (4)	(0)
-kupi 'short'	20	17	F25 /i/, F33 /i/, F34 /e/ (3)	F23c, F10 (2)
-yɪmbo 'song'	21	17	F23a /i/, F10 /i/, F33 /i/, F34 /e/ (4)	F23c (1)
'-yɪm(ɪdɪd)- stand'	21	17	F23a /i/, F23c /i/, F10 /i/, F34 /e/ (4)	F32a (1)
'-kɪda 'tail'	19	15	F23b /i/, F23c /i/, F10 /i/, F34 /e/ (4)	F32a, F32b, F32c (3)
-grn- 'thick, fat'	17	12	F23a /i/, F23b /i/, F23c /i/, F32a /e/, F32c /e/ (5)	F10, F31c, F25 F33, F34 (5)
'-dɪmi 'tongue'	22	18	F23a /i/, F23c /i/, F10 /i/, F34 /e/ (4)	(0)

PB Word and Gloss	Varieties with word	Varieties retaining /1/	Languages with a vowel other than /』/	Varieties with a different form
-tr 'tree'	18	13	F23a /i/, F23c /i/, F10 /i/, F32c /e/, F34 /e/ (5)	F31a, F31b, F24ba, F25 (4)
-bidi 'two'	22	17	F23a /i/, F23c /i/, F22d /i/, F10 /i/, F34 /e/ (5)	(0)
*-brcr 'unripe'	21	16	F23a /i/, F23b /i/, F23c /i/. F10 /i/, F34 /e/ (5)	F32a (1)
*-ytm- 'upright'	21	16	F23a /i/, F32c /e/, F25 /i/, F10 /i/, F34 /e/ (5)	F31c (1)
-gidi 'warthog'	22	19	F23a /i/, F23c /i/, F10 /i/ (3)	(0)
*-kɪ 'what'	15	10	F23b /i/?, F23c /i/?, F22d /i/, F10 /i/, F33 /e/ (5)	F23a, F31a, F31b, F31c, F32a, F32b, F32c (7)
-dimo work	22	16	F23a /i/, F23b /i/, F23c /i/, F10 /i/, F31c /i/, F34 /e/ (7)	(0)

Table 3.5. Evolution of *v in Zone F and 7V 5V

PB Word and Gloss	Varieties with word	Varieties retaining /a/	Languages with a vowel other than /a/	Varieties with a different form
*-pute 'abscess'	12	0	F23a, F23b, F23c, F21a, F21c, F21b, F22e, F10, F31c, F32c, F24a, F24ba All /u/ (12)	F22b, F22a, F22d, F31a, F31b, F32a, F32b, F25, F33, F34 (10)
*-dom- 'bite'	21	0	All have /u/ (21)	F10 (1)
*-tok- 'abuse, insult'	21	18	F23b /u/, F10 /u/, F34 /o/ (3)	F23c (1)
*-dogo 'brother, relative'	13	11	F23c /u/, F23b /u/ (2)	F25, F34, F23c, F10, F31a, F31b, F31c, F32b, F33 (9)
*-kangada 'crow'	17	15	F22e /u/, F23b /u/ (2)	F22d, F23a, F23b, F23c, F10 (Blank) (5)

PB Word and Gloss	Varieties with word	Varieties retaining /d/	Languages with a vowel other than /o/	Varieties with a different form
-cikʊ/-tikʊ 'day'	18	13	F23a /u/, F23b /u/, F22e /u/ F33 /u/, F34 /o/ (5)	F10, F23c, F31a, F31b (4)
•-gad- 'buy'	21	16	F23a /u/, F23b /u/, F23c /u/, F22e /u/, F10 /u/ (5)	F25 (1)
*-yijad- 'become full'	11	10	F23c /u/ (1)	F22b, F22a, F22e, F22d, F10, F33, F23b F23a, F21a, F21c, F21b (11)
*-bodi 'goat'	22	20	F10 /u/, F34 /o/ (2)	(0)
*-kad- 'grow'	22	18	F23b /u/, F23c /u/, F10 /u/, F34 /o/ (4)	(0)
*-kodo 'great, big'	16	14	F23b /u/, F10 /u/ (2)	F23c, F21b, F34, F22b, F22a, F21a (6)
*-yaŋgʊ 'haste'	20	15	F23a /u/, F23b /u/, F23c /u/, F10 /o/, F31b /o/ (5)	F31c, F25 (Blank) (2)
*-dondo 'heap'	16	11	F32a /u/, F32b /u/, F23b /u/, F23c /u/, F24ba /u/ (5)	F22d, F10, F31b, F23a, F21a, F34 (6)
*-yakı 'honey'	22	17	F23a /o/, F23b /o/, F23c /o/, F10 /u/, F34 /o/ (5)	(0)
*-dome 'husband'	6	1 (F25)	F23a /u/, F23b /u/, F22d /u/, F33 /u/, F34 /o/ (5)	F23c, F21a, F21c, F21b, F22b, F22a, F22e, F31a, F31b, F31c, F32a, F32b, F32c, F24a, F24ba, F10 (16)
•-bod(ag)- 'kill'	17	16	F34 /a/ (1)	F10, F23a, F23b, F23c, F25 (5)
-cubi 'leopard'	16	15	F31c/u/ (1)	F10, F32b, F25, F23a, F23b, F23c (6)
-godo 'leg, foot'	21	17	F23a /u/, F23b /u/, F23c /u/, F10 /u/ (4)	F25 (1)

PB Word and Gloss	Varieties with word	Varieties retaining /tl/	Languages with a vowel other than /σ/	Varieties with a different form
baaba (luud)	16	15	F33 /u/ (1)	F22a (Blank), F10, F23a, F23b, F23c, F21b (6)
*-bg 'mosquito'	20	15	F23a /u/, F23b /u/, F22e /u/, F24ba /u/, F34 /o/ (5)	F33, F10 (2)
*-baamb- 'mould'	21	16	F23a /u/, F23b /u/, F23c /u/, F10 /u/, F34 /o/ (5)	F25 (1)
*-tiko 'night'	19	15	F22d /u/, F10 /u/, F24a /u/, F34 /u/ (4)	F23a, F23b, F23c (3)
*-puda 'nose'	11	9	F33 /u/, F34 /o/ (2)	F22b, F22e, F22e, F22d, F23a, F23b, F23c, F21a, F21c, F21b, F10 (11)
*-dugød- 'open'	18	3	F32a /u/, F23b /u/, F32c /u/, F10 /u/, F34 /o/ (5)	F23c, F22d, F25, F33 (4)
*-nto 'person'	22	16	F23a /u/, F23b /u/, F23c /u/, F22d /u/, F10 /u/, F34 /o/ (6)	(0)
*-koonda 'pigeon'	17	6	F23c /u/, F23c /u/, F21a /u/, F21c /u/, F22b /u/, F22e /u/, F22d /u/ F22a /u/, F10 /u/, F32b /u/, F32c /u/ (11)	F23b (Blank), F33 (Blank), F21b, F24ba F34 (5)
*-nanga 'porcupine'	17	15	F10 /u/, F32a /u/ (2)	F31c, F22a (Blank), F23a, F23b, F23c (50
-nadaa/ usadaa bot,	21	16	F23a /u/, F23b /u/, F23c /u/, F33 /o/, F34 /o/ (5)	F10 (1)
'-nyo 'salt'	17	0	13 have /u/, except F23c, F22d, F32c, F34 with /o/ (4)	F10, F31a, F31b, F24ba, F33 (5)
'-yikot- 'be satiated'	21	17	F23a /u/, F23b /u/, F10 /u/, F34 /o/ (4)	F23c (1)

PB Word and Gloss	Varieties with word	Varieties retaining /a/	Languages with a vowel other than /u/	Varieties with a different form
*-beyo 'seed'	17	17	(0)	F23a, F23b, F23c, F22d, F10 (5)
*-tom- 'send'	20	15	F23a /u/, F23b /u/, F23c /u/, F10 /u/, F34 /o/ (5)	F22a, F31b (2)
*-damba 'sister'	17	14	F23a /u/, F23b /u/, F10 /u/ (3)	F23c, F31b, F32b, F32c, F34 (5)
*-tantato 'six'	11	10	F34 /o/ (1)	F23a, F23b, F23c, F22b, F22e, F22d, F10, F24a, F24ba, F25 (Blank) (11)
*-tado 'sleep' (n)	17	12	F23a /u/, F23c /u/, F32c /o/, F10 /u/, F34 /o/ (5)	F31a, F31b, F32a, F24a, F24ba (5)
*-gomba 'sterile person'	20	16	F23b /u/, F23c /u/, F10 /u/, F34 /o (4)	F32c, F32b (2)
-nto 'thing'	21	15	F23a /u/, F23b /u/, F23c /u/, F22e /u/, F10 /u/, F32a /u/ (6)	F34 (1)
*- tato 'three'	22	13	F23a /u/, F23b /u/, F23c /u/, F32a /u/, F32c /u/, F10 /u/, F24a /u/, F24ba /u/, F34 /o/ (9)	(0)
*-yedo 'white'	14	8	F22d /u/, F32c /u/, F24a /u/, F24ba /u/, F33 /u/ F34 /o/ ((6)	F23a, F23b, F23c, F10, F21a, F21b, F22b, F22a (8)

3.1.2. Bantu Spirantization (BS)

Bantu Spirantization is a phonological lenition rule whereby Proto Bantu (PB) consonants, represented as plosives, weaken to become fricatives in front of the Proto Bantu superclose (SC) vowels *i and *u. This process occurs in many of the Bantu languages and their

varieties. As a rule of thumb, in most of Bantu, the plosives "p, "t, "c, "k, "b, "d, "j, and "g followed by superclose "i and "u weaken, change to fricatives and become different from those followed by lower vowels "I, "e, "a, "o, "a and their long counterparts. In other words, in languages with BS, the reflexes of stops before PB [+superclose] must be different from those before PB [-superclose], otherwise, it is not Bantu Spirantization. While both are assimilatory processes. Bantu Spirantization differs from palatalization in that while BS refers specifically to the two superclose vowels // and /u/ modifying Proto Bantu plosives to be fricatives; palatalization involves front vowels generally which assimilate consonants towards the bard palate, and hence acquiring the place features of the hard palate.

Bantu Spiranzation is also known by the general name of (consonant) mutation (Hyman 1994:85, Zoll 1995). Hinnebusch and Nurse (1981:51) define it as 'that shift, or series of shifts wherein the Proto Bantu (PB) segment *p, *t, *k, *B, *l and *G when followed by the Proto Bantu close vowels *j and *y, become fricatives (spirants) or affricates...' This process is realized differently by the different Zone F varieties as shown in the examples below. The patterns of this variation may be a diagnostic criterion in classification, especially if a distinction is made between regular BS and the associated 7V to 5V reduction and palatalization. The examples below show the superclose and other lower vowels indicating the effects on the plosives for each group of vowels. In the examples, the regular reflexes of PB *p, *b, *t, *d, *e, *j, *k, and *g are indicated for Zone F, with the members in each group compared with similar varieties from other zones. The aim of including examples from areas

outside Zone F tests whether Zone F has any uniqueness in relation to BS. The data for those other language groups or varieties are mainly taken from Nurse (1979:413-463). The reflexes in other zones, language groups or varieties are provided, unless they were not found in the data. The non-high vowels are also shown since they normally indicate the unmarked, regular reflexes as permanent sound changes from Proto Bantu, contrasting with the results of superclose vowels in the languages in which they have an effect.

3.1.2.1 Reflexes of *p / V [-superclose]

- (a) [p] KInILaamba, KIKIImbu, ICIWuungu [G40, G50, G60]
- (b) [f] GIRwana/GiAhi, GiAhi, KeeMbuwe
- (c) [h] SiSuumbwa, KISukuma, KiBende [EJ10, EJ20, some EJ30, Some E60, G22, E74b,
- E72, G30, some E50]
- (d) [φ/f] γInyaMunyinanyi 6 [E71]
- (e)[h/p] KIDakama, KINvanveembe, KIKonoongo, SiGalagaanza

[&]quot;The other KIRImi varieties with /f/ may only be displaying a spelling-pronunciation tradition whereby the earlier writers of the language did not write the /b/ sound appropriately because of several reasons. These reasons may include technological problems where the typewriters and printing presses of the time had no such fonts; improper sound perception because the recorder had no experience with such sounds in his/her language; or simple carelessness on the part of the earlier writers who had assumed that such details do not count even in the long run. The native speakers in such a situation develop a tendency of hypercorrecting in favour of the privileged, even though misleading and incorrect representation. This is also common in KISukuma (as elsewhere) where proper names with the rounded velar nasal /ŋw/, as voiced or voiceless, are written and pronounced by many native speakers of KISukuma by the bilabial nasal/mw/. The /mw/ is the nearest sound which the dominant writing traditions in Tanzania (KiSwahili and English) could use. On their part, KiSwahili and English acquired their alphabet from the Roman script which has no such sound, and they passed it on without modification to KISukuma. Examples, with the appropriate sounds in brackets, include common place and personal names like Mwanza (Ŋwaanza), Mwadui (Ŋwaaduβi), Mwandu (Ŋwaandʊ), Mwashi (Ŋwaashi), Mabuki (sic) (Ŋwaaβuuki), Mwani (Ŋhwaani (or [nwaani], with the diacritic / / underneath or above the nasal showing voicelessness). Muundani (Thuundani). Kidokomo (E71), as an example, seems to have been transcribed correctly.

(f) [h/f] KiiRangi

A significant classificatory observation refers to KIRImi (GiAhi, GiRwana and YInyaMunyinanyi), the only language with [f] as the reflex of *p in non-high, unmarked environments. This in part accounts for the fact that KIRImi might have evolved from a different path from the rest of the eastern Bantu languages. In addition the current data differ from Nurse's (1979) in one instance where he shows that F33 has only one reflex. [h], while in our survey [f] was seen as another active and productive reflex. This may partly be explained by at least three reasons: difference of informant ideolect; a language in the process of being influenced by its neighbour, probably KIRImi; or the inclusion of borrowed words in the count of our survey which could not be detected and removed.

Another significant feature is the widespread distribution of [h] around the contiguous EJ and G zones. This may suggest common ancestry before dispersal, although absolute dating of such splits may not be ascertained reliably. Acquisition of the feature due to contact may not be a satisfactory explanation unless such widespread distribution implies also long contact for the transfers to take place.

On the other hand KINyamweezi (KIDakama, KINyanyeembe, KiKonoongo and SiGalagaanza) displays an innovation which sets it apart from all of Zone F and North East Bantu in this phonetic environment. It retains both [p] and [h] as regular reflexes before nonhigh vowels. This needs an explanation. It is a similar case with F33 [ht/] where two forms co-exist. Why this partial change? This question is answered in 3.2.5 on the interpretation of elottalization and chronology.

As can be observed in the unmarked environment of $^{*}p$, each reflex is represented by one, two or three languages with its dialects, as in the example of KINyamweezi with all its varieties showing $^{*}p > p/h$.

3.1.2.2 Reflexes of *p i [+superclose]

- (a) [p] KInILaamba, KIKIImbu [Mainly non-spirantizing languages belong here, because *i tests spirantization in Bantu]
- (b) [h] SiSuumbwa
- (c) [f] KISukuma, KIDakama [E50, E62c, G12, EJ23, some DJ60]
- (d) [f] KINyanyeembe/SiGalagaanza, KiBende, GIRwana/GiAhi, KiiRangi, KeeMbuwe [G22, E74b, G40 E70, G30, EJ25, some DJ60, G50, G60]
- (e) [s] KIKonoongo [E62a, some G40, some E110, some E130, E125, parts of E120, G65]
- (f) [s/f] ICIWoongo
- (g) [f/φ] KIRImi

The reflexes in a language like ICTWOUDGO show an inconsistency. suggesting a mixture of sources, as shown in (7). Five languages (seven varieties) in Zone F have [f] as the reflex of *p/_i, and two languages each retain [p] and shift to [f] respectively. It is interesting, however, to note that, among those with [f], one of the variety comes from KtNyamweezi while the other three come from KtSukuma. It is SiSuumbwa alone which shifts to [h] in all its varieties, while ICTWOUDGO shifts to either [s] or [f], although Labroussi (1999:360-1) observes only [f]. While the data were limited in our case, the [s] alternation is especially

convincing since it occurs in words which are quite widespread in Bantu languages in general, unless ICIWUUngU got them through borrowing from another language, as shown in (7). The words for 'arrive' -s-ok- and 'knife' cisu appear suspect because of their radically changed forms, although sinu, 'pinch' is plausible. That word with [s] may not be the only one in the ICIWUUngU lexicon, although it is obvious that the evidence for [f] is quite solid even with these few words, as Labroussi found out. On the other hand, a mixture of reflexes points to something else, as discussed in Chapter 5.

(7) Reflexes of PB *pi in ICIWoongo

*-pik- 'arrive	-s Oka
*-piga 'hearthstone'	ifiya
*-pit 'knife'	cisu
*-kapi 'oar'	IIngafi
*-pin(i)- 'pinch'	-sina

3.1.2.3 Reflexes of *p u [+superclose]

- (a) [p] KInILaamba, KIKIImbu?
- (b) [f] The rest of Zone F varieties [Many others, except E/25 /s/ and G60 /h/]

Most of the languages in Zone F have [f] as the reflex of *p/_u . Two languages.

KINILaamba and KIKIImbU, retain [p], although due to a mixture of languages, KIKIImbU's

status is not clear because of having [f] in some words. In words like *-pum- 'go out', the

likelihood is borrowing since it is -fuma, an unlikely native form in KIKIImbU.

Sections 3.1.2.1 to 3.1.2.3 suggest the following based on PB *p. KInILaamba, KIKIImbt

KeeMbuwe and most of KtRtmi have not spirantized because in them, the reflexes of PB *p are identical before all vowels. For the others, SiSuumbwa shows mainly glottalization, and KiBende displays BS. The rest present a mixed picture.

3.1.2.4 Reflexes of *b V [-superclose]

- (a) [β] SiSiloombo/SiYoombe, KISukuma, KINyamweezi, KIRImi) [E60, E74b, G11, G60, EJ10 20, some E50]
- (b) [β/b] KiLoongo, KiBende, KIKIImbu
- (c) [β/Ø] GIRwana/GiAhi
- (d) [b/Ø] KInIHaanzu
- (e) [Ø] KInaUshoola/KInILaamba C [some E60, E74h, G40 E70, G30]
- (f) [v] KeeMbuwe [G22, J32, EJ43, G50, G41]
- (g) [v/0] KiiRangi
- (h) [w] ICIWUUngu [Some E60, E74h, G40 E70, G30, some G60, G50]

The reflex [b] on its own without any other alternation was not found in Zone F. It seems to occur, most probably, in complementary distribution with another fricative or zero?. This suggests that at initial position it is retained in some languages, while intervocalically it is weakened to the fricative /B/ and lost altogether in others. This made *b one of the most unstable sounds in Zone F, since it has changed in all varieties, including in K1K1Imb0 and K1n1Laamba, languages which are relatively more conservative, closer to PB than any others in the zone.

⁷ In this context, a 'zero' sound or reflex, also represented as [O], signifies that the sound was lost in that environment. When observations were not made, then no data are recorded, represented by a dash (-). Both 'zero' and 'dash' refer more to observation than to absolute presence or absence of a sound in a language.

3.1.2.5 Reflexes of *b _ i [+superclose]

- (a) [v] SiSiloombo/SiYoombe ICIWuungu, KiiRangi, KeeMbuwe [E74, G22, G40 E70,
- J15-7, G50, DJ60] (b) [β] KISukuma
- (c) [β/v] KINvanveembe/SiGalagaanza/KIKonoongo
- (d) [B/f] KIDakama
- (e) [f] KiBende [E60, G12, J30, EJ25, G52, G60]
- (f) [Ø] KInīLaamba C
- (g) [[Ø/b] KInaUshoola/KInIHaanzu, KIRImi
- (h) [β/b] KIKIImbU
- (i) [z] KiLoongo [some G43, Rutara]

In the *b sound, it is mainly KIDakama which shows a significant alternation in the reflex between [β/f], a situation likely to be due to having two sources of the reflexes. Others like KIKIImbσ [β/b] suggest only allophonic variation or borrowing, the later being more probable given the high fidelity of KIKIImbσ to Proto Bantu. The KINyamweezi dialects (KINyanyeembe/SiGalagaanza/KIKonoongo), excluding KIDakama, have [β/v], partly suggesting orthographic influences and partly because of the sounds originating from two sources. In the former case, the bilabial fricative /β/ in many Bantu languages is represented as <> where it is confused with the regular labiodental <>>. It is later hyper-corrected both in writing and speech and adopted in the system. KIntLaamba and KIRImi usually lose *b.

3.1.2.6 Reflexes of *b/_ u [+superclose]

- (a) [β] KISukuma, KIDakama
- (b) [Ø] KInILaamba, KIRImi, KIKIImbo?
- (c) [v] SiSiloombo/SiYoombe, SiGalagaanza, ICIWUUngu
- (d) [f] KiBende
- (e) [z] KiLoongo
- (f) [w] KIKonoongo?

(g) [Ø/v] KiiRaŋgi (h) [v?/Ø] Keembuwe

Using "b/_u and its reflexes in Eastern African languages alone, Zone F seems unique in having [β] among the reflexes. According to Nurse's (1979.458) survey of the Eastern African languages, it is the only zone with [β] in that environment. Such a pattern is suggestive of a shared history between its members, although close proximity might have played a role. The only varieties in Zone F without any trace of [β] are 4 · KtntLaamba, KiiRangi, KeeMbuwe and ICtWOUggO. It is easier to explain KtntLaamba, since it is a conservative language phonologically, retaining traces of [b]. On the other hand, KiiRangi, KeeMbuwe and ICtWOUggO are isolated because of their reflexes of "b and this gives more weight to the skepticism in grouping these varieties within Zone F. Normally, the usual process of "b loss is common, in Sabaki, but also in many other Bantu languages (Nurse and Hinnebusch (1993.89-98):

*b
$$\rightarrow$$
 / β / \sim /v/ \rightarrow /w/ \rightarrow / \emptyset /

Another candidate for that skepticism, KiBende, has some traces of [\beta], indicating that it has some affiliation with the other Zone F varieties. However, that affiliation may be only geographical too, among others, because it is closest to KiKonoongo, a likely source of borrowing The evidence for BS based on PB *b is as follows. KIKIImbU, KIntLaamba, KISukuma, some parts of KiNyamweezi, KIRImi and maybe KeeMbuwe and KiiRangi do not spirantize because they have identical reflexes of PB *b before all vowels. On the other hand, SiSuumbwa, KiBende and ICIWUUngU show BS because the superclose vowel environment is different from the low vowel PB *a.

3.1.2.7 Reflexes of *t/ V [-superclose]

- (a) [t] All except KIRImi^k
- (b) [R] GIRwana/GiAhi
- (c) [R/t] YInyaMunyinanyi

K1RImi has the voiceless flap [R] as an allophone of M. It becomes [t] when it is prenasalized (Olson 1964:13). On the other hand, YInyaMunyinganyi (F32c) has double reflex indicating that the allophones seem to be in free variation. For the rest, there is no change from Proto Bantu, just as it is in the majority of other Bantu languages surveyed by Nurse (1979).

3.1.2.8 Reflexes of *t/ i [+superclose]

- (a) [t] KınıLaamba, KıKıımbu [E65, E62a]
- (b) [R] GIRwana/GiAhi
- (c) [t/s] (SiSiloombo/SiYoombe, KiLoongo, GInaNtuzu, KINyanyeembe/SiGalagaanza /KIKonoongo, KiBende, IC1WUUngu, KeeMbuwe⁹ [These have only [s]: E62c, G40 E70.

^{*} For comparison, outside of Zone F, all have [t], except E60, some G40, some EJ30 have [r]; some E60 [d]; E611 [h]: some G41 [c] (Nurse (1979).

⁹ The word *-tindfk- 'push' may be a wrong indicator, since in KeeMbuwe, it is the only irregular one, suggesting borrowing than internal sound change. In this case, it displaces (continued...)

G30, E.J. G50, G60]

(d) [t/f] KImunaSukuma, JinaKIIya, KIDakama [These have only [f]: G22, E74h, G23]

(e) [R/t] yInyaMunyinanyi

(f) [c/t] KiiRangi

In Zone F, KIKIImbU (F24) and KIntLaamba (F31) continue to show that they are stable phonologically, while the rest show divergence from Proto Bantu. The others like KISukuma and KINyamweezi indicate double reflexes: the inherited form and a mutated one. Where two reflexes co-exist, one or the other is likely to be the native, regular sound change in that language, while the other may be from a different source. This difference of source is interpreted in Chapter 5. ICIWUUŋgU, KiBende and KiLoongo display the double reflex pattern of the majority of Zone F languages with [t/s] indicating external influence over their phonological processes.

3.1.2.9 Reflexes of *t/_ u [+superclose]

- (a) [t] KInILaamba, KIKIImbu, ICIWuungu, KeeMbuwe
- (b) [t/s] SiSiloombo, KISukuma, KIDakama, KINyanyeembe, KIKonoongo, KiBende
- (c) [s] SiYoombe [G23 24 31 34, EJ17, G65]
- (d) [s/c] KiLoongo
- (e) [R] GIRwana/GiAhi
- (f) [R/t] YInyaMunyinanyi
- (g) [c] KiiRangi[G22, E74h, E.120 E.111-4]
- (h) [f/t/s] SiGalagaanza

The evidence of PB *t/_u suggests that SiSuumbwa and KiBende have BS, although they

[&]quot;(...continued)

the phonological stability in this phoneme like KIKIImb σ and KInILaamba, as indicated in *t _u.

have traces of some non-spirantizing *t. KIKIImbU (F24), and KInILaamba (F31), KIRImi (F32) do not show any traces of BS while the rest display a mixed picture like in PB *p. A feature to note in Zone F is the absence of [f] as a reflex of *t which is found in KiChaga (E60), Sabaki (G40/E70), Ruvu (G30), much of Lacustrine (EJ), Kilombero (G50) and Southern Highlands (G60). It is one argument for the validity of Zone F, although as negative evidence it is not as strong as presence of a feature. One of the most interesting case here is that of KiiRangi with its reflex /c/. For many years, if not decades or centuries, it was adjacent to non-Bantu languages like Maasai and Sandawe but seems to have received no influence from them. Instead, KiiRangi shares some features with Bantu languages which are geographically distant, today. It is not clear whether such similarity is chance or genetic.

3.1.2.10 Reflexes of *d/_ V[-superclose]

- (a) [1] All, except KIRImi, KiiRangi, KeeMbuwe
- (b) [l/r] KiiRangi, KeeMbuwe
- (c) [Ø/l/r] KIRImi

3.1.2.11 Reflexes of *d/_i[+superclose]

- (a) [1] KInILaamba, GIRwana/GiAhi, KIKIImbu
- (b) [r] yInvaMunvinanvi, KiiRangi, KeeMbuwe [E60]
- (c) [z] ICIWUUngu [E74h, G40 E70, G30, some EJ, DJ60, G50]
- (d) [s] KiBende [G12, some E130, E125, G52, some G60]
- (e) [z/l] SiSiloombo/SiYoombe, KiLoongo, GInaNtuzu, KINyamweezi
- (f) [i/l] KImunaSukuma/JinaKIIya [With [i] only: G22, G40/E70]

¹⁰ KiiRangi has [c] which is also found in neighbouring KiPare (G22) and Saghala (E74b), and in Rutara (EJ20/EJ11-4).

3.1.2.12 Reflexes of *d/ uf+superclosef

- (a) [1] KInILaamba, KIKIImbu
- (b) [l/d/r] KeeMbuwe
- (c) [r/d] KiiRangi
- (d) [v/l]SiSiloombo/SiYoombe, SiGalagaanza
- (e) [z/l] KiLoongo, GinaNtuzu, KiNyanyeembe/KiDakama/KiKonoongo / These have /z/
- only: G23 23 31 34, parts of EJ20]
 (f) [z/l/d] KImunaSukuma/JinaKIIya
- (g) [f/I] KiBende
- (h) [Ø/l/r] KIRImi
- (i) [v] ICIWUUngu / G40 E70, G30, E115-7, D.160, G501

One of the significant features of *d/_u reflexes is the isogloss joining SiSuumbwa and SiGalagaanza, both of which have [vfl]. On the other hand, KiBende also shares some significant features with SiSuumbwa, although the major difference is in its devoicing of the labio-dental [v], and hence the reflex becomes [07], a fact observed by Nurse (1988:58). This sharing of phonological features between SiSuumbwa and SiGalagaanza is not found in this context only. Further phonological contexts might cast light on the assumption that SiGalagaanza may be closer to SiSuumbwa linguistically than it is to KiNyamweezi, although one can also argue that it is close proximity that makes SiGalagaanza share features with SiSuumbwa. The *d/_u [*superclose] context also strengthens the notion that as individual varieties, KiKIImbo, KintLaamba and KiRImi are solid entities, while KiSukuma, KiNyamweezi and SiSuumbwa each have each some internal coherence. If they have any unity, then it is riddled with unresolved anomalies as displayed by the reflexes. ICIWUUngto, KiiRangi and KeeMbuwe seem autonomous in their own right, each displaying occasionally unique features not found in the rest of Zone F members, as with the unique case of

ICIWoongo with [v] as the reflex of *d.

Evidence for BS is solid in KiBende and ICIWUUngu, while its absence clear in KIRILaamba, KiRIImi, KIKIImbu, KeeMbuwe and KiRangi. The situation is mixed in SiSuumbwa, KINvamweezi and KISukuma with double reflexes, indicative of interference.

3.1.2.13. *k/ V [-superclose]

- (a) [k] All, except KIRImi, KIKIImbu
- (b) [k (x)] GIRwana. vInvaMunvinanvi
- (c) [x (k)] GiAhi, KIKIImbu

The sound *k shares some features with non-high vowels in that the [-high] or [-superclose] feature of the vowels does not have a conflict with the [+back] feature of $\hbar l \nu$ which makes $\hbar l \nu$ low. It may be this similar feature specification which makes the distribution of $\hbar l \nu$ relatively uniform in all of Zone F, except for K1RImi and K1KIImb σ , with [x] as an allophonic alternation occurring in complementary distribution with [k]. In K1RImi and K1KIImb σ [x] occurs only before vowels with the [+back, -high] features, that is $\hbar l \nu$ and $\hbar l \nu$, and not the front and high ones like $\ell l \nu$, $\ell l \nu$, $\ell l \nu$ because they modify the [+back] feature of $\hbar l \nu$ pulling the place of articulation away from regular velar position. Thus, [x] is only phonetic rather than phonological.

3.1.2.14. *k/ i [+superclose]

- (a) [k] KInILaamba, GIRwana, YInyaMunyinanyi, KIKIImbti-North
- (b) [x] GiAhi?
- (c) [f] KiLoongo
 - (d) [c] KImunaSukuma
 - (e) [f (k)] SiSiloombo, SiYoombe (f) [f/k] KiDakama, KiNyanyeembe, SiGalagaanza
- (g) [c/k] GinaNtuzu, JinaKiiya, KiKiimbu South, KiiRangi
- (h) [f/s] KiBende
- (i) [f/[] ICIWoongo
- (i) [k/v] KeeMbuwe

The [k] reflex is expected in KInILaamba, KIRImi, KIKIImbU, KiiRangi and KeeMbuwe as non-spirantizing varieties. But in KIRImi, two varieties meet the expectation, while GiAhi has [x]¹¹. This can be regarded as an allophone of [k], as pointed out above for the low vowels. Here, it has been generalized to the [+high] context as well. In addition, the fricative [x] may be due to the palatalizing effect of *i. Likewise, KIKIImbU South has an alternation [c/k]. The [c] is also a likely palatal effect of the verb itself for 'die' *-ki-, rather than spirantization. As well, it may be a transfer from linguistic neighbours like KISukuma whose speakers have immigrated into the Rukwa area in large numbers since the early 1970s. Their numerical strength might have had an immediate impact on KIKIImbU-South. As a strongly conservative variety, KIKIImbU's innovation might be a recent and limited one in words like [ca] 'die' <*-ki-¹². Such an innovation causing double reflexes is mainly idiolectal due to

¹¹ The reliability of [x] as a sole reflex of *k in this phonetic environment is not solid in GiAhi since the set of words for comparison in *k'_i [+super-close] were 7 in all, 2 of which were questionable, 3 were not filled, while 1 appeared to be borrowed.

¹² Such an environment can be best described as kiV - ciV - cV as a first step in (continued...)

contact rather than dialectal

The double reflex phenomenon is explained further in 3.1.3. in discussions about KtSukuma, KzNyamwezi and SiSuumbwa where the phenomenon is more widespread. As a rule of thumb, where one of the reflexes in a suspected Bantu Spirantization case includes a stop, then Bantu Spirantization is doubtful. Of the spirantizing varieties in Zone F, only KiLoongo, KiBende and ICtWUUngt display a true fricativization without traces of stops in the *k/_i [+superclose] environment. The rest show only traces of Bantu Spirantization, which suggests a contact situation resulting in a transfer of some features.

On the other hand, "k/_i (*superclose) shows the most variation of double reflexes where [k] alternates with another sound, a fricative or another stop, the [c]. This is a strong argument for limited Bantu Spirantization in Zone F, since, as Nurse (1979:462) shows, spirantizing languages have [s] as a regular reflex before *i. Only KiBende has [s]. KiBende can thus be regarded as a spirantizing language, with a five vowel system. On the other hand, both Schadeberg (1995:83) and Guthrie (1967-1971:47)¹³ regard KiTongwe, another name for KiBende/KiTongwe¹⁴ as 7V. Schadeberg (1995:83) shows that although KiTongwe

^{12(...}continued) palatalization before consonants, i.e. kiC as it becomes a regular process (where V and C are any yowels and consonants respectively)

¹³Comparative Bantu. 1971. Part I, Vol. 2.

¹⁴ Kapepwa K. Táámbilá (p.c. 15th April 2000), a speaker of KiBende/KiTongwe and (continued...)

(F11) is 7V it has full BS, a position which supports our data on superclose vowels.

However, our data do not only show clear BS, but also show a clearly 5V variety.

3.1.2.15. *k/ u [+superclose]

(a) [k] KImunaSukuma, GinaNtuzu, KiniLaamba, GiRwana, YinyaMunyinanyi, KiKiimbu-South. KeeMbuwe

- (b) [f] SiSuumbwa, SiGalagaanza, KiBende
- (c) [k (f)] JinaKIIya, KiDakama, KiNyanyeembe
- (d) [k/f]15 KiKonoongo, KtKtImbu-North, tCtWuungu, KiiRangi
- (e) [x/(f)] GiAhi

Apart from the varieties with alternations, it is only SiSuumbwa and KiBende which display a consistently Bantu Spirantization system. SiGalagaanza behaves like these two, most probably as an areal influence, since such an affiliation to both KiBende and SiSuumbwa does not end at phonological level alone, but is illustrated by the vocabulary as well. Predictably $^*k = [k]$ is found in KIntLaamba, KeeMbuwe, and parts of KIKIImbu and KIRImi, and KISukuma

14(...continued)

professor of history at the University of Dar Es Salaam, says that the distinction between kilbende and KiTongwe is not linguistic. It is only geographical since the KiBende speakers reside along the Lake Tanganyika shores while the so-called KiTongwe speakers live in the mountains. The language is one. With the advent of "tribal" labels for the linguistic communities of Africa, the division only helped create two identities which were formerly one entity. Such an argument is not an illegitimate appeal to authority by invoking Täämbliä's knowledge of history. It is fairly plausible, since in some literature there are such cases of pseudo-languages and dialects. For instance, KiKonoongo is regarded as a language apart from KiNyamweezi, just as many dialects and some languages. like KiLoongo are not even mentioned, mainly because there is no information about them.

¹⁵ An occurrence of [k/l] shows almost equal frequency of distribution, hence a reversed order [lR] refers to the same equation of the form: 'if a and b have the same values, then the sequences a-b and b-a are equal'. Order is therefore not important in such a case.

Clear indications of BS include ICIWOUDgO and KiBende. SiSuumbwa also shows some consistency, despite the interference with non-spirantizing elements. KtSukuma and KtNyamweezi continue to show the double reflex mixture of spirantizing and non-spirantizing forms and others which do not. KiiRangi also shows double reflexes indicating interference. On the other hand, KintLaamba, KiKIImbo, KiRImi and KeeMbuwe do not show BS.

3.1.2.16. *g/_V [-superclose]

- (a) [g] SiSuumbwa, KISukuma, KINyamweezi, KInILaamba, KIKIImbu
- (b) [γ] KiBende, KIRImi
- (c) [g/Ø] ICIWUUngu
- (d) [Ø/v] KeeMbuwe, KiiRangi

Prominent features with the reflexes of *g are the alternations [v] and [O] in KeeMbuwe and KiiRangi, and [g] and [[O] in ICtWoongo. This is explored further in 3.1.4.1 below. Otherwise, the other varieties display regular occurrences before [-superclose] vowels. This feature in KiiRangi and KeeMbuwe is an important classificatory cue, since it is only they which display such a pattern. It is one feature among several which suggests they descended from a common ancestor or had contact. On the other hand, $[\gamma]$ as a voiced counterpart of $[\chi]$ seems to result from the non-superclose vowel environment where the [+back] feature causes a friction in the velum, deleting the [+stop] feature of the [*g]. This seems a phonetic rather than a phonological reflex, since it was possible to substitute [g] for $[\gamma]$ without any loss of meaning in KiBende and KiRtmi.

3.1.2.17. *g/ i [+superclose]

- (a) [g] KiLoongo, KISukuma, KiDakama, KiKonoongo, KInILaamba, KIKIImbu
- (b) [y] KIRImi
- (c) [z] SiSiloombo, SiYoombe, KINvanveembe, ICIWUUngu
- (d) [s] KiBende

Due to limited data with "g/i [+superclose], SiGalagaanza, KeeMbuwe and KiiRangi are not represented. The other members display a consistent pattern of either favouring Bantu Spirantization or not. SiSiloombo and SiYoombe become isolated from KilLoongo in that the later has [g] while they show [z], like KiNyanyeembe and ICIWUUngg. While ICIWUUngg is a regular Bantu Spirantization candidate, KiNyanyeembe may be due to areal influence from SiSiloombo/SiYoombe and not from KiBende since KiBende has [s] and devoices spirants regularly (Nurse 1988.59). Within Zone F, the patterns displayed here are good typological clues. Some affiliation is indeed displayed, and if ICIWUUngg is removed as geographically distant, the four remaining ones suggest some areal-based distribution.

North Nyanza (EJ30), Western Highlands (DJ60) and Rutara (EJ10) have [z] too, hence pointing to SiSuumbwa as either a member or has been influenced heavily by them as neighbours.

3.1.2.18. *g/ u [+superclose]

- (a) [g] GInaNtuzu, JinaKIIya, KiKonoongo, KInILaamba, KIKIImbu
- (b) [v] SiSiloombo, SiYoombe, SiGalagaanza, ICIWUUngu
- (c) [f] KiBende
- (d) [Ø] KIRImi, KeeMbuwe
- (e) [v/g] KiNyanyeembe

(f) [Ø/v] KiiRaŋgi (g) [z] KiLooŋgo

The conclusions reached here may not be as valid as required since only two words were found in the "g_u [+superclose] environment, *-jogu 'elephant' and *-gund- 'be high (rot) (of meat)'. Some varieties like K1Sukuma and KiDakama do not use *-jogu for 'elephant', and so only one word remained. The informants in K1munaSukuma and KiDakama did not respond to the word for 'be high', and so both slots became empty for these two varieties. For those who answered, however, the responses were consistent with the expected patterns observed in other cases of *g_ For instance, KiBende [f], SiSiloombo [v], SiYoombe [v] and IC1WUUngtu [v] showed consistent Bantu Spirantization, while SiGalagaanza [v] followed SiSiloombo and SiYoombe. On the other hand, KiLoongo [z] became more like Rutara, and unlike SiSiloombo/SiYoombe with [v], which was more like Western Highlands like KiRundi, GiHa and KiHangaaza (D160), which are immediate neighbours of SiSuumbwa to its west.

A conspicuous case of double reflexes was displayed by KiNyanyeembe [v/g], showing that Bantu Spirantization is not well-established, as indicated in 3.2.1.1.14. In fact, the SiSuumbwa influence may be posited here, whereby [v] is from SiSuumbwa, and [g] from KiNyamweezi. KiiRangi's [0/v] alternation points to the same feature of absent or weak Bantu Spirantization since the default seems to be [0] rather than [v]. Section 3.2, illustrates in some detail such cases of alternation and the type of words in which such processes occur.

Despite insufficient data, BS is indicated clearly in KiBende, SiSuumbwa and ICTWOUngo.

The rest show none. KIRImi, KeeMbuwe and KiiRangi show loss of PB *g in the superclose vowel environment, although no solid conclusions can be drawn because of limited data.

3.1.2.19. *c/ V [-superclose]

- (a) [s] All, except KInILaamba-Central, KInIHaanzu, KIRImi
- (b) [h] KIRImi, KInIHaanzu
- (c) [s/f] KtntLaamba-Central

One important generalization which can be drawn from PB*c/_V [-superclose] is the status of KIntHaanzu, a dialect of KIntLaamba, in relation to KIRImi. They both have [h] as the reflex of PB *c with non-high vowels. There are several cases where KintHaanzu is more similar to KIRImi than it is to KIntLaamba. This may have something to do with historical genetic affiliation since it is only KIntLaamba and KIRImi which do not have a regular alternation pattern [s] in non-high environments of PB *c, like the rest of Zone F.

On the other hand, it is difficult to explain the alternation in KInII.aamba-Central [s/ʃ]¹⁶. It may be a generational question, or simply unknown rules at the moment leading to inconsistent alternations, as in ICIWUUggu where some younger informants had different qualities of sounds from the elders, who showed more conservative vowel productions

¹⁶ This case is similar to the four Seuta languages (G23, G24, G31 and G34), where the three have /s/, while one, G23 (KiShambala), has /[/ (Nurse, p.c. May 2000).

3.1.2.20. *c/ i [+superclose]

- (a) [s] All, except GinaNtuzu, JinaKiiya, KiDakama, KiNyanyeembe, KinaUshoola, KiniHaanzu
- (b) [f] KImunaSukuma, JinaKIIva, KiDakama, KInatishoola
- (c) [h] KInIHaanzu
- (d) [s ([)] GīnaNtuzu, KiNyanyeembe

3.1.2.21. *c/ u [+superclose]

- (a) [s] All, except Kinaushoola, KiniHaanzu, KiRimi
- (b) [h] KınıHaanzu, KıRımi
- (c) [[] KInaUshoola

Evidence for BS in the PB *c environment is not clear, first because of the limited data, and secondly, because of the overall distribution of the reflexes which favours /s/ generally before all vowels. This indicates that *c was not inherited from Proto Bantu by the Zone F languages because it is not attested in the group. Rather, /s/ is inherited from an intermediate, common proto language which is not Proto Bantu. The examples of KimunaSukuma, JinaKirya, KiDakama, Kinatishoola show /lf/ before superclose vowels. These are cases of probable recent palatalization, as a contrast to the [-superclose] vowel influence. However, the importance of palatalization seems marginal, since Kinatishoola, for example, shows traces of /lf/ in all phonetic contexts. KiSukuma has /s/ before PB *u, indicating a mixed situation with a likely non-BS status. A partial numerical distribution of the reflexes of PB *c is shown in 3.2.1.1.14 below when discussing SSN.

3.1.2.22. *j / V [-superclose]

- (a) [j] KIRImi, KIKIImbtt, KiiRangi, KeeMbuwe
- (b) [z] KiLoongo, KiSukuma, KiNvamweezi, KiniHaanzu, iCiWuungu
- (c) [j/z] KInaUshoola, KInILaamba-Central
- (d) [z/zy] SiSiloombo, SiYoombe
- (e) [s/sy] KiBende

The striking feature here is the isolation of KiBende by spirant devoicing as noted above.

This feature is not shared by any other Zone F language.

3.1.2.23. *i/ i [+superclose] and *i/ u[+superclose] [v] (All)

Data were inadequate in these environments. Out of the more than 1000 words used, only 26 contained *j, and out of those, none had *i, and only 2 had *u. Conclusions based on this sound would therefore be significantly misleading.

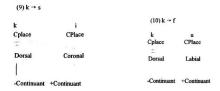
3.1.2.24. Explanation and interpretation of Bantu Spirantization in Zone F

The analysis of BS in Zone F can be approached in two ways (a) either as a phonetic or phonological process whereby articulatory and perceptual factors play a role in sound change (b) contact situation where one variety transfers features to another variety. During the process of adopting and adapting the new features, the phonetic/phonological processes interact simultaneously with the contact situation or any other factor(s) as one complex whole. The separation of the results of interacting processes is done only for the sake of analysis since the two, contact and phonological change, can and do occur simultaneously.

3.1.2.24.1.Phonetic Phonological Explanation and interpretation of Bantu Spirantization in Zone F.

The feature geometry approach can be used to account for BS. Feature geometry treats Bantu Spirantization as a Consonant/Consonant (C/C) interaction where the superclose vowels are phonologically specified for the [+consonantal] feature which then spreads over other neighbouring segments in a patterned way and completely replaces the CPlace features of preceding stops (Zoll 1995:539). The process is largely governed by the phonotactics of a language. She states:

...the narrow stricture of the superclosed (s/c) segments is directly responsible for these properties of mutation as well -in particular, that the superclosed segments have CPlace rather than VPlace features, in line with their narrow stricture, and thus are classified phonologically as [+consonantal]...Once Bantu mutation is properly understood as an interaction between consonantal segments, it is no longer surprising that the set of triegers has never broadened to include the other vowels.



Represented graphically in (9), the /k/ loses its

(11) d → z

d
CPlace
CPlace
Coronal

KiBende, two prominent processes in the language occur in that word, BS which transforms

*k into /s/ and spirant devoicing which changes *di > /zi/ into *di > /si/.

$(12) d \rightarrow d$		
d		The BS rule is powerful enough to account for the
CPlace	CPlace	changes observed in spirantizing languages. For
Coronal	Coronal	instance, with *u, the change of * $k \ge f$ can be
	nt +Continuant	explained as the spreading of the [+Labial] and
-Continuant		[+Consonantal] features of the *u to the *k. The two

features then delete the CPlace node of the ${}^{\bullet}k$, resulting in $/{\cal B}$ as an assimilatory process. This can be represented as in (10), above.

On the other hand, such a rule assumes that the process will apply without exception in a given language like KtSukuma. For instance, what is the interpretation of the in cases where there are double reflexes of *-dodi *whistling' where KImunaSukuma has /shiltoji/, JinaKIIya /notli/ and SiGalagaanza has /multzi/, respectively? The rule does not explain such

exceptions. However, one way of defending the feature geometry rule as a relevant and plausible explanation is the fact that in each language the rule applies differently in terms of which features are specified or not before the superclose vowels. The selective rule application also specifies which features are replaced in the adjacent stop, as illustrated in (11) as in K1Nyamweezi -gazi 'blood' < *-gadi 'blood'; in (12), as in K1Sukuma -dito 'heavy' < *-dito 'heavy', in (13) as in JinaK1Nya -biti 'hyena' < *-piti 'hyena'.

Due to these individual language differences, some phonotactic rules may apply in each case, either allowing or blocking some of the operations of the expected rule and its results.

On closer examination, the phonotactic explanation is not good enough for violating the BS rule, since, as in examples (12) and (13), any exception to the feature geometry account is likely to be a result of a vowel other than the superclose. Any violation or compliance with BS can also be due to a word borrowed into a language which has no BS, resulting in some words being affected by BS while others do not

t i
CPlace CPlace

Coronal Coronal I anguages like SiSuumbwa, KISukuma,
Continuant + Continuant KINvamweezi and ICtWtttnutt can be accounted for

by the feature geometry account when borrowed words or sounds are involved. As noted in

3.1.1, Tuhkes 3.1 and 3.2 above on 7 vs 5 vowel systems, there is dominance of 7V and 5V in F25 and F34 respectively without definite BS. On the one hand, F34 did not undergo BS, although it shows a 5V system, as illustrated in 3.1.1 regarding vowel systems in Zone F¹⁷. The state of affairs where there is a reduction of vowels in descendant languages like KeeMbuwe and KiBende can be interpreted in two ways, among others. First, it can be a result of true BS, and secondly it may be due to vowel reduction not related to BS. The behaviour of KeeMbuwe and KiBende can shed some light in the patterns of double reflexes in SiSuumbwa, KiSukuma, KiNyamweezi and iCtWotngto. At the beginning of Chapter 3 on vowel quality frequencies, F25 showed that it is a 7V language without any doubt, although other studies have also found that speaker variation was pronounced, with some speakers showing 7V, while others, especially from the young generation, had 5V (Labroussi 1999). One explanation given by Labroussi (1999) is BS in progress.

However, ongoing BS in F25 is an unlikely explanation because the mechanism does not suggest that it is internally motivated or adapted through adoption by borrowing. The major factor is likely bilingualism of the speakers, who are made conscious of using two codes

[&]quot;However, Dempwolff (1912:15) records 9 vowels for KeeMbuwe rather than 5, as noted in 3.1.1 above. As a reminder, these 9 are [v, j. [v, j. v, e, s, q, q, v, w], w]. In addition, Guthrie (1967-71) does not give any vowel details for either Kilkangi (F33) or KeeMbuwe (F34), although he records 7 vowels for KiTongwe (IF11), from his Tongwe Group which includes KiBende (F12)). These 7 are the regular vowels found in 7V Bantualanguages like KtSukuma or KiKImbo, from Proto Bantu⁺ji, e, a, o, u, u, the first and last being the superclose. These superclose vowels show clear BS even in KiTongwe (Guthrie 1971-47, vol. 1971-47, vol

and/or two phonological systems, F25 and KiSwahili, the national language. If the process were internal to the language, there would be no widespread exceptions for the superclose /i/ and /u/ being only occasionally specified for [+consonantal, +continuant]. This can be accounted for by the F25-Kiswahili bilingual situation the younger generation are exposed to. compared to their elders, who are likely to be less bilingual. Because of bilingualism, a much more plausible account is imitation borrowing without any progression to adaptation. Imitation borrowing occurs when the linguistic rules of the loan words from the source language are not learnt properly by the recipient language speakers, and therefore reproduction is not perfect. Adaptation borrowing in speakers occurs when assimilation into the recipient language follows the rules of the source language, resulting in a perfect blend of loan words so that the origin of the word in the source or recipient language is blurred (Coetsem (1988;7)). By imitation or adaptation, it is possible to store in language a faithful transmission of loan words and culture in general as non-material artefacts of a speech community. By their behaviour, these loans can then be distinguished from inherited vocabulary or other phonological processes like BS.

When there are double reflexes therefore, a language is either BS, or it is not. If it is not, then it has been heavily influenced by a BS language. This semblance of BS in a language is a result of a natural phonological process of assimilation helped by borrowing due to proximity to or being dominated by a full BS language. In the case of ICIWUUngo, such a dominant language is likely to be KiSwahili, which is a national language and a medium of

instruction in all schools. With the policy of universal education in the 1970s and 1980s in Tanzania, all young speakers in all speech communities in the whole country who had the chance of going to school were exposed to the prestigious BS language, KiSwahili. These included ICIWUUngU's neighbours like M11, M25, and M31 which show traces of BS, but with 7V, a pattern obtaining in F21 and F22 as well. In addition, all Zone G languages have BS1x. This indicates that the pressure of KiSwahili, a Zone G language, is enormous, although its influence is only recent, especially when young informants give data. Other BS languages exert their influence in other contexts, as in DJ60 or EJ10/20/30 on their neighbours. Since BS occurs in the same words because the languages affected are all Bantu, then it is easy to borrow such words when the source language is perceived to be of higher status at that time. But since there is no internal motivation to maintain the momentum towards full adaptation, the 7V also remains as a separate system. This becomes consonant with the F21, F22 and F25 situation where the languages appear to have undergone partial BS because of retaining some words without BS, and having a 7V system, although in fact this is only imitation which is not internalized by and generalized into the system. For instance, M32 (CiNdali) shows patterns of heavy interference by other languages like KiSwahili, resulting in partial BS but full-fledged 5V, although its nearest relative, M31, displays the same partial BS but with full 7V. Labroussi (1999) offers a good explanation of this inconsistency for the Corridor languages and which is relevant to Zone F generally. In

¹⁸ In fact, Nurse estimates that all Zone G languages have had BS for 1000-2000 years, long before KiSwahili influence (p.c. 13th February 2001)

both of the Zone M30 cases, it is likely but not proved by any study, that only imitation borrowing occurs rather than BS adaptation. As Labroussi (1999:374) aptly points out, 7 > 5 occurs independently of BS, although on the other hand, BS is necessarily followed by 5V. In other words, F34 has 7 > 5 as an independent vowel reduction process not associated with BS, whereas F10 and F23 have 5V because of BS.

On the other end of the spectrum F24, F31 and F32 have neither 7 > 5. BS nor any significant loan words with BS from their neighbours, indicating that, apart from being distant from F23, and to some extent from F10, they did not share any immediate historical path to make such influences possible.

For its part, KeeMbuwe (F34) has no BS, but shows strongly that it has 5V, as revealed in Tahkes 3.1, and 3.2. Such vowel reduction may be due to heavy recent borrowing, probably from Iraqw or KiSwahili, rather than internal change, since there are few [1] and [σ] remnants which reveal some underlying TV heritage. F34 is a language surrounded by non-Bantu languages which are 5V. Borrowing heavily from them is expected, facilitating the adaptation of new features into its own phonological system. KiiRangi (F33), a close relative

¹⁹ The rate of change from the 9 or 7 vowels observed by Dempwolff (1912) to 5 vowels in 1999 may be unusually speedy, unless they are phonetic or are due to the impact of a dominant language like KiSwahil which has been playing a major role in schools in recent years. In schools, the crop of young informants is likely to be even more susceptible to conforming to a language of wider communication in a multilingual context, especially in speech communities whose sneakers number only a few thousands or less.

of F34, shows neither BS nor 5V although neighbouring languages like CiGogo or Seuta (and Ruvu in general) are BS and 5V.

This further implies that any traces of BS in Zone F outside F10 and F23 are either borrowed, or that they are not even BS. Rather, the traces which appear to be BS may in fact be regular palatalization, which tends to occur whenever a high front vowel is adjacent to a plosive, as a general assimilatory process of language. BS as a specific assimilatory process in Bantu does not allow for exceptions if it is present in a language. In KISukuma and KINvamweezi, for instance, some words do sometimes undergo BS, while others do not. Taking off from Labroussi's (1999) analysis and conclusions, the situation in KISukuma and KINvamweezi suggests strongly that there is a mix of two assimilatory processes: Bantu specific palatalization (BS) and general palatalization. This is the type of mix that occurs occasionally in K1Sukuma/K1Nyamweezi and other 7V languages. BS as a specific form of palatalization is associated with strict 7 > 5, while general palatalization does not affect 7V systems. These palatalization patterns are described by Labroussi (1999) as partial spirantization since there are many exceptions, as in the case of CiNdali and CiNgonde. among others. Such palatalization is not Bantu Spirantization26 (BS) because BS is unlikely to accommodate such exceptions. The cases described by Labroussi are very similar with

³⁰ Sometimes, 'spirantization' is used to mean 'palatalization' or 'affrication', and sometimes restricted to BS only. In the case of Labroussi (1999), she refers specifically to BS, although the processes in the languages she describes suggest general palatalization, a process which is supported by the many exceptions in the same contexts.

the Zone F situation where there are fully-fledged BS with 5V languages like KiBende and SiSuumbwa. On the other hand, there is a group of languages like KiSukuma, KiNyamweezi and ICIWOOngO which behave anomalously because of mixing features from different phonological processes. Labroussi (1999:375) offers an insightful explanation on this anomalous situation by advancing this idea of structural mixing. She describes the anomaly as abnormal, indicating that the source may lie in the examination of the sociolinguistic and historical networks between different linguistic groups. Such networks might have resulted in 'structural mixing' of two or more languages within one recipient language, as in the case of F21, F22 and F25. Such a situation of BS with 7V is also found in G65 (KiKinga), M11 (CiCiPimbwe), M25 (ifiSafwa), N11 (CiManda), P13 (KiMatumbi). Schadeberg (1995) analyzes this situation in detail, selecting languages which represent all Bantu zones. See also Kahigi (1987, 1988, 1995) on the processes of Proto Bantu stop weakening.

Zoll's feature geometry approach is powerful and elegant enough to capture what goes on in Bantu Spirantization. Zoll's approach also supports Labroussi (1999:363-365) who views BS as the natural effect of tense high vowels on preceding consonants which become phonological, and then the changes are morphologized in inflections, later regularized in derivations as a permanent change.

Based on the phonetic/phonological approach, BS and its traces in Zone F can be interpreted in the following ways. First, those languages with traces of BS with 7V retention might be considered cases of historical palatalization only as an internal innovation. In this category can be grouped varieties of KISukuma and KINvamweezi. Secondly, there are those languages in which the Proto Bantu plosives underwent lenition generally, starting in an intervocalic environment and then by analogy regularized to all the occurrences. In this group are languages like KIRImi and KiiRangi where there was a systematic change of plosives with 7V retention without Bantu Spirantization. Thirdly in some languages, the plosives changed into corresponding fricatives without Bantu Spirantization, but then 7V became 5V by processes other than phonetic, as explained below under contact situations. This is the case of KeeMbuwe. Fourthly, it is unlikely that a language underwent the regular processes of weakening with Bantu Spirantization, but then retained the 7V quite firmly, like ICIWUUngu, With regard to 7V vs 5V in ICIWUUngu, Labroussi (1999:375) is quite clear that it is 7V, although some young speakers have 5V. However, such a system of spirantization with 7V she calls abnormal, a situation found in ICIWUUngU and Fipa-Sukuma as an instance of structural mixing referrred to above (Labroussi: ibid). Fifthly, the change resulted in Bantu Spirantization and a 5V system, as in the case of SiSuumbwa and KiBende. And lastly, there are those languages which changed little from Proto Bantu, like KIKIImbU and KInILaamba, showing neither traces of BS nor 5V. These linguistic groupings in Zone F can be summarized in (14) as one way of classifying these varieties based on Bantu Spirantization:

(14) Plosives, 7 > 5 and BS in Zone F

Process Languages .	7V	5V	BS	PAL ²¹	Other lenition
KıKıımbo, KınıLaamba	+	-	-		-
KıRımi, KiiRangi	+	-		-	+
ιCιWσσηgσ	+	-	+?		-
KrSukuma, KrNyamweezi	+	-	-	+	-
KeeMbuwe		+	-		+
SiSuumbwa, KiBende	-	+	+	-	+

Due to contact, the features of these various groupings can diffuse to their neighbours and cause such phenomena as double reflexes. For instance, words with BS from SiSuumbwa or KiBende can spread to other languages, while the non-BS languages can also donate those non-BS words to SiSuumbwa and KiBende. A few such words are found in SiSuumbwa, as shown in 3.2 below.

3.1.2.24.2 The Contact Model Explanation and interpretation of Bantu Spirantization in Zone F.

Apart from the purely phonetic and phonological explanation of Bantu Spirantization, the process can also be interpreted in sociolinguistic terms. This refers to language contact as a social dimension of language where people of one language adopt and adapt aspects of another language into their own. The natural phonetic and phonological environment becomes only one conditioning factor. After borrowing a few words with BS, the same

²¹ PAL = palatalization, as separate from BS

phonetic environment begins to behave in two ways, BS and non-BS. Double reflexes result with time. Multilingualism due to areal contiguity in many of the Bantu languages plays a big role here where BS can spread even further (Schadeberg 1995-82; Nurse 1999-26). Some of these languages therefore acquire BS partially, resulting in double reflexes when the process fails to be adapted; if acquired in full, there is resulting language shift, from a TV language to a SV with BS. The mechanism of this causal relationship between BS and 7 > 5 has not yet been fully explored as far I am aware. But, based on observation, BS is followed by 7 > 5 generally because of the phonological instability created by BS (Schadeberg 1995:78). This causal connection Labroussi (1999:367) calls phonological enrichment in which BS introduces new phonemes (fricatives) in a language whereby the vowel system is restructured by vowel reduction as a counterbalancing process. This explanation is adequate, although a systematic study can be undertaken to study the causal relationship in more detail.

The contact model approach is preferable since it simultaneously includes both the phonetic/phonological and sociolinguistic perspectives. Two observations can be made of this sociolinguistic approach: behaviour of loanwords and the capacity of various speech communities to absorb speakers from other languages.

3.1.2.24.2.1. The Contact Models: Loan words.

Loanwords with BS features, especially in KrNyamweezi and KrSukuma where Proto Bantu consonants show two reflexes, are suspected as major sources of apparent BS. The situation is similar to that of KiPare (Casu) where extraneous sounds which go against expected patterns in the language are found, creating a messy picture22. A few cases of BS are found in KIKIImbt North in words like ktt-fuma 'to go out' < *-pum- 'go out'. This word displays BS, a process which is generally absent in that language. A feasible explanation lies in contact with neighbouring KINyamweezi which has some Bantu Spirantization, also not native in the language. It is mainly due to contact with other Bantu Spirantization languages that KIKIImbu North would have a word with such a form. The prime suspect is likely to be SiSuumbwa or KiBende because it is synchronically the nearest (although modern language contiguity says nothing about ancient affiliations and neighbourliness between languages). Irregularities due to contact are a common occurrence, and in this case, we might ask ourselves: Is SiSuumbwa a real candidate for influencing KISukuma and KINyamweezi. which in turn might have influenced KIKIImbt? What about other languages which we do not know about now because they are at present geographically distant from KISukuma. KINyamweezi or KIKIImbu speech communities? Regularity in language is normal, and any irregularities as marked features should be explained. For instance, in cases of double reflexes, should ongoing change be posited? If such a position is suggested, then one word should allow two different ways of pronunciation to mean the same thing. But that is not the case in the double reflexes found in KINyamweezi and KISukuma. There is definitely no evidence of ongoing change. In southern KiSwahili, for example, mwivi and mweufi on the one hand, and northern KiSwahili mwizi and mweusi 'thief' and 'black' respectively, on the

²² Nurse, personal communication, March 2000

other, are dialectal and they do not coexist in one dialect. In their conversations, Bryan revealed to Nurse that in the 1930s mwivi and mwizi were in fact both common in Dar Es Salaam³³

3.1.2.24.2.2. The Contact Models: capacity for absorbing newcomers and demographics

In the not so distant past, both KtSukuma and KtNyamweezi speech communities showed a tendency to absorb speakers of other languages and swell their numbers (Masele 1997). That also can have a disturbing/modifying influence on the host languages. If that fact is acknowledged, then the following questions may have definite answers if the evidence is collected: Why are some of the reflexes irregular in some varieties while other varieties are

relatively stable? Why do some members of Zone f languages show consistency of pattern

while the others do not?

Demographic changes is one of the best scenarios. According to the preceding sections, SiSuumbwa underwent Bantu Spirantization. KISukuma and KINyamweezi did not, except that they borrowed lexical items which had BS. This explains the inconsistent reflexes. For instance, in the "d reflexes, one would expect only N, but there are fy (in KISukuma) and /zy/ (KINyamweezi) in causatives. This can be said of /k/ with the /B and /k/ reflexes. There is also a mixed situation with regard to "b. Where do these unexpected reflexes come from?

One answer might be the languages coming in contact with the affected languages. Which

²³ Nurse, p.c. May 2000.

ones, is a perennial question if the current neighbours are excluded.

3.1.2.24.3. Synthesis: Bantu Spirantization in Zone F

In phonetic and phonological terms, a more than ternary division of tonguse height allows for Zoll's proposal for a feature [\pm cons] for $\hbar l$ and $\hbar l$ (i.e. Guthric's $\hbar l$ and $\hbar l$). The ternary characterization of vowels as being only high, mid and low excludes finer vowel heights, at least in analysis. A four-part division allows for more Besibility superclose (*i , *u (or *j) and *v), close or close-mid (*t , *v), open-mid (*e , *o) and low (*a), as suggested in (15). In normal circumstances the $\hbar l$ and $\hbar l$ are underspecified for features [*superclose] and [*consonantal] where $\hbar l$ and $\hbar l$ are not high enough to trigger spirantization. In other words, in languages without BS, the superclose vowels are not specified for [*consonantal], although the division is quartery (four-part). In SiSuumbwa and KiBende the superclose vowels had the [*cons] feature specified, and they triggered Bantu Spirantization.

(15) Four-part height of Proto Bantu vowels

Front	Back
Superclose i	u
Close- Mid I	
Open-Mid e	0
Open-Low	a

BS due to contact applies only in those few loan words with BS, or those regularized due to the contact environment. The mechanism of why in some languages the [-cons] feature is present, with the potential of triggering BS, and in others it is not, is a matter for further investigation.

On the other hand, the contact model also accounts for those double reflexes which Harris and Lindsay (1995:69) see as an arrested process. Historical progression through various stages on a particular path is sometimes arrested at some point, with the result that two or more stages on a particular trajectory are retained within the same phonological system as stable alternations or distributional variants. Although this explanation is good at first sight, its major shortcoming is its inability to provide evidence for the arrest of a certain change in progress and the reasons for that. For instance, in the case of ICtWoungd, BS operates only in some words but not in others. The major question remains: why some stages are arrested

in some words but not in others? This model appears incorrect, since the arrested stages are most likely loanwords which appear as irregular or double reflexes in a language, as in SSN. In such occurrences then, no full Bantu Spirantization can be found. The case of KiBende is instructive: most of the reflexes are complete, which is suggestive of non-interference from other languages because of being isolated physically (in the past) from the non-BS languages. Where there are double reflexes, the influence of neighbouring BS varieties causes mixed forms to appear. This can be said of SiSuumbwa in relation to KINyamweezi and KiSukuma, and to some extent KiKiImbo North. Due to the impact of KiNyamweezi on KiKiImbo North, the borrowed BS words might have spread even farther, since KiNyamweezi was numerically stronger, and was also until very recently perceived as socially and culturally, prestigious.

To summarize, Bantu Spirantization in Zone F can be viewed as a three stage process. The first stage refers to languages which did not undergo BS. The second stage involved the adoption of words with Bantu Spirantization. However, the adoption and adaption process

³¹ In many speech communities in Tanzania, and indeed, in those of the whole world, there may be groups perceived to possess "superior" attributes at a certain point in their historico-cultural contact with others. Because of that, they command special respect so much so that other groups feel relatively inferior to those groups and reject their own assets and attributes and glorify others. This was common especially during pre-independence days when ethnic or "tribal" consciousness was created. The post-independence period, starting from the mid-1960s with the policies of socialism, levelled out most of the ethnically-based differences, and respect for everybody was restored, and different sets of attributes not based on ethnic identity emerged. Examples for certain groups in society being overly privileged and protected can be multiplied in any culture.

was not complete since the native words were already well formed phonotactically, and it was not necessary to influence them. Some fricatives replaced stops. This is explored in more detail in section 3.2 and represented in (16).

(16) BS and 7 > 5

Stage	Vowel status	Consonants	'arrive, measure'	Example languages
ı	7 (incl. r & v)	stops	-pika/-pɪma	All Zone F
II	7 (incl. 1 & a)	stops, fricatives	-pika/-pɪma	All Zone F, except F10, F2325
III	5 (no 1 & 0)	stops, fricatives	-fika/pima	F10, F23, G42 ²⁶ , with BS

The third stage occurred in languages like SiSuumbwa and KiBende. This stage of BS maps a one-to-one relation between superclose vowels and Bantu Spirantization. With such a rule, no exceptions are expected, unless the languages acquire loanwords. As neighbours, languages like SiSuumbwa (F23) had an impact on languages like KtNyamveezi and KtSukuma to some varying degrees, while the more distant ones received little or no influence. This is illustrated in (16).

As a classificatory tool, Bantu Spirantization only succeeds in isolating SiSuumbwa as a once powerful and influential language which interacted with and was reciprocally influenced by

²⁸ Keembuwe and ICIWUngo are borderline, with 5V without BS (F34), and 7V with some BS acquired through borrowing (F25). KtSukuma and KINyamwezi are in this category too, since they mix features from borrowed items, having 7V, with BS in loans.

²⁶ F10 (KiBende), F23 (SiSuumbwa), G42 (KiSwahili)

KtSukuma and KtNyamweezi. In Zone F, SiSuumbwa and KiBende are the only languages with true BS with 5V. Based on BS alone, Zone F's unity is questioned.

3.1.3. Dahl's Law

"When two successive syllables [in KtNyamweezi] each begin with an aspirate, the first of these loses its aspiration and becomes voiced", Meinhof (1932:181), had said, quoting Dahl (1915) who had observed KtNyamweezi lexemes and after whom the law is named. as in (17):

The rule can be restated in the form shown in (18).

In KTNyamweezi, the rule applies within a single di- or poly-syllabic morpheme. Other languages innovate the law differently.

³º While the original Dahl's Law in KINyamweezi might have worked by voicing the first voiceless stop of the first syllable when two such stops are consecutive, its mechanism is realized differently in different language varieties, as in JinaKINya.

Davy and Nurse (1982:157) indicate that the phenomenon shows traces in many languages of East Africa, and is not found outside the area, based on present evidence (Nurse and Hinnebusch 1993:215). Davy and Nurse (op. cit) isolate four possibilities of the process, implying that, although it is Dahl's Law, its implementation may depend largely on the phonotactics of a language. They go on to provide example languages and their dissimilation patterns, where possible ³⁵. (a) petrified in some, leaving only traces in stems (as in E74, E55, E56, G22, and EJ30, with traces in one or more of *p, *t, *k); (b) affecting consonants of prefixes and stems actively; (c) affecting several obstruents (as in E51, E52, E53 and EJ40); and (d) affecting only stops, predominantly /k/.

For instance, Dahl's Law in KinyaRwanda, as a geographically close neighbour to Zone F languages, particularly KtSukuma and KtNyamweezi, dissimilates the voiceless consonant of the prefix morphemes by voicing when the first consonant of the following root in a stem is voiceless, as illustrated in (19) (from Kimenyi 1979-65-71). The consonant may or may not be a stop. Because the rule in KinyaRwanda applies only across morpheme boundaries rather than within a single morpheme, the following affixes are examples of such morphemes that trigger the process: 'ku- 'infinitive 'to', 'you (singular)'; 'ka- 'diminutive (class 12)', 'narrative or consecutive tense', 'ki- ''not yet' aspect', 'class 7 marker'; 'tu- 'we, us', -ta- 'negative marker';

³⁸ For an in-depth analysis and examples, see Bennett (1967), Davy and Nurse (1982:157-195).

(19) Dahl's Law in KinyaRwanda (data from Kimenyi 1979)

 ku-βona 'to see'
 a-ka-gaβo 'a small man'
 i-ki-gori 'maize'

 ku-mira 'to swallow'
 a-ka-zu 'a small house'
 tu-ki-rya 'we eat it'

 gu-soma 'to read'
 a-gu-seka 'and then he smiles'
 tu-gi-soma 'we read it'

 gu-kina 'to dance
 a-gu-fima 'and then he thanks'
 i-gi-seβe 'wound'

u-ta-gona 'who doesn't snore'
u-da-saβa 'who doesn't ask'
da-teka 'we cook'
u-da-hinua 'who doesn't cultivate'
a-da-tuma 'he sends us'

In Zone F generally, the data show that Dahl's Law is active today in KtNyamweezi and KtSukuma only. In the other languages, it does not exist except in loanwords, in those of unknown origin or in sporadic processes with a semblance of the law (See Appendix 3). In extensive cases of borrowing due to contact or ambiguous status of Dahl's Law as in KtNyanyeembe, KtKonoongo and SiGalagaanza, a general explanation is given to account for the unexpected skewing of the results. In these three varieties, Dahl's Law is found in less than 50% of the sampled items. A figure of at least 78% words with Dahl's Law suggests that a language variety has active Dahl's Law, while a count of less than 48% raises some doubts, sometimes serious, about its linguistic group membership. The results are shown in Table 3.6

Table 3.6. Status of Dahl's Law in Zone F Individual varieties

Language variety	Total number of words					
	All used	+DL	% DL	- DL	% -DL	
SiSiloombo	38	4	tt	34	89	
SiYoombe	41	5	12	36	88	
KiLoongo	. 34	10	29	24	71	
KImunaSukuma	44	38	86	6	14	
GInaNtuzu	45	39	87	6	13	
JinaKIIya	51	49	96	2	4	
KIDakama	41	32	78	9	22	
KINyanyeembe	41	18	44	23	56	
KIKonoongo	44	21	48	23	52	
SiGalagaanza	42	12	29	30	71	
KiBende	. 33	0	. 0	33	100	
KInaUshoola	37	0	. 0	37	100	
KInILaamba C	33	0	0	33	100	
KiniHaanzu	38	0	0	38	100	
GIRwaana	36	0	0	36	100	
GiAhi	42	1	2	41	98	
YInyaMunyinanyi	43	- 1	2	42	98	
KIKIImbo North	47	4	9	43	91	
KIKIImbu South	43	1	: 2	42	98	
ICIWoongo	41	0	0	41	100	
KiiRaŋgi	41	- 1	. 2	40	98	
KeeMbuwe	40	2	5	38	95	

Based on the different numerical patterns of the law displayed by the various language varieties, some linguistic groups can be suggested. In order to obtain these groupings based on Dahl's Law, five steps were followed. First, all words containing a consecutive sequence of syllables with voiceless stop consonants were identified by examining the Proto Bantu list

of 1036 items, word by word. The aim was to include all DL words to see how they behaved in the various varieties. However, a few were not usable for various reasons. For instance, it was discovered that some were not directly inherited from Proto Bantu, while the others were formed exclusively by syllables with PB *c instead of those words having at least one voiceless stop from /p, t, k/. In many Bantu languages PB *c is realized as /s/. In all language varieties, except JinaKIIva, /s/ does not trigger Dahl's Law. Such excluded words, included *-cupa 'calabash bottle' (cf KiSwahili cupa, JinaKIIya nsuha 'calabash', juba 'bottle'); *cace/cacI 'spark'. The second step involved the assembly of a unified list of the counate words for each variety. Fifty eight (58) were found usable, constituting 6% of the whole list. Thirdly, the frequencies of either Dahl's Law or its absence were made, and their totals computed. Fourthly, the words which were not cognates or where the informant did not supply a word, were sorted out and excluded from the sample for each variety so that only words with responses were counted to see Dahl's Law words. And finally, a percentage for each language was computed from the final selected words that remained in each variety. The results of Table 3.6 indicating these groups are summarized in Table 3.7.

Table 3.7. Dahl's Law in Zone F and linguistic grouping

Items with Dahl's Law, out of 58		Number (=) and names Language varieties	Dahl's Law Status	
words	#	# Examples		
0% -12%	14	SiSiloombo, SiYoombe, GIRwana, GiAhi, GhInyamunyinanyi, KinaUshoola, KintLaamba, Kinlhaanzu, Kilrangi, KiKIImbu North, KiKIImbu South, KiBende, KeeMbuwe, ICIWuungu	-	
29%	2	SiGalagaanza, KiLoongo	?	
44 - 48%	2	KINyanyeembe, KIKonoongo	?	
More than 78%	4	KImunaSukuma, GInaNtuzu, JinaKIIya, KIDakama,	+	

As Tahle 3.7 shows, four divisions can be observed in Zone F with regard to Dahl's Law. Firstly, out of the 22 varieties, 14 of them show no or very few traces of Dahl's Law. (zero to 5 out of the 58 words). Most Zone F languages fall into this category. Secondly, two varieties have Dahl's Law in 10 and 12 words respectively, out of the 58. Thirdly, two others show 18 and 21 words with Dahl's Law respectively. And lastly, 4 dialects have more than 30 words undergoing Dahl's Law.

From the list, it is apparent that languages or their varieties without Dahl's Law include the two varieties of SiSuumbwa, KiBende, KiRImi, KintLaamba, KiKIImbū, KiiRangi, ICIWoongo, and KeeMbuwe, while the Dahl's Law languages are KISukuma and some

dialects of KINyamweezi. For KINyamweezi however, there are reservations with regard to KINyanyeembe and KIKonoongo on the one hand, and SiGalagaanza on the other. The frequencies of Dahl's Law and non-Dahl's Law items in these varieties do not give a conclusive picture, unless other criteria of classification are used. KINyanyeembe has 18 words or only 44% out of 41 while KIKonoongo has 21 out of 44, or only 48%. These two figures show that more than half of the words do not undergo Dahl's Law as they should. For SiGalagaanza, Dahl's Law words are even less, at 12 only from 42 words, or 29% only. That figure for SiGalagaanza matches closely with that for KiLoongo, at 10 words out of 34, or 29%.

While K1Nyanyeembe and K1Konoongo may be regarded as heavily influenced by languages without Dahl's Law, SiGalagaanza and KiLoongo have close figures suggesting something more than only influence from another language. This suggests membership in languages other than those they are purported to belong. In other words, SiGalagaanza may not be a part of K1Nyanweezi, just as KiLoongo seems to belong elsewhere than with SiSuumbwa. This is further explored in 3.2.2 below.

Using Dahl's Law alone, the classification of the Zone F languages emphasizes the following three points with regard to groupings. Firstly, SiSiloombo and SiYoombe exclude KiLoongo, establishing them as the centre of SiSuumbwa. KiLoongo, while it has some affinities with SiSuumbwa, creates a class of its own independent of SiSuumbwa, suggesting the possibility of a separate history punctuated by another period of long contact with SiSuumbwa. Some possible close affinity with SiGalagaanza is also suggested.

Secondly, the core of KINvamweezi is composed of two dialects; KINvanveembe and KIKonoongo, since KIDakama shows a closer affinity to KISukuma than to the KINyamweezi group, while SiGalagaanza displays an affinity to other peripheral languages. This behaviour seems to be the situation of the "centre" and "periphery" of an entity. The periphery 'protects' the centre from foreign influence by acting as a shell. The periphery is influenced because of its protective role by absorbing the foreign influences due to its location at the fringes of the core. This especially applies to languages or varieties which have geographically and socially porous borders allowing other linguistic groups to come in easily. SiGalagaanza borders other languages of Zone DJ and EJ with easy access both ways, while KiLoongo is surrounded by both EJ and F. The KISukuma varieties on the other hand are protected in the east by the swampy Wembere area, by Lake Victoria in the north, and in the west, in the not recent past by dense forests, and hence their closer affinity in terms of Dahl's Law with 86% for KImunaSukuma, 87% for GInaNtuzu and 96% for JinaKIIya. Their buffer to the south, KIDakama, at 78%, has the second highest frequency of Dahl's Law after the KISukuma varieties. KISukuma's status suggests relatively undisturbed, linguistically impervious borders, especially in the past. The three varieties of KISukuma constitute a core group of Dahl's Law, although finer details isolate JinaKIIya as a variety developing along a separate route from some distance in the past.

Thirdly, the rest of the Zone F languages constitute another negative grouping. But since this larger grouping is not homogeneous by other criteria, the separate sub-groups in it suggest independent development, as explored in the conclusion to this chapter.

Since Dahl's Law is largely confined to the target languages only of Zone F. namely.

KtSukuma, parts of KtNyamweezi and SiSuumbwa, a discussion of the mechanism of this law is detailed in 3.2.2. below.

Table 3.8 Dahl's Law outside KtSukuma, KtNyamweezi and SiSuumbwa

Word	Found in	Possible source	Explanation (lexeme) in source
i-γufa < *-kupa 'bone'	GiAhi	Zone EJ?	-gufa ²⁹
σ-bɪha < *-pic- 'hide'	γιηγαΜυηγίηαηγί	?	?
-visa <*-pic- 'hide'	KiiRaŋgi, KeeMbuwe	CiGogo? KiDaβida?	-visa?
kσ-βisa < *-pic- 'hide'	KıKıımba North	KıNyamweezi < KıSukuma	< kσ-βisa
i-dooke <*-tooke 'banana'	KıKıımbo, North and South	KıNyamweezi < KıSukuma	< i-dooke
-baahu < *-paap- 'light (in weight)	KıKıımba North	KrNyamweezi < KrmunaSukuma < SiSuumbwa	< -boohu
i-goba <*-kopa 'tick'	KıKıımbo North	?	?
ma-basa <-paca 'twin'	KeeMbuwe	?	?

³⁰ In Zone EJ languages like oRuHaya, oLuNyaŋkore, RuKereβe and LuGanda, the return of *k-kupa 'bone' is either -gufwa or -gufa, and some KIRImi speakers are said to have come from around those areas, like Ukerewe Island in Lake Victoria (Jellicoe 1969:3, Tanzania Notes and Records).

For the few frequencies obtained in other varieties, an explanation is given in *Table 3.8*. As can be observed, the words are either loans, or the origin of the reflex is not clear.

3.1.4 Other processes

For classification purposes, the preceding three features, 7 > 5, Bantu Spirantization and Dahl's Law are the most important, as a focus for this study. Other phonological processes like Meinhof's Law are not central in Zone F as a whole and therefore they are not discussed. In addition, not enough data are available for their fair treatment. The following processes are also not significant enough for diagnostic classification since they are isolated in a few individual languages only. However, they deserve some mention because they can shed crucial light in the finer sub-classification within the zone.

3.1.4.1 Lenition of PB*g

The process of lentition of *g is observed in KtRtmi where it becomes /q/. In this language, all PB stops (except partly /k/), weaken as part of a general process. In ICIWUUngU, Keembuwe and KiiRangi, it becomes a fricative or glide like /y/ or /w/** respectively. In Keembuwe and KiiRangi especially, it is lost altogether in the majority of cases, as illustrated in (20)

¹⁰ /w/ and /y/ may only be spelling devices rather than being phonemic, indicating that they represent no or zero_phoneme /Q/.

Variety ≠₹ Proto-Bantu #	KIRīmi	KiiRaŋgi	КееМыпче	iCiWuungu
*-gongo 'back'	mυγοοηgo	mwoongo	moonxo	mugoongo
*-dog- 'bewitch'	-roya, -loya	-lowa	-lova	-lowa
*-jogu 'elephant'	η ίου (η ίογυ)	Ŋjou	Ŋjou	Inzovu
*-torga 'giraffe'	ntI(I)Ya	ntwIIya	ntooya	ndwiiya
*-teg- 'set trap'	-Reeγa (-tega)	-tea	-teya	-teeya
*-bogo 'buffalo'	mbo(o)γo	mboo	mboo	Imbogo

In ICIWOUngO, the mutation of *g to a fricative appears to be blocked mainly by /o/ or /u/.

Otherwise, it regularly becomes /o/ in all three languages, except KIRImi where it is {Y}.

Because of that exception in ICIWOUngO and KIRImi, different histories are suggested for KIRImi, ICIWOUngO and KeeMbuwe/KiRango³¹. This might be explained as a diffused feature or as a feature inherited by the four from a common ancestor. The suggestion of a common ancestor needs additional support.

3.1.4.2. Lenition of *k (*k → x)

This is a phonetic process which occurs mainly in KIKIImbU and KIRImi. The change is more consistent in KIKIImbU than it is in KIRImi. As a phonetic phenomenon, lenition of *k to [x] may not be a significant classificatory criterion, although the question is, why not

³¹ For *g loss in other Bantu languages, especially KiSwahili, see Nurse and Hinnebusch (1993)

in the other languages? Such a shared articulation habit in two related and adjacent speech communities suggests either a feature inherited from a common ancestor, areal diffusion or contact with an earlier, perhaps non-Bantu community.

(21)

Variety **	KIKIImbu	KIRImi
Proto Bantu ↓		
*-teek- 'cook'	-teexa	-Reexa ³²
*-kada 'embers	-xala	-xa(l)a
*-kanua 'minea foud'	-xanga	-kanga (xanga)

3.1.4.3. Split of *d into N and /r/

All the Zone F languages have * d'^{a} |> M of some form or another, without exception. Again this shows how the lateral sound is important in any sound inventory. For instance, out of a sample of 317 languages in the $LPSID^{14}$, almost all had at least one liquid: 95.9% had at least one, while 72.6% had more than one liquid (Maddieson 1984:73). If all the languages descended from Proto Bantu have at least a liquid, mainly M, the likelihood is that Proto Bantu had at least one liquid. It is highly doubtful that this sound was not in Proto Bantu. To

³² Only GiAhi has this word with /x/ in this context, (although that does not mean that it is not used in other contexts).

[&]quot;The two varieties of the three show /k/.

⁴⁴ UPSID is an abbreviation for the UCLA Phonological Segment Inventory Database

have a liquid ($N \circ I'n'$) as a reflex of PB *d is the majority situation in most Bantu languages. In Zone F, the two liquids, $N \circ I'$ and I'n', occurring in one language is limited to the eastern parts only, in K1Rtmi, KiiRangi and KeemBuwe.

In these three Vr varieties, the distribution of Nr and Irl is sometimes environmentally conditioned, and at other times, dialectal. For instance, γ InyaMunyiŋanyi tends to have more r's than l's, while in KiiRanggi and KeemBuwe, the distribution is consistently conditioned by environment.

(22) *-d > l, r, Ø

Variety ≈ Proto Bantu #	KıRımi	KiiRaŋgi	KeemBuwe.
*-godo 'ant-hill'	gι-γσσ, gι-gσσ+	ky-oolo	c-oolo
*-bidi	m-wiin, m-wiil++	mo-vin	mo-vere
*-dom- 'bite'	σ-ruma	ko-luma	o-loma
*deet- 'bring'	-eRa, -leeta+	-reta	-reeta
*-ded- 'bring up'	σ-rea, σ-па+++	kur-era	o-rera
*-digo 'burden, load'	m-wiiyo+, m-wɪɪyo++, mu- lɪyo+++	mu-ruwa?	mo-rigo
-dedu 'chin'	gı-deu	ki-dedu	kı-dedu
*-dɪd- 'cry, wail'	-wɪɪra+, ʊ-lɪa++, kʊ-ra+++	ко-пга	o-rera
*-daŋgo 'door'	gɪnyam-waaŋgo	mu-lyaango	mo-reengo
*-doot- 'dream (vt)'	g-ootea+, g-oR-ea++, -goRea+++	ku-loot-era	o-lot-era

Key:

+ in yınyaMunyinanyi only

⁺⁺ in GiAhi only

⁺⁺⁺ in GIRwana only

Olson (1967:23) points out that in KIRImi, the voiced alveolar flap /R/ (from PB *t), is articulated by one quick flap, and occurs with all the seven vowels. In KiiRangi and KeeMbuwe this flap from PB *d occurs in complementary distribution with /l/ as explained below. Two processes can be observed in these alternations:

Firstly, K1RImi differs from KiiRangi and KeeMbuwe in its tendency to lose //l when another alveolar sound is in any of the following four environments of consecutive adjacency. The picture is also muddled by apparent inter-dialectal borrowing: (a) adjacent to another lateral syllable, as in *-ded-> -rera > -rea 'rear a child'; (b) adjacent to a homorganic consonant like /l/ as in *-dedu >-deu 'chin'; or (d) when intervocalically where both vowels in the root have the same quality, as in *-godto > *-godt/y00 'ant-hill'

Secondly, the rule of Vr alternation in KeeMbuwe and KiiRangi can be stated in two environments: Nt became Irt (a) when adjacent to front vowels Iet, Iit, I (and It for KiiRangi), or (b) intervocalically, if and only if one of the vowels flanking Nt is Iet, Iit or It Ith. The rule can be represented as in (23). This rule-sharing places KeeMbuwe and KiiRangi in one

⁵ This environment has also been called 'before tense vowels' by Nurse (1999:25), although 'tense vowels' are difficult to define or isolate clearly (Katamba 1988:48), since the feature [+tense] is only relevant if the language has vocalic oppositions like [-1], [-1], [-1], and it is commonly used in Germanic languages, which have contrasts like English [suit] 'suit' - [suit] 'soot' and German [m'ts9] 'rental fee' - [mts9] 'middle' (Gussenhoven and Jacobs 1998:76-7). KeeMbuwe at least has no such opposition.

historical route of development at some point in the past.

However, to see whether features in KeeMbuwe and KiiRangi, and indeed, in Zone F are unique, it is important to compare the three major phonological processes with other languages from other Bantu languages. These processes are BS, DL and 7 > 5.

3.1.5. Similarities and differences with other zones

Because of common ancestry, Zone F is expected to be similar to other zones in many respects. Guthrie (1948) notes this with regard to the difficulty of isolating unique differentia for each zone.

According to Nurse (1999-20-25), the occurrence of processes like Dahl's Law, Bantu Spirantization and 7 > 5 strongly suggests a shared historical development from a common, earlier ancestor. Tuhle 3.9 illustrates how the three processes are distributed across some sample Bantu languages. In order for a zone to be separate from other zones linguistically, it must have features unique to it. If there are no unique features to identify the zones beyond any reasonable doubt, then little is achieved in classifying them into zones in the first place.

Table 3.9 RS 7 > 5 and DL in Zone F and other zones

Feature ≈ Language or Zone ↓	BS	7 > 5	Dahl's Law	Neither BS, 7 > 5 nor Dahl's Law
Zone F	SiSuumbwa, KiBende, IC:Woongo?	SiSuumbwa, KiBende, KeeMbuwe	KrSukuma, (Part of KrNyamweezi)	KınıLaamba, KıRımi, KıKıımbo, KiiRaŋgi
	Ŋgumba (A), Yaka (B), Tetela (C)	Ngumba (A), Yaka (B), KinyaRwanda (D) Bangubangu (DJ)	KinyaRwanda (DJ) GIkuyu (E) KiKurya (EJ)	Yambasa (A) Teke (B) Bobaŋgi (C) Mbole (D)
Other Zones	LuGanda (EJ), KiSwahili ³⁶ (G), KiMbundu (H) Lwena (K) CiLuba (L) KiPimbwe (M)	LuGanda (EJ) KiSwahili (G), KiMbundu (H) Lwena (K) Luba (L)	KiKiŋga (G)	
	CiTumbuka (N) KiMatumbi (P) Kwanyama (R)	CiTumbuka (N) Kwanyama (R)		

Compared with other zones, the Zone F members are not unique, since the three features are not confined to them alone. Dahl's Law, for example, is found across eastern Bantu in other zones like DJ, EJ, E and G. The crucial point may be in the small details of those processes. What the processes say is that some eastern Bantu languages might have evolved from a common ancestor which had Dahl's Law. Table 3.9 also suggests that many other languages evolved from other ancestors which did not have DL. In other words, eastern Bantu is not a linguistic label, but rather a geographical one, containing several languages from different parents. Other zones therefore help only to highlight much earlier linguistic affiliation, but not

¹⁶ The information with regard to Bantu Spirantization and 7 > 5 in other zones is from Schadeberg (1995), while that for Dahl's Law is from Nurse (1979b, 1993, 1999), Davy and Nurse (1982), Bennet (1986).

the uniqueness of F. That individuality can therefore be examined within Zone F itself for the details of the three processes' role in uniting or subdividing the zone.

3.1.6 BS, 7 > 5, DL in Zone F: Uniting or dividing criteria?

From *Table 3.9*, some groups based on individual languages in Zone F can be identified.

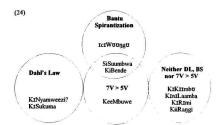
These groups are significant linguistically in that they either unite the zone if they are internally unified themselves, or they divide it if their similarities are not immediately genetic.

These groups can be represented in *Table 3.10*, 3.11, and graphically in (24).

Table 3.10 BS, 7 > 5 and DL in Zone F: Summary of significant classificatory criteria

Feature ≠ Language ↓	Bantu Spirantization	7 > 5	Dahl's Law	
SiSuumbwa	+	+	-	
KıSukuma	-		+	
KıDakama	•		+	
KɪNyamweezi ³⁷			+?	
KiBende	+	+		
KınıLaamba				
KıRımi	-		-	
KıKıımbo	-	-		
ΙσιΨασηgα	+	-/+?	-	
KiiRaŋgi	-		10.0	
KeeMbuwe	-	+	_	

³⁷ Although K1Dakama (F22b) is traditionally part of K1Nyamweezi, the evidence so far suggests that core K1Nyamweezi is composed of F22a, F22d and F22e



Combined with the individual scenarios observed across the varieties surveyed so far, Bantu Spirantization, $7 \ge 5$ and Dahl's Law converge to have a greater impact of linguistically segmenting Zone F into some five groups. In *Tuble 3.10*, similar groups are similarly shaded based on broad similarities. The members in these small groups, however, may not belong together if analyzed further, since, for example, the unity of KIKIImbD. KIntLaamba, KIRImi and KiiRangi is based on negative evidence, the absence of BS. $7 \ge 5$ and DL. In other words, the number of groups is not fixed since it depends on the details observed. Without the details, the resulting five general groups are shown in (24)

The languages enclosed within one circle share one or more of the three named linguistically diagnostic features. The languages which are not in one circle and do not overlap anywhere suggest mainly geographically, rather than genetically, derived similarity. For instance, 7 > 5 in isolation, without Bantu Spirantization, loses its diagnostic meaning. Vowel reduction alone as in KeeMbuwe suggests a different process, since the two, BS and 7 > 5 tend to be strongly interrelated causally. Because of that, KeeMbuwe sharing the 5V feature with SiSuumbwa and KiBende is not significant linguistically, since 5V is not the result of BS. Other features, as noted above, remove ICtWOUngO from the SiSuumbwa and KiBende group, since, though ICtWOUngO is reported to have 5V for some speakers, it is mainly a 7V language (Labroussi 1999:375). The groups therefore need some tighter criteria for subgrouping so as to base the classification on genetically relevant features only. This fine tuning results in eight groups as shown in Table 3.11. Where there is more than one member, the closely related ones and isolates in each sub-group are put in brackets.

Table 3.11 BS, 7 > 5, DL: Phonologically-based linguistic groups of Zone F?

(SiSiloombo, SiYoombe), (KiLoongo)	(KImunaSukuma, GinaNtuzu, JinaKiiya), (KiDakama)	(KiiRaŋgi, KeeMbuwe)	
(KIKonoongo) (KINyanyeembe, SiGalagaanza)	(KIKIImbu, North and south), (KiniLaamba,	(GIRwana, GiAhi) (YInyaMunyiŋanyi)	
KiBende	KinaUshoola, KiniHaanzu)	ICIWoongo	

With so many sub-groups, the representation in *Table 3.11* questions Zone F as a genetically valid group. Guthrie (1967;5, 6) himself does not claim that zones are based on linguistic

criteria or cohesion. He makes it clear that the differentia he identified and which are summarized in Chapter 2, are not unique for each zone but overlap and are shared by other zones as well. His classification of the Bantu languages into zones is mainly referential. The only major problem with Guthrie's zones is his definition and treatment of units he calls zones and groups. He says that while the zones are mainly geographical, based on proximity, the groups are linguistic (Guthrie 1948). The problem lies in the fact that Guthrie first sought geographical unity and then looked for common linguistic features.

3.1.7 Unity of Zone F: Synthesis

The linguistic evidence for Zone F cohesion is not robust, since, for instance, Dahl's Law in SiSuumbwa or some traces of Bantu Spirantization in KISukuma/KINyamweezi are a result of loans. This appearance of possessing traces of a feature like Dahl's Law in a language brings in the significant role of non-linguistic factors in borrowing and language change, which are of a sociolinguistic nature.

Sociolinguistic explanations are unavoidable facts since they forcefully impinge on and determine the route of the linguistic processes. Linguistic change due to contact is not brought about by purely linguistic factors, but by (mainly) social conditions as well. (Thomason and Kaufman 1988). For instance, it is rare for two linguistic communities to be symmetrical in terms of the control of equal power centres like social prestige or economic advantage. This common asymmetry in prestige due to economic, cultural, technological,

military, demographic or political advantage encourages bilingualism among the less prestigious group members, and pronounced borrowing ensues in such situations. This nonlinguistic aspect of borrowing is explored more in 3.2 and in Chapter 5, where historical interpretations are also given.

3.2. SISUUMBWA-KISUKUMA-KINYAMWEEZI PHONOLOGICAL DEVELOPMENT

The main diagnostic changes in SiSuumbwa, KtSukuma and KtNyamwezi are three: the shift of 7 > 5 because vowels feature prominently in BS; Bantu Spirantization; and Dahl's Law, as discussed in this section. BS and 7 > 5 are discussed together because they are related. SiSuumbwa, having undergone 7 > 5, is 5V, while KtSukuma and KtNyamwezi are 7V, the original Proto Bantu vocalism. Although there are cases where members of the same group display different phonological inventories, some disparities in vowel quality are a pointer to some fundamental difference, either because of different paces and sources of innovation, isolation, or because of contact with different groups at different times and places.

On the other hand, BS offers another support for the hypothesis of fundamental difference between SiSuumbwa, KtSukuma and KtNyamwezi. Briefly, it is mainly SiSuumbwa which behaves differently from the two, showing BS, while KtSukuma and KtNyamwezi do not have the process, except in loanwords. BS is therefore explored in some detail below. followed by DL.

3.2.1. BS and 7 > 5 in SiSuumbwa, KISukuma and KINyamwezi

In this section, example words in two target environments are presented, *C/_i and *C/_u, where *C is any of the eight Proto Bantu consonant phonemes examined in the study. The *C/_a environment as the unmarked form has been shown in the general section on Zone F. The tables in each phonetic environment are also supplied with this unmarked form as an indicator of whether the BS forms from *C/_i and *C/_u are consistently different from the products of *C_a. Phonological mutation due to BS is best observed if the *C/_a environment is also presented because it is most unmarked in Bantu. PB *C/_a shows the regular reflex of a sound more clearly without the effect of conditioned assimilation.

3.2.1.1 Analysis of Bantu Spirantization in SiSuumbwa, K1Sukuma and K1Nyamwezi

The following examples illustrate the various sounds from Proto Bantu in the context of both internal innovation and external contact, as summarized after each data set

3.2.1.1.1 PB *pi

(25) PB *-pik- 'arrive'

/-hika/ SiSiloombo, SiYoombe, KiLoongo

/-fika/ KImunaSukuma, KIDakama

/-sika/ GInaNtuzu, KIKonoongo

/-figa/ JinaKIIva

/-fika/ KINyanyeembe, SiGalagaanza

(26) PB *-koopi 'flat of hand'

/-koofi/ SiSiloombo, SiYoombe, KiLoongo, KINyanyeembe, KIKonoongo
- KImunaSukuma, GInaNtuzu, JinaKIIya, KIDakama, SiGalagaanza

(27) PB *-piga 'hearthstone'

/i-higa/ SiSuumbwa, KImunaSukuma /i-siga/ GInaNtuzu /1-ʃiga/ JinaKIIya /i-figa/ KINyamweezi

(28) PB *-pic- 'hide'

/-bisa/ SiSiloombo

/-βisa/ SiYoombe, KISukuma, KINyamweezi

- KiLoongo

(29) *-pio 'knife'

/mu-syo/ KiLoongo
/lʊ-ʃʊ/ KiSukuma, KiDakama
/ki-syʊ/ KiNyanyeembe
/lʊ-syʊ/ KiKonoongo

SiSiloombo, SiYoombe, SiGalagaanza

(30) PB *-pin- 'pinch, scratch'

/-sina/ SiSiloombo, SiYoombe, GinaNtuzu, KiNyanyeembe, KiKonoongo, SiGalagaanza /-suna/ KiLoongo

/-fina/ KImunaSukuma, JinaKIIya, KIDakama

Table 3.12 Reflexes, innovations, extraneous sounds and their possible sources, PB *p/ i

Variety and unmarked form	Sound/	nnovation (6)38	Possible source/comment
	Regular	Irregular	
SiSiloombo /h/	h(2) ³⁹	f(1), s(1), b(1)	KıNyamweezi?, KiSwahili
SiYoombe /h/	h(2)	f(1), s(1),β(1)	DL, KıNyamweezi?, KiSwahili
KiLoongo /h/	h(2)	f(1), s(2)	F21b, F22d?
KımunaSukuma/p/	ʃ(3)	h(1), β(1)	DL, minor innovation
GınaNtuzu /p/	s(3)	ſ(1), β(1)	DL, minor innovation, F21a/c?
JinaKrrya /p/	ʃ(4)	β(1)	Dahl's Law
KıDakama /p/	ʃ(3)	f(1), β(1)	Dahl's Law, KiSwahili?
KıNyanyeembe /p/	s(2)	f(3), β(1)	DL, KiSwahili?
KıKonoongo /p/	s(3)	f(2), β(1)	DL, KiSwahili?
SiGalagaanza /p/	s(1)	f(1), f(1), β(1)	DL, SiSuumbwa?, KiSwahili?

Two regular reflexes are evident in this set of languages, summarized in two phonological processes in $Tahle\ 3.12$ as glottalization in SiSuumbwa: *-pi > hh, and palatalization in KtSukuma: *-pi > hh and KtNyamweezi: *-p > hh and KtNyamweezi: *-p > hh and KtNyamweezi points to hh and h

 $^{^{38}}$ The total number of words for each environment, e.g PB *-p_i, is put in brackets in each table.

¹⁹ The numbers in brackets after a reflex are total frequencies of a reflex in each dialect

Glottalization in SiSuumbwa sheds some important light on the chronology of BS, 7 > 5 and Dahl's Law in the area. One would have expected the reflexes of PB *pi in SiSuumbwa to be homorganic spirants to the stops they replace rather than to the glottal fricative $\hbar V$. This suggests that glottalization preceded BS, thus blocking any chance of its occurrence. One interpretation is that BS was acquired later by SiSuumbwa.

On the other hand, each dialect is characterized by irregular reflexes which are extraneous, suggesting borrowing or an operation of other phonological rules. For instance the reflex /b/ in SiSuumbwa, like /B/ in the other dialects, is a result of Dahl's Law, which, once it operates initially in a sequence, blocks BS. In SiSuumbwa, Dahl's Law is absent except in a few words as shown in 3.2.2. For instance, in the word for 'oil', PB *makuta, is /mafuta/ rather than /mavuta/ if SiSuumbwa had Dahl's Law. The status of /B/ in SiSuumbwa is also not clear, since it seems to be in free variation with /b/, a situation which does not obtain in KtSukuma and KtNyamweezi

Another extraneous sound in the PB *pi context is /ll'. KINyamweezi, including KtDakama has a shared innovation of /ll', possibly from borrowing. This is not found in KtSukuma generally. The presence of /ll' in /-koofi/ 'flat of hand' in SiSuumbwa, KtNyanyeembe and SiGalagaanza is a good illustration of possible borrowing, possibly from KiSwahili. For SiSuumbwa, it is the only /ll' out of the six words with *-pi in the examples given above. The expected reflex in SiSuumbwa would have been/ikoohi/ and in KtNyamweezi /-koosi/ into

which the majority of the reflexes mutate. Since historically some βaSuumbwa, together with the BaNvamweezi, were renowned traders and adventurers plying the hinterland as far as Katanga in the DRC and later the East African coast in the late nineteenth century 40, the source of this word might be along the coast, probably from KiSwahili, /koti/. The other members of Zone F which have such a reflex are KeeMbuwe and KiiRangi, which, like KINvanveembe and SiGalagaanza are located along the once busy trade routes in ivory and slaves, within their neighbourhoods and into the DRC and Zambia, and back to the East African coast (Roberts 1968, Shorter 1968b Kimambo 1993), KIKonoongo in the south and KISukuma and KIDakama in the north were outside the immediate trade route, and the word is not found, highlighting the importance of contact and some type of dominance in the transfer of words. This also suggests that the word is quite recent, since the coastalhinterland trade was prevalent mainly from the 18th century (Kimambo 1993). On the other hand, one anomalous word in a language cannot rule out other possibilities on the source of the /f/ in this environment, as in *pik- in KINyanyeembe and SiGalagaanza. Three possibilities can be suggested for the source of /f/:

(a) since the speakers of SiGalagaanza and KINyanyeembe have been living along a main trade route, they were also active participants in the long distance trade in their own right during the same period, and they independently acquired the sound from the coast;

(b) it is the influence of some BS language like SiSuumbwa whose speakers popularized the

¹⁰ Kahigi (1988:5)

word through trade;

(c) it is an internal innovation in KINyanyeembe, SiGalagaanza

The last explanation is not strong enough since some plosives apart from /p/ do not change to spirants in the same environment, as shown below, suggesting an external source.

Another case of borrowing is KImunaSukuma /h/ as a reflex of *pi as in ihiga < PB *-piga

'hearthstone', which is likely to have been acquired from SiSuumbwa. In the PB *pi

context. /h/ is not found in the other dialects of both KISukuma and KINvamweezi

The appearance of If in GtnaNtuzu and SiGalagaanza may be a case of inter-dialectal borrowing, possibly from JinaKIIya or KImunaSukuma. In the PB *pi context, the regular reflex is Is I for both. since IF or If I are questionable in both.

In the KISukuma/KINyamweezi expected reflex, only GInaNtuzu and JinaKIIya behave as expected, with /s/ and /f/ respectively.

From the above, two things can be said. First, glottalization in SiSuumbwa started before BS.

This is indicated by the reflex of PB *pi being /h/ rather than /t// or any other fricative.

Secondly, speakers of languages are not static in space and time, but they interact with different speech environments and speakers of other languages. This has the impact of

introducing new sounds in their languages. This is revealed by both the regular and irregular reflexes of Proto Bantu sounds even within related dialects.

3.2.1.1.2 PB *pu

(31) PB *-pud- 'blow on, blow up'

/-fuula/ SiSiloombo, KISukuma, KIDakama

/-puula/ KINyanyeembe

/-fulIIzya/ KIKonoongo

SiYoombe, KiLoongo, SiGalagaanza

(32) PB *-puktd- 'dig up, dig out'

/-fukuula/ SiSiloombo, KINvamweezi

/-sukuula/ GinaNtuzu /-fuguula/ JinaKiiva

SiYoombe, KiLoongo, KImunaSukuma

(33) PB *-pudo 'foam'

/-fulo/ SiSuumbwa, KISukuma, KINyamweezi

(34) PB *-deepu 'long'

/n-dIIhu/ KImunaSukuma

/n-dIpu, nIpu/ GInaNtuzu / -lIhu/ JinaKIIya

/ -liihu/ KIDakama, KIKonoongo /n-diihu/ KINyanyeembe

SiGalagaanza, SiSuumbwa

(35) PB *-pum- 'go out'

/-fuma/ SiYoombe, JinaKIIya, KINyanyeembe, KIKonoongo, SiGalagaanza

SiSiloombo, KiLoongo, KImunaSukuma, GInaNtuzu, KIDakama

(36) PB *-pum- 'produce, put forth, display'

/-fumva/ SiYoombe, KINvamweezi

/-funya/ KImunaSukuma, JinaKIIya

/-sunya/ GInaNtuzu

- SiSiloombo, KiLoongo

Table 3.13 Reflexes, innovations, extraneous sounds and their possible sources, PB *pu

Variety and unmarked form	Sound/li	nnovation (6)	Possible source/comment	
	Regular	Irregular		
SiSiloombo /h/	f(3)			
SiYoombe /h/	f(3)			
KiLoongo /h/	f(1)	-	Insufficient data?41	
KımunaSukuma /p/	f(3)	h(1)	SiSuumbwa?	
GrnaNtuzu /p/	s(2)	p(1)? ⁴² , f(1)	KıSukuma dialects, internal	
JinaKrrya /p/	f(5)	h(1)	KımunaSukuma < SiSuumbwa	
KɪDakama /p/	f(4)	h(1)	SiSuumbwa?	
KıNyanyeembe /p/	f(4)	p(1)?, h(1)	SiSuumbwa?	
KıKonoongo /p/	f(5)	h(1)	SiSuumbwa?	
SiGalagaanza /p/	f(4)			

⁴¹ Only one word out of six was filled, so the adequacy of the reflex as representative can be questioned.

⁴²/p/ as a retention from Proto Bantu suggests a regular feature, while the BS forms suggest markedness although they are the majority and seem more regular.

In the majority of languages, PB *pu yields /l/ as a regular change (see Nurse 1979). Most languages surrounding KINyamweezi and KISukuma have /l/. For example, within Zone F, KInILaamba and KIKIImbū retain /p/, unless they have borrowed heavily like KIKIImbū North. KIRImi, KeeMbuwe and KiiRangi have /l/ as a regular reflex of PB *p regardless of phonetic context. SiSuumbwa displays /l/ without exception. For the rest of the SSN dialects, each indicates more than one reflex.

An interesting feature of double reflexes is displayed in the KiNyamweezi and KiSukuma dialects. All except SiGalagaanza have double reflexes, mainly regular /l/i and /h/. Within the SSN group, only SiSuumbwa has consistent glottalization, that is, with /h/, especially in the [-superclose] position. Languages outside Zone F with /h/ in the [-superclose] environment include E60, some E50, EJ10/20 and G30. In the PB *pu context, only G60 has /h/ (Nurse 1979:458). If KtSukuma and KtNyamweezi did not glottalize, then the source of /h/ in the PB *pu context can be G60 which has /h/. Otherwise, the source may be EJ10/20 and SiSuumbwa (F23), as nearest neighbours (assuming that such neighbourliness is ancient). This may explain the presence of irregular reflexes like /h/ and /l/ as a result of mixing vocabulary stock from different languages (Labroussi 1999, Batibo 2000). For instance, the following JinaKIIya words (which were not included in the list used in the thesis), indicate that there are cases which do not become spirants. These words may not be confined to JinaKIIya alone, although this was not checked. The majority are not in Proto Bantu either.

(37)
gw-tpuuna 'rise very early in the morning'
βυ-puuna 'rype of wild, creeping, seasonal plant, its leaves resembling those of sweet potatoes, with brightly coloured flowers'
gυ-pula 'to clope (for a mar, as a verb (vi)' < PB *-pud- 'blow (with mouth)'
gυ-puuga 'to chase away troublesome beings like insects, chickens, or children'
gu-puluguan 'to try to wriged fee from a very confining balea, usually by small

animals and insects, like a tick in the inner ear'

1-pu/ma-pu 'stomach of ruminous animals like cows, resembling a towel' < PB *-pu

'stomach'

All these words have superclose vowels in them, but they do not undergo spirantization. This existence of BS and non-BS forms in the same environment in JinaKIIya or in KISukuma and KINyamweezi in general suggests two things. It may either mean minor local innovation or borrowing. Local innovation implies that the /l/l from PB *pu is a result of a process which is not BS, but rather it is due to another assimilatory process like palatalization, which results in /s/ in GranNIIVI and (l/l in the other dialects).

On the other hand, borrowing cannot be discounted either, since the spirants may be a result of loan words which had spirants, and were added to the non-spirantizing stock found in the language. Because of borrowing without adapting the system of the source language, the native forms continue to be used with the loans, resulting in inconsistent reflexes. The loan hypothesis is more consistent, since internal innovation implies regular change across the board in a phonetic context. In this interpretation, any form with a spirant in K1Sukuma and K1Nyamweezi can be viewed as a loan which might have triggered palatalization in some words, appearing like BS, while retaining the old non-BS forms in other words.

Another sub-type of borrowing is the case where all forms with /pu/ are borrowed. This depends on the following scenario: there is regular change in K1Sukuma or K1Nyamweezi of the form PB *pu \rightarrow /fu/, and then when later words were borrowed with /pu/, they were not affected by the weakening process to /fu/.

If the loan hypothesis is correct, then both borrowing and minor innovation explain the occurrence of the double or ternary reflexes in KtSukuma and KtNyamweezi. For instance the presence of /h/ and BS in SiSuumbwa makes it a good source of influence over KtSukuma and KtNyamweezi. Another way of looking at it is that some SiSuumbwa speakers were absorbed into the KtSukuma/KtNyamweezi speech communities in the past and brought their words with them. Some also remained independent, though lived adjacently, and interacted with KtSukuma/KtNyamweezi speakers, while maintaining their linguistic and cultural identity generally. In turn, this shows that SiSuumbwa culture might have been very influential in the area for a considerable period of time for such widespread loans to occur so pervasively. However, the powerful and higher status of SiSuumbwa of the past has not been documented.

Another interesting point to note for the PB *pu reflexes is the length of the vowels in the roots of PB and some daughter languages. For instance, Proto Bantu has a short /u/, in *pud- 'blow up' while the majority of the reflexes have the long /uu/, except KIKonnongo which has /-fullIsya/ 'blow up'. Two hypotheses can be advanced to explain this

phenomenon of vowel lengthening. Firstly, it might be a rule in SSN which states that penultimate syllables tend to lengthen their vowels in some verbs. This can be illustrated by JinaKIIya whose data is readily available:

(38)

-fūùlà < PB *-pud- 'blow'

-füùlììlà 'blow, especially by mouth, in order to soothe'

-fülä 'drink water and be satisfied'
-fülä 'wash clothes'

-pùlà 'snatch, as the wind would do'

-pullia 'snatch for (someone)'

(39)

-fügððlá < PB *-pukod- 'dig up'

-fügðlà 'snatch from the grip of someone, by force'

-bùkớớlà 'harvest maize'

cf -ìfūgớlà 'refuse because of anger, disgust'

From (38) and (39), it seems true that in JinaKIrya, vowel length is first and foremost phonological, secondly, it is used to differentiate between shades of meaning between related concepts. In (38) for example, the reflex of *p is both /0 and /p/ as a semantic strategy. Thirdly, vowel length is also influenced lastly by phonetic context. Hence, penultimate position may be true in some dialects, although not only that in JinaKIrya, because -füulilila 'blow in order to soothe' and -putilla' snatch for (someone)' violate that rule. In Table 3.12, GtNantuzu and KINyanyeembe have /p/ as reflexes of PB *p, indicating that the /p/ is a retention from PB. This would then suggest that all the other reflexes, /0 and /h/, are actually loans, or innovations triggered by loans. This is especially true of /0.

3.2.1.1.3 PB *-hi

(40) PB *-bin- 'dance'

/-βina/ KtDakama, KtSukuma
 SiSuumbwa, KtNyanyeembe, KtKonoongo, SiGalagaanza

(41) PB *-bi 'excrement, dung'

/maamvi/ SiSiloombo , SiYoombe

/mazi/ KiLoongo

/maafi/ KISukuma /maafi/ KIDakama

/maavi/ KINyanyeembe, KIKonoongo, SiGalagaanza

(42) PB *-bido 'spread, smear'

/-βila/ KISukuma, KIDakama, KINyanyeembe, KIKonoongo,
 SiSuumbwa, SiGalagaanza

(43) PB *-bimb- 'swell'

/-viimba/ SiSiloombo, SiYoombe

/-ziimba/ KiLoongo

/-βiimba/ KISukuma, KINyamweezi

(44) PB *-yibi 'thief'

/mwiivi/ SiSiloombo, SiYoombe

/mwiißi/ KiLoongo, KIKonoongo

/ŋwiißi/ KImunaSukuma, KIDakama

/ŋuβi/ GInaNtuzu /nwIβi/ JinaKIIva

/mwiβi/ KINyanyeembe /mwiizi/ SiGalagaanza (45) PB *-bita 'war'

/βita/ SiSiloombo

/vita/ SiGalagaanza

SiYoombe, KiLoongo, KiSukuma, KiDakama, KiNyanyeembe, KiKonoongo

The reflexes for each of these languages are KtSukuma /β/, KtNyamweezi /β/ and SiSuumbwa /v/. In SiSuumbwa, the data suggest removing KiLoongo (F23c), leaving only SiSiloombo (F23a) and SiYoombe (F23b). KiLoongo has consistent /z/ as a reflex of PB *bi.

Table 3.14 Reflexes, innovations, extraneous sounds and their possible sources, PB *b/_i

Variety and unmarked form	Sound/In	novation (6)	Possible source/ comment	
	Regular	Irregular		
SiSitaamba /ß/	v(3)	β(1)	F21, F22	
SiYoombe /β/	v(3)			
KiLooηgo /β/	z(2)	β(1)	F21, F22	
KɪmunaSukuma /β/	β(4)	J(1)	?	
GınaNtuzu /β/	β(4)	J(1)	2	
JinaKɪɪya /β/	β(4)	J(1)	7	
KıDakama /ß/	β(4)	f(1)	F23 and devoice?	
KɪNyanyeembe /β/	β(3)	v(1)	F23	
KιKonoongo /β/	β(3)	v(1)	F23	
SiGalagaanza /β/	β(1)	z(1), v(1)	F23	

The possible influence of SiSuumbwa is revealed in the irregular innovation to /vi/a s a reflex of "bi in K1Nyanyeembe, K1Konoongo and SiGalagaanza. K1Dakama has /fi/a, devoicing /vi/a. K1Sukuma also has an irregular /fi/a, suggesting a second innovation, in addition to the regular /fi/a reflex. This supports the hypothesis of loanwords from a BS language suggested above

which triggered palatalization before superclose vowels43.

KiLoongo is consistent in being different from SiSiloombo and SiYoombe, although both have an irregular /β/ reflex, suggesting the same source, possibly F21 and F22. In addition. /mwiizi/ in SiGalaaganza seems a borrowed word, probably from KiSwahili. This borrowing is also manifested in example (46) in SiSiloombo and SiGalagaanza. The word for 'war' in the area is not PB *-bita. The extraneous sound /\(\beta\)/ in SiSiloombo in this slot suggests borrowing too, since the expected form would be /vita/ rather than /Bita/. SiGalagaanza's reflex /vita/, although identical to the KiSwahili form, might have been acquired through SiSuumbwa and regularized to fit the SiSuumbwa forms.

3.2.1.1.4 PR *-bu

(46) PB *-bu 'ashes'

/mavu/ SiSiloombo, SiYoombe, SiGalagaanza /mazu/ KiLoongo

/maßu/ KISukuma, KIDakama /mawu/ KIKonoongo

KINyanyeembe

(47) PB *-buni- 'break, snap'

/-vuna/ SiSiloombo, SiYoombe, SiGalagaanza

KiLoongo, KiSukuma, KiDakama, KiNyanyeembe, KiKonoongo

⁴³ KiBende, which has a devoicing rule, has /f/ without exception from /v/ in this PB *bi context (See Nurse 1988:58, also noted above)

(48) PB *-buda 'rain'

/ mvula/ SiSiloombo, SiYoombe, KINyanyeembe, SiGalagaanza

/eenzula/ KiLoongo

/mbula/ KISukuma, KIDakama, KIKonoongo

Table 3.15 Reflexes, innovations, extraneous sounds and their possible sources, PB *bu

Variety and unmarked form	Sound/Innovation (3)		Possible source/ comment
	Regular	Irregular	
SiSiloombo /β/	v(3)	-	-
SiYoombe /β/	v(3)		
KiLoongo /β/	z(2)	-	
KımunaSukuma /β/	β(2)**		
GrnaNtuzu /β/	β(2)		
JinaKπya /β/	β(2)	-	
KıDakama /β/	β(2)		
KɪNyanyeembe /β/	-	v(1)	F23
KɪKonooŋgo /β/	β(1)	w(1) ⁴⁵	Phonetic strategy
SiGalagaanza /β/		v(3)46	F23

Although only three words were found in the PB *bu context, their value is priceless in showing consistent regularity. SiSuumbwa (F23a, b) have /v/. KiLoongo /z/. and KtSukuma

⁴⁴ When PB *b is intervocalic, it regularly changes to /β/. a process which might have helped later to have /β/ and /b/ as separate phonemes. When *b is prenasalized or is underlyingly /b/ as opposed to phonemic /β/, then it remains /b/, as in JinaKInya /mabd/ /mosquitoes/ in contrast to /mabd/ ashes/. /mabd/ 'grey (colour)' or /mabd/ forests'

⁴⁵ The change may be a phonetic strategy for /O/.

⁴⁶ Although no /b/ or /β/ is shown in the three words used, /v/ is still irregular.

and KINvamweezi /B/.

The disadvantage of having only a few words is also revealed in the data by SiGalagaanza. Although its regular reflex in that context is /β/, the influence of a BS language is telling. All the examples show /v/ consistently. K1Konoongo shows less influence from a BS language, and the reflex of pre-nasalized PB *bu is /b/. By inference, a bilabial fricative regular reflex is implied in all the K1Nyamweezi dialects by this K1Konoongo example.

Another important aspect in the data is the role of pre-nasalized forms. The form for 'rain' PB *mbuda or *mbula, belongs to *b/N _, which is not a purely *bu context. However, it is revealing in the way the /b/ is consistent even in this pre-nasal context. SiSuumbwa (F23a, b) shows a consistent /v/ reflex, while KiLoongo is also consistent in displaying /z/ KINyanyeembe and SiGalagaanza also show a consistent /v/, suggesting the likely former influence of SiSuumbwa in linguistic terms. The only drawback in KINyanyeembe is that only one word was filled, whereas all three are present in SiGalagaanza.

3.2.1.1.5 PB *-ti

(49) PB *-kIti 'darkness'

/giiti/ SiYoombe, KISukuma, KIDakama, KINyanyeembe, KIKonoongo - SiSiloombo, KiLoongo, SiGalagaanza

183

(50) PB *-tingiId- 'be sleepy, doze'

/-tiindila/ SiYoombe, KiLoongo

/-tiindIla/ KISukuma, KIDakama /-tiindIla/ KINyanyeembe, KIKonoongo

/-tiindiila/ SiGalagaanza

- SiSiloombo

(51) PB *-tina 'base of tree trunk'

/i-tina/ KImunaSukuma, GInaNtuzu, KINyamweezi

/I-tina/ JinaKIIya

SiSuumbwa

(52) PB *-tinga 'long hair, of animals'

/Bu-tiinga/ GInaNtuzu /wI-tiinga/ JinaKIIva

KIDakama -

/U-siinga/ KINyanyeembe

/u-siinga/ KiKonoongo /lu-siinga/ SiGalagaanza

SiSuumbwa, KImunaSukuma

(53) PB *-piti 'hvena'

/m-fisi/ SiSiloombo, SiYoombe, SiGalagaanza

/em-pisi/ KiLoongo /m-biti/ KiSukuma, KiDakama, KiNyanyeembe, KiKonoongo

(54) PB *-koti 'nape'

/βu-kosi/ SiSiloombo

/βυ-kosi/ KImunaSukuma, SiGalagaanza

/βυ-gosi/ GInaNtuzu /u-kosi/ KIKonoongo

- SiYoombe, KiLoongo, JinaKIIya, KIDakama, KINyanyeembe

(55) PB *-tiku 'night'

/Brz-iikrz/ KImunaSukuma, JinaKIIva

/Bu-ziku/ GinaNtuzu, KiDakama, KiKonoongo

/u-zikt/ KtNyanyeembe

/βυ-fuku/ SiGalagaanza SiSuumbwa

(56) PB *-tindIk- 'push'

/-siindika/ SiYoombe, KiLoongo

/-fiindIka/ KImunaSukuma, JinaKIIya, KIDakama

/-siindIka/ GInaNtuzu,

/-siindtka/ KtNvanveembe SiGalagaanza

KIKonoongo, SiSiloombo

(57) PB *-tiku 'rainy season'

/ki-dikt/ KImunaSukuma, KIDakama, KINyanyeembe, KIKonoongo

/gi-dikt/ GīnaNtuzu

/ji-dikt/ JinaKIIya /si-dikt/ SiGalagaanza SiSuumbwa

(58) PB *-timt 'spear'

/i-sumu/ SiSiloombo, SiYoombe, SiGalagaanza

/i-cumu/ KiLoongo

/i-cimu/ KISukuma, KIDakama

/i-kimu/ KINyanyeembe /i-timu/ KIKonoongo

(59) PB *-tim- 'strike with a spear'

/-cima/ K1Sukuma, K1Dakama

/-kima/ K1Konoongo

SiSuumbwa, KINyanyeembe, SiGalagaanza

In F23, the PB *ti reflex is /si/ while in F21 and F22, it is /ti/. All three (SiSuumbwa, K1Sukuma and K1Nyamweezi) have irregular reflexes, reflecting external sources which also suggest some externally driven innovation. Words with spirants for PB *ti, are not as frequent as those from PB *pi or *pu.

Table 3.16 Reflexes, innovations, extraneous sounds and their possible sources, PB *ti

Variety and unmarked form	So	und/Innovation(11)	Possible	
	Regular	Irregular	source/comment	
SiSiloombo /t/	s(3)			
SiYoombe /l/	s(3)	1(2)	F21, F22	
KiLoongo /l/	s(2)	t(1), c(1)	F21	
KımunaSukuma /l/	t(3)47	d(1), j(1), f(1), s(2), c(2)	F23	
GrnaNtuzu /l/	1(5)	z(1), s(2), c(2)	F23	
JinaKırıya /t/	t(5)	d(1), j(1), J(1), c(2)	F23	
KıDakama /l/	1(4)	d(1), z(1), ʃ(1), c(2)	F23	
KıNyanyeembe /l/	t(4)	d(1), z(1), s(1), k(1)	F23, internal	
KtKonoongo /t/	t(5)	z(1), s(1), k(1)	F23, internal	
SiGalagaanza /V	1(2)	d(1), f(1), s(5)	F23	

As to the sources of the irregular sound changes, the major one is through borrowing. These are revealed by the regular patterns which are displayed against violations of those expectations. For instance, /giiti/ 'darkness' in SiYoombe suggests borrowing, since the

if The presence of the reflex /d/ for PB *t in KtSukuma, and to some extent KtNyamwezi emphasises the original underlying sound /l/ which is voiced by Dahl's Law, as in *-tiku > /-diku/ 'rainy season'. This can be compared to second syllable position /l/ in *-kiti > /-guiti/ 'darkness', *-piti > /-biti/ 'hyera'.

regular reflex observed is /s/, while /t/ is regular in KtSukuma and KtNyamweezi. Another observation in the same word is the operation of Dahl's Law in SiYoombe. SiSuumbwa's Dahl's Law status is synchronically minimal generally, as indicated in 3.1 above, suggesting that the word is a loan. Such external influence or later entry into the language can also be observed with regard to KtNyamweezi and GrnaNtuzu's cases of /s/ and KtmunaSukuma and JinaKttya's /f/. They are cases of palatalization which are only few, occurring in some words like *-tindtk-*push'. KiLoongo's continued dissimilarity with SiSuumbwa in general with the /z/ reflex emphasizes a probable different historical origin.

Borrowing from KiSwahili is also suggested in PB *-koti 'nape' in the reflexes in F21 and F22 other than /t/. The word refers to collars of shirts rather than 'nape'. The expected form in KiSukuma would be [βūgoti], without any weakening of *t. It is quite unlikely to be [βūkodi] or [βūgosi], since, by Dahl's Law, it is only the first voiceless segment of the stem which is normally dissimilated in order to simplify the pronunciation when two voiceless plosive consonant sounds are adjacent. All words borrowed into KiSukuma are normally subject to Dahl's Law, modified depending on the operation of the law in each dialect*. The transition from [βūkoti] to [βūkodi] or [βūkodi] does not simplify pronunciation since voice is followed by two voiceless segments as in the original with /t/, a situation which is normally

M Borrowed words from KiSwahili illustrating DL in JinaKIIya: tatizo → datiizo problem'; kupe → gupe 'tick'; kutu → gutu 'rust'; katibu → gatiβt < Arabic [kattib] writer, secretary, clerk'; katani → gatani < Arabic [katta:n] 'sisal, flax'; mapato → mabato 'income, receints'</p>

avoided. In addition GinaNtuzu does not voice a stop when the following segment is /s/.

For JinaKIIya, for instance 'nape' is nhouni [ŋɔtoi] <-kūtoii. But one might also argue that this word comes from PB *-koti by a route so complicated, it may be unlikely to be the source".

Another suspicious case is from PB *tikU 'night' in both KtSukuma and KtNyamwezi. SiGalaganaza has /βUfluku/, like KiBende's /bufluku/. In Ktsukuma and KtNyamwezi, the form seems suspect because it violates the expected rules for *t in that environment. The expected form would be /βufliku/ by Dahl's Law, unless that was disfavoured by the presence of /-diktU 'rainy season' and it had to be spirantized to /z/ and /j/ like a reflex of /d/. But that semantic explanation is not adequate since 'rainy season' *bU-tikU (Class 14-bU) and 'night' *kt-tikU (Class 7 kt/ki/) do not belong in the same noun class in all varieties. A non unleas as a category is a sufficient distinguisher. Otherwise there is no motivation for /z/ and /j/ as reflexes of *t. Another explanation for this may be that, the proper word deriving those forms is actually not PB *-tikU, but rather PB *-cikU 'day of 24 hours'. This is also not accurate because, in JinaKtrya the expected form would then be /-figtU rather than /-jikU/.

_

^{*&}quot; *ŋkoti Proto Bantu 'nape' By Dahl's Law

nkoni By Dahl's Law nkoni Prefix nasality spread nhoni Loss of /k/ occlusion

nhooni vowel lengthening before nasal

nhuuni Vowel raising (height anticipatory assimilation)

There are also some likely idiosyncratic innovations, or cases when the origin of words is not known. For instance, the word /isumu/ is suspect in SiSuumbwa, just as it is in SiGalagaanza, unless the final /u/ just spreads to the /i/ by deleting the feature [+front] in /i/ in anticipatory assimilation. But this is not a productive process. The word might also come from PB *-tumo 'spear' instead of PB *-timo 'spear'. Even in KtSukuma and KtNyamweezi, the word is suspect because the reflex of *t as /c/ is not regular, although it is in KiiRanui. The expected reflex is /t/ as it occurs in KtKonoonuo.

Apart from these few exception PB *ti offers quite regular reflexes, despite the small sample in some languages. For example, the words in Sisuumbwa are limited to only a few out of the eleven in the sample. Only three words are recorded for SiSiloombo, four for SiYoombe and five for KiLoongo, compared to a minimum of nine and a maximum of all eleven in the KISukuma and KINyamweezi group. This is a general difficulty in the data where not all words appear in all languages.

3.2.1.1.6 PB *-III

(60) PB *-tung- 'pack (luggage)'

/-tuungIla/ KImunaSukuma

/-tuunga/ GinaNtuzu, KiDakama, KiNyanyeembe, SiGalagaanza /-tuunganya/ JinaKiiya

/-tuungaania/ KIKonoongo

SiSuumbwa

(61) PB *-tumbI 'stool'

/i-suumbl/ KImunaSukuma, GInaNtuzu, KIDakama, KINyanyeembe, KIKonoongo

/I-suumbI/ JinaKIIya /j-fuumbI/ SiGalagaanza

SiSuumbwa

(62) PB *-tum- 'sew'

/-suma/ SiYoombe, KiLoongo, KImunaSukuma, JinaKIIya, KINyanyeembe

SiSuumbwa, although other sources cannot be ruled out.

it from other languages quite recently.

SiSiloombo, GinaNtuzu, KiDakama, KiKonoongo, SiGalagaanza

Although the data in this set were severely limited, the pattern is similar to the situation where there are ample data, as in 3.2.1.1.5 with PB *ti. The reflexes for PB *tu are /s/ for both SiSuumbwa and KiLoongo on the one hand, and /t/ for KiSukuma and KiLoyamweezi. The extraneous sound /s/ in KiSukuma and KiNyamweezi can be presumed to be from

For instance, the reflex of PB *tu in *-tumb1 'stool' (62), is /s/ in all dialects represented, except SiGalagaanza, which has /tl. In Zone F, it is Y1nyaMunyinanyi and Keembuwe only which have a reflex of /tl, while G1Ahi and G1Rwana have /Rl. The rest have a different lexeme altogether, except North K1K1mbU, which has unexpected /k1suumbt/ for a non-spirantizing language, while KiiRangi has /icuumbt/. This hints at an external source since a stable language like K1K1mbU is not expected to have such a form, unless it has borrowed

Table 3.17 Reflexes, innovations, extraneous sounds and their possible sources, PB *tu

Variety and	Sound/Innovation (3)		Possible source/comment
unmarked form	Regular	Irregular	
SiSiloombo /t/	_50		
SiYoombe /t/	s(1)		-
KiLoongo /t/	s(1)	-	
KımunaSukuma /V	t(1)	s(1)	F23?
GınaNtuzu /t/	t(1)	s(1)	F23?
JinaKırya /t/	t(1)	s(2)	F23?
KıDakama /t/	t(1)	s(1)	F23?
KtNyanyeembe /t/	t(1)	s(2)	F23?
KıKonoongo /W	t(1)	s(1)	F23?
SiGalagaanza /V	t(1)	f(1)	F23?

For KtSukuma and KtNyamweezi, a reflex with /s/ instead of /t/ seems extraneous, since the reflex should be /t/ according to the majority of the reflexes, which have been taken as more regular. A similar word is that for 'flour', PB *-tu. The word also suggests an external source not far in the past, since it is β0su or β0fu in KtSukuma. The history of the word implies that cultivating cereals like millet and maize and extracting flour from them might have come somewhat later, perhaps brought into the area by migrants whose languages were already spirantizing. The histories of both KtSukuma and SiSuumbwa speakers have legendary exploits of hunting, indicating that even SiSuumbwa might have got the word from another farming community speaking a different Bantu language relatively recently. It is

⁵⁰ Data were limited in this word: only three words were relevant for the PB *-tu environment, and out of these, all were absent in SiSiloombo. Only SiGalagaanza had /f/.

especially important to note here that, when dealing with *t > /s/ in the word for 'sew', PB
*-tum-. Kahigi (1988:250) suggests that the word might have entered SiSuumbwa from
KTSukuma, because he found it extraneous, just as it is in KTSukuma. However, he does not
question BS. On the other hand, Kahigi (ibid:228) says unreservedly that KTSukuma does
not generally spirantize, as exemplified in 3.2.1.2.

Since -suma 'sew' is assumed to be a recent borrowing into both languages, then this can also point to other source languages outside Zone F, and indeed, outside Tanzania, in the DRC or Zambia and beyond. For instance, KiHoloholo (D28) of the DRC has some features which are quite similar to many KiSukuma ones³¹. This weakens the assumption that any BS-like change in KiSukuma or KiNyamweezi is necessarily a result of borrowing from a nearby language or dialect. The nearest choice is only a synchronic convenience. For the past, any source is possible, given the mobility of people and the potential for language contact and borrowing/lending⁵² words.

The irregularity of /s/ in KISukuma can be illustrated from the following JinaKIIya words in (63), since /t/ exists widely before [u]. Some of these words are in Guthrie's Proto Bantu list.

⁵¹ The KIHoloholo features were pointed out to me by Nurse when he said some of the tense/aspects looked quite similar to those of KISukuma from Counez (1955)

³º The terms 'borrowing' or 'loan', though established, are not precise. Borrowing implies lending, and both words suggest a loan which is normally refunded or returned. Such a situation does not apply in language, just as 'irranfer' is not a sprecise because it implies a one-way conduit. Words like 'adoption' (imperfect assimilation) and 'adaption' (total assimilation) are referable.

while the majority are not, suggesting that they were omitted, or they are KISukuma innovations, which can be inventions or borrowing:

-tulumeenha 'slide, normally away from the I-tuundulu 'evergreen tropical shrub of' (bed) headrest during sleep' the mimosoideae subfamily' -tuundaga 'urinate' (PB *-tond- 'urinate') -tuia 'kneel' (cf ttia 'pass and feed domestic animals in a farm, accidentally or deliberately') I-tuunji 'urinary bladder' (-tUnd- 'urinate') -tuußa 'get hungry' -tuga 'catch in the act' -tuungo < nhuungo 'civet cat' PB nwiituunga 'zombie' mitugo33 'cattle, domestic animals' -tuuma 'extend something, usually buttocks -tula 'drive cows from one place to in order to block somebody' another'

ntuumba/mituumba '(round) container, usually of calabash, especially for storing medicine' lookeepts and young, unmarried women'

-tuntla 'lean forward and raise the buttocks

unruly cow or ox'

-tuna 'kneel, or bend the knees to senior people, not necessarily old, usually as a sign of deference, by women' -dutuma 'grow and become luxuriously greener than previously'

while exposing them 'pierce'?)
Ituumbagija 'muscle tightener for taming an I-dutuβija 'light darkness due to heavy

clouds'

-tuumtila puncture (PB *-tuub-

lu-tuumbt/nuumbi 'division of maize, millet, ji-tuundulu 'abdomen of grasshoppers' sugar cane, etc stalks'

An interesting word is 'become blunt', PB *-tuup-, which in JinaKIIya is -duuha, although

⁵³ Although this word is widespread in east African Bantu languages, it is not found in Guthrie's nor Meeussen's reconstructions of Proto Bantu.

because of the limited amount and type of words in our data, it was not included. The path of change of this word might have been the following:

(64)

PB *-tuun- > -duuna > -duuha or -duuh-tla 'become blunt'

→ DL → Glott

This word is significant in telling us that Dahl's Law54 in KISukuma occurred first, and then glottalization followed later. Contact with a source for glottalization like SiSuumbwa is later since an earlier contact would result in *p becoming /h/, thus blocking most of Dahl's Law in those words inherited from Proto Bantu

From the above discussion, the regular reflexes suggested in Table 3.15 have validity, namely, SiSuumbwa /s/. KISukuma and KINvamweezi /t/.

3.2.1.1.7 PB *-di

(65) PB *-gadi 'blood'

/ma-gazi/ SiSiloombo, SiYoombe /mu-gazi/ KINyamweezi

KiLoongo, KISukuma

⁵⁴ The chronology of four phonological processes in SSN is put together in the conclusion to this chapter (section 3.3). These processes are glottalization (Glott), Bantu Spirantization (BS), 7 > 5 and Dahl's Law (DL).

(66) PB *-cudi 'broth'

/n-svji/ KımunaSukuma, JinaKıtya

/n-stzi/ GInaNtuzu

/mu-strzi/ KIDakama, KINvanyeembe, KIKonoongo

SiGalagaanza, SiSuumbwa

(67) PB *-juudi 'day after tomorrow'

/ma-ztttli/ SiSiloombo, SiYoombe, KtSukuma, KtNyamweezi /i-zweeli/? KiLoongo

(68) PB *-budi 'goat'

/m-buzi/ SiSiloombo, SiYoombe

/em-buzi/ KiLoongo

/m-bʊli/ KISukuma, KIDakama, KIKonoongo

/m-buzi/ KINvanveembe, SiGalagaanza

(69) PB *-di 'string'

/bu-zi/ SiSiloombo

/Bu-zi/ SiYoombe, KiLoongo

/Bo-ji/ KImunaSukuma, GInaNtuzu

/u-zi/ KIDakama, KINvanyeembe, SiGalagaanza

/βυ-zi/ KɪKonoongo

JinaKIIya

(70) PB *-yedi 'moon'

/kw-eezi/ SiSuumbwa

/ŋw-eeji/ KImunaSukuma, JinaKiiya /nw-eezi/ GinaNtuzu, KiDakama

/mw-eezi/ KINyanyeembe, KIKonoongo, SiGalagaanza

(71) PB *-codi 'tears'

/mii-sozi/ SiSiloombo, GinaNtuzu, KiDakama, KiKonoongo

/miin-sozi/ SiYoombe, SiGalagaanza /shii-soji/ KImunaSukuma

/ji-isoji/ JinaKtīva

KiLoongo, KINyanyeembe

(72) PB *-dito 'weight'

/-dito/ KISukuma

- SiSuumbwa, KINyamweezi

(73) PB *-dodi 'whistling'

KImunaSukuma/shi-luji, nuji/ /nuli/ GInaNtuzu, JinaKIIva

/mu-lt/li/ KIDakama

/mu-l\u0000zi/ KINyanyeembe /mu-l\u000zi/ KIKonoongo, SiGalagaanza

- SiSuumhwa

(74) PB *-kadi 'wife'

/mu-kazi/ SiYoombe, KiLoongo

SiSiloombo, KISukuma, KINyamweezi

Three patterns of regular reflexes are revealed in this PB *di environment, making three groups out of the three language groups. The decision to classify them as regular or irregular is based first and foremost on frequency of phoneme occurrence. These regular reflexes are: SiSuumbwa /z/; KINyamweezi /z, l/; and KISukuma /l, z(j)/ (or (GtnaNtuzu /z/ on the one hand, and KImunaSukuma and JinaKIIva /i/. on the other)

196

Table 3.18 Reflexes, innovations, extraneous sounds and their possible sources. PB *di

Variety and	Sound/Innovation (10)		Possible source/comment	
unmarked form	Regular	Irregular		
SiSiloombo /l/	z (5) ⁵⁵	1(1)	KrSukuma/KrNyamweezi?	
SiYoombe /l/	z (6)	1(1)	KıSukuma/KıNyamweezi?	
KiLoongo /l/	z (4)	1(1)	KrSukuma/KrNyamweezi?	
KɪmunaSukuma /l/	j (5)?, I (2)	d (1)?	internal innovation?	
GɪnaNtuzu /l/	z (3)?. I (3)	d (1)?	internal innovation?	
JinaKııya /l/	j(3)?, I (3)	d (I)?	internal innovation?	
KtDakama /l/	z (5)?, I (3)		SiSuumbwa?	
KINyanyeembe /l/	z (6)?, I (1)	-	SiSuumbwa?	
KıKonoongo /l/	z (6)?, I (2)		SiSuumbwa?	
SiGalagaanza /l/	z (6)?, I (1)	-	SiSuumbwa?	

KINyamweezi and KISukuma have similar regular reflexes, except for the irregular forms which separate them. The irregular reflexes are SiSuumbwa /l/ and KISukuma /d/.

KINyamweezi, including KIDakama, does not show any irregular forms.

Within the regular reflex list, there is one problem. The regular reflexes for both K1Sukuma and K1Nyamweezi are two, /z/ and /l/. Their derivation is based on the frequency principle, that the more frequently a sound occurs, the more likely it belonged to the proto language. In this case, both/z/ and /l/ have an almost equal frequency of occurrence, indicating that they have equal chances of being the regular proto sounds of the proto languages in question.

⁵⁵ Total number of cases out of 10 words used, out of which some have no responses for reasons such as the presence of a different lexeme.

However, it is unlikely that the proto sound had two phones in the proto language, each with a status of an independent phoneme. And that is the problem which has been pointed out in 3.0 above.

The presence of f/f or /z/ as a reflex of /d/ then becomes a process of palatalization rather than Bantu Spirantization, as observed above. Hence, these reflexes are based on a mixture of two sounds. /d/ and /f/, as illustrated below.

Although only one word was available where the reflex for PB *d was also /d/, as in /-dito/

'heavy' in KtSukuma, an important insight can be gained. The example seems to illustrate
the fact that, without external influence, KtSukuma and KtNyamweezi's reflexes for /d/ may
remain /d/ or change to /l/ regularly in certain contexts, if a Proto Bantu *l and *d are posited
as separate phonemes. There are many cases in synchronic JinaKtnya with /di/ suggesting the
scenario suggested above: they may be examples of the inherited forms from Proto Bantu or
innovation by invention or borrowing. However a more plausible explanation is that the
words are from some intermediate ancestors, reflecting the reflexes of the protoforms of the
immediate ancestor language, Proto KtSukuma. Such synchronic lexemes with /d/ indicate
a diachronic path, even if /d/ has been lost by many languages. Borrowing is an unlikely
explanation, since /-dito/ for example, is not attested in the immediate vicinity languages.

⁵⁶ Lack of attested examples is not necessarily a sufficient argument, although as a provisional hypothesis, it is useful.

Some of the words with /di/ and /li/ respectively in JinaKIIva include the following:

```
(75)
-diigho [diigo] 'sheep's accumulated dung, especially in sheep house'
-diinimila 'rumble deeply, creating a low deafening din, mainly of big drums'
-diima 'hold, catch'
-diindißtika 'become shallow'
-βtdidiga, -diidi 'person who is arrogant in a foolish way'
-didoha 'become heavy' < PB *-dito 'heavy'
-diimu 'hard, of physical objects'
-gulumaadi 'tortoise'
-Saanuudi 'male, proper name'
-diba 'accidentally poke into somebody's eye' (cf PB *-dib- shut (eyes))'
(76)
-Baliga 'throw a long stick, aiming to hit something'
-Bilinga 'collect into a heap, heap'
-lilimuka '(of many birds) take off at once, noisily, flying in all directions'
-dugali 'tarantula'
-liinda 'guard'
-liinha [liina] 'climb'
-liga 'leave one's straight path during a walk, journey, travel; duck'
-liimbe 'cucumbers'
-jiliili 'wild animals which eat and destroy crops'
-iilimIla 'internally feel vibrations because of tremors caused by extreme cold'
```

From the above contrast between /d/ and /l/ in JinaKITya, and by extension, in KISukuma, it is plausible to posit that /-dito/ is an inherited form from Proto Bantu. It is not from DL, since there is no attested form to suggest that it is from PB *-tito, just as /-dakama/ 'south' is well formed as an inherited form without DL in a dialect like KIDakama 'southern speech'. It is not from *takama. The lexeme {takama} seems to occur only because of likely backformation. From the list of PB *di words above, the irregular forms based on the *d, *l

assumption display the following patterns in each language, suggesting their lack of native phonotactics.

The case for innovation by inventions or borrowing is supported by a few words like gulumaadi 'tortoise' < Barbaig gumald 'tortoise'. Since such loans from Nilotic members are not widespread except in restricted areas like animal husbandry, it is unlikely that Barbaig is the source of Idia.

The word for 'day after tomorrow', PB *-jUUdi, reveals some discrepancies in SiSuumbwa. With /l/ as a reflex, it is a regular, inherited form in K1Sukuma and K1Nyamweezi. In SiSuumbwa, the expected reflex is /ma-zuuzi/, instead of /ma-zuuli/. This form with /l/ shows two problems. First, the phonetic /UU/ is marked in SiSuumbwa, indicating a possible loan, probably from K1Sukuma or K1Nyamweezi. Secondly, in SiSuumbwa, it is the only /l/ out of the total 10 in the sample, as shown in Table 3.18, and it is not well-formed within the SiSuumbwa phonological system, especially vocalic, which is presumably 5V. The /tu/ suggests a 7V language like K1Sukuma. The phonetic realization of the word violates two important SiSuumbwa rules, 5V-violation, which shows up here as 7V; and *d > l/_i.

Another word is PB *-di 'string'. The word might have entered SSN probably by way of trade to and from the coast, since it resembles the KiSwahili form /uzi/. The reltex is also

suspect in both KISukuma and KINyamweezi, since one would expect /βυθί/ or /βυθί/ rather than /βυzi/ or /uzi/.

With PB *yedi 'moon', SiSuumbwa suggests a different historical path indicated by the different prefix, a non-nasal kw-3 instead of the mu- in KISukuma and KINyamweezi. The word can be explained as a dissimilation strategy. KISukuma and KINyamweezi used the choice of zj as a strategy to avoid the homophone /ŋweeli/ (KISukuma) and /mweeli/ (KINyamweezi) 'west'. There are several cases where this strategy is used, exemplified by JinaKIIya. This strategy involves either borrowing, palatalization, syllable reduplication, vowel lengthening, tonal change, or other process that is employed to avoid homophony and polysemy as PB *-dim- and PB *-tUtUm-, shown in (77) and (78):

(77)

PB 617 *-dim- 'become extinguished'

PB 618 *-dim(td)- 'get lost'

-jimă 'become extinguished, faint' (of fire or life of animate entity)

-jimžžla 'get lost (become extinguished physically or metaphorically, in the mind)'
-lilíma 'close one's eves'

-limalima 'twinkle, as if in the process of disappearing or being extinguished: fade'

mainta twinkle, as it in the process of disappearing of being extinguished, lade

It is unlikely that /-jima/ < PB 617 *-dim- 'become extinguished' and /-jimIIIa/ < PB 618 *-

⁵⁷ The prefix kw-eezi is used in Western Highlands (DJ60), parts of Rutara (EJ10/20) and Suguti (EJ25).

dim(td)- 'get lost' are two independent lexemes, since *-dim(td)- appears to be only an extension of or derivation from *-dim-, both having the reference of 'disappearing'. Although the original *d does not feature, the various strategies of derivation indicate that, the evolution of *d to N_V /z/ or f_jV is an internal innovation unrelated to BS, although with external influence from BS languages, the process was accommodated in loan words, though not productively in other lexemes.

(78) PB 1854 *-từtừm- 'boil up, boil over'

-dudumà 'boil over, bubble'

-dùtùmà 'become bigger, greener and more luxurious (of leaves)' (Dahl's Law)

-luluma 'flow noisily (of rivers)'

-huluma 'sprout luxuriously after being trimmed (of sweet potato leaves and similar creeping vegetation)'

-duùlumă 'accelerate even faster, as if to hit a target (of stones and other throwable material)'
 -huùlumă 'move swiftly in a flowing motion like an eagle'

Most of the words in (78) seem to have been derived from one lexeme with a sense of accelerating from an initial point of slower motion to a faster rate. The original Proto Bantu form is *-tôtôm-, so the /-tutuma/ form in JinaKIIya is not inherited from PB, since [-dutuma] as a DL form may be a recent adoption from a BS language which has lost /u/ (superclose) and /to// (high) distinction. The word was then adapted in the language by following phonological adjustments, like DL, a dissimilation rule of consecutive voiceless syllables containing plosives.

The word for 'wife' PB *-kadi is found in SiSuumbwa (74) above, but not in KISukuma

and KINyamweezi. However, the word for 'wife' or 'woman' found in KISukuma and KINyamweezi. /-kIII)ma/, is also found in SiSiloombo, as /mukIIma/ with the same phonological shape, instead of being /mukiima/. Such a form makes it suspicious. Its value, however, lies in uniting SSN's lexemes until their linguistic memberships are mixed and confused. This mixture leads to the view that, KISukuma, KINyamweezi and SiSuumbwa share an immediate node in the hierarchy of genetic affiliation. This inter-mixing of each others' vocabulary may be one of the triggers of and reason for the entry of /z/ or /j/ as a reflex of "d and "l in KISukuma and KINyamweezi. This makes the distinction between "d and "l reflexes difficult to isolate in cases where such a distinction is absent." Comparing the words with "d or "l in other languages makes things a bit clearer. For instance, while it is not clear whether Proto KISukuma had /d/ or /l/ in PB "yedi 'moon' because of inter-dialectal mixing, languages like KIKIImbO, a Zone F sister language which has changed little from Proto Bantu, has /mweeti/, while KiiRangi and KeeMbuwe have /mweeti/.

A revised picture for regular sound change in PB *di, with the irregular reflexes in brackets can thus be: SiSuumbwa/z/(ll); KINyamweezill/(lz); KISukumall, d'(jz). Such a division between ldl and ll words suggests one thing: ll and ld are both inherited phonemes. The reconstruction of Meinhol's PB *l and Guthrie's PB *d do not constitute an eitherlor situation. Rather, it is *l and *d, with some languages treating them as allophones in

⁵⁸ There are some minor problems with *l and *d in Indo-European too where a name like Odysseus is also Ulysseus (John Hewson, p.c.)

complementary distribution, while in others like KISukuma, they are separate phonemes, a situation analogous to that of voiceless nasals. In some languages/dialects like KISukuma and KIDakama, the voiceless nasals are both phonemic and allophonic, whether appearing as morphologized forms in some words, and hence phonemic, or in homorganic contexts as allophonic realizations of stops after nasal prefixes.

3 2 1 1 X PR *du

(79) -dedu 'beard'

/n-dezu/ KISukuma, KIDakama, KINyanyeembe, KIKonoongo /ka-levu/ SiGalagaanza

SiSiloombo, SiYoombe, KiLoongo

(80) -duggt- 'blow bellows'

/-vuguta/ SiSiloombo, SiYoombe

/-zuguta/ KiLoongo

/-fukuta/ KINyanyeembe /-tuguta/ KIKonoongo

/-vukuta/ SiGalagaanza

KImunaSukuma, GInaNtuzu, JinaKIIya, KIDakama

(81) -dedu 'chin'

/ci-lezu/ KiLoongo

/fi-lezu/ KImunaSukuma

/gI-lezu/ GInaNtuzu

/ji-lezu/ JinaKIIya

/kI-lezu/ KIDakama

/ki-lezu/ KINvanveembe, KIKonoongo

/ka-levu/ SiGalagaanza (cf kasaku in F23a,b, class marker 12 ka-instead of Class 7 kI-)

SiSiloombo, SiYoombe

(82) -dug- 'cook'

/-zuga/ KISukuma, KIDakama

- SiSiloombo, SiYoombe, KiLoongo, KiNyanyeembe, KiKonoongo, SiGalagaanza
- (83) -dub- 'fish, vt'

/-zußa/ KīSukuma KīDakama KīNvanveembe KīKonoongo

- SiSiloombo, SiYoombe, KiLoongo, SiGalagaanza
- (84) -du/-dui/-duI 'knee'

/si-vi/ SiSiloombo

/si-vwi/ SiYoombe

/ci-zwi/ KiLoongo /i-zwi/ KImunaSukuma, GInaNtuzu, KIDakama

/I-zwi/ JinaKIIva

- KINyanyeembe, KIKonoongo, SiGalagaanza

(85) -dugtd- 'open, vt'

/-lugula/ KISukuma, KIDakama, KINyanyeembe, KIKonoongo

- SiSiloombo, SiYoombe, KiLoongo, SiGalagaanza
- (86) -gudube 'pig'

/η-guluβe/ SiSiloombo, JinaKIIya, KINyamweezi, KImunaSukuma, GInaNtuzu

- SiYoombe, KiLoongo,
- (87) -dut- 'pull'

/-duta/ KImunaSukuma, JinaKIIya

- /-luta/ KtDakama
 - SiSiloombo, SiYoombe, KiLoongo, GinaNtuzu, KiNyanyeembe, KiKonoongo, SiGalagaanza

(88) -badu 'rib'

/lu-Bavu/ SiSiloombo, SiYoombe, SiGalagaanza

/lu-Bazu/ KiLoongo

/tt-Bazu/ KISukuma KIDakama KINyanyeembe KIKonoongo

(89) -gudu 'strength, power, effort'

/ŋ-guzu/ SiSiloombo, SiYoombe, KıSukuma, KıDakama, KıNyanyeembe, KıKonooŋgo
- KiLoongo, SiGalagaanza

From Tahle 3.19, the regular reflexes are the following: SiSuumbwa/v/; KtSukuma/d, I/; and KtNyamweezi /I/. The results for KtSukuma and KtNyamweezi however, seem contradictory, since in both cases, the majority are regularly /z/, except for SiGalagaanza, whose regular reflex is /v/, like SiSuumbwa (F23a.b).

Table 3.19 Reflexes, innovations, extraneous sounds and their possible sources, PB *du

Variety and	Sound/Innovation (11)		Possible source/comment	
unmarked form	Regular	Irregular		
SiSiloombo /l/	v(3)	l(1), z(1)	Loan F21/F22, F42?	
SiYoombe /l/	v(3)	z(1)	F21/F22	
KiLoongo /l/	z(4)			
KımunaSukuma /l/	l(1), d(1)	z(7)	recent internal innovation	
GɪnaNtuzu /l/	I(1)	z(7)	recent internal innovation	
JinaKɪɪya /l/	l(2), d(1)	z(7)	recent internal innovation	
KıDakama /l/	1(3)	z(7)	recent internal innovation	
KtNyanyeembe /l/	1(2)	z(5), f(1)	recent internal innovation	
KıKonoongo /l/	1(2)	z(5), t(1)	recent internal innovation	
SiGalagaanza /l/	v(4)?	l(1)?	/l/ from G42, /v/ from F23?	

The reasoning around this apparent contradiction is the same as for PB *-di above, especially with regard to -dito 'heavy' and -duta 'pull'. These words are both d-t or l-t, suggesting Dahl's Law. In fact, Dahl's Law did not apply to them to yield /-dito/ or /-duta/ because /-dito/ and /-duta/ were already well-formed. These words are also not attested in languages without DL. For instance, KiSwahili has/-zito/ by BS: PB *d →z / __*i. Since KiSwahili does not undergo DL, the original sound is *d rather than *t.

To begin with, irregular SiSuumbwa's /// occurs in g-guluße 'pig' < PB *-gudube 'pig', a likely loan from KiSwahili, just as it is in KISukuma and KINyamweezi. Another likely loan is g-guzu 'strength' found in F21/F22. In F23a and F33b, it violates the regular change to /w/, showing that it is not native. Kahigi (1988:267-8) also lends support to this notion of regular /w/.

An argument for pervasive appearance of regular reflexes as /z/ in K1Sukuma and K1Nyamweezi is the strategy of homophony and polysemy avoidance mentioned above. This strategy seems to have been encouraged especially by borrowed BS features from Ioan words which proved useful in distinguishing meanings. Such a strategy is illustrated from the JinaK1Iya example again where the presence of /d/ and /l/ is not in doubt. The phoneme /z/ appears mainly when it is necessary to disambiguate homophonous words, especially when those words are in the same lexical class. For instance, in (90), the two words/-dumi/a as a verb to 'declare open enmity or opposition with someone' and as an adjective, bit, huse.

large' are left alone without any modification because the chances of being ambiguous are reduced. They cannot co-occur in the same slot. When they are both verbs, as in /-dūūsai/ 'dig deepty' of /lūūsai/ 'kick', the /d/ is dissimilated in the second word. There arefew exceptions like /-lūmai/ 'leave abrupty with a great noise, like birds and cattle', and /-lūmai/ 'roar like a bull or thunder' < PB *-dum- 'roar, rumble', which are identical in everything, except meaning. The strategy of using a fricative instead of a stop is demonstrated in /-dūūmai/ 'fail' and /-zūūmai/ 'give a low, pleasant din, like that of a KtSukuma single-stringed guitar, ndono (KiSwahili zeze) used in βtzoli (also known as βtytott) dance'

(90)

/-duma/ 'declare open enmity or opposition with someone'

/-dùmà/ 'big, huge, large'

/-duumá/ 'fail' cf/-zuumá/ 'give a low, pleasant din, like that of a KISukunia single-stringed guitar, ndono'

/-dubtlà/ 'uproot' (See Batibo 1992b:65) cf -zuβtlà 'fish out from water' < PB *- dub-'fish'

/-dùdùmà/ 'swell' /-lùlùmà/ 'roar, like a waterfall, or a big, boiling pot full of food'

/-duusa/ 'dig deeply (a hole or metaphorically, pain)' cf /luusa/ 'kick',

/-duut(y)à/ 'make string, especially from cotton' cf/-luutà/ 'throw something, especially at someone or something'.

/-duta/ 'pull' < PB *-dut- 'pull' (no opposition, so word remains like PB)

(91)

/-luma/ 'leave abruptly with great a noise, like birds and cattle'

/-luma/ 'roar, rumble like thunder, or a bull' < PB *-dum- 'roar, rumble'

/-lumă/ 'bite' < PB *-dum- 'bite', cf/-zumă/ 'curse' < PB *-dum- 'curse'

The irregular /z/ in K1Sukuma and K1Nyamweezi therefore is encouraged by many factors, including the internal motivation of dissimilating sounds in order to differentiate meaning, and

also palatalization. Loan words with BS encourage these internal processes even further, by regularizing most phonemes in that environment by analogy, even when there is no semantic motivation. This can be illustrated by causatives in F21 and F22 (KtSukuma and KtNyamweezi) which use $I \rightarrow z$ or $I \rightarrow j / (i)$. Maybe, in F21/F22, PB * $I \rightarrow I$, but then, words from F23 (SiSuumbava) arrived with PB * $I \rightarrow z/j$. The F21/F22 speakers recognized the connection between z/j and I as reflexes of PB *I, so they started to exploit it in pairs of words and in morphological derivations where it maybe joined with incipient palatalization. Only KiLoongo remains consistent with the I/zI reflexes, without borrowing I/zI from SiSuumbwa, as SiGalagaanza likely does. SiGalagaanza sometimes gives the impression that it belongs to SiSuumbwa with its I/zI reflexes of PB *-du, although the relatively consistent 7V system discounts that possibility.

3.2.1.1.9 -*ci

(92) PB *-cid- 'cease, be finished'

/-fila/ KImunaSukuma, JinaKIIva, KIDakama

/-sila/ GInaNtuzu

- SiSuumbwa, KINyanyeembe, KIKonoongo, SiGalagaanza

(93) PB *-cikt 'day'

/lu-siku/ SiSiloombo, SiYoombe

/lʊ-ʃikʊ/ KɪmunaSukuma, KɪDakama

/lʊ-sikʊ/ GɪnaNtuzu, KɪNyanyeembe, KɪKonoongo

/lʊ-ʃigʊ/ JinaKɪɪya /n-sikʊ/ SiGalagaanza

KiLoongo

(94) PB *-cinga 'long, straight hair, like those of animals or Europeans'

/u-siinga/ KINyanyeembe /u-siinga/ KIKonoongo

/lu-siinga/ KiKonoongo /lu-siinga/ SiGalagaanza

SiSuumbwa, KISukuma, KIDakama

(95) PB *-koci 'husband'

/n-gooshi / KImunaSukuma, JinaKIIva

/ŋ-goosi/ GInaNtuzu /mu-goosha/ KIDakama /mu-gooshi / KINyanyeembe

/mu-goosi / KIKonoongo
- SiSuumbwa, SiGalagaanza

(96) PB *-cing- 'rub'

/-fiing-/ JinaKIIva

SiSuumbwa, KImunaSukuma, GInaNtuzu, KINvamweezi

The regular reflex of PB *ci in the majority of dialects is /si/, except for three dialects: KImunaSukuma, JinaKIIya and KIDakama which go one step further by palatalizing /s/ to /ʃu/. Among this group of three, two, KImunaSukuma and JinaKIIya are consistent in a similar way with regard to the most frequent reflex of PB *di which is /j/, instead of the majority, including GInaNtuzu, /z/, which is similar to the SiSuumbwa and KINyamweezi reflexes, as compared in Table 3.21.

Table 3.20 Reflexes, innovations, extraneous sounds and their possible sources, PB *ci

Variety and	Sound/Innovation (5)		Possible source/comment
unmarked form	Regular	Irregular	
SiSiloombo /s/	s (1)	-	
SiYoombe /s/	s(1)		
KiLoongo /s/			-
KımunaSukuma /s/	J(3)		
GınaNtuzu /s/	s(3)	-	
JinaKııya /s/	ʃ(4)		
KıDakama /s/	ʃ(3)	1.5	
KxNyanyeembe /s/	s(2)	J(1)	F21
KıKonooŋgo /s/	s(3)		
SiGalagaanza /s/	s(2)	- 1	

From *Table 3.21*, KImunaSukuma and JinaKIIya are palatal dialects, as is KIDakama to some extent in this context: PB *ci →/si/ →/fi/.

Table 3.21. Similarity of most frequent reflexes in SSN from PB *di and PB *ci

Language/Dialect	Most frequent reflex of PB *di	Most frequent reflex of PB *ci
F21b, F22, F23	z	s
F21a, F21c, F22b ⁵⁹	j	ſ

⁵⁹ K1Dakama (F22b) looks more like K1munaSukuma (F21a) and JinaK11ya (F21c) in the context of PB *ci only, indicating some pervasive influence, which can be areal or genetic. The picture in the reflexes of PB *di is like the rest F22 generally, being /zi, instead of fil.

The irregular reflexes may have their origin from an outside dialect, as is the case of #/| in KINyanyeembe which is a likely inter-dialectal loan from F21a or F21c. The most difficult type of loan to detect is one which is well-formed, as if it is inherited directly from PB. For instance, /-siinua/ 'long hair', is confined to KINyanweezi only, excluding KIDakama.

It is unlikely to be a native KINyamweezi word, especially when it is missing in KIDakama, KtSukuma and SiSuumbwa. In addition, its prefix /0-l or /u-l is suspicious, since its class marker is supposed to be /0-l (singular) or $/\beta0-l$ (plural or mass), and the loss of $[\beta]$ is marked in KINyamweezi. Its likely source may be KiSwahili /u-singa/ 'long hair'. On the other hand, the word suggests that KIDakama is a possible member of KtSukuma rather than KINyamweezi. This is true with regard to the division of socio-political entities during the colonial period in Tanzania."

Marchaettive boundaries which were also regarded as 'linguistic', often coincided with administrative borders like provines, districts and wards, so that it was common to regard certain 'ribbe' as occupying certain locations as if speech communities were as rigid and as relatively unchanging as physical features like mountains and valleys. For instance, many maps show that Tabora and Shinyanga Regions are occupied by the KTNyanweezi and KTSukuma speakers respectively, divided by the seasonal Manoonga River. But Manoonga River or any physical boundary anywhere in the world cannot be regarded strictly as a language boundary because of its porousness, as indicated by the common shared features between KTSukuma and KTDakama, the later being grouped as KTNyamweezi. Because such labels carry immense socio-cultural and legal complications like ethnic identity and political territoriality, changing such perceptions is very difficult given the short period of 40 years since flag independence in 1961.

3.2.1.1.10 PB *-cu

(97) PB *-cuk 'pour'

/-fuka/ SiSiloombo

/-fuuka/ SiGalagaanza

SiYoombe, KiLoongo, KISukuma, KIDakama, KINyanyeembe, KIKonoongo

(98) PB *-cub 'urinate'

/-sußaala/ SiSiloombo, SiYoombe, KImunaSukuma, JinaKIIva, KINvamweezi

- KiLoongo, GInaNtuzu

The limited data in this word only emphasizes the affinity between SiGalagaanza and SiSuumbwa, on the one hand, and the relatively regular reflex/s/ on the other. However, the lengthened form in SiGalagaanza may imply something important, that the source of the word, and hence the phoneme, is external. It may be the lengthening found in KISukuma, as a semantic strategy, indicating that the word itself is a loan from a BS language.

The almost uniform reflex of /-suβaala/ 'urinate' < PB *-cub- 'urinate' across the three languages is interesting in relation to SiSuumbwa. If that one word above is any indication, then, the expected morpheme would be -fubaala, rather than -suβaala, since /s/ is extraneous in SiSuumbwa in this context. Kahigi (1988:197) suggests that /b/ (and /w/) may be from Proto SiSuumbwa, because they cannot be traced back to any other segment since derived /b/ is from PB *pu, or some PB *tu and PB *ku. It can also be a loan from Cushitic-fug- 'to drain out' (Ehret, p.c.). What this means is that, /b/ may be a loan from other languages. All

in all, it would be unwise to draw conclusions based on two words. This also applies to PB
*ju, with one word, and PB *ji with none.

3.2.1.1.11 PB *ki

(99) PB*ki- 'die'

/-ca/ KISukuma

- SiSuumbwa, KINyamweezi

(100) PB *-kind 'overcome'

/-kiinda/ SiSiloombo, SiYoombe, GīnaNtuzu, JinaKīīya, KīDakama, KīNyanyeembe, KīKonoongo

(/-tiinda/) KImunaSukuma

/-kiinda, -siinda/ SiGalagaanza - KiLoongo

(101) PB *-yoki 'smoke'

/lyoonsi/ SiSiloombo, SiYoombe, SiGalagaanza /lyoochi/ KISukuma, KIDakama /lyonki/ KINyanyeembe

/lyoki/ KIKonoongo

KiLoongo

(102) PB *-kidi 'soot'

/ma-kili/ JinaKIIya, KINyamweezi

SiSuumbwa, KImunaSukuma, GinaNtuzu

The regular reflexes are SiSuumbwa /s/, KISukuma /k/, and KINyamweezi /k/. The irregular reflexes in SiSuumbwa suggest borrowing from neighbours, possibly from KISukuma or

KINyamweezi. On the other hand, KISukuma gets its irregular reflexes by regular palatalization as an assimilatory process from the superclose f/t to a vowel (or semi-vowel), as with /a/ in PB *-kia →-cia →cā 'die'. This assimilatory behaviour in KISukuma suggests that, on its own, *i does not palatalize when it is followed by [-superclose] vowels, illustrated in (103).

Table 3.22 Reflexes, innovations, extraneous sounds and their possible sources, PB *ki

Variety and	Sound/Innovation (4)		Possible source/comment
unmarked form	Regular	Irregular	3
SiSiloombo /k/	/s/(1)	/k/(1)	F21/F22?
SiYoombe /k/	/s/(1)	/k/(1)	F21/F22?
KiLoongo /k/			
KımunaSukuma /k/	/k/(0)	/c/(2)	internal innovation?
GınaNtuzu /k/	/k/(1)	/c/(2)	internal innovation?
JinaKııya /k/	/k/(2)	/c/(2)	internal innovation?
KıDakama /k/	/k/(2)	/c/(1)	internal innovation?
KɪNyanyeembe /k/	/k/(3)	19	
KıKonoongo /k/	/k/(3)	-	
SiGalagaanza /k/	/k/(2)	/s/(2) ⁶¹	F23?

Such a process is not BS. More examples are shown in (103) and (104), from JinaKIIya. (In JinaKIIya, the prefix [ki-] is regularly changed to {ji-}, regardless of phonetic context, as

⁶⁴ Ambivalence of SiGalagaanza is shown by displaying both /ki/ and /si/ in PB *-kind-overcome /-kiinda,-siinda/, indicating an existence of two phonological systems because of having two lexical sources.

in the name of the dialect itself: JinaKIIva < GInaKIIva < KInaKIIva).

```
ki-alo 

→ caalo 'village, country, land' < PB *-yado 'land' 
ki-enge 

→ cenge 'lamp' 
ki-yoga → cyloga 'hoof' 
ki-aŋio 

→ caaŋio 'nest', <-anza < PB *-yaŋia 'spread something (vt)' 
ki-yope 

→ coople 'funnel' 

(104)
```

-kijgilima 'at dawn' -kilima 'erect poles on the sides of a house as walls' makilimo (noun) 'screening poles at sides of house used as wall'

-kiindagIla 'press something, like soil or grain to make it fit space properly'

-kiliifa 'smear, rub'

Nyaangaki 'proper name, male'

SiSuumbwa does not spirantize when a loan is suggested, as in /-kiinda/ 'overcome'.

KINyamweezi is generally consistent by its regular /k/ reflexes, except SiGalagaanza which
suggests great external influence, possibly by loans. Even the name of the language itself
shows this in the prefix, which is changed from {ki} to {si}. The likely source of this
influence is SiSuumbwa due to their synchronic proximity.

Another significant word which suggests the powerful former influence of SiSuumbwa on its neighbours is /ma-kiili 'soot' < PB *-kidi 'soot', even if useful by negative evidence only. The word is not in SiSuumbwa usage. Significantly, the reflex /makili/ is retained even in varieties like SiGalagaanza and KiNvanveembe which display a flair for replacing the

K1 Ny amweezi forms with a SiSuumbwa lexeme when it is available in SiSuumbwa. The word

for 'soot' in the 3 SiSuumbwa varieties is /muviila/ for SiSiloombo, /muvwiila/ for SiYoombe

and /mavilla/ for KiLoongo. What this suggests is that, when a word was found in SiSuumbwa, it easily replaced a similar lexeme in SiGalagaanza. If a word was not replaced

in SiGalagaanza, then it was likely that that word was not in SiSuumbwa.

In KImunaSukuma, /-tiinda/ 'overcome' suggests a regressive assimilatory gesture of the

coronal /d/ which spreads its place feature to /k/, thus deleting it. It is not a productive

process, since it occurs only in a few words.

A comparison can be made between PB *d/l, *c and *k reflexes in F21/F22b. The irregular

reflexes show a pattern which indicates regular palatalization, shown in (105):

(105) *I → z → i

 $*_{c} \rightarrow s \rightarrow f$ $*_{k} \rightarrow c$

3.2.1.1.12 PB *-ku

(106) PB *-poku 'blind (person)'

/mu-hofu/ SiSuumbwa, KIDakama, KIKonoongo /m-oku/ KImunaSukuma. GInaNtuzu

/m-boku/ JinaKIIva

/m-pofu/ KINyanyeembe, SiGalagaanza

(107) PB *-kupa 'bone'

/i-gufwa/ SiSuumbwa

/li-guha/ KImunaSukuma

/i-guha/ GInaNtuzu, KIDakama. KINyanyeembe, KIKonoongo

/I-guha/ JinaKIIya/

/i-fupa/ SiGalagaanza

(108) PB *-kuba 'chest'

/si-fitBa/ SiSiloombo, SiYoombe, SiGalagaanza

/ci-fußa/ KiLoongo

/ʃi-kuβa/ KīmunaSukuma

/gI-kuβa/ GInaNtuzu

/ji-kuβa/ JinaKIIya /kI-kuβa/ KIDakama, KINyanyeembe

/ki-kuβa/ KIKonoongo

(109) PB *-kundo 'knot'

/i-guundo/ SiYoombe, KIDakama, KImunaSukuma, KINyanyeembe

/i-fuundo/ KiLoongo, SiGalagaanza /I-guundo/ GInaNtuzu, JinaKIIya

- SiSiloombo, KIKonoongo

(110) PB *-kuta 'oil'

/ma-futa/ SiSiloombo, SiYoombe, KINyanyeembe, SiGalagaanza

/ma-zuta/ KiLoongo

/ma-guta/ KISukuma, KIDakama, KIKonoongo

(111) PB *-kun(d)od- 'uncover'

/-fuundukula/ SiSiloombo

/-fuundUkUla/ SiYoombe /-kuundUla/ KImunaSukuma, JinaKIIya, KIDakama

/-kuntla/ GInaNtuzu

/-kundtktla/ KINyanyeembe, KIKonoongo

/-vundukʊla/ SiGalagaanza - KiLoongo

Table 3.23 Reflexes, innovations, extraneous sounds and their possible sources. PB *ku

Variety and unmarked form	Soun	d/Innovation (6)	Possible
	Regular	source/comment	
SiSiloombo /k/	/f/ (4)	/g/ (1)	F21/F22? (DL)
SiYoombe /k/	/f/(4)	/g/(2)	F21/F22? (DL)
KiLoongo /k/	/f/(3)	/z/(1), /g/(1)	F21/F22? (DL)
KımunaSukuma /k/	/k/(3)	/g/(3)	DL
GrnaNtuzu /k/	/k/(3)	/g/(3)	DL
JinaKırya /k/	/k/(3)	/g/(3)	DL
KıDakama /k/	/k/(3)	/g/(3)	DL
KıNyanyeembe /k/	/k/(2)	/f/(2), /g/(2)	F23?
KıKonooŋgo /k/	/k/(2)	/f/(1), /l/(1), /g/(2)	DL, F23?
SiGalagaanza /k/	/k/(0)	/f/(5), /v/(1)	F23?

From Tahle 3.23, the reflexes are F23/10; F21and F22/1kl. This environment is one clear indication that KIsukuma does not spirantize, unless a loan word is involved. When there is an irregular form, it is a voiced counterpart of /kul, the /gul, which is a result of Dahl's Law (DL). It is this form which makes/ma-zuta/in KiLoongo, from PB *-kuta *oil***.

On the other hand, KtNyamweezi sometimes shows the effects of Dahl's Law. The absence of the process in a word like PB *-poku, which is realized as /-pofu/ or /-hofu/, suggests two

⁶² PB *gu > zu is treated in more detail while dealing with PB *gu in 3.2.1.1.14

things. First, the two forms suggest a loan word from a language without Dahl's Law, which makes the form unlike that in KtSukuma. Secondly, DL may not be part of KtNyamweezi^{kst}. In this case, the word for 'blind' in KtNyamweezi has two phonological features which are extraneous: absence of Dahl's Law as in SiSuumbwa, and spirantization of hz/ in front of *u to /b', which is also a regular SiSuumbwa feature (Nurse 1979b:462, Kahigi 1988:257). The presence of /b' in KtNyamweezi suggests SiSuumbwa's influence which is observed even in KtKtImbu, possibly through KtNyamweezi, where the word is /mpofu/.

Another interesting word is PB *-kupa 'bone'. Two processes are interesting in this word: SiSuumbwa shows extraneous Dahl's Law which seems to have operated first and blocked any regular spirantization to 10 when 1kl became voiced. Neighbouring SiGalagaanza. regularizes 1kl before *u to 10 under presumably SiSuumbwa influence, but retains /pl instead of changing it to 1kl as in the other varieties. The *p > h process (glottalization) is regular in SiSuumbwa, and it might have been blocked in the word, since it might be a loan from elsewhere where PB *pa > fa. SiGalagaanza might have obtained the morpheme {ifupa}; 'bone' from elsewhere too, possibly from KiSwahili /mfupal. Such a form is found neither in KtNyamweezi nor in SiSuumbwa. For both SiGalagaanza and SiSuumbwa, the word seems to be a loan. However, not every word with DL in SiSuumbwa (F23a/b) and KiLoongo (F23c) is automatically a loan, since most J languages have traces of DL, as in PB

⁴³ A discussion of DL is found in section 3.2.2. Mention here is made because of the contrast between F21 and F22 in the way they show their irregular reflexes

*-kut- 'be satiated' → /-gut-/ or PB *-kuta 'oil' → /mazuta/, /majuta/, /mavuta/.

In PB *-kuba/ 'chest', only SiGalagaanza has a form which is identical to that of SiSuumbwa,

/si-fußa/. But as pointed out above, the SiGalagaanza vowel system is 7V, and this makes

any genetic affiliation suspect, despite the similarity. In addition, the data show a one-way

influence. SiSuumbwa affecting SiGalagaanza more, indicating that, either some SiGalagaanza

speakers have SiSuumbwa origins, or the SiSuumbwa influence on SiGalagaanza is simply

more far-reaching.

Some of the irregularities in the reflexes are not clear. For instance, it is difficult to know why in SSN it is ${}^*k \to {}^*$ in PB * -kundo \to /-eundo/ 'knot', except in KiLoongo and

SiGalagaanza (-fuundo). It appears nevertheless to be an SSN innovation. With these

caveats, it is clear enough that SiYoombe's form is a likely loan from KISukuma or

KINvamweezi, while SiGalagaanza's /-fuundo/ form suggests a SiSuumbwa origin.

3.2.1.1.13 PB *-gi

(112) PB *-dogi 'magic', 'sorcerer', 'witchcraft'

/bu-lozi/, /mu-lozi/, /\u03bd or-lozi/ SiSiloombo, SiYoombe

/βu-logi/, /mu-logi/, /βt-logi/ KiLoongo /βt-logi/, /nogi/, /βt-logi/ KtSukuma

/βυ-logi/, /mu-logi/, /βυ-logi/ KIDakama /υ-lozi/, /mu-lozi/, /wυ-lozi/ KINyanyeembe /u-logi/, /mu-logi/, /υ-logi/ KIKonoongo

/βυ-logi/, /mu-lozi/, /βυ-lozi/ SiGalagaanza

Although only one word was available here, the regular reflex of K1Sukuma and K1Nyamweezi remains/g/, supporting earlier patterns. This reflex includes KitLoongo, which departs from its usual BS forms, implying a loan from K1Sukuma or other non-BS languages. SiSuumbwa's F23a and F23b are consistently regular with /z/*. Only SiGalagaanza and K1Nyanyeembe show an affinity with SiSuumbwa, the former being identical with SiSuumbwa, while the ambiguity of SiGalagaanza's linguistic membership shows in /\(\beta\)Glogi/ 'magic'.

3.2.1.1.14 PB *-gu

(113) PB *-jogu 'elephant'

/n-zovu/ SiSiloombo, SiYoombe, KINyanyeembe, SiGalagaanza

/en-zozu/ KiLoongo /n-zoßu/ KiKonoongo

KISukuma, KIDakama

(114) PB *-gund- 'be high (of meat), rot'

/-vuunda/ SiSiloombo, SiYoombe

/-zuunda/ KiLoongo

/-guunda/ GInaNtuzu, JinaKIIya, KINyanyeembe, KIKonoongo

KImunaSukuma, KIDakama, SiGalagaanza

Like the examples with PB *-gi above, the reflexes of PB *-gu show the clear divide between SiSuumbwa on the one hand, and KISukuma and KINyamweezi on the other, despite the lack

⁶⁴ The case of regular voiceless JinaKIIya prefixes voicing is unique in F21/F22, as in the name of the dialect itself: $k\mathbf{I} \to g\mathbf{I} \to g\mathbf{i} \to j\mathbf{i}$

of sufficient data. SiSuumbwa (F23a, b) shows PB *gu > /vu/, KiLoongo /zu/ and KISukuma/KINyamweezi /gu/. This assumption of regular reflexes fits the general pattern of BS in F23 shown in other phonemes, or the lack thereof in F21/F22.

Table 3.24 Reflexes, innovations, extraneous sounds and their possible sources, PB *gu

Variety and unmarked	Sound/Inr	novation (2)	Possible source/commer	
form	Regular	Irregular		
SiSiloombo /g/	/v/(2)			
SiYoombe /g/	/v/(2)		•	
KiLoongo /g/	/z/(2)			
KımunaSukuma /g/	/g/(0)			
GɪnaNtuzu /g/	/g/(1)	140	-	
JinaKtrya /g/	/g/(1)		¥	
KıDakama /g/	/g/(0)	· ·		
KıNyanyeembe /g/	/g/((1)	/v/(1)	F23	
KrKonoongo /g/	/g/((1)	/B/(1)	F23?	
SiGalagaanza /g/	/g/(0)	/v/(1)	F23	

Kahigi (1988) gives data which support the above regular patterns, as shown in (115):

(115)

PB and gloss	SiSuumbwa	K LSukumo
*-gubo 'hippopotamus'	-νυβυ	-guβσ
*-gido 'taboo'	-zilo	-gilo
*-bido 'soot'	-viila	-Bilo
*-takun- 'chew'	-tafuna	-dakuna

From the general patterns observed above, the following groups can be regarded as related, genetically or areally. The sometimes ambiguous status of SiGalagaanza is indicated by two entries in both the SiSuumbwa and KtNyamweezi traditional groups, illustrated in (116). SiSiloombo, SiYoombe and KiLoongo are core BS dialects in SSN, forming a group of their own. However, KiLoongo departs from SiSiloombo and SiYoombe in a consistent way making it a different entity. The BS features in the rest of SSN appear to be from SiSiloombo, SiYoombe and KiLoongo as nearest neighbours, and therefore as likely sources, rather than as a given fact.

(116)

KıNyanyeembe KıKonoongo SiGalagaanza? ←? →	SiSiloombo SiYoombe SiGalagaanza?	KiLoongo	KimunaSukuma GinaNtuzu JinaKiiya KiDakama
--	---	----------	--

In addition, the data continue to support the contention that SiGalagaanza may either be part of SiSuumbwa, or is part of KtNyamweezi, but is heavily influenced by SiSuumbwa because

of the irregularity of PB *gu > /vu/, instead of K1Nyamweezi's PB *gu > /gu/. A similar question can be asked: does KiLoongo really belong with SiSuumbwa if it is so consistently different? Or, how many maximal differences can be allowed to qualify two or more varieties to belong to one genetic linguistic group? These questions are attempted in section 3.2.1.2 by tabulating the general reflexes of SSN in the Ca, Ci and Cu environments, where C is any of the 8 tarvet stops dealt with above.

3.2.1.2. BS in SiSuumbwa, KzSukuma and KzNyamweezi: Summary.

The tables below examine the reflexes in the various SSN dialects. What is noted is that, the greater frequency of reflexes does not automatically suggest regular change in language. Compared to majority counts, regular changes may be minority cases for many reasons. These regular reflexes can be recovered only by comparing the data in the other phonemes. In some cases, the native reflexes are lost, and without careful examination in other environments, inaccurate conclusions may be drawn.

Where a process like Dahl's Law is in operation, a reflex of a phoneme like PB *p being/ β /
or β b/ in SSN is counted as β p/, since this change is regular and predictable, presupposing a
dissimilated β p/. Hence the β pa/ or β pa/ proves the active presence of β p/ in that context at the
same time. This applies to the PB *Ci and *Cu contexts as well in other phonemes where DL
is relevant. In addition, most of the tables are self-explanatory because of the descriptions in
one table applying to the others as well. The aim is to display patterns which have already

been discussed in the previous section in specific examples of PB reflexes in context. Due to limited cases per phoneme per environment, the tables have included all irregular and idiosyncratic instances. A rigorous sifting was not done from the beginning, although higher frequencies indicate probable regular reflexes, highlighting the dubiousness of the irregular occurrences.

Table 3.25 Bantu Spirantization in SiSuumbwa, KtSukuma and KtNyamwezi *p

Environment Dialect i	PB *pa	PB *pi	PB *pu
	(60 cases)	(6 cases)	(9 cases)
SiSiloombo	h(16), p(9), f(2)	h(2), p(1), f(1)	f(3)
SiYoombe	h(20), p(9), f(2)	h(2), p(1), f(1)	f(3)
KiLoongo	h(20), p(6), f(1)	h(3), s(1), f(1)	f(1), h(1)
KimunaSukuma	h(19), p(9)	f(2), h(2), p(1)	f(3), h(1)
GinaNtuzu	h(16), p(11)	s(2), p(1), f(1)	f(3), s(1), p(1)
JinaKiiya	h(19), p(15)	f(3), p(1)	f(6), h(1)
KIDakama	h(16), p(9)	f(2), p(1), f(1)	f(4), h(1)
KINyanyeembe	h(12), p(12)	f(3), p(1), s(1)	f(4), h(1), p(1)
KIKonoongo	h(12), p(13)	s(2), p(1), f(1)	f(5), h(1), s(1)
SiGalagaanza	h(13), p(15)	f(3), p(1)	f(4)

An important aspect to note in *Table 3.25* is the absence of homorganic fricatives in some of SiSuumbwa's reflexes in superclose contexts if it is claimed that the language has BS. For instance, some PB *pi change to /hi/. A plausible explanation here is the effect of chronology in phonological processes. Glottalization seems to have occurred before BS in SiSuumbwa,

resulting in blocking BS due to the bleeding effect of glottalization⁶³. Those words with /Ø might have been borrowed later. In K1Sukuma and K1Nyamweezi the picture is that of mixed reflexes, just as it is in SiSuumbwa, reflecting a possible multiplicity of vocabulary sources (Batibo 2000:25).

Table 3.26 Bantu Spirantization in SiSuumbwa, KzSukuma and KzNyamwezi PB *b

Environment = Dialect !	PB *ha	PB *bi	PB *bu
	(52 cases)	(7 cases)	(2 cases)
SiSiloombo	β(13), b(8)	v(3), β(1)	v(2)
SiYoombe	β(21), b(3)	v(3)	v(2)
KiLoongo	β(19)	z(2), β(1)	z(1)
KImunaSukuma	β(25)	β(5), ƒ(1)	β(1)
GInaNtuzu	β(23)	β(5), ƒ(1)	β(1)
JinaKIIya	β(31), b(2)	β(4), ƒ(1)	β(1)
KIDakama	β(24)	β(4), f(1)	β(1)
KINyanyeembe	β(25), b(1)	β(3), v(1)	-
KIKonoongo	β(26)	β(3), v(1)	w(1)
SiGalagaanza	β(27)	v(2), β(1), z(1)	v(2)

Because PB *b is not affected by glottalization, the difference between /Ca/ on the one hand, and /Ci/ and /Cu/ on the other is apparent in SiSaumbwa, and to some extent in SiGalagaanza. Any double reflex suggests interference from other phonological systems. Like the reflexes in PB *p, the reflexes of *b as /b/ or /fb/ can be treated as a realization of the same quality.

⁶⁵ See Batibo (2000:24-25) for a discussion of glottalization in SSN.

and the count is made accordingly. Ambiguous reflexes of PB *b include /w/ and /y/ which can be interpreted as phonological strategies of PB *b (weakening $/\beta$ / or $|\cos/\theta\rangle$), rather than being different phonemes. In this context therefore, /b/ and $/\beta$ / are treated separately, especially because in JinaKinya they are phonemic, whereas the $/\beta$ / in PB *p is often determined by phonetic context, and therefore a diachronic reflex of PB *p.

Table 3.27 Bantu Spirantization in SiSuumbwa, KtSukuma and KtNyamwezi PB *1

Environment Dialect	PB *ta	PB *ti	PB *tu
	(65 cases)	(16 cases)	(16 cases)
SiSiloombo	t(25)	s(5), t(1)	s(1), t(1)
SiYoombe	t(29)	s(6), t(3)	s(2)
KiLoongo	t(23)	s(3), t(3)	s(1), c(1)
KimunaSukuma	t(26)	t(7), f(2), c(2)	t(6), s(3)
GinaNtuzu	t(22)	t(8), s(4)	t(9), s(1)
JinaKiiya	t(33)	t(8), f(2), c(2), s(1)	t(9), s(3)
KIDakama	t(26)	t(5), f(4), c(2)	t(5), s(3)
KINyanyeembe	t(27)	t(7), s(5)	t(5), s(3)
KIKonoongo	t(26)	t(7), s(5)	t(6), t(3)
SiGalagaanza	t(36)	s(6), t(4)	t(4), s(2), f(1)

Table 3.28 Bantu Spirantization in SiSuumbwa, KzSukuma and KzNyamwezi PB *d

Environment =	PB *da	PB *di	PB *du
Dialect!	(171cases)	(35 cases)	(20 cases)
SiSiloombo	l(75), t(1)	z(12), l(2)	v(3), l(2), z(2)
SiYoombe	l(75)	z(11), l(2)	v(3), z(2), l(1)
KiLoongo	l(63), t(1)	z(11), l(2)	z(5), l(1)
KImunaSukuma	I(86)	j(10), l(6), d(1)	z (7), l(3), d(1)
GInaNtuzu	I(84)	z (6), l(6), j(2), d(1)	z (8), l(2)
JinaKIIya	I(123)	l(12), j(8), d(1)	z(11), l(4), d(1)
KIDakama	l(78), d(1)	z(10), l(5)	z(8), l(5)
KINyanyeembe	l(71), d(1), t(1)	z(10), l(3)	z(5), l(4)
KIKonoongo	l(90), d(1), t(1)	z(10), l(4)	z(6), l(4)
SiGalagaanza	l(79), d(1), t(1)	z(14), l(3)	v(4), l(3)

Table 3.29 Bantu Spirantization in SiSuumbwa, K1Sukuma and K1Nyamwezi PB *c

Environment =	PB ca*	PB *ci	PB *cu
Dialect l	(35 cases)	(9 cases)	(8 cases)
SiSiloombo SiYoombe KiLoongo	s (9), c(1) s(10), c(1) s (8)	s(4) s(3)	s(1), f(1) s(1)
KImunaSukuma	s(16), c(1)	f(4), j(1)	s(1)
GInaNtuzu	s(12)	s(3), f(2), z(1)	-
JinaKIIya	s(21), c(1)	f(5), j(1)	s(1)
KIDakama	s(12), c(1)	f(4), z(1)	s(1)
KINyanyeembe	s(11)	f(2), s(2), z(1)	s(1)
KIKonoongo	s(11)	s(4), z(1)	s(1)
SiGalagaanza	s(9), c(1)	s(3)	s(1), f(1)

Table 3.30 Bantu Spirantization in SiSuumbwa, KtSukuma and KtNyamwezi PB *j

Environment Dialect 1	PB *jV (24 cases	PB *i (0 cases)	PB *u (0 cases)
SiSiloombo SiYoombe KiLoongo	z(10) z (9) z (7)		-
KImunaSukuma z (9), ly(1), j(1) z (8), ly(2) JinaKiiya z(11), ly(3), j(1)			-
KIDakama z(8), j(1) z(8), ly(1) kINyanyeembe KIKonoongo z(9), ly(2) z(9), ly(2)		-	-

Table 3.31 Bantu Spirantization in SiSuumbwa, KtSukuma and KtNyamwezi PB *k

Environment Dialect 1	PB *ka	PB *ki	PB *ku
	(94 cases)	(5 cases)	(11cases)
SiSiloombo	k(41)	s(1), k(1)	f(3), k(1)
SiYoombe	k(44), h(1)	s(1), k(1)	f(3), k(2)
KiLoongo	k(41), h(1)	s(1)	f(3), k(3)
KimunaSukuma	k(39)	c(2), k(1)	k(8)
GinaNtuzu	k(39)	c(2), k(2)	k(7)
JinaKiiya	k(60)	k(3), c(2)	k(7)
KIDakama	k(38)	k(2), c(1)	k(6), f(1)
KINyanyeembe	k(41)	k(3)	k(3), f(2)
KIKonoongo	k(46)	k(3)	k(3), f(2)
SiGalagaanza	k(50)	k(2), s(2) ⁶⁶	f(5)

⁴⁶ In SiGalagaanza, PB *-kind- 'overcome' is both /-kinda/ and /-sinda/

Table 3.32 Bantu Spirantization in SiSuumbwa, KISukuma and KINyamwezi PB *g

Environment Dialect	PB * (43 cases)	PB *i (1 or 3 cases?)	PB *u (2 cases)
SiSiloombo SiYoombe KiLoongo	g(17) g(18) g(15)	z(3) ⁶⁷ z(3)	v(2) v(2)
KImunaSukuma GInaNtuzu JinaKIIya	g(26) g(19) g(31)	g(3) g(3) g(3) g(3)	z(2) - g(1) g(1)
KIDakama KINyanyeembe KIKonoongo SiGalagaanza	g(16) g(22) g(23) g(21)	g(3) g(3) g(3) z(2), g(1)	- g(1), v(1) g(1), β(1) v(1)

The above tables include all the eligible cases, and they confirm the divisions of SSN reached in (116). While KiLoopgo continues to be unique within F23, especially by having /z/ where F23a,b have /v/, SiGalagaanza displays a difference within F22 by resembling F23 in many reflexes. But as Kahigi (op.cit) points out, frequency of occurrence on its own is not a measure of genetic cohesion. The double reflexes in this group especially make even the small amount of data count. Although sometimes absent or even contradictory in some cases, as in the case of SiGalagaanza displaying more BS examples than non-BS, these bits of data fit the general pattern as part of the bigger picture. One of the major reason of such extraneous similarity is contact, facilitated by other factors in which speech communities of those

⁶⁷ The words used here were 'magic', 'witchcraft' and 'witch', which in Proto Bantu are pressed by one concept, *-dogi. It may be taken as one word or three depending on whether form or content is central. For the sake of SiGalagaanza, three words are preferable for capturing the double reflexes.

languages operate, such as the sociolinguistic. On the other hand, BS is only one measure. Dahl's Law in SSN may present yet another picture before the combined effect of 7 > 5, BS and DL are assessed.

3.2.2. Dahl's Law in KISukuma, KINyamweezi and SiSuumbwa

As pointed out above, in the general section, Dahl's Law is a dissimilatory process in some eastern Bantu languages whereby a sequence of two voiceless obstruents, usually stops, in consecutive syllables in a word, voices the first. The process is active only in KtSukuma and KtNyamweezi, while in SiSuumbwa it does not occur except in loanwords or in residual words, as is the case of DJ and EJ languages with whom SiSuumbwa possesses a close relationship.

3.2.2.1. Dahl's Law in KISukuma

The process of Dahl's Law in KImunaSukuma follows the classic pattern of voicing the first of two consecutive voiceless stop segments. While JinaKIIya behaves classically to a point, it dissimilates differently when other non-stop voiceless segments are involved, mainly fricatives like |si and /Ji. On the other hand, GInaNituzu behaves sometimes like KImunaSukuma, and at other times like JinaKIIya, as shown in (117) and (118) for KImunaSukuma, GInaNtuzu and JinaKIIya respectively, while all three show their individual differences as well:

(117)

The examples in (117) display the classic dissimilation of Dahl's Law. The only difference is the regular infinitive *ku- change to /gu-/ in GInaNtuzu and JinaKIIya on the one hand, and the /j/ vs /z/, or /f/ and /s/ on the other, displayed by KImunaSukuma and JinaKIIya together, and GInaNtuzu alone, shown also in (118).

(118)

3.2.2.1.1 Dahl's Lerv in K muSukuma

In KmunaSukuma, the process does not need much comment since it has the default mechanism of voicing the first of the two consecutive voiceless stops. If the first syllable contains no stop, then DL becomes unnecessary. Out of the 44 words shown in Tahle 3.6, only 6 or 14% do not undergo Dahl's Law. These words are indicated in (119), and they have one thing in common: the initial syllable is a fricative synchronically, while only one voiceless stop consonant occupies the second syllable slot. The phoneme /h/ in haapt/ 'place' <*-pant0, also shows its true membership, since it is this phoneme only which does not undergo Dahl's Law even in JinaKtrya, as shown in (119) below, indicating that it does not have stop qualities necessitating dissimilation:

(119) kʊ-ʃika 'arrive' < *-pik- ; lʊ-ʃikʊ < *-tikʊ 'day'; kʊ-seka < *-cek- 'laugh'; haanʊ 'place' < *-pantʊ; sato 'python' < *-cato; i-saka 'thicket, bush' < *-caka.

While KImunaSukuma shows the unmarked form of Dahl's Law. JinaKIIya is located on the extreme end of the law's spectrum. The scenario in KImunaSukuma in which DL does not operate when a fricative is syllable-initial indicates that the change of $^*p \rightarrow f$. h and $^*c \rightarrow s$ is a total deletion of the CPlace and manner features of *p and *c respectively. The resulting fricatives found synchronically in KImunaSukuma are treated as new phonemes rather than stop derivatives when they occupy the first syllable slot. Another, more plausible and simpler explanation indicates that KImunaSukuma requires an initial stop only in order to trigger DL. When a stop is root-initial, the synchronic fricatives in second syllable position trigger DL.

as shown in (120). When /s/ or /f/ are initial, as in (119), then no DL occurs because there is no target /p, t, k/ as default triggers.

```
(120)
-/gesa/ > PB *-kec- harvest
-/gusa/ > PB *-kuc- rub

(121)
-/βisa/ (Lenition) < *-bisa (DL) < PB *-pic 'hide'
-/βasa/ (Lenition) < *-bisa (DL) < PB *paca 'twin'
```

When (119) only is used, the words seem to indicate that when Dahl's Law started the If' and Is' were already established as independent phonemes in KimunaSukuma. If Dahl's Law had applied much earlier, the fricatives would not show up in those words, and regular DL would operate. For instance, PB *-caka would be /i-jaga/ in KimunaSukuma rather than /i-saka/. The earlier occurrence of palatalization or *b and *c lention is not convincing, since it is contradicted when (120) and (121) are compared with (119). A better explanation is that the words failing to undergo DL like those in (119) are affected by the bleeding effect of a preceding process like palatalization. When the dialects diverged, DL began to operate differently. This difference of DL operation suggests a long period of separation between KimunaSukuma and JinaKiiya for the two to treat the same words differently with regard to Dahl's Law.

In (121), chronology indicates that Dahl's Law started, and then PB *c and *b lenition

followed as a regular reflex: $PB^*p \rightarrow b \rightarrow \beta$. The process is not $^*p \rightarrow \beta$ because \hbar remains unaccounted for. Because of this chronology, it is important to distinguish the operation of Dahl's Law and lenition in \hbar - β isa/ and \hbar - β asa/. The \hbar - β / is from \hbar - β / rather than directly from \hbar - β /.

3.2.2.1.2 Dahl's Law in JinaKtiya

Of the 51 words, 49 undergo Dahl's Law in JinaKIIya. Because of this high number of cases undergoing the process, there are two things to note. Firstly, JinaKIIya dissimilates classically like KImunaSukuma. But in JinaKIIya, if one of the voiceless segments is not a stop, then the stop is voiced, regardless of its second position. Secondly, JinaKIIya also consistently voices all prefixes with voiceless stops as a morphologized feature, like the infinitive marker ktr.

na	to	ko	pep	a	-	na	ďσ	gσ	bep	а
15	neg	2s	mislead	sufx		15	neg	2s	mislead	sufx
to	tr	naa	kop	а		ďσ	dI	naa	gop	а
10	neg	pres	borrow	sufx		1p	neg	pres	borrow	sufx
ва	ta	laa	laal	а	-	βа	da	laa	laal	а
30	nea	futfar	sleen	sufx		30	nea	futfar	sleen	sufx

natokopepa → nadogobepa 'l will not mislead you'
tutnaakopa → dodtnaagopa 'We have not borrowed'
βatalaalaala → βadalaalaala 'They will never sleep'

Other morphemes which have been morphologized are the second person tu-which becomes du- and negative marker-ta-or-tr-, which become-da-or-dr-as permanent features. This point is illustrated well with the examples in (118) and (122).

The exceptions to Dahl's Law in JinaKIIya are two out of 51 words, the percentage of occurrence of Dahl's Law being 96%. These two exceptional words are:

```
(123)
haano 'place' < *-panto
suha 'calabash' < *-cupa
```

(124)

These two words raise one question: why only these two out of 51? The answer strongly suggests a semantic strategy where homophonous words are dissimilated phonologically to avoid polysemy.

```
PB *cÓpá 'jar, calabash bottle'
jôbá 'bottle' < KíSwahili cupa 'bottle'
sôhá 'calabash'
-sôbá 'worry, hesitate'
-jôbá 'walk or run in rain, soaked in water'
-sôbílá 'dip a bolus of food in (meat) soup'
PB *-pantu 'place'
haapu 'polace'
Baanu 'booole'
```

The dissimilated words can be minimal pairs except for one element, in this case, the change of a stop to hV. Other devices are used, including tonal distinction and borrowing. Speech context is also used where the strategies are exhausted and two words remain identical. The words in (124, 126) are all extant in JinaKIIya, indicating that the semantic strategy is aided greatly by borrowing. In this sense, glottalization offers a rich source of new vocabulary. These words are not purely minimal pairs, but they suggest the parallel presence of hV and /pV or /pV as an indication of interference from another phonological system. Although /hV is a fricative, like /pV or /pV, it does not trigger DL even in JinaKIIya. This explains why there is no DL in PB *pantU 'place'. In JinaKIIya, the word for 'place', haa/pV0 is also hale/pV6. DL applying to PB *pantU would have given /pV6 where /pV8 pantU 'people'. Where there is homophonous with /pV8 pantU 'people'. Where there is homophony, there is almost always a way of avoiding it, including the failure of a law like DL to operate, or borrowing.

3.2.2.1.3 Dahl's Law in GanaNtuzu

GrnaNtuzu occupies a middle position in that it behaves like KImunaSukuma in some respects and like JinaKIIya in others, while a third pattern is established by its own unique features. It undergoes the process by 39 out of 45 words, or 87%, while KImunaSukuma is 86% or 38 out of 44 words. This places them on the same node for Dahl's Law, since even the 6 divergent words in GInaNtuzu are exactly the same as in (119) above. For instance, GInaNtuzu's Dahl's Law does not respond to fricative sounds like /s/, as in /isaka/ 'thicket, bush', which is like KImunaSukuma /isaka/. On the other hand, GInaNtuzu has generally

morphologized the infinitive marker ku-to go-like JinaKIIya as illustrated in (122). Can this have been a borrowed feature from Southern Nilotic, where in that language group, "k > g (Ehret 1971:100)? This strengthens the notion of centre and periphery since in this case the populations speaking JinaKIIya and KImunaSukuma are bigger than those speaking GInaNtuzu. These big populations create around themselves larger protective peripheries or shells" which ensure that the core remains relatively intact during contact with other varieties, including inter-dialectal contact.

Using the linguistic tree metaphor for the three dialects of KISukuma, JinaKIIya would be farthest from the root of proto KISukuma, because of the more far-reaching changes of Dahl's Law from the version of the law that affects /p, t, k/ only. GinaNtuzu would follow as a more conservative version, while KImunaSukuma is the most conservative of the three.

3.2.2.2. Dahl's Law in KINyamweezi

In KINyamweezi the rule is described as an almost exceptionless root structure condition in which, when two adjacent syllables in a stem both start with a voiceless plosive, the first one becomes voiced (Maganga and Schadeberg 1992.23). The syllable structure of a root with two adjacent voiceless consonants is not found synchronically in KINyamweezi because of this root structure condition. When either two of the following are in adjacent syllables, the

⁶⁸ This metaphor of 'shells' protecting the inner centre was brought to my attention and illustrated by Nurse as an appropriate inference (p,c)

first must be voiced: /p, t, k, f, h, mh(m), nh(m), nh(m), mh(m), mh(m),

A few exceptions to this condition are the following, which are attributed to inter-dialectal borrowing (Maganga and Schadeberg (ibid:24):

(125)

-heha 'winnow' vs -beha 'smoke (tobacco) (genuine exception)
-hofu 'blind' vs -boku 'blind' (KISukuma)

teetele 'indeed' vs teletele (original form of teetele)
mpaka 'until' vs mpaka 'until' (KiSwahili)

The second and fourth examples -hofu 'blind' and mpaka 'until' clearly suggest borrowed words from languages without Dahl's Law. The third, teetele 'indeed' indicates that one /t/ was lost, although the syllable was not, and therefore Dahl's Law does not apply because the root structure is well-formed.

Of these, -heha 'winnow' and -beha 'smoke (tobacco)' are more interesting. The alternation suggests the possibility of a lexical technique of semantic distinction so as to avoid homophony, as observed for KTSukuma. This JinaKIIva case illustrates the technique: (126)

PB *-pep- 'blow, winnow'

-bėpă 'seduce and mislead a close friend/or follower, by deception (blow mentally)'

-bèhă 'smoke (tobacco, medicinal leaves, marijuana, etc)'

-hehă 'winnow' (would expect -beha < PB *-pep-)

-hèèhà '(of the sun), be on the western horizon and be less burning, with gentle breezes'

peehà* (the word does not occur, and therefore -heehà is regular)

PB *-pod- 'cool down, get cured'

-pòlă 'cool, be calm'

-hola 'be peaceful, without disease or war'

If these cases of homophony avoidance are taken into account, it becomes true that KINyamweezi (in fact this refers to KIDakama only), like KISukuma, especially KImunaSukuma makes no exceptions to classical Dahl's Law where it occurs.

On another note, the KINyamweezi referred to by Maganga and Schadeberg (1992) is the KIDakama variety which agrees with that analysis. The other varieties, notably SiGalagaanza, KIKonoongo and KINyamyeembe display more exceptions than regularities, as shown in Table 3.6 above. These dominant exceptions can be interpreted as internal linguistic dynamics, or external loans. The questions to be asked include: (a) Did SiGalagaanza, KIKonoongo and KINyanyeembe once have DL, but replaced many words with DL by loans which did not have DL? (b) Were SiGalagaanza, KIKonoongo and KINyanyeembe once without DL but borrowed many words with it? The first explanation is possible, but unlikely because there is no motivation, while the second is more plausible.

3.2.2.2.1 Dahl's Law in KIDakama

Dahl's Law in KtDakama is very similar to that in Ktmunasukuma because both follow essentially the same rules of classical Dahl's Law, unless they are interfered with by loans, dialect-specific innovations or homophones. A few examples illustrate this in (127):

(127)

K1Dakama	KanunaSukuma	Gloss	
ku-daha	ku-daha	'draw water'	< *-tapa
i-dato	i-datʊ	'three'	< *-tatʊ
lυ-∫ikυ	lσ-∫ikσ	'day'	< *-tikʊ
i-saka	i-saka	'thicket, bush'	' < *-caka
i-dako	i-dako	'buttock'	< *-tako
mu-hofu	moku	'blind person'	< *-poku
mu-gaate	ŋ-gaatī	'bread'	< *-kaate

3.2.2.2.2 Dahl's Law in KIKonoongo and KINyanyeembe

Of the 44 Dahl's Law sample words, only 21 or 48% undergo the process in KtKonoongo, and 18 words or 44% in KtNyanyeembe. The majority of the words at 52% and 56% respectively do not undergo Dahl's Law. As dialects of a language which are "expected to have" Dahl's Law, such a low percentage of expected behaviour and a conversely high percentage of irregular features represents a marked situation. For a full list of these exceptional words, see Appendix 6. Examples of words which do not undergo Dahl's Law, include the following common predictable ones. They are also compared with those from

KINyanyeembe and SiGalagaanza, within the KINyamweezi group, and then with SiSiloombo, from SiSuumbwa. KISukuma and KIDakama follow the classical pattern:

(128)

Gloss	Konoo ngo	Nyanyeembe	Galagaanza	Siloombo	Proto Bantu
'three'	idato, itato	i-dato	i-tato	i-satu ⁶⁹	< *-tato
'be satiated'	-ikota	-ikota	-ikota	-ikuta	< *-yikut-
'abscess, boil'	i-pute			i-hute	< *-pute
'headpad'	η-kata		η-gata	ŋ-kata	< *-kata
'chicken'	ŋ-koko	ŋ-koko	η-koko	ŋ-koko	< *-koko
'shiver'	ko-tetema	ko-tetema	kp-tetema		< * -tetrm-

The picture in (128) suggests that, KIKonoongo and KINyanyeembe had a different historical development from that of KIDakama, a variety grouped in KINyanweezi. The KIKonoongo and KINyanyeembe picture is actually very similar to that of SiSiloombo, although where they differ, the difference is significant too. For instance, the words for 'three' and 'abscess, boil', which are /i-satu' and /i-hute' in SiSiloombo suggest that KIKonoongo might not have been in contact with SiSiloombo, since its reflexes are /tiattu, idattu/ and /i-pute/ respectively. In other words, the interpretation of the data from KIKonoongo and KINyanyeembe may be viewed in terms of an independent development.

⁶⁹ This word may be from PB *-catO rather than from PB *tatO, and therefore they are not cognate.

The existence of two forms for 'three' in K1Konoongo also suggests that Dahl's Law and non-Dahl's Law phonetic realizations may be in free variation so that intra-informant variations might make such a phenomenon more noticeable if informant samples were larger. Internally, it might be a case of innovation by strengthening the once voiced stops, although the motivation may be difficult to establish. Otherwise, the weak presence of DL indicates that K1Konoongo and K1Nyanyeembe have borrowed massively from languages without Dahl's Law surrounding them like K1K11mbu, KiBende, IC1W0Unggo and possibly SiSuumbwa

Such an ambivalent status in KtKonoongo and KtNyanyeembe may also be explained in terms of sociolinguistic factors (Thomason and Kaufman 1988). These speech communities might have been KtKtImbu speakers in the past but were absorbed by F22 and adopted KtNyamweezi. Although this is a plausible scenario, it needs some more evidence to validate it. For instance, Brock (1968:58) talks of the naming tradition of languages which is only a recent phenomenon. Modern Bantu languages became frozen and petrified when they began to be named, located and confined in prescribed spaces. For instance, the histories of KtKtImbu and KtntLaamba by Shorter (1968a), and Kidamala (1961) respectively say that the speakers came from different places. Some KtKtImbu speakers came from Usuumbwa (SiSuumbwa country) and Usagara in Morogoro. This is a great possibility since the movements in the past were much easier and more regular because they were not restricted by political boundaries or ethnicity. Such ethnic or political boundaries or ethnicity. Such ethnic or political boundaries were not important

enough to restrict movements and mixing with speakers of different languages or dialects.

What we try to capture now is only a fraction of what was happening only a short while ago
with that volatile situation of free-mixing speech communities. The origins of the various
Bantu clans, groups, and peoples are only recalled when they are recent enough to be fresh
in the communities' collective memory from their most recent journeys, events and their great
people. Such narratives are normally presented as if there were no great people or history
before them

3.2.2.2.3 Dahl's Law in SiGalagaanza

As (128) and Table 3.6 show, SiGalagaanza has more exceptions than regular Dahl's Law forms. Out of 42 words, only 12 or 29% undergo Dahl's Law. This number of exceptions is the same as in KiLoongo, which has 29% of its sample undergoing the process. Due to geographical proximity and probable linguistic closeness, KiLoongo was assumed to belong to SiSuumbwa in this study, a language which has no Dahl's Law. The reason for assigning KiLoongo to SiSuumbwa was partly because it was not yet classified.

The arguments for more exceptions here are similar to those advanced for KIKonoongo and KINyanyeembe, but the difference may be the numbers. SiGalagaanza behaves more like a language without Dahl's Law, as if those few words were acquired only through borrowing from mainly DL languages like KIDakama or KISukuma.

On the other hand, if the 71% non-Dahl's Law words are interpreted as possibly acquired by contact, then it can be explained as the intensive model of contact-induced borrowing (Thomason and Kaufman (1988:50). In this kind of borrowing, intensive contact with bilingualism is expected among the speakers of the borrowing language or variety, extended over a long period of time. Here, there is heavy lexical borrowing and moderate to heavy structural borrowing as well. If the candidate for that donation is SiSuumbwa., KiBende or another language, an examination of that language is essential, although the structural part of borrowing is outside the scope of this work. In Chapter 4, there are some indications that SiGalagaanza shares a few significant vocabulary items with both SiSuumbwa and KiBende. And since they are all Bantu languages, a phonological process such as Dahl's Law could be applied to lexical loans. Dahl's Law used as a classification tool results in the dialects of KiSukuma and KiNyamweezi grouped as in (129).



3.2.2.3 Dahl's Law in SiSuumbwa

As the data in *Table 3.6* show, Dahl's Law in SiSuumbwa is distributed as follows: 10 words out of 58 in KiLoongo; SiSiloombo 4; and SiYoombe 5 words. The fewer number of words undergoing the process raises questions of how can such a skewed exception be explained in a language which had supposedly undergone Dahl's Law.

On closer examination, the words undergoing Dahl's Law are limited to a set of loanwords which can be counted and accounted for. Most are from either KISukuma or KINyamweezi, while two are from Zone EJ. All DJ and EJ languages have at least a few items with DL, for example 'oil' is either /majuta/, /mazuta/ (EJ) or /mavuta/ (DJ). So, these few items in SiSuumbwa and KiLoongo are inherited from DJ/EJ. Since genetic affiliation is either present or absent, SiSuumbwa belonus within SSN or it does not.

Table 3.33 Dahl's Law in SiSuumbwa

Word	Found in	Possible source	Explanatory notes and expected lexeme in brackets
-gufwa <*-kupa 'bone'	SiSiloombo SiYoombe KiLoongo	KrSukuma, KirNyamweezi Zone EJ?	-guha (why not -kuha?) -guf(w)a (Zone EJ, e.g. RuKereβe, Runyalhaŋgiro)
-zuta <kuta 'oil'<="" td=""><td>KiLoongo</td><td>Zone EJ</td><td>-juta (kuta)</td></kuta>	KiLoongo	Zone EJ	-juta (kuta)
-syaabo, -saabo, - saaβo <*-capo 'calabash'	SiSiloombo SiYoombe	JinaKırya	the only variety which dissimilates non-initial stops, instead of being -saho
giiti < *-kɪti 'darkness'	SiYoombe	KıSukuma, KıNyamweezi	giiti (kiti)
eeŋ-kogoto < *-koko 'crust'	KiLoongo	?	It is doubtful if this word is cognate with *-koko
gaaka < *-kaaka 'grandfather'	SiSiloombo	KıSukuma, KirNyamweezi	gaaka (kuuku)
guuku	SiYoombe, KiLoongo	KıSukuma, KitNyamweezi	gaaka (kuuku)
engata ⁷⁰ <*-kata 'headpad'	KiLoongo	KıSukuma	ngata (njkata)
-bisa, -βisa < *-pic- 'hide'	SiSiloombo, SiYoombe	KıSukuma, KıNyamweezi	-βisa (-fisa/hisa)
ku-gesa < *-kec- 'reap'	KiLoongo	KımunaSukuma	kogesa (kukesa)
madete < *-tete 'reed'	KiLoongo	KrSukuma, KrNyamweezi	madete (matete)
тиβећо	KiLoongo	KrSukuma	-βeho, mbeho (mpeho)
-gufu <*-kupt 'short'	KiLoongo	KıSukuma, KıNyamweezi	-guhɪ (-kuhi)

Muzale (1998.93.4) mentions that Dahl's Law in Rutara is not productive, because it occurs in a few words only. It is informative to note that he also mentions two words eggata 'headpad' and -guft'-gufu' short' as examples of the few traces of this Law. These words appear only in KiLoongo.

Because the facts of SiSuumbwa suggest strongly that it has disproportionately few cases of Dahl's Law in the same words, it is also implied that it does not share any immediate ancestry with all the KISukuma varieties and KIDakama. From this, Dahl's Law is essentially a process that affects all KISukuma dialects plus KIDakama. The evidence suggests it has

(130)

SiSuumbwa KiLoongo SiGalagaanza KINyamweezi KISukuma

F23a F23b F23c F22d F22a F22e F22b F21a F21b F21c

diffused via loanwords into adjacent languages. Graphically, a family tree for these three languages would show branches which are not joined by a common stem, as in (130). In other words, such a tree has hanging branches without any roots.

3.2.3 Other processes in SiSuumbwa, KISukuma and KINyamweezi

One prominent process distinguishing these languages is the appearance and evolution of voiceless nasals. In KtSukuma⁷¹, and KtDakama this process entails a mechanism whereby some prenasalized voiceless stop consonants lose their place features, leaving only their voicelessness, resulting in voiceless nasals which spread to become homorganic with the lost

⁷¹ In KISukuma, particularly in JinaKIIya, the nature of voiceless nasals is not explored fully, since it is not immediately relevant. A survey of some initial voiceless nasals and their description in JinaKIIva is attempted in Masele (1996).

stop, as in Tahle 3.34 below from KImunaSukuma, JinaKIIya, GInantuzu and KIDakama examples, compared with KINyanyeembe, KIKonoongo, and SiGalagaanza.

As the table suggests, the voiceless nasals are found only in four varieties, KtmunaSukuma, JinaKIIya, Gtnantuzu and KIDakama. As a significant process for this group for diagnostic purposes, voiceless nasals reconfigure the group into the same three divisions, but with adjusted membership. Combined with other features, such a reconfiguration suggests linguistic validity.

Table 3.34 Voiceless nasals and linguistic sub-grouping in SiSuumbwa, KtSukuma and KtNyamweezi

Proto Bantu ↔ Variety ↓	*N-pamba 'provision'	*N-toiga 'giraffe'	*mu-Ntu 'person'	*N-kaŋga 'guinea fowl'
SiSiloombo	mpaamba	ntwiiga	muuntu	ŋkaaŋga
SiYoombe	mpaamba	ntwiiga	muuntu	ŋkaaŋga
KiLoongo	mpaamba	entwiiga	muuntu	еŋкааŋgа
KımunaSukuma	maamba	ņwπga	นเกบัณ	ђаапда
Grnantuzu	maamba	ņīga	muuņo	фаалда
JinaKrrya	maamba	úīga	muuņo	ђаађда
KıDakama	maamba	ņwiiga	muuņo	ήaaŋga
KıNyanyeembe	mpaamba	ntwiiga	maanta	ŋkaaŋga
KıKonooŋgo		nwiiga	muunto	gkaanga
SiGalagaanza	mpaamba	ntwiiga	muuntu	ŋkaaŋga

3.2.4. Homogeneity between SiSuumbwa, KISukuma and KINyamweezi

With regard to the four phonological processes used to trace the divisions within SSN, only traditional KtSukuma remains undisturbed, although a dialect is added to it, making it incomplete as well. This new KtSukuma (or KtSukuma2) is supported favourably by DL. DL isolates KtNyanyeembe, KtKonoongo and SiGalagaanza as the core KtNyamweezi group, and BS isolates SiSuumbwa away from SSN. Such affiliations support the suggestion in (116) and (130), although the memberships of SiGalagaanza and KiLoongo are not clear. Each of the three reconfigurations has its own internal sub-divisions.

To refine the sub-divisions within SSN, the following test targets SiSuumbwa and KiLoongo to see if they can fit in within the surrounding linguistic groups in DJ, EJ or F. This is illustrated in *Table 3.35*.

Table 3.35 Comparison of Zone D DJ, and EJ languages with KiLooggo, SiSuumbwa and JinaKIya (Some data from Guthrie 1967-71, Nurse 1979, Schoenbrun 1997, mutatis mutandis)

Feature or Process	F23a,F 23b Suum	F23c Loon	EJ14 Ciga	D41 Koon	DJ51 Huun	DJ61 Rwan	DJ63 Fuli	EJ25 Jita	F21c Suk
pa/e/o/1/0	h	h	h	h	h	h	h	ø	р
pi	h	h	h	h	h	ı	h	Ø/s	р
pu	f	?	1	?	?	f	?	s?	р
mp	mp	mp	mp	mp	?	mp	mb	mb?	m/mh
ba/e/o/ɪ/ʊ	b~β	b-β	β	β	b	β	ь-в	β	β
bi	v	z	z	?	?	ь	?	ь	β
bu	v	z	z	β	f/pf	v	v	f	β

Feature or Process	F23a,F 23b Suum	F23c Loon	EJ14 Ciga	D41 Koon	DJ51 Huun	DJ61 Rwan	DJ63 Fuli	EJ25 Jita	F21d Suk
mbu	mv	nz	nz	mb	mf	mv	mv	f	mb
ta/e/o/t/o	t	t	t	t	t	t	t	t	t
ti	s	s	s	?	?	s	2	s	t
tu	t/s	s/c	С	?	?	pf	?	s	t
nt	nt	nt	nt	nd	nd	nt	nd	n	ņ/nh
da/e/o/I/U	1	1	1	1	- 1	1	1	1	Vd
di	z	z	z	- 1	ts	z	z	s	l/d?
du	v/I	2/1	j~z	r	pf	v	d?	f	Vz?
ca/e/o/t/o	s	s	s	s	s	5	ſ	s	s
ci	s	?	s	?	ſ	s/ſ	ſ	5	s
cu	s	s?	1	?	?	s	?	s?	s
nc	ns	ns	ns	ns	ηſ	ns	ns	ns	ns
ja/e/o/t/o	z	z	z	z	С	z	z	ı	12
ņi	nz	nz	nj	nz?	pc?	nz		nj	Ui,
ka/e/o/t/o	k	k	k	k	k	k	k	k	k
ki	s	s?	s	с	ts	ts	С	s	k
ku	f	f	i	k	pf	pf	f	f	k
ŋk	ŋk	ŋk	ηk	ŋk	?	ηk/η	ηk/η	η	ŋ
ga/e/o/ɪ/ʊ	g	g	g	Υ	g	g	g	g	g
gi	z	g?	g	?	?	z	?	s	g
gu	v	z	j	?	?	v	?	f	g
Vowels	5LS	5LS	5LS	7LS	7LS	5LS	5LS	5LS	7LS
Dahl's Law	2	8	8	(8)		٠		•	
BS		+	+	121	?	+	2	14	-

F23a,b = SiSuumbwa, F23c = KiLoongo, EJ14 = RuCiga, D41 = RuKoonzo, DJ51 = KiHuunde, DJ61 KinyaRwanda, DJ63 = KiFuliru, EJ25 = eCJilta, F21 KSukuma (JinaKtya (F21c)), SLS/7LS = five or seven vowels, of both long and short quality, ? = issufficient data/information.

In Table 3.35 above, the double reflexes in JinaKIIva (F21c) suggest mixture of phonological systems due to contact as reciprocal borrowing with interacting speakers of different languages. For instance, this explains the presence of traces of Dahl's Law or Bantu Spirantization in languages like KIKIImbu which did not undergo such processes. But since their neighbours did, they borrowed some words, and one finds words like /idooke/ 'banana' < KIDakama /idooke/ < PB *-tooke. The same can be said of Dahl's Law in SiSuumbwa and Bantu Spirantization in JinaKIIva. Glottalization is not native in KImunaSukuma for words like /-hya/ 'new', /-hyaagula/ 'sweep'. They appear as /-pya/ and /-pyaagula/ respectively in JinaKIIva, KIDakama, KINyanyeembe, KIKonoongo and SiGalagaanza, strongly suggesting that they are loans in KImunaSukuma and in F21/F22 generally rather than frozen processes. Similar phonological processes which appear to have operated in the past and then stopped can be explained this way just as Batibo (2000:25) observes. For SiSuumbwa (F23a, F23b), borrowing from Zone DJ60 (Western Highlands) or EJ10/20 (Rutara) languages is not plausible enough, since the evidence is overwhelming. The most probable explanation is genetic affiliation, especially with DJ60. Although DJ60 has DL, within it, some like one variety of GiHa (DJ66) do not show it (Muzale 1998). Internally, therefore, SiSuumbwa may not necessarily be immediately affiliated with DJ60 (like KinvaRwanda or KiRundi). It may be closely related to another unknown DJ language, since not all DJ languages are well known. With the available data, SiSuumbwa fits well with DJ60.

On the other hand, KiLoopgo shows a stronger phonological affinity with the Rutara group than with SiSuumbwa. This is illustrated well with KiLoopgo words like /enzozu/'elephant', /izu/'ashes' from *-jogu and *-bu respectively, which are /njovu/ and /ivu/ in SiSuumbwa. Respectively, these are /enjojo/ and /eizu/ in RuCiga, indicating genetic relationship which is not contradicted by other data. Non-native reflexes in KiLoopgo can be easily traced and explained.

After examining the examples and patterns above, two conclusions can be drawn. First, the inherited Proto Bantu words in KtSukuma and KtNyamweezi show regular reflexes in many cases. Although sometimes native reflexes are completely missing, the general pattern discounts 7>5 and BS. Only loan words show BS in both KtSukuma and KtNyamweezi. Secondly, within SSN, the chronology of glottalization, 7>5/BS. DL and voiceless nasalization support the idea of historically, and therefore genetically, different routes taken by the SiSuumbwa, KtNyamweezi and KtSukuma dialects as their speech communities evolved differently, though sometimes concurrently. The two conclusions above suggest that any large sample of informants or words from SSN would support this hypothesis. In this study, for instance, the three informants for SiSiloombo and SiYoombe on the one hand, and KiLoongo, on the other, were less than 30 years old, although older than 20. Much older informants would show less interference from other languages to support consistently Kahigi's (1988:267-8) diachronic prehistory of SiSuumbwa:

(131)

PB *p, t, k > f/u; PB *b > v/iPB *g, d, g > v/u; PB *p > f/i

3.2.5 Relative Chronology in SiSumbwa, KISukuma and KINyamwezi

Chronology of phonological processes in SSN suggests that these languages might have started as separate entities and then converged in adjacent areas at some point. In the convergence, some features from each were diffused to the others depending on their geographical location and direction of physical and social movement of the speakers.

Time	→ < →					2000 AD →
Process	DL	LENIT	GLOTT	BS	7 > 5	N[-voice]
Group 1	F21, F22b	F21, F22	8	×	15	F21, F22b
Group 2	?	F22a, F22d, F22e			(4)	-
Group 3	127	*	EJ20, F23	EJ20, F23	EJ20. F23	
Some examples	*-tato > -dato *-kec- > - gesa *-piti > -biti	*ci > s/ʃ *b > β	*p > h	*gu>vu - *piti >-fisi	-satu	*mp > m *nt > n *nk > n

[DL = Dahl's Law; LENIT = Lenition; GLOTT = Glottalization; BS = Bantu Spirantization; 7 > 5 = Vowel reduction from 7 to 5; NI-voice] = Voiceless nasal formation]. The sequence of processes is DL-LENIT/GLOTT-BS/7 > 5-NI-voicel

Figure 3.1 Relative chronology of phonological processes in SSN

The evidence for this chronology can be observed by looking into some features in each individual language, since the languages appear to have developed differently. In SiSuumbwa, for example, PB *pi does not change into the expected spirant like /f/ because of the chronology of the events. Glottalization occurred first in most of the PB *pi words and /h/ blocked the effect of BS in them. This blocking process of /h/ can be possible only if glottalization first appeared in the *pi environment, and while it was in progress in the rest of the superclose vowel environments, BS began. This explains the total absence of BS in that environment, except in later borrowings72. In non-*pi contexts, BS is present. Why BS did not start in PB *pi but elsewhere like in PB *ti *tu *ki . *ku is partly a phonetic question. In the articulation of PB *pi, the front part of the tongue is lowest in the buccal cavity, touching the lower teeth, making the PB *i in *pi less [+consonantal] because it is farthest from the hard palate. The tongue height is highest elsewhere, almost touching the hard palate, causing frication. In addition, glottalization does not occur in other environments. In SiSuumbwa, glottalization is a regular phonological change which is parallel to PB *c and *b in KISukuma or KINvamweezi. In KISukuma and KINvamweezi palatalization was probably triggered by contact with BS languages, since some words in an identical environment do not palatalize.

On the other hand, Dahl's Law in KISukuma predated all other changes in the language. This

⁷² In forms like PB *-kopi 'flat of hand', SiSuumbwa has /-kofi/ in contrast to forms like PB *-pik- 'arrive' which is /-hika/. The former is a likely loan from KiSwahili, while /- hika/ is inherited from PB.

can be tested by words like PB *-paca 'twin', *-ptt-'pass', *-pic-'hide' as shown in (132), which is compared to SiSuumbwa. Any deviation from DL as a first rule to apply in a word in F21/F22b is likely to be an external influence.

(132) PB *-panttt, *-paca 'twin', *-ptt- 'pass', *-pic- 'hide', *-piga 'hearthstone, *-pik'arrive'

PB → Process .		*-panto 'place'	*-paca 'twin'	*-prt- 'pass'	*-pic- 'hide'	*-piga 'hearth stone'	*-pik- 'arrive'
1.	F21		-basa	-bɪta	-bica	-?	-?
DAHL'S	F22	-			-	-	
LAW	F23			141		Te.	-
2.	F21	haņu?73	-βasa	-βɪta	-ßisa	-higa?74	-?
LENITION *c>s, *b>β,	F22	panto		-βrta?	-βisa?	-	
*p>h	F23	hantu	-hasa	-hita	-βisa?	-higa	-hika
3 PALATAL	F21	-		-		-ʃiga? ⁷⁵ . -siga?	-ʃik/ga? -sika
	F22		-	-	-	-figa?	-f/sika
	F23	-			-		

For example, when Dahl's Law fails to operate in KISukuma and palatalization takes precedence, it indicates a borrowed word or a change triggered by contact. The voiced

⁷³ KIDakama (F22b) has a form here.

⁷⁴ K tmuna Sukuma

⁷⁵ JinaKIIya/KImunaSukuma have /ʃ/, GInantuzu /s/ and KINyamweezi, including KIDakama /t/. In PB *-pik 'arrive', KIDakama has /ʃ/, KIKonoongo /s/.

counterpart of /p/ is /b not $/\beta/$ as is the case with PB *-paca > - β asa. A stage. DL . is skipped when lenition is posited as the first process to have occurred. According to the evidence, DL was the first, followed by the lenition of PB *c and *b: *-paca > - β asa/ (DL) > /- β asa/ (Lenition). In SiSuumbwa, that lenition was glottalization.

It is clear from the above examples that palatalization in KISukuma and KINvamweezi is a later development which was not complete because it was not native. It came after DL. Forms like PB *-pic-'hide', *-piti 'hvena' being /-Bisa/ and /-Biti/ suggest the normal lenition route, especially in KISukuma, by the DL > LENITION > PAL path, rather than PB *-pik-> /-fika/ or /-sika/ which skips DL completely without any justification 76. The lenition of PB *b to /B/ in KISukuma, for example, is regular, expected when there is phonemic contrast between /b/ and /β/. If /-fika/, /-sika/ or /-fika/ are not marked in KISukuma and KINyamweezi, then PB *-piti and similar words would have a fricative which would effectively block DL in KImunaSukuma, GInantuzu and KIDakama, except in JinaKIIva. With palatalization taking precedence over DL, PB *-pic- 'hide', *-piti 'hyena' for example, would be /fisa/, /-sisa/ or /-fisa/ 'hide' and /fiti/, /-siti/ or /-fiti/ respectively, which they are not. This anomaly of fricatives in both KISukuma and KINvamweezi indicates that each language developed separately, with separate rules in operation. In fact, the SSN languages hardly share any of those important processes. Each behaves individually and differently as summarized in (133). While F21/F22b has regular lenition of PB *c and *b across the board, KINyamweezi shares only that aspect with F21/F22b. The rest of SSN are different, for

⁷⁶ Only in JinaKIIva is DL not skipped since PB *-pik- 'arrive' is /-figa/

instance in DL and voiceless nasal formation, which are in F2I/F22b but not in F22a, F22d, and F22e. SiSuumbwa has glottalization and BS with 7 > 5, while both F21 and F22 have none of these.

(133)

	Process	F21/F22b	F22a/F22d/F22e	F23a,b,c
1	$\begin{array}{l} \text{Dahl's Law} \\ (C_{1[\sim i]}VC_{2[\sim i]}V > C_{1[\sim ci]}VC_{2[\sim i]}V \end{array}$	Yes	Traces?	Traces?
2	Regular reflex e.g. lenition *b > β , *c > s, *p > h	*b > β, *c > s	*b > β, *c > s	*p > h, *b > β. *c > s.
3	Voiceless nasal formation $N \rightarrow N/_{C_{[-n]}}$	Yes	No	No
4	BS and 7 > 5	No	No	Yes

Chronologically, BS in SiSuumbwa is not a process which is as old as glottalization, since, PB *pi does not produce a spirant. This only points to earlier glottalization which blocked BS in that environment. This suggests BS either diffused from elsewhere as well or it started in F23 only later. If it was acquired through borrowed words, then it affected the whole phonological system because it was adapted. This is illustrated in Tahle 3.36 where only loanwords in SiSuumbwa seem to show BS, although with far-reaching consequences, leading to 7 > 5. If SiSuumbwa is assumed to have split from DJ, then the source might have been EJ20 or DJ60. Such sources suggest that when SiSuumbwa diverged, DJ60 and EJ20 were one language and had undergone glottalization first, followed by BS later.

Table 3.36 Status of Glottalization and BS in SiSuumbwa, KtSukuma and KtNyamweezi

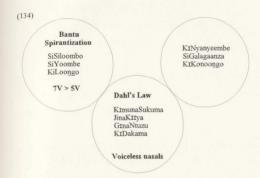
Language	F23	F21a	F21b	F21c	F22b	F22a.
Proto Bantu 3						F22d. F22e*
*-pod- 'cool'	-hola	-pola	-pola	-pola. -hola	-pola	-pola
*-prni 'handle, haft'	-hini	-pɪni	-ptni	-pɪni	-prni	-pɪni
*-pembe 'horn, ivory'	-heembe	-peembe	-peembe	-peembe	-peembe	-peembe
*-pr- 'ripen'	-hya	-hya	-pya	-pya	-pya	-руа
*-pic- 'hide'	-bisa	-ßisa	-ßisa	-Bisa	-Bisa	-Bisa
*-pote 'abscess'	-hute	-Bute	-Bute	-Bute		-pute
*-paca 'twins'	-hasa	-βasa	-βasa	-βasa	-βasa	-pasa
*-piga 'hearthstone'	-higa	-higa	-siga	-ʃiga	-figa	-figa
*-tap- 'draw water'	-taha	-daha	-daha	-daha	-daha	-daha
*-pigo 'kidney'	-figo	-ptgo (m)	-pigo (m)	-prgo (m)	-figo	-figo

Since F23 can be viewed as part of EJ20/DJ60 historically, it was easy to borrow words, adopt them easily, and then adapt them as well after the split. For the words inherited directly from Proto Bantu like 'arrive' -hika PB < *-pik-, glottalization takes precedence because it had already occurred when BS set in with loan words like -koofi < *-kopi' 'flat of hand'; -fisi < *-piti 'hyena', -figo < *-pigo 'kidney'. These, though they are Proto Bantu, appear to have been borrowed from elsewhere, since the native words appear to be affected by glottalization, which blocks BS in PB *pi because the trigger *pi is removed by becoming /hi/ (See Batibo 2000 on this bleeding effect between BS and glottalization).

3.2.6. Conclusion: SSN phonological change and grouping

SiSuumbwa, KtSukuma and KtNyamwezi stand alone individually within a relationship which cannot be described satisfactorily as genetic. Their differences are linguistically significant, making their current similarity only areal at best. Reconstructing proto-forms from the three languages as if they belonged to the same immediate ancestor is also not feasible, since they diverge diachronically. Reconstruction and grouping should ideally start with the smallest levels in each sub-grouping, and proceed to the top nodes of genetic affiliation. Within the scope of this work, this is not possible due to the new discovery that SiSuumbwa on the one hand and KtNyamwezi and KtSukuma on the other, are not as close as originally thought, summarized by the phonological processes noted in (134).

Of the four tests used (BS, 7 > 5, DL, and voiceless nasals), all are absent in KtNyamweezi (F22a, F22d, F22e) as native features. Any traces suggest borrowing. KtSukuma is characterized by DL and voiceless nasals which are absent in the other two; SiSuumbwa has BS and 7 > 5 and the others have not.



3.3. CONCLUSIONS

From the discussions in this chapter, it appears that what most of the Zone F varieties share is geographical proximity rather than phonological innovation. In the whole of Zone F, BS and 7 > 5 is found in F10 and F23 only, while the situation in F25 is mixed, just as it is in F21 and F22. F34 is alone in being 5V without BS, although the number of vowels varies with researchers. The evidence in this study supports 5V without question. DL is confined to F21/F22b only, while in the rest, any traces are from loan words. And finally, voiceless nasals within Zone F are confined to the DL languages: F21/F22b. The rest of the languages show some individual innovations which do not help in unifying the zone.

Although SiSuumbwa is no longer a member of Zone F, the phonological evidence suggests that, one dialect, KiLoongo (F23c). originally belonged to EJ10/EJ20 and the rest of F23 derived probably from DJ60. Both SiSuumbwa (F23a/F23b) and KiLoongo (F23c) share BS and 7 > 5 with DJ and EJ languages.

KtSukuma/KtDakama (F21/F22b) and the rest of KtNyamweezi (KtNyamyeembe (F22a).
SiGalagaanza (F22d) and KtKonoongo (F22e) share little, apart from their phonological conservatism and geographical adjacency.

F10 and F25 are outside our focus, and without considering other languages outside this study, we cannot say anything about their evolution; only general comments were made.

F33 and F34 (KeeMbuwe and KiiRangi) have some commonalities such as PB *g loss, and *I -rr before front vowels.

F24 (KIKIImb0) and F31 (KIntLamba) share one of the most conservative phonological systems in Zone F and beyond, but there are no sets of shared innovation to support their common history. On the other hand, while F32 (KIRImi) is equally conservative, some of the striking features are PB * t > R and * p > ϕ . They do not share much with F24 or F31, indicating that any similarity may be areal rather than genetic.

For classification therefore, the innovations like Bantu Spirantization with the 7V versus 5V sequel and Dahl's Law as major criteria for subgrouping only succeed in isolating the various Zone F languages into smaller independently evolved languages rather than one unit with a common intermediate node in a genetic tree. This phonological picture suggests that the classification of these languages into geographical zones was mainly iconic: assuming genetic relationship because of adjacency. This justifies this study as a contribution towards filling out the gaps identified in Chapter 2. The inclusion of as many dialects as possible has demonstrated that BS, 7 > 5, DL, glottalization and voiceless nasal formation are significant criteria which are able to isolate languages or dialects which followed a common historical path from those which did not, despite their current geographical adjacency or similarity due to that adjacency.

The bottom line from the phonological picture is that there is no linguistic Zone F if other diagnostic tests outside phonology are not considered. Vocabulary and morpho-syntactic evidence might shed a different light by reviving Zone F into a linguistic unit. On a more optimistic note, the phonological features surveyed do not tell us much about classification because they are shared by other groups as well. To find more evidence for Zone F, the analysis of lexical development is the subject of Chapter 4. Otherwise, by the phonology hypothesis alone within the zone, linguistic Zone F or SSN can no longer be maintained.

CHAPTER FOUR LEXICAL DEVELOPMENT

4.0 INTRODUCTION

This chapter explores the development of vocabulary in Zone F. It is divided into three sections. The first part is a lexicostatistical survey as a quantitative analysis for relatedness, while the second establishes the genetic relationship between the varieties using qualitative evidence as diagnostic criteria. The last part summarizes the findings of lexical relatedness in Zone F.

Quantitative evidence refers to shared, and hence inherited vocabulary from a common proto language. Although we may assume various protos/nodes in the development of Zone F languages, at this point we are concerned with lexical items inherited from PB. When there are shared lexical items between two or more language varieties, the first assumption is that they are from the same ancestor language. Unless they are loans, chance similarities, universal symbolisms or a result of diffusion because of contiguous locations, shared lexis among sister languages is expected. In terms of weight, it is traditionally held that inherited words do not help much diagnostically since it is a given fact that all languages descending from the same ancestor have the same basic features of the parent, unless something drastic happened to change that. Diminished diagnostic utility of retention, however, may only be a matter of degree, since, as is shown below, retention can help much in grouping languages genetically. On the other hand, qualitative evidence as a stronger diagnostic measure of genetic

relationship refers to shared innovation which is a creative departure from the original by any or all of the following three major processes: borrowing, changing the phonological and/or semantic value of inherited words; and unique creations. In this study, purely phonological innovation is excluded because it refers essentially to inherited vocabulary which is only modified. In addition, it is not lexical innovation. The reliability of qualitative evidence, like that of retention, depends on careful analysis: without care, it is difficult to know if similarity between languages is due to genetic ancestry or contact (for a fuller treatment of genetic vs contact similarity, see Hinnebusch, 1976, 1999).

4.1 QUANTITATIVE EVIDENCE: SHARED VOCABULARY AND COMMON ANCESTRY

With the exception of a few languages like KeeMBuwe, KiBende, KiLoongo and IctWOUngO, in many of the Zone F members, shared vocabulary has been dealt with quite adequately using lexicostatistics by Nurse (1979), Nurse and Philippson (1982) and to a limited extent Kahindi (1988) who compared only SiSuumbwa, KiSukuma, KiNyamweezi and iGiHa. Although lexicostatistics as a method is controversial, it is used here as a contribution to the clarification of that controversy, as presented in the overview of the method in 1.3.5.2 above. Any good method, in linguistics or any field, tends to yield reliable and consistent results which are not significantly different from previous classificatory findings based on other, more popular methods. The following are the results of the application of lexicostatistics to Zone F. They are based on the comparison of a pair of

languages in a horizontal relationship, that is, how two language varieties compare synchronically.

4 I I Method used

The method is that explained by Swadesh (1950:157), Lees (1953:115), Fairbanks (1955), Swadesh (1955:122), McElhanon (1970:216) and Embleton (1986), among others. In this method, cognation is treated as an 'either/or' possibility. Words are either descended from one common source or not, rather than a series of phonologically graded departures from the proto-forms. This approach slightly departs from the graded treatment of retention used by Nurse and Philippson (1980). Although their method is complicated, it does not significantly alter the overall configuration of relationships between languages derived by simpler ones (Nurse and Philippson, ibid:27). The 'either/or' method therefore involved the following steps:

(i) 28 language varieties were selected. These included all Zone F varieties and some controls from Zone DJ, EJ, G and M, as follows: SiSuumbwa F23: (SiSiloombo (Si). SiYoombe (Yo). KiLoongo (Lo)): KISukuma F21: (KImunaSukuma(Su). GInaNtuzu (Nt) JinaKIIya (Ki)): KINyanweezi F22: (KIDakama (Da). KINyanyeembe (Ny). KiKonoongo (Ko), SiGalagaanza (Ga)); KiBende/KiTongwe F10: (Be): KIntLaamba F31: (KInaUshoola (Us). KIntLaamba Central (La). KIntHaanzu (Ha)); KIRImi F32: (GiAbi (Ah). GiRwana (Rw), YInyaMunyinanyi (Mu)); KIKIImb0 F24: (KIKIImb0 North (Kn). KIKIImb0 South (Ks)); IntWU01000 F25: (Wu); KiiRange F33: (Ra); KeeMbuwe F34: (Mb); oRuHaya

EJ22: (Zone EJ) (RuHyoza (Hy)); iGiHa DJ66: (Zone DJ) (Hh); CiGogo G11:(CiNyambwa (Go)); eKiHehe G62: (He); IKINyakyusa M31: (Ky); and KiSwahili G42d:(KiSanifu (Sw), from KiUnguja).

(ii) A 100-word list modified by Nurse (1979) from that by Swadesh (1950, 1955) was used, as shown in (135), in alphabetical order, with assumed Proto Bantu etyma. It has been generally found that the shortest 100-word list used to-date is reliable and useful to a large extent (Hymes 1960.12).

(135)

abdomen, stomach, belly *-da; all *-(n)ce, *-vona; arm, hand *-kono, *-boko; ashes *-bu; back (n)*-gorjgo; bad *-bī; bark *-koba; bird, *-nyoni, *-dege; bite *-dum-; blood *-gadi, *-(n)yinga; bone *-kupa; breast *-beede; child, infant *-yana; cloud *-dunde; cold *-pepo; come *-yij-; cook (vt)*-dug-, *-teek-; dark, black *-vidu; daytime *-c1. *-juba: die *-ki-. *-ku-; dog *-bua; drink (vt)*-nu-; ear *-tui, *-kutu; eat *-dI-; egg *-gI; eye *-vico; feather *-yova; fingernail *-jada; fire *-yoto, *-dIdo; fish *-comba, *-cuI; *-cI fly (vi) *pap-, *-godok-; give *-pa, *-vink; go *-gi-, *-vend-; good *-viia; great big large. powerful *-kodo; hair *-yuIdI, *-yuede; he, she *-koe, *-ye(e); head *-toe; hear *-yigu-, *-teg- *-pUd-; heart *-kodo, *-tIma, *-yoyo; horn, ivory *-pembe; I *-ne; kill *-vit-, *bUd(au)-: knee *-du(i); know *-man(i)-; leaf *-yani; leg, foot *-gUdU; liver *-tIma; long/tall *-deepu, *-tadī, *-de; louse *-da; male, man, husband *-koci; *-dume; many *yingt; meat *-(n)yama; milk *-beede; moon *-vedi; mountain *-gudu. *-dundu: mouth *-domo, *-nua; name *-yina; neck *-ki(i)ngo, *-koti; new *-pIa; night *-tiku; nose *puda, *-judu, *-vido; oil, fat *-kuta; old *-kudu; one *-mo; path, way *-jida; person *ntu; rain (n) *-buda; root *-di; sand *-canga; sav *-buid-; see *-bon-; seed *-bevu. *buto; short *-kupI; sing *-yImb-; sit *-yikad-; skin *-koba, *-kanda, *-dIdI?; sleep (vi)*daad-, *-gon-; small *-niini, *-ke; smoke *-yoki; soil *-dongo; stand *-vIm(IdId)-; star *-tondua, *-yo(n)ti; stone *-bue; sun *-juba; tail *-kIda; that *-da/e, *-dIa, VCVo; they *-bo; tongue *-dImi; tooth *-vino; tree *-tI. *-pIkI; two *-bIdI; water *-iI; we *-cue. *-vitue: what *-kI: white *-vedU: who *-nani: woman female *-ke *-kadi: vou (su) (thou) *-be; you (pl) (ye) *-moe, *-nue

- (iii) Where there were two or more words in the English gloss, they were retained if they all referred to a polysemous word in Proto Bantu or its daughter languages. Gudschinsky (1956:179) suggests using only one word as an equivalent where two words compete equally, by choosing one randomly, preferably by tossing a coin. This advice was not followed in both the English gloss and Proto Bantu forms in some of the words.
- (iv) The selection of Proto Bantu forms was not always straightforward. Two, sometimes three, and even more reconstructions were available for one word in Proto Bantu, as in 'all' *-(n)ce, *-yona; 'arm, hand' *-kono, *-boko; blood *-gadi, (n)yinga; 'cook (vt)' *-dug-, *-teek: 'die' *-ki-, *-ku-: 'fire' *-woto, *-dtdo and 'seed' *-berg *-bttg.

To accommodate such a situation, the following approach was adopted: the comparisons were done using all protoforms, each language according to the words it had in its lexical inventory. It was this list which was adopted as representative of simultaneous lexicostatistical (cognation) computation and similarity subgrouping. It will be noted here that, while the method adhered to strict cognation, it also simultaneously measured similarity, just as Fairbanks (1955:120) notes that a consistent relationship between cognation and similarity counts is normally displayed. Using this method yields consistently higher figures of inherited words across the board, compared to relatively lower figures if a strictly monogenetic approach was adopted. For instance, if the lexemes {-kolo} and {-ttma} were both listed in English as 'heart', in Proto Bantu they are two words. Languages sharing

either word had a cognate score, while those not sharing it got a zero.

4.1.2 Lexicostatistics of language pairs

This is the standard procedure, and each of the 28 language varieties was compared to the rest to determine shared vocabulary between each pair. The following procedure was adopted:

(i) Each language variety was compared lexeme by lexeme with each of the other 27 varieties in turn to measure cognation against Proto Bantu, as sample (136) shows. Only the 'zeroes' were entered, and any blank space indicated cognation. Any other system representing cognation/non-cognation would have been adopted, since this was chosen for convenience only. In (136), S/N is the serial number of each word in the list compiled by Nurse and Philippson. The two-letter codes are iconic representations of the language varieties used for convenience. The first two letters of each language variety are from the root of each name in the Roman alphabet, which excludes any phonetic symbol that would take more space. These symbols are also indicated in the list of abbreviations.

(136).

Language variety PB and Gloss #	SN	Si Yo	Si Lo	Si Su	Si Nt	Si Ki	Si Da	Si Ny
abdomen, stomach *-da	133							
all *-(n)ce,* -yona	926		0	0	0	0	0	0
arm, hand *-kono, *-boko	55		0	0	0	0	0	

Languages from other zones were included as a control to determine if the method can really differentiate between languages assumed to belong to other zones. They were selected because some are also adjacent to one or more of the Zone F languages, although IKINyakyusa M31: (Ky) is not adjacent to any Zone F language, only nearer to tetW00ng0 F25: (Wu).

(ii) The scale was binary, 1 for cognation, and 0 for non-cognation. Cognation was defined as any regularity of morpheme realization in any lexeme believed to be derived from a common proto language and which is manifested in descendant languages and their dialects as regular, but not necessarily, by identical shapes, as illustrated in (137) (The full list is shown in Appendix 11). In this case, a word was either cognate or it was not. Thus, mā-yū, mā-wū, and mā-vū are cognate to Proto Bantu *-bu, *ash', awarded 1, while mā-tūūndē and mā-fūūndū both *ash' are not, and therefore are coded 0.

SN	Gloss	Da	Ny	Ko	Ga	Be
337	ashes	iβú/máβú	mátůůndě	màwú	ivú/mávú	ifűúndú/máfűúndú

(iii) Doubtful cases were ignored and awarded a 0, while probable ones were given a full 1, so that any bias in awarding 1 or 0 cancelled each other between the two scenarios. For instance, in SiSiloombo and SiYoombe, {ilunde} 'cloud' was not recognized as cognate to Proto Bantu *-dunde 'cloud', although it was so recognized in KImunaSukuma as {ilunde} because, SiSiloombo and SiYoombe do not allow *d /_u > 1 due to Bantu Spirantization obtaining in them. So, {ilunde} was judged as a loan, probably from KImunaSukuma, since the form from an inherited lexeme would have been {ivunde}. Likewise, KIKIImbU North. {lilihu} 'long' was judged to be a loan, probably from KIKonoongo or KINyanyeembe {lilihu}, from Proto Bantu *-deepu 'long', since the regular correspondence of *p in KIKIImbU is/p/ without exception.

On the other hand, KeeMbuwe [mbuuye] 'stone' or KiiRangi, KinyaRwanda, KiHangaaza, and KiVinza [ißuye] were treated as cognates of Proto Bantu *-bue 'stone' where the inserted /y/ was regarded as an articulatory strategy only, similar to other reproductions like [mabwe] in KiKitmbu and iKiFuliiru, [mawe] in KiSwahili or KiSukuma.

Another consideration involved words which in Proto Bantu were given many forms, as reconstructed by Guthrie (1967-1971). These different but cognate forms were not sifted and

solidified by Guthrie to obtain only one or two reconstructions. One extreme case is that for 'all'. It has thirteen morphemes, although on closer examination, they can be reduced to only two, *-ce and *-ona. The rest are reflexes in the different languages. These morphemes for 'all' are *-ce, *-co, *-yence, *-yonce, *-yonce, *-yonca, *-yoct, *-yoct, *-yoct, *-yot, *-yot,

(iv) After the 100-word list for each pair was compared, the 0s were counted, representing the percentage of non-cognation, which was proto form loss through replacement by borrowing or other forms of innovation. The remaining count was shared cognation. Since it was a 100-word list, the figures so obtained were the final percentages, needing no conversion. Conversely therefore, the 0s could also be represented as the only marked forms, and their count out of the 100 total would constitute the rate or extent of innovation or loss in each language variety.

4.1.2.1 Lexicostatistical subgrouping: procedure and results

The results shown in Tables 4.1 to 4.12 represent the relationship between the Zone F language varieties to each other. In addition, the languages external to Zone F are also compared. On the other hand, Tables 4.13 to 4.15 illustrate the difficulty of inclusion and exclusion in grouping, based on statistics. Some languages like CiGogo which are outside

Zone F show more affinity than languages supposed to be members of Zone F. Based on the percentages, the following master table was made, as shown in Table 4. 1.

Table 4.1. Lexicostatistical relationships between Zone F and some adjacent languages

```
Be
52 Lo
64 57 Su
62 57 87 Nt
66 59 90 90 Ki
64 58 86 84 87 Da
70 57 78 76 80 81 Nv
72 60 79 77 81 81 84 Ga
68 58 81 80 84 84 84 84 Ko
63 56 77 78 80 78 79 79 84 Kn
62 55 76 75 77 76 74 75 78 82 Ks
67 64 68 70 71 70 72 78 73 67 68 Si
67 66 70 72 73 72 74 82 75 71 68 84 Yo
55 50 75 75 76 75 69 70 74 75 74 66 65 Us
56 51 74 74 76 74 69 70 75 75 73 67 66 83 La
56 52 78 79 82 77 73 73 77 76 72 69 69 79 77 Ha
58 58 75 71 76 75 71 72 74 74 71 68 68 71 70 74 Ah
57 56 76 73 76 76 70 71 74 74 72 66 71 73 71 76 80 Rw
55 53 71 69 72 72 66 68 69 70 67 63 64 69 68 71 79 77 Mu
56 53 70 66 71 71 70 67 73 72 70 60 61 66 67 66 71 69 69 Mb
51 42 65 61 64 65 61 61 66 67 64 53 55 59 58 60 62 62 61 64 Ra
61 53 64 64 64 66 69 69 70 71 70 53 64 62 64 64 64 62 60 63 56 Wu
50 57 55 55 57 56 53 60 56 52 52 57 58 50 51 52 53 54 51 49 42 48 Hy
59 54 58 59 61 56 61 65 61 57 56 64 64 54 52 54 59 65 55 54 57 58 52 Hh
54 47 59 58 61 63 64 66 64 64 64 57 66 57 59 60 61 59 60 63 60 63 49 54 Go
43 40 44 43 46 47 51 52 48 49 52 46 46 43 45 45 48 45 47 43 49 42 41 57 He
52 46 55 54 57 55 57 58 68 58 59 52 53 53 54 54 55 54 52 56 45 57 48 56 60 49 Ky
53 49 62 61 65 65 63 67 69 65 61 55 57 60 62 62 65 66 64 65 61 61 49 53 61 48 55 Sw
```

For convenience, the shared percentages on the right-most edge on the diagonal line were arranged so that the pairs with the lowest percentages were placed at the end of the Zone F spectrum, either to the top or bottom of the diagonal. Assumed linguistic relatedness and known geographical proximity were also considered where it was feasible. Then, the highest figure on that diagonal was identified and the pair merged as one unit.

Table 4.2. Collapsing highest percentage of Table 4.1 (90%)

```
Be
5210
64 57 Su
64 58 89 Nk
                                                                         Nk = 90
64 58 86 86 Da
70 57 78 78 81 Ny
72 60 79 79 81 84 Ga
68 58 81 82 84 84 84 Ko
63 56 77 79 78 79 79 84 Kn
62 55 76 76 76 74 75 78 82 Ks
67 64 68 71 70 72 78 73 67 68 SI
67 66 70 73 72 74 82 75 71 68 84 Yo
55 50 75 76 75 69 70 74 75 74 66 65 Us
56 51 74 75 74 69 70 75 75 73 67 66 83 La
56 52 78 81 77 73 73 77 76 72 69 69 79 77 Ha
58 58 75 74 75 71 72 74 74 71 68 68 71 70 74 Ah
57 56 76 75 76 70 71 74 74 72 66 71 73 71 76 80 Rw
55 53 71 71 72 66 68 69 70 67 63 64 69 68 71 79 77 Mu
56 53 70 69 71 70 67 73 72 70 60 61 66 67 66 71 69 69 Mb
51 42 65 63 65 61 61 66 67 64 53 55 59 58 60 62 62 61 64 Ra
61 53 64 64 66 69 69 70 71 70 53 64 62 64 64 64 62 60 63 56 Wu
50 57 55 56 56 53 60 56 52 52 57 58 50 51 52 53 54 51 49 42 48 Hy
59 54 58 60 56 61 65 61 57 56 64 64 54 52 54 59 65 55 54 57 58 52 Hh
54 47 59 60 63 64 66 64 64 64 57 66 57 59 60 61 59 60 63 60 63 49 54 Go
43 40 44 45 47 51 52 48 49 52 46 46 43 45 45 48 45 47 43 49 42 41 57 He
52 46 55 56 55 57 58 68 58 59 52 53 53 54 54 55 54 52 56 45 57 48 56 60 49 Ky
53 49 62 63 65 63 67 69 65 61 55 57 60 62 62 65 66 64 65 61 61 49 53 61 48 55 Sw
```

To determine the affinity between the varieties, the highest figure for each preceding table was collapsed, and the resulting new configuration became the subsequent table. In $Table + L^2$, the highest figure of Table 4.1 was taken as 90% (Ni/Ki) = GInaNtuzu + JinaKitya. The two language varieties were combined to be one entity, Nk, with the shared retention rate of 90%. Since Nk became one language, all the other languages associated with it as a single entity were adjusted accordingly.

To treat Nk as a single language, their two rows and column associated with the other languages were collapsed into one row and column respectively. For instance, with KImunaSukuma, the shared vocabulary percentage in *Table 4.1* is 87% with GInaNtuzu and 90% with JinaKIIya. To obtain a single shared figure, the two were added, and then divided by two: (a) 87 + 90 = 177, (b) 177-2 = 88.5, or approximately 89%. This became the shared percentage between Nk and Su (KImunaSukuma), appearing in *Table 4.2*.

Likewise, the shared figures of KiLoopgo (Lo) with GranNtuzu and JinaKIIya (Nk) in Table

4. I are 57% and 58% respectively. These are collapsed by adding, and then dividing them
by two, to obtain 58%. This figure appears in Table 4.2 as a percentage between Nk and Lo.
The figures collapsed in these rows are combined vertically, taking the top row figure (57%),
then adding it to the bottom row figure (58%). The procedure is repeated to the end of the
rows until all language figures are collapsed to the utmost limit so that the languages cannot
be combined any more.

On the other hand, the columns of figures which associate the combined language pairs are added horizontally, taking one language on the left and then combining it with its paired counterpart on its right. For instance, in *Table 4.1*, GranNtuzu and JinaKIIya share with KIDakama 84% and 89% respectively. These two figures are horizontally placed, and by combining them, then adding and dividing by two, the result is 86%, a percentage shown in

Table 4.2. To aid reference of originally shared percentages, the numbers at the right margin of the tables refer to those original shared figures for that combination.

Table 4.3. Collapsing highest percentage of Table 4.2 (89%)

```
Be
52 Lo
64 58 Sk
                                                      Sk = 89
                                                                   Nk = 90
64 58 86 Da
70 57 78 81 Nu
72 60 79 81 84 Ga
68 58 82 84 84 84 Ko
63 56 78 78 79 79 84 Kn
62 55 76 76 74 75 78 82 Ks
67 64 70 70 72 78 73 67 68 Si
67 66 72 72 74 82 75 71 68 84 Yo
55 50 76 75 69 70 74 75 74 66 65 Us
56 51 75 74 69 70 75 75 73 67 66 83 La
56 52 80 77 73 73 77 76 72 69 69 79 77 Ha
58 58 75 75 71 72 74 74 71 68 68 71 70 74 Ah
57 56 76 76 70 71 74 74 72 66 71 73 71 76 80 Rw
55 53 71 72 66 68 69 70 67 63 64 69 68 71 79 77 Mu
56 53 70 71 70 67 73 72 70 60 61 66 67 66 71 69 69 Mb
51 42 64 65 61 61 66 67 64 53 55 59 58 60 62 62 61 64 Ra
61 53 64 66 69 69 70 71 70 53 64 62 64 64 64 62 60 63 56 Wu
50 57 56 56 53 60 56 52 52 57 58 50 51 52 53 54 51 49 42 48 Hy
59 54 59 56 61 65 61 57 56 64 64 54 52 54 59 65 55 54 57 58 52 Hh
54 47 60 63 64 66 64 64 64 57 66 57 59 60 61 59 60 63 60 63 49 54 Go
43 40 45 47 51 52 48 49 52 46 46 43 45 45 48 45 47 43 49 42 41 57 He
52 46 56 55 57 58 68 58 59 52 53 53 54 54 55 54 52 56 45 57 48 56 60 49 KV
53 49 63 65 63 67 69 65 61 55 57 60 62 62 65 66 64 65 61 61 49 53 61 48 55 Sw
```

89% = Sk ((Nt/Ki) (GInaNtuzu + JinaKIIya) + Su (KImunaSukuma)

Percentage at right margin of table = Original shared % for combination

Table 4.4. Collapsing highest percentage of Table 4.3 (86%)

```
Be
52 Lo
64 58 Sd
                                     Sd = 86 Sk = 89
                                                                 Nk = 90
70 57 80 Nv
72 60 80 84 Ga
68 58 83 84 84 Ko
63 56 78 79 79 84 Kn
62 55 76 74 75 78 82 Ks
67 64 70 72 78 73 67 68 Si
67 66 72 74 82 75 71 68 84 Yo
55 50 76 69 70 74 75 74 66 65 Us
56 51 75 69 70 75 75 73 67 66 83 La
56 52 79 73 73 77 76 72 69 69 79 77 Ha
58 58 75 71 72 74 74 71 68 68 71 70 74 Ah
57 56 76 70 71 74 74 72 66 71 73 71 76 80 Rw
55 53 72 66 68 69 70 67 63 64 69 68 71 79 77 Mu
56 53 71 70 67 73 72 70 60 61 66 67 66 71 69 69 Mb
51 42 65 61 61 66 67 64 53 55 59 58 60 62 62 61 64 Ra
61 53 65 69 69 70 71 70 53 64 62 64 64 64 62 60 63 56 Will
50 57 56 53 60 56 52 52 57 58 50 51 52 53 54 51 49 42 48 Hy
59 54 58 61 65 61 57 56 64 64 54 52 54 59 65 55 54 57 58 52 Hh
54 47 62 64 66 64 64 64 57 66 57 59 60 61 59 60 63 60 63 49 54 Go
43 40 46 51 52 48 49 52 46 46 43 45 45 48 45 47 43 49 42 41 57 He
52 46 56 57 58 68 58 59 52 53 53 54 54 55 54 52 56 45 57 48 56 60 49 KV
53 49 64 63 67 69 65 61 55 57 60 62 62 65 66 64 65 61 61 49 53 61 48 55 Sw
```

86% = Sd = (NVKi (GɪnaNtuzu + JinaKɪɪya) + Su (KɪmunaSukuma) + Da (KɪDakama) Sd = Original KɪSukuma group (Su,Nt,Ki) + KɪDakama (Da)

Percentage at right margin of table = Original shared % for combination

In Table 4.4, two sets of languages share 84% (a) K1Nyanyeembe (Ny), SiGalagaanza (Ga) and K1Konoongo (Ko), and (b) SiSiloombo (Si) and SiYoombe (Yo). They are both iconically labelled Nz, for core K1Nyamweezi and Sy for core SiSuumbwa. Although it appears that K1K11mbt North (Kn) would ideally be collapsed with the Nz group

Table 4.5. Collapsing highest percentage of Table 4.4 (84%)

```
Re
52 Lo
64 58 Sd
                           Sd = 86
                                       Sk = 89
                                                       Nk = 90
70 58 81 Nz
                           Nz = 84
63 56 78 81 Kn
62 55 76 76 82 Ks
67 65 71 76 69 68 Sy
                           Sv = 84
55 50 76 71 75 74 66 Us
56 51 75 71 75 73 67 83 La
56 52 79 74 76 72 69 79 77 Ha
58 58 75 72 74 71 68 71 70 74 Ah
57 56 76 72 74 72 69 73 71 76 80 Rw
55 53 72 67 70 67 64 69 68 71 79 77 Mu
56 53 71 70 72 70 61 66 67 66 71 69 69 Mb
51 42 65 63 67 64 54 59 58 60 62 62 61 64 Ra
61 53 65 69 71 70 59 62 64 64 64 62 60 63 56 Wu
50 57 56 56 52 52 58 50 51 52 53 54 51 49 42 48 Hy
59 54 58 62 57 56 64 54 52 54 59 65 55 54 57 58 52 Hh
54 47 62 65 64 64 62 57 59 60 61 59 60 63 60 63 49 54 Go
43 40 46 50 49 52 46 43 45 45 48 45 45 47 43 49 42 41 57 He
52 46 56 61 58 59 53 53 54 54 55 54 52 56 45 57 48 56 60 49 Ky
53 49 64 66 65 61 56 60 62 62 65 66 64 65 61 61 49 53 61 48 55 Sw
```

84% = Nz (KINyanyeembe (Ny), SiGalagaanza (Ga), KIKonoongo (Ko); Sy = 84% (SiSiloombo (Si), SiYoombe (Yo)).

because it shares an 84% rate with K1Konoongo (Ko), its shared rate with the other two, K1Nyanyeembe (Ny) and SiGalagaanza (Ga) are consistently lower at 79%, suggesting that K1K1Imbt North (Kn) does not have such an immediate genetic relationship with Nz as a group. Most probably, the bond is with individual varieties facilitated by proximity and borrowing.

Table 4.6. Collapsing highest percentage of Table 4.5 (83%)

```
Be
52 Lo
64 58 Sd
                        Sd = 86
                                    Sk = 89
                                                    Nk = 90
70 58 81 Nz
                        Nz = 84
63 56 78 81 Kn
62 55 76 76 82 Ks
67 65 71 76 69 68 Sy
                         Sv = 84
56 51 76 71 75 74 67 UI
                          111 = 83
56 52 79 74 76 72 69 78 Ha
58 58 75 72 74 71 68 71 74 Ah
57 56 76 72 74 72 69 72 76 80 Rw
55 53 72 67 70 67 64 69 71 79 77 Mu
56 53 71 70 72 70 61 67 66 71 69 69 Mb
51 42 65 63 67 64 54 59 60 62 62 61 64 Ra
61 53 65 69 71 70 59 63 64 64 62 60 63 56 Wu
50 57 56 56 52 52 58 51 52 53 54 51 49 42 48 Hy
59 54 58 62 57 56 64 53 54 59 65 55 54 57 58 52 Hh
54 47 62 65 64 64 62 58 60 61 59 60 63 60 63 49 54 Go
43 40 46 50 49 52 46 44 45 48 45 45 47 43 49 42 41 57 He
52 46 56 61 58 59 53 54 54 55 54 52 56 45 57 48 56 60 49 Ky
53 49 64 66 65 61 56 61 62 65 66 64 65 61 61 49 53 61 48 55 Sw
```

```
89% = Sk (Nh/Ki) (GranAtuzu + InakTrya) + Su (KrmunaSukuma)
86% = Sd = (Nh/Ki) (GranAtuzu + IinaKTrya) + Su (KrmunaSukuma) + Da (KIDakama)
84% = Nz (KiNyanyeembe (Ny), SiGalagaanza (Ga), KrKonoongo (Ko)
84% = Sy (SiSiloombo (Si), SiYoombe (Yo)).
83% = Ul (KinaUshoola (Us) + KrmLaamba Central (La)
```

Table 4.7. ('ollapsing highest percentage of Table 4.6 (82%)

```
Ве
52 Lo
64 58 Sk
                       Sd = 86
                                   Sk = 89
                                                   Nk = 90
70 58 81 Nz
                       Nz = 84
63 56 77 79 Km
                      Km = 82
67 65 71 76 69 Sv
                       Sv = 84
56 51 76 71 75 67 UI
                       111 = 83
56 52 79 74 74 69 78 Ha
58 58 75 72 73 68 71 74 Ah
57 56 76 72 73 69 72 76 80 Rw
55 53 72 67 69 64 69 71 79 77 Mu
56 53 71 70 71 61 67 66 71 69 69 Mb
51 42 65 63 66 54 59 60 62 62 61 64 Ra
61 53 65 69 71 59 63 64 64 62 60 63 56 Wu
50 57 56 56 52 58 51 52 53 54 51 49 42 48 Hy
59 54 58 62 57 64 53 54 59 65 55 54 57 58 52 Hh
54 47 62 65 64 62 58 60 61 59 60 63 60 63 49 54 Go
43 40 46 50 51 46 44 45 48 45 45 47 43 49 42 41 57 He
52 46 56 61 59 53 54 54 55 54 52 56 45 57 48 56 60 49 Ky
53 49 64 66 63 56 61 62 65 66 64 65 61 61 49 53 61 48 55 Sw
```

82% = Km (KIKIImbti North (Kn) + KIKIImbti North (Kn))

Table 4.8. Collapsing highest percentage of Table 4.7 (81%)

```
Be
                                    SN = 81
                                               Nk = 90
52 Lo
                                                Sk = 89
67 58 SN
                                                Sd = 86
63 56 78 Km
                                   Km = 82
                                               Nz = 84
67 65 74 69 Sv
                                   Sy = 84
56 51 74 75 67 UI
                                   UI = 83
56 52 77 74 69 78 Ha
58 58 74 73 68 71 74 Ah
57 56 74 73 69 72 76 80 Rw
55 53 70 69 64 69 71 79 77 Mu
56 53 71 71 61 67 66 71 69 69 Mb
51 42 64 66 54 59 60 62 62 61 64 Ra
61 53 67 71 59 63 64 64 62 60 63 56 Wu
50 57 56 52 58 51 52 53 54 51 49 42 48 Hy
59 54 60 57 64 53 54 59 65 55 54 57 58 52 Hh
54 47 64 64 62 58 60 61 59 60 63 60 63 49 54 Gd
43 40 48 51 46 44 45 48 45 45 47 43 49 42 41 57 He
52 46 59 59 53 54 54 55 54 52 56 45 57 48 56 60 49 Ky
53 49 65 63 56 61 62 65 66 64 65 61 61 49 53 61 48 55 SW
```

Table 4.9. Collapsing highest percentage of Table 4.8 (80%)

```
Re
                             Sk = 89
                                            Nk = 90
52 I n
                             Sv = 84
                                            UI = 83
67 58 SN
                            SN = 81
                                            Sd = 86
63 56 78 Km
67 65 74 69 Sy
                                            Nz = 84
56 51 74 75 67 UI
                                            Km = 82
56 52 77 74 69 78 Ha
58 57 74 73 69 72 75 Ar
                                           Ar = 80
55 53 70 69 64 69 71 78 Mu
56 53 71 71 61 67 66 70 69 Mb
51 42 64 66 54 59 60 62 61 64 Ra
61 53 67 71 59 63 64 63 60 63 56 Wu
50 57 56 52 58 51 52 54 51 49 42 48 Hy
59 54 60 57 64 53 54 62 55 54 57 58 52 Hh
54 47 64 64 62 58 60 60 60 63 60 63 49 54 Go
43 40 48 51 46 44 45 47 45 47 43 49 42 41 57 He
52 46 57 59 53 54 54 55 52 56 45 57 48 56 60 49 KV
53 49 65 63 56 61 62 66 64 65 61 61 49 53 61 48 55 Sw
```

81% = SN (Sk ((Nk (GInaNtuzu (Nt), JinaKIIya (Ki)) + Su (KImunaSukuma) + Nz (KINyanyeembe (Ny), SiGalagaanza (Ga), KIKonoongo (Ko)) 80% = Ar (GiAhi (Ah), GiRwana (Rw)

Percentage at right margin of table = Original shared % for combination

- Nk = GInaNtuzu + JinaKIIva
- Sk = Nk (GInaNtuzu + JinaKIIya) + KImunaSukuma
- Sd = Sk (Nk (GInaNtuzu + JinaKIIya) + KImunaSukuma) + KIDakama
- Nz = KINyanyeembe + KIKonoongo + SiGalagaanza
- Sy = SiSiloombo + SiYoombe
- Ul = KInaUshoola + KInILaamba Central Km = KIkIImbii North + KIKIImbii South
- SN = Sd + Nz
- Ar = GiAhi + GtRwana

Table 4.10 Collapsing highest percentage of Table 4.9 (78% -SN - Km)

```
Be
                          Sk = 89
                                         Nk = 90
52 Lo
                         Sv = 84
                                         UI = 83
65 57 NM
                        SN = 81
                                         Sd = 86
67 65 72 Sy
                                         Nz = 84
56 51 75 67 UI
                                        Km = 82
56 52 76 69 78 Ha
58 57 74 69 72 75 Ar
                                         Ar = 80
55 53 70 64 69 71 78 Mu
                                        NM = 78
56 53 71 61 67 66 70 69 Mb
51 42 65 54 59 60 62 61 64 Ra
61 53 69 59 63 64 63 60 63 56 Wu
50 57 54 58 51 52 54 51 49 42 48 Hy
59 54 59 64 53 54 62 55 54 57 58 52 Hh
54 47 64 62 58 60 60 60 63 60 63 49 54 Go
43 40 50 46 44 45 47 45 47 43 49 42 41 57 He
52 46 58 53 54 54 55 52 56 45 57 48 56 60 49 Ky
53 49 64 56 61 62 66 64 65 61 61 49 53 61 48 55 Sw
```

78% = NM (SN + Km); Lm (UI + Ha); RI (Ar + Mu)

Percentage at right margin of table = Original shared % for combination

Nk = GInaNtuzu + JinaKIIya

Sk = Nk (GInaNtuzu + JinaKIIva) + KImunaSukuma

Sd = Sk (Nk (GInaNtuzu + JinaKIIya) + KImunaSukuma) + KIDakama

Nz = KINvanveembe + KIKonoongo + SiGalagaanza

Sy = SiSiloombo + SiYoombe

UI = KInaUshoola + KInILaamba

Km = Kikiimbu North + KiKiimbu South

SN = Sd + Nz

Ar = GiAhi + GIRwana NM = SN + Km

INIVI - SIN + KIII

Table 4.11 Collapsing highest percentage of Table 4.10 (78%-Ul - Ha)

```
Ве
                       Sk = 89
                                      Nk = 90
52 Lo
                      Sv = 84
                                      UI = 83
65 57 NM
                      SN = 81
                                      Sd = 86
67 65 72 Sy
                                     Nz = 84
56 52 76 68 Lm
                                     Km = 82
58 57 74 69 74 Ar
                                      Ar = 80
55 53 70 64 70 78 Mu
56 53 71 61 67 70 69 Mb
                                     NM = 78
51 42 65 54 60 62 61 64 Ra
                                     Lm = 78
61 53 69 59 64 63 60 63 56 Wu
50 57 54 58 52 54 51 49 42 48 Hy
59 54 59 64 54 62 55 54 57 58 52 Hh
54 47 64 62 59 60 60 63 60 63 49 54 Go
43 40 50 46 45 47 45 47 43 49 42 41 57 He
52 46 58 53 54 55 52 56 45 57 48 56 60 49 Ky
53 49 64 56 62 66 64 65 61 61 49 53 61 48 55 Sw
```

```
Nk = GInaNtuzu + JinaKIIya
```

- Sk = Nk (GinaNtuzu + JinaKiiya) + KimunaSukuma
- Sd = Sk (Nk (GInaNtuzu + JinaKIIya) + KImunaSukuma) + KIDakama
- Nz = KINyanyeembe + KIKonoongo + SiGalagaanza
- Sy = SiSiloombo + SiYoombe
- Ul = KInaUshoola + KInILaamba Central Km = KIKIImbu North + KIKIImbu South
- SN = Sd + Nz
- Ar = GiAhi + GIRwana
- NM = SN + Km
- Lm = UI + KInIHaanzu

Table 4.12 Collapsing highest percentage of Table 4.11 (78%-Ar - Mu)

Be					Sk	=	89			Nk	=	90
52 Lo					Sy	=	84			U	=	83
65 57	NM				SN	=	81			Sd	=	86
67 65	72 S	y								Nz	=	84
56 52	76 6	B Lm								Km	=	82
57 55	72 6	7 72	Rı							Ar	=	80
56 53	71 6	1 67	70	Mb						NM	=	78
51 42										Lm	=	78
61 53										RI	=	78
50 57	54 5	52	53	49	42	48	Hy					
59 54	59 64	4 54	59	54	57	58	52	Hh				
54 47	64 62	2 59	60	63	60	63	49	54	Go			
43 40												
52 46	58 53	3 54	54	56	45	57	48	56	60	49	Ky	
53 49	64 56	62	65	65	61	61	49	53	61	48	55	Sw

```
Nk = GInaNtuzu + JinaKIIva
```

Sk = Nk (GInaNtuzu + JinaKIIya) + KImunaSukuma

Sd = Sk (Nk (GInaNtuzu + JinaKIIva) + KImunaSukuma) + KIDakama

Nz = KINvanyeembe + KIKonoongo + SiGalagaanza

Sy = SiSiloombo + SiYoombe

Ul = KınaUshoola + KınıLaamba Central

Km = KIkIImbv North + KIKIImbv South

SN = Sd + Nz Ar = GiAhi + GtRwana

NM = SN + Km

Lm = Ul + KInIHaanzu RI = Ar + YInyaMunyinanyi

Table 4.12 indicates that 76% is the highest percentage. However, it is not at the edge. In order to facilitate collapsing the pair which shares it, it is essential to shift it to the diagonal, doing all the necessary adjustments in the rows and columns of relationships. The rearranged configuration is indicated in Table 4.13 by shifting Sy to the top of NM.

Table 4.13 Collapsing highest percentage of Table 4.12 (76%): Rearranging MN Lm

Be					Sk	=	89			Nk	=	90
52 Lo					Sy	=	84			UI	=	83
67 65 Sy					SN	=	81			Sd	=	86
65 57 72	NM									Nz	=	84
56 52 68	76	Lm								Km	=	82
57 55 67	72	72	RI							Ar	=	80
56 53 61	71	67	70	Mb						NM	=	78
51 42 54	65	60	62	64	Ra					Lm	=	78
61 53 59	69	64	62	63	56	Wu				RI	=	78
50 57 58	54	52	53	49	42	48	Hy					
59 54 64	59	54	59	54	57	58	52	Hh				
54 47 62	64	59	60	63	60	63	49	54	Go			
43 40 46	50	45	46	47	43	49	42	41	57	He		
52 46 53	58	54	54	56	45	57	48	56	60	49	Kv	
53 49 56												Sw

Table 4.14 ('ollapsing highest percentage of Table 4.13 (76%)

```
Be
                 Sk = 89
                                Nk = 90
52 Lo
                 Sv = 84
                                UI = 83
67 65 Sy
                SN = 81
                                Sd = 86
61 55 70 NL
                Km = 82
                                Nz = 84
57 55 67 72 Rt
                                Ar = 80
56 53 61 69 70 Mb
                               NM = 78
51 42 54 63 62 64 Ra
                               Lm = 78
61 53 59 67 62 63 56 Wu
                               RI = 78
50 57 58 53 53 49 42 48 Hy
59 54 64 57 59 54 57 58 52 Hh
54 47 62 62 60 63 60 63 49 54 Go
43 40 46 48 46 47 43 49 42 41 57 He
52 46 53 56 54 56 45 57 48 56 60 49 Ky
53 49 56 63 65 65 61 61 49 53 61 48 55 Sw
```

Percentage at right margin of table = Original shared % for combination]

- Nk = GInaNtuzu + JinaKIIya
- Sk = Nk (GInaNtuzu + JinaKIIva) + KImunaSukuma
- Sd = Sk (Nk (GInaNtuzu + JinaKIIya) + KImunaSukuma) + KIDakama

```
Nz = KINyanyeembe + KIKonoongo + SiGalagaanza
Sy = SiSiloombo + SiYoombe
UII = KINaUShoola + KINILaamba Central
Km = KIKIIMbU North + KIKIIMbU South
SN = Sd + Nz
Ar = GiAhi + GIRwana
```

NM = SN + Km Lm = UI + KINIHaanzu

RI = Ar + γInyaMunyinanyi

NL = NM + Lm

Table 4.15 Collapsing highest percentage of Table 4.14 (72%)

						=						90
52	Lo				Sy	=	84			UI	=	83
67	65	Sy			SN	=	81			Sd	=	86
59	55	69	NR		Km	=	82			Nz	=	84
56	53	61	70	Mb		Ar	=	80		NM	=	78
51	42	54	63	64	Ra					Lm	=	78
61	53	59	65	63	56	Wu				RI	=	78
50	57	58	53	49	42	48	Hy					
59	54	64	58	54	57	58	52	Hh				
			61									
43	40	46	47	47	43	49	42	41	57	He		
52	46	53	55	56	45	57	48	56	60	49	Ky	
53	49	56	64	65	61	61	49	53	61	48	55	Sw
	Nk	= '	90		UI	= 8:	3	ı	m	= 78	3	
	Sk	= ;	89	- 8	Km	= 82	2		RI	= 78	3	
			86									
	Nz	= ;	84		Ar	= 80)	1	NR:	= 72	2	
	Sy	= ;	84	- 1	MM	= 78	3					

Percentage at right margin of table = Original shared % for combination

```
Nk = GInaNtuzu + JinaKIIva
```

Sk = Nk (GInaNtuzu + JinaKIIya) + KImunaSukuma

Sd = Sk (Nk (GInaNtuzu + JinaKIIya) + KImunaSukuma) + KIDakama Nz = KINyanyeembe + KIKonoongo + SiGalagaanza

Sy = SiSiloombo + SiYoombe

Ul = KrauUshoola + KraiLaamba Central
Kim = KiKirinbb Nohi- + KiKirinbb South
Sin = Sd + Nz
Ar = GiAhi + GiRwana
Nim = Sn + Kin
Lim = Ul + KiriHaanzu
Lim = Ul + KiriHaanzu
NL = Nim + Lim
NL = Nim + Lim
NL = Nim + Lim
NR = Ni + Ri
NR = Ni + Ri

For practical purposes, Table 4.15 can be the final stage in combining the languages, although this raises the question of cut-off points in sub-grouping. When dealing with the classification of related languages using lexicostatistics, where should sub-grouping stop in collapsing percentages and combining them into nodes of related languages/dialects? According to glottochronology, the method from which all the assumptions in lexicostatistics are based, the interval from NR to KeeMbuwe is 1182 years¹ (or the split occurred in 817 AD), given the 70% shared vocabulary recorded in 1999. With SiSuumbwa, the shared vocabulary with NR is 69% or 1230 years ago, in 769 AD. This span is suspect because it does not change much even when compared to lower levels like dialects. With KISukuma, SiSuumbwa shares 71% or they split 1135 years ago in 864 AD; with KINyamweezi, excluding KIDakama they share 76% or the split occurred 910 years ago in 1089 AD. Since most of the languages forming NR share vocabularies in the 80%s, then SiSuumbwa in the 70%s is unlikely to be joined to them, and hence the cut-off point is justified.

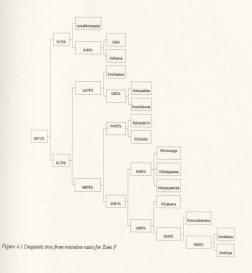
¹ A table of all percentages and the years they represent is presented and discussed in 4.1.2.3, Tables 4.16-18 when absolute chronology is compared to relative chronology discussed in Chapter 3.

But the difficulty of determining a limit remains real when the lower percentages after 72% are separated by short intervals only, such as 70%, followed by 69%, etc. Since the rates of shared retention are relative distances, the higher than 70% rate within the NR node is suggestive of a minimum, which can be observed even in Table 4.1. Addressing this question of a cut-off limit, Hymes (1960:26-7) points out that it is a difficult matter to decide, partly because of inadequate studies on procedure, but also partly because of the many factors involved in differentiating related languages. When speakers of languages separate, distance from each other over time increases linguistically and spacially. With more quantity of distance and time of separation, communication eventually fails because the languages spoken by the two separated speech communities change in quality from the earlier, common form. On the other hand, when speakers of two languages are adjacent, with communication between them constant, their languages, even if they are different, will tend to converge because time or space bridges, rather than increases, the gap of communication. For instance, if in the NR node the percentage is generally higher, then any slight variation draws attention. This is clearly shown by SiSuumbwa, which, though its speakers have been adjacent with the NR languages for a long time, maintains a visible difference in shared retention, in the 70s. while the neighbouring NR languages are consistently in the mid-80s or higher (See Tuble 4.1).

4.1.2.2 Lexicostatistical subgrouping: Analysis and discussion of results

Lexically, the statistics show that Zone F excludes five original members, namely IctWoungo. KiBende, KiiRangi, KeeMbuwe and KilLoongo. Of these, KiLoongo was normally ignored in the past and therefore it did not feature in any zone, except for mentions in anthropological or archaeological studies (Abrahams 1967, Soper and Golden 1969). On the other hand, the other four are the same languages which have been a focus of affiliation scepticism for some time, from being not known well enough (Nurse (1979a-28-9), Nurse and Philippson 1980:47-8), to that of being reasonably known enough to warrant some conclusions, although a systematic study had not been conducted (Nurse 1999:10-1). SiSuumbwa is borderline between known and unknown, for some time now characterized by uncertain statements of affiliation and history.

Those included in Zone F are not that homogeneous either since there are clear subdivisions based on the different shared retention rates as shown in Figure 4.1. The shared retention rates among different levels are summarized in Table 4.15, and reproduced below for convenience.



(138)

From the shared percentages in (138), a linguistic tree of 14 nodes can be constructed (Figure 4.1). It is encouraging to note that the traditional groupings within Zone F are more or less the same, except that their internal relationships show the hierarchy in which the different dialects are associated. The traditional Zone F listings, as in other zones, did not suggest any hierarchies between the dialects identified, as though assuming that all dialects/languages were coordinate partners.

An important point noted by Nurse and Philippson (1980-38-9) with regard to the 76 languages they investigated concerns influence due to closeness, regardless of genetic affiliation, whereby higher similarities are registered with closer neighbours as higher percentages of shared retention, and consistently lower with distant ones. This proximity hypothesis in raising or lowering retention rates is informative with regard to cut-off points. In our data, the shared percentages depended on whether the neighbour had a higher or lower percentage rate of retention, suggesting that a language with a higher figure on its own would have an even higher one if its neighbour had an equal or higher rate, and vice versa. For instance, KeeMbuwe would show higher shared rates if it were surrounded by equally Bantu languages with higher retention rates, while KiLoongo would show a lower rate than is currently shown, because it is surrounded by KISukuma, with higher retention rates. In other words, if a language which had lost much of its inherited vocabulary came in contact with, and borrowed from, languages which had a higher retention rate, it would itself seem to have retained a higher retention rate. The converse is true with regard to the lowering effects of

neighbouring languages. KIKIImbu is phonologically conservative and stable, but it is surprising that the retention rate is lower than expected. The likely explanation is contact with KINyamweezi which lowered the count by replacing the original words. It may be the case that KiBende would have a lower retention rate if it were not adjacent to KIKonoongo or SiGalagaanza.

Because of this scenario, the KISukuma (89%), KINyamweezi (84%), SiSuumbwa (84%), KIKIImbu (82%), KIntLaamba (78%) and KIRImi (78%) groups' internal rates would be different if they were not surrounded by languages which tend to lower or raise their shared percentages. And since this larger group of 6 subgroups is characterized by high retention rates, its rate would be even higher than the current 83% average between them if they did not hypothetically experience that contact. With this high average figure for the 6 groups, the exclusion of IctWoungo, KiBende, KiRangi, KeeMbuwe and KiLoongo at 70% or less, is justified. Otherwise, many languages including those outside the zone would behave like the immediate sister languages of Zone F.

This also raises the question of the role of mutual borrowing in contact situations. For instance, KInIHaanzu's proximity with JinaKIIya makes its overall figures closer to those of KISukuma-KINyamweezi than to some of the members of its KInILaamba group, as shown in Table 4.1. This supports and explains the similarity of some phonological features described in Chapter 3, illustrating the case pointed out by Hinnebusch (1999) 176-8) about

similarity due to language contact. When speakers of different languages interact often, the relationship leads to the diffusion of vocabulary and its phonological features from and into those languages. Thomason and Kaufman (1988:53) actually suggest that features can be borrowed from one language into another even when they do not fit the typological nature of the other language. They may later become significant innovations in the recipient language. When the languages in question are typologically the same, and the speakers have been adjacent and interacting for a long time, detecting borrowing between them is a challenge, so that any slight difference is significant.

4.1.2.3 Lexicostatistics, absolute chronology and linguistic grouping in Zone F

While the results closely resemble the traditional classification of the obvious individual groups like SiSuumbwa, KtSukuma, KtNyamweezi, KtRtmi, KtKtImbU, ICIWUUngU. KiiRangi, KeeMbuwe and KiBende, to a great extent expected zonal unity is undermined. In the linguistic tree, some languages are excluded because of retaining lower vocabulary percentages than expected. The variation should be small if languages really belong to the same group. Because language relationships can be graded in a continuum of closeness rather than viewed as discrete entities, including or excluding any member like SiSuumbwa and KeeMbuwe from Zone F is a difficult decision, as they have relatively higher percentages than the rest of the excluded varieties. This indeterminate division into discrete units between one language or dialect and another needs an interpretation of the patterns observed in a historical perspective based on what really happened.

The relationships between languages shown in the tables above so far suggest that the prospects for Zone F maintenance are improved. Chapter 3 greatly undermined the unity of the zone by showing how irregularly the major phonological processes are distributed in Zone F, indicating a doubtful genetic relationship. The vocabulary in this chapter presents a better picture by showing that, although the lexicostatistical application excludes some members, the remaining ones show some cohesion. But as pointed out above, lexical unity may also have been mainly facilitated by the lengthy proximity of the speech communities. The effect is seen in how the rates of shared vocabulary are modified when languages are adjacent, as observed by Nurse and Philippson (1980a).

For instance, while some traditional classifications group KtratLaamba, KtRImi and KtKIImbU as one unit, on the one hand, and SiSuumbwa, KtSukuma and KtNyamweezi on the other as core units of Zone F, our study displays different hierarchies as shown in Figure 4.1 (Cf Nurse 1979a:28). The levels in this lexicostatistically based pattern indicate that, SiSuumbwa is out of the picture, a situation which Nurse (1979a) notes as an influence to SiSuumbwa, as an F member, by the GiHa and KiZinza group. The remaining ones, KtSukuma, KtNyamweezi, KtntLaamba, KtRtmi and KtRtImbU branch in a complicated way. The following are the results of the patterns in Figure 4.1. The first spin removed

K1RImi from the larger group 1089 years ago, in 910 AD, indicated by 72% of shared vocabulary, illustrated in Table 4.16 for all the possible split times in our study.

Table 4.16 Time estimates of language separation using index of .86 for 1000 years expressed as a percentage rate of retention (Ret) of shared vocabulars.

Ret %	Years	Ret %	Years						
90	349	80	740	70	1182	60	1693	50	2298
89	386	79	781	69	1230	59	1749	49	2365
88	428	78	824	68	1279	58	1806	48	2433
87	462	77	866	67	1328	57	1864	47	2503
86	500	76	910	66	1377	56	1922	46	2574
85	539	75	954	65	1428	55	1982	45	2647
84	578	74	998	64	1480	54	2043	44	2722
83	618	73	1043	63	1532	53	2105	43	2798
82	658	72	1089	62	1585	52	2168	42	2876
81	699	71	1135	61	1639	51	2232	41 40	2956 3038

(139)								
	Nk =	90	UI	=	83	Lm	=	78
	Sk =	89	Km	=	82	RI	=	78
	Sd =	86	SN	=	81	NL	=	76
	Nz =	84	Ar	=	80	NR	=	72
	Cu -	0.4	5/54	_	70			

 $^{^2}$ The years in this table use the formula I = log C 2log r introduced in Chapter 1, where I is the time of separation in years, obtained by calculating C, a percentage of the retained words from a list of 100 words, and r is a given constant 86, which is assumed to be a ratio of 86 words retained out of 100 after the initial 1000 years have passed.

The percentages in (139) are those calculated from Tuhles 4.1 to 4.15, as shared vocabulary between the nodes identified. They are repeated here for ease of reference. From the tree, after KIRImi split, the remaining group split into two again, 910 years ago, in 1089 AD, when KIRImis split, the remaining group split into two again, 910 years ago, in 1089 AD, when KIRILaamba diverged, as shown by the shared vocabulary of 76% at that level. In 1175 AD, KIKImbU diverged from the remaining group, shown as a retention rate of 78%. It was at that same period that KIRIHaanzu splintered from the larger KIRILaamba group which had split earlier. When KIKIImbU split from the remaining larger group, it was the KINyamweezi and KISukuma groups that still remained together. In 1300 AD, or 699 years ago, they split, KINyanyeembe, KIKonoongo and SiGalagaanza as one group, and KISukuma and KIDakama another, shown with a shared retention of 81%. KIDakama split from the rest of the KISukuma dialects later, in 1499, or 500 years ago, with a shared retention of 86%. Modern KISukuma dialects began to be differentiated in 1613 when KImunaSukuma split from the others, some 386 years ago, indicated as 89% of shared vocabulary. And in 1650, or 349 years ago, JinaKIIva and GInaNtuzu separated (90%).

How historically true are these years of splits? This is a different matter which the method itself can only be credited for proposing. The rest may depend on two things: availability of corroborating external evidence and the interpretation of the results, especially of any unexpected deviations from the facts of known history.

To begin with, dates by other researchers concerning Zone F or its members can put these lexicostatisically based calculations in perspective, although these are not many. Neither are they reliable, since they are also only hypotheses of the events. For instance. Ehret (1984-489) gives some dates for part of Zone F. Although he does not state how he got those approximate years, their similarity with ours is striking and interesting, as compared in (140):

(140)

Ehret's estimates (1984:489)

By 500 AD: Division of Proto Takama into 3 groups: F21/F22, F24 and F31/F32

1100-1600 AD Divisions of KiWembere speakers (KInILaamba and KIRImi) This study's lexicostatistical figures
By 1300 AD: F32, F31, F24 and F21/F22

divided, though F32 split in 910 AD 910: Split of KIRImi from the rest of Zone F core group

The margins of error of the dates in (140) depend on the method used and the assumptions of the beginnings of humanity. From the years by Ehret indicated above, lexicostatistics is not that bad for giving rough estimates of linguistic relationship, just as it works to some reasonable degree when the lexicostatistical results are subjected to glottochronology, as a measure of absolute dating applied to the nodes. Even Carbon 14 depends on ideal conditions for the accuracy of its results. If the historical facts of an area are known by other means, then the figures of lexicostatistics begin to make sense. This is consonant with the metaphor of Carbon 14: if it is contaminated, the years obtained may not match the actual chronology. In linguistic terms, when a speech community remains in relative isolation, maintaining

constant communication between its members, the language is unlikely to change in an irregular way. This will be reflected by high retention rates. This is an ideal situation which rarely obtains in reality, except in a few rare cases (Ross 1998:142). On the other hand, when movements and interactions of people are numerous, especially when there are social, political and economic changes and upheavals like wars, pestilence, conquests, plunder, invasions and repression, linguistic change over time is likely to be greatest, reflected by lower retention rates in the intermingling speakers of different languages. Any figures given therefore, whether as retention percentages or glottochronological years, depend on all factors impinging on the ideal situation. This makes lexicostatistics and glottochronology similar with other methods which impose conditions for their reasonable accuracy. Failure to observe those conditions does not make the methods worse than others.

When those conditions are observed, the following ideal divisions are used to rank linguistic levels from dialect to macrophylum. The only problem here is that the system of assigning retention rates and linguistic levels is not uniform, suggesting that linguistic science in the area of dating is still in its infancy. For example, Crowley (1997:184) ascribes the different assignment of retention rates and linguistic levels to idiosyncratic choices by practicing linguists. In Table 4.17, two systems have been used for classifying and dating Pacific languages.

Table 4.17 Language, dialect, time of separation and shared percentage (After Crowley 1997:182, 184)

System A		System B			
Approximate years of separation	Level of subgrouping	% shared cognate core vocabulary	Level of subgrouping	% shared cognate core vocabulary	
0 -500	Dialects of one language	81-100	Dialects of a language	81 - 100	
500 - 2500	Languages of a family	36-81	Languages of a sub-family	55 - 81	
2500 - 5000	Families of a stock	12-36	Subfamilies of a family	28 - 55	
5000 - 7500	stocks of a microphylum	4-12	Families of a stock	13 - 28	
7500 - 10000	microphyla of mesophylum	1-4	Stocks of a phylum	5 - 13	
10000 - x	mesophyla of a macrophylum	0-1			

Table 4.18 Median rating and retention dates between languages (After Ehret 2000; 288)

Approximate median dating in BP (Before the Present)	Retention rate between languages %	Approximate median dating in BP (Before the Present)	Retention rate between languages %	
1000	74	6000	16	
2000	55	7000	12	
3000	40	8000	9	
4000	30	9000	7	
5000	22	10000	5	

But sometimes these systems differ significantly, It is indeed disturbing to note that the same labels like 'language', 'language family' or 'linguistic stocks' are used to refer to different retention rates and different linguistic levels. Ehret (2000) provides another scale as a ratio of retention to time, shown in Table 4.18. Compared to the rates in Table 4.17, the numbers are not identical, although they should be, where the same concept is used to mean the same thing.

This inconsistency in the value of units, labelling and therefore criteria for subgrouping may be one of the reasons why some linguists regard the twin methods as a waste of time. Practically, it remains true that sloppy application of method should not be confused with the method itself, which is quite good, as good as the regularly used comparative method. The comparative method has its weaknesses. For instance, in dealing with genetically related languages it uses only regular correspondences. If material does not correspond regularly, then it is left unaccounted for, or is simply labelled 'borrowed' as Ross (1996:180) puts it.

While in Chapter 3 the phonological picture suggested similarity due to convergence of adjacent languages, this part of quantitative evidence using exicostatistics and glottochronology suggests divergence of a once unitary language. Ehret (1984:497) interprets the situation in the same way: from Proto Takama to the various groupings which later gave rise to F21, F22, F24, F31 and F32. Nurse (1999:3), on the other hand, uses the metaphor of a limited version kaleidoscope, a tube of mirrors reflecting constantly changing patterns of colour. In this metaphor, the languages are in constant flux, diverging and converging, splitting and merging as circumstances surrounding the speakers change through time and space, with individual speakers, in small or big groups, criss-crossing familiar paths rather than blocks of languages moving uni-directionally, replacing other languages as they pass. Qualitative evidence based on lexical innovation sheds yet more light on the linguistic history of Zone F, particularly SSN, as various speakers of different linguistic groups interact in an endless process of human survival.

4.2 QUALITATIVE EVIDENCE IN LEXICAL INNOVATION

This section focuses on lexical innovation as a linguistic mechanism which serves to isolate one language from another, as evidence of independent historical evolution. If such innovation is shared by a set of languages, then it is assumed that those varieties share a common history from the past and therefore a genetic relation between them can be justified. Such innovation is evaluated in terms of three aspects: borrowed items confined within a single group only; shared and consistent morphological similarity among language varieties with no other reason for that resemblance except evolution from the same path from a common ancestor language; unique lexical creations which cannot be attributed to chance between any two or more languages/dialects except to a common historical path, even when an existing source is present, but is not known. Nurse and Hinnebusch (1993:285), Batibo (1992, 1996), Schoenbrun (1997), Ehret (1999) among others, utilize this technique in tracing the history of a group of languages.

The minimal unit of analysis used is the dialect, while the maximal grouping is Zone F. Inbetween, the intermediate levels are examined, each one indicating its unique innovations that purport to join a number of member linguistic sub-units. By definition, the dialect is expected to be unique by having a feature or set of features which are not found in the other sister dialects belonging to the same higher level that unites them, a language, as their parent. On the other hand, Zone F may be identified by the isolation of some key innovations displaying two essential characteristics. Firstly, those features peculiar to Zone F must run throughout the members of the group without exception so that affiliation, existence or validity as a Zone is displayed without any reasonable doubt, and secondly, those features should not be found in other zones which form Bantu. To accomplish the task of comparison, the following method was employed in the identification, selection, and use of lexical items.

From the basic list of the 1036 words, not all could be utilized for comparison. Only about 400 or so were actually selected as useful. 200 or so were judged to be inherited from Proto Bantu and therefore they were excluded, unless some special interest emerged. Inherited words as common items across a number of languages are normally realized differently in matters of detail from one language to another due to their different paths of historical development. Such common vocabulary appeared in almost all 22 language varieties, and it was easily recognizable in form and meaning in other Bantu languages beyond Zone F as well. As inherited items, they could not be used because they do not show any uniqueness which would help isolate Zone F from the rest of the other zones.

From that list of 1036 words, an additional 400 or so words could not be used at all because of some inconsistencies, which can be categorized into at least five groups. Firstly, verbs of motion in many languages, such as those referring to 'run', 'lift', 'jump' seem too amenable to inconsistent innovation, so that each language variety in extreme cases had its own word, depending on the shade of meaning an informant happened to remember readily. Difference of item in this case was not necessarily an indication of different origin.

Secondly, some words were simply ambiguous, and one response was as acceptable as the other depending on which item an informant picked from the range of several possibilities available to him/her at the moment. Hence, a difference of morpheme meant two things: different origin or different concept. For instance, a word like 'cut' in JinaKIIya would be gottema, go-βuta, go-cheemba, or go-tina, go-jega, depending on what object or how that object was cut, or both. Another interesting word was 'unripe, half-grown'. In JinaKIIya, as in other speech communities specializing in a particular activity like farming, to be 'unripe' is not enough. It depends on what object is unripe. For instance, it can be -nagana (for vegetables and other fruit eaten raw like cucumbers and their families); -IIIndI (millet and maize stalks); ji-deema (baobab young tree only); ma-noga (groundnuts/peanuts only); and -βIsI (ffuit, wild and cultivated, like water melons, oranges). A concept like 'to teach' also caused problems of choice among possibilities, although it did not seem ambiguous at first. The response to that one depended on what was taught and/or for how long, as the following illustration from JinaKIIya shows: got-laanga (general instruction, short or long term); go-

toonga (specific to one occasion only, normally for a short duration); g0-heembeka (used in medicine only as long term instruction which can take many years, although it can be extended to other types of specialized or exclusive instruction as well); g0-fluunda (used for girls only in relation to teachings of family life and its preservation); g0-hana (used for the instruction of secret subjects).

Thirdly, taboo and sacred words like those referring to private parts and fluids emanating from them commanded a high innovation rate which was inconsistent with the straightforward referential meanings. For instance, in some languages, 'sperm, semen' was often not translated, and when a response was provided, its root was the same as either for water or urine. Other words in this category included 'copulate', 'testicle', 'dead person', 'god', and 'spirit'. With such concepts, euphemisms are more common than the conceptual ones, which, for many, are unknown or too embarrassing to mention to strangers.

Fourthly, onomatopoeic words like that referring to 'cat' as nyau, or nyaaβu were ignored since they could be found in other areas beyond Zone F as well.

Finally, some of the concepts or objects were simply not known to either the informants, the researcher himself, or to both. These were not translated very well, not because the word did not exist, but simply because the participants had no clue what the word was talking about. Among others, these included the names of some animals, trees, or birds which were either not known, have been forgotten, or have not been seen.

With this scenario in mind, it becomes obvious that the critical list of words can be quite small and yet significant enough for isolating a linguistic group. In some cases therefore, one word may be useful in a set of languages and not in others, while some words can cut across linguistic sub-groupings displaying clear sub-divisions by difference of reflex form.

On the other hand, when lexical innovations in one group are totally absent or their status questionable, serious doubts of validity and reliability of classification are raised. A historically valid linguistic grouping is expected to be open to observation and scrutiny, based on accessible evidence like innovation. This does not mean, however, that absence of evidence or clues is indicative of absence of historical connection in a contested case. The cases of doubtful historical connection are illustrated in some words below by question marks. Doubt only emphasizes the point that a word must withstand rigorous tests to qualify as a useable item in classification.

For comparative purposes, Nurse and Philippson's 1972 list is used where 100 language varieties were extracted from CBOLD³. In addition, Nurse's unpublished field notes have

³ Comparative Bantu On-Line Dictionary under the direction of Larry Hyman, University of California at Berkeley, with contributions by participants from all over the (continued...) been used in many cases, especially with regard to those languages which are not included in CBOLD, like CiGogo (G11). One limitation encountered in using the CBOLD list and which readers should be aware of is the use of an orthography limited to symbols for 5 vowels only, excluding the common lower high /I/ and /U/, especially for the 7V languages. In addition, the consonant inventory is limited, based on the KiSwahili orthography of 24 letters (a,b,c,d,e,f,g,h,i,j,k,l,m,n,o,p,r,s,t,u,v,w,y,z), from the Roman alphabet which was acquired through English, but without the 'x' and 'a'. Vowel length is also not indicated consistently in the CBOLD list phonologically or phonetically. The justification for such inaccurate recording is understandably a historical one, because most of the informants who prepared the lists themselves had the 5-vowel and 19-consonant KiSwahili writing system in mind when they transcribed their results from their mother tongues. KiSwahili does not show vowel length in its writing system4 either. Linguistically, showing short vowels only as if there is no length contrast is unfortunately unacceptable because it misrepresents both phonological and phonetic facts. For instance, the consonant inventory used in the orthographies of all the transcriptions does not include some other common phonemes like /B DV x/, which are quite widely distributed outside KiSwahili and English. The status of /l/

³(...continued)
world and found at http://www.linguistics.berkeley.edu/CBOLD (in 2000)

⁴ There is disagreement on long vowels in KiSwahii, although there are indications that the distinction is there (Bathbo 1990, Bathbo and Rottland 1994, Mpiranya 1995). For instance, baba, dada and papa for 'father', 'sister' and 'shark' respectively are appropriately baba, dadaand papaga. Whether these words are borrowed, nomatopoci or that minimal pairs in the language cannot be found for them to solidify the contrast, is entirely another matter.

and lr'l is also problematic in some Bantu languages, where the two are sometimes used in free variation, often in a haphazard way. The most frequent liquid from PB *d in most of the Bantu languages of eastern Africa is lV. This inconsistent representation of liquids is illustrated by some members of EJ and DJ groups. In these languages, the use of lVr is not uniform, even within one language variety, calling for a systematic study of their status in order to isolate the phonological from the phonetic and orthographic. For instance, Muzale (1998:xviii) chooses "r" as a generic symbol to represent both phonemic and orthographic examples for the whole of Rutara (some part of EJ). The only reason given to justify that choice is convenience. At times, this inconsistence of representation can cause serious and misleading interpretations as wrong vowel and consonant phonemes are used and assumed to stand for historical facts. And finally, some of the languages were recorded as if they were mono-dialectal. For instance, F22, oRuHaya, as it appears in comparisons only means that any one of the 4 dialects mentioned in this study or another was used.

4.2.1 Survey of qualitative evidence in Zone F

4.2.1.1 Dialects: 'buds' in the linguistic tree

As concrete linguistic realities, the 22 dialects investigated more or less fit the pattern of the discrete divisions known by the native speakers of those languages. Where a language has already been investigated and recorded by others, the divisions are also corroborated to a large extent, except for a few adjustments which are shown below. For instance, in addition to native speaker intuition and experience, KIRImi has three dialects (Olson 1964). KiiRangi and KeeMbuwe, though similar, have significant differences. On the other hand, the majority of the dialects of Zone F languages were only mentioned by previous scholars without being rigorously investigated and their similarities and/or differences identified and recorded in confirmation or rejection of the common wisdom taken for granted. Native speaker intuition can also be questioned if it is influenced by factors other than linguistic.

The languages which are fairly homogeneous include SiSuumbwa, which is formed by SiSiloombo and SiYoombe, although this does not mean that they are the only dialects in SiSuumbwa. The difference between KiKiimbū North and KiKiimbū South is also minimal. Such minimal variation is often brought about by surrounding languages impinging differently on them, depending on their locations and other sociolinguistic variables in an area. With this unequal exposure to different external forces which might also accelerate or trigger internal processes, each dialect becomes marked by either consistent lexical, morphological, tonal, or phonological differences on the one hand, or some combination of those markers. on the other.

This shows that each variety innovated differently as it took a different historical path. Some of these distinguishing features are unique to the individual dialects, while the others are shared by neighbouring dialects of other groups as well. Since the existence of the majority of these dialects is not in dispute, just a few cases to illustrate their independent histories will suffice.

One point to note however is that only one variety was used for KiiRangi, KeeMbuwe, tctWutngt and KiBende. One justification for using only one form was the assumption that they have minimal variations internally, due to their speakers' expected dense social networks facilitated by their confined geographical locations, compared to languages like KtSukuma or iGiHa, whose speakers occupy areas large enough to cause complete isolation and much easier separate linguistic developments. This generalization is, however, not always accurate, since there are other factors which make homogeneity difficult even when those languages or dialects are geographically adjacent. For the other languages, examples of dialectal difference are important to highlight, since such variation at the lowest levels forms the foundation for grouping and isolating the upper nodes of proto languages.

For instance, JinaKIIya is unique in having Dahl's Law dissimilation operating to the right if the usual left-hand target consists of a voiceless fricative, rather than the canonical Dahl's Law case of dissimilating the first of any consecutive voiceless stop syllables, as in Idat0 < *-tat0 'three'. GInaNtuzu and KImunaSukuma adhere to the standard rule. while JinaKIIya takes a step further, as in Isaga < isaka < *-caka 'bush', or 10 Jig0 < 10 Jik0 < *-cik0' 'day'. This is one important distinguishing marker for JinaKIIya.

On the other hand, it is only GInantuzu which does not allow the infinitive marker ku-(regularly changing to gu-) to be followed by a verb with an initial or short $\overline{h}V$ or $\overline{h}V$, to form a glide. The initial vowel of that verb, $\overline{h}V$ or $\overline{h}V$, as the case may be, is deleted, and the vowel /U/ of the infinitive also replaced by the higher /u/, as illustrated in Table 4.19. Apart from the glide-forming environment of the infinitive, other words with a potential glide are also affected.

JinaKırya uniformly forms a glide with the initial NI of NI of a verb and NI voices to NI consistently, as in GinaNtuzu, while KimunaSukuma also forms the glide consistently, but additionally and uniquely for this group, maintains NI.

Table 4.19 Infinitive *ko- as an important dialect morphological marker in K1Sukuma

Dialect ♥ Proto Bantu .	GmaNtuzu	JinaKzıya	KımunaSukuma
*-yɪtɪk- 'answer a call'	gudika	gwidika	kwiidika
*-deg- 'avoid, dodge'	guliga	gwrliga	-
*-yɪt- 'call'	gutana	gwrtana	kwiitana
*-tork- 'carry on to head'	gudrrka	gwidiika	kwiidɪɪka
*-yij- 'come'	guza	gwiza	kwiiza
-yiŋk- 'give'	guṇa	gwɪṇa	kwiiņa
*-yigu- 'hear'	gugwa	gwɪgwa	kwiigwa
*-yit- 'pour away'	guta	gwɪta	kwiita
•- 'squat'	gutoonda	gwrtounda	kwiitoonda
*-yib- 'to steal'	диβа	дwɪβа	kwiiβa
*-yɪb- 'to forget'	дwπβа	дwπβа	kwɪɪβa
*-yiŋgɪd- 'to go in, enter'	gwiiŋgɪla	gwɪŋgɪla	kwiiŋgɪla
-yɪm- 'to stand'	gwɪɪmɪɪla	gwɪɪmɪɪla	kwiimiila
*-goɪna 'crocodile'	ŋuna	ŋwɪna	ŋwɪɪna
*-yibi 'thief'	ημβί	ηντβί	ŋwiiβi

The rest of the language varieties are treated in the main section using lexical innovation to show that they developed together or differently, and hence they are the same language or they are independent dialects of a language. For others like SiSiloombo and SiYoombe on the one hand, and KiLoongo on the other, the lexical and phonological differences indicate that they might actually belong to different languages, rather than dialects of one language, as shown below. The shared percentages in the nodes obtained in section 4.1.1 above and displayed as tables as well as showing a linguistic tree, are used to examine the justification of the results against known historical facts about Zone F. Such a test also validates the lexicostatistical groupings as historically significant as well.

The classification of linguistic levels based on shared innovation in vocabulary which purports to define identified clusters is tested against words from other languages. Such words outside a given group are examined to find if there is any indication of relation, especially in cases of borrowing and genetic relation. In other types of innovation other possible sources are suggested. The final part in each linguistic node summarizes the observations as a whole and comments on the historical validity of such qualitative measures.

4.2.1.2 Dialect clusters: hierarchical nodes of historic languages

In the process of lexical analysis below, the vocabulary which is identified stands out as peculiar only to that group under discussion. The vocabulary can be unique in two ways: belonging exclusively to that cohesive group as inventions or having words which are not found in its larger group's lexicon, but are shared by outside languages because of areal influence, borrowing or genetic affiliation peculiar to it. In each language or language group analyzed, the unique creations (inventions) precede shared vocabulary. Unique creations are those words which are not inherited from Proto Bantu and are not found elsewhere except in that language or dialect. The only drawback with the 'uniqueness' label is that a unique word may not appear in other dialects, not because it is absent in those languages, but because those languages which might show the same unique word are not included in the sample of languages being used in the comparisons. This limitation in access to all data makes any conclusion reached here only tentative rather than an absolute fact.

On the other hand, shared innovation may refer to semantic or peculiar morphological innovations of inherited words, or loans from one language to another. As pointed out above, phonological innovations are not counted, although they may be listed to display an interesting pattern. Where appropriate, some comments are supplied to add more context to the words.

To facilitate actual frequency in shared vocabulary, the dialects are not counted in the final tallies. The whole group is listed, unless only one dialect displays the word. For instance, if one word occurs in F21 in all three dialects, then one observation is counted rather than three, since we are dealing with larger patterns. In other words, the total number of frequencies will equal or be less than the total number of groups observed in a linguistic grouping like Sk

(GinaNtuzu (F21b) and JinaKiiya (F21c) which form a node of 90% of shared vocabulary in the lexicostatistical table of section 4.1.2.1 above.

The method used here, therefore, involves three stages: first, it lists all the dialects in which a lexeme occurs, groups those occurrences into their respective linguistic groups which are judged to be genetically valid⁴ and then represents the results in a graph as frequencies. Those graphs are a rough and relative display which shows how the target group compares to each of the external dialect or group used. An absolute display would include all dialects from all Bantu languages. The graph only gives an approximate visual picture of how much the various linguistic subgroups share vocabulary.

Secondly, those dialects sharing the innovation are grouped together into dialect or language clusters in the Guthrie numbering system where necessary. Full names like Rutara, East Ruvu (ERuvu), Seuta are used as conveniently short labels especially in groups which span different digits. For instance, Seuta includes G23, G24, G31, and G34, making a simple alphanumerical representation cumbersome. Kilombero is G50, and therefore it is easy to represent it as G50 rather than by the long name because all its members are included. The names of these groups are given in the list of abbreviations. For convenience, these names and the

³ The linguistic groups of eastern African languages which are fairly genetic can be found in the proposals of Nurse (1982, 1988, 1994/5, 1999), Nurse and Hinnebusch (1993), Muzale (1998), among others. These groupings are often changing as better analyses and understanding become available. Their major function is therefore mainly referential and tentative until definitive answers are finally assembled.

languages they represent are given in (141). They are used interchangeably with their alphanumerical representations.

(141)

Western Highlands (DJ60) = KinyaRwanda (DJ61), KiRundi (DJ62), iKiFuliiru (DJ63), KiShußi (DJ64), KiHangaza (DJ65), iGiHa (DJ66), KiVinza (DJ67)

North Rutara (EJ11-14) = Runyoro (EJ11), RuTooro (EJ12), oLuNyankole (EJ13), oLuCiga/oRuCiga/RuCiga (EJ14)

South Rutara = oRuNyambo (EJ21), oRuHaya (EJ22 (RuZiba (EJ22a), RuHamba (EJ22b), Runvalhangiro (EJ22c), RuHvoza (EJ22e)), RuZinza (EJ23), RuKereße (EJ24)

Suguti (EJ25) = KiJita (EJ25a), KiKwaya (EJ25b), KiRegi (EJ25c), CiRuri (EJ25d)

North Nyanza (EJ15-EJ17) = LuGanda (EJ15), oLuSoga (EJ16), oLuGwere (EJ17)

Luhya (EJ30 and EJ41) = LuMasaaßa (EJ31) = LuGisu/LuKisu (EJ31a/b), Lußukusu (EJ31c1), oLuSyan (EJ31d), oLuTachon (EJ31e), oLuDadiri (EJ31f), LuBuya (EJ31g), LuWanga (EJ32a), oLutsotso (EJ32b), LuMarama (EJ32c), LuKisa (EJ32d), LuKabarasi (EJ32e), LuNyala (EJ32f), LuNyore (EJ33), oLuSaamia (EJ34), LuXaayo (EJ34a), LuMarachi (EJ34b), oLuSonga (EJ34c), LuNyuli (EJ35), LuLogooli/LuRagooli (EJ41), Lwldaxo (EJ41a), Lwlsuxa (EJ41b), oLuTiriki (EJ41c) East Nvanza (EJ42-EJ45) = KiNgurimi (EJ401), Kilkizu (EJ402), KiKuria (EJ43), iKiZanaki (EJ44) including varieties like iKilsenyi (EJ44b), KiNdali (EJ44c), KiSiora (EJ44d), KiSweta (EJ44e), KiRoba (EJ44f), GiRango (EJ44h), KiSimbiti (EJ44k), KiShaashi (EJ44l), KiHacha (EJ44m), KiNata/Kilkoma (EJ45), (eKiGusii (EJ42))

Thagicu/Central Kenya (E50) = Gzkoyo (E51), KiEmbu (E52), KiMeru (E53), KiTharaka (E54a), KiCuka (E54b), KiKamba (E55) and KiSonjo (E46)

Chaga/Kilimanjaro-Taita (E60, with or without E74)KiRwo/KiMeru (E61), KiSiha (E611), KiChaga (E62), KiMachame (E62a), KiWunjo (E62b), KiRombo (E62c), KiWoso (KiBosho) (E62d), KiSeri (E62e), KiKeni (E62f), KiArusha (E63), KiKahe (E64), KiGweno (E65), KiTaita (E74) = KiDaβida (E74a), KiSagala (E74b)

Seuta (G20), (G30) = KiShambala (G23), KiBondei (G24), KiZigula (G31), KiI]gulu (G34)

West Ruvu (G10, G39) = CiGogo (G11), KiKagulu (G12), KiSagala (G39) East Ruvu (G30) = Kinhwele (G32), KiDoe (G321), KiZalamo (G33), iKiLugulu (G35), KiKami (G36), KiKutu (G37), G38 CiVidunda

Sabaki (G40 and E71, E72, E73) = KiMwani (G401), KiMakwe (G402), CiFundi/KiShirazi (G403), KiTikulu (G41) = (Kitikulu (G41a), KiMbalazi (G41b)), KiSwahili (G42) = (KiAmu (G42a), KiMvita (G42b), KiMrima (G42c), KiUnguja (G42d)), KiPemba (G43) = (KiPhemba (G43a), KiTumbatu (G43b), KiHadimu/ KiMakunduchi (G43c)), KiKomoro (G44) = (Kifigazija (G44a), KiNjuani (G44b)), Kidokomo (E71), KiDhaiso/KiSegeju (E56), MijiKenda = (KiGiryama (E72a), KiKauma (E72b), KiConyi (E72c), KiDuruma (E72d), KiRabai (E72e), KiRibe (E72f), KiJibana (E72g), KiKambe (G72h)), KiDigo (E73))

KiLombero (G50) = KiPogolo (G51), KiNdamba (G52)

Southern Highlands (G60) = eSiSangu (G61), eKiHehe (G62), eKiBena (G63), KiPangwa (G64), KiKinga (G65), KiWanji (G66), KiKisi (G67)

Corridor (M10 = Corridor-Fipa, M20 = Corridor Nyiha) = iCiPimbwe (M11), KiLungwa (M12), CiFipa (M13), CiLungu (M14), iCiMambwe (M15), iCiWanda (M21), CinaMwanga (M22), ifiNyiha (23), ifiMalila (M24), ifiSafwa (M25), Iwa (M26), Tambo (M27), (tCtWoongo (F25)) Nyakyusa (M30) = IKINyakyusa (M31), CiNdali (M32)

Tanzanian CiNgoni (N10) = KiNdendeule (N101), KiNindi (N102), CiManda (N11), CiNgoni (N12), CiMatengo (N13), CiMpoto (N14)

Rufiji (P10) = KiNdengeleko (P11), KiRuihi (KiRufiji) (P12), KiMatumbi (P13), KiNgindo (P14) Ruvuma (P20) = CiYao (P21), CiMwera (P22), CiMakonde (P23), CiMacinga (M231), CiMaßiha (P25)

Where only a few members of a group show a lexeme, and others do not for whatever reason, then that group is represented in brackets, indicating that only some members displayed that word.

Thirdly, the list of all innovations is divided into two: unique creations and areal. "Areal" is a cover term for areal vocabulary, derivation, morphological innovation and borrowing, as indicated in the examples, and shortened to "areal vocabulary" in the text. A percentage is computed in each case to show the proportion of each. That percentage is another rough and relative indicator of how much a language innovated, and how much of its vocabulary is shared with other languages outside its zone. The measure is rough and relative because only limited vocabulary and language sample size outside zone F were used, rather than exhaustive lists of all possibilities. Where possible, the words are segmented to show basic morphemes, the roots, around which other morphemes are optionally attached.

4.2.1.2.1 Ntuzu KIIya (Nk) (90%) (GpiaNtuzu (F21b) - JinaKIIya (F21c))

The unique count is 4 out of 14, or 29%. The remaining 71% is composed of words which are shared by other Bantu languages, both adjacent and far-flung ones.

(142) Unique vocabulary (4 words)

```
cure, (cool), heal gu-pija (vt), gu-pila (vi); unique creation? *
pronounce go-hava:
slander, accuse falsely (often secretly) 90-800la
```

slap (with front of open hand) vi/vt gU-paala (I-pI): unique innovation? (same root as in M3279 ku-nata?)

(143) Areal vocabulary, derivation, morphological innovation and borrowing (10 words)

```
apply by stretching gu-koma (F31, F32) -koma < Nk and spread, or vice versa?
be -Biiza G60 ku-yedza: Luhya -wica: E60 -iya?
bladder Ituunii (F21c), ituunzi (F21b); < *-tond- 'urinate' by derivation
howstring luge F23a/b luge; EJ40, o-ruge; E74a luga; Thagicu rugaa; Rutara oruga;
Borrowing < F23a/F23b < F21b/F21c < Zone F1
hate gu-kolwa < *-kodu- 'become intoxicated': extension of meaning
iron F21c jisIInza F21b gIsIInza 'the one which slaughters'? < *-cInj- 'butcher'?' unique
by derivation
```

mud. mire teembe EJ40 -tembe: borrowing one from the other, or from same origin? sell go-jiinja any relation with Thagicu ku-endia?

snore, snort (vi) gu-noola (onomatopoeic?) (Thagicu-nora, -norota; Luhya xunorela; EJ25 -noroota; South Rutara ku-norota; F24 uxu-nota*; Corridor uku-noota; <*-uona; phonological innovation? Or is it a loan fro m Nilo-Saharan *nuur?

⁶ The following abbreviations and symbols, explained in the abbreviations section, are repeated here as a reminder:

⁼ separating different forms of a lexeme or concept in different languages

cf = compare with these forms, which may be related or not []

⁼ enclosing languages which do not form the complete set = enclosing related languages being compared to the rest

⁽⁾

⁼ explanation follows, especially type of innovation = unconfirmed, uncertain or doubtful case

⁷ M32 is a code for CiNdali, suggested by Swilla (1981, 2000), a native speaker of the language and a linguist, a suggestion which is a good addition, since Guthrie (1967-1971) did not include all languages/dialects. This code is adopted in this study.

^{*} This word was found in the KIKIImbu list collected by Nurse and Philippson in 1972, although in the list of 1999, the informants of both north and south did not mention it It also suggests borrowing from M11 or M12 since they share borders.

tortoise F21c gulumaadi, F21b guumaadi < Barbaig gumald: borrowing (cf PB *-kudu 'tortoise')

The connection of JinaKIIya with Luhya, East Nyanza (EJ40) and Thagicu languages raises serious questions of genetic affiliation. How much should a language share features with another for them to be regarded as genetically close, if first hand evidence is lacking? How can borrowing and genetic relationship be isolated if a pair belong to the same group typologically? The answer here lies in the employment of a multiplicity of evidence rather than relying on one form of evidence alone and elevating it to a final answer. For example, seed (especially edible, not for planting) F21c ndete E46 ndetele, EJ25a entetel (also occurs in Zambia as -tetele; accident or common origin? (Ehret, p.c.): EJ45 chantetere. EJ401, EJ42, EJ43, EJ45 entetere points to zones EJ and E origins because of the more elaborate forms there whereas in F21c the form is reduced. This is one indicator of source and origin.

4.2.1.2.2 KBukuma - (Sk) (89%) (GBiaNtuzu - JinaKIIya - KBiinnaSukuma)

This grouping can be termed 'traditional K1Sukuma' since, when that name is used, it is those dialects which are featured (although it by no means suggests that they are the only dialects forming K1Sukuma). Out of the 13 words, 4 are unique, or 31%. The rest, or 69%, are areal, shared with other languages and language groups.

(144) Unique vocabulary (4 words)

ahdomen, helly, stomach ŋuumbi: follow -kuußija pit, hole F21a, F21b icoongo, F21c Icoongo spoil (a child by pampering) -gesela

(145) Areal vocabulary, derivation, mornhological innovation and borrowing (9 words)

hreast (of woman) F11a, F21b In-noone, F21c In-noone, (North Nyanza) pondo. Thaigicu poonto: (Chaga) podo: borrowing < E (credibility of the βaKaamba and other clans in βαSukuma (Itandala 1979)? Common origin in the past since ponto/pondo is a Thagicu word? (Nurse 1979b.533)? Or isi ta loan from non-Bantu languages: < Kamdang-tono (sg), ano (β) breast? (Skevenson 1991;51)

great, hig, powerful -taale unique creation or semantic shift < Rutara -tale 'lion'? hard -diimu (EJ40) ki-dinu

in front of βu-toongi F23c (Seuta) nonge, N10 ku-longi?, P10 nungi kneel-tuja Thagicu -turia ndu/maru. (EJ40) -furva makoti

mourning noungo (any relation with Corridor impungo, 'mourning'?):

pig nOUmba (any relation with (G50) mtumbi, 'pig'?): unique creation or areal vocabulary? pipe (hohacco)* IO-sekel/O-sege unique creation, or < *-cege 'horn', or borrowing: < Proto East Victoria Bantu (EJ40) *-seke 'beer straw' < Proto Kalenjin *sek- 'beer straw' (Ehret 1971-98, 130)?

tomorrow ntoando (why not nhoondo?) EJ25 mtondo; (Seuta) montrondo; Corridor mutondo: borrowing from M? Or inheritance from a common ancestor, but not Bantu? The formation of a prenasalized stop after the prefix mu- in KtSukuma follows a regular pattern which distinguishes the N prefix. But here the rule does not apply, perhaps to distinguish the word from three words of the same shape which are tonally the same as well, with low tones:
-toondo 'type of wasp; locusts at hopper stage; flesh wound' with a dictionary form of noondo!"

⁹ K1Dakama has that word as isekeé/masekeé in Maganga and Schadeberg (1992), although the informant for this study gave nteemba which Maganga and Schadeberg mention in the vocabulary section as common in Tabora, presumably referring to SiGalagaanza, K1Nvanveembe, and K1Konoongo

¹⁰ The topic of base words in JinaKIIya and in other Bantu languages is explored in Masele (1996). For instance, -toondo is a root which is not a dictionary form, because such a form is marked in the sense that it is not recognized by a native speaker's mental lexicon.

trunk (of elephant) nkoondo (Sabaki), (Corridor) umkondo (these might be the only ones with an unambiguous lexeme¹¹ like that in KtSukuma).

urine F21a, F21b mine, F21c mte (North Nyanza) ma-pe, (Luhya) ama-pii. Speakers from the same group, or some speakers from the E1 group entered F21 and spread the word? Borrowing? This word is the only one where 'urine' and 'sperm' match with E116, while urinate' in E1 is different from 'urine'. To show the distance from E116/17 and E134 from each other, and E134 from F21 in this word, E134 behaves differently in terms of the vowel ending in urine', and the word for 'urine' and sperm' being radically different. On the other hand, E117 displays a different word for 'sperm' bujula perhaps because it might be a cuphemism. For the majority of the languages compared, 'urine' is derived from 'urinate'. For instance, 'urine' derived from ku-plais is -jali, while that derived from -sudgalais -su. Another common word here for 'urinate' is ku-tunda, with 'urine' being-tundi, -tusi, -tunzi, -tuke', 4.20 illustrates this pattern in E116/17 and F21.

Table 4.20 'Urine' and 'sperm' in F21 and EJ16, EJ17, and EJ34

Word	F21ab/c	EJ16	EJ17	EJ34
urine	m-iine/m-rne < ma-ine/ ma-rne	ma-iñe	та-ле	ama-ni
sperm	w-iine/w-ɪne < βσ-ine/ βσ- ɪne	ama-iñe agazala 'bearing urine'	bujula	oβwehe

walk (take a.) -yeela F23a,b -yeela; Thagicu gu-cera?, (Chaga) ku-sela?; E65-ira ira? is it < PB *-ptt- 'pass'?

wall ndugu (EJ25) i-ndugu

^{10(...}continued)

Rather, such a form is obtained as a dependent morpheme when number, the diminutive or other process is involved: **noondo** (generic, base): **ga-toondo** 'small wasp': **ma-toondo** 'manv, big wasps'.

¹¹ EJ41 (Maragoli/LuLogooli?) and M12 (CiMpoto), though do not undergo the homorganic nasal and stop process, do show the word as it is found in KTSukuma. It is not clear whether EJ403 KiSuba displayed a misspelling in omokonondo or not. On the other hand, though N13, P13 and P14 do not use that word, the one they use undergoes the same process ; hoppas 'trunk (of elephant) \sim mu-koppant.)

From the foregoing, it can be observed that K1Sukuma shares more words with some members of Corridor, East Nyanza (EJ40) and Thagicu than with other groups. Such shared vocabulary in the unique set of lexemes with K1Sukuma is striking, given their present geographical distances, especially Thagicu. Four interpretations can be posited here. Firstly, it might be borrowing from them (Corridor, East Nyanza and Thagicu) (most unlikely for current geographical reasons). Secondly, some speakers might have originated from them and the newcomers were influential enough to spread some words in K1Sukuma. This is a likely explanation, for recent historical reasons, especially with regard to Corridor, as explored in Chapter 5.

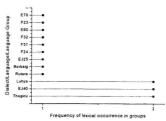
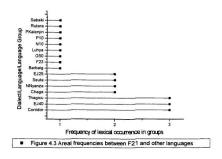


Figure 4.2 Areal frequencies between F21b/c and other languages

Thirdly, the languages, although they are different, might have borrowed from a common source. This is another possibility if, for a example, a powerful invader occupying a large area subjugated them together. Lastly, the possibility of a single origin, as proposed by Nurse (1999:20-1), that there was once a grouping Thagicu/F20/EJ, etc, which then split up is strengthened by Dahl's Law distribution among them, especially between Thagicu and F21. Thagicu like Giktyty and KtSukuma share some important features linguistically which make them closer than KtSukuma is to F22. In both F21 and Thagicu, 'return' is -Jooka, -Jooga. -syooka, or in F21c, -kiliifa 'rub' and -ogosa 'twist', noopo 'breast' is -kiiθa, nondo and -okoθa respectively in E55.



Nurse (1982:221, 1988:34) alludes to that close connection. Because of that similarity it suggests that they have at least two things in common, namely that their ancestors have been long separated from other East African Bantu languages and their routes of immigration patterns were separate.

Other important contributing sources are North Nyanza, Suguti (EJ25), Seuta and Chaga as shown in Figure 4.4 below. What do they suggest: loans, or common history?

4.2.1.2.3 KtSukuma - KtDakama - Sd (86%) (GtnaNtuzu - JinaKttya - KtmunaSukuma - KtDakama) - KtSukuma2

As a readjustment, the 'new KISukuma' or KISukuma2 should include KIDakama, while the plain KISukuma term excludes KIDakama in subsequent references. This inclusion of KIDakama is also supported strong by phonological evidence presented in Chapter 3. In this group, 3 words are unique (21%), and the rest, 79%, are shared, as shown below.

(146) Unique vocabulary (3 words)

elephant molt¹²
give light to -twiima, (F21c -tIma) (F21b, from PB different morpheme)
leave, go away -IInga

(147) Areal vocabulary, derivation, morphological innovation and borrowing (11 words)

heads fp.u-salto (F23a fbusilo, F23b fbusilo): E140, E125 ufpu-sanu; (D160) -saro; (Seuta), East Ruvu, (N10) usalu; < East Ruvu? Distribution concentrated along the central part of Tanzania as if the word is coastal, acquired during coast-hinterland long distance trading, then, just spread to E125 and E140, probably via the KTSukuma speakers. dem; refuse, www.elma.exuc. (East Ruvu) - elme(bla)

fly (vi) -lala (North Nyanza) -papala?, (Rutara) -halala? Probably loanword from Cushitic? hand, left IOmoso (only one sub-group with Iosas II marker ID- in F) increase (vi) -kwIIa (Luhva) xu-xiia?, (E140) kukera? semantic innovation < PB *-kUId-

'go up' as in Kiswahili -kwea < PB *-*-ktred- 'go up' ?

lend, horrow -laanda (EJ40) -randa

¹² Although Batibo (1992b-70) suggests that probably -puli 'elephant' is from pxed lephant' from Proto Southern Nilotic, it is unlikely, because only the consonants match. In addition, /ee/ changing to /bi /n KSūkuma2 is not phonologically or phonetically motivated. If it is not a KISukuma2 innovation, then the source is not known because Hadza and Sandawe speakers do not use such a word for elephant, as one would expect from people who are synchronically more proximal to the KISukuma2 speakers and might have been better hunters at that time than the Proto Southern Nilotic speakers. Bubenik (p.c.) suggests the same source of the Afro-Asiaci form as Arnbie fid' elephant.

medicine, remedy Bo-gota G50 m-gota, Corridor mu-kota, G60 (u)mu-goda, u-goda, (N10) qod qname for 'tree', -kota in F31a/F31b kyota/ma-kota; F33 mooda; Barbaig geta (sg), gedig (pl) with DL: widespread Bantu word.

sick -saatu, -saadu (F21c), < -saata 'be sick' EJ24 ku-saaswa 'be sick' < -saata/saada < F21? < Barbaig miyand 'be sick'?</p>

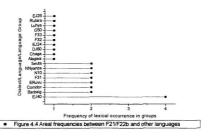
squat -itoonda, -itoonda (F21c), (North Nyanza), (EJ40) -sundala?

sun, sunlight, daytime ITmi (Chaga) idime? < Alagwa †ehemi < Proto West Rift-liimi (cf Western Lakes(D40, D150, D160)-lemi 'creator, maker'? (Schoenbrun 1997)¹³ E145 omwi?, E611 mwi?, P14 lumu?) (See Nurse 1979b;518)

take in from rain -υυβa, F31 kw-iyuuwa; F32b -ooya; Corridor u-kuuwa

East Nyanza (EJ40) is the single most important group at this level. Four words out of the 12 areal vocabulary, or 29%, are found in that group. This count exceeds the unique innovations within F21/F22b, suggesting that areal vocabulary is the norm rather than an exception. Such areal influence highlights the fact that the tree model alone is not appropriate in accounting for lexical inheritance. The non-Bantu languages are represented by Alagwa (Cushitic) and Barbaig (Southern Nilotic) of the Datoog subgroup. The words from these non-Bantu languages suggest that some of the unaccounted for words like-ptlt (nptlt) might

[&]quot;I A Zone D and DJ source, from Proto Savanna *-lemi 'creator, maker', as in D53 (Tembo) -rema 'create', D161 rurema 'Creator, manifestation or type of imana who has created what which exists'; D162 iremezo 'base, fundamental principle; ideal; army chief Schoenbunn (1997-212; 252-255) provides another plausible alternative to Proto West Rift teemi(Batibo 1992b:64) because of D and DJ's typological proximity and the nature of the universality of the object', 'sun' as a least candidate for borrowing. The sun is also associated with the gods, and as a euphemism, 'yoUSp' as justified in remaining in K15ukuma rituals and use the loan Ltmi instead. The plausibility of the D and DJ alternative is strengthened by the meaning 'creator, maker' while 'day' from Cushitic is weaker in semantic motivation. In addition, there is a strong ritual connection of ritual between K15ukuma and Barbaig, and less owith any modern Cushitic group. In K15ukuma Istrafd (Istrat) 'god' 'C Barbaig aseta 'sun' is also common. In addition, 'teemi is 'day' rather than 'sun' which can be closer to a higher concect like 'creator'.



come from languages like Hadza or Sandawe which seem to have been borrowers only, a situation which is not convincing.

The area is characterized by a convergence of various speech communities, contributing their vocabulary in turn to each other. Hadza and Sandawe should not be any different, unless there is a special reason why not.

4.2.1.2.4 KtNyamweezi proper (Nz) (8.4%) (KtNyamyeembe - KtKanooggo - SiGalagaauza)

These three dialects appear to form 'KtNyamweezi proper', since KtDakama does not behave as closely to these three as expected. In addition, KtNyamweezi proper is not

homogeneous. It has its internal sub-divisions too. When KINyamweezi is mentioned subsequently, only these three varieties are meant. The unique creations are three words, representing 12.5%, while the areal vocabulary accounts for 87.5%, or 21 words.

(148) Unique vocabulary (3 words)

dance vi -saapa

walk (take a) -youmba (F22b), not indicated in F22d) (cf F21c gwtyoumba 'shifting abscess, usually in gums, perhaps due to periodontitis':

weight (β)U-ti(i)mbu, βU-timbe, (F22b βUtiimbu) (cfF21c-tuunga matiimba 'fasten the tendons of an unruly cow or castrated bull by adding some weights like short logs in order to slow down its wild nature' <F22?)

(149) Areal vocabulary, derivation, morphological innovation and borrowing (21 words)

heads waambo F24 waambo; G60 -yambo; M20 uwaambo; M30 ifiambo, amambo; Rufiji lwambo

heat-guma Corridor ku-kuuma? borrowing, because the voicing of /g/ and change of PB *o to /u/ in F22 is surprising if the word is from PB *-kom-- 'hit with a hammer'. No motivation is justified and this word cannot be inherited from Proto Bantu.

carry, convey -soomba F22b, F24a, F25 -soomba; Luhya xu-soomba; EJ24 ku-somba elepham n-zovu (F22e n-zoβu) (F23a/b) DJ60, M10/M20 -nzovu: loan from either DJ60 or M10/M20, because PB *uu → /vu/ is not resular in K1Nvamweezi.

forget F22a, F22e -laβIIIa, F22d -laβIIIa (F23a, F23b kulaβIIIa; F10 kulaβilila): unique creation, and then spread to those Zone F neighbours?

great -hanya (F22b; not in F22e): (cf G67 mhaja in ndombo mhaja 'elder brother') unique creation and a loan from F22 in G67?

hippopoxiamus -tomoombo (F22b, F10), (F22e -tomombo: F33 -toromondo (Ehret (pc.)) (F22a not sure)i-tonoombo (F24a), n-tomoombo (F24b): [M10] -ntomombo: unique creation by F22, and F24, and M10 seem to have borrowed from F22. Rufiji-Ruvuma -tomondo; F24a displays an 'imperfect' transfer where an alveolar nash as been used instead of the bliabial. Kidney m-fge (F22b, F1p, F23a, F23b) M20. [42e -nfigo: -F23a] or M20? (F8 *p -n*) knee F22a i-yūngo, F22e i-yūngo (not F22d), F24a i-yūngo, F10 i-jūnungo: D167i-yūngo (P21 lilungo) < PB*-dūngo. This is borrowed from elsewhere, like F10. since in F22 *d0 > /d0/.

kneed -sukaamba (F22b, F22a), -sukamba (F22e), tolaamba (F22d): M10 ukusukama: borrowing, with modifications: < M10? < PB *-kukam-? (cf G60 -fugamilo 'knee', PB *ku → su as in KiKinga)

lean (become), grow thin -gaanda (F22b) M30, G52, G60, N10, P10, P20 -ganda

lie on one's back -laala kansaga (not shown in F22d), F10 -laala kansaga, F24 -gona kansaga. Borrowing the second portion < F24?

return -suβa F22d -sσβa (F23a, F23b, F23c kusuβa; F25 kσsσwa; F24b kστuuβa) EJ24, EJ25, F25 -suba; D25 subya: borrowing, < F24 kστuuβa, spread to F22, then to F23 because limited distribution apart from Rukereβe, CiJita, KiKwaaya and KiLega, which might have borrowed from SiSuumbwa?

scorpion ka-miina, F22e (also F10, F23a, F23b) ka-mina:EJ23, EJ24, M10 ka-miina: [DJ60], F24 i-mina: < M10, and then through F22, spread to others?

six mukaaga (F22b, F24, F23a,b,c, F10): [DJ60], Rutara, North Nyanza, [EJ30], mukaaga: borrowing: < F23? < Rutara

spoil a child, pamper -seneka (not indicated in F22d): [M10] ukuseneka

squat -sσυπεσβala (not given in F22d), F24 kσsσηjσβala: Thagicu -cσηjσmara: G62 ukusuunzumala?; M10, M22, ukusunsumala; G33 kususumala?

stutter vi -gugumtla (F25, F23b) EJ23, G321, G37, G52, P21, kugugumila; E66 ukugugumila; E74akugugumila; E117kuguguma?; E64-yuyuma: DI65, EJ16, kugugumiza; G23 kuyuyumiza; DI67 ukugugumiza; G31 cigugumo?; G32 cigugumiza?: G64 kigugumizi < KiSwahili?

sun, sunlight |yυυβa The absence of lumi 'sun, sunlight', as in F21 suggests that these two related languages did not travel the same path if such a central object as the 'sun' is different, and they are so adiacent.

wwer, pleasum -seemu, F22d -seeme F23a,b -seeme (cf F21c -seemu 'sour') < F23? walk *ya < ya 'yo 's *-gi-'go' (other languages with -ya 'go': F24 ktya; M10, M22, EJ43 ukuya); loan: < Zone M

wall igelele F24a i-gelele, [F24] IO-gelele, M10 ulu-jelele < F24, especially F24b? If this is a loan from K1KImbb south (F24b), then F24 is interesting, because it has lost (or some speakers have), and re-acquired it from F22; i-gelele F22 < F24

The other groups, languages or dialects which share one word with F22 are D25, DJ65, Rutara, North Nyanza, EJ16, E17, EJ30, EJ25, EJ34, EJ43, Thagicu, E64, E66, E74a, G23,

G31, G32, G321, G33, G34, G37, G64, G67, N10, P10, P201, and P21. Although EJ16 and EJ17 belong to North Nyanza, they display those words as individual languages in which the

word was not found in the group as a whole.

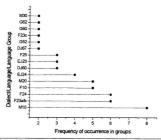


Figure 4.5 Areal frequencies between F22 (-F22b) and other languages

When KISukuma2 (F21 + F22b) and KINyamweezi (F22a/d/e) are compared, the sources of their defining vocabulary become strikingly different as Tahle 4.21 shows. However, this difference is a matter of degree since it is measured by the total number of shared lexical innovations found in the sample used.

Table 4.21 Difference of unique vocabulary source between F21 and F22

Language group	Majority sources of areal vocabulary (1) EJ40		
F21 (KrSukuma2 (with F22b))			
F22 (K _I Nyamweezi (without F22b))	(1) M10; (2) F23a/b, F24; 3 F10, M20		

One factor which seems to play strongly here is geographical proximity. The majority of the sources tend to be adjacent or close enough, as in the case of K1Nyamweezi and the M10 languages such as iCiPimbwe (M11), KiLungwa (M12), and CiFipa (M13), while EJ40 languages like iKiZanaki (EJ44) and its varieties like KiShaashi (EJ441) are close enough to KtSukuma.

4.2.1.2.5 SiSuumbwa (Sv) (84%) (SiSiloombo - SiYoombe)

Lexicostatistically, the shared vocabulary percentage between SiSiloombo and SiYoombe (SiSuumbwa) on the one hand, and those two with KiLoongo, on the other, is 65%, a rate which is not high enough for combining the two as one entity. The items shared are therefore entered separately as if F23c (KiLoongo) is not part of F23 (SiSuumbwa). Another important point to note here is that, while the JinaKIIya and GInaNtuzu node has only 14 unique vocabulary items, KISukuma (13 words), KISukuma2 (14 words), and KINyamweezi (24 words), SiSuumbwa, made up of SiSiloombo and SiYoombe among other dialects, has 74 words which need attention. These lexemes are different in significant ways from those in F21 and F22, as shown below. But their sheer quantity is also indicative of the fact that such

significant quantity as a marker of difference in vocabulary is a pointer to a different origin altouether.

(150) Unique vocabulary (11 words)

```
heard ka-saku, lu-saku:

crow n m-baga (F23a), -Baaga (F23b, F23c)
do ku-gema
door mu-zigo (F22d m(u)zigo) unique innovation?
embrace ku-buumbillia (F23c kubumbila):
hippopotamus n-g-uguma (F23c enguguma):
himger bu-tamo (F23a), Bu-tamo (F23b):
jow home mi-laambo:
om (go), go awey ku-puuna
walk ku-tuumbagila: innovation, < PB *-tambūk-web hiinde.
```

The unique words in F23a,b above are 11 out of the 74, or 15%, and the shared ones account for 85%. Such a small percentage of unique vocabulary in such closely-knit dialects as SiSiloombo and SiYoombe, compared to GtnaNtuzu and JinaKttya (29%), suggests an affiliation outside its own group to another, outside one where a relatively longer history with that group is indicated. Massive interference is also suggested.

(151) Areal vocabulary, derivation, morphological innovation and borrowing (63 words)

ufraid (he) kw-ooβaha (F10 ku-γoβaha) EJ40 -oβaha: derivation < PB *-yoba 'fear'

arrow m-wambi (F23a), m-wambi (F23b): DJ60, M10, Rutara, omwambi: (G61

uwudambi?)

uwudambi?)

sak for ku-saba (F23a), ku-saβa (F23b, F23c); Rutara, EJ16, EJ25, EJ30, EJ40 --saba -

saβa; (EJ22 ku-ſaba)

bahoun, αρκ η-kohe (F23a), η-kohe (F23b), eny-kohe (F23c), [Rutara] η-kohe; D160 , inkohe/inkohe (RutTooro enkerebe 'baboon' is it the name of the Rukereβe language (E124) and its people (related to their (βaKereβe) totem? of WaaMbuwe from mbuwe 'partridgelfrancolin', as a name given to KeeMbuwe (F34) by the KiiRangi (F33) speakers because of the likelihood of descending from the same group before splitting?

base of tree trunk i-ziinga (F23c i-ziinga) E54a, [M20] iff-siŋko; ici-siŋko; E62e itiŋko heer, Ilquor bu-sele (F21c ma-sele, F22d B0-sele) E131 bu-sela; G32, G321, u-pele?; M20 i-pele? (cf E113 kaabwanjare '...marijuana'?, the connotation focusing on the effect of the liquor. 'like marijuana'

hladder lu-hago Rutara oru-hago/olu-hago; E16 aka-hago; DJ60, ulu-hago, uru-hago, aga-hago

branch of a tree i-tabazi (F23a), i-taβazi (F23b, F23c): (< E123 i-tabagi: (cf E113, E124 ei-tagi; E114 ei-tagi; E114 ei-tagi; E114 ei-tagi; E108 ei-tagi; E116 ei-tagi;

hroth, soup mu-fwa (F23c mu-fwa): EJ23 umufwa; DJ60 umufa

build (a house) kw-oombeka (F23c kw-oombeka) Rutara, E55 -kw-ombeka; EJ31 xuxw-ombexa; EJ31c-yombixa/-xwombaxa (cf EJ44 yomboka; EJ44) okw-omboka; EJ402 kw-ombaka; EJ41 kw-umbaka; EJ45 by chumbaka; EJ45 kw-d0ka)

buttock(s) i-heende (cf EJ22 lu-hende [luende] 'anus', but enio/binio 'buttock(s)', and F21 no 'vagina' 14, < PB *-nio 'anus'); borrowing? F23 adopting and adapting the word from

¹⁴ Private parts and other taboo phenomena elicit all types of euphemisms and associations, favouring indirect references. For instance, while 'vagina' in most of Rutara is -mana, the same word except for vowel length in Western Highlands like KiRundi and KiHangaza is -mana 'god, creator'. In Rutara, by association, god = creator = vagina Is is <PB *-man-know?. > The knower', 'God', or is it from a different source? In Rutara-nio 'buttocks' suggests that, the regular word for 'vagina' PB *-yo was replaced by borrowing a word which associates 'vagina' with the creative powers of a god, and therefore became 'god', emana, although with time, even euphemisms become taboo. On the other hand, PB *-mio 'anus', < PB *-ni- 'defecate' seems more plausible, by derivation. In languages (continued.)

EJ22 as an opaque euphemism in the recipient language?). Also cf D25 mwende 'calf of leg', suggesting that -heende is 'a protrusion')

calf of leg m-fuundo (F23c em-fuundo): DJ67, Rutara em-fuundo; M31 ama-kundo: semantic innovation: < PB *-kundo 'knot'?

chin ka-saku DI60 aka-sakusaku; uru-sakusaku; aga-sagusagu: This may be one of the important keys to understanding the affiliation of F23a,b. Iconically, more complex is older, while less and simpler is younger, implying that the SiSuumbwa ka-saku is a reduction, indicating some earlier split from DI60.

climb, ascend ku-gegela DJ67 uku-gegela (remnant from DJ60, or innovation in DJ67 or F23a,b and spread to F23?

count kupeeta (F23c ku-peeta) East Ruvu ku-peta [Corridor] uku-penda (borrowing: why not ku-heeta?)

crawl, creep kw-aavuula, (cf F23c kw-aazuula, F21c gw-aagula) (gu>vu vs gu \geq zu): M20, G51 ukw-avula; (cf EJ kw-azula, EJ23 kw-azura; EJ14 okw-ajura, EJ21 kw-ajula)

crocodile n-saambi (F23c en-saambi, F21a informant not sure)):[Rutara] ensambi, ensaambi/en∫ambi

 $\textit{crown of head In-tooto} \ (F23a), \\ \beta \textit{w-ootooto} \ (F23b), \\ (F23c \ lw-otooto): EJ40 \ orw-oototi; \\ N14 \ lu-tutu; \ (F24 \ loo-looti?)$

drizzle IO-naanagala, (F23b) ma-naanagala, (F23c lu-naanagala, F10 ku-nayala (vi)): M10 -mvula ya ku-nagala (cf M31 akananagala) -nia -fula 'rain defecating') (haplology in F10 and M11/12?): borrowing, or genetic affiliation?

elephani n-zovu: DJ60, Corridor (cf F23c, EJ23, EJ24 en-zozu, < en-zogu < *-jogu) Morphological innovation when viewed from F21/F22 angle: gu > vu

forget ku-laβīla (F10 ku-laβilila): [North Nyanza] kwerabira; EJ25 oku-labilwa, ku-rabirwa: N14 kulibalila?

fork, hifurcation n-saaga, n-saga (F23b); (F23c en-saga): EJ41 in-zago. In most of the comparative lists, the item was one of the least answered, showing its obscurity to most of the informants.

grain (of cereal) ka-zumo (F23a), n-zuma, luz-uma (F23b); (F23c lu-zuma): Rutara lu-zuma/oru-zuma, ep-juma, aka-juma

grandfather gOOkO (F23a), guuku (F23b): EJ23 guuku; EJ24 guku; E51 guuka; [EJ30] guka; [EJ40] γuka/guga: Borrowing? < F21 goOkO because given away by the vowels? hair mu-saxi (F23a), mu-saxi (F23b): [DJ62] num[afx]

^{14(...}continued)

like KTsukuma, PB*-nio 'anus' and PB*-yo 'female genitals' are difficult to distinguish because of their phonetic similarity. It is not clear whether *-nio and *-yo were indeed separate words, given the potential for semantic shift. In JinaKTyya 'anus' is Uplindo, the origin of which seems obscure. Also compare Lußukusu kumsi (sg.), kimisi (pl) 'vagina' vs oRuHaya omusino 'clitoris'.

hure nakami (F23c nakami): Rutara nakami, akami; DJ61 bakame; (cf EJ13 orumi ('a huge hare'? <-kami?)

hate, detest ku-gaya (F23c ku-gaya): M12 uku-gaya

hide -bisa (F23a), -βisa (F23b): E117, E140, E125, D25, E46, P22, E131 -ku-bisa/-ku-βisa; -ko-βisa; E117, P22 kubisa; E131 xuβisa: borrowing from any of these languages which have both Dahl's Law and no glottalization. The expected form would be ku-hisa rather than kubisa or ku-βisa, just as 'to pass' is ku-hita rather than ku-bita.

hoe m-fuka (F23c emf-uka) Rutara em-fuka: EJ32 efuka

hump (of cow) i-baango (F23a), i- β aango (F23b): Rutara, EJ16. EJ17. i-bango, ei-bango in front of butoonzi (F23a), ku- β 0toonzi (F23b) (gi > zi) (cf F23c β 0toongi)

jealous i-buuba (F23a), i-βuβa (F23b): EJ31 li-buba; DJ64, [Rutara] ei-buba; M10 i-βuβa; DJ65 i-fuha?: M20 uwu-zuwa?

king mwaami (F10 mwaami; F24 u-mwami¹⁵): DJ60 u-mwami; Luhya o-mwami kneel ku-sika sivi (F23a), ku-sika sivvi (F23b): G31 ku-fika?; (cf EJ21 ku-teka; EJ22 ku-

teeka): unique creation or areal vocabulary?

knife mwaambi (F10 kaambi/twaambi): BJ16 a-kambe; M11 i-caambi: DJ66 in-tambi?

leak, ooze out ku-wa (cf F25c ku-wa): dua > -vwa: DJ60 uku-va

lend borrow ku-tiizya (not used in F23a), F23c ku-tiiza): Rutara ku-tiiza; DJ60 gu-tiiza 'lend'gu-tiira 'borrow' (cf DJ67 uku-liza; EJ22 ku-tiila 'borrow'; EJ25a oku-lisya) leopard n-gwe-E62f n-gwe, Vorth Rutara (Lulva), DJ60, n-g-gwe Although this lexeme is listed in Guthrie (1967/1971) as a Proto Bantu form, the presence of two proto-forms *-

is listed in Guthrie (1967/1971) as a Proto Bantu form, the presence of two proto-forms -cobt and *-gop for the same entity 'loopard' suggests that the origin of languages after the
first one (if ever there was one), is essentially multigenetic, on the one hand, or, it is an
innovation after Proto Bantu spread over a wide area, on the other. But one leveme may
also mean only one type of loopard among the many species of the animal, and therefore the
two items may not be referring to the same thing.

lost /gcy/ku-plus/fc25ck.w-bulk/Rutara. [EJ40].

tost (get) ku-puta (r2sc ku-outa): kutara, E125, D161, E116,-ku-buta-ku-bura; [E140] bura-/βora; Thagicu ku-tra/ ku-ura: semantic innovation, < PB *-bud- 'lack' (cf PB *-bud-'become plentiful or numerous')

love, want ku-siima (F23c ku-siima): EJ31c -siima; DJ66 ugu-siima

hung ma-haaha (F23a), ma-haha (F23b, F23c); D160 iri-haha'ama-haha; E143, Rutara-haha (ki-haa); E142 amaa; (<-opapa as in N1 li-papa; N12 ma-papa; M24;-papa) (cf G62, G63 ili-hafwa; G25 -hafwa; M25 -ma-pafwa; M20 -ma-pafwa; M20 -ma-pafwa; M20 -ma-pafwa; M20 -ma-pafwa; M20 -ma-pafwa; M21 -pafwa; M21 -pafwe; M14 -pafwe; M21 -pafwe

migrate ku-fuluuka (F23a), ku-fuluka (F23b, F23e): Rutara ku-fuluka/ku-furuka (cf EJ17 kubulika)

monkey ŋ-keende (F23c eeŋ-keende) Rutara eŋ-keende; DJ64 iŋ-keende moon kw-eezi (F23c kw-eezi) (ku- prefix): DJ60, Rutara -kw-eezi; EJ25 o-kw-esi moontam mu-gala: G65 ikidu-gala

¹⁵ From Nurse and Philippson's list, while our list had mutemi

mourning naku: EJ23 e-naku

night bw-iile (F23a), w-iile (F23b): [North Nyanza] o-bw-ire; (cf kilo < *-yid- 'get dark', from same root?): extension of meaning by derivation.

old -laala/n-daala: G23 m-daa 'old person', G321, G67, N11 -lala

parent mu-βusi: (BS ti > si): G63 mu-busi/ba-busi; EJ25, EJ34 omwi-busi <*-būt- 'bear (child, fruit)'

pig m-punu (not F23a) (F23c eem-punu): Rutara em-punu

porcupine li-pogote (F23a), i-nogote (F23b), e-pogote (F23c): [Rutara] eki-pogote, e-pogote: DJ60 iki-pogoto)

potato (sweet) i-ziizi/ma-ziizi: < Barbaig kasisa?

pour away ku-seesa (F23c ku-seesa): DJ60 ku-seesa/gu-seesa; Rutara ku-seesa; ku-ʃeeʃa) quarrel vi ku-soola: F10, F22d ku-soola; EJ16 ku-sola or < F10?)

refuse, say no. deny ku-kema: G321 ku-kema

return ku-suβa (F23c ku-suβa): EJ24 ku-suba; EJ25 oku-suba; D25 -subya

river mwiiga: North Nyanza (EJ15 mugga (LuGanda: iC →CC); EJ16, 17 mwiga): [Rutara] o-mwiiga

salt mwiinu EJ31c -yinu16; [G60], P10 u-mwino/u-mwipo; G67, N10, mwipu

satiated (he), have enough to eat (or drink) ku-haga (not given in F23b), (F23c ku-haaga): [Rutara] oku-haaga; [DJ60] ukuhaga; gu-haga/gu-haaga

xerver musaamvu: North Nyanza, EJ34 musamvu¹⁷ (Cf F23c musaanzu; Rutara EJ24 musanzu; musanzu; musanju; EJ22, [DJ60] muʃaapju) (cf EJ31 musafu) (An interesting case is M32 sebeni¹⁴ < English 'seven')

sharp (he) ku-ugiha (F21a, F21c, F22a, F22b, F22c -OUgtha): EJ41 kw-ugiha; [EJ40] okogeha/-oyeha; E46 -ogeha; E51 -Uhiga, E53 ku-gia (cf E54b ku-giba; F24a kU-Ugipa)

¹⁶ While de Blois (1975) mentions that word, native speaker Evelyne Namaemba (KiSembe (p.c. 17 September 2000) is not aware of such a word in the Lußukusu she speaks. It might be a dialectal variation or a loan, since table salt processed by modern methods is cumbe. KiSwahili cumw, while that made traditionally by extracting from plants is called xmm/pt. She also says that Lußukusu is changing rapidly.

 $^{^{17}}$ LuSaamia seems to use two forms, musamvu and citanu na ci β ili. This suggests borrowing, which can be of either one, or even both.

It is not clear what were the original CiNdali (M32) numerals and what happened to them after such a short contact with English, since Swilla (2000;304) does not explain, although she clearly says they were loans from the CiNdali spoken in Malawi (Malaaβi) where English was prestigious enough to replace even those morphemes considered relatively resistant to change by borrowing, although they are occasionally replaced (Swadesh 1950:157).

shiver ku-zuguma (F23c ku-zuguma, F21a kU-zuguma): [Rutara] ku-zuguma, kuzugumira; D166, D167 ukuzuguma; (any connection with D162 kugugumiza < guguma?) (cf also E115 kujugumera (E112 kutukumira? (tu >zu? or gu >zu? Why not gu > vu as a regular reflex in F23*)

snail mu-fweelo: DJ60 iki-fwelo/igi-fweera/gifyeelo

spittle ma-swaante: Rutara ama-cwante/ebi-cwanta/ama-cwanta

spread, smear on ku-siiga (F23c ku-siiga, F21c g0 [IIga): Rutara, EJ15, oku-siiga; DJ60 uku-siiga/ugu-siiga

squat ku-sukumala (F23c ku-sukumala): EJ23 ku-sukumala (cf EJ34 oxu-socomala)(cf 'squat in (149) above).

stick n-koni (F23c een-koni): DJ60 in-koni: Rutara en-koni

stone i-βaale (F23c i-βaale): Rutara, [North Nyanza] ibaale; ei-baale/ ei-baare;; EJ31c -baale; EJ34 li-bale

take clothes off kwaambula: [DJ60] ukw-ambula/kw-iyambura; EJ16 okw-eyambula: EJ43b ok-ombora; [Seuta] ku-hambua; (EJ31 xu-xwiyabuula; EJ17 keeyambalya?) tiicket i-sala: EJ43 eevesarar?

thigh of an animal si-taambo (F22b kU-taambo, F10 i-taamba/ma-taamba? F3 la kI-taambo 'thigh of human being'); E55 U-tambt?

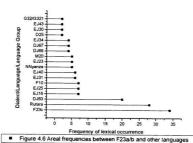
toskay Bu-leeto (prefix) innovation? tortoise fulwe (F23a), fuulwe (F23b): DJ67 fulwe; DJ66 fugwe? innovation, <*-kudu wean-child ku-syuusya (F23a), ku-s00sya (F23b): G61 uku-tusya? (M20] uku-tuzyaa? G62

uku-suufya which ye tyaani: M14 -cani:(cf M15, M22 icani 'what'); G33 ya kwahi? G36, G37 coni? whistling lu-guunzu (F23a), lt-gttnzo (F23b); D25 ka-gonzo

who ende:DJ60 inde (cf biinde 'what' in (150) and KiSwahili nani 'who' and nini 'what')

In Figure 4.6, not all languages are included. There are dialects, languages and language groups of one word shared with F23a/b, namely, Barbaig, E54a, E62E, P22, E62f, North Rutara, Luhya, Thagicu, G65, M14, G60, P10, N10, F22, E53, F21a, EJ15, Seuta, F22b, F31, G62, M31, G51, E74a, D162, M12, EJ32, D165, G31, M11, G23, N11, and G63.

From the qualitative results of SiSuumbwa in relation with other languages, some scenarios can be proposed in the determination of its origins and evolution, as a function of contact with



other speech communities. Some proposals are necessary because the results obtained from analyzing the vocabulary cannot reveal the "truth" embedded in them unless they are interpreted correctly.

While the historical events creating languages remain the same, with the enormous gaps in knowledge that we have, only flexible interpretations of what is available can approximate what really happened. With this caveat in mind, some three scenarios are considered. Firstly, the monogenetic approach can be taken by assuming that the affiliation of SiSuumbwa to some of its neighbours sharing its vocabulary is genetic. To weed out the non-immediate contenders, a process of elimination can be applied using the numbers obtained in the results.

EJ25 features as prominently as F10 and EJ16, indicating distant affiliation. The major dilemma here is the cut-off point and the criteria for judging whether a higher number of shared lexis necessarily means close genetic affiliation especially where all candidates are based on innovations.

The answer is a qualified affirmative because deep time depths may be shown by lower counts as more words are lost and replaced, while higher numbers may either indicate common history or only a more recent relationship based on heavy borrowing. Swadesh (1955:129) recognized the problem of such modifying factors in lexicostatistics. For instance, there may be heavy borrowing without any immediate genetic relationship, as in the case of English where the vocabulary from French is about 70%. Because all counts are based on innovations, all counts of similar innovations are supposed to be important, either as indicators of genetic relationship or borrowing. To isolate genetic affinity from similarity due to borrowing, the second scenario below can be invoked, so that loans remain loans only. When regular phonological, morphological and semantic overlaps occur between two or more languages, they normally point to a common history between them. Since lexical innovations alone are not an absolute measure of affiliation when no other facts are known, the higher numbers are reasonable predictors of genetic affinity when other criteria are considered to

support those numbers. In terms of numbers alone then, the best contenders as the genesis of SiSuumbwa remain Rutara and Western Highlands. As a hypothesis, only Rutara and Western Highlands (D160) can remain as possible origins of F23. With monogenesis, other approaches can be used to eliminate one of them so that only the most consistent group remains. Innovations on their own cannot do that. The phonology can help by picking the most salient and diagnostic innovation(s), as shown in Tuhle 4.22 below. One of the single most important pointers is the reflex *gu > vu in SiSuumbwa and *gu > zu / ju in Rutara, and which eliminates Rutara convincingly as a tree from which SiSuumbwa branched. This also helps classify KiLoongo with Rutara.

Table 4.22 Phonological affinity between Rutara, Suguti, Western Highlands, KiLooggo and SiSuumbwa from qualitative evidence

Innovation based on	Rutara (EJ21/22)	Rutara (EJ10, EJ23/24)	KiLoongo (F23c)	Suguti (EJ25)	Western Highlands (DJ60)	SiSuumbwa (F23a, F23b)
*tu	с	с	c	fu	pf	s
*du	ju	zu	zu	fu	vu	vu
*gu	ju	zu	zu	fu	vu	vu

In this first scenario, similarity and difference within one large group is displayed, depending on individual language history. The effect of contact with other languages might have resulted in heavy or light borrowing from them depending on the nature of the interaction with each group. Borrowing from other languages as a marker of linguistic interaction is a phenomenon which is the norm than an exception, as Andersen (1989:11) comments with regard to the non-linguistic factors in linguistic descriptions. He notes that what are normally called non-linguistic factors to innovation are actually part of the linguistic process. Divorcing contact from regular linguistic realities can only be unfortunate. Many lexical or phonological sources in SiSuumbwa, for example, simply show how dense the interaction networks were as a linguistic fact.

The second scenario suggests that there was a core of F23 speakers, as a J language or dialect. Later, other speakers from other languages or dialects, especially from the vicinity (DJ, EJ, some F20, M10, M20), among other groups, contributed some items depending on the nature of their contact with F23. This means the other groups joined SiSuumbwa as semi-autonomous, co-ordinate groups which maintained their identity, but at the same time identified with their host, resulting in mixed codes. What the original status of F23 was remains the question, because it can be one of F21, F22, EJ10/20, DJ50/60, M10/20, or none. This scenario is plausible given the fact that speech communities are not normally hostile to each other, so that it is possible to acquire vocabulary from languages in contact. Between them, one contributes more dominantly than the others as a matter of degree only. The influence in such a situation becomes mutual, hence the shared features of innovation.

This scenario implies multigenesis in which a language is composed of several independent languages from the same family (Bantu) brought about by the cooperation of different people

speaking different languages and whose identity can only be revealed by a qualitative lexical analysis. It is the nature of a melting pot like North American French and English: sailor's English and français maritime. This is a situation which creates a unique mixed language characterized by co-ordinate linguistic features drawn from the contributors, the prominent features of one being a function of the perceived relative importance of the contributing language. With this interpretation, simple monogenesis is discounted in SiSuumbwa. Languages are spoken by people with particular histories, values and attitudes which impinge on their other social institutions like language. The more open their cultural systems, the more mixed their languages, and vice versa. SiSuumbwa illustrates that two or more speech communities can merge not in an automatic adversarial superior-inferior, conqueror-conquered relation, but as coordinate contributors to a whole. It is a language created by convergence rather than one with diverging dialects from a single proto language.

The third and final scenario is that of a common ancestor between F23 and the others so that DJ60, EJ10/20, EJ25, EJ40, M10 and M20, among others, are descended from the same proto language, the shared innovations being earlier forms in the proto language before they split, as a case of divergence.

These three scenarios are not impossible. As has been pointed out in Chapter 2, much is still unknown in these languages. But as a working hypothesis, SiSuumbwa is affiliated to DJ60 as the high frequencies and limited phonological facts show.

4.2.1.2.6 Qualitative evidence and patterns in K.Sukuma, K.Dysumweezi and SiSnumbwa

The linguistic picture from the shared innovations between F21, F22 and F23 indicates that, nor only do F21 and F22 share different innovations between them, but also that they show the same difference from F23, as shown in Table 4.23. This supports the notion that they do not come from an immediate linguistic node, with similarity of high retention rates between F21 and F22 accelerated by inter-borrowing. This explains why only F23 has BS and consistent glottalization, only F21+F22b have DL and voiceless nasals, while F22 has neither, although traces of those processes are found in all 3 groups because of inter-borrowing.

Table 4.23 Difference of unique vocabulary sources between F21, F22 and F23

Language group	Majority sources of areal vocabulary (1) EJ40 (1)M10/M20, Thagicu, EJ40 (1) M10; (2) F23a/b, F24, (3) F10, M20		
F21 (KrSukuma)			
F21 + F22b (KrSukurna2, with F22b)			
F22 (KıNyamweezi, without F22b)			
F23 (SiSuumbwa without F23c)	(1) F23c. (2) DJ60. (3) Rutara		

To illustrate this question of inter-borrowing. Table 4.23 shows that the source of M10/M20 vocabulary might be F22 through F22b, while the source of Rutara lexis in F23 might be F23c (KiLoongo), a Rutara language whose speakers have been adjacent to SiSuumbwa speech communities for an unknown number of years. The influence of KiLoongo on SiSuumbwa is indicated by the highest number of shared words (33 words) out of the total 76. The presence of E50 (Thagicu (Central Kenya)) vocabulary in F21+F22b indicates a genetic

affiliation which is also supported by the presence of DL and 7V in Thagicu, as in F21+F22b.

This possibility is taken up again in 4.3.

```
4.2.1.2.7 Ul (83%) (KmaUshoola - Kmilaamba C)
```

According to the vocabulary items available to the author, the 13 lexemes shown in (152) are unique to F3 larb at a percentage of 42%. This suggests a long common history since the unique count is one of the highest, if not the highest, in all cases of unique creations within dialects. The rest are shared by other groups, representing 58%. Such shared items suggest interaction of either F3 larb speakers moving to other places and then coming back to F31, or those of other languages coming into contact with F31 speech communities. Another scenario is bidirectional movement of speakers as a sign of mutual linguistic contribution and enrichment.

(152) Unique vocabulary (13 words)

```
ахе т-рооро
```

heer n-tolo (cf F24 nt111)

day IU-toondo (cf F21c ntoondo 'tomorrow')

drink ku-kopa

press out (oil, seeds, sugar cane) ku-kasima

push ku-guma

salf mO-leegge, F31b mul-eegge (F24b mu-leegge) (cf G35 m-kere): where F24b suggests borrowing from F31ab beause of the occurrence in ord dialect only, while the vowel 4b the prefix of F24b is also suspect, given F24s high rate of accurate reflexes from Proto-Bantu shiver kO-kikima iconic creation as a group's way of perceiving shivering like animal sounds in various cultures, which, though come from the same animals, are perceived different people.

sister mu-guli, F31b mu-guli (cf G42d ki-goli 'young girl')

stutter ku-fekema, F31b ku-sekema

today na n-teende (cf G52 na-lelo, with prefix na- 'with, of as in F31a, F31b: any relation?) woman mu-suungu/ a-suungu

(153) Areal vocabulary, derivation, morphological innovation and borrowing (18 words)

brother, relative montowa, by derivation < PB -nto 'person'?

hand (left) ŋ-kɪgɪ, F31b kʊŋ-kɪgɪ (F24 mu-kigi!º): N11 kumaŋ-gigi; G60 ku-ŋigi/-ŋigi/ ŋigi/-ŋigi; [G50] ku-ſigi/m-kii; P21 kuŋ-ciji;(cf [P10] kuŋ-kɪya/-kiya

jaw (bone) n-zagasa, F31b n-zakasa (F34 ŋ-kaasa)

prominent (be), put out ku-punIla dissimilation of two consecutive syllables with bilabial onsets: < *-pum-'come/go out or away'

pnff adder k1-s00pa, F3 lb k1n-s00pa E53 ki-ua? (In Meru Imenti, *p > Θ , but not s > Θ (Nurse 1979b), making the word a possible match).

quench, extinguish kū-dibya (< -dimya < *-dim- 'extinguish', (but why in KɪnɪLaamba should this be: *m → b and *di →di? Is it morphological innovation?

sharp (he) kw-iyooptka, F31b ko-yoptka E51 -ohtga (< -yoktpa, metathesis)

s/kU-kikalaans, F31b kU-ktkalaansa E442 go-ikaransa (cf E54b gu-ikaran6i; E54a gukaran6i; E52 gw-tkara n6i; E55 kw-tkala n6t; E51 sk-arkan6t; E53 tw-tkara n6t; N25 a-xale pansi; G23 ku-ikaa fi; G36 kukala hasi; G52 kw-ikala past; G66 ku-kala pasi; M22 ukw-ikala pansi; M24 ku-hala pasi (< *-yikala 'stay' + *pa 'at' + *-ct' centribland') (note: Standard KiSwahii (G42) - keti < Northern KiSwahii (G42) - keti < kala iti 'si there (on earth')

xore ŋ-kooŋko F24 ŋ-xoŋxo^{xo}; G60 iki-kooŋo/-ŋoŋgo/ŋoŋo/-koŋo (cf EJ31 с -gopjo?; ЕJ34 е-kopjo)

spoil ktyonoona (F24-noona²¹): [J60]-kw-onoonekala/-kw-onoona; EJ17 kw-onona; M10 uko-onona;

¹⁹ This word appears in Nurse and Philippson's 1972 list, suggesting idiolect variation, depending most probably on the bilingualism of the informant, his/her area of residence and the probability of borrowing.

³⁰ Recorded in Nurse and Philippson's CBOLD list, and the speaker from KIKIImbt North (F24a) responded by giving kiloonda and ipxopxo, while two of the F24b respondents gave kiloonda only.

²¹ From Nurse and Philippson's list, while our list was kUpokulya according to the training in KiSwahili, which was kupofua 'to blind' from 'spoil, blind' in which the KiSwahili rendering does not include 'spoiling' as such because it is general, while to 'blind' is a specific form of spoiling.

spot, speckle -dyoa/ma-doa (focus on the singular form especially where palatalization is common²³) (cf languages with non-palatalized forms: G24 -doa; G32 doa/ma-doa; E62d -dova/ma-dova: E1403 if-dova

stranger, visitor, guest mu-geenda [G60] umu-geendzi,(< PB *-geend- 'go' 'the one who goes (or passes, does not stay') (cf El34 omulu-kendwa; G35 u-menza?))
suffer, bear patiently ku-gigimtTlya, F31b kot-ktgigimtTlya (cf F21c gw-gimtTlja 'endure')
sweat (ii) -vtla (cf F21c g00vtla 'to sweat')

thigh (human animal) kitga G24a kiga 'human thigh'; [P20] ciiga/ ciya/sija 'human/animal thigh'

tomaton **n-tole** (F21b i-tole/ma-tole; F22d mu-tole/ma-tole) Dl67 iβi-tole (vya mbwibwi) tree **kyota/ma-kota** (widespread in east Africa, see Nurse 1979b) (ikota (Class 5) — kyota (regular palatalization in Kɪnɪl.aamba)) (cf β0-gota 'medicine' in (147) in KɪSukuma/KɪDakama sa na real feature which can also be observed in *Tuble 4.9*). μρ. above **kyanpa**, F31b **kyannia** (F24 kO-caapla) G60 ku-kyaŋa/ku-caapa ku-Japa; E74a kw.-apa; [E3at Ruvu] ucapa/ucapa/ucana² (cf M20, M30 ku-mwapa/pa-mwapa.

From Figure 4.7, F24 and G60 sharing 4 words each with F3 la/b suggests a certain historical relationship, of either contact and mutual borrowing only, or genetic affiliation. On the other hand, as in other cases above, the presence of F24, G60 and all the other languages' vocabulary in F3 la,b might also suggest cross-immigration into and from F3 l by speakers of other languages and their continued use of some items from their language. This is often the case, especially at the edues of different speech communities.

²² Palatalization in KInILaamba occurs before class 5 (di/dI or li/II) and 8 (bi/bI); in many tense markers like -i- present, -ki- future, -ile perfect (Nurse 1979b;31).

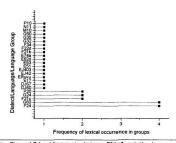


Figure 4.7 Areal frequencies between F31a/b and other languages

4.2.1.2.8 KIKIDHD (Km) (82%) (KIKIDHD North and KIKIDHD South)

PB as in E62e -binda, G37 -winda, G42d -winda, G52, P15 ku-vinda)

(154) Unique vocabulary (13 words)

```
hlord caaji (F24b) unique creation as a definer of F24.

down-httr (F24b) (cf Proto-Kalenjin krvk 'door'?): unique creation or borrowing?

graxs ma-sanjic (F24a), i-sapji (F24b)

gruel, light porridge m-paap0

how i-sit (F24a), i-siji (F24b)

how the (F24b) (F24b) (F24b) (F24b)
```

leaf (of tree) i-titi/ma-titi (isaapi)/masaanji F24b)
navel *-wuumbu (F24a), pixvuumbu (F24b) (cf F21c jijluumbu 'pubic area')
pregnancy mii-tungo (F24b) unique creation, as a euphemism, literally meaning 'something
which is wrapped, and therefore fastened safely inside', < *-tung-'tie up'

search for ku-puuga (F24a), ku-puuga (F24b)

sound, cry idoolo (F24b) unique creation, or from specific sound rather than generic.
spit k0-tya matye
stuter k0-tamaantama

The 13 words above, or 33%, are unique to K1KIImbū, a high percentage which indicates that F24 and its dialects has a long history of internal cohesion. The areal vocabulary, at 67%, shows the effect of neighbouring languages. The influence of K1nyamweezi is obvious from Figure 4.8 below.

(155) Areal vocabulary, derivation, morphological innovation and borrowing (26 words)

hanana -dooke (F21, F22 -dooke) P15 ndoki < F22 < 21 (because of DL) < EJ? due to proximity

hark of a tree i-pata (cf F32 i-bada/ma-bada (F32a, c), 1-bada F32b)) < Barbaig badacanda geta (geta 'tree') < Proto-Southern Nilotic 'pertat' bark (of tree)' (Rottland 1989:221)? or did Barbaig get the word from F24, and F32 got if from Barbaig'

hlood mu-gazi (F24a) F22a,b,d,e mu-gazi; F23a,b ma-gazi; N12 ŋ-gazi; borrowing < F23a,b because F22 has no inherited BS where *d > /l/; (cf caaii (F24b))

howstring ŋ-gtsa (cf ŋgusa, a proper name in F21): M21 lu-kusa lwa wulapwa; M24 ahakusa (spelling error from ama-kusa?); E123 omu-guha gubuta: s > h? climb ku-taanta (cf F22d, F25 ku-taanda; F10 ku-taanda); unique creation, or is it only one

type or way of climbing, an innovation which is common in all verbs of motion?

dance (vi) kw-iigeya (cf F32a i-yeya; F32b w-IIyeya; F32c g-iyeeya 'imitate': borrowing: <

deny ku-siita (F33 ku-siita; F34 o-siita)M31 ku-sita; (cf G61 usiiti denial') (cf P25 kw-ita?) < Proto-Southern Nilotic *REEt²³ 'deny, refuse'?

F32?

grind coursely ku-balaaga (F24a), ku-balaaga (F24b) El25a oku-baraga; El41 ku-baraga; G61 ku-balanga; El22 ku-baranga; G62 ku-balaasa; G63 ku-baladzula; G34 ku-balaza; E54b ku-bararta; P14 ku-balahya; (cf E61 i-barangata < PB *-pad 'scrape', e.g. as in M21 ukupalala?' (cf G42d ku-paaza); borrowing: < G60?

grow (of plants) vi ku-leemba (F25 kul-eemba): unique innovation by metathesis, as an idiosyncratic development: < kulemba < kulema < kumela < PB *-med- 'grow, sprout'?

^{23 &#}x27;R' is a consonant which stands for an approximation without full feature specifications, and therefore can be flexible (See Rottland 1989:220)

hide ktr-sweexa (F24b), kt-fisa (F24a). The two words in the two dialects might be from two different sources, or from one source because of their irregular shape in KIKIImbU where there is no ll deletion nor $^*p > \beta$ as observed in the respective words: North Nyanza ku-kweka (cf D166 ugu-seleka; D167 uku-seleka; Rutara ku-seleka/ ku-sereka; ku-feleka/oku-fereka; and ktr-fisa: D25, E46, E131, E140, E125, F21, F22-fisa-bisa, F23-bisa (reflexive): borrowing: < Rutara and F21/22 for the two words respectively?

in front of ktp0-loongolo (F24a), ktr-loongolo (F24b) (60 kuwu-longolo, pawuloongolo; East Ruvu, N10 ku-longolo, ktu ulongozi, palongolo; [M20] kwi-longoleta; Seuta kulongole. See also G50, P15 ku-longolo in [G40-loong) in firoto ri in (145) KTSukman jawhone ma-zaktola (F24a) (F22e i-zakula/ma-zakula); [M10] i-zagula/ama-zagula: unique creation, and a loan in F22e and M10 because of that phonological giveaway /u/ in F22e instead of 70/7.

journey mu-sIIpjo (24a lugeendo) (F31a, F31b mu-sIInzo; F31c lu-sIInzo/n-sIInzo; F32 mu-heepjo/mu-hiipjo): unique creation, and borrowing in F31 and F32 < F24?

maize i-gaagwe/ma-gaagwe M20 in-gagu, aman-gagu/amagagu:

mother maayı (F25 U-maayi) E62d, [EJ40], G35, G61, M10, M20, [M30] EJ25, u-mayi/maii; EJ31 mayii;

mushroom wiipwa (F24a), wIIpwa (F24b) [G60] u-wiipa

out (go), go away ku-fuma borrowing: < F22?

potato -kafu (F24a) (F22 -kafu) borrowing: < F22?

serw Ku-suma F22, [F21] [F23] [Seuta], G321.Corridor -suma: borrowing: < Zone M and spread to F21/F22, <PB *-tum-, as in F31 -tuma? (cf KiKinga: PB tu → su (Nurse 1979b:459, also Seuta: KiKinga as nearest source?))

sniff, smell out ko-tuca (F24a), ko-tuuca (F24b): borrowing: < Alagwa tsu?ut- 'to sniff' (See Ehret 1980:199)

spider n-sumaf-suma Bu-taanta literally "weaver of webs' (cf DJ67 tanda; G35 tandabu; M21 etandawulwe): borrowing, from a language with BS, because Kt/filmbo is expected to have -tuma instead of -suma 'PB *-tum-'sew'. Name is derived from the spider's activity. take leave of 'ku-daabya (F24a), ktd-daabya (F24b) (F22-daabya): borrowing: <F22. with DL. The regular reflex of F24 is like in F23 or F10 ku-taabya. In all the more than 100 varieties available for that word, only F22 has that word, and it is not well-formed in F24. In F21 it has connotations of 'bidding farewell' to a medical apprentice after graduation so as to practise on her/his own.

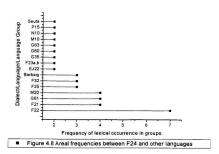
walk ku-ya (F22a, F22d, F22e): M11 kuya ulwa mulu; E143b ukuya magoro: borrowing < F22, by M11, and perhaps E1439? < PB *-gi- 'go' (cf-ya 'go' in (149) in K1Nyamweezi proper (F22a, F22d, F22e).

wet (get) ku-saapa EJ22 ku-faaba, Barabaig faba

word, affair mpola [M10] impola unique creation, then loan to M11/12? (cf KISukuma (F21) greetings: 0tf mola 'Are you well?' Literally 'Are you a word?' that is, 'Do you have any word?' = 'Are you well?')

zebra n-sengele G63 i-seengele, G61 n-sepjele, M24 in-sepjele: borrowing: < Barbaig singiyed 'zebra')

The role of geographical proximity in lexical similarity is displayed well in this case of



KIKIImbū and its neighbours like KINyamweezi, Corridor-Nyiha languages (M20) on the one hand, and by the Southern Highlands languages like eSiSaangu (G61), and others, on the other. The farther away a language, the more unlikely the occurrence of shared items, and if such occur, then it suggests contact in the past or genetic affiliation. The F22 items are presumed to be mainly borrowed, because they skew the regular KIKIImbū reflexes. So far there is no known pressure of G60 over F24. The similarity therefore points to possible contact in the past and present, involving constant interaction over a long period of time. This is especially true because many languages share vocabulary with F24, including the following dialects and groups, which share one word each with KIKIImbu: N12, EJ23, G34, E54b, Rutara, East Ruvu, F22e, F31, EJ25, EJ31, Corridor, F22d, F10, F33, F34, M31, EJ25a, EJ41, P14, G50, EJ40, E62d, M30, G321, and Alagwa.

4.2.1.2.9 SN (81%) (K.Bukuma2 - K.INvamweezi)

Out of the 21 words 5, or 24%, are unique to K1Sukuma2 and K1Nyamweezi. This indicates a closeness which is significant historically, suggesting a genetic affiliation. The remaining 16, or 76% of the total, occur in other languages as well, although their forms may not be necessarily identical with those found in K1Sukuma2 and K1Nyamweezi (SN).

(156) Unique vocabulary (5 words)

```
affair, word mayo (F21) (< mu-hayo), mu-hayo (F22) chase away-peeja (F21); -peezya (F22) < -peela 'run', -peeja/-peezya 'make run' (run-peela (F23) kupela<sup>3</sup>, not given in F22d) escape -plla (not given in F22d) escape -plla (not given in F22d) escape -plla (not given in F22d) escape for -koofa (F23a, F23b -koofa), a loan in F23. tick fjuundya (F21), ŋ-kuundya (F22) (F22d l1ŋ-kupa (not related)
```

(157) Areal vocabulary, derivation, morphological innovation and borrowing (16 words)

baboon η-gʊkʊ; ηg-uku (F22e); η-kʊkʊ (F22d) (F22a not sure) M11 ama-kuku; [EJ30] inguke; DJ62, [EJ25] in-guge; EJ40 en-goge/en-yuye E46 η-goge (cf EJ32 in-gugi)

²⁴ Only in Nurse and Philippson's list, our list has kw-iiluka/kw-iilt/ka 'run'

hark of tree i-gula; i-guula (F21a); I-gula (F21c); i-gula (F23) (F21b word not mentioned) (F23 < SN because in F23a,b gu > vu and F23c gu > zu); [DJ60] iki-gula; Corridor -gula/-cuula/ifi-zula/ivi-zula; G64 i-cula; E124 e-cula/el-yula (cf N14, P14 ii-jola/ma-jola)

hrother-in-law, sister-in-law ŋ-kweela (F21) mn-kweela (F22) innovation by derivation <*-- kutor marry, copulate' Literally, 'the one who was married,' or 'the one who copulates' to contrast "-ktbe' relative by marriage' restricted to in-laws

dust. cloud of dust In-βauβu. (In-βoυβo F22a) (F23a lu-buubu; F23b, F24a It-βuuβu; F23c lu-βuuβu) EJ34 o-lufu; North Nyanza em-fufu?: Derivation PB *-bu 'ashes' full (become) -okala (F23a, F23b -okala) loan to F23 because it is limited to F23 only.

get, obtain -paandIka (F23 -paandika, F22a not certain) derivation from PB *-pat- 'hold', loan to F23 because regular process in F23 is *pa > ha

hump of core ID-guku (not mentioned in F22a, F22b) (F31c ID-kuku; F32, F34 -kuku; Thagicu-guku/-Buku; E74a -fufu; D160 i-pfupfu/-buфu) borrowing: S Barbaig hukta < Proto Kalenjin "yUUk (Rottland 1989), or < Ehret (1971-96) claims the source is Proto Southern Nilotic "yuuk ("vuuk) 'cow's hump'?

Instem -degeleka (F23b -degeleka; not mentioned in F22d) M11 uku-tegeleka; E125 tegerersya, E140 -degerera; E46 -degerva; (cfM20 Quku-teyelezya; E3b1 c-regidifidifia 'listen to' (de Blois (1975); D166 ugu-tega amatwi' to snare with the ears'; D167 ukukutegeleza?; East Ruvu ku-tegeleza; G23 ku-teyeza/Ku-geza; E143 -tekeresa; F24a -tekeleza; E74b -tegeleya; F33 kU-teerera; F34 o-teererera < PB *-tegs-'trap'? innovation by extension of meaning.

resemble very clasely -ikola (F23a, F23b kw-iikola; F24a,b kw-iixola) Corridor uku-kolana (cf F32a gw-iixwere; F32b g-iixwa; F32e g-ixwa, where *d or *i is sometimes lost) seize -diima (F24a -diima) (cf F25, Corridor ku-lema; (EJ22 ku-zimatila? P12 ku-limba?) E134 oxu-dira (missnelline?)

speeds yoomba (not shown in F21b) (F23a, F23b ku-yoomba) E116, E124 ku-yomba; E135 yomba; E134 oxu-yomba (cf E117 kw-omba 'quarrel'; G52 ku-womba: "-gomba as in, Seuta, [East Ruvu] -gomba?", 'egomba-na (reciprocal as in G24, G31, G52 -gombana) (cf mbegu > mbtyO: is it the same process of PB *g loss which in SN is irregular, found in a few words like these two? "g-loss in non-high contexts is regular in E60F24, some Sabaki, F33, F32, some Thagicu (see Nurse 1979b.462). Source of -yoomba therefore may be one of these languages/troups?

squeeze (milk), milk -feema (F21). -syeema (F22a, F22e), (F22d has -kama - not related) (F24a-feema, -syeema³³), F31 a-feema (FE132 xufela (misspelling²) (mispelling²) (mispelling²) (mispelling²) (mispelling²)

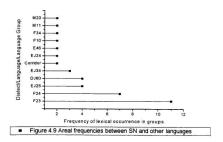
siimbuulu; F23b simboolo; F24 kiimbolo) (not indicated in F21b, F22b and F22a)(F23 siimbuulu; F23b simboolo; F24 kiimbolo) EJ441 kembulu

swar Bu-logo (F22a, F22e wu-logo, not shown in F22d) (F24 wu-logo) G61 uwu-lugu; M20-ugu; G66 lilugu; (Proto Kalenjin *luk 'war, raid' (Rottland 1989; or < Proto Southern Nilotic *luk 'raid', Ehret 1971).</p>

²⁵ In Nurse and Philippson's list

white—aape (not given in F22d) (F10, F24a—aape; F23a, F23b—epe) Imnovation using the intensifier instead of the lexeme: «*-yelu pe, where pe is an intensifier. KiSwahili (G42d retained both, with regular loss of *!: -eupe. (See Nurse and Hinnebusch 1993;290, 583—4) wind ID-yaga, Jaga (* mu-yaga as in F22, F23) (F10 mu-saya) Rutara, E125 omu-yaga: D160 mun-yaga; Borrowing; < DVIET mu-yaga;

Compared to the unique creations, shared vocabulary due to borrowing or contact generally



predominates at 16 words out of the 22 total. Such skewed results in favour of external sources of vocabulary support in part the idea that the sources of KtSukuma2/KINyamweezi are many and varied, as Batibo (1992b) points out for KtSukuma. The other languages or groups sharing one word each with SN are El30, DJ62, EJ40, G64, EJ16, G61, G66, N14, P14, F3 lc, G32, Thagicu, E74a, EJ17, F3 la, Proto Southern Nilotic (PSN), Barbaiu, DJ66.

DJ67, East Ruvu, G23, F33, F25, EJ22, P12, G52, EJ441 and Rutara. Those sharing two or more words are represented in Figure 4.9.

4.2.1.2.10 Ar (80%) (GiAhi - GIRwana)

Only 7 words are shared by these two dialects, indicating that their history as separate dialects has not been a long one. Out of those, 3 (43%) are unique, supporting the idea of a short period of separation. On the other hand, it is difficult to predict whether a longer list of words would make a difference in the percentage of unique vocabulary. As it stands, the distribution between unique and areal vocabulary is almost equal, 3 by 4 words respectively.

(158) Unique vocabulary (3 words)

arrow i-Ruumbo (cf F21c Ikuumbo 'arrow shaft') listen -Raaya (F32a), -taraya (F32b) mushroom mpoRa/ma-mpora

(159) Areal vocabulary, derivation, morphological innovation and borrowing (4 words)

hranch (rrec) i-sanjia M14 lu-sansa (cf EJ31 c-sagia: EJ34 esaga) < P8 "-canj- 'spread': derivation and extension of meaning (not from P8 "-canju-branch') 'chuse (novny) -jupra (F32a), -jupra (F32b) (cfG64 xu-pica: EJ11 kw-iruca; E51 -pukia; E54s ku-rungia: E55 K0-drugga; climb, assenti-nanatta (cf F24 -nanata*' climb') climb, assenti-nanatta (cf F24 -nanata*' climb')

hunt Useempa (cf G33, G35, P11 ku-pelemba)

²⁶ From Nurse and Philippson's list.

4.2.1.2.11 KnttLaumba Lm (78%) (Kntall/shoola - KntLaumba (* - Kntltaumba)

Of the 25 words, 10 or 40%, are unique to KnttLaumba (F31). The rest occur in other neighbouring languages, although there are few cases like M30 languages which are not adjacent. A high number of unique words from the total number of innovations indicates a historically valid and close-knit finguistic group, especially when it is larger than a language, incorporating several dialects. When the majority of the innovations is composed of shared words, the claim of historically based grouping becomes less certain.

(160) Unique vocabulary (10 words)

```
he, hecome kO-tula (F31a, F31b), kO-tula (F31c)(cf G23 ku-tuka?, G51, G54b gO-tulka?)
get, obtain kw-iligia (F31a), kO-ligya (F31b), kO-lija (F31c)
leaf fof tree) IOka (not shown in F31c)
lean, hend (down), kO-tuna (cf F21 c -tuna 'bend the knees and lower body vertically.
especially for women, as a sign of respect):
maize m-pokile (F31a) -pokile (F31b), kim-pokile (F31c)
mourning skile (not mentioned in F31c)
specar n-dilima
her ministru (F31a, F31c), mintyou (F31b)
```

wife mo-strongo (F31a, F31b), mu-strongo (F31c) (cf P23 m-jangu/p-jangu?

The following 15 words, though they occur in other zones outside Zone F, are peculiar to KINILaamba only within Zone F, representing 60% of the 25 words identified. Where a Zone F language or dialect uses or shares such a word, then it is likely to be either a loan from KINILaamba, or the language borrowed it from the same source.

```
(161) Areal vocabulary, derivation, morphological innovation and borrowing (15 words)
```

carry, convey ku-keeŋka (F32 -keeŋka) M31 u-kwega? G65, EJ25, EJ40 -yeya; N12-gega?

climb ku-naaŋkɪla (F31a, F31b), ku-naaŋɪla (F31c) EJ41 -yanigira?

dust, cloud of dust lu-ŋkuundī (F24b lu-ŋkuundī, F25 lu-ŋguundī [G60] -ŋkundi; M25 i-kundi

louse m-pani F22a, F22e, F24 m-pani; M20 m-pumi; [East Ruvu] mani/mani

milk ma-sUUnsU (F32, F33, F24 ma-sUU(n)sU) E65, G22, G50 ma-susu³², DJ64, M22 amafyufyu(cf EJ13 ama-fununur) EJ15 ki-sununu?) Widely distributed generally. penis ki-loga/mi-loga (F31a), ki-doga/mi-doga (F31b), i-loga (F31c) (F32c)-i-Uya: F22e.

pents #-togarmi-roga (F31a), Ki-oogarmi-roga (F31b), Hoga (F31c) (F32c)-F0ya; F22e. F24 -loga; F25 i-lowa) (cf [E140] uru-zunga? E46 ke-punga? Cf also [Rutara] ku-cuga 'copulate (with')): extension of meaning, as euphemism meaning 'paddling tool', < PB *-dugpaddle vi vi

quarrel (vi) ku-kıleea (F31a, F31b), -kilea (F31c) G51 ku-lirewa

rest, take a holiday ku-[uupya (F31a), ku-suupya (F31b), ku-supya (F31c) (F22a, F22e -suuha; F22b -isuuhya; F24 ku-suupa; F25 ku-supa) [G60] -suupa

rooster, cock mOUmbt (F31a, F31b), mOmbt (F31c) restriction of meaning (< PB *-cumbt 'chicken' or < PB *-bUUmb 'mould pottery, create'? set (of the swy), bc-fastIrta (F31a), k0-salIrta (F31b), k0-salIrta

-fala, -syala; [EJ40] -fara? spider tyati (F31a, F31b), itati (F31c); derivation and extension of meaning. < PB *-tat-tie

up' stem (of maize, millet) to-peleli (F31a, F31b), i-peeli (F31c) (F10 i-helele; F25 ma-pelele;

F21, F22, F23c ma-βelele) M10 im-pelele; M20, i-pelele/ama-pelele; [M30] imi-pelele; E1402 liberer; [P10] -pelele; N12 lipehe; semantic shift? < PB *-bede millet, eleusine, sorghum tomorrow mu-daau (F31a, F31b), mu-dau (F31c) [G60] ki-lawu/ki-lavu; [N10] ci-lawu; G50

tomorrow mu-dato (F31a, F31b), mu-dato (F31c) [G60]ki-lawu/ki-lavu; [N10] ci-lawu; G50 ci-lau; [P10] malabu/malabu

wind n-zega (F31a, F31b), ŋw-eega (F31c) (F24 iɲ-jega²⁴, F25 σm-weya) G51 I-yega; P15 li-yeγa;

 word IO-kaani/ŋ-kaani (F31a, F31b), IO-kani/ŋkani (F31c) (cf EJ40, [EJ25] e-ŋana/ama-ŋana-semantic shift: < PB *-kaani- 'to contradict', and in EJ40: η k > η < η -kaani (See Nurse 1979b:433 on η k > η)?

²⁷ From Nurse (1979b:542)

²⁸ From Nurse and Philippson's list

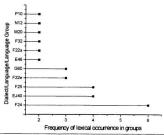


Figure 4.10 Areal frequencies between F31 and other languages

4.2.1.2.12 KIRImi (RI) (78%) (GiAhi - GIRwana - YInyaMunyi ganyi))

The 10 words (20%) out of the total 49 as unique inventions in KIRImi suggest group cohesion. On the other hand, the group is heavily mixed as the speakers have interacted with others from adjacent languages. Shared vocabulary indicating that mixed nature of lexical stock is 80%.

(162) Unique vocabulary (10 words)

axe gI-heendo (cf P25 imbendo) clothes, material i-saa/ma-saa crown of head -buusa
hoe i-kuujo
medicine, remedy ma-huka
pronomice U-hafia
tail I-фuumbu
thicket -Runku
lry-sooya
m., ahove gu-unto

[E62] -sua;

(163) Areal vocabulary, derivation, morphological innovation and borrowing (39 words)

hirth (give), to a child u-qaaqa M20, M30 ku-paapa; G64 xu-baba; N12 ku-baba parent, s he who hegets mu-qaqi G66, [M20] m-pafi; M30, P13 -papi

blood-sayami (F31c, F33 -sakami) (G30) -sakame; Thagica, E65 -θakame, E46 n-daxame; R(utara), D165 -[agama/-sagama; (E60) -samu? (in some E60 languages: g > 0, e.g. -waa kill < P8 *-bodag- kill* For -scamu see Nuste 1979b: 108, West Kilimanjiaro (Masama-E62a), Rombo (Mashati-E62c): *1 > u, *u > i as in KiWunjo (E62b), KiRombo (E62c) mhuru 'goat' < P8 *-budi; er- c'inhi '< P8 *-dedu, and therefore, -samue Proto Southern Cushtiic *sak 'blood' *3 → -sagami → -sagamu → -samu? borrowing from Proto Southern Cushtiic

breathe, rest gu-hea [G60] kwe-ehela; [Luhya] oxu-hera; [EJ40] -hecera (cf P23 ku-yewelela)

hrother (older) mu-una (F3 lb mu-nuna) Northern Dialects of KiSwahili innovation *m-nuna younger sibling' as in G4 lb, G42d mu-na (Nurse and Hinnebusch 1993:300) (cf EJ13 omu-rumuna; E52 mu-rua jina; E54a mu-rua jia; EH2 mo-mura)

day after tomorrow \$\phi_0\text{kIo}\$ EJ42 eg-kio ende, G24a -kioi; EJ11 -kiro far kw-eengI cf Barbaig [agi 'far'

fly (vi) 0-ruma (cf P15 ku-jumba; P22 ku-lumpa; G36 ku-zuma; E74a ku-zumba, ku-zump¹a) follow-hoonga G65, G66, M30-konga; [M10], M20-konjka (*k>x where it is phonetically easy to change to \hbar b oefore low vowel fab0 roback f0 in KtRImi, although elsewhere. *k>

sy get, obtain **u-haanga** G51 kw-aŋk^ha hate, detest **u-hura** [Thagicu (i.e [Thagicu] ku-θuura and E46 -soola)]; Luhya oxu-syula;

³⁹ Compare explanation given by Nurse 1979b:513 on the status of -samu 'blood' as an unlikely loan from KiSwahili damu 'blood', which is a loan from Arabic clum, a word which may not be used now in Arabic, and whose original meaning in Arabic is obscure (Bosha 1993)

```
lean, hecome; grow thin U-xoxoa EJ14 oku-koha? M24 ku-hoha? (G65 uku-sokoka?, G35 ku-soka)
```

look around -iheenga [Luhva] oxu-henzahenza?

lost (get) -yaya G60, [N10] ku-yaga; Seuta, East Ruvu kw-aga, E55 kti-a, kw-aa; P23 ku-yahika; E74a ku-lagaya;

love, want U-yaanja [EJ40] -hanca; [Luhya] xu-yanza

marriage -ilooyoa (cf F31a -loogoa 'love, want') E74a ku-lowoa; DJ65 ku-longora milk (n) ma-aya (cf [E62] ma-lla < ma-nla < ma-lela (as in E62d); borrowing . Proto

Southern Nilotic *Fe:F- 'white' (Ehret 1971:138).

milk (fresh) ma-hounga (F21b, F21c ma-suunga; F23b ma-suunga; F23a ma-suka)

mother iyuu (F33) iyo; F31c iyaa, F21b iya) EJ441 yiya: borrowing: < Barbaig yiya, Proto Southern Nilotic *iiro

old times, the past ka-enge G35 u-henga

pipe (tohacco) i-fuunde (F33 -puunde; F34 ke-buunde) EJ45 eke-βonde; G35 mu-nde; EJ24 eki-bunda? (cf Barbaig kaponded)

pit, hole i-koombo (F31c i-koombo) G36 -kombo; P15 li-γumba? [Cf DJ60] ik-yoβo?; EJ25b er-yobo?; EJ31 li-lowoo?; EJ31c -dopoo?; [EJ40] mw-oβo?)

pour away -hunta (F31c -huntla) G61 -kunula push d-suntitya E143 uku-hunia; G65, M21 uku-suficilizya; (cf E142 ko-sukia?; G32 kusuñiza?)

quiet (he) U-kila EJ40, [Thagicu] -kira

return -s0ka (F31c ku-s0ka, F24 -syuxa³⁰; F33 ku-fy00ka) Thagicu -cioka (cf F21, F22b, F31a/F31b, -fooka/-fooga) 'return y', -foofa 'return y', reply'

rooster, cock p-jololo (F24 p-jogolo; F25 i-jogolo)

search for - peepja (F32c) (F10 ku-heensa; [F22] ku-pestila/ku-pesa) EJ31 - peepja; EJ25a oku-venja; (cf EJ41 kw-ena; E62e - sengeta; M25 - hwanza)

shame minaa (F31c minala: F21 minala: [East Ruvu] minala

shiver UxaxaRa^{J1} (F31c kU-kagata) (cf EJ43 oko-gaŋkana) small nUYU (F32c) P14 -cuku (cf EJ 40 -suhu)

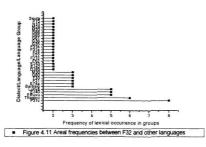
spear (n) mo-koha; [P10] [West Ruvu], G50, [G60], m-koha; Seuta, [East Ruvu] -guha. [N10], η-oha (cf F21c η-guha < mu-guha 'small, spear-shaped, functionally double-ended, big needle either used for sewing hard materials like leather or in KtSukuma medical operations, and it resembles η-gela, which is such a big needle used exclusively for medical purposes?)

³⁰ From Nurse and Philippson's list.

[&]quot; In KIRImi, the voiceless flap represented as [R] is a regular reflex of PB *t in many words, although it often occurs in free variation with hl (See Olson (1964:13) on the allophonic nature of [R]).

sweat (u) mu-RuRu (F21c li-duutu) North Rutara e-tutu (cf P10 li-usu): derivation and extension of meaning < "PB -tu 'spit' sweet, pleeasun -loombe M14-lyompe: ([EJ40] -omereru?) thigh fof human anninol gr-nama (F31c kt-nama) E60 ki-nama; [EJ40] eke-nama; [Luhya] esi-nama; (B30 G61 igik-nama) G60 igik-namo ori diho - possibe misspelling as given: idho? wassh-clothes-homboa [Thagicu] kb-0-ambya ngba? (cf E46-sabya?) what ntUni (F31c ntUni) M24 hom? [East Ruvu], M32 coni?, M23 Joni? word l-hape (F51/F22 mahayo)

Apart from those groups in Figure 4.11, other dialects, languages or groups which share one word with F32 include G64, N12, P13, E65, Southern Cushitic, G51, EJ441, F34, EJ45, EJ24, M21, F25, EJ31, G40, G24, P22, Corridor, E55, P23, F23, F21b, F10, P14, G50, West Ruvu, North Rutara, P10, M14, E60, EJ16, M32 and M23.



4.2.1.2.13 NM (78%) (KIKIDnbt - KISukuma - KINyanweezi)

Only four words join these three language groups, KISukuma (F21), KINyamweezi (F22) and KIKIImbt (F24). The four words can be accounted for in terms of diffusion from a common source, either from among them or from a common ancestor. This account is plausible because all 4 words are not unique to these 3 members alone. They are also found in zones DJ, EJ and G, amonic others, as areal words.

(164) Areal vocabulary, derivation, morphological innovation and borrowing (4 words)

hush, forest-poolu (F23a i-poolu; F25 i-pooli) [DJ60] i-polo, East Ruvu P12 -poli /-hulo?

culf of leg-saluta/saluda/n-saluta (not mentioned in F21a, F22a, and in F22d n-salula) EJ44 e-sanuta; EJ43b i-sutwa; (CF Gisamjanga, Barbaiga¹² hàw-da 'thigh', Proto Southern Nilotic *AR (Rottland (1982:296))

thigh (especially human) i-taango [EJ40] ri-tango; [Luhya] -rango; DJ65, DJ66 i-tako; G23 -tako (cf DJ62 i-tako 'female thigh');

try -gema (F23a, F23b -gemezya, F23c -gemeza) EJ402 -gema; (cf E54a -gena)

Of these languages and languages groups, only SiSiloombo (F23a) shares two words with NM (KtSukuma (F21), KiNyamweezi (F22) and KiKIImbo (F24)). The rest share with this grouping only one word. These are F23b, F23c, F25, DJ60, DJ65, DJ66, East Ruvu, P12, EJ44, EJ43b, EJ40, Southern Nilotic, Luhya (EJ30 and EJ41), G23 and EJ402. Such a distribution does not tell definitively about genetic affiliation since even the areal vocabulary is widely distributed.

4.2.1.2.14 NL (76%) (KIKIImhti - KISukuma + KINyamweezi - KINILaamba)

The small number of shared innovations in this lexicostatistical node makes it doubtful as a historically valid grouping, as in the NM (KIKIImbU + KISukuma + KINyamweezi) case above. The unity of the node supports a retention-based explanation, which is a weak classification criterion. Three words out of the four can be said to be uniquely NL (KIKIImbU + KISukuma + KINyamweezi + KINLamba). But the major drawback is that, one of the major members of the group, F24b KIKIImbU South, does not have all three words in our sample. The absence of these three words in F24b suggests a later diffusion

There are two ways of representing this name, Barabaig and Barbaig (Rottland (1982:27)

from one language rather than innovation within an earlier group (NL) before a split. This areal account is supported by the relatively heavier influence on F24a by F22 dialects because of F24a's closer proximity to F22 compared to F24b. In addition, the last word 'remember' is shared by Rutara (EJ11-4, EJ21-24) and Corridor-Nyiha (M20) languages exclusively, indicating a possible source from them as neighbours.

(165) Unique vocabulary (3 words)

F24) (cf N11 n-denga: N12 n-donga?)

face downwards (lie on one's stomach) -bundaala¹³ (not indicated in F22a, F24b) (F23c - βuundaala) (cf [E140] -βumara²) pot, vessed kI-seme (F23 -seme) (not indicated in F24b) stick mu-laanga (F21b,c naafa (< mu-laaria); F32 mw-aanga) (not indicated in F31a,b and

(166) Areal vocabulary, derivation, morphological innovation and borrowing (1 word)

remember F24-ijūktla: F22 kw.izūktla; F31a,b kū-ktjūka; F21-izūka), (F23a-izūktla, F10 kw.isukila) (cf F23b-ijūktla; F23c-ijūuktla), Rutara-ijūk(ila; [M20]-izūk(il)a; M11 ukw-idukla; [E125]-icūk

 $^{^{33}}$ In the majority of dialects, the initial phoneme in the root is $/\beta$ /. In others, it is /w/ or /u/. /b/ is used as a proto-phoneme

4.2.1.2.15 NR (72%) ((KtK13mbt) - KtSukuma2¹⁴ - KtNyemweezi - Km1Laamba - KtR3mi)

In the linguistic tree constructed for Zone F in section 4.1.1 above, this is the final stage in which the languages appear to be closely connected lexically. But even this connection is not necessarily genetic, because areal features can spread quite quickly if there are favourable conditions for adjacent social networks to be established. There is no strictly unique lexical item joining this lexicostatistical group. Only one word (14%) partly appears to be a unique innovation, -daule 'pack, flock'. However, since it is also reported in M12 (KiLungwa), a F22 neighbour, it suggests innovation in one area only and with later spread to other languages through contact. Since daule is associated with an animal flock, it is likely that F24 might have borrowed it from F21 or F32 where animal husbandry is more entrenched. The occurrence in non-pastoral speech communities suggests borrowing, and since animal herds and their herders can be mobile over long distances through trade or emigration, cattlerelated words can spread quite easily. The linguistic and the socio-economic cannot be separated, since the socio-economic activities and interaction directly influence people's experiences and how those experiences are expressed in their languages. Because the words in this group are areal or occur in other zones as well, the implication is that they are inherited or borrowed from a common source. With such a distribution therefore, the genetic status of the group is doubtful and inconclusive.

¹¹ K15ukuma2 is equivalent to (KtmunaSukuma, GInaNtuzu, JinaKIIya) + K1Dakama while plain K15ukuma refers to KtmunaSukuma, GInaNtuzu, JinaKIIya only. This has been pointed out above (section 4.2.1.2.3).

(167) Areal vocabulary, derivation, morphological innovation and borrowing (7 words)

pack, flock, group i-daale/ma-daale F31a,b dyale/ma-dale; F32b dae/ma-dae; F32c i-de; (not mentioned in F21b, F22a, F32a) F23, M12 i-daale/ma-daale. Also in East Ruvu like KiZalamo: Joanword from Cushitic (Ehrt. p.c.)

bounday I**t-bIImbi** F25 **ʊlʊ-wIImbili** (not mentioned in F32a³⁵) South Rutara, EJ25b oru-bibi; F10 i-βiβi; D360 uru-βiβi; [EJ40] oro-βeβe (cFF22d Iʊ-βʊʊmba; [F23], lu-vuumba; EJ45 oru-βuβa)

hove, wunt-togwa cfF31 a kulyoogwa; F31b kuloogwa; F31c kulowa; (F23th, F25 togwa) (not mentioned in F32) cf G65 kunogwa; G35, G37 kunogela (F21c-toga 'object O') please subject S')

pole (thin) -kito-'gito (not mentioned in F21a) (cfF32b fiRo; F24b -sito) cfalso [G60], M31 ulu-sito; [M10], M32, [Seuta], P13, P22-fito; G52u-fitu; DJ66i-fÿito; P14-hito; EJ14 umu-sito. Also wider distribution in East Africa generally as in KiSwahili (G42d); [Thagicu] ru-bito?

shurp (he) -yOkIpa/-yOgIpa (F31a, F31b-yOpIka; F23a, F23b-ugiha; F31c p-Igr 'sharp') (not mentioned in F21b, F22d, F24b) [Luhya/-ogiha; [E140]-ogeha; EJ24; -uhiga; [Thagicu]-Ugiba; cf, E61-yoi-ya; and EJ25b, M32-ugi 'sharp'

sheep-kolo³⁷(F21, F22b, F22e golo; (g-kolo (F22a), (not mentioned in F22d) G11³⁸, [East Ruvu] -kolo; [G60], i-golo/-koondolo³⁹; < -kolo < PB *-kodo sheep

well (n) -ji/zI (F23a lw-inzI) (not mentioned in F22d), EJ15 luz-zi; P13 lose; Derivation < PB *-vIII 'water'

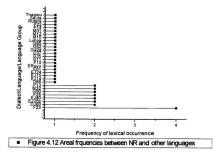
³⁵ The informant was not sure.

⁶ From Nurse and Philippson's list.

[&]quot;Although this word is part of Guthrie's (1967-1971, Vol.3:291) reconstructions for Proto Bantu, as a recent acquisition in Eastern Bantu, there is uncertainty about its origin. For instance, it was not clear whether the word was actually borrowed from outside Bantu or not (Ehret 1968b:217), although later, Ehret (2001, p. c.) affirms that -kondolo is a Bantu derivation while -kolo is a loan from Eastern Sahelian *kwar.

³⁸ The languages in this category are from Nurse's field notes prepared in the 1970s. Some of the languages like G11 icGogo are not in CBOLD at the time of writing this line. In comparative examples, G11 has not featured because of that reason.

On the other hand, Nurse and Hinnebusch (1993:669) assert that ŋ-kondolo 'sheep' in some Sabaki, Ruvu and Seuta languages is of non-Bantu origin.



One major problem in this set of words is that some of these words are not found in certain languages/dialects, making their unity even more doubtful.

4.2.1.2.16 Zone F

(169) Unique vocabulary (1 word?)

old person (mole) mu-nampala (not mentioned in 7 out of 22 varieties: F10, F22a, F22d, F25, F33, F34). The one word is found nowhere else with one major problem: F24 as a prominent member of Zone F does not show the word, even F24a which is relatively proximate to F22. But also, two dialects which form the cores of Zone F, F22, do not show the word. F22a and F22d, indicating that, the word may have originated from F21, F31 or

F32, from mu-na-m-pala 'the one with the bald head' ***. From one source, it spread to the rest, especially given the absence of serious physical barriers between the speech communities.

Rather than define Zone F as one unit, the one word or (6%) out of the total 16 in (169) only happens to be in the zone in most, but not in all, of the language varieties. This word is munampala 'old male person'. The speech communities being relatively adjacent to each other, but then sharing only one unique word as a marker of their genetic affiliation casts serious doubts on the claim. In addition adjacency also disturbs the core of Zone F by introducing the possibility of a word spreading easily from one source, so that a few shared words confined to Zone F alone can be only accidental. Furthermore most of the intermediate lexicostatistical nodes forming Zone F are not as genetically cohesive as shown by the qualitative analysis of the vocabulary. Since reliance of unique innovation for the validity of Zone F is placed on one word only, the qualitative evidence is not hard. This word is likely to have originated from only one of the languages and simply spread, due to the often friendly relations which have existed between these core Zone F community members, with frequent intermarriages and cross-migration sustained over a long period of time. If smaller populations in the earlier constituent F languages are assumed, living relatively even more closely than is currently the case, then the spread of words might have been much easier and faster, all conditions being equal, and hence, this word does not isolate Zone F as one historically cohesive group. The word excludes an important member of the traditional Zone F core, KIKIImbu (F24), both northern and southern. The other varieties in which the

⁴⁰ Suggestion by and discussion with Nurse, personal communication, 2000

word is not mentioned are F10, F25, F33 and F34. The distribution of this one word not only weakens the core of Zone F significantly, but also it goes on to support what Nurse (1979a, 1995a, 1999) and Ehret (1999) have maintained over a period of time about the doubtful status of F10, F25, F33 and F34 within Zone F.

It is tempting to even suggest that this word is actually borrowed from Proto Kalenjin-Omotic, a word given as *pANyAn 'elder' (Rottland 1989:223). The form, meaning and distribution offer a strong argument. The path might have been pANyAn → payan → palan → palan → mun-pala → mun-yala → mun-pala. The loan might have started in one language and simply spread to the rest. This source may be F32 (KiRtmi) with a fuller form munampala and lindough the /l/ is normally lost. In SSN, it was reduced to munampala, then to nampala and naṃala in F21/F22b. This argument adds to that by Nurse (p.c.) as being from '(person) with the bald head' < PB *mu (class 9 marker, which includes people) + *-pada 'bald'. Both hypotheses do not seem to have any strong justification as to why should 'old man' in this group of languages and not 'old woman' use a euphemism like 'the one with the bald head' or borrow from Southern Nilotic. One suggestion would be the higher status and esteem which the Southern Nilotic elders seemed to have been enjoying in the eyes of outsiders, and it might have acted as an incentive in the speech communities in contact with them to adopt and adapt the term'. In fact, there were intermarriages between them, especially in eastern

In most of Rutara like in oRuHaya (EJ22), the idea of using a euphemism, a loanword or a grandiose term is also observed (as in F20/F30) where 'old woman' is the continued...)

βυSukuma where contact was maintained as the Datog continued to move in and out of the area they once lived (Itandala 1983:189). In this contact, some Datog were absorbed into KtSukuma society, by the βaβinza clan, and with this absorption, many cultural aspects were also acquired, especially in livestock keeping which made the predominantly agriculturalist βaβinza into pastoralists as well, being selective of those aspects which were only beneficial for them (Itandala ibid). This fact is borne out by the Datog proper names for both females and males, place names, some rituals, name for the Datog god Asita, etc. indicating that the contact between Southern Nilotic groups like the Datog was harmonious and mutually beneficial rather than the adversarial nature implied in contact situations and/or replacement of one speech community in an area with another. They might have moved out of the way because their exclusively pastoral way of life became incompatible with the now mixed farmers βaSukuma, who continued with their farming tradition after adding cattle keeping.

The term for 'old female person' in many Bantu languages is composed of two morphemes. PB *-ka, *-ke or *kt 'woman, female' and PB *-ktdt' big, or old', forming mu-ka-ktdt. mu-ke -ktdt, or mu-kt-ktdt respectively, or other such words with 'person' and 'old' in

^{41(...}continued)

regular o-mu-ka-i-kuru and 'old man' is either o-mu-gurusi (sgl/a-ba-gurusi (pl) ''iounder or patriach') or omu-kanuka - Proto Southern Nilotie ''ka-i/kr' 'married adult (Ehret 1971:136). Abagurusi, as those clan founders who constitute oRuHaya society, just as the KtSukuma case and their clans p-gr-kotlo' old woman', anapala/panapala' old man' indicate absence of classless society as is often implied in earlier Bantu prehistory (Sec Cory and Hartnoll 1945 [1971]) and Itandala (1983) for a discussion of clans and their founders in the respective speech communities?

either order. The term for 'old male person' from PB is normally derived from two words from which many other variations are possible: mu-ntu 'person' mu-kulu 'big, or old' as in KiWoso (E62d) ndu nku < muntu mukulu or as in GIktiyti (E51) mundu mukuru, or in Maragoli (LuLogooli) (EJ41) mukurundu < mu-kuru mu-ntu; and mu-lume -kulu 'big or old male'; as in KiSeri (E62e) mmeku < mulumekulu.

The remaining 15 words, or 94%, do not define Zone F either. They occur widely across neighbouring zones also. With inter-dialectal borrowing, this is not surprising. The most telling feature of these words is that they are borrowed, mainly from Southern Cushitic (cattle terms). Southern Nilotic (some cultural items like terms for animal hides/skins) or KiSwahili (trade terms like metal pots and tins), indicating the lexical impact from one source facilitated by movement inherent in pastoralism and trade, and therefore the 'movement' of these words from a recent past

(170) Areal vocabulary, derivation, morphological innovation and borrowing (15 words)

hull -vagamba (not mentioned12 in F10, F22d, F24b, F25, F33). This word occurs in two shapes -vagamba, as in most of Zone F and -kambako/-kambaku as in [G60] -kamba-ko: M20, M30, N10, P21-kamba-ku; borrowing < Iraqw yaqaamba (sg), yaqaambee (pl) 'bull, big male animal'. Where it occurs in Zone F, the word comes directly from Iraqw. calf -dama (not mentioned in F10, F31c, F32a) Seuta, East Ruvu, G52, [M10], M32, P11 n-dama: G61, M22 in-dama: Burunge, Sandawe dama: borrowing < Iraqw dama

⁴² Lack of mention may reflect more than one fact: absence of such a word, informant forgetting a word or being unaware of its existence, even when it does and confusing between similar concepts and mentioning the wrong one.

caulte mi-tugo (not mentioned in F10, F23b, F22c, F33, F34). Occurs in three shapes, with stem-initial I/I, with stem-initial I/O by process of Bantu Spirantization and with regular I/O followed by prenasalized I/O [tog] instead of I/O sia in [E140]-tugo, E74a, [Seutal, [East Ruvu], G52 mi-fugo; [Rutara] i-tungo ly'ente; [DI60] i/O i-tungwa; (cf EJ32 mi-rugu; N13 mi-pugo? J Innovation by a proto language from which some Zone F members descended (cf Eastern African Bantu and Ruvu languages in Hinnebusch and Nurse 1993-385).

goat fibe.) n-gulanati ([F22], F23a,b, F24, [F31]); n-gulyanati (F21), n-gulyanati (F21), n-gulyanati (F21), n-gulyanati (F21), n-gulyanati (F21), n-gulyanati (F22), F31, F32a), G35 vulati; Senta-vulata. -vuata: Barbaig qwarayda; fraqw gurta (sg), gurtaawee (pl) (see Maghway (1995); Burunge gwerati; Kw'adza gulata - Proto Southern Cushitic *-Togur- (Ehret 1980-293). The word though from the same source, displays two major areal phonological features which define three different geographical groups and phonological influences: _gulaati. -gulyanati and -u-da-divide, most probably depending on the route the word took to reach them. The -a word suggests a direct route from the source, and it is in Seuta only (G23, G24, G31 and G34), while the -is not based on direct transmission, or the plural form, gurtaawee, was taken instead of the singular gurta. This is found in iKiLuguru (G35) and some members of Zone F only, resembling the Burunge gwerati.

lime, whitewash -swaakala (not mentioned in F21b, F31a, F31b, F32c, F34), [G60], P10. P20, Corridor -swakala/-cokala; EJ25; [EJ40] -swakara/-cokala; N10, cwakara/-sokala; DJ66 i-swankala; [East Ruvu], Barbaig, [Thagicu], [Seuta], [Rutara], [G50], [Luhya], [Chaga], [North Nyanza] -cokaa: borrowing: from G42d, through English 'chalk'? This wide distribution of the word suggests that it is a recent loan from the same source, most probably English, especially if it is associated with house decoration on sealed walls. It is unlikely that completely plastered walls were common in such hot and humid climates where mosquitoes, the heat and darkness would discourage such house construction. The word is also unlikely to be found in languages which did not have any strong English impact. The need for nswaakala is hence highly dubious as a native concept in hot climates apart from borrowing from a culture which needs sealed houses because of weather conditions like extreme cold In cold climates like the vicinity of Mount Kilimanjaro and the Upare ranges (E60), Bukoba (EJ20), Mbeya (M30) and Iringa (G60) a native word is likely to have been in place already making borrowing unnecessary. This fact is corroborated by the absence of -swaakala in dialects/languages either located in relatively cold climates or those in isolation like G62 (ingeesi), G63 (ingedzi), E65 (mlaci), [EJ20] (-noni), M30 -pana; E46 mbarimbari

monkey (small, lightish-coloured) n-UUmbilt (not mentioned in F10, F23, F25, F32a) East Ruvu, (G60), N10, P20-tumbili; [P10] -tombele; Seuta, [Corridor]-tumbii; E312 in-duvili; (M32 p-gambili?) Innovation by a proto language from which some Zone F members descended. Also widely distributed in East African languages like KiSwahii immbili.

ome-eyed (being) -soongo (not mentioned in F22d, F31, F33, F34), EJ25, [Luhya], [EJ40] soongo; N13 -songu; Thagicu-Bongo; Seuta, East Ruva, G51, P13 -congo; DJ61, [Rutara] fongo; (cf EJ402 eke-tongo?; EJ43b ege-tongo?; EJ43b eke-tongo?; EJ42 ege-tono;
[Corridor] -tonko (mbalii)*) semantic innovation < PB *congo.* 'noint'.

pool, pond-faambe (not mentioned in F10, P25, F33, F34). EF41, G32, P14 - lambo; (E125)
-rambo; G37, G60. M10 - laamba. Innovation from a core then the word spread to others.
This is another telling word where the four languages are effectively excluded. This however does not necessarily prove that the remaining members are genetically unified because the distribution of the word extends beyond Zone.

pot (metal), cup -kope (not mentioned in F10). DJ60, Rutara, EJ2S, Seuta, East Ruvu, G50, G60, Corridor, M30, N10, P10, P20 -kopo, E40-kop6. [E60] -kobo; Barbaig kop-ajanda (sg) /kop-ajega (pl): borrowing, < KiSwahili-kopo 'small tin' < Portuguese copo 'cup' (Tucker 1946-857). This is an illustration of late borrowing from a common source like KiSwahili (G42d) in which unretated languages seem descended from a common, immediate ancestor where even Iraqw, a Southern Cushinic language, has koopto (Mous 1993-42). With his word, all the 8 Bantu zones occurring in Tarnzania are represented (DJ, EJ, E, F, G, M, N, P). The word is significant in highlighting the potential for misleading conclusions when languages share a word. Sharing a word is not enough. The source of that sharing should ideally be ascertained beyond any reasonable doubt.

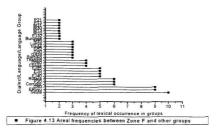
pot. mug mu-kebe (not mentioned in F10, F24b, F25). [DJ60], Rutara. EJ25. Luhya. EJ40. [Chaga], Ruvu, [G60], [Corridor], P10, P20-kebe; [Thagicu] mt-keve. All zones except N display this word. It is a widespread word the source of which is obscure.

shin thome, I-Dundt (not mentioned in F31c). [G60] -luundt; [Corridor] mu-lundi, omnundi wa yulu: D160. [Rutara], M31 -Jundi; [Seust] muundivi-lundi; M13 uundundi; E65 mwindi (cf E142 omgorondo 'small leg'') Innovation by a proto language from which some Zone F members descended, probably East African Bantu (see Hinnebusch and Nurse 1993; 288) skin (of person)-dtit (F23a -Adii; F23b -ddt; F33 -ddt; F24 -nilia) (not mentioned in 6 of the 22 varieties: F10, F32c, F25, F31b, F32c, F34): Borrowing from Southern Nilotic as in Kalenini *iri* skin' [Ehret 1971:143)

sky-luunde (not mentioned in F10, F23c, F31b, F25, F33, F34). P13 lyunde; P21 kwiunde semantic extension < PB *-dunde cloud'</p>

woman mu-kilma (not mentioned in F33c, F31a, F31b, F33, F34). G62 u-muki-mana: (cf G63 umu-kidala). These words are probably segmentable as: m-u-ki-mema and u-mu-ki-dala respectively. muklma or something similar is found in two G60 languages, and the morphology of the word there shows more antiquity than those found in Zone F: Derivation, PB -ke' wife "-ma" mother", to suusest: woman who acts both as wife and mother

Table 4.24 makes some important statements with regard to contact affirming both Thomason and Kaufman (1988) and Labroussi's (1999) observations on the role of proximity and the contact of different speech communities. First, F10, F25, F33 and F34 behave radically differently from the rest suggesting separate development with minimal contact with any of the other Zone F members. Secondly, the cohesion of the remaining members suggests areal



influences rather than genetic affiliation, as demonstrated by F31 which is KtntLaamba. showing less shared vocabulary, presumably because it is shielded from the direct impact of surrounding Zone F members. The other F31 members show higher shared vocabulary precisely because they are at the edges of contact with adjacent languages, with a higher possibility of mutual influence (See Maps 1, 2, 3 in Chapter 1 for the relative adjacency of the speech communities).

Table 4.24 Variety and frequency of occurrence of the 16 words shared in Zone F (in brackets) (1 word 'old male person' as unique to Zone F)

Variety	Freq	Variety	Freq	Variety	Freq	Variety	Freq	Variety	Freq
F10	013(6)	F22a	0(15)	F23a	1(14)	F25	0(7)	F32a	1(12)
F21a	1(15)	F22b	1(15)	F23b	1(12)	F31a	1(12)	F32b	1(15)
F21b	1(14)	F22d	0(13)	F23c	1(9)	F31b	1 (8)	F32c	1(13)
F21c	1(15)	F22e	1(14)	F24a	0(15)	F31c	1(12)	F33	0(9)
	Į.			F24b	0(13)			F34	0(6)

In order to determine further whether these 16 words are relevant in the genetic argument for Zone F, a semantic analysis is in order. Normally, there is a tendency for cultural vocabulary to be borrowed as contacts bring in new concepts and objects which require naming. With a majority of shared cultural vocabulary rather than core vocabulary, non-genetic affiliation is suggested, and vice versa. Table 4.25 shows that out of the 16 words identified in (169) and (170) as defining Zone F, 6 are core, and 10 are cultural. Cultural vocabulary is subdivided into four groups: related to technology (Tech), Animal husbandry (Animal). Farming (Farm) and Geographical location (Geog). Possible sources of the words are suggested where feasible. All these words are shared by most of the other 7 Bantu zones in eastern Africa (Zone F being the 8th), indicating that the cohesion of Zone F is due to

⁴⁾ The numbers outside the brackets indicate the presence of mu-pampala 'old male person', which is the only unique innovation of Zone F, although it is only a partial uniqueness as explained in the text, since it may be a loanword from Kalenjin or a derivation from Proto Bantu.

convergence of different languages which drew their shared vocabulary from the same sources. In eastern Africa, 8 zones are represented: DJ, EJ, E, F, G, M, N and P (See Map 1.3, Chapter 1).

Table 4.25 Lexical analysis of Zone F shared vocabulary

		Vocabulary						
	Other zones in	Core	Cultural					
Word in Zone F	eastern Africa		Tech	Animal	Farm	Geog	Possible Source	
bull	GMNP	-	-	+	-	+	S Cushitic	
calf	GMP			+	-	+	S Cushitic	
cattle	DJ/EJ/EG	1.	-	+	-	+	S Nilotic?	
goat (he)	Seuta, G35	-	-	+	-	+	S Cushitic	
lime	DJ/EJ/EGMNP	-	+		-	-	KiSwahili	
look after grazing cattle	GMNP	-	٠				S Cushitic	
monkey	GMNP	-	-	-	-	+	NECB	
old man		+	-	-	-	-	Kalenjin	
one-eyed	DJ/EJ/E50GMNP	+	-	-	-	-	NECB	
pool, pond	EJ/GMP	+?	-	-	-	+?	NECB	
pot (metal)	DJ/EJ/E/GMNP	-	+	-	-	-	KiSwahili	
pot (mug)	DJ/EJ/E/GMP	-	+		-	-	KiSwahili	
shin bone	DJ/EJ/E60/GM	+	-		-		NECB	
sky	Р	+	-		-	-	РВ	
woman	G60	+			-		PB	

4.2.1.2.17 Other groups: KntLaamba and KtRnni

Three words (20%) out of the 15 are unique to F31 and F32, and the remaining 10 or 80% are shared with other languages. While geographical proximity and lexical inter-dialectal borrowing cannot be discounted, the unique creation vocabulary count attracts attention. This points strongly to some close relationship, although the lexicostatistically based tree used above does not show this closeness. For example, Nurse (1979a:28) points out that in West Tanzania (roughly Zone F, without a few members), F31 and F32 stand out as the only ones without Class 13 ttp- (diminutive, plural) which normally forms the plural of Class 12 ka-(diminutive, singular). Instead, they form that plural using Class 19 pt-, normally a locative morpheme 'at'. Two interpretations can be advanced here: first, Kintlaamba and KiRmi are genetically related, although they might have split a long time ago in the past. The second interpretation is similarity in unique vocabulary as an areal feature. The other languages in the vicinity could not have exerted any stronger influence because of their geographical locations, and therefore only these two influenced each other with regard to those words which were invented by one language and spread to the other.

One supporting piece of evidence of the historical validity of F31/F32 is the grammatical aspect of Class 13 sharing. In addition, Nurse (1979a:28) notes the division of West Tanzania into two halves, the KISukuma, KINyamweezi and SiSuumbwa division, on the one hand, and the KInILaamba, KIRImi and KIKIImbu belt, on the other, while the other

members assigned to this group have an unclear status. For the former group, he sees some relative homogeneity, while in the KInILaamba, KIRImi and KIKIImbū group, their unity is less homogeneous. Within this group. KInILaamba and KIRImi display this historical unity, although internally, the group as a whole which includes KIKIImbū, might be explained better by the second account, in part explaining the weak cohesion of the group.

(171) Unique vocabulary (3 words)

focm -poombolu gather (flowers, fruit) -kala run -maaŋka

(172) Areal vocabulary, derivation, morphological innovation and borrowing (12 words)

acke (carpenters') -seeso G24 seezo, (cf. [P20] -teeso; G23 -tesu; [E60] -teso; M25 Ji-teso: E54a. [East Ruvu] -tezo/ipezo; M14 n-tezo; [EJ25] -tesyo; P13 n-deso; and elsewhere in East Africa, as in Sabaki) cohra (spitting) -π10⁴⁴ (F34 p-joka pi-tro) F24⁴³, G62 ipamw-ilu; E46 egap-jiro; cf EJ41 ri-rubi

dunkey: m-dogwe [some M20] in-dokwe; F31 n-dakwi, F34 n-daako (cf D160 in-dogs@le. South Rutara en-dogs@e (E124 n-dogsove⁴⁶); [some M20] in-dogs@i: G61, 66-dogsvi; [North Rutara], E134 in-dogsya. en-dogsya. n-dogsyi; also cf E46 n-dikele; E140-t-ekere; -tikere, -tikkiri: E53, E54a n-tigiri; [E125] -sikili; E131e -sigiria borrowing: < Barbaig diged and < Proto Kalenini sale.

^{**}The forms in the individual dialects vary between Ni and NJ, NJ and reconstructed lexeme is posited as the most unmarked and expected with regard to regular reflexes from Proto Bantu. Where relevant, KIRLL-aumba acts as a reference point because of its least number of channes from Proto Bantu compared to KIRLINI.

⁴⁵ From Nurse and Philippson's list.

⁴⁶ From Nurse and Philippson's list.

fingernail-kulukulu by derivation and extension of meaning: < PB *-kudu 'tortoise'? fing-100nd0 (is a species of frog rather than a generic term? (cf F21c-t00nd0 /gotndo/ 'tod' vs-daanga 'frog').

intoxicated (get) -gaala [G60] ku-gaala; M32, [N10] ku-gala; M25 a-gale (subjunctive)? itch-vaaga EJ441 okw-ivaga

monkey (small, dark-coloured) -poma (Not mentioned in F31a, F32b, F32c) (cf F25 -Im-buoma) unique creation in F31 and spread to F32? What about F25? (cf hahoun, ape -pooma (F24, F25 Im-booma) G61, G62 ili-puuma).

n/s n-pulmma cf F132 in-quiume

potatio (sweet) -doolo F21 maan-doolo; D25, [M20] kan-dolo; [P10] kin-dolo; G34 n-dolo, and elsewhere in east Africa

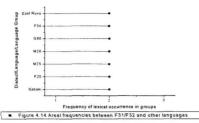
rhimocerus -peembele N12 ci-pembele cf DJ61 ru-hembe; [North Rutara] eŋ-kura uyaruhembe/ekuraru-hembe rhino with the horn'; M31 ki-pembe-kimo 'the one with one horn' P25 si-pambele?; extension of meaning < PB *-pembe horn'

testicle -tuumbu cf [G60], P21 li-pumbu; Sabaki, M22 -pumbu ; East Ruvu -pumbu/mumbu; Seuta; P25 mumbu; E62c, P12 m-bumbu

The other groups which share one word with F31/F32 are DJ61, G24, G34, P20, E60, E62c.

G52, E54a, M14, EJ25, P10, P12, P13, P21, F33, F34, F24, G62, E46, F21c, M22,

M31,M32, N10, N12, EJ441, F25, EJ32, F21, D25, North Rutara and Seuta.



4.2.1.2.18 ()ther groups: KprzLaamba, KzRzmi. KzKzmbv

The results in this sub-group are startling. Only one word seems to unite them, although even this one is shared by other groups. The most disturbing fact is that the word is not mentioned in F24b, the southern variety of K1KIImbU which shows less influence from languages of the north like F22.

(173) Areal vocabulary, derivation, morphological innovation and borrowing: (1 word)
shield-gula (F24a) G11, G12⁴⁷, G61, G66 p-gula Borrowing (cf F21, F22b lu-puuda)

⁴⁷ G11 and G12 are from Nurse's unpublished field notes.

This grouping is a good case which demonstrates the problem of lumping together languages when they are simply adjacent or because they show a high rate of lexical retention. This uneasiness is also mentioned by Nurse (1979a:28) who observes the loose unity between these languages. While they may be closer by retention, lexical innovation reveals more disunity. The cases of shared innovation like this one include mainly areal vocabulary which

suggests there is normally a centre of innovation in one language and an area of spread to adjacent languages. Because of this weak lexical support, these languages may not be one

entity historically, apart from the fact of being geographically adjacent.

4.2.1.2.19 Other groups: KiiRangi and KeeMhiwe

Three words or 18% out of 17 words are unique to F33/F34, while the remaining 14 or 82% are shared by others, as indicated in Figure 4.15.

(174) Unique vocabulary (3 words)

heer i-rUsU (F33), -rusu (F34) pass, surpass kU-looka (F33), ho-looka (F34) udder ki-miira (F33), ki-mire (F34)

(175) Areal vocabulary, derivation, morphological innovation and borrowing (14 words)

hrother-in-law maange (F33), maanke (F34) cf [Rutara] mu-ramu waange/ mu-ramu-kazi waange 'my brother/siter-in-law': compounding and reduction, < PB *damO 'brother/sister-in-law': -1_pge 'me'

follow ku-tuba (F33), o-tuumba (F34) E46-tubagera; EJ24 ku-tubilila; cf EJ25 -ruba; E62e -idubisa; Barbaig dubagesht < Proto Omotic-Datooga *rup follow (Rottland 1989) grass, leaf-saambe D25-samba cf EJ32-samba?; G35, [G50], [G60], [N10], P15, [P20]-samba/-hamba
mutriage: holats (F33)-loola (F34) (F25 ilcole): G42d-oa < -loola < -loola

murriage i-loola (F33), -loola (F34) (F25 iloole); G42d -oa < -lola < -lola mushroom i-rino (F33), ma-rino (F34) cf DJ64, DJ65 iki-zinu?

pipe (tohacco) -puunde (F33), ke-buunde (F34) (F32 -fuunde) EJ45 eke-βonde; G35 munde: EJ24 ekibunda? (cf Barbaig kanonded)

potato (sweet) kt-rasi (F33) ke-rasi (F34) G42d kiazi/viazi. Widespread in East Africa pronounce ktJ-lusa (F33), o-losa (F34) cf EJ31 xu-rwaasa

spoil ku-saambura (F33), o-saambula (F34) cf F21c -saambula 'demolish, especially a house or structure'

sweet, pleasant mw-erere (F33), m-orere (F34) EJ40 -comercru/-zomercru; Seuta -mw-ile; -mw-iiye; [East Ruvu] mu-lile of DJ66 -βeleye, E46 -jamiryo

take, carry ku-toola (F33), o-toola (F34) G50, [G60], M10], [N10], P10 kutola; [Seuta] -

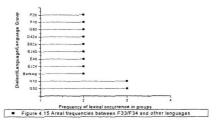
taste (vt) ku-saera (F33), o-seera (F34) EJ44g ko-sagasera

yesterday niijo (F33), meejo (F34) [North Rutara] ijo; [North Nyanza] jjo/izzo; DJ60 ejo/ nijoro; EJ40 ico/izo; P20 liiso/liido; P10 liso; [N10], G50, lisu; cf E62e hiyo; E55 tyoo; yvuth mu-tavana (male), mu-hiinja (female) (F33); mo-tava, mw-aana-mo-ka (F34) G66 mirita: E46. E74 mo-taana

The other language groups which share one word with KiiRangii (F33) and KeeMbuwe (F34) are Rutara, EJ25, D25, EJ32, G35, East Ruvu, EJ44g, North Rutara, DJ60, P15, F25, DJ64, DJ65, F32, EJ45, EJ31, E74, F21c, Seuta, M10, P10, North Nvanza, E55 and G66.

Although there is a lower count of shared uniquely created vocabulary between F33 and F34, there is reason to believe that these two are related genetically, supported by native speaker intuition⁴⁴.

³⁸ Personal communication: Michael Kimolo (1994), Florian Kimolo (1999) and Flourine Francis (1999) on the relationship between KiiRangi and KeeMbuwe with regard to KiiRangi folklore's epic branching of the earlier ancestors in search of francolins (of the (continued...)



The following five languages (or dialects) of Zone F, as individual languages (KeeMbuwe, KiiRangi, KiLoongo, ICIWuungu, and KiBeende) display one specific lexical feature in common. Their lists of unique vocabulary which isolate them from the general stock of the Zone F group, whether invented or areal, are unusually long compared to the others. This may point to some significant difference in their historical development based on the assumption that, if languages belong in one genetically derived zone, then the difference in their individually unique vocabulary is minimal, since their ancestor would be expected to

⁴x(...continued)

Francolimus genus, related to and resembling the quails and partridges found in the Old World), mbunove or kwafe in KiSwahili. For example, Michael Kimolo characterized the two languages as dialects which differed in speed and length of some syllables only: KiiRangii faster, and KeemBuwe slower tempo.

have innovated and borrowed the same items before a split into smaller units. After they split, only a limited amount of different vocabulary is expected. A full display of lexical behaviour for the Zone F languages is summarized in Table 4.26.

Table 4.26 Total number of language-specific vocabulary in Zone F linguistic groups

Language (group)	Identifying lexemes	Language (group)	Identifying lexernes
F21b,c (-Ntuzu, -Krrya)	13	NL (F21, F22, F24, F31)	4
F21a,b,c (KtSukuma)49	20	NR (F21, F22, F24, F31, F32)	8
F21 + F22b (KtSukuma2)	16	Zone F (F10, F21, F22, F23, F24, F25, F31, F32, F33, F34)	16
F22a,d,e (KINyamweezi)	19	F31/F32	15
F23a,b (-Siloombo, -Yoombe)	74	F24/F31/F32	1
F31a,b (-Ushoola, -zlaamba C)	39	F33/F34 (-Mbuwe, -iRangi)	18
F24 (KıKıımba)	39	F34 (KeeMbuwe)	53
SN ((KrSukuma2 + KrNyamweezi)	21	F33 KiiRaŋgi)	42
Ar (GiAhi, GtRwana)	7	F23c (KiLoongo)	73
F31a,b,c (KınıLaamba)	27	F25 (:C:Wσσηgσ)	79
F32 (KıRımi)	53	F10 (KiBeende)	91
NM (F21, F22, F24)	4		

³⁰ F22c in Guthrie is Ktya which does not belong in F22. It was shifted to F21 as F21c JinaKIIya. In addition F22b KIDakama joined the F21 group because of its linguistic affinity. leaving F22a, F22d and F22e as the core KINyamweezi dialects.

Any isolation of dialects from their sister languages increases their distance as they innovate and borrow differently, resulting in the emergence of new, different languages with an obviously different linguistic evolution, and a heritage from a different proto language. And it is this subtle difference of innovation and contact with other languages which divides the Bantu languages into zones (geographical), languages and dialects (linguistic).

If only the highest figures of unique vocabulary are taken as a first step, then these are 91 (F10 - KiBeende), 79 (F25 - ICtWuungg), 74 (F23a,b - shared between SiSiloombo and SiYoombe), and 73 (F23c KiLoongo). Incidently, these are the same languages which did not fit properly in the lexicostatistically based linguistic tree for Zone F because of their relatively lower percentages of shared vocabulary with the rest of Zone F languages. As a second step, other high figures of interest are 53 (F34 - KeeMbuwe), 53 (F32 - KIRImi) and 42 (F33 - KiiRangi). As a rule of thumb, it seems true that, if a language belongs to a group, its higher count of unique vocabulary implies questionable membership in that group. In this case, the membership of KiBeende, SiSiloombo and SiYoombe, KiLoongo, ICTWuungu, KeeMbuwe and KiiRangi is questionable or simply not genetic because of their higher unique stock. However, of these, KeeMbuwe and KiiRangi are closest to the remaining members of Zone F because they have fewer exceptions.

On the other hand, higher counts of shared uniquely created vocabulary among two or more languages or dialects is indicative of a common history between them. In other words, when linguistically viable groups share fewer unique innovations (whether as creations or areal

words), then they are unlikely to belong to one immediate genetic tree. Their similarity may be only areal. This is best illustrated by the counts of least shared vocabulary in KIKIImbD,

KINILaamba and KIRImi as one group, sharing only one word. That word is also found in

KINILaamba and KIKImi as one group, sharing only one word. That word is also found in neighbouring languages, therefore making any similarity between these three languages only

areal. Another illustrative figure is 7 words shared between GiAhi and GIRwana. Since

these two dialects do not form a final node in their group, then their genetic position within

Zone F is not the issue here, because they are part of larger KIRImi. What the 7 words tell

us is the existence of a significant relationship between the two of them as members of a

larger group. When they combine with YIJiaMujiijajii to form KIRImi, the number of

shared vocabulary between them is 53 unique words. This is one of the highest figures

indicating genetic cohesion without question.

Because of the first scenario of high numbers of unique vocabulary in single languages indicating non-membership, the following languages are not discussed. Only their vocabulary

is given, as members of geographical Zone F rather than genetic Zone F.

4.2.1.2.20 Other groups: KeeMbuwe

(176) KeeMbuwe unique vocabulary (53 words)

heard mbulo cattle vi-maka

chief mo-suungaati

day after tomorrow o-keeye

384

```
dog diyo
doze o-naafa
duck kI-dako/vi-dako
grandfather maame
ground (cultivated), farm waala
hate, detest o-sooca
hunt o-loomba
increase, make greater o-duuma
increase o-swaania
jaw (bone) n-kaasa
jealousy kI-feeva, kI-feva
kidney n-kosaankosa
leave, go away o-ferenka
lend, borrow o-taapca
milk masii
mountain mw-eemb1
navel mo-poku (F22b i-noku; F31a, F31b poku; F22a i-noonku; F32a peku; F32c peeku)
new kI-fefe
penis kīva
pig n-kamba
pigeon (kind of) ke-rukwa
pinch, make narrow o-dida
pit, hole -siimbo derivation: < PB *-cImb- 'dig'
pool, pond ki-tenge peri
pregnancy mo-kova
pull, drag oo-kurya
return o-taaloka
river mo-fulo
rooster, cock n-sesero
run o-feena
sell o-ta
sheep o-risa
shield gaamboda: borrowing Iragw gaamboot
shiver o-siingisa
singe o-reerya
slaughter -kera
snail n-kalaya
sniff, smell out o-ndu[a
speak o-loseka
stick mo-resa
```

sweat biro

```
termite mekese
tomorrow loovi
Iry weseererya
urinate o-sumaa < PB *-cub- 'urinate'? (cf E55 ku-maa)
urine ma-suma < PB *-cuba 'urine'? (cf E55 ma-umao)
well (n) soola
work as a mason o-ji[a
zebra n-dako va i-sake 'donkey of the bush, i.e. wild donkey'
4.2.1.2.21 Other groups: KiiRangi
(177) KiiRangi unique vocabulary (42 words)
armpit ki-nesu
day after tomorrow luvirirya
dog kuri also found in Seuta, Arusha (Ehret p.c.); loan Maasai ol-kurii
dust, cloud of dust i-ruri cf Iraqw/Burunge teri 'dust, earth' (Nurse 1979b:515)
embrace ku-kwatirira
feathers, fur baaera < G60 ama-gala?
finger i-maamba
give ku-toola cf G42d kutoa 'give, produce, remove'?
grandfather baaba semantic shift: < PB *-baaba 'father'
hate, detest ku-suula
hunt ku-sakaata < Barbaig fagata 'search for, hunt' of PB *-cak- 'search for, chase'
increase ku-mema
jealousy i-vIsI
knee i-coomero cf G60 -fugamilo?
kneel ku-cwaama < -cugama < -tugama (cf G60 -fugama 'kneel')
know ku-taanga
leave, go away ku-roka < G40 kutoka 'leave'?
mosquito uno
navel mu-kt/fo
outside weerwi
pit, hole I-duundu (also used for 'well')
river i-Bote
salt saangasa
sell ku-culuca (cf F21c gu-suluia 'to trade')
sharp (he) ku-kola
shave ku-kera extension of meaning, < PB *ked- 'cut'
sheep muundi
```

```
sift ku-cekesa (cf gusegeesa 'to separate butter from milk by shaking, especially in a
calabash')
snail i-tambaala Seuta term (Ehret p.c.)
sneeze ku-va maafa
sniff, smell out ku-tahva
spear n-koongo
thigh (human) ra-awa/ma-awa
thigh (animal) kI-jUmbUlU
tomcat (half-wild) i-hulumi
tortoise ki-simantohe
/ry ku-veva
walk ku-doma
word i-saare appears in Sabaki (Ehret, p.c.)
vann kw-aasama ('gape')
zehra η-jae E46 η-jage; EJ40 -η-faye/-η-cage/n-zage/n-zagi/η-jagi; EJ25, E52, E54b η-jagi
(cf Iraqw dakeet (Sg), daket (Pl)
4.2.1.2.22 Other groups: KiLoongo
(178) KiLoongo unique vocabulary (73 words)
axe n-seepa
hanana (fruit) i-hiise
hark of a tree i-Baangwa
heat ku-teela Rutara
hlood Bwaamba Rutara
borrow ku-tiiza
brother, relative mu-zaale cf PB *-biada 'cousin'
hush i-luungu
buttocks i-buunu
cease, finish ku-hwa
chief, king mu-kama [Rutara], DJ64, EJ25, [EJ40] mu-kama
climb, ascend ku-hanama
cow e-n-te Rutara of Proto Eastern Nilotic *-ktten 'cow'? (Ehret 1971)
coward mu-tiini derivation PB *-tIIn- 'fear, run away'
crocodile e-nsaambi (F23b nsaambi)
darkness e-n-ziimbazi
daytime i-haangwe
deny kw-aanga Rutara
```

```
do ku-zila
finger lu-kumu General Great Lakes term
fly (house) e-n-sohela cf F21c sohela 'small, blood-sucking flies which pester cows'
grandmother kaaka Restriction of meaning, < PB *-kaaka 'grandparent'
great, powerful, hig -haange found in Rutara
ground (cultivated) e-n-saambo
hair i-soke appears in Rutara
hide ku-seleka Rutara
husband iBa (F10 iBa)
intoxicated (get) ku-tamiila
jeny (hone) eemba
lamp e-n-kaanzi
lean (become); grow thin kw-aanuka
leopard e-n-zumula
lie down ku-lyaama Rutara
lion e-n-gaanza Rutara
maize i-po
male i-seeza/ma-seeza Great Lakes
medicine, remedy mu-Bazi
mother maaha
neck bica Rutara
night cilo Rutara -kilo/-cilo
path mhaanda Rutara
pig ee-m-punu Rutara
porridge (stiff) o-Bulo
press out (oil seed, sugar cane) ku-kaanza cf F21c -kaanza 'extract, usually seeds, from a
plant/fruit like a cucumber'
quarrel kwi-izumagula
rat mu-dolo
rhinoceros ee-n-kula Rutara
river mu-nona (cf F21c nnona 'ravine, especially with fast flowing water'
seed mb1βo cf F21c -β1βa 'plant seeds by throwing and scattering'
sister, (his her) mu-naana
slander, accuse falsely, often secretly ku-Beehela
slaughter ku-βaaga (F23b ku-βaaga; F21c gt-βaaga 'to flay an animal')
sleep ku-Ivama Rutara
smoke mu-hilinka
snail e-∩oonga
strength, power maani (cf G42d manii 'sperm'?)
stutter ku-titihaza
sweat e-mpiita (F10 kafiita)
```

kears ma-ilia derivatione 'PB *-dtd-'cry'
think, imagine ku-teekuza
thirxi -iliho
tick (of coutle or dog) ee-m-balaflala
tomorrow peepca Rutara
urine ee-pkali Rutara
vomir ku-tanaka Rutara
wokil (take a) ku-tuumbagila
weesh (hanks) ku-tuumbagila
weesh (hanks) ku-tuumbagila
veesh (hanks) ku-naafja cf G42d -nawa 'wash hands'
whishing lu-cuizo
who oha
yoovi kw-iyayamula
yoong mar mu-sigaai Rutara
zebra ee-m-tuleee

4.2.1.2.23 Other groups: ICIWUUngu

(179) ICIWUUngu (79 words)

ashes i-twiitwi ask for ku-leenga arrow D-n-dDDnda hanana -dizi cf G42d n-dizi 'banana' bathe ku-cunda beautiful i-noonu extension of meaning, PB *-non- 'became fat', cf F21 -nonu 'sweet' hite ku-wawa blood U-laanda charm (especially to ensure wife's fidelity) (n) i-nuumbo chief, king mweene cloud i-koombi cohra I-hoogo courtyard i-saala crawl, creep ku-sala crocodile I-n-doolo day after tomorrow isikwIIDje

```
defecate ku-ku-pa (ku-insertion and double infinitive why?)
do ky-loonga
dwell ku-kw-iikala (double infinitive?)
face downwards ku-kw-Inama (double infinitive?)
father-in-law mother-in-law kaveemba
fence enclosure IU-wava
finger kaa-n-kono derivation using diminutive ka-: < PB *-kono 'hand, arm'
fingernail i-nIIngwa
fly (house) i-sangaazi
four i-povu (of soap): borrowing to enrich language, since ifuulo < PB *-pudo is for the rest
of other types of foams.
food supply for a journey 1-n-suuma (cf F21c -fuma/-suma 'obtain/buy food, usually from
a distant place after a shortage or famine in one's house')
fully developed (he) ku-kw-eeniuka (double infinitive?)
go ku-waala
grass, reeds i-sote/ma-sote
grind coarsely ku-sigina (cf F21c -[igina 'grind finely and thoroughly')
ground (cultivated) caalo (cf F21c caalo 'village, land, district country')
heavy, serious, dull i-kopaavu
hundred I-mya (F24b, F33, G42d mia 'hundred')
ill (be), groon ko-wima
itch ku-pegela (cf F24b kupegela; F33 kupeera; F34, E74 and some others opeera)
kill ko-komaanga extension of meaning, < PB *-kom- hit with a hammer
kneel ku-laamba
knife o-m-pyaano 'knife used by men only' (cisu 'knife for women')
lake, pool, pond U-IU-kUwa
lean (become): grow thin ktt-tona
leg, foot I-cInama < PB *-vama 'meat'? Corridor
lick (vt) ku-myaanda
lie on one's back ku-kw-anzika (double infinitive?)
light, sky I-koombi
lion 1-saama Corridor
listen ku-kw-IIvIkI[a (double infinitive?)
look ground ku-vwaamba
louse 1-suumi
maize i-saka/a-ma-saka (F10 sisaka/fisaka)
```

⁵⁰ The addition of ku- is counted as one innovation only, and the cases mentioned only illustrate the phenomenon in the language. Most of the words are inherited from Proto Bantu. F31 and F32 of that to a limited degree (Nurse, p.c).

```
medicine I-kwI (cf tree I-kwI, < PB *-kUI 'firewood')
monkey I-m-bwaaii
mould pottery ku-maata, (also elsewhere in east Africa)
navel kt-pwawaambwe
open mouth wide, vann ku-kw-asama (double infinitive?)
pot, vessel I-cI-IndU/ I-vi-indU
protect by charm (medicine) ku-tema
quarrel ku-ku-dwa (double infinitive?)
quiet (he) ku-kw-iinala (double infinitive?)
river U-m-baana
root i-kwaazo
scorpion I-ŋ-go∏a
search for ku-vwaamba
seize ku-lema
sell ko-kaja
set (of the sun) kw-iila /g/ loss, (cf F24b ktt-gw-IIIa; F31a w-eela; F31b -iila; F33 kw-iira;
F34 o-w-era, F21c gw-Ila; (cf F21, F22a -gwa < PB -gu- 'fall' )
shame, disgrace vaazi
shave ku-seena
sick mbIInu
skin (of person) I-n-gweembe
soot a-ma-twiitwi (cf itwiiti 'ashes')
speak ku-tela
spear U-n-duunda
spread ku-kw-aala (double infinitive?)
spread abroad (he), become generally known ku-kw-eenela (double infinitive?)
stick soomi
take, carry ku-seenda
taste ku-myaanda
thigh (human animal) IU-paamba/I-m-baamba
tie, fasten ku-nepa
tomcat (half-wild) i-waka
tree i-kwi
rv ku-paaia
walk ku-wala
wall U-lu-wuumba
wash, take a bath ku-ciinda
wet (get) ku-kolowa (double infinitive?)
wind U-mweya (cf F21 paga (< mu-yaga), Rutara mu-yaga 'wind' and *g loss in F25
withhold from ku-kw-iima (double infinitive?)
```

F25 has some affinity with F33 and F34 in losing *g unless it is pre-nasalized as in -lowa (F25/F33), -lova (F34) < *-dog- 'bewitch' and Iŋgaaŋga (F25), ŋkaaŋga (F33, F34) < *-kaŋga 'guinea fowl'

4.2.1.2.24 Other groups: KiBende

(180) KiBende unique vocabulary (91 words)

accustomed (get) ku-beelela animal i-nweele ashes i-fuundu/ma-fuundu (F22a matuunde) ask for ku-seeya haboon, monkey i-jaanda/ma-jaanda base of tree-trunk i-siindo hathe, wash hands ku-paaya heads Bu-kasi (< PB *-kadi 'female'?) hite ku-teta blood malase < PB *-lac 'to shoot with arrow' body si-taambo/fi-taambo brother, relative wa muyana huild ku-jußaka cf PB *-bak- 'build' bush i-siyo calabash lu-siingi/n-siingi chest i-tuundu cloud i-knusi/ma-knusi count ku-paanda cover ku-fiimbila day lwiisye (F21c lwIsI used mainly in lwIsI lweene 'that day') (< *-yIcI 'day, daylight, found mainly in Zones A, B, C?) day after tomorrow before vesterday lwijsve luundi denv. refuse, say no ku-tuna

like in F25, by adding a syllable in verbs, the infinitive ku-?)

dig ku-saβa district, province, country si-huyo diy (vi), set out to dry ku-y-anika (morphological innovation or retention of earlier PB form,

```
dust, cloud of dust lu-fuundu/ma-fuundu (cf ifuundu/mafuundu ashes', difference of class
marker to show difference)
feathers ma-fuumbu
fill ku-buumba
fish i-seembe/ma-seembe
frog ka-saßa
goat (he) li-kaßooloßoolo ('the strutter of its testicles/penis'); lexical extension < PB *-bodo
'nenis'
grass ma-Bano
ground (cultivated) i-Bala
gruel, light porridge m-pana
hair (white, grev) n-kote
hand (right) kweene
heart mweeyo
heavy, serious, dull i-Owaamu
hill, mountain mu-sosi/mi-sosi Common Great Lakes, loan from Nilo-Saharan, diagnostic
term of Great Lakes subgroup (Schoenbrun 1997; Ehret p.c.)
hold, arrest ku-niva
hvena i-tana
kill kw-ihaaya (D28 -Ihaga)
king mw-aami cf DJ60 mw-aami 'chief, king'
leak, ooze ku-sooßa
lend horrow ku-tiila
look after grazing cattle ku-kema
love, want ku-nomwa
lung i-poombo/ma-poombo (<PB *-puupu 'wind '?)
matize si-saka/fi-saka (nsaka/masaka 'millet' < PB *-caka 'bush'?) (D28 -saka F25
isaka/masaka 'maize')
migrate ku-tuluuka (7V?)
mosquito ka-laamba/tu-laamba
navel mu-ρορο/mi-ρορο
pack, flock, group mu-leva
pipe i-kuunka/mi-kuunka
pot, vessel; earthern cooking pot n-kono
pour away ku-yona
protect by charm (medicine) ku-liisiimpa, ku-siimpa
pull ku-bwiita
quarrel ku-soola (F22d -soola: EJ16 kusola)
rest, take a holiday ku-tamuka
return ku-heleela
run ku-kilima
```

```
seize ku-niya
seven dwi
sew ku-laanda
sharpen ku-tyasva
short -tofu
skin rind (of fruit) i-papa
sneeze ku-tisila
speak ku-teenda
spit ku-tema
spoil ku-vonona
spread ku-ganika, ku-yaansa innovation or retention of -ga-?
star lu-taangwa/n-taangwa < PB *-tangua 'sun' (Zones H, L, K, R)
stick i-ntußa
strength, power manaya
stumble ku-kuuntuka
sweat kafita (F23c)
sweet -Ivoohile
thicket i-huumpu
thigh (human animal) i-taamba/ma-taamba
thirst n-kaangu (cf F21c iilaangu 'desire (thirst) for things one does not deserve')
tie, fasten ku-haamba, ku-haambilila
tomorrow yesterday isoneka
try ku-liingisya
walk (take a) ku-lyaata
wall lu-mato (cf F21c -mata 'plaster by throwing from a distance, usually watery mud)
war masoola
wet (get) ku-⊓aa⊓a
wind musaya
work (n) musika
```

4.2.1.3 Contribution of non-Bantu languages to Zone F

In the following examples of shared vocabulary, there are clear-cut cases of borrowing from and to either direction, on the one hand, and the obscure ones on the other (for a fuller treatment of Cushitic and Nilotic loans in Bantu languages, see Ehret 1971, 1980; Nurse 1979b; for Arabic loans, see Bosha 1993)

4.2.1.3.1 Contributions of non-Bantu languages: Iraqw

The three words below are from Bantu without any doubt, and their significance lies in the obvious fact that speakers of different languages have always interacted with their neighbours, borrowing words from each other in the process. The number of words borrowed depend on the perceived gaps and reasons for borrowing by the recipient languages' speakers. When only oral history is available, in cases like Bantu where speakers of different languages from language families have interacted for millennia, tracing the sources of those words becomes difficult

(181)

hed ki-taara loan, PB *-tada 'platform' hottle -cupa, loan, KiSwahili -cupa sword -panga, loan, KiSwahili -panga

It is difficult to decide whether the following words are native to Iraqw, loans from the languages listed after them, or from sources other than those shown:

(182)

grass for cattle manongi (f) manonga (f) F21cma-noonga name of river, meaning 'shells'.

The river divides Tabora and Shinyanga regions and its valley empties its water in the Wembere swamp. Cattle graze in the valley and drink from the river.

hare kwa?angw (m), kwa?ceri (n) F21c gwana-kaapwa hare, mainly used in

personifications in folklore; also a female proper name kaapwa, with the whole name for the 'hare' meaning 'son of Kaapwa'. Is it a loan from Iraqw?

The following group of words are borrowed by the Bantu languages. However, for some like 'maternal uncle', 'pestle' the direction of borrowing is indeterminate, since Southern Cushitic might have borrowed from Bantu. Many of the examples from JinaKIIya are compared mainly with Iraqw vocabulary by Mous (1993) and Maghway (1995):

(183)

heans loosito (f) loosi (f) F34 loosi

darkness giwti NCfi F21 giiti, F24 kiiti 'darkness' (cf PB *-kiit- 'screen') kid, lamb deel(a)moo NSgfi51, deelav Plm F21c ndIlaana 'infant calf' maternal uncle maamay (m) maami?i (n) F21 maami 'uncle (who is by definition, maternal)' This word in K1Sukuma can be posited to have come from two Proto Bantu words muulmu) 'mother' and -dDmi 'male, man' to form the compound maa(ma)-lDmi 'male mother' or 'brother of my mother'. In oRuHava, the second stage before a portmanteau stage is reached is relevant: marumi 'maternal uncle'. This word is very similar in context and meaning to 'aunt', which in Bantu refers to father's sister only. In KISukuma, as in many of the Bantu languages surveyed, it is composed of two words: seengi < *-ce '(his) father' and -ke52 'wife (female)', becoming 'female father' or 'female person born of same parents as my father. The other zones in Eastern Africa indicate that the concept is widely distributed. since many members in E. E.I. G. M. N. and P. also use a two-word compound to represent 'aunt', as in oLuNvankole which better represents this concept of referring exclusively to father's sister: ife '(his) father' and n-kazi 'female', becoming ifenkazi 'paternal aunt' (cf KiSwahili shangazi 'aunt'. Because of this likelihood of Bantu origin, both the JinaKIIya maami and seengi are suspicious as original Nilotic words. Since JinaKIIva does not have

hull, higgest in herd sidiimé NSgfi sidiimedu? Pln F21c [adiimá 'biggest bull in herd'

-lumi for 'male, and instead has -lume, it might be a loan from EJ20 or EJ40 where that shape is found. For instance, as an analogy from maconey, it is unlikely that the following reconstruction for Proto Southern Nilotic is correct: soft into saternal aunt'. Rottland

⁵¹ Abbreviations used by Maghway (1995.211) in describing Iraqw. Some like N 'noun' are universal, while others like fi or fii are language-specific: N = noun; Sg = Singular, fi = first feminine subcategory; PI = plural; m = macruline NC = non-count noun; n = neuter

⁵² seeggi can also be posited in KISukuma as *-ce '(his) father' and *-ggi 'other'.
to mean 'another kind of father'

1989:221), or even Iraqw egga 'father's sister' < Proto Southern Cushitic *7ag- 'father's sister' (Ehret 1980:288).

pestle, mortar stick musa (m), muse (f) cf PB *-yIncI 'pestle', F21c gwIIsI

piece of soil with grass kinti (f), kinta (f) F21c Ikiindo 'dry clod of earth'

pole (for shutting cuttle enclosure) kaangarmo (m), kaangara (f) $F21c \beta U$ -kaangala 'short poles cut to fit the width of a bed used as a mesh onto which a cow skin or other skins can be spread, for sleeping purposes'

leather hag (on donkey) may foodu F21c fooda/mi-fooda 'leather bag'

mule unimal yaqaamba Zone F and some other central Tanzania Bantu languages 'bull' sear, chair, place to sir kitaaŋw NSgm kiteeri7 Pln F31 and some other Bantu languages kiteeng0 'seat, chair'

side dish naanu F21c nani 'relish, which can be from plants (all kinds of vegetables) or aniimals (all types of meat) as a regular, complementary accompaniment to a main food made from grain'

sunset, evening tsiindi NSgfi tsiindoo Pln F21 mIIndi 'evening' sweet potatoes kasiito\o (f) kasiis (f) F23 -ziizi 'sweet potato' (cf KiSwahili kiazi).

4.2.1.3.2 Contributions of non-Bantu languages: Barbaig53

The loan words in Bantu languages from the list below are Barbaig, and some Bantu language varieties like JinaKttya have borrowed them. Those from Cushitic in Barbaig might have been borrowed by the Bantu languages either directly from Cushitic, or indirectly from Barbaig, as in the case of loss' beans', from Cushitic, which might have been borrowed by KiiRangi from Barbaig because of its shape, rather than the Iraqw loosito\u00f3\u00

(184)

calf of leg hawda cf saluta/saluda in KIKIImbu, KISukuma and KINyamweezi?

⁵³ From Nurse's 1972 unpublished field notes collection.

calf of cow mayd (sg), muhog (pl) F21c muuga 'heifer'

cow ded(sg), dug (pl) F21c dIIda 'old female cow'

dust binjand F21c gusanda 'powder, mainly medicinal'

horse diged Ulay 'European donkey', Ulay from KiSwahili, Ulaya 'Europe'

hump hukta KISukuma and KINyamweezi luguku < Proto Southern Nilotic *yuuk (*yu:k) (Ehret 1971:96) 'cow's hump'

hunt fagata E46, E62d (and E60 generally), F33, Hadza, loan from Cushitic, as in Iraqw tagaadu; Alagwa †akaat; Burunge †aakat

took after grazing cattle adabiw F21c g0-labilla 'look after grazing cattle for another for a short period before the substantive herder takes over' mitratue. move anny balage F21c Ut-base, temporal, grazing camp obtained after mitrating.

from the usual place of domicile'

mother iya F21b iya 'mother' pot, vexel dahuda F21c -dahula 'scoop and serve, mainly relish, from a cooking pot to a smaller, serving bowl/vessel'

shield igambod F34 gaamboda: borrowing < Barbaig (Iraqw gamboot also borrowed from Datoog)

tail Jumpand F21c stripwaanda 'bushy, bull's tail-end used for dances and ritual' tortoise gumald F21c gulumaadi 'tortoise'

Because of their shape, the words below are borrowed from Bantu, with Barbaig affixes attached to the Bantu roots:

(185)

hoe magempand (sg), magembojig (pl) PB *-gembe 'hoe' spoon matingod PB *-yiko 'spoon' hed bulalida PB *-daad- 'sleep' cf -didi 'bed'

On the other hand, the following words are most likely borrowed through KiSwahili generally. Some of them are from other Bantu languages other than KiSwahili, with their origin in Proto Bantu:

(186) Possible Bantu loans in Barbaig

hottle cupajand (sg), cupajeg (pl) G42d cupa 'bottle' bread mkat G42d mkate 'loaf of bread'

```
chief mtamid F21, F22, F24, G42d m-temi 'chief'
examine apima G42d -pima 'measure'
fish samak G42 samaki 'fish' < Arabic samak 'fish'
highway balbala G42d barabara 'road'
hook (for fishing) ndoan G42 ndoana 'hook'
hunger jalod PB *-jada 'hunger'
lime, whitewash cokaa G42d cokaa 'lime, whitewash' < English 'chalk'
pay alipana, gilipanda G42 -lipa < PB *-dIp- 'pay'
pol (metal) kopajanda (sg), kopajega (pl) G42 kopo 'small tin' < Portuguese copo 'cup'
pump bomba G42 bomba 'pump, water tap' < English 'pump'
ragor wemb G42d wembe 'razor blade'
read kisomand G42d -soma 'read'
salt munod PB *-munu
size, measure gipim G42d kipimo 'size, measure'
spring, machine masineda haw G42 mashine < English 'machine'
sword panga G42d panga 'matchet'
teach, instruct go-fundi[ G42d ku-fundisha < (cf F21c regular infinitive gu-)
tomato nan G42d nana
town muii G42d mii
whiteman msungajanda G42d mzungu 'European'
While some of the above words were relatively easy to trace, the following show some close
affinity to Bantu morphologically, although they show up as Barbaig.
```

```
(187) Possible loans in Barbaig from Bantu and other obscure/unknown sources
```

he, hecome huwa cf PB *-ba

```
hout, cunoe malambod cf F2/IF2/E74F3/F32-4ambo; EU25b-rambo 'pool, pond' cod hyawdo nomatopoeic, as in most Bantu languages fierce, sharp ŋanipa cf PB *-kadtp- 'be sharp' //lib madakalgajega cf F22e, F23ab ma-takala; F23e bi-takala; F24 n-taxalala; cf F3 la ma-lagala; G65 a-ma-kakala; G61 a-ma-kakala; G61 a-ma-kakala; G61 a-ma-kakala; G61 a-ma-kakala; G61 serape' garde, scrape 'far, fara cf PB *-pad- 'scrape' gan mandischand cf F22 F24 mud0ji; F25 I-m0d0Usi; F10 munduusi; F22e mund0Uzi; F31a mud0Uzi moutrning foka cf F31 sUka 'mourning' did limes, the past garrai cf PB *-kale
```

pestle mosida cf PB *-vIncI

seven isba < Proto Southern Nilotic *tisap, a loan from Eastern Cushitic *tizzb-(Ehret 1971)

(cf Arabic sabaa(t) 'seven').

(1988))

sound, cry fokjand cf F31 stka 'mourning'

From the foregoing lists, the vocabulary from Iraqw and Barbaig indicates that some words can be traced quite easily, while for others it is difficult to know whether their origin is Bantu or non-Bantu because they are claimed by both as native, as in the case of 'sheep' which is Proto Bantu *-kodo and may have some bearing with the Central Sudanic *-(k)ondri, although *-kolo had not been traced to any non-Bantu source (Ehret 1968:217). With the passage of time and collection of more data however, some of the words can be ascertained, as is the case with *kodo and *-kondri (Ehret 2001, p.c.). For some, tracing their origins remains illusive. This goes to show that proto languages can be multi-genetic (for a discussion of the impact of the nature and length of contact on loan words, see Thomason and Kaufman

4.2.2 Conclusions: Lexical status of Zone F members from qualitative evidence

The data and discussions of qualitative evidence in K1Sukuma, K1Nyamweezi and SiSuumbwa, on the one hand, and other Zone F languages on the other, reveal the following general, tentative conclusions:

(1) The dialects as concrete linguistic units smaller than languages are true historical representations of differentiation due to linguistic splits. If they are dialects, they normally share the highest number of words within a language and they can be represented in a linguistic tree as one node. They can thus be posited as genetically related at that micro level to form the languages we know. Beyond that, uncertainties abound. This is true of the KISukuma group, where KImunaSukuma, GtnaNtuzu and JinaKIIya form a coherent group as one would expect. For KINyamweezi, KIDakama behaves more like a dialect of KISukuma in significant ways, leaving only KINyanyeembe, KIKonoongo and SiGalagaanza in the KINyamweezi group. In SiSuumbwa, SiSiloombo and SiYoombe unite genetically, while KiLoongo departs from the two in important ways. Lexically, the historical affiliation of F23a,b (SiSiloombo and SiYoombe) with neighbouring languages is difficult to ascertain precisely, especially between DJ60 and EJ20, as the above graphs show, while F23c's (KiLoongo's) affiliation is clear: it does not belong in Zone DJ60. It is a member of EJ20 or Rutara generally. Internal dialectal unity is also solid in the separate KInILaamba, KiRImi and KiKIImbū groups.

On the other hand, IC1W0UngO, KiiRangi, KeeMbuwe and KiBende each form a group of its own because their innovations are quite different from the rest of Zone F languages, indicated also by the relatively lower shared lexical percentages. Because of forming their own groups, analysis does not proceed any farther as an indication that they do not immediately belong to the larger group, and therefore their analysis deserves a different project altouether.

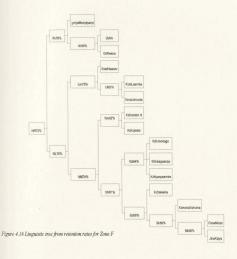
For the remaining languages in Zone F, namely F21, F22, F24, F31 and F32, it is true that as one goes higher up in the linguistic tree, incorp@nating more dialects and then languages, the internal relationship of the expanding groups begins to be clearly due to geographical proximity since unity becomes progressively weaker and essentially areal.

For instance, F21/F22/F23 is not a historically valid group because F23 does not belong there, lexically. F23 belongs to either EJ20 or DJ60. On the other hand, F21 and F22 share many lexical innovations, both unique creations and areal, making it a better group historically, although it is difficult to say whether they are dialects of one language as Nurse (1999:10) suggests, most probably quoting conventional wisdom. Some significant differences exist language-internally, as shown by their unique e/eations and areal vocabulary configurations, as elaborated below. Such configurational différences between F23 and F21/F22 suggest a different genesis, since geographical proximity or distance of related languages does not significantly erode genetic affiliation. This is strongly supported by the case of F23c (KilLoongo) which has maintained its genetic affiliation with EJ20 despite being engulfed by F21. Physical separation of dialects or languages does not therefore significantly affect their former historical path even at their lexical level, although the evolutionary path is normally clearer phonologically.

As to genetic similarity between F21 and F22, two possibilities can be advanced: first, either the languages were one initially, and an earlief divergence differentiated them as separate languages, although the speakers maintained contact by being resident in contiguous spaces; second, though descended from the same Proto Bantu, they might have been different languages which, by convergence, were made more similar by contact. Nurse and Philippson (1980:38-9) describe both the long and short range mutual influence between speakers of neighbouring languages where even languages from different families display some lexical similarities.

(2) There is fuzziness of affiliation at higher levels in the linguistic tree (See Figure 4.16 below). Three nodes shed some important light on the lexical status of Zone F, the highest node in our discussion. These three nodes are NM formed by three languages (F21 (KISukuma), F22 (KINyamweezi) and F24 (KIKIImbū); node NL, composed of F21, F22. F24, with the addition of F31 (KInLamba)); and node NR, which includes the preceding group, NL, (F21, F22, F24, F31) with the addition of F32 (KIRImi).

The members of node NM, that is, F21 (K1Sukuma), and, F22 (K1Nyamweezi), F24 (K1Kttmbt) do not share a single unique lexical creation as a diagnostic innovation out of the 4 possibilities identified, indicating that their unity is not necessarily genetic. The linguistic tree in Figure 4.16 implies that they descended from only one node up the tree, an assumption which is not supported by lexical innovation. Likewise, the members of node NL (F21, F22, F24, F31) do not share any unique lexical innovation apart from areal vocabulary. On the other hand. Zone F displays three shared innovations only out of the 17 identified.



although even with these three, only one seems to be properly unique. Unfortunately, even this one word has a problem: an important member, F24b does not share that word, suggesting that the innovation might have started at one point and simply spread to the rest.

This is illustrated in *Table 4.27*. In this table, unique lexical inventions and areal vocabulary counts are compared. Within any one group, fewer or zero shared innovations imply an

automatic weak or absent genetic relationship with a larger group (e.g. Zone F) into which they purport to belong.

Table 4.27 Lexical innovation in Zone F and genetic affiliation

Linguistic node and % of shared		Wor	ds innovated in 2	Cone F	
vocabulary	Total # of words	# of Unique creations	% of Unique creations	# of Areal vocabulary	% of areal vocabulary
F21b,c 90%	14	4	29	10	71
F21 89%	13	4	31	9	69
F21/F22b 86%	14	3	21	13	79
F22a,d,e 84%	24	3	12.5	16	87.5
F23a,b 84%	74	11	15	63	85
F31a,b 83%	31	13	42	18	58
F24 82%	39	13	33	26	67
SN (F21/F22) 81%	21	5	24	16	76
Ar (F32a,b) 80%	7	3	43	4	57
F31a,b,c 78%	25	10	40	15	60
F32 78%	49	10	20	39	80
NM (F21/22/24) 78%	4	0	0	4	100
NL (F21/22/24/31) 76%	4	3?	75?	1	25?*
NR (F21/22/24/31 /32) 72%	7	0	0	7	100
Zone F	16	1?	6?	18	94

Two interpretations can be advanced here: firstly, such high percentages may indicate dialects or languages which are internally less cohesive genetically because of dominant external

lexical interference or because of unrelated dialects or languages converging into one unit, as in the case of NM (F21 (KISukuma), F22 (KINyamweezi) and F24 (KIKIImbū); NL (F21, F22, F24, and F31 (KIntLaamba)); NR, (F21, F22, F24, F31 and F32 (KIRImi); or Zone F.

Secondly, the group may be genetically valid and cohesive internally but with heavy interference from other languages in the past as the cases of F22a/F22d/F22e, F23a/F23b and F33/F34⁴⁴ seem to suggest. F24 also shows this interference by having more shared than unique vocabulary.

This high percentage of shared areal vocabulary is best illustrated by K1Nyamweezi (F22a, F22d, F22e) (87.5%), SiSuumbwa (F23a,b) (85%), KiRtmi (80%) and K1Sukuma2 (F21, F22b) (79%) as examples of heavy interference, where the sources of that interference make tracing their history extremely difficult. The four examples, especially SiSuumbwa, are relevant because of the relatively large sample of Zone F-unique words identified, at a total of 76 words, where only 12 or 16% of them are unique creations. At level NR (F21, F22, F24, F31, F32), unique creation is 0%, suggesting weak or dubious genetic affiliation by this predominance of areal vocabulary, rendering the historicity of Zone F itself highly questionable, as it has an areal count of 15 words (or 94%) against 1 (6%) of unique inventions. On the other hand, NL (F21, F22, F24, F31) with a unique vocabulary count of

⁵⁴ The shared areal vocabulary of these two is 83% as shown in Table 4.29, which is less than 87%, indicating reasonable internal cohesion, although the languages are also significantly different because of beavy interference.

3 out 4, and 1 areal word suggests borrowing, since such an inconsistent display may be due to the small sample of words found (4 of them), where chance can play a bigger role than in a larger sample.

(3) The Zone F languages show more lexical affinity to outside groups than among themselves. This externally favourable relation is extracted from the highest cases of shared vocabulary appearing in the different groups in the graphs above. For instance as summarized in Table 4.28, individually, traditional KISukuma (F21) and KINvamweezi proper (F22a F22d F22e) do not seem to be immediately related to each other because KINvamweezi does not share significant vocabulary with Thagicu, while KISukuma does. When KIDakama extends a bridge between KISukuma and KINyamweezi to form one group, then Thagicu (Thagicu - Central Kenya languages like KiKamba and GIktyt) disappears. But also, Thaujou shares vocabulary to a large extent with only F32, and not with F23, F24, or F31. This suggests strongly that the development of these languages before the speakers settled in their current geographical locations was not from one parent. Where only a few Thagicu traces are found, it is likely that it is the effect of inter-dialectal borrowing, which tends to spread the words from one source to surrounding neighbours. There is also a suggestion that the lexical connection between F21 and E50 (Thagicu) is historically valid. given the possibility that the area currently occupied by non-Bantu speakers like Maasai was once occupied by the Bantu. The intervention by the non-Bantu cut off the geographical continuity, leaving linguistic islands, as Nurse (1999:4) muses about the connection.

On the other hand, three groups of languages show a widespread pattern of interaction with Zone F languages. These are Ruvu (G30), East Nyanza (EJ40) and Corridor (M10/20). Vocabulary which was not inherited from Proto Bantu and which was unique for a group within Zone F suggested mainly two processes: unique creation or areal occurrence. Widespread G30 or Ruvu vocabulary was shared by the following clusters: KISukuma2. K1RImi (F32), core KInILaamba (F31a and F31b which excludes F31c (KInIHaanzu)). Those not well represented were KINvamweezi proper (F22a,d,e). SiSuumbwa, as well as the SN (F21/F22) NM (F21/F22/F24) and NR (F21/F22/F24/F31/F32) combinations. Since these combinations are subsets of Zone F, two important points are suggested. First, the NM and NR groupings are not historically valid, since their individual languages have G30 vocabulary. If the speakers of those proto groups acquired those words as a single group before splintering into speakers of several languages, then the words would show up even in the larger, earlier groupings. Second, Ruyu (G30) vocabulary was acquired by the speakers of each individual language after the earlier groups had already split. Scenario two is unlikely, since it would require a larger agent for spreading those words. The first point suggests a plausible possibility that some of the G30 and F20/30 languages emerged from the same ancestor before they split, like the "Kati" suggested by Ehret (1994).

Such a scenario may well apply to EJ40 which shares vocabulary with all levels of KtSukuma, F21/F22, F31, F32, F21/F22/F24 (NM), F21/F22/F24/F31/F32 (NR) and Zone F generally. The interesting part however is that EJ40 is not shared with F24, F22 and core F31, indicating that the larger units beyond the language acquired the words through inter-dialectal borrowing rather than from immediate genetic heritage. Likewise, M10/20 words are found in F21, F22, F21/F22, F24, F31 and F32. On the other hand, as larger units, NM (F21/F22/F24) and NR (F21/F22/F24/F31/F32) as groups do not feature M10/20, indicating that the vocabulary is areal rather than genetic.

Table 4.28 Shared vocabulary between Zone F members and other languages

Linguistic node and % of shared vocabulary	Largest areal vocabulary shared with	Linguistic node and % of shared vocabulary	Largest areal vocabulary shared with
F21b,c 90%	Thagicu (E50), East Nyanza (EJ40), Luhya (EJ30/EJ41)	SN (F21/F22) 81%	F23, F24, (EJ25). DJ60
F21 89%	Thagicu (E50), Corridor (M10/M20), East Nyanza (EJ40)	F31a,b,c 78%	F24, EJ40, F25, F22e G60
F21/F22b 86%	East Nyanza (EJ40)	F32 78%	F31c, Thagicu (50), East Ruvu (G30), EJ40, Luhya
F22a/F22d/F22e 84%	M10, F23a,b55, F24, M20, F10	NM (F21/22/24) 78%	•
F23a,b 84%	F23c, Rutara (EJ11-EJ14, EJ21-24), DJ60	NL ((F21, F22, F24, F31)	
F31a,b 83%	F31a,b 83% F24, G60		F23a,b, DJ60, EJ25b, F25, EJ40, G60, M32, P13*
F24 82%	F22, F21, G61, M20	Zone F	All Bantu zones found in East Africa: DJ, EJ, E, G, M, N, P

^{*} Only four, four and seven words respectively were used, and the results are only tentative in NM (78%), NL (76%), NR (72%) because of the small number of words in areal vocabulary which makes the statistical pedantry of using a graph unnecessary, although a graph was drawn for NR. 7 words.

⁵⁵ F23a,b is strictly SiSuumbwa, while F23c, KiLoongo is treated separately.

(4). While the linguistic tree for Zone F admitted some members and rejected others, patterns observed in the past or those emerging from the current data deserve some mention. For instance, the linguistic trees in Figures 4.1 and 4.16 suggest how the branching of the different Zone F languages took place. Its configuration could be altered depending on the order in which the shared retention percentages are collapsed. In the current tree, KintLaamba and KiRimi are not coordinate anywhere. They join further up the tree, due to KiRimi's drastic change away from the phonologically conservative KiniLaamba, and therefore indicating a much earlier split and different history, if it is assumed that they formed one language in the past. The shared vocabulary between KiniLaamba and KiRimi which is not represented in the tree is indicated in Table 4.29, showing a unique invented vocabulary figure of 20%. As advanced above, such a figure qualifies them to share a coordinate node, suggesting immediate historical branching, shown in Table 4.13 with a shared retention rate of 72%. However, such unity is open to question given the effect of proximity and subsequent borrowing.

Table 4.29 Lexical innovation in nodes outside the Zone F tree and genetic affiliation

Linguistic node and % of shared	Words innovated in Zone F							
vocabulary	Total # of words	# of Unique creations	% of Unique creations	# of Areal vocabulary	% of areal vocabulary			
F31/F32	15	3	20	12	80			
F24/F31/F32	1	0	0	1	100			
F33/F34	18	3	17	15	83			

Only one word is indicated, illustrating the possibility that the languages are not immediately genetically related.

The proper interpretation of such a figure, which is also supported by shared unique created vocabulary, depends on whether such innovation is really genetically or areally based. Mere proximity even of languages from different language families can do a lot to change the surface configuration of created vocabulary, an element which Nurse (1988: 43) correctly characterizes as the least important form of borrowing, when a hierarchy of determinants of language similarity are considered. If such unique lexical creations are genetically based, then, some drastic interference can be posited for the difference in phonological inventory and phonetic realization, like the presence of and interaction with several non-Bantu languages in the area. Both scenarios are plausible, and a preference for one over the other depends on how much evidence is available and used to justify it.

On the hand, KiiRangi and KeeMbuwe display a lower percentage of shared unique creations, although they are claimed to be very similar in the literature, including strong assertions of historical affinity by the native speakers of the two languages themselves. One explanation which is likely to be correct is contact with different non-Bantu languages at different periods with varying degrees of intensity, contributing to a different set of new vocabulary.

The assumption that F24/F31/F32 (KIKIImbt, KintLaamba and KiRImi) are immediately connected historically is not borne out by both the lexicostatistical and lexical figures. In fact, only one areal word joins them, indicating an unlikely genetic relationship, apart from similarity of Proto Bantu vocabulary retention and areal shared vocabulary. A genetic

connection would be shown by a higher number of shared unique lexical creations enhanced even more by the close proximity obtaining between the speakers.

4.3 CONCLUSION: QUANTITATIVE AND QUALITATIVE EVIDENCE IN GENETIC AFFILIATION

4.3.1 The lexical unity of KISukuma, KINvamweezi and SiSuumbwa

From the preceding sections, it is apparent that KtSukuma, KtNyamweezi and SiSuumbwa do not form a unified linguistic group. SiSuumbwa, referring mainly to SiSiloombo and SiYoombe, is shown to belong elsewhere since its overall shared retention rate to KtSukuma/KtNyamweezi is 74%, while the figure between KtSukuma and KtNyamweezi is 81%, a margin which is high in this context. The 74% rate seems high because of contact, since the number of unique vocabulary proves that. KiLoongo, while geographically occupying an area between RuZinza, SiYoombe and KtSukuma, with many of its speakers mixed across the whole area, does not fit in well with SiSiloombo or SiYoombe nor with KtSukuma/KtNyamweezi. It shares with them some words, and departs from them in significant ways, with a shared retention rate of 65% to SiSiloombo/SiYoombe, and 58% to KtSukuma/KtNyamweezi.

Qualitatively, SiSuumbwa is similar to both Rutara (EJ I 1-EJ 14 and EJ 21-EJ 24) and Western Highlands (DJ60), although a definite taxonomy can only be confirmed when other criteria like phonology or morpho-syntax are considered. Combining lexis and phonology places SiSuumbwa (F23a/F23b) in DJ60, the affinity to Rutara being a result of contact. On the other hand, KiLoongo (F23c) is shown to belong to Rutara exclusively. A paradox might be the low shared retention rate with oRuhaya, at 57%, roughly the same rate obtaining between KiLoongo and KiSukuma/KiNyamweezi at 58%. Isolation from Rutara for a long time accounts for such low shared rates with Rutara members as a function of contact with many other languages.

On the other hand, KtSukuma and KtNyamweezi have internal divisions which question the essence of their similarity as a pointer to genetic relationship. For instance, quantitatively, they share a retention rate of 81% of Proto Bantu vocabulary, a high figure warranting genetic affiliation. But the KtNyamweezi internal configuration excludes KtDakama whose lexical retention figure gravitates towards KtSukuma, a picture supported by the qualitative evidence as well. Phonologically, KtDakama is also isolated from core KtNyamweezi (F22a, F22d, F22e). The 81% figure therefore is raw, emphasizing convergence.

4.3.2 Does Zone F exist lexically?

Lexically, each major group: F10, F21, F22, F23, F24, F25, F31, F32, F33 and F34 stands on its own, related to the others only by either the high retention rates from Proto Bantu words in some of them or because of inter-dialectal borrowing facilitated by many years of contact. Because most of the words in the innovations within the Zone F languages are areal, it implies therefore that the small uniquely invented vocabulary is the most important aspect of evidence for classification. This apparent autonomous status of each group is supported by the absence of solid shared lexical innovations among them, except a few groups at lower levels like KtSukuma/KtNyamweezi. This Zone F fuzziness is illustrated well by the extreme members of the zone which are not only clearly autonomous, but also do not belong there entirely as immediate sister languages to the core group. These non-members are F10 (KiBende/KiTongwe). F23 (SiSuumbwa), F25 (JctWOUngO), F33 (KiiRangi) and F34 (KeeMbuwe). Two common attributes are shared by this group of languages: first, a long list of unique innovations, either as loans or lexical creations not found in the rest of Zone F members, and secondly, being at the edges of the zone, although F33 and F34 are closer than the others

It is also interesting to note that if 5 out of the 10 members of Zone F do not tally with the other 5 lexically, indicating a weak grouping, then it follows that the zone cannot be called by the same name when half its membership from the original is missing.

Within the remaining 5 members, namely F21 (K1Sukuma), F22 (K1Nyamweezi), F24 (K1KIImbū), F31 (KIntLamba) and F32 (K1RIm) and their dialects, only one word can be called a unique innovation of the 7 words which isolate them (example 167). In the Zone F node, one word appears to unite them. But even this one word mn-nampala 'old male' is doubtful, because it suggests borrowing from Southern Nilotic in one of them, then spreading to the rest, shown in (169) and in the footnote in that section. In addition, the validity of

Zone F as a linguistic unit is further challenged because min-numpula is not mentioned in 6 out of the 10 traditional Zone F members, namely F10, F22a, F22d, F24, F25, F33, F34. This indicates that the speakers of those languages did not originate from one proto-community. The multi-genetic character of the Zone F speech communities is mentioned by Itandala (1979, 1983) and Batibo (1992b) when they discuss the origins of the current K1Sukuma speakers. Nurse (1999) also doubts the membership in Zone F of F10, F23, F25, F33, F34, as reviewed in Chapter 2. Such multi-genesis as reflected by the different sources of vocabulary parallels the notion of Zone F as a geographical Ahflussloses Gehier²⁶, an area into which various linguistic 'rivers' emptied their vocabulary, never to come out again. It is an area where rivers flow in and the water has no outlet to flow out because it is blocked, probably because of the safety the area offered in the past. This makes Zone F a real Ahflussloses Gehier calling for a proper grasp and interpretation of both its history and the phonological and lexical data yielded in this study, a theme treated in Chapter 5.

⁵⁶ A German term meaning a linguistic situation in an area whereby features are shared across genetic language boundaries (Kiessling, unpublished manuscript, 2000).

CHAPTER FIVE

CONCLUSION: LANGUAGE AS A TOOL OF HISTORY

5.0 INTRODUCTION

This chapter closes our study by synthesizing the results of Chapter 3 and 4 in relation to the aims spelt out in Chapter 1, given the gaps identified in the literature review, Chapter 2. The reference point involves phonological and lexical innovation focusing on Bantu Spirantization (BS), seven to five vowel reduction (7 > 5), Dahl's Law (DL), glottalization and voiceless nasal formation, covering the area shown in Chapter 1 Maps 1.2 and 1.2. Comparison to a number of eastern African languages shown in Map 1.3 was also attempted with the aim of outlining the linguistic history of SSN and Zone F from the last millennium BC to the present.

As Ehret (2000:273) correctly observes, change of society and its culture is mirrored in the histories of words in the languages spoken by people who express the various aspects of their lives. These words and their behaviour become historical artefacts especially when they show up as reflexes in several languages, indicated by some regular sound changes. The evidence from the phonology and lexis in both SSN and Zone F suggests that they are not unified linguistic entities internally, although the individual languages have been adjacent for a long time. The evidence also suggests that the intermediate nodes in the Zone F hierarchy are not historically valid because the smaller units forming those higher levels are not historically supported by the phonology or vocabulary (See Figure 4.1 and 4.16. Chapter 4 in relation to the lexical evidence). The interpretation of the evidence to determine whether the facts

available suffice to justify such historical statements about the languages and their speakers permeates all sections. Without their proper interpretation, the graphs, statistics or patterns as representations of raw data may not be tools of history, since many factors operate in the generation of such raw data, rendering any direct interpretation of those representations difficult and misleading. Normally, there are interpretations which are not valid either linguistically or historically because the conclusions are based on the misuse, misunderstanding, or over-stretching of the limits of the data or models; or when the conclusions are based on false premises, assumptions, arguments, or mere hypotheses.

As objective events in space and time, languages reflect changes in peoples' material conditions, although languages may lag behind in some respects. Such changes are discernible in sounds and words. When a speech community, its language and environment change or disappear altogether, the languages or words are left as traces of that temporary distant series of events.

In oral cultures, the only linguistic evidence of that past is obtained through the synchronic study of languages. On the one hand, if isolated evidence from the phonological, lexical or any other linguistic component is used alone, yielding some results, it does not necessarily mean that such evidence furnishes necessary and sufficient proof giving an accurate interpretation of a complete historical event which was not under our direct observation. The contribution of components such as phonology alone, may not have the same evolunatory impact as the overall effect of the language taken in its totality.

5.1 LINGUISTIC EVIDENCE: THE RESULTS

5.1.1 Evidence from Phonology

5.1.1.1 BS and 7 > 5

Bantu Spirantization is an important phonological process because it takes advantage of a particular context; superclose vowels /i/ and /u/. There are particular, general and universal changes in languages, three metaphors used by Andersen (1988:8). BS is a particular process which has both phonetic and historical significance. Only historically related languages will have this process in Bantu, and when the process is anomalous in a specific language, then some historical explanation can be posited, either in terms of imitation or adaptation. BS could not take place independently in different languages for one reason. BS requires that features of a plosive consonant be deleted by consonantal features of a vowel, the superclose PB *i or *u. In regular assimilatory processes like palatalization, front yowels generally can also spread their features to neighbouring consonants, although the results of BS and palatalization may be identical. Zoll (1995:542) differentiates between BS (which she calls 'Bantu mutation') and palatalization and the distinction highlights the uniqueness of BS as a process which could only occur in related Bantu languages. An independent occurrence would suggest that BS could be found in Indo European, Algonkian, Afro-Asiatic or indeed in all language families of the world.

5.1.1.1.1 BS and 7V 5V in K. Sukuma 2. K. Nvamweezi and Si Suumbwa

In these three linguistic groupings, only SiSuumbwa underwent Bantu Spirantization. To strengthen this argument, in this group, only SiSuumbwa is also 5V like the I languages. Due to an implied lengthy contact between SiSuumbwa and KISukuma2/KINyamweezi speakers, facilitated by constant interaction because of geographical proximity, any traces of BS in KISukuma2 and KINyamweezi are a result of words borrowed from SiSuumbwa. This is further strengthened by the continued 7V presence in F21 and F22, with the occurrence of words which appear to have undergone BS under the same phonetic context in SiSuumbwa, and others which did not in the same context. Such an anomalous exception to the general rule of BS within Bantu languages, and in KISukuma2/KINyamweezi in particular, can only be explained in terms of borrowing by imitation rather than a result of an inherited process from a common parent language. Neither is it plausible to posit a process in progress or a frozen one which ceased to operate at one point in the past, implying an adaptation was in progress and then stopped. The presence of double reflexes in KISukuma2/KINvamweezi as shown in Chapter 3 can be explained guite adequately by imitation borrowing, as a process of imperfect reproduction. Since not all words in a language can be borrowed, a process like BS does not spread to all words which fulfil the conditions of the occurrence of BS, because those loan words are only imitated poorly without being adapted into the whole system of the recipient language. In SSN F21, F22 and F23, only F23 shows complete BS with 5V, except in a few borrowed words, while F21 and F22 show an anomalous pattern of BS and non-BS within the same contexts, with solid 7V.

Thus, BS within KtSukuma2, KtNyamweezi and SiSuumbwa is a good classificatory criterion which manages to isolate SiSuumbwa from KtSukuma2/KtNyamweezi as languages which have different histories.

5.1.1.1.2 BS and 7V 5V in Zone F

Within the wider Zone F area, full BS is found in F10 and F23 only, part of the same group of languages whose vocabulary does not fit well with the other Zone F languages. Of these, F10 and F23 have also 5V, while F25 shows only traces of BS, with the retention of 7V (Labroussi 1999). This is indicative of separate histories within the zone.

5.1.1.2 Dahl's Law (DL)

Dahl's Law, the dissimilation of voiceless stops when two occur in consecutive syllables, is realized slightly differently in each language where it occurs. In Chapter 3, it was shown that only KISukuma (F21) and KINyamweezi in the whole of the 10 Zone F language groups had consistent and active occurrence of DL. The rest showed traces only likely to have been inherited from their proto-language or borrowed from outside. As a marked feature, DL is unlikely to be inherited from Proto Bantu by KISukuma and KINyamweezi, or from intermediate nodes by others, for three main reasons. Firstly, it would not be confined to eastern African languages only, showing up in Proto-Thagicu/Central Kenya (E50), Proto-Chaga (Kilimanjaro)-Taita (E60/E74), Proto-J (also called Great Lakes) (DJ60, EJ10, EJ20, EJ30, EJ40), Proto-NEC (Sabaki (G40 and E71, E72, E73), Seuta (G23, G24, G31, G34), Ruvu (West and East as shown in (141) and elsewhere), Pare (G21, G22), Proto-West

Tanzania (Zone F. including F33 and F34) and Southern Tanzania Highlands (G60) (Nurse (1980, 1999). Dayy and Nurse (1982). Nurse and Hinnebusch (1993). Secondly, it could not occur in F21/F22, EJ40, E50, E60, etc by spreading because they are not adjacent today nor, as far as we know in the recent past. So, these languages with DL are likely to have split up from a once unitary community because of the restricted distribution of the process. Independent innovation is suspect when pockets of languages with DL in distant zones are not attested. The languages without DL were not part of that speech community. Thirdly, any highly retentive language which retains Proto-Bantu consonants very faithfully as does F24, but does not show significant traces of DL, makes DL inheritance from its immediate proto-language unlikely. If it were a feature of Proto-Bantu or any other proto-language of Zone F, it would show up with some consistency in phonologically and lexically conservative languages such as KIKIImbt (F24) and KInILaamba (F31), just as the feature would be distributed more widely and evenly within Zone F if one linguistic node joining them was responsible. Because of this anomaly, the likely possibility is inheritance by only a few languages from an intermediate node, a proto-language from which all languages with DL in eastern Africa descended, as Nurse (1999:21) observes. This intermediate node source explanation of DL is better than any other so far, because it is unlikely that an inherited feature from PB in languages like F24 or F31 can be lost without a trace, while much earlier phonological features from Proto-Bantu continue to exist. What that absence of DL in KiBende (F10), KIKIImbu (F24), IcIWuungu (F24), KInILaamba (F31), KIRImi (F32), KiiRangi (F33) and KeeMbuwe (F34) suggests is that some of those languages with DL

inherited it from one ancestor, while the others might have acquired the appearance through borrowing some words with DL. Since it was only imitation borrowing, few words showed up with DL. In Zone F, DL distribution is an essentially K1Sukuma2 (F21/F22b) phenomenon, excluding core K1Nyamweezi (F22a, F22d, F22e). Due to contact, intermarriage and geographical proximity, K1Nyamweezi speakers might have adopted DL in some borrowed words, while in the majority of the vocabulary, DL does not operate because it was not adapted.

5.1.1.2.1 DL in KtSukuma2, KtNyamweezi and SiSuumbwa

DL exists in SiSuumbwa¹ only in a few words, as pointed out in Chapter 3. The most telling aspect of the process is in K1Nyamweezi, where DL does not show up in more than 50% of the words it is expected to occur. This DL status in SSN is recapitulated in Table 5.1

Table 5.1 Percentage of DL candidate words which do NOT undergo DL (From 58 words used)

F21a	F21b	F21c	F22b	F22a	F22d	F22e	F23a	F23b	F23c
13	13	4	22	56	71	52	89	87	71

Although there are many traces of DL in Rutara (EJ11-14/EJ21-24 and in J in general), their status is debatable considering the spirit of our study. Most of DJ60 has DL, and if SiSumbay (F23a/F23b) belongs there, then it suggests an earlier split.

From Table 5.1, it is apparent that the lower the number of exceptions, the more natural is DL in that language or dialect. The higher the number of violations leading towards a 100% rate of exceptions, the more unlikely DL is native in that language or dialect. F21 and F22b have the lowest exceptions, implying that most native words, including all loan words, undergo DL productively, whereas F22a and F22e show only half of the words with DL Interestingly, F22d behaves as though DL is actually absent in the phonological system, because most of the words are not dissimilated. DL is unlikely to be a graded process, it is either present or absent. Anything less than full DL implies two things: loans of words with full DL or the resultant intermingling of speakers from different speech communities, some of whom originally spoke or had adopted a language with DL but failed to adapt DL words properly and ended up imitating incorrectly. The phonotactics in the recipient languages might not have allowed complete DL, and the speakers then passed on the 'poorly imitated' words to the next generation. Of these two explanations, loan words with DL is the most reasonable account for partial DL in Krivyamweezi.

On the other hand, when a DL language like F21 has words which violate the DL principle, then, the most likely explanation is that such words are loans. With this in mind, it is only F21 and F22b which are DL, 4 dialects or languages out of 22 from the whole of Zone F. In KINyamweezi (F22a, F22d and F22e), DL is probably a result of close contact with F21, among other DL languages. This is strengthened by the SiGalagaanza case (F22d) which is currently geographically farthest from both F21 and F22b. The effect of DL fades in F22d as the DL violations expand to 71%, suggesting less borrowing from F21/F22b as the distance from the centre of DL increases.

5.1.1.2.2 DL in Zone F

Zone F is not characterized by DL, since the dissimilation rule as a consistent process is confined to F21a, F21b, F21c and F22b only, that is, in K1Sukuma2. Out of the 18 remaining dialects surveyed in the study, 12 show more than 90% exceptions to DL, while the other 6, which are adjacent to K1Sukuma2, show more than 50% exceptions. This is shown in Table 5.2.

In other words, DL is a good diagnostic tool which isolates KtSukuma2 from the rest of Zone

F as a historically different group. The remaining languages are not necessarily related
because of that negative feature, since many languages have the same negative attribute, and
they are not Zone F members.

Table 5.2 Percentage of words violating DL in Zone F (From 58 words used)

13 13 4 22 56 52 71 89 87 71 1	F21a	F21b	F21c	F22b	F22a	F22d	F22e	F23a	F23b	F23c	FIC
	13	13	4	22	56	52	71	89	87	71	100
						L					
F24a F24b F25 F31a F31b F31c F32a F32b F32c F33 F	F24a	F24b	F25	F31a	F31b	F31c	F32a	F32b	F32c	F33	F34

In historical terms, two groups constitute Zone F: those whose ancestor had DL., and those from a proto-language without DL, suggesting strongly that Zone F is a group created by a convergency of different speech communities rather than by linguistic affiliation from common ancestry. By combining DL with BS, what is obtained is a highly fragmented K1Sukuma2, K1Nyamweezi and SiSuumbwa, a group which is traditionally assumed to be cohesive linguistically. The group is actually composed of three independent languages whose genetic closeness is highly questionable, although K1Sukuma2 and K1Nyamweezi share the absence of BS, with SiSuumbwa standing alone because of it. At Zone F level, after F10 is removed because of having complete BS, the remaining ones are not touched by either BS or DL, making such an absence of a feature a linguistically poor unifying criterion.

5 1.1.3 Glottalization and Voiceless nasal formation

While glottalization is widespread in other languages, in SSN only SiSuumbwa glottalizes consistently, as shown in *Table 3.36*. In Zone F, KiBende (F10) and KiiRangi (F33) show consistent glottalization, while the rest show none.

Another important phonological process is the presence of voiceless nasals in Zone F in a limited number of languages, namely F21 and F22b. The configuration of these nasals in the zone is further evidence for the genetic unity of K1Sukuma2 (F21 + F22b), a unit which further excludes core K1Nyamweezi as an immediately valid sister language. Voiceless nasal formation in E71, G24, G30, G60, parts of G50 and Kisukuma2 shows a restricted process not found in other Zone F languages, nor widely distributed in other Bantu languages, suggesting that such an areal distribution may be a sign of some genetic affiliation rather than a purely phonetic accident. It is not a productive process in KiNyamweezi or SiSuumbwa. In fact, in these two, it is found only in loans or in imitations of KtSukuma2. These nasals are illustrated in (188).

(188)

abdomen, belly, stomach numbt < N.kuumbt grasshopper noombí < N-kroumhí that which scoops (non-human)2 numbi < N-kuumbi < -kuumba 'scoop, dig' kidnev mIgo < N-pigo malf < N-pall < PB *-padI 'polygamy' polygamy apprenticeship or medical fee meéla < -peelà 'nay apprentice or medical fees' running meela -peela < -peela 'run' (cf meela 'chaff') noombá < N-toombá pig (wild) ball of food noongě < -toongě

The common characteristics of the above words are two: first they are composed of word initial voiceless nasals which are homorganic with the initial voiceless stops of the underlying roots³ of those words, and secondly, they are unique morphophonological creations or innovations not found elsewhere in eastern African Bantu languages and possibly in the whole of Bantu in such a regular way, as a phonetically motivated, but idiosyncratic feature.

² If the scooper is human, then it becomes n-kuumbi < mu-kuumbi

³ For a discussion of these alternations in KtSukuma, see Masesa (1978).

When the nasal prefix is /mu/ and is followed by a voiced stop in the root, then, the /u/ is deleted, and the /m/ becomes homorganic with the initial stop of the root, without forming a voiceless nasal, because there is no voiceless feature in the word, as shown in (189). This pattern is also found in KiMatengo⁴ and other Rufiji-Ruvuma languages (N10, P10, P20) in general.

(189)

back
ground (cultivated)
stranger, visitor, guest
trunk (of elephant)
-koondo < mu-koondo

Another important pattern connected with nasals occurs when the prefix /mu' is followed by a semivowel or liquid sound. The /u' is first deleted, and the /m' assimilated to the place features of the semivowel or liquid, as in (190).

(190)

⁴ Joseph Mbele, p.c.

³ The pattern of this word violates the KISukuma2 nasalization principle, suggesting that it is a loan word because the expected form is goondo because of R/. The word is also not found in Proto-Bantu, indicating that it might be a non-Bantu word, probably originating from languages like Hadza or Sandawe.

5.1.1.4 Phonological evidence for SSN and Zone F: concluding remarks

The violation of the phonological principles of relatedness and regularity illustrated in Chapter 3 and 4 in the phonology and lexis of KīSukuma2, KīNyamweezi and SiSuumbwa (SSN) suggest that they are not closely related for the following reasons.

- (1) As sister languages in such close proximity, it is genetically suspicious for them to differ in the important phonological processes of DL, BS, 7 > 5, glottalization and voiceless nasal formation. This points to a significant assumption, for instance that when a language shows only some traces of BS, then it is not BS in its strictest sense. The traces are likely to be from borrowed words from a BS language. The evidence against BS in such a language can be explained in two ways. First, the continued existence of the 7V system weakens any claims of BS, since as Zoll (1995) notes, the close vowels triggering BS must have as their essential feature [+syllabic, +consonsantal] in order to make Bantu Spirantization possible. Secondly, 7 > 5 is not a result of BS alone since there are two sources: BS and non-BS 7 > 5°.
- (2) The phonological differences of K1Sukuma2/K1Nyamweezi cannot be explained only in terms of the continuum hypothesis either, since DL and voiceless nasalization divide them significantly. They are both suspicious in K1Nyamweezi (F22a, F22d, F22e).

⁶ In Zone F, 7 > 5 without BS refers to KeeMbuwe alone, a situation which calls for mempirical research involving many speakers of the language. Otherwise, non-BS 7 > 5 is unusual, and Nurse (p.c.) is sceptical about its truth. Our analysis in Tables 3.3, 3.4 and 3.5, Chapter 3 showed clearly that KeeMbuwe shifted to 5V

By extension, if the smaller units like F21, F22 and F23 do not cohere internally, since F10 with its BS and 7 > 5; F25, F33 and F34 do not fit well within the remaining Zone F languages, then what remains is also open to doubt, at least phonologically. The lexical aspect was expected to shed some more light on whether SSN and Zone F could stand as valid linguistically genetic groups. It did, but not in favour of SSN or Zone F.

5.1.2 Evidence from vocabulary

As shown in Chapter 4, two aspects of vocabulary were analyzed, namely, quantitative evidence using lexicostatistics and qualitative evidence by examining lexical innovations. The aim in lexicostatistics is to approximate numerically the extent of relatedness between a pair of languages or group of languages using lexical retention from a proto-language, in percentages. It is assumed that the higher the quantity is shared, the higher the level of relatedness between the languages is suggested, and vice versa. On the other hand, qualitative measures examine the type of similar lexical values or traits shared by a pair or group of languages to determine whether those traits are genetic or not. In this study lexical innovations in any one group are divided into two: unique inventions and areal inmovated vocabulary as borrowing or creation (which can also be inherited in some special cases).

5.1.2.1 Quantitative evidence: Lexicostatistics

As a quantitative measure, lexicostatistics tells a story of relatedness, even if it is fragmented, since all second-hand stories cannot match the completeness of first hand experience before.

during or after languages split. For a fuller treatment of a larger geographical area covering more languages using lexicostatistics, see Nurse and Philippson (1980). In both Chapters 3 and 4, it has been observed that Zone F as a linguistic entity is not supported by the phonology and vocabulary. Only smaller units form coherent patterns, corroborated by the intuitions of native speakers of those languages.

5.1.2.1.1KtSukuma2, KtNyamweezi, Sisuumbwa and Lexicostatistics

The lexicostatistical figures for this group of three languages cast doubts on SiSuumbwa's membership. For instance, whereas the shared retention rate between KtSukuma2 (F21/F22b) and core KtNyamweezi (F22a, F22d, F22e) is 81%, SiSuumbwa shares 71% and 76% with them respectively as shown in Table 5.3.

Table 5.3 KtSukuma2, KtNyamweezi, SiSuumbwa and other Zone F languages' retention rates

```
Вс
52 Lo
64 58 Sd
                         Sd = 86
                                      Sk = 89
                                                     Nk = 90
70 58 81 Nz
                         Nz = 84
63 56 78 81 Kn
62 55 76 76 82 Ks
67 65 71 76 69 68 Sv
                         Sv = 84
56 51 76 71 75 74 67 UI
56 52 79 74 76 72 69 78 Ha
58 58 75 72 74 71 68 71 74 Ah
57 56 76 72 74 72 69 72 76 80 Rw
55 53 72 67 70 67 64 69 71 79 77 Mu
56 53 71 70 72 70 61 67 66 71 69 69 Mb
51 42 65 63 67 64 54 59 60 62 62 61 64 Ra
61 53 65 69 71 70 59 63 64 64 62 60 63 56 Wu
```

Abbreviations used in Table 5.3:

```
Be = KiBende: Lo = KiLoongo; Kn = KIKIImbu North; Ks = KIKIImbu South;
Ha = KInIHaanzu: Ah = GiAhi: Rw = GIRwana: Mu = VInvaMunvinanvi, Mb = KeeMbuwe:
Ra = KiiRangi: Wu = ICIWUUngu: Nk = GInaNtuzu + JinaKIIva
Sk = Nk (GtnaNtuzu + JinaKtIva) + KtmunaSukuma
Sd = Sk (Nk (GInaNtuzu + JinaKIIya) + KImunaSukuma) + KIDakama
Nz = KINvanveembe + KIKonoongo + SiGalagaanza
Sv = SiSiloombo + SiYoombe
Ul = KinaUshoola + KiniLaamba
Km = Kikiimhti North + KiKiimhti South
SN = Sd + Nz
Ar = GiAhi + GIRwana
NM = SN + Km
I.m = Ul + KınıHaanzu
RI = Ar + yInyaMunyinanyi
NL = NM + Lm
NR = NL + RI
```

This is a difference of almost 10%. KISukuma2 shares the same percentage with KeeMbuwe, although there has been no claim that KeeMbuwe forms part of the KISukuma2 and KINyamwezi group. On the other hand, shared vocabulary with KISukuma2 is higher in the following varieties than it is with SiSuumbwa (F23): KIntiHaanzu (F31c) (79%), KIKIImbU North (F24a) (78%), KIKIImbU South (F24b), KInaUshoola (F31a), GIRwana (F32a) (all 76%); GiAhi (F32b) (75%); and YInyaMunyinanyi (F32c) (72%). The only figures with lower percentages are from four languages, namely, IctWUungU and KiiRangi (both 65%), KiBende (64%) and KilCongo (58%). The use of lexicostatistics to detect the effect of contact as noted by Hinnebusch (1999-177) in 1.3.5.2.3 provides a useful explanation.

The doubts of the validity of SSN are strengthened by other reasons, among them, the naming tradition of the dialects/languages themselves in the first place, since, as words, language

names reveal the history of groups (see Chapter 2, 2.1.4.8). The use of directional names is misleading when used to suggest that any languages so named from the point of view of one language are automatically genetically related. In the KISukuma2 and KINyamweezi context, the four cardinal points of the compass refer to the following dialects/languages in the literature: sukuma 'north' (F21 and F21a), dukama 'south' (F22b), pweeli (F23 and/or F22d) 'west' and kItya (F21c/F22c) 'east'. Abrahams (1967:11-2) gives an excellent summary of this naming problem with plenty of bibliographical details which support the observations from GfnaNuzu in this study.

In GrnaNtuzu, for instance, 'north' is not sukuma but shaashi. The name shazashi refers to KiShaashi (EJ441), a language spoken north of the GrnaNtuzu speakers. For any groups of people living west of them, the GrnaNtuzu speakers call them fkanagweeli 'westerners', who include some KtSukuma, SiSuumbwa, KiLoongo and other speakers of other languages or dialects who simply happen to reside on that side, using a different language from theirs, however slightly. They only mention particular names if a group has special characteristics like the KiLoongo speakers who were famous hoe manufacturers and itinerant sellers in the past (Odner 1971). Likewise, for people living in the south, they also include speakers of any language, although they are mostly those speaking some form of KtSukuma with some slight difference, because no other people using different languages lived there as their immediate neighbour.

The same insight on the misleading connotations of language names is made by Brock (1968-59-61), dealing with ifiNyiha, that common names which group a number of people often do not imply homogeneity of language and culture. The problem lies in the fact that other people who did not know those cultures well named them in the past. The ifiNyiha case is not isolated, since it is convenient and easy practice to classify and name entities by the easiest way of reference possible where no other details are available or relevant to the person giving a name.

For other groups, the same naming tradition applies, indicating a non-linguistic reference. For example, in the eyes of the K1Sukuma speakers who live on the west, eastern speakers, AmaK17ya, include any group or language variety that is known to be different from theirs. These include JinaK17ya, GranNtuzu and K1ntLaamba speakers. The major problem with these dialectal names is that they are not precise linguistically nor old in usage. For example, Kasele (p.c.) is quite convinced that in reality there is no such language as 'K1Nyamweezi'. In the present day Tabora Region (See Map 1.1, Chapter 1), there are people who are known to speak specific languages or dialects rather than the abstract 'K1Nyamweezi' which is a socio-political, rather than linguistic entity. These concrete dialects include K1Nyanyeembe (from Igaltla' in the east to Ndono in the west, as well as in the South to Ipoole, Sikoonge). K1Konoongo (from Ipoole southwards), K1Yuumbu (the speakers of which moved from

⁷ Most of these place names are located within the shaded areas of Map 1.1, mainly in the area where the speakers of those dialects or languages mentioned are concentrated, shown in Map 1.2.

Ndono and β0sooke in present day Tabora to the south, in Mpanda, Rukwa Region, in order to avoid sleeping sickness); SiGalagaanza (of Mabama, Ndono and β0sooke), K1Saag0zi (of Kaliua); and KiSiisya (west of β0sooke). K1Nyamweezi is essentially a political or social group identity. It is 'a language' which no one speaks. According to Kasele (p.c.), the name 'KtNyamweezi' therefore, was only a label given by the SiSuumbwa speakers to refer to their neighbours. But those SiSuumbwa speakers did not clearly know them either, and they coined the name βaNyamweezi. 'people who come where the moon sets' or simply, 'people of the moon'. Other scholars have offered various ideas on this naming tradition. It was during the slave trade in the 1860s where the slaves normally stayed together in their respective families or clans in the slave markets in Bagamoyo and Zanzibar before being sold to customers. The SiSuumbwa speakers could communicate well due to their better experience in long distance trade, and they were the ones asked about their neighbours.

Lexicostatistically therefore, KISukuma2 and KINyamweezi form a possible linguistic group based on genetic heritage, whereas it is unlikely that SiSuumbwa belongs there. On the other hand, even this apparent KISukuma2 and KINyamweezi genetic affinity can be questioned, since it is based on retention only where groups like KIKIImbU share with KISukuma2 and KINyamweezi a rate of 78%, which is a difference of only 3%, at the rate of 81% between KISukuma2 and KINyamweezi, as indicated in Table 5.4. This doubt is also indicated by the qualitative analysis of the vocabulary. The areal vocabulary is not shared exclusively by SSN as a single genetic group as indicated in Table 4.23 (Chapter 4) and (192).

Table 5.4. Percentages of retention rates of KESukuma2/KENyamweezi (SN) in relation to other Zone I: languages

```
Re
                                     SN = 81 Nk = 90
52 10
                                             Sk = 80
67 58 SN
                                             Sd = 86
63 56 78 Km
                                    Km = 82 Nz = 84
67 65 74 69 Sv
                                     Sv = 84
56 51 74 75 67 UI
                                     UI = 83
56 52 77 74 69 78 Ha
58 58 74 73 68 71 74 Ah
57 56 74 73 69 72 76 80 Rw
55 53 70 69 64 69 71 79 77 Mu
56 53 71 71 61 67 66 71 69 69 Mb
51 42 64 66 54 59 60 62 62 61 64 Ra
61 53 67 71 59 63 64 64 62 60 63 56 Wu
```

(192) Affinities in areal vocabulary for F21/F22b and F22a/F22d/F22e

KrSukuma2 (F21, with F22b)	(1)M10/M20, E50, EJ40
KINyamweezi (F22, without F22b)	(1) M10; (2) F23a/b, F24, (3) F10, M20

5.1.2.1.2 Zone F languages and Lexicostatistics

Languages which have evolved from a common history are expected to behave in as similar a way as possible. Any slight divergence is an indication of a different path, and therefore a different history. Within Zone F, the languages tend to be conservative phonologically and to some extent. lexically, with only slight variations obtaining in each individual language (Nurse 1980:47; 1999:10). Lexically, the retention of Proto-Bantu words is relatively high, with many words appearing as they do in Proto-Bantu. With such a scenario, all Zone F languages are expected to behave that way if they indeed belong in that group.

According to the data, some languages retain fewer words than the typically conservative languages of the zone, as indicated in Tohle 5.5. Those with lower retention percentages in relation to the VR node (72%) (Kisukuma2, core Kidyamweezi, KiKIImbu, KinILaamba and KitKimi) obtained in Chapter 4, 786/e 4, 15, are the remainder of the ten Zone F group members (F11 to F34): KiLonggo (55%); KiBende (59%); KiiRangii (63%); Licuumbwa are membra (66%); and KeeMbuwe (70%) Since KiLonggo and SiSuumbwa are grouped together, what remains as VR is only half the languages of Zone F. The remaining grouped together, what remains as VR is only half the languages of Zone F. The remaining grouped together, what remains as VR is only half the languages of Sone F or The remaining grouped together, what remains as VR is only half the languages of Sone F or The remaining grouped together.

Table 5.5. Percentages of retention rates of Zone F

8T = 19		nM	99	£9	59	65	53	19
R = m			Ra	19	63	15	71	19
8L = WN	08 =	1A		qW	04	19	23	99
t8 = tN	78	=	Km		NB	69	SS	69
98 = PS	18	=	NS			ÁS	59	45
$\Omega I = 83$	1/8	=	λS				07	75
$N_{k} = 90$	68	=	2K					35

From the lexicostatistics, it is apparent that most of the traditional language groups retain their status as autonomous entities, with a few adjustments, as summarized in Table~5.6.

Table 5.6. Results of lexicostatistical groupings in Zone F

Guthrie's scheme		This study	
Code/Group ^b	Languages/Dialects	Code/Group	Languages/Dialects
F10 KiTongwe	F11 KiTongwe	F10	F10 KiBende/KiTongwe
	F12 KiBende	FIU	Kibelide/KiTdijgwe
			F21a KımunaSukuma
			F21b GrnaNtuzu
F21 KrSukuma	F21 K ₁ Sukuma	F21 KtSukuma2	F21c JinaKrIya [F22c ⁹]
			F22b KıDakama
	F22a KıNyanyeembe		F22a KıNyanyeembe
	F22d Mweri		F22d SiGalagaanza
F22 KrNyamweezi	F22c Kiya	F22 KıNyamweezi	F22e KıKonoongo
	F22b Takama		
F23 SiSumbwa	F23 SiSumbwa	F23 SiSuumbwa	F23a SiSiloombo
			F23b SiYoombe
		F23c KiLoongo ¹⁰ (Rutara)	F23c KiLoongo
	NAMES TO A STATE OF THE STATE O		F24a KıKıımbo North
F24 KIKImbo	F24 KıKımbu	F24 KıKıımbo	F24b KIKIImbo South
F25 ιcιβσηgσ	F25 ιcιβσηgσ	F25 ται Wσσηgσ	F25 ισιΨσσηgσ

^{*} All the language names in Guthrie are written in their long forms with the prefixes indicating 'language/speech', although Guthrie himself does not show the prefixes in all languages.

⁹ As classified by Guthrie (1948), making our scheme skip F22c within F22 because it does not belong there, and therefore transferred to F21 as F21c.

¹⁰ Although KiLoongo appears under SiSuumbwa, the data shows that it does not belong there. It belongs in Rutara (EJ10/EJ20, especially EJ10).

Guthrie's scheme		This study	
F31 KınıLamba	F31 KınıLamba	F31 KınıLamba ¹¹	F31a KınaUshoola
			F31b KınıLaamba C
			F31c KınıHaanzu
F32 KıRımi	F32 KrRzmi	F32 KıRımi	F32a GIRwana
			F32b GiAhi
			F32c γιηγαΜυηγίησηγί
F33 KiiRaŋgi	F33 KiiRaŋgi	F33 KiiRaŋgi	F33 KiiRaŋgi
F34 KeeMbugwe	F34 KeeMbugwe	F34 KeeMbuwe	F34 KeeMbuwe

The other schemes for SSN and Zone F by Bryan (1959), Doke (1961) Cole (1961), Guthrie (1959, 1967), Nurse and Philippson (1980a) and Nurse (1999) are reviewed in Chapter 2, 2.1.4. Those works were produced when gaps in knowledge in both SSN and Zone F generally were more numerous. This study therefore represents a step forward.

5.2 RESULTS: DIVERGENCE SINCE PB AND GROUPINGS

5.2.1 Areal influences

Areal vocabulary normally implies either descent from the same origins, contact and spread or borrowing from a common source at the same or different time and place. In our study, this is illustrated well by both phonology and lexis.

¹¹ The other two dialects are not shown in the table because they were not included in this study for lack of data. These are KINIAmbI (F31d) and KINAMbUga (F31e).

Areal phonological features being recycled within Bantu languages make it difficult to detect whether a word is a result of later contact or inheritance from the same proto-source. This is more so if the word is cognate and it has not undergone any significant phonological change. One such case is Dahl's Law. In Zone F, the process is clear in F21/F22b. In F22a/F22d/F22e the picture is very confusing because the majority of the words do not undergo DL. A strong areal influence is suggested where intermingling, intermarriage and cross-migrations are common. The words with DL suggest borrowing through speakers from F21/F22b speech communities who intermingled with F22 speakers as adults with established speech patterns.

This also applies for BS-like features in F21, F22, F24, F25 for borrowed words. The process of BS seems partial because of the same reason of diffusion from centres of BS like F10 and F23 within Zone F, and other surrounding and outlying languages in D160, EJ40, E60 G30 and G60 (Hinnebusch and Nurse 1981).

While glottalization is widespread in many areas outside Zone F, within F, only F10 and F23 show consistent glottalization, whereas the widespread occurrence of PB $^*p \rightarrow hl$ is a result of outside influence in F21, F22 and F24. Glottalization is absent in F31, F32 and F34, as illustrated in 3.1.2.1, 3.1.2.2 and 3.1.2.3. In 3.2.1.2, Table 3.25, the example refers to SSN. The mixed picture of the reflexes where PB *p is both hl and /pl shows the effect of contact, borrowing and areal spread of words. In some contexts in F21 and F22 the reflexes are all

/h/, emphasizing the great impact in the past of languages like SiSuumbwa (F23). Such a mixed picture of glottalization in F21 and F22 is very similar to the partial operation of BS in these languages and Chaga noted by Hinnebusch and Nurse (1981:59, 72-73). It is a situation which can be explained in terms of heavy borrowing argued by Thomason and Kaufman (1988:53) where features are transferred from speakers of languages in contact regardless of the typological fit with the features of the borrowing language. Such borrowing results in apparent anomalies in the recipient languages' phonological or lexical structure, as demonstrated by anomalous BS and glottalization in F21 and F22, and DL in F22 from F21.

In lexis, areal influence from one source to others is exemplified by a word like -gulaati/gulaata 'he-goat', from Southern Cuhitic, as in Iraqw gurta (sg), gurtaawee (pl) (Maghway
(1995); Burunge gwerati; Kw'adza gulata < Proto-Southern Cushitic *-7ogur- (Ehret
1980:293) (See (170)). While F21, [F22], F23a,b, F24, [F31] have -gulaati or -gulyaati and
G35 vulati on the one hand, and ([F32], F33, F34) -gulaata and Seuta -vulata, -vuata, on
the other, it seems that the borrowing and adaptation process of this word depended on the
particular route the word traveled, as indicated by the differences in Southern Cushitic
between the singular and the plural forms, for example. When borrowing is outside Bantu,
detection becomes relatively easier. For instance Nurse (1979b:350-51) posits that the
Southern Cushitic speech communities were all over East Africa from Lake Victoria to the
Southern Highlands, Ruvu to Central Kenya. The loans in all those areas, especially related
to domestic animals attest to that. Batibo (1992b) and Ehret (1971, 1980) examine

vocabulary and its distribution in related and/or surrounding areas across time. In their surveys, lexical diffusion points to some form of contact, although the historical correlation with genetic classifications need more work and water-tight evidence of the sources and direction of borrowing.

5.2.2 Classification by areal vocabulary

In this study, areal vocabulary joining groups is more numerous than unique lexical creations, indicating that the central words most relevant for genetic classification are the shared unique creations as a more reliable type of innovation. Areal vocabulary points to a past connection which may not necessarily be genetic, but only be the result of contact and borrowing, either directly or through second- or third-hand sources.

One hint suggested by the areal shared vocabulary is that the languages involved were closer linguistically and geographically in the past (See Table 4.23). This is true of the connection between Corridor languages (M10/M20), East Nyanza (EJ40) and Thagicu (E50) in relation to KISukuma2, or Corridor, SiSuumbva (F23a/b), KIKIImbU (F24) and KiBende (F10) for KINyamweezi. On closer examination, all such areal influences are mainly contact induced due to proximity rather than being strictly genetic. The only possibility of affiliation occurs between KISukuma2 (F21/F22b) and Thagicu (E50) for two main reasons: presence of DL as an innovated phonological feature in both and some significant shared vocabulary. KINyamweezi shows only shared vocabulary without any other phonological connection.

The comparative method shows clearly the extent of divergence from PB. Languages which share a common history also show the regular phonological changes uniting them, proving their close relatedness. In SSN and Zone F, the principles of relatedness and regularity are violated significantly. These principles were introduced in 1.1.3 as pillars of the comparative method. If these languages were really related, bound by their regular sound correspondences, they would not be so different in salient and diagnostic innovations like DL, BS, 7 > 5, glottalization and voiceless nasal formation, in addition to having lexical stocks from different sources. Diagnostic innovations for groups and subgroups are indeed not always based on regular sound changes as Ross and Durie (1996:6-7) point out. Other peculiar innovations can be examined. In our case, the dialects as low-level units of language groups and families necessitate strict application of analyses to avoid similarities due to contact and subsequent borrowing.

5.3 RESULTS: INDIVIDUAL LANGUAGES AND DIVERGENCE FROM AND SINCE PB

5.3.1 Areal influences

Although the Zone F languages are known for being phonologically and lexically conservative, processes like DL and BS have made some of them diverge from PB. affecting even the most conservative and stable languages such as F24. Another influence is witnessed in F32 with the regular change of PB*p to /\(\phi\). F24 and F31 for example have departed very little from PB, especially phonologically. Others like F21 and F22 departed a bit because of the massive interference from many contacts with different languages, both Bantu and non-

Bantu. This can also be said of F25, F33 and F34 which retain reflexes more or less close to PB. Apart from 7 > 5 and other interferences from other Bantu and non-Bantu languages, F34 is not very far from PB.

On the other hand, many of the divergencies in these languages can be traced more to adjacent languages than to internal innovation, especially for those languages spoken by smaller speech communities and surrounded by other, relatively bigger speech communities speaking other languages. This can be said of F10, F23, and again F34.

5.3.2 Classification

After minor adjustments, it is the traditional, individual groupings which are confirmed: F10: F21 (F21a, F21b, F21c (also labelled F22c by Guthrie), F22b); F22 (F22a, F22d, F22d, F22e), F23 (F23a, F23b); F32c, F24 (F24a, F24b), F25, F31 (F31a, F31b, F31c), F32 (F32a, F32b, F32c), F33, F34. The divergence from PB in each individual language or language group is not significant, especially because of the generally conservative nature of the languages. This relative conservation does not make them automatically genetically related.

5.4 RESULTS: CONVERGENCE AND CONTACT MODELS

While the elements of divergence in Zone F are mainly a result of contact with other languages which influence them through borrowing some items which trigger some changes, convergence in the group is even more pronounced. However, this is mainly confined to languages such as F21, F22 and F24 in the area of vocabulary. Their individual phonologies remain distinct

This lexical convergence can be said to have contributed to the attribution of Zone F as a valid grouping, not only referentially, but also linguistically, validating the contact model by Thomason and Kaufman (1988.51), especially that characterized by casual contact with little bilingualism on both sides. The lexicostatistical effect of contact on retention counts as noted by Hinnebusch (1999) is also valid as an explanation here. Lexicostatistically, there is a reflection of this convergence, indicated by the family tree (Figure 4.1), which seems to imply various epochs of senaration at different levels from a common ancestor.

Closer examination reveals however that the ancestor of these languages is not immediate although there are some substantial lexical similarities between the Zone F languages as shown in the sample vocabulary in 4.2.1.2.16. The words they share, though innovations, are not unique to Zone F in the first place. The phonology supports the lack of unity of the zone by indicating that each had a different history, exemplified by F23, parts of which belong to D160 (F23a/F23b) and other parts to E110 (F23c). In addition, F22b does not belong genetically to F22. F24 does not share the same history with F31 and F32 because only one doubtful word joins them.. The histories of F10, F25, F33 and F34 are also separate. The evidence is furnished by the phonology of each language which displays either retention of the PB system, or separate innovations in terms of B5, 7 > 5, DL, glottalization and

voiceless nasal formation. Since the evidence from lexis and phonology does not match, phonological evidence tends to take precedence as older, and lexical similarity more recent. This analysis of non-genetic similarity is also supported by the shared innovations in lexis. Apart from the individual languages known traditionally, the other traditional groupings in Zone F, SSN, F24/F31/F32, F21/F22/F24/F31/F32 are suspect, because the evidence is shaky, based predominantly on areal features.

5.5 LANGUAGE, ARCHAEOLOGY AND HISTORY

What do these phonological and lexical details tell us about history in the area? The following historical and archaeological works are surveyed briefly in order to compare their results with the linguistic ones. especially in relation to the methods used. The linguistic contributions were dealt with in Chapter 2, 2.1.1 a summary of which is not necessary here. But as a rule of thumb, the interpretation of objective historical events is normally determined in large measure by the methods used and type of facts available to inquirers, among other things. This is due to the fact, for example, that artefacts whether material or linguistic (words) do not necessarily overlap or correlate with biological, genetic, racial, linguistic, historical, cultural, ethnic or other institutional grouping (David 1980-612, Lwanga-Lunyingo and Vansina 1988-146). In short language and culture do not always correspond. Facts and their interpretations are therefore as good as the methods employed in obtaining the data in the first place. With this in mind, our brief overview takes into account the insights of language contact and the consequent evolution of those languages Thomason 1983. Thomason and

Kaufman 1988, Nurse 1997, Hinnebusch 1999, Mesthrie and Leap 2000). In addition, most of these works did not have Zone F or SSN as their primary focus, and hence they may address only small sections of the zone.

5.5.1 Soper and Golden (1969), Odner (1971)

Most of the archaeological sites Soper and Golden (1969-53) examined south of Lake Victoria did not show evidence for Early Iron Age occupation. Archaeological evidence in the area is therefore inconclusive with regard to human activity during that era because there is none. But absence of such evidence says nothing of human occupation since iron-making is a cultural innovation, not a precondition of life.

On the other hand, Soper and Golden (1969:76) contribute some understanding of KiLoongo (F23c) speakers whom they hypothesize as originating in Buha, Rwanda or Burundi because of their cultural and linguistic affinity to KiLoongo. This information was obtained from informants as oral traditions rather than a result of archaeological finds. According to the informants, the Rongo's or Longo were smiths who were also first called Kamba, then Geji and finally Rongo (Soper and Golden, 59). Taylor (1969:144), like the rest, mentions the Rongo as a tribe distinct from the Sumbwa (F23) and Zinza (EJ23). Commenting further, he quotes a legend, saving that the Rongo occupied the forests while the Zinza lived on the

¹² The language names written in this section are according to the sources' conventions.

shores of Lake Victoria. Chronologically, the Rongo are said to have been the first to occupy the area. The Rongo or Longo are mentioned also in the F31 area and they predated the KIntLaamba speakers. When the KIntLaamba speech communities settled in the area they now occupy, the Alongo left peacefully and went to Usukuma (Odner 1971:154).

Although the picture is not clear, some affinity to DJ or J languages generally was observed earlier on, although no formal linguistic research was conducted. This study supports in part the general gist of the hypothesis of SiSuumbwa and KiLoongo belonging to J languages.

5.5.2 Itandala (1979, 1983)

Using oral sources gathered by the interview method and written original documents from museums and libraries, Itandala (1983:16) emphasizes the multi-clan nature of βaSukuma, using the βaβiinza clan history. The βaβiinza themselves arrived between 1200 AD and 1600 AD, the exact dates are unknown since various sources using genealogies differ, but falling within that range. They found other clans and Bantu speaking people in the area whose arrival is also not known, although some dates have been suggested, ranging from 500 BC to 1000 AD (Itandala 1983:33-35). These earlier inhabitants spoke proto-KtSukuma (KtNyamweezi) which formed a base language for incoming groups. Other immigrants such as the βaβiinza were absorbed and adopted proto-KtSukuma (KtNyamweezi) (Itandala: ibid).

From the examples of recent history (shortly before or after 1700 AD) when the βaβiinza met the Datog, Itandala (ibid: 188) mentions that later interactions between them became

more intense. This intensity of social networks was facilitated by the intermarriage of various ethnic groups interacting in the area, evidenced by the example of the Datog proper and place names still in use, especially in eastern βυδυκυπα, among other remnants (Itandala 1983:189), as mentioned in 4.2.1.2.16. Such an interaction of many Bantu and non-Bantu cultures suggests a complex multi-genesis of KtSukuma as a base around which substrata clustered (Itandala 1983:34).

5.5.3 Ehret (199413, 1999)

The basis of analysis in Ehret (1994:6-8) is linguistic testimony, specifically vocabulary based.
The testimony also goes on to establish some groupings among which is Mashariki,
comprising the languages in zones DJ, EJ, F, G, M, N, P and S located within eastern Africa,
hence the name mashariki 'east'. This larger grouping is a combination and modification of
both Guthrie (1967-71) and Bastin, Coupez and de Halleux (1983) who do not agree with the
idea of a division of Bantu between Western and Eastern Bantu (Ehret ibid:9-11). Within
Mashariki there is Kaskazi (north(ern)) from which Proto-Takama emerged. Proto-Takama
was the ancestor of present day F21, F22, F23, F24, F31 and F32. Excellent lexical data is
provided in terms of unique innovation or loanwords. However, we do not use the
vocabulary fully in our study because, first, Ehret's work covers several zones, including
Zone F (Takama), and therefore only a few words are given as examples. Secondly, the basis

¹³ Ehret, Christopher. 1994. Eastern Africa in the early iron age: explorations in history, 1000 B.C. to A.D. 300, Prepublication manuscript, published 1998 as An African Classical Age. Charlorexille: [Inviersity of Virginia Press.]

for obtaining both the years and linguistic affiliations and hierarchies of relationship is not explained explicitly, although it is stated clearly, that Mashariki and its subdivisions are not based on genetic linguistic divisions but rather they are geographical distributions of people (Ehret ibid:10). It is difficult to draw linguistic conclusions from a geographical distribution of languages, although some linguistic statements like those of contact and mutual borrowing can be made. Thirdly, the reliance on vocabulary to draw historical correlations is a drawback which is mentioned elsewhere. Words normally spread easily, and their significance is weakened especially when they are not unique to one group. And finally the distribution of the vocabulary is not analyzed to see the extent of sharing between the different levels of relationship. Without such a breakdown, it is difficult to reach conclusions of genetic affiliation, which is our main focus. For instance the following words are claimed to be Proto-Bantu by Guthrie (1967-71), although Ehret (1994) suggests that they are loans from eastern Sudanic: Proto-Lakes -tebe 'stool' from *te.b 'to stay, dwell, sit' (cf PB *-tebe 'stool'); Kati *-kolo 'sheep' from *kol 'goat wether' (cf PB *-kodo 'sheep'). It would be more comparable with this work if it were clarified and justified why a certain choice of word origin was preferred over another. That would be possible if the exact distribution and extent of lexical spread was shown, enhancing the great potential of the work in combining history and linguistics

5.5.4 Other sources: ethnography, oral history and linguistic history

Apart from written linguistic, archaeological or historical sources there are other documents which are based on oral accounts recorded from the speakers of some Zone F languages. These explain mainly the origin of people according to collective memory. Some are confirmed by other well-known academic disciplines while others await more evidence for confirmation or refutation. Where knowledge gaps are common, it is not a good idea to privilege some sources of information by inclusion and leaving out others without rigorous academic scrutiny simply because they were not written by professional linguists, archaeologists or historians. Important insights can be gained in examining them with an open mind. However, these sources are few, as shown in 2.1.1

5.5.4.1 History of SiSuumbwa

According to Abrahams (1967a.25) the origin of F23 speakers is not certain, although he quotes earlier writers as saying that Usumbwa might have been controlled from Karagwe, by Tusi rulers, although he found no evidence to support that claim of imported rulers. Sutton and Roberts (1968:64) quote oral sources as saying that the history of western Tanzania communities is the history of their chiefs, and that some of the Sumbwa chiefs trace their origins in Rwanda. Who the aboriginal inhabitants were, Sutton and Roberts do not say, although the connection with Rwanda is borne out by both the phonological and lexical evidence.

5.5.4.2 History of KIKIImb U

Shorter (1972:xix) introduces his research findings about the Kimbu in the following way:

¹ have received no specific linguistic training. However, during my fieldwork in Ultimatu 1 was obliged to work out an orthography for the Kimbu language which I was recording. Since virtually no language recording had been done in Ultimatu before I went there, there were no existing orthographies to follow, and literate Kimbu vary considerably from each other in the way they write the sounds.¹

Shorter's observation was true then, as it continues to be so even today for many of the language varieties in Tanzania. Statements and informal observations not based on research continue to be made. For instance, Shorter (1972-33) compares the opinions of various scholars who mostly relied on informants without any analysis of linguistic data as a backup mechanism, and get confused results, such as Kimbu and Bungu being almost identical, both dialects of Nyamwezi, Kimbu related to another language of Zone G, (G62), the Hehe, or Kimbu as a distinct language but closely related to Nyamwezi, which is contradictory

5.5.5 Conclusions from the various sources

The works on the linguistic and general history of Zone F and SSN surveyed above share one important thing: they are all hypotheses trying to account for the phenomena, using synchronic data and facts. Guthrie (1967-71) also used synchronic data to draw conclusions in relation to linguistic affiliations in Bantu languages.

The survey of the folk history of some of the Zone F languages shows that some of these folk

histories do actually have historical validity. This study shows traces of evidence to substantiate these mythologies of contact, although the constant movements suggested cannot be handled by the vocabulary since the spread of words does not imply movement of people. On the other hand, lack of evidence only means more research, possibly with a multi-disciplinary approach, involving all branches of linguistics as well as evidence from other areas. This will help unearth more interconnectedness or lack thereof of the Zone F languages.

5.6 DIRECTIONS FOR FUTURE RESEARCH

Several improvements could make studies such as this in the future even better. These are in the areas of method, researcher attributes and source of information.

(1a) Improving method: The lists of words used were not pretested to determine if they were suitable. The problems encountered in 1.3.4 would be reduced or eliminated if this were done. Some items were unusable because they were ambiguous, polysemous, or irrelevant because the list was not given in a trial to a preliminary small target group where the word-list would have been tested and edited to improve its quality before given to the final informants.

(1b) In analyzing the relationship between languages, the focus should not be just on the phonology and lexicon as in the present study. Evidence of morpho-syntax (tense/aspect, noun class (nominal) and tonal systems) would go a great way to supplement lexical and phonological studies as noted by Nurse (1995:72)

(1c) A multiplicity of methods should be employed in these complex historical problems rather than sanctifying a few and ignoring the potential contributions of other approaches. This calls for changes in the training of linguists, historians, archaeologists, and others in related disciplines. This weakness has been observed when scholars adhere to various schools of thought, and they are not interested in employing the approaches of other schools by assuming that their school's approach is the best or the only one worth of attention. A similar point was raised by Nurse (1995:72). This is illustrated by archaeological approaches where German, British. American, continental Europe generally, and Russian historians and archaeologists have had their own schools of thought (Härke 1998). The rest of the scholars and researchers have followed any one of those, depending on who was influencing them at that moment. East African archaeology has been a testing ground for various approaches. although the processualist paradigm of the 1960s and 1970s moulded those East African archaeologists of the 1980s and 1990s (Robertshaw 1990:93) (also see 2.2). As a balance in the search for truth and facts, wherever they led the scholars, a multi-disciplinary or multiapproach focus would imply taking optional courses like historical linguistics for palaeontologists, historians; or statistics, especially probability theory for linguists for application in lexicostatistics. Many scholars assume incorrectly that scholarship is bias-free. not influenced by ideology, self-interest or the politics of the day (Bunge 1983; Härke 1998:23). It is important to recognize this fact rather than suppress it or pretend it does not exist.

- (1d) Equal emphasis should be placed on the intermediate levels of reconstructed languages from which the daughter languages are postulated to have emerged. Many of these levels are only hypothesized without being subjected to rigorous scrutiny. Historical linguistics is not only about reconstruction of ever distant proto(-proto-proto) systems (upstream), but also about historical trajectories (downstream).
- (2) Native speakers of these languages should be encouraged even more to do research in their languages so as to inject their intuition and insights.
- (3) Other sources of knowledge, especially in oral cultures should be included. For instance rituals like matambiko (ancestral offering customs) make it possible to know a people's roots by observing what artifacts are used in the tambiko (singular), eg, bamboos, canoes for βaHa which indicate how they earned their living, built their houses, etc (Chubwa 1979.8.9), Elias Manandi Songooyi¹⁴. In turn, such sources could be compared with others describing the history of a people in oral traditions, written records, archaeology, history and linguistics.
- (4) The stakeholders in the knowledge process, including researchers, funding bodies and society at large should encourage and scrutinize all alternative views, approaches and explanations of phenomena so that enquiry or funding do not prescribe and proscribe areas in which they are only interested. Such approaches of biased interest thwart genuine progress.

¹⁴ Personal communication, October 1999, with regard to research in BUSukuma.

of knowledge in a situation described by Harke (1998) in which what happens is not necessarily what is told because of interests tied in reporting history. In Bantu studies for instance, some languages have not been described because nobody is interested in funding the research there.

(5) Future phases of research in Zone F should concentrate on F10, F25, F33 and F34 to clarify their histories, especially to look for more evidence for Musso's (1968) claims of the connection he makes between KiiRangi and tCtWUUngU. F23 is clearer than previously known, although some more work is needed to ascertain its linguistic history even more precisely. Other languages with questionable histories can be handled in the same way to resolve any fuzzy areas

5.7 CONCLUSION

5.7.1 Answering the research questions

Four questions were posed in Chapter 1 as research questions.

(1). What are the concrete criteria for the classification of Bantu languages into zones? Do we need linguistic zones in the first place? Are they historical, areal or typological? Only unique linguistic criteria should define linguistic zones. Purely linguistic criteria do not support the idea of a Zone F. they either fragment the zone and destroy it, or they are shared by other zones, making them trivial for classification.

- (2). How many of the criteria mentioned in number (1) above should a language or variety possess in order to qualify for membership into a zone? If an entity is claimed to be historical, then all the defining criteria should match. Within Zone F, the languages hardly share anything. In SSN, F21, F22 and F23 are separate, unless those features: BS, 7 > 5, DL, glottalization and voiceless nasal formation are not significant and can be ignored. If they are ignored, which features make SSN, or even F21/F22 one entity?
- (3). What rigorous features define Zone F, excluding all other zones? This study has found none, apart from vocabulary, innovations which are easily spread and shared, making Zone F only a referential one without any historical validity, except that of convergence by long contact.
- 4. Within Zone F, what features distinguish one group of languages from others in exclusion of all others, justifying the isolation of those groups? For assumed sister languages, unique innovations are the only relevant criteria for classification. The distinct status of each traditional language group is the defining character of Zone F. In combination or isolation, BS, 7 > 5, DL, glottalization and voiceless nasal formation effectively fragment the zone. In addition the behaviour of PB *d in F33 and F34 isolates them from Zone F, while PB *g takes F25 away. Vocabulary and how it is shared are also peculiar to each group.

5.7.2 Concluding remarks

The following are general methodological and theoretical observations based on the analysis of SSN and Zone F in this study:

- (1) Cultural and core vocabulary reveal different things if the time of separation from a protolanguage is long. Cultural vocabulary reveals either both custom and geographical distance, or only one of them, whereas core vocabulary maintains the genetic relations even when both the cultural and geographical distances are large. For instance, KiLoongo or SiSuumbwa do not belong to F20 genetically, although they are adjacent to F20. The closeness to F20 is revealed in cultural vocabulary, which is easily acquired. Similarly, genetic and cultural affiliations do not always overlap, as in the case of F23 in relation to F21/F22 and DJ60/EJ20. Cultural vocabulary explains contact, technological acquisitions and their sources, cultural influence and domination. Core vocabulary reveals genetic heritage. For instance, F23 is predominantly F20 culturally, but DJ60 genetically, as shown by the phonology and vocabulary.
- (2) The rates of lexical retention, high or low, are relative rather than absolute, depending on whether the word-lists used are 100, 200, 400 or more. It also depends on the reference group. If one language is compared to languages with high retention rates, its individual high rates may be low with such languages, as in the case of KeeMbuwe (70%) or SiSuumbwa (69%) with NR (F21, F22, F24, F31, F32), since the retention rates there are even higher.

and a cut-off point has to be made. In some contexts, taboo words in social relations lead to vocabulary loss.

(3) In adjacent languages, inter-comprehension depends largely on shared culture, facilitated only by cultural vocabulary where the rules of communication and the changes in material culture are encoded. This can be demonstrated by the Bantu languages, which belong to one family, but where speakers may not communicate if their cultures are different. When cultural distance is great because of geographical separation, communication begins to be difficult or impossible, although the core vocabulary retention rates may be high between any pair of languages. This applies in continua where distance between the furthest dialects of a language makes communication difficult. In other words, inter-comprehension between dialects tends to diminish as distance increases with a concomitant or proportional increase in cultural divergence. Both the distant and adjacent languages or dialects normally share the same core vocabulary. Inter-comprehension therefore cannot be a measure or proof of genetic affiliation between speakers of two languages from the same family since genetic affiliation is a fixed fact, whereas cultural acquisition is not¹³.

(4) Linguistic trees (Figure 4.1 and Figure 4.16 in Chapter 4), frequency graphs and shared retention percentages are all simplifications and generalizations. They are meant to be

¹³ Communication becomes possible only when facilitated by KiSwahili in bi-or multilingual speakers. But many people in Tanzania, especially in DD Sukuma, are still functionally monolineual, unless they went to school where they learnt KiSwahili.

descriptive. Their interpretation can be historical even when the methods of deriving a certain set of conclusions are different.

- (5) The oral history of iron workers in Buzinza refers to Longo as specialist ironsmiths living there and who came from different clans related to the βuKereβe clans (Hartwig 1971). Buzinza is the south-western part of southern Lake Victoria. This oral version of history is corroborated by our data since linguistically, KiLoongo fits well within Rutara, both phonologically and lexically.
- (6) The statements made about similarities or differences about languages in the zones, especially as suggested by Guthrie (1948, 1967-71), have often been taken for granted. Only anecdotal accounts are sometimes given without any rigorous evidence to ascertain the status of entities sufficiently and necessarily. For instance, the cohesion of core Zone F (F21, F22, F24, F31, F32) or SSN (F21, F22, F23) was based on evidence which was not sufficient.
- (7) It is important to recognize the advantages and limits of disciplines and their methods, as Vansina (1995b:396) observes with regard to their theory and/or practice. For instance, in archaeology he notes the advantage of producing concrete evidence. But its limitations include the tendency to adhere to particular paradigms or to have a free range of the imagination (Vansina 1995b:396). In history, one problem in both written and oral testimonies is the privileging of some sources, especially favouring the testimony given by leaders and ignoring the versions of common people (Nurse 1979b:384). One advantage with

such testimony is the limitation on the free range of the imagination because the events are narrated by others, minimizing the subjectivity of the historian.

(8) Guthrie's (1967-71) classification was mainly synchronic. It did not include the historical dimension when classifying the languages into zones, although the consonantal reconstructions and the vocabulary were historically grounded. The effect of language contact and the resulting areal influences were not considered. The phonological and lexical analysis in this study has shown that SSN and Zone F are not valid linguistically.

REFERENCES

- Abdallah, Yohana B. 1991. The antiquity of the WaYao. Ndanda-Peramiho: Benedictine Publications. [Abdallah, Yohana B. 1991. Zamani za Wayao (Chiikala cha Wayao). Ndanda-Peramiho: Benedictine Publictions.]
- Abrahams, R. G. 1967. The peoples of Greater Unyamwezi, Tanzania: (Nyamwezi, Sukuma, Sumbwa, Kimbu, Konongo). London: International African Institute.
- Andersen, Henning. 1989. Understanding linguistic innovations. Breivik, Leiv Egil and Ernst Håkon Jahr (eds). Language change: contribution to the study of its causes. Berlin: Mouton de Gruyter. 5-27.
- Anttila, Raimo. 1972. An introduction to historical and comparative linguistics. New York: Macmillan Publishing Co., Inc.
- Armstrong, Robert G. 1962. Glottochronology and African linguistics. *Journal of African History. III.* 2, 283-290.
- Barnard, Alan. 1995. Wilmsen's reply: a comment. African Studies. 54.1. 45-46.
- Bastin, Yvonne. 1983. Statistique grammaticale et classification des langue bantoues. Africana Linguistica. 9, 17-37.
- Bastin, Ývonne, André Coupez and Michael Mann. 1999. Classification lexicostatistique des langues bantoues sur base de 542 relevés. Tervuren: Musée Royal de l' Afrique Centrale, and London: School of Oriental and African Studies. [quoted originally from 1995 on-going project, then]
- Batibo, Herman M. 1982. Some linguistic contributions to the cultural history of the people of the Great Lakes and the neighbouring regions. Unpublished paper, University of Dar es Salaam
- Batibo, Herman M. 1985. Le Kesukuma, langue bantu de Tanzanie: phonologie et morphologie. Paris: Editions Recherche sur les Civilisations
- Batibo, Herman M. 1990. Vowel length: the forgotten distinctive feature in Swahili? Afrikanistische Arbeitspapiere. 23, 53-72.
- Batibo, Herman M. 1991a. The two-directional tone melody spread in Sukuma. Proceedings of the Seventeenth Annual Meeting of the Berkeley Linguistics Society, February 13-18 1991. Berkeley, California: Berkeley Linguistics Society. 15-24.
- Batibo, Herman M. 1991b. The tone structure of the Sukuma nominal forms. Francis Katamba (ed). Lacustrine Bantu phonology. Cologne, University of Cologne. Afrikanistische Arfeitspaarier. 2, 5, 31-53.
- Batibo, Herman M. 1992a. The fate of ethnic languages in Tanzania. Matthias Brenzinger (ed). Language death: factual and theoretical explorations with special reference to East Africa. Berlin: Mouton de Gruyter. 85-98.
- Batibo, Herman M. 1992b. The peopling of Busukuma: a linguistic account. Journal of Linguistics and Language in Education 6, 43-76.
- Batibo, Herman M. and Franz Rottland. 1994. The markedness principle and Swahili syllable structure. Afrikanistische Arbeitspapiere. 40, 49-81.

- Batibo, Herman M. 2000. The state of spirantization in Sukuma-Nyamwezi: a historical account. Kulikoyela Kahigi, Yared Kihore and Maarten Mous (eds). Lugha za Tanzania Lungunges of Tanzania: Studies dedicated to the memory of Prof. Clement Maganga. Leiden: Research School for Asian, African, and Amerindian Studies (CNWS). Universited Leiden. 19-29.
- Bennett, Patrick R. 1967. Dahl's Law in Thagicü. African Language Studies. 8. 127-159.
 Bergsland, Knut and Hans Vogt. 1962. On the validity of glottochronology. Current anthropology. 3.2. April. 115-153.
- Bleek, Wilhelm H.I. 1862-9. A comparative grammar of South African languages, 2 Vols. Capetown: Juta and London: Trübner.
- de Blois, Kees F. 1975. Bukusu generative phonology and aspects of Bantu structure. Annales, Série IN-8° - Sciences Humaines- N° 85. Tervaren, Belgique: Musée Royal de l'Afrique Centrale.
- Bosha, Ibrahim Ahmed. 1993. Taathira za Kiarabu katika Kiswahili pamoja na Kamusi Thulathiya (Kiswahili-Kiarahu-Kingereza). The influence of Arabic language on Kiswahili with a Trilingual Dictionary (Swahili-Arabic-English). Dar Es Salaam: Dar Es Salaam University Press.
- Botne, Robert with Kisanga Salama-Gray (compilers). 1994. A Lega and English dictionary with an index to Proto-Bantu roots. Köln: Rüdiger Köppe Verlag.
- Bourquin, W. 1955. Notes on "close vowels" in Bantu. African Studies (formerly Bantu Studies). 14. 2, 49-62.
- Brenzinger, Matthias, Bernd Heine and Gabriele Sommer. 1991. Language death in Africa. Harris, Robert H. and Eugenius M. Uhlenbeck (eds). Endangered languages. Oxford/New York, BERG Publishers Ltd. 19-94.
- Brock, Beverley. 1968. The Nyiha (of Mbozi). Roberts, Andrew (ed). Tanzania hefore 1900. Nairobi: East African Publishing House, for The Historical Association of Tanzania. 59-81.
- Bryan, Margaret A. 1959. The Bantu languages of Africa. London: Oxford University Press, for the International African Institute.
- Bunge, Mario. 1983. Treatise on basic philosophy Volume 6: epistemology and methodology: understanding the world. Dordrecht: D. Reidel Publishing Company.
- Byarushengo, Ernest Rugwa. 1976. Strategies in loan phonology. Berkeley Linguistic Society. II. 78-87.
- Bynon, Theodora and Michael Mann. 1973. Papers on Comparative Bantu: an introduction. African Linguistic Studies. XIV 1-5.
- Chami, Felix A. 1994. The Tanzanian coast in the first millennium AD: an archaeology of the iron-working, farming communities. Uppsala: Societas Archaeologica Upsalensis.
- Chami, Felix A. 1998. A review of Swahili archaeology. African Archaeological Review. 15.3, 199-218.
- Chami, Felix A. 1999a. Graeco-Roman trade links and the Bantu migration theory.

- Anthropos, 94, 205-215.
- Chami Felix A. 1999b. Roman beads from the Rufiji delta, Tanzania: first incontrovertible archaeological link with the Periplus. Current Anthropology. 40.2. 237-241.
- Chubwa, P. 1979. WaHa: history and development. Tabora: TMP Book Department. [Chubwa, P. 1979. Waha: historia na maendeleo. Tabora: TMP Book Department].
- van Coetsem, Frans. 1988. Loan phonology and the two transfer types in language contact.

 Dordrecht: Foris Publications Holland.
- Cole, Desmond T. 1959. Doke's classification of Bantu languages. African Studies. 18.4. 197-213.
- Cole, Desmond T. 1961. Doke's classification of Bantu languages. Doke. Clement M. and Desmond T. Cole (eds). Contributions to the history of Bantu linguistics. Papers contributed by C.M. Doke and D.T. Cole (1935-1960). Johannesburg: Witwatersrand University Press. 80-96
- Committee for Cultural Research (The), at Bujora. 1988. Basukuma traditional beliefs in sayings, folktales, proverbs and norms, 3: traditional religion. Paris: CID editions. [Kamati ya Utafiti wa Utamaduni, Bujora. 1988. Imani va judi za Kisukuma katika misemo, hadithi, methali na desturi ya maisha, 3: traditional religion. Paris: CID editional.
- Cory, Hans. 1953. Sukuma law and custom. London: Oxford University Press, for the International African Institute.
- Cory, Hans and M.M. Hartnoll. 1945. Customary law of the Haya tribe, Tanganyika Territory, (Second impression 1971). London: Frank Cass & Co. Ltd.
- Coupez, André. 1955. Esquisse de la langue Holoholo. Tervuren: Commission de Linguistique Africaine.
- Dahl, Edmund 1915. Nyamwesi worterbuch. (Abhandlungen des Hamburgischen Kolonialinstituts, 25; Reihe B. Völkerkunde, Kulturgeschichte und Sprachen, 15). Hamburg L. Friederichsen.
- Dalby, David. 1970. Reflections on the classification of African languages, with special reference to the work of Sigismund Wilhelm Koelle and Malcolm Guthrie. African Language Studies. XI. Presented to Malcolm Guthrie on the occasion of his retirement, School of Oriental and African Studies, University of London. 147-171.
- David, Nicholas. 1980. Early Bantu expansion in the context of Central African prehistory: 4000 - I BC. Luc Bouquiaux (editeur). L'expansion bantone. Actes du colloque International du CNRS, Vivier-France, 4-16 avril 1977. Paris. CNRS (Centre National de la Recherche Scientifique). 609-647.
- Davy, Jim and Nurse, Derek. 1982. Synchronic versions of Dahl's Law: the multiple applications of a phonological assimilation rule. *Journal of African Languages and Linguistics*. 4. 157-195.
 Deetz, James. 1967. *Invitation to archaeology*. George Garden, New York: The Natural
- Deetz, James. 1967. Invitation to archaeology. George Garden, New York: The Natura History Press for The American Museum of Natural History.
- Dempwolff, Otto Von. 1912. Beiträge zur Kenntnis der Sprachen in Deutsch-Ostafrika.

- Buwe. 7. 1-27.
- Dickens, Patrick. 1995. Why anthropologists need linguistics. The case of the !Kung. African Studies. 54.1. 17-35.
- Dixon, R.M.W. 1997. The rise and fall of languages. Cambridge: Cambridge University Press.
- Doke, Clement M. 1959. Bantu language pioneers of the nineteenth century. African Studies. 18, 1, 1-27
- Doke, Clement M. 1961. The growth of comparative Bantu phonology. Clement M. Doke and Desmond T. Cole (eds). Contributions to the history of Bantu linguistics. Papers contributed by C.M. Doke and D.T. Cole (1935-1960). Johannesburg: Witvatersrand University Press. 55-79.
- Downing, Laura J. (Compiler). 1989. A bibliography of East African languages and linguistics 1880-1980 (excluding Somali and Swahli) based on the holdings of the University of Illinois at Urbana-Champaign Library.
- Ehret, Christopher. 1968a. Linguistics as a tool for historians. Hadith 1: Proceedings of the annual conference of the Historical Association of Kenyu 1967. Nairobi: East African Publishing House, for the Historical Association of Kenyu. 119-136.
- Ehret, Christopher. 1968b. Sheep and Central Sudanic peoples in southern Africa. Journal of African History. 9.2. 213-221.
- Ehret, Christopher. 1971. Southern Nilotic history: linguistic approaches to the study of the past. Evanston, Illinois: Northwestern University Press.
- Ehret, Christopher. 1980. A historical reconstruction of Southern Cushitic phonology and vocabulary. Berlin: Dietrich Reimer Verlag.
- Ehret, Christopher. 1984. Between the coast and the Great Lakes. D.T. Niane (ed). General history of Africa Vol. 4: Africa from the welfth to the sixteenth century. London & Paris: Heinemann and UNESCO. 480-497.
- Ehret, Christopher. 1994. Eastern Africa in the early iron age: explorations in history, 1000 BC to AD 300. Unpublished ms, [Published as Ehret, Christopher. 1998. An African classical age: eastern and sauthern Africa in world history, 1000 BC to AD 400. Charlottesville: University of Virginia Press and Oxford: James Currey.
- Ehret, Christopher. 1999. Subclassifying Bantu: the evidence of stem morpheme innovations. Jean-Marie Hombert and Larry M. Hyman (Eds). Bantu historical linguistics: theoretical and empirical perspectives. Stanford, California: Center for the Study of Language and Information Publications. 43-147.
- Ehret, Christopher. 2000. Language and history. Bernd Heine and Derek Nurse (eds). African languages: an introduction. Cambridge University Press. 272-297.
- Embleton, Sheila M. 1986. Statistics in historical linguistics. Bochum: Studienverlag Dr. N. Brockmeyer.

 Favan, Brian, M. et al. (eds.) 1996. The Oxford companion to archanology. Nav. Voctor
- Fagan, Brian M. et al.(eds).1996. The Oxford companion to archaeology. New York: Oxford University Press.
- Fairbanks, Gordon H. 1955. A note on glottochronology. International Journal of American Linguistics. 21.2. 116-120.

- Fischer, David Hackett. 1970. Historians' fallacies: toward a logic of historical thought. New York: Harper Torchbooks, Harper & Row, Publishers.
- Gardner, Martin. 1957. Fads and fallacies in the name of science. New York: Dover Publications.
- Geyh, Mebus A. and Helmut Schleicher. 1990. Absolute age determination: physical and chemical dating methods and their application. Berlin: Springer-Verlag.
- Goldsmith, John A. 1985. On tone in Sukuma. Didier L. Goyvaerts (Ed). African linguistics: essays in memory of M.W. Semikenke. Amsterdam/Philadephia: John Benjamins Publishing Co. 167-187
- Grace, George W. 1964. The linguistic evidence. Current anthropology. 5.5. December. 361-368.
- Greenberg, Joseph. 1963. The languages of Africa. The Hague: Mouton.
- Gudschinsky, Sarah. 1955. Lexico-statistical skewing from dialect borrowing. International Journal of American Linguistics. 21.2, 138-149.
- Gudschinsky, Sarah. 1956. The ABC's of lexicostatistics (glottochronology). Word. 12.2.
- Gussenhoven, Carlos and Haike Jacobs. 1998. Understanding phonology. London:
- Guthrie, Malcolm. 1948. The classification of the Bantu languages. London: Oxford University Press.
- Ontversity Press.
 Guthrie, Malcolm. 1962a. A two-stage method of comparative Bantu study. Collected Papers in Oriental and African Studies. African Languages Studies. III. 1-24.
- Guthrie, Malcolm. 1962b. Some developments in the prehistory of the Bantu languages.

 Journal of African History, III. 2, 273-282.
- Guthrie, Malcolm. 1962c. Bantu origins: a tentative new hypothesis. Journal of African Languages, 1,1, 9-21.
- Guthrie, Malcolm. 1967. The classification of the Bantu languages. London: Dawsons of Pall Mall for the International African Institute.
- Guthrie, Malcolm. 1967-71. Comparative Bantu. Farnborough: Gregg International Publishers Ltd.
- Guthrie, Malcolm. 1970. Contributions from comparative Bantu studies to the prehistory of Africa. David Dalby (ed). Language and history in Africa. A volume of collected papers presented to the London Seminar on Language and History in Africa field at the School of Oriental and African Studies, 1967-1969). London: Frank Cass & Co. Ltd. 20-49.
- Halle, Morris. 1995. Feature geometry and feature spreading. Linguistic Inquiry. 26.1. 1-
- Harris, John and Geoff Lindsay.1995. The elements of phonological representation. Durand, Jacques and Francis Katamba (eds). Frontiers of phonology: atoms, structures and derivations. London and New York: Loneman. 34-79.
- Hartwig, Gerald W. 1971. Oral traditions concerning the Early Iron Age in northwestern

- Tanzania. African Historical Studies. IV. 1. 93-114.
- Härke, Heinrich. 1998. Archaeologists and migrations. Current Anthropology. 39.1. 19-45.Heine, Bernd. 1973. Zur genetischen Gliederung der Bantu-Sprachen. Afrika und Übersee.56. 164-185
- Heine, Bernd. 1976. Knowledge and use of second language in Musoma Region a quantitative survey. Kiswalhili. 46.1. 49-59
- Heine, Bernd. 1980. Methods in comparative Bantu (The problem of Bantu linguistic classification). Bouquiaux, Luc (éditeur). L'expansion bantone. Actes du colloque International du CNRS, Vivier-France, 4-16 avril 1977. Paris: Centre National de la Recherche Scientifique. 295-308.
- Henrici, Alick. 1970. Numerical classification of Bantu languages. African Language Studies, XI, 82-104.
- Herbert, Robert K. and T.N. Huffman 1993. A new perspective on Bantu expansion and classification: linguistic and archaeological evidence fifty years after Doke. African Studies C.M. Doke Centenary, 22, 23-76.
- Hinnebusch, Thomas J. 1976. Swahili: genetic affiliations and evidence. Studies in African Linguistics, Supplement 6, November, 95-108.
- Hinnebusch, Thomas J. 1999. Contact and lexicostatistics in comparative Bantu studies. Hombert, Jean-Marie and Larry M. Hyman (Eds). Bantu historical linguistics: theoretical and empirical perspectives. Stanford, California. Center for the Study of Language and Information Publications. 173-203.
- Hinnebusch, Thomas J. and Derek Nurse. 1981. Spirantization in Chaga. Sprache und Geschichte in Afrika, 3. Hamburg: Helmut Buske Verlag. 51-78.
- Hinnebusch, Thomas, Derek Nurse and Martin Mould. 1981. Studies in the classification of Eastern Bantu languages. Sprache und Geschichte in Afrika, Beihefi 3. Hamburg: Helmut Buske Verlau.
- Hock, Hans Henrich. 1991. Principles of historical linguistics, 2nd revised and updated edn. Berlin: Mouton de Gruyter.
- Homburger, L. 1913. Etude sur la phonétique historique du Bantou, Paris.
- Hyman, Larry M. 1994. Cyclic phonology and morphology in Cibemba. Jennifer Cole & Charles Kisseberth (eds). Perspectives in phonology. Stanford, California: Center for the Study of Language and Information Publications. 81-112.
- Hyman, Larry M. and John B. Lowe. A computerized database for theoretical and historical Bantu phonology and morphology 1994-1997. Online Project. Department of Linguistics, University of California, Berkeley, CBOLD Grant Proposal, National Science Foundation Grant. Access date: 28th February 1998. http://doi.org/10.1006/j.chu/phonology/10.1006/j.phonology/10
- Hyman, Larry M. and John B. Lowe. A computerized database for theoretical and historical Bantu phonology and morphology 11 1997-2000. Online Project. Department of Linguistics, University of California, Berkeley. CBOLD Grant Proposal, National Science Foundation Grant. Access date: 13th March 2000.

http://www.linguistics.berkeley.edu/CBOLD

- Hymes, Dell. 1960a. Lexicostatistics so far. Current anthropology. 1.1. January. 3-44.
 Hymes, Dell. 1960b. More on lexicostatistics. Current anthropology. 1.4. July. 338-345.
- Hymes, Dell. 1964. Validity of chronology. Current amhropology. 5.4. October. 324-326.
 - Itandala, A. Buluda. 1979. Ilembo, Nkanda and the girls: establishing a chronology of the Babinza. Webster, J.B. (ed), Chronology, migration and drought in interlacustrine Africa. New York: Africana Publishing House and Dalhousie University Press. 145-173.
- Itandala, A. Buluda. 1983. A history of the Babinza of Usukuma, to 1890. Unpulished PhD thesis, Dalhousie University, Halifax.
- Jeffers, Robert J. and Ilse Lehiste. 1982. Principles and methods for historical linguistics. Cambridge, Massachusetts: The MIT Press.
- Jellicoe, Marguerite. 1969. The Turu resistance movement. Tanzania Notes and Records. 70. 1-12.
- Johnson, Marion R. 1979. The natural history of Meinhof's Law in Bantu. Studies in African Linguistics. 10.3. 261-271.
- Kahigi, Kulikoyela Kanalwanda. 1987. Bantu reconstruction and the stops versus continuants controversy. *Utafiti*. ix.2. 1-20.
- Kahigi, Kulikoyela.Kanalwanda. 1988. Aspects of Sumbwa diachronic phonology. Unpublished PhD Dissertation, Michigan State University.
- Kahigi, Kulikoyela Kanalwanda. 1995. Darajia za uimara na mabadiliko ya vizuio vya Kibantu-mama. Kioo Cha Lugha. 12, 8-27. [Kahigi, K.K. 1995. The strength hierarchy and the evolution of Proto Bantu stops. Kioo Cha Lugha. 12, 8-27].
- Kahindi, H.E. 1988. Whether Sumbwa has been more influenced by Ha. Sukuma or Nyamwezi. Unpublished B.A. Linguistics Project, Department of Linguistics, University of Dar es Salaam.
- Kairanya, Peter Manyama. 1990. History and customs of the βaJita of Musoma. Unpublished ms. University of Dar Es Saalaam. [Peter Manyama Kairanya. 1990. Historia na utamaduni wa kabila la Wajita. Muswada usiochapishwa, Chuo Kikuu cha Dar Es Salaam]
- Katamba, Francis. 1989. An introduction to phonology. London: Longman.
- Kidamala, Daudi, translated and arranged by E.R. Danielson. 1961. A brief history of the Waniramba people up to the time of the German occupation. Tamganyika Notes and Records. March. 56. 67-78.
- Kihore, Yared. 2000. Historical and linguistic aspects of Kihacha. Kahigi. Kulikoyela. Yared Kihore and Maarten Mous (eds). Lugha za Tauzanu Lunganges of Tauzanu: Studies dedicated to the memory of Prof. Clement Moganga. Leiden. Research School for Asian, African, and Amerindian Studies (CNWS), Universiteit Leiden. 67-80.
- Kimambo, Isaria N. 1993. The east African coast and hinterland, 1845-80. Joseph Ki-Zerbo (ed). General history of Africa, Vol 6: Africa in the nineteenth century until the 1880s. London : Heinemann. 2344-269.

- Kimenyi, Alexandre. 1979. Studies in Kinyarwanda and Bantu phonology. Edmonton, Alberta: Linguistic Research, Inc.
- Kollmann, Paul. 1899. The Victoria Nyanza: the land, the races and their customs, with specimens of some of the dialects. London: Swan Sonnenschein & Co., Ltd.
- Kroeber, A.L. 1955. Linguistic time depth results so far and their meaning. *International Journal of American Linguistics*, 16, 4, 91-104.
- Kuhn, Thomas S. 1970. The structure of scientific revolutions. Second edition, Enlarged. Chicago: The University of Chicago Press.
- Labroussi, Catherine. 1999. Vowel systems and spirantizations in Southwest Tanzania. Hombert, Jean-Marie and Larry M. Hyman (eds). Buntu historical linguistics: theoretical and empirical perspectives. Stanford, California: Center for the Study of Lanquage and Information Publications. 335-377.
- Last, J.T. 1885. Polyglotta Africana Orientalis. London. Society for the Promotion of Christian Knowledge.
- Lestrade, G.P. 1948. The classification of the Bantu languages. A review. African Studies 7. 1. March. 175-184.
- Lwanga-Lunyiigo, S. and Jan Vansina. 1988. The Bantu speaking peoples and their expansion. Elfasi, M.(ed). General history of Africa Vol. 3: Africa from the seventh and eleventh century. London & Paris: Heinemann and UNESCO. 140-162.
- Mabala, Leo Bassu. 1988. The Watutsi: traditions and customs. Ndanda-Peramiho. Tanzania: Benedictine Publications. [Mabala, Leo Bassu. Watutsi: mila na desturi. Ndanda-Peramiho. Tanzania: Benedictine Publications].
- Maddieson, Ian. 1984. Patterns of sound. Cambridge: Cambridge University Press.
- Maddieson, Ian. 1991. Articulatory phonology and Sukuma 'aspirated' nasals. Proceedings of the Seveneenth Annual Meeting of the Berkeley Linguistics Society February 15-18 1991. Berkeley, California: Brekeley Linguistics Society. 145-154.
- Maganga, Clement and Thilo C. Schadeberg. 1992. Kinyamwezi: grammar, texts, vocabulary. Köln: Rüdiger Köppe Verlag.
- Maghway, Josephat B. 1995. Amotated Iraqw lexicon. African Language study series 2. Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa (ILCAA).
- Maho, Jouni, Derek Nurse and Gerard Philippson. jouni.maho@african.gu.se "The posted version" 29th September 2000. Personal email.
- Mange, J.M. Kadaso. 1971. Notes and Documents: Mfumo ya βtkwImba: The origins of βtkwImba. Translated by Edward Shillinde Kadaso, and edited and annotated by C. F. Holmes. African Historical Studies. 1971, 115-137.
- Masele, Balla. 1993. Voiceless nasals in Sukuma. Unpublished MPhil Dissertation.
 Cambridge: University of Cambridge
- Masele, Balla. 1996. Homorganic voiceless nasals in Kisukuma nouns: a feature geometry account. Unpublished ms. St John's: Memorial University of Newfoundland.
- Masele, Balla. 1997. Dense social networks and language maintenance: KISukuma and its eastern neighbours. Unpublished ms. Memorial University of Newfoundland.

- Masele, Balla 2000. Nominal tone in JinaKIIya dialect, KiSukuma. Kahigi, Kulikoyela, Yared Kihore and Maarten Mous (eds). Lugha zu Tunzania Lungunges of Tunzania: Studies dedicated to the memory of Prof. Clement Maganga. Leiden. Research School for Asian, African, and Amerindian Studies (CNWS), Universetit Leiden. 97-109
- Masesa, Samuel Masele Elias. 1978. The organization of the Kesukuma verbal word: the systemic approach versus the generative transformational approach. Unpublished M.A. (Linguistics) Dissertation. University of Dar Es Salaam
- Massamba, David P.B. 1986. On the influence of local languages on Kiswahili: the case of Mara Region in Tanzania. Kiswahili. 53, 1 & 2, 67-83.
- Massamba, David P. B. 1996. Phonological theory: history and development. Dar Es Salaam: Dar Es Salaam University Press.
- McElhanon, K.A. 1970. Lexicostatistics and the classification of Huon Peninsula languages. Oceania. 40.3, 214-231.
- McMahon, April M. S. 1994. Understanding language change. Cambridge: Cambridge University Press.
- Mdachi, Patrick L. 1991. The Wanyaturu of Singida: their trealitions and customs. Ndanda-Peramiho, Tanzania: Benedictine Publications. [Mdachi, Patrick L. 1991. Wanyaturu wa Singida: mila na desturi zao. Ndanda-Peramiho, Tanzania: Benedictine Publications.]
- Meinhof, Carl. 1932. Introduction to the phonology of the Bantu languages: being the English translation of "Grundrild einer Laudehre der Bantusprachen". Translated, revised and enlarged in collaboration with the author and Dr Alice Werner by N.J.v. Warmelo. Berlin: Dietrich Reimer, Ernst Vohsen.
- Meeussen, Achille E. 1962. Meinhof's rule in Bantu. African Languages Studies. III. 25-29.
- Meeussen, Achille E. 1973. Comparative Bantu: test cases for method. African Linguistic Studies. XIV. 6-18.
- Meeussen, A.E 1980. Bantu lexical reconstructions. Archives d'Anthropologie Schrief voor anthropologie 27. Tervuren.
- Mekacha, Rugatiri D.K. 1993. Language death: conceptions and misconceptions. Review article of M. Brenzinger (ed). 1992. Language death: factual and theoretical explorations with special reference to East Africa. Berlin and New York: Mouton de Gnyter. Journal of Pragmatics. 21. 101-116.
- Mekacha, Rugatiri D.K. 1997. Disconnecting education: language as a determinant of the quality of education in Tanzania. A critical rejoinder. Journal of Linguistics and lunguage in education, New Series. Department of Foreign Languages and Linguistics, University of Dar Es Salaam. 3, 95-105.
- Mesthrie, Rajend. 2000. Language contact 2: pidgins, creoles and 'new Englishes'. Mesthrie. Rajend et al. Introducing sociolinguistics. Philadephia: John Benjamins Publishing Company. 279-315.
- Mesthrie, Rajend and William L. Leap. 2000. Language contact 1: maintenance, shift and

- death. Mesthrie, Rajend et al. Introducing sociolinguistics. Philadephia: John Benjamins Publishing Company, 248-278.
- Michels, Joseph W. 1973. Dating methods in archaeology. New York and London: Seminar Press.
- Mihanjo, Eginald P.A.N., Betram Mapunda and Nestor N. Luanda. 1999. Redrawing the southern slave trade route: a look at social, economic, cultural and demographic impacts. Paper presented at Mkonge Hotel, Tanga, as a summary from an on-going project). Faculty of Arts and Social Sciences. University of Dar Es Salaam.
- Milroy, J. and L. Milroy. 1985. Linguistic change, social network and speaker innovation. Journal of Linguistics. 21, 339-384.
- Mkirya, Benjamin. 1991. The history, traditions and customs of the WaZanaki. Ndanda-Peramiho: Benedictine Publications. [Benjamin Mkirya. 1991. Historia, mila na desturi za Wazunaki. Ndanda-Peramiho: Benedictine Publications.]
- Mkude, Daniel J. 1999. Language policy in Tanzania and the building of democracy: Kiswahili/English against the languages of ethnic communities. Z.N. Tumbo-Masabo and E.K.F. Chiduo (editors). Kiswahili in education. Dar Es Salaam: Institute of Kiswahili Research, University of Dar Es Salaam. 14-31. [Mkude, D.J. 1999 Ujerazi wa demokrasia na sera ya lugha nchini Tanzania: Kiswahili/Kiingereza dhidi ya lugha za jumuia ndogondogo. Z.N. Tumbo-Masabo na E.K.F. Chiduo. (Waharin). Kiswahili kutika elimu. Dar Es Salaam: Taasisi ya Uchunguzi wa Kiswahili, Chuo Kikuu cha Dar Es Salaam. 14-31.]
- Mous, Maarten. 1993. A grammar of Iraqw. Hamburg: Helmut Buske Verlag GmbH.
- Mpiranya, Fidèle. 1995. Swahili phonology reconsidered in a diachronic perspective: the impact of stress on morphonemics and syllable structure. Köln: Rudiger Koppe Verlau.
- Musso, Michael. 1968. Mukwawa and his tribe. Arusha: Eastern Africa Publications Limited. [Michael Musso. 1968. Mukwawa na kahila lake. Arusha: Eastern Africa Publications Limited]
- Muzale, Henry R.T. 1998. A reconstruction of the Proto-Rutara tense/aspect system. Unpublished PhD thesis. St. John's: Memorial University of Newfoundland.
- Newman, James L. 1970. The ecological basis for subsistence change among the Sandawe of Tanzania. Washington, D.C: National academy of Sciences.
- Nishida, Toshisada and Shigeo Uehara. 1981. Kitongwe names of plants: a preliminary listing. African Study Monographs. 1. March. 109-131.
- Nurse, Derek. 1979a. Description of sample Bantu languages of Tanzania. African Languages Langues Africaines 5.1. London: International African Institute.
- Nurse, Derek. 1979b. Classification of the Chaga dialects: language and history on Kilimanjaro, the Taita Hills, and the Pare Mountains, with 24 tables and 3 maps. Hamburg: Helmut Buske Verlag.
- Nurse, Derek. 1982. Bantu expansion into East Africa: linguistic evidence. Christopher Ehret and Merrick Posnansky (eds). The archaeological and linguistic reconstruction of African history. Berkeley: University of California Press. 199-222.

- Nurse, Derek. 1988. The diachronic background to the language communities of southwestern Tanzania. Sprache und Geschichte in Afrika. Band 8. Hamburg: Helmut Buske Verlag. 15-115.
- Nurse, Derek. 1995a. 'Historical' classification of the Bantu languages. Azunia XXIX-XXX. 65-75.
 Nurse, Derek. 1995b. Social issues in historical linguistics in Africa. Proceedings of the 21st
- Annual Meeting of the Berkeley Linguistics Association. Parasession on historical issues in sociolinguistics social issues in historical linguistics. Berkeley Berkeley Linguistics Association. 465-477.

 Nurse Ports. 1907. The confidence of the instance of the language o
- Nurse, Derek. 1997. The contributions of linguistics to the study of history in Africa. Journal of African History. 38, 359-391.
- Nurse, Derek. 1999. Towards a historical classification of East African languages. Jean-Hombert, Marie and Larry M. Hyman (Eds). Bantu historical linguistics: theoretical and empirical perspectives. Stanford, California: Center for the Study of Language and Information Publications. 1-41.
- Nurse, Derek and Gérard Philippson. 1980a. The Bantu languages of East Africa: a lexicostatistical survey. Edgar C. Polomé & C. P. Hill (eds). Language in Tanzania. London: Oxford University Press, for International African Institute, 26-67.
- Nurse, Derek and Gérard Philippson. 1980b. Historical implications of the language map of East Africa. Luc Bouquiaux (éditeur). L'expansion hantone. Actes du colloque International du CNRS, Vivier-France. 4-16 avril 1977. Paris: Centre National de la Recherche Scientifique. 685-711
- Nurse, Derek and Thomas J. Hinnebusch. 1993. Swahili and Sahaki: a linguistic history. Berkeley: University of California Press.
- Nurse, Derek and Gerard Philippson (forthcoming). The Bantu languages. London: Curson Press.
- Odner, Knut. 1971. An archaeological survey of Iramba, Tanzania. Azunia, VI. 151-198.
- Olson, Howard Stanley. 1964. The phonology and morphology of RImi. PhD thesis.

 Hartford, Connecticut: The Hartford Seminary Foundation.

 Police Petril. and Paymond H. Muserin. 1989. The such many foundation.
- Pelto, Pertti J. and Raymond H. Muessig. 1980. The study and teaching of Anthropology. Columbus, Ohio: Charles E. Merrill Publishing Company.
- Polomé, Edgar C. 1980. The languages of Tanzania. Polomé. Edgar C. and C.P. Hill (eds). Language in Tanzania. Oxford: Oxford University Press/International African Institute. 3-25.
- Posnansky, Merrick. 1981. Introduction to the later prehistory of sub-Saharan Africa. G. Mokhtar (ed). General history of Africa Vol. 2: ancient civilizations of Africa. London & Paris: Heinemann and UNESCO, 533-550
- Rentrew, Colin and Bahn, Paul. 1996. Archaeology: theories, methods and practice, Second edition. New York; Thames and Hudson. Inc.
- Richardson, Irvine. 1959. The role of tone in the structure of Sukuma. London: School of Oriental and African Studies. University of London
- Richardson, Irvine (Compiler) and W. M. Mann (Ed). 1967. A vocabulary of Sukinna.

- London: School of Oriental and African Studies, University of London.
- Roberts, Andrew. 1968. The Nyamwezi. Roberts, Andrew (ed). Tanzania hefore 1900. Nairobi: East African Publishing House, for the Historical Association of Tanzania. 117-150.
- Ross, Malcolm D. 1996. Contact-induced change and comparative method: cases from Papua New Guinea. Durie, Mark and Malcolm Ross (eds). The comparative method reviewed. New York: Oxford University Press. 180-217.
- Ross, Malcom. 1998. Sequencing and dating linguistic events in Oceania: the linguistics/archeology interface. Blench, Roger and Matthew Spriggs (eds). Archaeology and language II: correlating archaeological and linguistic hypotheses. London: Routledge. 141-173.
- Rottland, Franz. 1982. Die Südnilotischen Sprachen: Beschreibung, Vergleichung und Rekonstruktion. Band 7. Berlin: Dietrich Reimer Verlag.
- Rottland, Franz. 1989. Southern Nilotic reconstructions. M. Lionel Bender (ed). Topics in Nilo-Suharan linguistics. Nilo-Suharan Linguistic Analysis and Documentation Vol. 3. Hamburs: Helmut Buske Verlag. 219-231.
- Rubagumya, Casmir M. 1997. Disconnecting education: language as a determinant of the quality of education in Tanzania. Journal of Linguistics and language in education, New Series. Department of Foreign Languages and Linguistics, University of Dar Es Salaam. 3. 81-93.
- Rugemalira, Josephat M. 1994. Runyambo verb extensions and constraints on argument structure. Unpublished PhD Dissertation, University of California at Berkeley.
- Schadeberg, Thilo C. 1979. Über die T\u00f6ne der Verbalen Formen in Rimi. Afrika und \u00dcbersee. 57.
- Schadeberg, Thilo C. 1986. The lexicostatistic base of Bennett and Sterk's reclassification of Niger-Congo with particular reference to the cohesion of Bantu. Studies in African linguistics. 17.1. April, 69-83.
- Schadeberg, Thilo C. 1991. High tone shift in KiNyamwezi. Proceedings of the Seventeenth Annual Meeting of the Berkeley Linguistics Society February 15-18 1991. Berkeley, California: Berkeley Linguistics Society, 2(10-221).
- Schadeberg, Thilo C. 1994. Spirantization and the 7-to-5 vowel merger in Bantu. Dominicy, Marc and Didier Demolin (eds) Journal of Linguistics, Issue devoted to sound change 9, 1994 5, 73-84.
- Schadeberg, Thilo C, Jouni Maho, Gerard Philippson and Derek Nurse. <u><dnurse@morgan.ucs.mun.ca></u> Re: Bantu language code numbers & BMM" 7th April 2000. Personal email.
- Schmidt, Peter R. 1978. Historical archaeology: a structural approach in an African culture. Westport, Connecticut: Greenwood Press.
- Schoenbrun, David L. 1990. Early history in Eastern Africa's Great Lakes region: linguistic ecological and archaeological approaches, ca 500 B.C. to ca 1000 A.D. Los Angeles: University of California at Los Angeles.
- Schoenbrun, David L. 1997. The historical reconstruction of Great Lakes Bantu cultural

- vocabulary: etymologies and distributions. Sprache und Geschichte in Afrika Beihefte. Beiheft 9. Köln: Rüdiger Köppee Verlag. 1-351.
- Seligman, C.G. 1939. The races of Africa. 2th revised edition. London: Thornton Butterworth Ltd.
- Seligman, C.G. 1966. The races of Africa. 4th edition. London: Oxford University Press. Shorter, Aylward. 1968a. The Kimbu. Roberts, Andrew (ed). Tanzania before 1900.
- Nairobi: East African Publishing House, for the Historical Association of Tanzania.96-116.
- Shorter, Aylward. 1968b. Nyungu-ya-Mawe and the 'Empire of the Ruga-rugas'. Journal of African History. ix.2. 253-259.
- Soga, J. Henderson. 1930. The south-eastern Bantu (Abe-Nguni, Aba-Mbo, Ama-Lala). Special mumber of <u>Bantus Studies</u>, Journal devoted to the scientific study of <u>Bantus</u>. Hottento and <u>Bushman</u>. Supplement No. 4. March. Johannesburg: Witwatersrand University Press.
- Soper, Robert C. and B. Golden. 1969. An archaeological survey of Mwanza Region, Tanzania. Azania. IV. 15-90.
- Stegen, Oliver < Oliver stegen@sil org> "Rangi language research survey chg Stegen" 6th August 1997, Personal email.
- Stevenson, Roland C. 1991. Relationship of Kadugli-Krongo to Nilo-Saharan: morphology and lexis. Bender. Lionel M. (ed). Proceedings of the fourth Nilo-Saharan Linguistics Conference (Nilo-Saharan: Linguistic analyses and Documentation Vol.7). Hamburg: Helmut Buske Verlag. 347-369.
- Sutton, John E.G. and A.D. Roberts. 1968. Uvinza and its salt industry. Azania, III. 45-86. Swadesh, Morris. 1950. Salish internal relationships. International Journal of American Linguistics 16.4, 157-167.
- Swadesh, Morris. 1955. Towards greater accuracy in lexicostatistic dating. International Journal of American Linguistics 21.2, 121-137.
- Swadesh, Morris. 1964. Linguistics as an instrument of prehistory. Dell Hymes (ed). Language, culture and society: a reader in linguistics and anthropology. New York: Harper and Row. Publishers. 575-584.
- Swilla, Imani N. 1981. The noun class system and agreement in Chindali. La civilisation despeuples des grands lacs: Paris: Karthala. 379-393.
 Swilla, Imani N. 2000. Borrowing in Chindali. Kulikovela Kahigi. Yared Kihore and
- Maarten Mous (eds). Lugha va Tanzania Languages of Tanzania: Sindies dedicated to the memory of Prof. Clement Maganga. Leiden: Research School for Asian, African, and Amerindian Studies (CNWS), Universiteit Leiden. 297-307.
- Thomason, Sarah G. 1983. Genetic relationship and the case of Ma'a (Mbugu). Studies in African Linguistics. 14, 2, 195-231.
- Thomason, Sarah G. and T. Kaufman. 1988. Language contact, creolization and genetic linguistics. Berkeley: University of California Press.
- Taylor, Douglas, and Irving Rouse. 1955. Linguistic and archeological time depth in the West Indies. International Journal of American Linguistics, 21,2, 105-115

- Trigger, Bruce G. 1990. The history of African archaeology in world perspective. Robertshaw, Peter (ed). A history of African archaeology. London: James Currey 309-319.
- Trigger, Bruce G. 1994. Paradigms in Sudan archaeology. The International Journal of African Historical Studies. 27.2, 323-345.
- Trudgill, Peter. 1989. Contact and isolation in linguistic change. Leiv Egil Breivik and Ernst Håkon Jahr (eds). Language change: contributions to the study of its causes. Berlin and New York: Mouton de Graver. 227-237.
- Tucker, A.N. 1946/47. Foreign sounds in Swahili. Bulletin of the School of Oriental and African Studies. 11:854-871; 12:214-232.
- Vansina, Jan. 1995a. New linguistic evidence and 'the Bantu expansion'. Journal of African History. 36, 2, 173-195.
- Vansina, Jan. 1995b. Historians, are archaeologists your siblings? History in Africa. 22. 369-408
- Whybrow, C. 1948. Sukuma bird names. Tanganyika Notes and Records. 25. June. 56-62.
 Wilmsen, Edwin N. 1995. On mutual dependence of anthropology and linguistics: a comment on Dickens. African Studies. 54.1.36-44.
- Worsley, P.M. and J.P Rumberger. 1949. Remains of an earlier people in Uhehe. Tanganyika Notes and Records. 27. June. 42-46.
- Wrigley, Christopher. 1960. Speculations on the economic prehistory of Africa. Journal of African History. 1. 2. 189-203.
- Zoll, Cheryl. 1995. Consonant mutation in Bantu: a squib. Linguistic Inquiry. 26, 536-545.

APPENDICES

Appendix 1, Zone F word-list: F23 and F10

abdomen, stomach, no beliy abscess, boil	SiSilòòmbò	SiYoombe		
mach,				
1	ndâ	ndâ	Ιάβύűndâ	iinda
1	hùté	ihùté	hùtè/màhùtè	ihüüté
	kwoókálá	niiŋki	pag	-iŋgi, pa
	kwóókálá	nligki	pậġ	-iŋgi, på
****	entribés.	kintika	kūzūma	kütükâ
do.	schröká	kútůká	kůzůmá	kükâlihilâ, kügââmbâ
_	komantitha	kömäniilä	kùmànyillà	kübéélélá
_	cogémá, kößéézyá	kügèmà	kūkólā	kwiila
	kwoongezya	kwdongezya	kwoongeza	kügüŋgilisya
t (be); border	oga hiini hiini	κύβὶ há lüvüümbá	kůvůmbáná	kúfitíŋkáná
dze camenter's n	mblizô	mbilzó	mblizò	kábáásó
	dahmbo	igaambò	igaambo/Bigaambo	iyaambo/mayaambo
(pe)	κωόόβάhά	kwòóßáhá	kütiinä	киуорана
	Itma	iltma	ilima	polimi
	-òòna	-oona	-oona	-oonse
iller change	kopilosya	kûpilûlâ	kúpliúlá	kühiindülä
	ndimů	ndimû	ndimů	inyweele
acall	kúzůmyà	kūzūmya	kwiikiliza	kwitájílá
	kdiibù ?	kwiitikilä	kwiikilizâ	
nown	mpázi	mpâzi	būsisi	maansunswa
	makényi	sigina, sigolò	chiswá/viswá	síyülü
Gle	mákézi, Bösiinsi	ninágwė	inyààngó	lúnyèèlèlè
	baamífzyö		itéélélő	

No	English	Si-Sùùmbwà SiSilòòmbò	SíSúúmbwá SíYóómbé	KiLööŋgö	KiBèndé/KiTòòŋgwè
989	apply by stretching, spread over	kòtiindfflà	kòβààmbà	kùβààmbà	kůbàámbá
976	appoint, set up	kůcháágůlá	kůcháágůlá		kwimiká
55	arm, hand	kùβòkó	kờβôkó	můkônô	kùβókó
771	armpit	kwààhá	kwààhá	kwááhá	ŋkwááhá
203	arrange, put in order	kùpààŋgà	kůβėėzyà	kûtûûmbikâ	kůpáángá, kůlyóhélésyá
204	arrange, put right, repair	kůβèézyà	kůβėėzyà	kůkôlá	külyöhélésyá
478	arrive	kůhiká	kůhiká	kůhiká	kůfiká
665	arrow	mwààmbi gwè bútà	mwààmbì	iβànò	mwààmbi/myààmbi
666	arrow (head of); spear head	můtwé	mwààmbi	mwaambi	mwààmbi, îsůmó
337	ashes	màvú	ivú/màvú	izů/màzů	ifúúndú/máfúúndú
199	ask for	kůsábá	kùsàβà	kùsàβà	kůsěéyá
89	assemble, collect (vt)	kôlôndíká hámwi	kůlůůndiká	kúsóózá	kůlyóhélésyà, kwisá hámwi
789	aunt (father's sister)	sèéngi	sèéngi	sėėngi	sèéngè
148	avoid, dodge	kwibáánzyá		kwiifüündä	
688	awe, fear of God	βòòhà	kwòòβáhà		βόόβά
667	axe	mpåså	mpàsá	nséényà	mpàsá
364	baboon, ape	ŋkôbè	ŋkòβè	èèŋkößè	ijáándá
634	back of (at the)	nůmá	nùmà	nyùmà	kúnyůmá
297	back	mügööŋgö	můgôóŋgô	mügööngö	múyôôŋgô
297a	backbone	igùfà lyà múgòòngò	igùfwá lyá mùgóòngó	mügööngö	műyööngő
27	bad	ibí	iβí	-ißi	ibi
37	bad (become), rotten (vi)	kùβòlá	kùβòlá	kůßólá	kùβôlà
87	bait	syååmbö	syààmbò	wààmbô/vyààmbô	fyåámbó/syåámbó
398	banana (plant)	ntôôkê	làtòòkè	tùgèmà	ikóóndé

No	English	Si-Süümbwà SiSilöömbö	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
397	banana (fruit)	itóóké	itóókè	itóóké, ihlísé	ikóóndé
399	banana (for cooking)	itooké lyé kütééká	itóóké	itóóké	-
1005	baobab	•		•	
1022	bark (of tree)	ìgúlà	igúlà	igúlá, ißáángwá	-
313	barren (of living being)	mùgúúmbá	mùgùùmbá	mùgùùmbà	
314	barren (of land)	nsi yè bò	βwôómé	chikámó	insí ilkámité
376	base of tree-trunk	iziiŋgà	iziingà	iziingā	isiindò
650	bask (in the sun), warm oneself	kwiikòòntá	kwiikóóntá	kwóótá	kùgóntélá
576	basket of open wicker-work	sikäämpű	isáánzó	isáánzó	m(ù)séγè
577	basket (plaited)	sikààmpú	sikápó	chikápó	sikápó
643	bathe	kwóógá	kwóógá	kwòògá	kùnyááyá
498	be fitting, behove	kůfwááyá ?	-sógá	kùhikà	kůlyóóhà
1	be, become	kờbà	kởβá	kùβá	kùβá
955	beach, coast, shore	mpwààní	mpwàání	mwààlò	mpwáánvi
827	bead(s)	βůsàlớ	Büsáló	bùkwáánzi	Bûkâsi
416	bean, kind of bean (from Phaseolus vulgaris)	mfèèli	ŋkùúndě	lůkôólě/ŋkôólě	mùnyéγà
417	bean, small (from bean plant)	màhàlàgè	måhålågè	mähälägė	mùnyéγà
844	bean (runner)	mfèèlì	mfwěěli, ŋkůúndě, mákůúků	lůkôólě	kàbálámá
1037	bear child	kůbůtá	kùβùtá	kůzáálá	kūfvāálā
147	beard	kàsàků, nsáků	kàsáků	bilėzù	káléfú/túléfú
768	beat	köhöólá	kůhůúlá	kütéélá	kühüülä
759	beautiful	-sògá	-sògá	izimā	-sóγá, lyòòhílé

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
162	bed	bùlíili, sitàándà	sìtàándà	chitáándá	βùlili, sìtàlá
161	bedstead	βờkààŋgàgà		inchiinzi	Bülli
653	bee	nzòkí	nzôki	ènzóchi	nsúsí
775	beer	bůsělě	bùsèlè	màálwà	mààlwá
497	befit, suit	kůběézyá, kůběégézyá	kößéélá	kůsémězá	külyööhelä
101	below, underneath	mùùnsí	hàànsi	hàànsi	hèèfó
186	bend, twist (vi)	kwiigóóndá	kügööndä	kügööndä	
468	bend (vt)	kwihiná	kùgôòndà	kügööndä	
193	bewitch	kůlôgá	kůlôgá	kůlôgá	kůlôyá
930	bifurcation, cross-roads	mázilá sáángwé		ndékáániló	máháándá nsílá
222	bile	ndůlwě	ndůlwé	ndůlů	nyòòngò
262	bind up, splice	külägülä	külägülä	külägülä	kühäämbä
658	bird-lime	bwillèèmbó		wilėėmbwa	bůlímbó
811	bird	nònì	nôni	nyônyi	inyônyi, kànyônyi
46	birth (give), to a child	kůβůtá	kùβùtá	kůzáálá	kůfyáálá
125	bite	külümä	külümä	külümä	kütétá
221	bitter	-kálf, bilúlú	-kalf	küsäälilä	sikálí
223	bladder	fühágó	lùhàgò	ènsàkò	
482	blind person	mùhôfù	můhôfů	můhôfů	můhôfů
669	blood	mágázi	mágázi	βwáámbà	málásó
496	blow on, blow up	kůfůůlá	kúpůůgá	kůhůůhà	kûpûûsyâ
238	blow bellows	kůvůgůtá	kůvůgůtà	kůzůgůtá	kūfūkūtā mūfūβā
463	blow away	kòhèhá	kůhěhá	kůhéhéézá	kùhèhémüsyà, kûhèhémülà
776	boast, brag, praise oneself	kwiibòná		kůtáámbà	kwitéhá
676	boat	βwààtò	βwààtó	bwaató	ßwäätó

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgw
670	body	můbiti	mùβiti	mùβili/miβili	sítààmbó/fitáàmbó
581	boil up	kůsěbà	kùsėβà	kùβilà	kútókötá
30	boil (vt)	kůsěvyá	kůsévyá	kùsėβyà	kùtéékà
433	bone	igůfwá	lgůfwá	igúfwà	ìfùhá/màfùhá
564	bore a hole	kùdùlà	kùdùlá	kůfůmůlá	kùtùβúlá
1008	born (be)	kůbůtwá, kůzyáálwá	kùβùtwá	kůzáálwá	kůfyáálwá
910	borrow	kůkôpá	kůkôpá	kutiiza	kůkôpà
872	bottle	nsúpá	nchùpà	èènchúpà	insúpà
928	boundary	mpákà ?	lůvůůmbá/mvůůmbá	lùvùùmbà/mvùùmbà	mùpákà, ἰβίβί
671	bow, bending	kwiihiná	βùtá	bútá	kwinàmà
508	bow	bùtá	βùtá	bútá	bùtá
953	bowstring	lügė	lògè	lùgôhí	kájé ká bůtá
58	brain	βwòòŋkò	βωὸὸηgὸ	βωὸὸηgὸ	
509	branch	itàbàzì	itàβázi	itàβàzi	ìtàβi
375	bread	ŋkààté	mùkááté	můkáátě	můkátě ?
831	break wind*	kúnià můfůzí	kùnià mùfùzí	kůnyáámpá	kùnià ipùsí
77	break, snap	kůvůná	kůvůná	kùhééndà	kùfúnáyá
1036	break wind	kůnià můfůzí	kùnià mùfùzí	kùnyáámpá	kùnià ipùsí
17	breast (of a woman)	mábèélè	màβèélè	màβéélè, itútů/màtútů	mábéélé
489	breath, breathing	můhèèmò	můhèémô, kůhèémà	můhèėmò	
490	breathe, rest	kůhěèmá	kühèèmà	kůhéémůká	kůhéémélà
138	bridge	idálázyá	idálájá ?	lütlindé	dálájá
139	bridge (wooden)	bůláálé		lùtiindè	bůláló
885	bring, fetch	küléétá	kůlěétá	kůlěětá	kůléétà
171	bring to light	kůtóólá hěépě	kůmánířsyá	kůmányřísá	kùlàåŋgiisyà
882	bring up (a child)	kòlėlà	külėlà	külèlà	külėlà
660	brook, stream	mwiigà	ihòòlà	mùgėlà	móóngá
942	broom	lòhyààgizyò	lùhyààgílò	lóhyáágizó	syèèsò

8	English	Si-Suùmbwà	SiSuumbwa SiYoombe	KiLòòŋgò	KiBèndè/KiTòòŋgwè
	hoosh	mirfwá	mùfwå	mùfwa	mūsani
,,	prother-in-law.	mùlâmù	můlámů	mülâmü, mülâmükazi	mulamu
-	sister-in-law			mideala	mùkòló
=	prother (older)	műkülű(űyő)	mūkāla	mirrhhip	wa muvana
3	prother, relative,	ßádúgú	mūdugu	Illuzaaro	
	fellow-tribesman		Lindhold	kūkūūBūtā	küfümä iköbá, küfüläliká
74	bruise badly, take	kwinao ludili	MINIOIDIA		
	the skin off		mphon	émbógó	mboyo
_	puffalo	mpogo	official	kundombeka	küjeenga, küjüßaka
20	pnild	kwóómbéká	KWOOMIDEKA	nashnashna	inopmbe
74	Mud	nzágáámbá	nzagaampa		manywele
	hunch (of hair)	ùmùsàsi	misasi milijki	4-347	millivo
6	burden load	mùligó	müligó	mulido	Lingka
2 4	hura (vt & vi)	kwaaka, kwoosya	kwaaka	kwaaka	Author A
2 3	(decount)	kiihvä	kühyá, küzigá	kühya	Paris and
31	Durnt (Decome)	Lingston .	küzviikā	kúzilká	Kusiika
179	bury	NUCTING.	inchipeli i	iliùùngù	isala, isiyo
555	hsud	Isala, ipoolu	affinavi	mpoboto	mápéélé
2.1	buttermilk	muliboto	Trace of trace	iRivinis/maßüünü	itákó/mátákó
514	buttocks	ihèénde	meende, mako	- Control	kiiviila
301	hud	kùgúlà	kugula	Kugula objedo/RicháRó	lùsiingi/nsiingi
873	calabash	sisyaabo	sisaalo	description of the second	kasafu
067	calf of the leg	mfúindó	mùfùindò	eminana	
100	- off	ndama	ndamá	endama	*****
8//	call	La La La Anna	kiılaanga	ètánà	kwiita
31	call	Koladijga	Disciplina in the second	ßwaató	bwaató
875	cance (dug-out)	lwaato	omerand of	Bwaato	bwaato
602	canoe	Swaato	present	kühèékä	kühééká
863	carry a child on the	kaneeka	rainche, natalina		
	back (in a blanker)				

KiBende/KiToongwe	kútwáálá múllyó, kwiltwiká		külèlâ	kūtwáálá	kūfēlā	kányáü	fitüüngwa, iŋöömbê	kühwä		kūhindūkā	ikala/makala	Büväängä		kūßinaā	itama	küssángaþálá		Rüündü	Hüündü		mwaami, mutwaale	mwaami	mwäänä	mwádná	kalêfû	küsääyülä		
KiLòòŋgò	kwiftwèèkâ		kwêélêkâ	kūtégūlā	kitwalla	ėnvaamū	mitiad	kirhwa	KORON	Londinka	1 Alakmakala	Paristrument		A.C. Handle	Mamb	kokoroko		chiffinh	chidaii		mükülü	miskama	mirkeka mwaana	mwééná	childzū	P. MONTO		
SiSuumbwa	SiYoombe	KWIIIWIIKA	kütégülá	Linkshills	Kutegura	Kupoosya, Kuteguin	nyaama		kumala	nzumaali	Kupiloka	makala		2 0000	Küßtinga	nama	KOSIIMa		situpa	Sidall	dung hand during	mwadiiai jawa	Tilweamin	mwaana	mwaana	Kasaku	Kucnaaguia	482
Si-Suūmbwa	SiSilòòmbò	kwiitwiika	kútééngőlá		küßöösya	kulila	nyaabu	mitigo	kůmálá	lúbúbi	kúpliðsyá	mākālā	κύgόδηgόδία (v)		kūbilingā	Nama	küyégá	imbóndó	sifûbâ	d sidáli		makala	mwaami	můkékô, mwaana	mwaana	kasaku	kúcháágülá	
dilona		(take up) a heavy	load carry astride on the	hip	carry, take	carry, convey	cat	cattle	cease, finish	centipede	change, furn round	charcoal	charm (esp. to	(1)	chase (away)	cheek	cheerful (become)	cheetah	chest	chest (of animals and sidáli	pirds)	chief, headman	chief	child, infant	child, offspring	chin	choose	
ź	2	267	47	i	560	578	104	286	486	526	247	334	963		32	515	92	106	585	672		431	431a	619	597	886	83	

KiBende/KiTòòŋgwè	kudadanda buloʻongo koniyala buloʻongo koniyala sidasintakida meseridikmyelnda kidalida hamon, kidalida hamon, kudisala hamon, kudisala hamon, kudisala hamon, kudisala hamon, kudigalanda kuniya bosilina kudigalanda kuniya bosilina kudigala kuniyala bosilina kuniyala kuniyala bosilina kuniyala kuniya kuniya kuniya kuniya kuniya kuniyal	
Kil.òòŋgò	kostobuch periodoch period	
SiSûûmbwa SiYôômbê	howodoko kogogolela tilodo tilodo kokogogolela kokogogolela kokogolela tilodokogolela tilodokogo	483
Si-Suùmbwà SiSiloòmbò	inulayo jukol 7 yangagalak itoopkormaloopko kohomilisya, kuzibila kwakambika wakkinda minia minia kwahanda minia kwahanda kw	
English	cover can claim, assent close, there eyes, would, also contained to close the eyes, would, also contained colores, material colores, material contained to contained to contained to contained, and contained, and and contained, and and and contained, and and and contained, and and and contained and and and and and contained and and and and and and contained and and and and and and and and and an	
8	255 861 861 229 228 238 305 817 817 860 862 862 87 87 87 87 88 83 88 84 88 88 88 88 88 88 88 88 88 88 88	

No	English	Si-Sùùmbwà SiSìlòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
52	corpse, carcass	můtůůmbáángá	můtůůmbí	mitúúmbi	můláámbó
1001	corpse (human)	imáitì ?	mútůůmbí	můtůůmbí	můláámbó
383	cough (vi)	kůkôlólà	kůkôlólá	kůkólôlà	kůkôsôlá
4	count	kůpěétá	kůpěětá	kůpěétá	kúpáándá
100	country (our)	insi yiitü	nst ytttå	éénsi yéétű	insi
14	courtyard	lübüügä	sìβáánzá	lùβùgá	ibáánjá, sibáánjá
852	cover (up)	kůfůndíkílá	kůfůůndikílá	küfüündikilä	küfilmbilä
285	cow	ŋôômbê	ŋòòmbė	èèntè	ìŋòòmbè
1003	coward	mwòòβá	mwòòβá	mùtiini	mwóóbá
335	crab				
520	crawl, creep	kwāāvūūlā	kwāāvūūlā	kwáázúúlá	kúsyèèlèkä
612	cricket	sifüülä/bisifüülä	nàànzélélé	nyèènzè	nyéénsé
153	cripple	můlèmá	můlémá	můlémá	můlémá
803	crocodile	máámbá ?	nsáámbí	énsáámbi	ŋgwêênâ
319	cross (a river)	kútáámbóká	kútáámbúká	kůtáámbůká	küyámbúká mwóóngá
846	crow (n)	mbàgá	βàágà	βàágà/βàágà	
308	crown of the head	lòtòótò	Bwóótóótó	twóótótó	lútôósi
79	crumple	kůhinááhiná			kübülüŋgânyà
370	crush by pounding, pulverize	küsèkülä	*	küsiginä	kůtwá
393	crust	ŋkókótwá	ŋkôkôtwâ	èèŋkógötö	
160	cry, wail	kültlä	kúlilá	kůlilá	külilä
966	cucumber, small	määliimbė	màhiti	máliimbě, ßöliimbě	mútáná
736	cudgel	Bühili	Bühili	Bùhili	iyoongo
165	cultivate	külimä	kôlimá	kůlimá	külimä
950	cure, cool, heal	kůsiinsyà	kôhôzyá	kůhôzá	kůsisyá <kůsilá< td=""></kůsilá<>
355	cut	kůkátá ?	kůtěmá	kůnógólá, kůtémá	kùpůtá, kůpůtůlá
98	cut, lop	kûpûûŋgûsyâ		kütüütüülä	kůpůtůlá

KiBendė/KiTòòŋgwė Kúßààsâ	hidninal obidiss specification obidiss specification obidiss specification obidiss specification obidiss specification obidiss specification obidiss obidiss obidiss obidiss obidiss obidiss ob	
Kil-òòngó kùlutiúilà ?	kwilifiqala kuningala kuningala kuningala kunina kunina kunina kunina kunina kunina kunina muliumeli muliumeli muliumeli muliumeli kunina	
SiSúúmbwa SiYòòmbe Sixòòmoila	katuama ngoma gitt yestin yestin gitt yestin yasaya hebesi hebesi hebesi hazbotti nazbotti nazbotti nazbotti marbotti marbotti marbotti marbotti harbotti kanisa kasisak kajilinya kanisa kanisa kanisa kanisa kanisa kanisa kanisa kanisa kanisa kanisa kanisa kanisa kanisa kanisa	
Si-Sùùmbwà SiSilòòmbò	wegdampa weispinia ngoma w weispinia ngoma w weispinia ngoma w izina izi	
English	to 1 bit (and to 1) b	
S.	11/ 3365 53 6222 622 622 759 130 682 682 682 682 682 682 682 682	200

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
466	diminish, grow less	kwóòndà	kùpùùŋgớlà	kůkéhà	kùpúúŋgúkà
635	dip	kůsôfyà	kúsôômvyá	kůkózà	kùtwéésyà
49	dirt	mátákálá, bùcháfů?	mátákálá, βùcháfů ?	ùkó/mákô, bitákálá	bùchááfù ?
680	district, province, country	nsř (yřítů)	nsi	ėėnsi	sihùyó
245	divide	kügàbàànùlà	kùgàβà	kùgàβà	kùγàβàànyà
512	divorce	kübilingá, tàlákà ?	küßiiŋgá	külékàáná	külèkànà
367	do, complete, finish	kůmálá	kůmálá	kůmálá	kůhwá
366	do	kûgêmà	kügémà	kůzilà	kwiilà
60	dog	mbwá	mbwá	éémbwà	ilmbwá
292a	donkey	ndògòbé	nzòβé, mpùúndà	ėėndògóβė	
685	door	můzigó	můzigó	můlyáángô	lwiißi, múlyáángó
415	dove (red-eyed)	ŋkùùndyà	ŋkùúndyà	ėŋkùùndyà	ŋkửúndà
188	doze	kůgônà	kùgônà, kùtiindilà	kůtříndílá	küsiinsilä
529	draw water (from well)	kùtàhà (miinzi)	kůtáhá (miinzi)	kůtáhá miinzi	kùtàhá màànsi
215	dream (vt, vi)	külöötélá	külöötélá	kůlóótà	külóótá
328	dream (n)	kůlóátá, můlóátélá	můlôôtélô	chilóótó	
448	drink	kônwá	kòŋwá	kůnywá	kůnywá
196	drizzle	lònàànàgálà	mànàànàgálà	lùnyàànyàgálà	kůnyáyálá
780	drop, throw down	kôgwiisyá	kühääŋgðölä	kútáβúlá, kúhááŋgúúlá, kwááhá	kúgwiisyá
284	drum	ŋgòmà	ŋgòmà	ėėngomà	iingòmà
598	dry (vt), set out to dry	kwàànikílà	kwáánikilá	kwáánikilà	küyániká
346	dry	nòòmú	lyòòmú	bwóómè	-gůmílé <kůgůmá< td=""></kůgůmá<>
954	dry up, ebb	kwôômá	kwòòmá		kůhwá
345	dry up, become dry	kwôòmá	kwôómá	kwóómá	kùhwá

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndé/KiTòòŋgwè
289	duck	mbààtà	mbààtà	ėmbaata	iβààtà/màβààtà
243	dust, cloud of dust	lðbúúbú	Ι Θβὰὰβά	Ι ὰβὰάβὰ	lùfùúndú/màfùúndú
628	dwell	kwiikala	kwiikala	kwiikalisa	kwiikala
492	eagerness, zeal	bwààngùbwààngù	βwààŋgùβwààŋgù	měělů, kůhůlúgůtá	bwààngùbwáángù
491	eagle, bird of prey	mbėėsi	mbėėsi	ŋkóónà	ipúúngú, lisáánsá
563	ear	kôtwi	kůtwí	kůtwi	itwi
70	earth, land	nsi	nsi	ènsi	bùlóóŋgò
44	earthenware vessel for serving up food	lòlààngàhè	•	chisėmė/visėmė, ėnyūungu	siliilò
156	eat	kůlyá	kúlyá	kůlyá	kůlyá
900	effort, exertion	ŋgùzù	ηgùzù	kûhátikà	kùkáláámbáná
273	egg	ìgì/màgì	igi/màgi	iyááyi/màyááyi	ìjí/màjí
443	eight	mùnààné	mùnàánè	můnááně	mùnááné
705a	elbow	ikòòkólà	lůkôčkódlá	lůkókôôlá	kásůkúúmpä ?
329	elephant	nzôvú	nzôvů	ènzòzù	insófů
336	embers	ikálá tyé múliló	ikálá lyé múliló	ikálá lyó múliló	ikálá lyá múlíló
842	embrace	kübüümbililä	kübüümbililä	kůbůmbilà	kůkůkůtílá
394	end (come to an), cease	kühikä mwiisyö	kůmálá, kůléká	külékélá	kùhwá
952	escape, recover	kùsilà	kůsilá	kůchilá, kůpůlúgůká	kùsilá
899	examine, measure, test	kùpììmà	kügémá, küpilmá	kůpiimá	kůplimá ?
45	excrement, dung	määmvi	määmvi	màzi	ifi/màfi
958	exorcise, drive out a devil	küküüŋgüülä	küβiiηgā, kùkùùηgùúlā	kůkůúŋgůůlá	kùpùùŋgà
784	explain	kwiiyėlėėzya ?	kůtěémbůúsyá	kůtéémbůůchá	küläängisyä, küläänsyä
620	eye	liinsó/mààsyó	liinsó/miinsó	tiìnsô/mèėnsò	liinsó/méénsó
828	eyebrow	ŋkòhé		màsigà	•

No	English	Sí-Súúmbwá SíSílóómbó	SiSúúmbwá SiYöömbé	KiLòòŋgò	KiBèndè/KiTòòŋgwè
838	eyelash	ŋkòhé	ŋkôhé	èŋkóhè	ŋkóhé
587	face downwards	kávůmá	lààmbàlàlà	kùβùúndààlà	küláálá
686	face	βάsyð	βüsyó	βúsò	bùsyú
940	fade, disappear	kwėėlòkílwà		kühwéélélá	
891	faint, lose consciousness	kůhôlă			
298	fall	kůgwà	kúgwá	kúgwá	kùywá
549	fall short	kůpôóŋgůlà	kùlėβå	küléßá	küpööŋgóká
462	fan, wave	küpépéélá	küpépéétá	kühüühilä	kühéhémülä
764	far	hàlè	hàlè	hálé	külê
921	fat (be) (of animals)	kùginà	kùginà, kùnòlà	kûnûlâ	kùhàmà, kùnônà
922	fat (of animals)	inòné	-nôlé	-ànùzilè	inónilé, -hàmú
531a	father	βάάβά	βàáβà, dàádà	táátá	tàátá, tàátá búsyá, tàátá
382	father-in-law, mother-in-law	báá-/máá bůkwě	táátá-/máá β∂kwé	sínyizálá, máházálá	táátá/máámá búkwè
531	father (my)	βὰάβὰ	βàáβà, dàádà	táátá	täätä, täätä
687	fear	kwòòbáhà, βòòβá	βόόβά	Bûtini	bóóbá
652	feathers, fur	mázózá	mázóózá	ßwódyá	máfüümbű, inyélé
848	fence, enclosure	lògó	lògó	lùúβá	túúβà
858	ferment, turn sour	kògàásà	kùgààsà	kùgàgà	kūsāsā
762	few (a), not much	tůdó	ndó	bichė, bikė	-sé
757	fierce, sharp	můláámbé	ßüsööngöké	βwòògì	-kálí
421	fig-tree				
422	fig-mulberry tree	můkůyů		můkůyů	
216	fight	kúsóólá, kwiihúúlá	kůsôôlà	külwäänä	kúsôôlà
804	fill	kůkázyá	kwóókázyá	kwiizùzà	kůbůůmbá
176	fill a hole, stop up	kůziβilà	kùzìβìlà	kùzìβìlà	kwiiyala
583	filter, strain	kůswiizá	kúswiizá	kůswiizá	kùsùùsà

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
50	filth	mátákálá	màtàkàlà	bitàkàlà	bùchááfù ?
516	final, decisive	küläämülä			-à há mwìisyò ?
760	fine, excellent	-sògá	-sògá	kůzimá	sòyá
447	finger	můnwě	mùnwė	lůkúmů	kákúmó/tůkúmó
323	fingernail	lyäälä	lyààlá	lyààlà/mààlà	lůsàlá/nsálá
474	fire	můlilô	můlitó	můliló	můlitô/militô
280	fireplace, hearth, kitchen	izlikó	izlikó	ihigà	ifiyá/máfiyá
970a	firewood (collect, cut) (vt)	kúsééná	kùsėėnā	kůsěényá	kùtêmá ŋkwi
413	firewood	ŋkwi	ŋkwi	ėė́ŋkwi	ŋkwi
191	fish up, pull out	kùlòβòólà	kwiihùlà	kůzômôôlà	kùsààβùlà
126	fish (old Swahili nswi)	mfwi, nsàmàákì ?	mfwi	èémfwi	iséémbé/máséémbé
190	fish (vt), trap fish	kůtěgá	kütégá mfwi	külóßá, kütégá	kùlóβá
400	fist	ŋgùúmi	ŋgùùmì	èèŋgùùmì	ngúmi ?
525	five	itàánò	itàánò	itàànò	itàánò
493	flap wings wildly, flutter	kůpěpěélà	kùpàpàmìlà	kùpàpàmilà	kůpůpůmůká
832	flatulence	kůvimbéélwá	kůvímběélwá	kùziimbėėlwa, kūhiha	kůfiímbiilwà
384	flavoured (be properly)	kůkwàátà	kůkôlěélà	kůhiká	kůjôγá
907	flower	iùà ?	ìùà ?	iláβö/máláβö	ìùà/màùà ?
278	fly (house)	nsáázi	nsààzi	ėnsòhėlà	lùsáási/nsáási
1028	fly (vi)	kûgûlûkâ	kügülükä	kùgùlùká	küyülükä
1032	foam *	ifùló	ifuló	ifúló	ifülő/máfülő
502	foam	ifüló	ifúló	ifülő	ifùló/màfùló
143	follow (in order)	kwilòòndézyà	kùlòòndà	kůkúláátřlá	külööndélá, kühélékélá, kühélékésyá

KiBendė/KiToongwe	külööndä, külööndélä	mpáámbá	***	Sala	Kusula	Kulabilila	ihaanda	line	kasajja	ιγάβό/màyàβό	kükäläängä	POPULA	Popular in the second	Autonomica	pusitaani 7	küsesa ? kwiisa hamwi		mbāβala ?	казуа	likéjé, lifüüŋgö		kupata isyüükâ, müsyüüká		ıtwiiya	kulumya, kühä kühä
KiLòòŋgò	kūkūlaatīla	empaamba	William	Minde de de	kud 404	Parcelous	egesta	11 de 1. 1	ineiye	Isúmô, Búsúmô	kūkálāanga	kůkóměělá	kwiinziila	Bireltaani 2	pusitalii i	κύκόβėlà		éénsá		ėntūūngo	Mindahadita 1201-1			elitwiiga Pitodomin	_
SiSuùmbwà SiYôômbê	külööndézyá	IIIpaaiii0a	ikūūnoū	küvüqütä	kirlaßfla	neada indanda	inė	lvòòlà	ninof		kukalaanga	kůhyá, kůkôměělá	kwookala		kingha	-		nsyà moàlahála		ntùùŋgò	kindandika	músáámbwá? můzůůká	ntwijoś	kriba	kühá, küfümyá
Si-Süümbwa SiSilöömbö	külööndélézyá mpáámbá		ipooli	kühêésa	küläßílá	nsaaqa	inè	lyóólá	nsijimo	hit distant	efilealiga	kūkūlā	kwóókálá	bůsitádni ?				kásyá můkösé		ունանցծ	kúpáándiká	isáámbwá	ntwiiqa	kúfüühä	kühá
English	follow food supply for a	journey	forest	forge	forget	fork, bifurcation	four	frog	fruit	2	,	rully developed, be	full (become)	garden	gather (flowers, fruit)	gathered (be),	(ad) Daidillaceb	gazelle (Grant's) gazelle, small	(impala)	genet (kind of speckled civet cat)	get, obtain	ghost, sudden apparition	giraffe	give away (present)	
2	142		929	584	889	458	442	295	574	349	900	020	625	316	419	91	900	454		108	108	384	999	546	149

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndé/KiTòòŋgwè
916	give light to	kůmwóóléká	kůmôléká	kůmôlėká	kůmůníká
815	glide, trickle	kùsėlėmā		kùgėlà	kùsòòβà
269	go	kůzyà	kůzyá	kûgêêndâ	kûjå
639	go in, come in, enter	kwiingflà	kwiiŋgflå	kwiiŋgilà	kwiingilá
63	goat	mbùzí	mbòzi	èmbúzi	mbúsí, imbúsí
694	goat, (he-)	ŋgùlààti	ŋgùlààti	èntùlàgè	likáβöölöβöölö
695	god	misäämbwä	misäámbwá, mùúŋgù	nyàmùhààngà, mùùngù	liβwėėlėėlò
758	good	mfùlá	nsògá	mázimá	nsògá
388	goshawk (East African) (Astur tachiro)	sùŋgùsèélyà	màlèèlé	ìnààndà	lisáánsá
68	grain (of cereal)	kàzůmó	nzúmá, lúzúmá	lůzůmá	sisáká, mbůtó
696	grandfather	gờớkờ	gùúkù	gùúkù	kúúků, sô/tààtákůlú
697	grandmother	màámá	màámà	kàákà	kúúků, nyôkôkúlú
432	grasp, hold in arm	kòkwàtílilà	kükwätililä	küßüümbilä	kůfůůmbátá
698	grass, reeds	mànàánsi	mànàánsi	mányàánsi	máβánô, bwààsí
406	grate	kôkwààtólà	kůkwáálůlá	kůkwáálůlà	
409	great, powerful, big	můkůló	ŋkùlú	iháángò	-kùlú
164	grief, sorrow			kůhólólóká	ŋkúúmbú, nyúúmbú
371	grind (grain with a millstone)	kờsyà	kùsyà	kùsyà	kůsyà
372	grind coarsely	kùsìginà	kůhálálá	kùhàlàgà	kùhálálá
212	groove, furrow	ihisyó	ŋkòlóómbilwà		ie.
801	ground, cultivated	mùgùùndá	mügüündä, iläälé	ėnsaambo	iβálá
405	grow up, get large, become great	kókólá	kůkůlá	kůkůlà	kůkůlá
913	grow (of plants)	kòmėlà	kůmělà	kùmėlá	kůmělá
461	grown (be fully)	kůkôměélá	kůkôměélá	kůkôměělá	kůkůlá

No	English	Sí-Súúmbwá SíSílóómbó	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KìBèndè/KiTòòŋgwè
373	gruel, light porridge	ŋkòómbà	ŋkòómbà	égköómbá	mpana
358	grunt, grumble	kògùùnà	kůkůůná	küküümä	kůkíimá
205	guide aright	küläánzyá		kûhânâ	kůlômbôlá
351	guinea-fowl	ŋkààŋgá	ŋkààŋgá	èŋkááŋgà	ikáángá
701	gun	ngôôhó	ngôóhó	èngòòhò	mùndúúsi
702	hair	mùsàsì	mūsāsi	ìsòkè	nyèlé
977	hair (long straight- of animals and Europeans)	můsásť m(ů)léélé	můsási m(ů)léélé	èmbûûsî	βùjáámbá, nyèlé, βòòsá, βùsíiηgá
75	hair (white, grey)	mv1	mvi	ėėnzwi	nkôté
703	hand (flat of)	ikòófi	ikòófi	ikóófi	kůβôkó
157	hand, right	kůlyó	kúlyó	kúlyó	kwèèné
439	hand (left)	kůmásó	kůmáánsô	kùmásô	làànsó
476	handle, haft	mùhìní	můtřiní	můhíní	můhìní
779	hang in mid-air	kwiiliingá	küsüngèéná	külèléémbá	külėlà
655	hard	ggůmé .	igůmé	kûgûmâ	ikáká
377	hardship, distress	mákôyé	máköyé	èŋkùùlè	
294	hare	nákámi	nákámí	nyákámi	súngúlá ?
781	haste	bwààngùbwààngù	βwààŋgùβwááŋgú	βwààŋgù	βwááŋgó
795	hate, detest	kùgâyâ	kùgâyá	kùgàyà	kûγâjâ
700	hay	mánáánsi möömű	mánáánsi mòòmú	βùnyààsi	
678	head, chief person	můkôló	můkůlů	műkülű	mūkūlū
356	head	můtwé	můtwé	mútwė	můtwé/mitwé
352	head-pad	ŋkàtá	ŋkàtá	èngátá	ŋkâtâ
561	heap	kůliindíkà (v)	itúúmbi, ilúúndó	ilúúndó	můslinků, isyáálá
391	heap up, ready/set on fire	kůhéèmbá můliló	kůhěémbá múliló, kwáásyá	kůhéémbá	külüündikä
623	hear	kwiimvá	kwòòmvwá	kůhůlilá	kúhůliká

No	English	Si-Süümbwà SiSilöömbö	SiSüümbwà SiYöömbè	ĶiLòòŋgò	KiBéndè/KiTòòŋgwè
543	heart	mwiizò	mwiizò	mügányá	mwėėyo/myėėyo
944	hearthstone for putting pots on	ihigá/màhigá	ihigá/màhigá	ìhigà/màhigà	ifiyá/màfiyá
893	heavy, serious, dull	itiimbė	itiimbé	-tiimbá, itiimbé	inywaamu
705	heel (of foot)	nsiinsiilö	sisjinzíló, lúgélé	chisiínsilò	kásiinsilá/tùsiinsilá
681	heifer	ndógóósyá		ndògòòsà	
418	hem, make a border	kůhiná	kühinä	kùgôôndâ	kúláándá
690	hen, fowl, chicken	ŋkôkó	ŋkòkó	ėnkoko	ínkókó/nkókó
766	here	áhànó, èyônô	àhó, èyó	áhá, úků	ááhá, úkó
863	hiccup	kůsééfúúlwá	kúsilfúúlwá	ėnsikinyà	nkwlinkwi
800	hide (vt)	kůbisá	kùβisá	kůséléká	kūfisá
38	high, be (of meat)	kůvůůndá	kůvůůndá	kůzůůndů	kûfûûndâ
326	highway	nzílá	ibálábálá ?	ikwèèsi, ikûúlwà	nsilà
309	hill	lügülü	lùgůlů	kàßààŋgà	můsôsí/mìsôsí
925	hip	műkitngifili			
317	hippopotamus	ngùgùmà	ngùgùmà	ėngūgūmā	ntómóómbó
396	hit with a hammer	kůkômààngílà	kůkômáángílá	kůtéélá	kúsúlá
706	hoe	mfůká	mfůká, igèèmbè	èmfükà	mfůká
990	hold, arrest	kůkwáátá	kúkwäätä	kúkwáátá	kúniyá
575	hole, nest	idòlólò	idúlúlú	chààli	sílsà/filsà
836	hollow out	kůkôómbá	kůtěézá ?	kůkógôtà	kùsàβà
816	home	kââyâ	kààyá, wììtú	wèètù, mûkà	kûlûyô, kû mwêêtû
654	honey	bwóósi	Bwoosi	Bwóóchi	bûûsî
150	honour	kůhiisímá ?		kůkůzá	kůkóôŋkà
797	hook (for pulling down branches in plucking fruit)	inánúúziló	inánúùziló	ndóβánó ?	
189	hook (fish)	ndôbánô	ndôβánô	ndóßánó	ndôβáánô ?

No	English	Si-Süümbwà SiSilöömbö	SiSùùmbwà SiYòòmbè	KiLòòηgò	KiBèndè/KiTòòŋgwè
707	horn, ivory, tusk	ihèèmbè	ihèèmbé	ihéémbé	ihéémbé lyá nsôfů
288	horse *	mfáláási ?			
708	house	nùúmbá	nùúmbà	èènzù	ìnyùùmbá
263	how many?	nì ziingà	zìiŋgà	ziingá	fiingåå
572	hump (of hunchback)			fütüümbi	
573	hump (of cow)	ibààngò	iβààngò	ìβààŋgò	
756	hundred	igànà	ìgànà	igànà	imyà ?
320	hunger	nzálá, bůtámô	nzálá, ßütámó	ènzàlà	nsàlà
33	hunt	kòhligà	kùhìígà	kühiigä	kůhílyá
34	hunter (professional)	můhlízí	můhlízi	můhlígi	mùhliyi, fúundi hà nyàmà
35	hunting	bùhlízì	kùhìigà, mùhìigò	βùhíigì	kůhílyá
227	husband	můlůmé	můlůmé	iβà	ibá, ibàné, iβàló
808	hut	nùúmbà	siβàándà	kàβàánzà	nyùùmbá, mùyààndá
709	hyena	mfisi	mfisi	ėmpisi	itàná
1016	1	óné	òné	ìnyè	üünê
1013	idleness, sloth	bůzôbé	βůzòβé	βògósè	bùfilà
901	ill (be); groan	kòlwàálà	kůlwáálá	kůlwáálá	külwáálá
902	illness, (crippling)	bûlwêêlê	βůlwěělě	βůwéétě	Bûlwéélé
275	imitate	kwiibilà	kwiigėmėėkėzya	kůtôólělá	kůjíjíngányá
16	in front of	bůtôônzí	kůβờtôônzí	βờtỏóngi	küümbėlė
353	in the middle of	hàkàtí	hákátí	hàgátí	hákátí
118	incite	kügängóósyá	kůsámilíkizyá	kůsámilizá	kůsôónsyá
206	increase, make greater	kůkůzyá	kwóóngézyá	kwòòŋgèzà	kùgùŋgìlisyà
155	increase	kôkilá	kůkilá	kůchílááná	küküümbiká, kükülá
426	inheritance	isàáló			kůhyááná, visáánsô
542	inside, in	můkátí, můnůůmbí	můkátí	mùgátì, mùùnzù	můkátí
353a	inside, middle	můkáti	hákátí	hàgátì	hákátí

2	English	Si-Süümbwa SiSilöömbö	SiSuumbwa SiYoombe	ΚίΕὸὸηgό	KiBende/KiToongv
		N.db	Bùtà	Bülà	mala
132	intestines		With Sheep	kütámillá, kükölwá	kükölwa
389	intoxicated (get)	kukolwa	KUNDIWA	maRaala	
513	iron ofe	mábáálé se sydoma	,	o condens	iisis/maista
, ,		svirima	syddmå	chooma	and the state of
704	IIOII	1-11-4		iziinga	maanda (Kiriba)
710	island	izinga	1.50404	küßäßä	kūbābā
0	itch	kúßaba	Rupapa	404	kühádámá
480	iammed (become)	kůnátá	kühägä	Kunaga	
400	dillipa (page)	military	milaambo	èèmbà	
853	Jaw (pone)	Tillingalino.	IRARA	Bußa	ibußa
960	jealousy	egnngs	and and	ijobbodo	lweendo/nyeendo
271	ionmey	lügeendo	Ingeendo	All controls	kūjaanaūla
ROB	indoe (vt)	külâmülâ	kulamula	Kulamula	kondidka
9	need com	kúgůlůků	kúgülükâ	Kuguluka	2004.2
010	day dund	milao	mfigó	eensigo	of miles
477	kidney	100	kwills	kwiità	kwihaaya
218	KIIK	Kwina	The state of the s	mid dem	mwaami
677	king	mwaami	mwaam	ind hold	lisaansa
787	eija	maleété	maleele	Ination	
101		S. S	kütößä	kükäändä	
347	Knead	Number of the second	jacots	chizwi/mázwi	offination
348	knee	SIVI	The state of the state of	Line Alb Airwi	küsükâmâ, küsikâmâ
427	kneel	KüSİKB SİVİ	KUSIKA VIVWI	4	kaambi/lwaambi
200	enite.	mwaambi	mwaambi	musyo	- Little
900	baile thin curved.	υσφουσφ	wiihyó	múholo	DROIGHI
-	broad-bladed			400.000	initindo
704	too!	kibálisyó	igüündő	Ituundo	4.04
5 5	MIN	kimbnià	kūmāniā	kúmányá	Kumanya
979	Know	National Park	district of the second	ènvàànzā	isila
178	lake	nyaanza	nyaanza	4.00 militarilla	küsüüntä
151	(ame (be)	kúsúúntá	Kusuunia	1000000	mweende, kamuni
	lamo	tálá	tálá	eenkaanzi	juni
0	(drv)	nsi nyöömü	nsi ndomu	eensi	
00	(fun) primi				
			495		
			100000		

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
761	large, great, big *	ŋkċlċ	ükülü	ihààŋgò	ikòló
94	laugh	kůsěká	kůsěká	kůsěká	kůsěká
792	lay over on one side	kwàànikilà	kůsěěndámíká	kůhéngèkà	kwiinàmisyà
1000	lazy	můzôbé	můzôbé	mùgósè	mfilà
699	leaf, blade of grass	mátůůtů	itúútú	ißàßi/màßàßi	lyáányi/máányi
1025	leaf (tree)	mátůůtů	itúútú	iβàβi/màβàβi	lyáányi/máányí
911	leak, ooze out	kůvwà	kůvwá	kůzwá	kùsóóβà
96	lean, bend down, slope	kwiinama	kwiinàmà	kügööngömälä	kwiinàmà
536	lean on, rely on	kwiizigizyà	kwiizigizyà		
796	lean, become; grow thin	kwòòndá	kwōōndá	kwāánūkā	kůyôôndá
535	leaning (be)	kwèègàmflà	küsèèndàmà	kůsééndámá	-
613	learn	kwilláánzyá	kwiilàánzyà	küégésá	kwiifúúndiísyá
546	leave, permission	lùhúsà ?		kůlàgà	lühüsä
1011	leave over	kůsàázyà	kúsáázyá	kůsáágyà	külékélá
547	leave, go away	kůzyá	kůzyà, kůβůúkà	kügééndá	kůbůůká
544	leave (off)	kùtěká	küléká	külèkà	küléká
975	left over, (be); remain over	kwiikala, kosiigala	küsilgálá	kůsáágyá	kùsiiβá
310	leg, foot	kùgùlù/màgùlù	kùgùlù/màgùlù	kùgùlù/màgùlù	küyülü/mäyülü
774	lend, borrow	kůkôpà	kůtiizyá	kůtřízá	kūtiilä
107	leopard	ηgwè	ŋgwė	énzůmúlá	iingwė
878	lick (vt)	küläämbä	kúláámbá	kùláámbá	küláámbá
134	lie down	kùgònà, kùlààlà	kùgònà	kùlyáámá	küláálá
250	lie on one's back	kúsáángálálá	küsägälälä	kùgàlàmà	küláálá kánságá
791	lift up, pick up	kůbůúsyá	kùβùúsyà, kwiinúlà	kwiimùchà	kůbůůsyá
467	light in weight	mpůůpé	ipòòpé	-pùùpė	ilèlé

KiBenderKiToongwe	i your chooled and your chooled and your sale, moving institution the minimum of the chooled and the sale which the sale of the sale which the sale of the sale of the sale which the sale of the sale	kidebeh, kikida, kisolomba leeke kidiomsya, kogengalila kidema kidema kidela kidela kidela	kulégejá kuláagika iinda
KiLòòŋgò	giguido jeguido degrado de elegação ele	eenzige Kuiteetha Kuiteefia Kuiteefia Kuiteefia Kuiteefia Kuiteefia	kübülâ kübülâ êêndâ
SiSüümbwa SiYöömbê	liúinrade hourseame? ? mysaykaka? ? mysayakala? ? mysayakala? ? mysayakala! ? msimbal msimbal msimbal isimbal illimal kraidiggeleika.	nzigė kuidenta kuidela, kutuingd kuidima kuidima kuidia, kuilingilila	Külogóyá Kúljúlá ndá/ldá
SI-Sùùmbwà SiSilòòmbò	liúdinde barbener ? Chókáa ? musitaál! ? musitaál! ? musitaál musitaó karkakakakakakakakakakakakakakakakakaka	nzigė kūzvikėtė bulaėtė kūdima kūdima kūlinga kūlinga	kūdēdā kūķūlā ndā
English	iight, sky highning piming mine, frow ine, fishing lion ip sissen fishes (be) liver (sistes (be) liver	to closter ratio locust construction of the closus of the closus (Necessary) Associated form (Lock after, care for Kodalina (Lock after grazing to a sick man on the road (Lock at reamine Kodiling) Lock for parage acute (Milinga Lock for parage acute (Milinga Lock for parage acute (Milinga Lock for parage acute (Milinga Lock for parage acute (Milinga Lock for parage acute (Ne paragement Acute (Paragement	
8	304 805 657 213 659 103 103 1024 429	819 794 155a 144 131 871 871 354 354 200	973 181 1023

No	English	Si-Süümbwà SiSilöömbö	SíSúùmbwá SíYòòmbé	KìLòòŋgò	KiBèndè/KiTòòŋgw
769	love, want	kùsiimä	küsiimä	kúsìimà	kùnyómwá
934	lung	màhàáhà	iháhá/máháhá	iháhá/máháhá	ipóómbó/mápóómbó
713	magic *	bůlôzi	bůlôzi	βởlôgì	βùlòsi
714	maize	mùhlindi	mùhlindi	ìpò	sisàká/fisàká
521	make offerings to the dead	küläβüülülä	kùtààmbíkà	kutaambiika	kůpéélá
226	male	ìgòòsyá	igóósyá, mügóósyá	iséézá/máséézá	ŋgòòsi
10	mamba, green (kind of poisonous snake)	nyálútúútů		ééŋköβökö	ηκόβόgό
793	many	-iiŋki	-iiŋki	nyiingi	-iiŋgi
1019	many *	-iigki	-iiŋkí	nyiingi	-iingi
897	marriage	kůswéélá, kůtóólá	βůswéézi	βwèéŋgà	bùtóósi
895	marry (of man)	küswèélà	kůswéélà	kůswéélá	kùtóólá
896	marry (give in marriage-of parents, priests)	kůswéézyá	kůswéézyà	kùsìigà ?	kùtóósyà
814	master	mwaami ?	•		můjáángô
888	match, harmonise (vi)	kwiigànìlà	kwiingana, kwiinganila	kwiiŋgáná	küliiŋgànà
935	mature	kůkôměélá	ikôméélé	-kômèèzílé	ŋkùlú, ìnyhé
596	meat	nàmà	nàmà	ėėnyama	inyama
259	medicine, remedy	bùgààngà	βùgààŋgà	mùβázi	bùγààŋgà
260	medicine (art of medicine man)	bûfûmû, kûlâgûlâ	βùfùmù	βůlàgůzì	βùfúmù
261	medicine-man	můfůmů, můlágůzí	můfůmů	mùfúmù	műfűmű/báfűmű
90	meet	kùsàànià	kùsààngà	kùsààngà, kùßúgànà	kùsààŋgà
861	melt	kùyèyükà ?		kühwééélélá	-
845	midwife			mùfúmú	-
859	migrate, move away	küfülüükä	kůfůlůká	kůfůlůká	kötőólóká

No	English	Si-Sùùmbwà SiSilòòmpo	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòngwè
1030	milk (n)	màbéélé	måßéélé	àmátě	màβéélè
20	milk (curdled), curds	můlibôtô, můlimbôôtô		mbòβòtò	
19	milk, (fresh) (n)	máběélé, másůká	másùúŋgá	àmátě	måßéélé
903	millet (bullrush)	bùsigá	βùsigá ?	lùβélé	nsáká/másáká
290	millipede	igóòngólwá	igòóngólwà	igólóngólyó	-
73	mix (ingredients, 'season food')	kùlùùŋgá	kùlởờŋgá	kůtúláánizá	kůsàánsyá
72	mix, put together	kůsáánzyá	-	kùtúláánìzá	kůsáánsikányá, kůsáánsyá
363	monkey (small lightish-coloured)	ŋkééndé	ŋkèéndé	èèŋkèèndè	ijáándá/májáándá
362	monkey (colobus- (with long black silk hair, white on shoulders)	ŋkèéndé	1-1	•	
361	monkey (small, dark-coloured)	ŋkèéndé	ŋkèéndé	ėėηkėėndė	
716	moon	kwéézi	kwėėzi	kwéézi	mwéénsí
609	moonlight	kwèèzi	kwėėzi	kwėėzi	kůmwéénsí
59	mosquito	mùβú/mìβú	mùβά/mìβά	π άβὰ/míβὰ	káláámbá/túláámbá
436	mother	yàáyở/màáyờ	yàáyở/màáyở	mááhà	máájó/bámáájó, máámá
65	mould (pottery)	kůbůůmbá	kůvůúmbá	kùβúmbà	kůbúúmbá míloondě
717	mountain	mùgàlà	mùgàlà, lùgùlù	iβààŋgà	můsôsi/misôsi
163	mourning	nákú	náků	lúfů	sililó/fillió
1026	mouth	můlômô	můlômô	můnwá	můlômô/mílômô
272	movement	kàziilò	lùgèèndò	lügééndő	kájiilô
979	mud, mire	málóló	málóló	ėntomė	ntôpê/màtôpê
642	mushroom	βωὸόβὰ	βωὸὸβὰ	βωὸόβὰ	bòòbà
152	mutilated (be)	kůlèmàálà	külèmäálá	külémäälä	kůlémálá
281	name	iziiná	iziiná	iziinà	isiinä

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
539	namely	òtí	òtí	βífmwà	òkútééndá
403	nape (of neck)	βůkósì		ėėŋkòmò	ikòsi/mákòsi
256	navel	ikòòndó	ŋkùùndwi	můkůůndí	můnyónyó/minyónyó
765	near	hìihi	hiihi	hífhi	hèèhí
379	neck	ŋkiiŋgó	ŋkiiŋgó	bíchá	ikòsi/màkòsi
843	need, request	shìidà ?		βwėėnzi	•
962	new	nyhäähyä	nyhyááhyá, ihyááhyá	ènyhyàhyà	nyhyá
718	night	bwiilé	willé	chilò	bùfúkú
755	nine	syèèndà	syèèndà	mwèéndà	kêêndá
484	nose	nììndó	niindó	ènyiindò	inylindó
211	number	můlòòngò			
237	oar			èèngàhì	ŋkàhí
939	obstruct	kùkèmá	kůkěmá		kùpíiŋgá, kùpiiŋgámá
48	offspring	mwààná/bààná	mwààná/βààná	lùzááló	bùfyáási, mwààná
66	oil (from plants)	màsànà		màzútà	bùtó, màfùtá
435	oil	máfútá	màfùtá	màzútá	màfùtá
818	old times, the past	nà kálẻ	kálé	hàlè	kàlè
411	old person	múnámpálá, műkéékülű	můnáámpálá, můklikůlů	můnyáámpálá, můkéékůlů	můkéékúlú/bákéékúlú
410	old	ndáálá	ilàálá	-áá kálè	lyà kàlė
214	one-eyed (being)	nsòóngó	nsòóngó	ėnsóóngò	chóóngò
440	one	imwi	iimwi	ímwė, kamwė	imwi
590	open mouth wide	kwààsámà	kwààsámà	kwásámá	kúgásámá
984	open	kwiigòlà	kwiigùlà	kůchilggůlà	kwiiyula
829	open (set ajar) a door	kwiigòlà		kùchìingùlà, kùhégà	kwilyula, lyaango ßwiyule
876	order, direct	kůtůmá	kůtůmá	kůtůmá, kůlágiilá	kůlágisyá
961	ostrich	mbùùnì, bìnyônyi byáá hèélá	nóòmvwi	ènyóónzó	

KiBèndè/KiTòòŋgwè	fyéétü	kůjá, kůfůmá, kůbůúká	kuunse	kûyólá	kùbá nệ đểni		kabaamba	kūtūtikā	můlévá	mùtúúmbá	nkáhí	můlômô můkátí běboůtů	mùtèèndè ?	maalwa	kūßòkó		mùhàmà/mìhàmà	mäßese	mwégó kùpálálá	mùfyáásì	3	kūhitā	nsilà	külihà
KiLòòŋgò	yéétü	külügáhő	héélú	kùsiiŋgà			kúhlingiká	kùsiindāqilā	bitúùtà, idaalê, bilûûndô mûlêva		ééngáhi	١.			chigaanza		mùhàmà/mìhàmà		kùzùgùmâ	můzěělě		kühiingülä	mùháándà	külihà
SiSùùmbwà SiYôômbè	ythtú	kúfůmá, kůpůůná	heelú	kúkiindá	külööngwá, küdááíwá?		küviga hamwi	küsindililä	idaale	mùligó			,		sigaanza				kùzùgùmà	müβüsi/βäβüsi	kásúúkú	kühitá	nzila	külihâ
Si-Sùùmbwà SiSilòòmbò		kúzyá, kúpůúná	hèèlü	kûkiindâ	kūdāāiwā ?		kůviingá hámwi	kūbiliingā	idààlé	múligó, kâàmûligó		mùkàáŋká	ntééndé ?	Bosele	sigaanzya		mùhàmà		küvügümä	müßüsi	kásúků	kühitá	nzilà	külihà
English	our(s) pl. 1st person)	out (go), go away	outside	overcome; win, vanquish	owed by, be	oyster	pack (luggage)	pack, press together	pack, flock, group	pack, bale, bundle (n)	paddle (n) *	palate	palm (date)	palm-wine	palm (of hand)	palm (raphia)	palm (borassus)	palm (oil)	palpitate, flutter, tremble	parent, s/he who begets	parrot	pass, surpass	path	pay
N _o	640	909	324	217	982	835	207	208	456	457	236	342	6	719	257	9	7	80	429	47	720	232	325	159

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYoòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
600	pay attention, take care	kwàmvůlikízyá	kùlèlà, kùtùùŋgá	kwiitoonda	kůγáŋgálílà
820	peel, shell	kùpàlá, kùsôôndôólà	kůsěéná, kůsôôndôólá	kůtóóndôlá	kùkôôŋgà
12	peg	lùmààmbò/mààmbò		èèmbàgò	
11	pegs (tent)	lùmààmbò/mààmbò	lùmààmbò/mààmbò	(úmáámbó	imáámbó/máámbó
494	penetrate	kůhitilízyá	kwiingflà	kůsyèépä	kwiingilä, kùtúßúŋkányá
721	penis	mbòló	lάβὸló/mbóló	mbòlò	iβóló/máβóló
884	penknife, lancet	kákůůmbí	mwààmbi	kásyó, káhyó	kàámbí/twáámbí
558	person	mùùntù	můůntů	mùùntù	müüntü
638	pestle	mwiisi	mwiisi	mwiinsi	mùùnsì/mìinsi
312	pig	ηgùlùβė	mpúnů	ėėmpūnū	ηgúlüβè
414	pigeon, kind of	ŋkùúndyà		èèŋkùúndyà	ŋkùúndà
579	pile up, pile loads on head	kůtwiikà, kůtikà	kwiitwiikä	kùhííŋgìká	kůtwííká
479	pinch, make narrow	kůsiná	kůsiná	kůsúná	kūsinā
357	pipe (tobacco)	kànùúŋgù	-	isékè	ikùùŋkà/mikùùŋkà, mùtèèmbà
552	pit, hole	liinà	liinà	tiinà	liiná/mėėná
974	place, put (vt)	kùtùúlà	kůtůúlá	kù táhỏ	kůbílká
722	place (n)	hààntù	hààntù	hààntù	hààntù
892	place of the dead	kùzimù		kůzímů ?	kùsímů
225	plait	kùsùkà	küsükä	kůsůkà	kùsùkà
932	plant, sow	kùhààmbà	kůhàámbá	kůhààmbà	kůbyáálá mbůtó
510	platform	làtèèßéézyő	lwàànzá	Įùβàlázà	hěègůlů
834	please, satisfy (vt)	kùtòósyà	kùtôósyá	kůhichá	kůlyôôhyá
93	pleased (be)	küsiimä	kůslimà	kůnůlilwá	kůnyômwá
13	plot of ground	Ιờβờớgà	lờβờgá	Ιὐβúgà, Ιὺβáánzà	
647	plunder (a town)	kùbàdà ?		-	kùtėká ?

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgó	KiBèndė/KiTòòηgwė
1014	plunge into, cause to sink	kůdůůmbůkízyá	kúdůůmbůkízyá	kùtòβētā	
114	poke	kůkůůngáániá	kůkůůngáániá	kwêêndêgêzâ	kůsôôŋkà
737	pole, thin	ìβàzi/màβàzi	iβàzi/màβàzi	Iùβázì	
111	polish, clean by rubbing	kùsìigà	kùsììgà	kùhálágútá	
177	pool, pond	ilààmbó	ilààmbó	ilààmbò	kàsiβà
923	porcupine	linògòtè	inògòtè	ėnyogotė	nùùŋgúli
374	porridge (stiff)	βùgàli	βúgàli	òβúlò	βúγàti
42	pot (metal)	ikòpó	ikópò	ikópó	ifulila/māfulila ?
41	pot, vessel	sìsèmè/visèmė	sisėmė/visėmė	chisèmė/visėmė	ŋkònó
39	pot, mug	můkébě	můkébé	můkébě	2
40	pot, cooking (earthen)	nùúŋgù	ոննդցն	ènyùùŋgù	ŋkônô
749	potato (sweet)	màziizi	iziizi/màziizi	ėniúmbu, lünüümbu	silòòmbò
646	potter's kiln				-
369	pound (grain in a mortar to get off the husks)	kúsěěkúlá	küküüzüülä	kůs ěk ůlá	kůtwá
441	pour away	kůsěěsá	kůsěésá	kůsėėsà	kùyóná
641	pour	kůfůká	kůkěnéná	külööngèlà	kůyóná βúsèèβúsé
748	pregnancy	ndá	ndà	èèndà	indà/ndà
636	pregnant, be	kùtwààlá ndà	kútůůngá ndà	küßà nééndá, kütéélwá ééndá	kùβá nê ndà, kùnywààmà
599	prepare	kůtáyáálisyá ?		kůliingánizá	külyööhèlèsyà
553	press out (oil seed, sugar cane)		kühâmúúlâ	kükáánzá	kùkàmá
986	produce, put forth, display	kùpùùnià	kùfùmyá	kwiiháhó	kûfûmyá

No	English	Sí-Súúmbwá SiSilóómbó	SiSüümbwà SiYöömbè	KiLòòŋgō	KiBèndè/KiTòòngwè
909	prominent (be); put out	kùpùùná		kütülükä	kůmányiká
518	pronounce	kůtětá	kůtětá, kůyčombá		kùtěéndá
340	protect by charm (medicine)	kùgùùŋgùùlà	kùkàgá	kùkágá	kůliisiímpá, kůsiimpá
947	protect by charms (target)	kùgùùŋgùùlà	kùkàgá	kùkágá	kùliisiimpä, kùsiimpä
475	puff-adder	kipfii	iβààmbàhiti	íβààmbàhili	impili/mpili
244	pull	kůkwěěsá	kùkwèėsa	kůkwěěsá	kùbwiità
173	pull up, come to a halt	kwiimililä	kwiimililä	kwèémèlèlà	kwiimililä
172	pull up, root up	kösiimböölä	kūdūbūlā, kūsiimbūūlā ?	kůnyůkůlá	kůmôôlá
833	pull, drag	kůbwěěgá	kůkwěěsá	kůkwéésá	kůbwiità
57	pump	ibòómbà	iβóómbà	iβòómbà	
548	push	kůsůkůmá ?	kůsiindíkà ?	kùsìindikà	kûtêèŋkâ
992	put, place, set	kùtùúlà	kůtůůlá, kôβříká	kùβiìká	kůbííká
887	put together for comparison	küliingánisyá	küliiŋgànisyà	kwiiŋgànisà	kùliìŋgàànyà
969	put a pot on the fire	kwààlikilà	kůtěléká	kůtělěká	kůtěléká nkônô
981	put together, compose	kůliiŋgá		kùliìŋgà	kùtùúŋgá
862	python	nsàtó	nsátó	èėnsatò	nsàtó
656	quarrel (vi)	kúsöölä	küsöölä	kwiizùmàgùlà	kůsôblá
180	quench, extinguish	kůzimá	kůzimyá	kůzimyá	kůsipyá, kůhwá
485	quiet (be)	küléémbéélá	küléémbéélá	kůtékááná	kůhůůmbůlá
76	rain	mvůlá	mvůlá	ėėnzūla	(i)mfúlá
917	rain (vi)	kůtôlá (mvůlá)	kùgwà (mvùlá)	kùgwà nzùlà	kůgw' émfülá, kůtóónyà
1006	rains, the lesser	káswáálázi	-		můtůsyô ?
197	rainy season	syààndà	itùùmbá	itúúmbá	kůsôyô

No	English	Si-Sùùmbwà SiSilòòmbò	SíSúúmbwá SíYóómbé	KiLòòŋgò	KiBèndè/KiTòòŋgwè
580	rumble	kütütümä	kwàànà, kùhììndà	kůzíímbà	kùjòβòòlà
26	rat, kind of	ŋkèsi	ŋkėzi	éénkézi	nsėėnsi
488	rat (field)	nkösö müdőlő		ėėmbėβà	ikósó/mákósó
24	rat	ŋkòsò	ŋkösö	můdôlô	ikôsô/màkôsô
25	rat- (very large, long-tailed)	ŋkėsi	•	můdôlô	tùùŋkò
883	razor	lügèèmbė	lügèèmbė	wėėmbė	káyéémbé
949	read	kůsómá	kůsômà	kůsômá	kůsômá ?
1007	reap, harvest	kwiimbùlà, kùsôlà	kwi/mbòlá, kůkésá	kúsüúndúlá, kügésá, kútöná	kůsůůγůlá
523	receive	kúpôkéélá	kwäänükülä	kwàànùkùlà	kůpôkéélá
537	reed	lùbilngôbilngò	itété/mátété	idété/mádété	itété/mátété, iswé
632	refuse, say no	kùkèmá	kùkèmá	kwáángá	kůtúná
633	reject, refuse, dislike	kůkémá, kůkááná	kůkémá	kwààngà	kùtůná
545	remain, stay behind *	kwiikala numa	kwiikàlà	kwiikala	kùsiiβà
1035	remain, stay	kùsàágà	küsilgálá	kwiikālā	kùsiiβà
840	remember	kwiizòkilà	kwiißòkilà	kwiβùùkìlà	kwisùkilà
499	resemble *	kwiikòlá	kwiikòlá	kúsúúsáná	küliingäänä
879	resemble (very closely)	kwiikòlá	kwiikòlá	kùsùsà	küliiŋgàànà
1031	resemble *	kwiikòlá	kwiikòlá	kùsùsà	küliingäänä
149	rest heavily on, be burdensome	kùβùná	küléméélá	kùtiimbilwà	kùβáándá, kùβáándikíisyá
964	rest the cheek on the hand (in brooding mood)	kwìikwààtá kàtàmá	kükwäätä itämä	kůhôlôlôkělwá	kunyigá itámá (kunyig' étámá)
957	rest, take a holiday	kwiifùúlà	kwiifùúlà	kühümülä	kůtámůká
249	return, go back	kùsùβá	kùsùβá	kúsùβà	kůhěléélà
1004	return	kůsůβá	kùsùβá	kúsúβá	kůhěléélá

KiBende/KiTooŋgwe	kůhéémbúúká	mpėla/mpėla	lùβàfù/mbàfù	-hiilé	kùhyá	kühyá	móóngá/myóóngá	kůlitá	kûtûûmbâ	küyaanika	ibwe/mábwe	(li)kajėėnjė/(mā)kajėėnjė	mūsisi/misisi	ibòlé, ibòsílé	kūbūlūŋgūkā	kůsyúngúlůká	kūba ibūlūjingi	and manage agency		bùcháfů ?	isyaala	kūkilimā, kwiilūkā	mpėló < kūpėėlà	mùkèlé	mūsifnsi/misifnsi	kwiikūtā
KiLòòŋgô	kühiimbüülä	eenkülä	lùßázů/éémbázů	-ihiile	kùhyà	kùhyà	munona	külüüŋkümä	kükáláángá	kwóóchá	itaale	ééŋküüŋgülümi	mūzi	15	kūziiņgililā	kůziiŋgâ	kirzilona	Pagilly Ba	kūkūūsa	ßitàkálá, mwágá	itaaβa/mataaβa	kwiilükä		mwòònyò	mùsèèngà	kühäägä
SiSûûmbwa SiYôômbê	kühéémbüüsyá		lúßávú/mbávů	ihiilė	kühyä	köhyá	mwilga	kühüümä	kūkālā	kwoosya		ŋkùùŋgùlúmê	mùzi	ißi, ißòlé	küviingilisyä	küpilimä	Conflicting and	KWIIVIIIIIJBISYA	küküüsä	màtàkàlà	izyaala	kwiilūkā		mwiini	müseenga	kwiikūtā
Si-Süümbwa SiSilöömbö	kūzòòkòlâ	mpėlá	lùBàvù	ya Bühyé	kühyä	kühyá	mwiida	kühüümä	kükâanzyá	kwoosya	mwaamba qwi Baale	nküüngülümé	můzi	kùBòlà	шріійдае	kùpilimá	Annah and the same	kuvilinggisya	kūkūūsa	matakala	izyaalala	kwillrika	mulabititio, sitaambo	mwiinii	müseenaä	kwilkútá, Kühágá
English	revive	rhinoceros	æ	ripe	ripen (vi)	ripen (vi)	river	roar rumble	roast	roast (in/by fire)	rock	rooster (cock)	root	rotten	(band (be)	round (go), turn	ninoi	round, become	dD.	rubbish, garbage	rubbish heap	Oil	Sacrifice	salt	Sand	satiated (be); have enough to eat or
No	200	318	988	473	966	472	500	239	644	350	ROB	291	169	29	1012	183		666	110	50a	321	828	622	723	4	630

No	English	Si-Sùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòηgwè
788	satisfy	kůtôósyá	kůtôósyá	kůhíchá	kwiikúsyá ?
251	say to, tell to	kùbwìílà	kůwřílá	kùgààmbìlà	kübálilá
783	scorpion	ŋgè	kàmìínà	kámiíná	kààminà/tùùminà
453	scrape	kůkwáálůlá	kúpálá	kůpálá	
855	scrape, grate	kükwäälölä	kúkwáálúlá	kůkwáálůlá	kupala
856	scratch, grate *	kwiiyààgớià	kůsinààgůlá	kůkwàálůlá	kùpàlà
668	scythe, sickle	lwiihyò	můhôôlô	mùhòlò	mpůpó <kůpůpá< td=""></kůpůpá<>
84	search for	kůkôôβā	kůkôôβà	külööndä	kùhéénsá
85	search diligently	kůkůlá	kůkůlá	kûkûlâ	kùhéénsá
738	seat, stool, chair	itèβé	itèβé	itéβě	sitéßé/fitèßé
770	see	kůβôná	kůβôná	külèèβà	külölä
67	seed	mbůtó, mběgů	mbùtó, βὰtùùŋgà	mbìßò	mbútó
404	seize	kůkwàátá	kůkwáátá	kůkwáátá	kůnyiγà
611	self	-ènėkili	-ėnikiti	yöónyéné	mwèèné (-èèné)
302	sell	kûgûzyà	kúgůzyá	kùgùzà	kùγùlà, kùgùsyà
570	send	kůtůmá	kůtůrná	kůtůmá, kůlágizá	kůtůmá
451	separate, set apart	kůlékáániá	külèkäänisyä	külèkäänisä	kůblíká háájéháájé
450	separate, leave each other	kütääŋgánä, külèkäänä	kutaagana, kulekaana, kwilléka	külèkàànà	kúlékáná
534	set a trap	kùtėgá	kůtěgá	kůtěgá	kůtěyá
868	set (of the sun)	kůlôká	kůlôká	kůlôká	küsyáámá
971	settled (be); be in good order	küléémbéélá	küléémbéélá	kůsémělá	kúlyóóhá
754	seven	můsáámvů	músáámvú	můsáánzů	mpůůngáti, ndwi
1033	sew *	kůsôná	küsümá	kůsôná, kůsůmá	küläändä
589	sew	kůsôná	küsümá	kůsôná, kůsůmá	küläändä
135	sexual intercourse with (have)	kůswííká	kügêmâ	kùchùgànà	kůtôômbá, kůswááná

No	English	Si-Süümbwà SiSilòòmbo	SiSùùmbwà SiYòòmbè	KiLòòŋgò	KiBèndè/KiTòòηgwè
691	shadow, shade	můtáká	můtáká	mwiinziízi, mùβéhò	bùlėlò, siinsimwi
867	shame, disgrace	nsòní	nsòní	èènsoni	nsònyí
116	shame	nsòni	nsòní	èėnsoni	nsònyi
724	shame, modesty	nsóní	nsòní	ėėnsoni	nsónyí
386	sharp (be)	kùùgíhà	kùùgihà	kùkálà	kùkálihá
920	sharpen	kůnôôlá	kůnôôlá	kůhyôôlá	kůtyásyá
915	shave	kůsônzôólá	kúsúnzúúlá, kúmóógá	kůsôsôlà	kùbéyá
603	she, he	àwénè	àwé	wènyénè	ùyò, yóyòli
287	sheep	ntààmà	ntààmà	èntààmà	ŋköndóló ?
1009	shell, cowrie	nsiimbi	nòòngá	ėnsiimbi	mpási, máámbá
822	shell	-	nòòngá	ènsíingó	ŋkómbélélé
725	shield	ηgàβò ?			1-1
712	shin (bone)	mùlùùndf	můlůůndž	můlůúndí	můlůndí
968	shiver, shudder *	kůzůgůmà	kůzůgůmà	kůzůgůmá	kůtětěrná
528	shiver	kůzůgůmá	kůzůgůmá	kůzůgůmà	kùtėtėmà
434	short	nìthí	niihf	-gùfù	ntófú
430	shoulder, tip of	iβėgà			
588	shoulder	ìβėgà	iβėgà	iβėgà/màβėgà	ibèyà/màbèyà
839	shout	kùyôgá	kùyògá	kůtélá yóómbó	kütáángiítá, kwillá búláángá
946	shrivelled (be); wrinkled	•		kwiisùnà	
763	sick	külwäálá	ilwèélè	ßülwéélè	lwèélé
870	sift	kùyởờŋgà	köyööngä	kůyůůngá	kùsäägülä
615	sing	kwiimbá	kwitimbá	kůziná	kwiimbá
3	singe	kůbábůlá	kùβàbúlà	kwóóchéélá	kùbábúlá, kúgôsyá
980	sink, be drowned	kùnùbísà	kùtùβìlà	kùtôtà	kůsyáámá, kůnyáányá
170	sink	kůnwibílà	kůtůβílá	kůtůβilá	kůsyààmà

2	English	Si-Süümbwa SiSilöömbö	SiSüümbwà SiYöömbè	KiLòòŋgò	KiBèndè/KiToongwè
726	sister (his)/ (her) brother	kálúúmbú	llüümbü	mûnyâânyâ	ilüümbü
627	sit	kwiikalisya	kwiikalisva	kwilkalica	budleath
753	six	můkáágá	mùkaágá	mikaaoa	mittala mittala
785	size, measure	Bükülü, Büdàazi		fullmo chooms	rinimaya
123	skin (of person)	ndili	ndilif	ikARA	September 1
124	skin/rind (of fruit)	igúlá	Súswa	iniput	Indo Armakoba
303	sky	llüünde	llüünde	iodii	ivolio in in
865	slander, accuse falsely, often secretly	kúchôôŋgèlèlà		kûßééhélá	kùsôôŋgêlêlâ
470	slap	kůhůůlá ikôsfi	kühödiá ikóófi	kütéété iköön	MONOR A LAME ALCHOOSE
970	stash	kütémá	kütémá	kùtémà	Kindal e koon (Kundula)
220	slaughter	küsiká	küsiinza, küßaaga	kūRāānā	kisilose
727	slave, bond servant	mūzyāānā	múzyááná	mizaana	m(i)svp
728	slave (female)	múzyáánákázi	műzyááná	mizaana	m(c)m
729	slave, (male)	múzyááná	mūzyāānā	mizááná	m(c)ship
136	sleep (vi)	kügönä	kütiindilä	kilitama	Manhah Manhan and
731	sleep (n)	tùió	tolo	into	high
730	sleeping-place, accommodation	βūlāāló, hā sigönö	Винано	Búlaaló	bûlilî, hê kûlaala
867	slip, be slippery	künenelä	kûnelêla	kûtêtêtê	P. Cardidana a
1021	small	opu	opu	146	Autoresya 7
332	smallpox	ndùbi	ndùBi		-1136, -36
241	smell (sweet) (vi)	kûmôôtâ	konoonkiia	Virmbols Limbashas	naupi r
242	smell (bad, of fish) (n)	kûhûgûtâ	πάπαμκό	kûnûûŋkâ	künyüüŋkâ
240	smell (bad) (vi)	kúnúúŋkà	kůnůůnká	kindinka	Management
629	smoke (n)	lyòònsi	lyòònsi	mùhiliŋka	lyóónsi

KiBende/KiToongwe	kúfúmyá lyöönsi			nsóká		kūtisilā	künüünsvä	kükölömä	bùlóóngó	huiimhó	o i i i i i i i i i i i i i i i i i i i	ngining.	masisi	mulosi	siloonda/filoonda	mwèėyó		mbùyá	nsésé	kütêéndá	istimó	olinei.	KWIISYA			iswa, iseya	Frank	BWE	Iswa	külèmá	
KiLòòŋgò	kütüünjkä	ènyóóngà	ènyóóngá	éènzóká	mùtégò	kutyaamuza	kimijimotha	ioono (n)	itaka	Colonial Colonial	Inzina/eelizina	eeuzina	iviilà/màviilà	mülögi	ilòòndà	mùgânyâ	iláká	ßwèélà	èènsàsè	kingampa	Pugagilloa .	Ichumu	külömeela	Bünyááli	lùpùpi	mūzimū		muzitan	mūtūnībe	küchwéélá máchwáánté kütémá	
SiSüümbwa	kůzůůká	mfweelo	mfweelo	nzòka	mithaó	kwiityaamiila	- Continued	Kunuunsya	KUROLOHIA, KUROLOHIA	Bulgonjko	wijmpo	miimbó	mivwillà	mülözi	ilòòndà	mwilzò	můzwi	lùwúúgà	neżaskimisaask	Control County	Kuyoomba, Kuleta	isúmű	,	ßönyääli	idgddgi	múzimů ?				kūtūriga	
Si-Suumbwa oisildombo	Sismonia Laboratela	mifweeld	mifweeld	nzóká	mildoh	muteyo	Kwiiiyaaiinia	kunuunsya	kugona, millist (n)	βύΙοοηκό	niimbó	niimbó	můviilà	můlôzi	ilòòndà	mwiizō mutima	kitila	hwèèli lùbùúgà	pededimdeded	ilsase/illasase	kùyoomba	isūmū	kwiifūūlā	Bütáángá	libithi	müsäämbwä		misaambwa		kùtùúgà	
English	Althorities of the color of the Althorities of the colorest of the colors of the color	smoke (give out) (vi)	Sildii, siug	Sildii	sildre, scipcili	snare, riap (n)	Sueeze	sniff, smell out	snore, snort	soil	Song	sonds *	loos	Sorrerer	0.000	sout snirth	sound cov	space (open)	space (open)	spain	speak	spear (n)	spend time	sperm. semen	enider	spirit (of dead	person)	spirit (disembodied)	Spirit (evil)	spit	
Š	90,	107	100	200	2	138	864	924	296	69	732	616	36	195	2	20.0		5 9	5 6	78	253	733	137	1038	62	182	-	464	683	582	

2	English	Sisilòòmbò	SiYoombe		
		DOIIIOOIIO	o de la companya del la companya de	máchwáántě	màté
533	spittle	maswaante	Maydalle	Contractor of the Contractor o	Minnish kinnistilla
301	snlit crack (vt)	κύβάlálölá	kutaandula	Kunalayuta	Appare, magazin
061	enoil blind (vt)	kühöfüzyä	kühöfüsyä	kühöfülä	kupotusya r
	Spoll, Diffe (1)	Lindakozua	külèmäázvá		
648	spon (a cuind)	ne and and	P.O.O. Speed	küßühvä	küyönönä
866	spoil	kūbiiha	Kupilinya	na minus	muliko
813	Spoon	rnwiiŋkó	mwiiŋko	mwinjko	The state of the s
8	enot erackle	ißàlá	ißala/maßala	igala/maßala	(Sala/mabaia
2000	aporti, aportio	kittèèngükâ	kūmyóólá	küláßülá	küteyüka
B .	Spirall on aller	Lincompagna	kijsaambaazva	kùsaambaala, kwaala	kùsaambaala
4	spread out (be)	Kusdalilbaakya	Vind danza	kwaala	kùganika, kùyaansa
527	spread	KWaanza	THE PARTY OF THE P	L. Charles Company of the	kimanyika
808	spread abroad, be;	kůmániiŋkáná	kumantinjka	Kunullidaljas	
	known				
		Litellan	küsilak	küsiiga	kupaka 7
780	spicau, silicai uli	Burny	S. Contract of the Contract of	kirchambaala	kùsáámbáálá
591	spread, scatter (vi)	kusaambaala	Kusaampaala	111111111	eleimá 2
380	spring (of water)	hivillò		eensoko	
965	spring machine	másliné ?		masine	4
986	and one	kůnělělézvá ?	kůpělělězyá ?	kúßúlilizá	Kuguunsa
2 0	and the	Liveritim 919	küsükümälä	küsükümâlâ	kusuunsumala
343	squat (on the haunches)	National Property and Property			L.Chiland
201	someeze oneself up	kwiihisya	kühisya	kwiihega	Kullisya
	against a wall (e.g. to allow another to				
**	compare out	kiivinä	kükâmöölä, küvigà	küvigà	kükama
1 243	Squeeze milk	kúsvéémá	kükâmöölâ, küsyèémä	kūkāmā	kūkāmā
2 2	squirel				Annual to the same
1 5	and offer the same	Villiandika	küsöözvá	küsöözä	kutuhka, kupaanga
295	stack, pile up	Kunduluika	1000	hundamalala	kwiimitila
1029	stand (vi)	kwiimililä	kwiimiiiia	Wednieda	

KiBèndè/KiTòòŋgwè	histángwá/ntáángwá	kūrūumbūla mėėnso	kirlimush	The state of the s	kūgundumula		kúsísúká	kwiißå	41411	month of the state	melele/manelele	kūtāāBūlā	and and and and and	action Anii	iotofia	to the party of	KUSINISA	KüSİKİSB		i6we/mabwe	P. C. C. C. C. C. C. C. C. C. C. C. C. C.	The state of the s	kügölölä	mūnyėnyl/βānyėnyi	móóngá	manava	kwiivolola	Konoola	Missbard ne Sumb	4104044	Aginialea
KiLòòŋgò	ènsóóndè	Lithdompolib	KUKOOIIIpoia	kwinano	küfüümbülâ		kūtiinisā	A Principle	PARIDA	chooma	lipólipó, igalála/mágalélé	PODDÍCK A	Magaiana	müğuumpa	14-64-1	eenkon	küpamilizaku	kirvwóda	- Contract	10441A/manandalah	pagaguadani	Kusooza	Kügölöölä	mùaènvi	minoph	magain	hadinal and	KWIIguiodia	Kukuumpa	KUChumita	Buzi
SiSüümbwa	SiYoombe	Nacoundana and and and and and and and and an	kūvybola miinso	kūfūmyā	Liberandilland	Vice and Minister A	County o	Kositola	kwiißa	syddmá		Authorized Automotives	kutaambuka, kuguluka	mùgùùmbà		ŋkôni	küsägäniä	404404	Kutopa		gaale	küsöözyä	kūnoloola	- Contraction	iii afaiii		ngngu	kwiigoloola	kübaamizya	küsömä	ßùzi
Si-Sùùmbwà	Sisiloombo	nsoonda	kůvyčotá miinsó	kwiihaló kwiihakó		Kusitula		kúsitala 7	kwiißå	svůůmá			kūtāāmböölā	mügddmbä		ŋkôní	P.Or OR O	edony	kūtoßa		ipable	külüündikâ	400000	Kugolooia	mageni		ngúzú	kwiigólóólá	kūbāamizyā	Külâsâ	būzi
Enalish		star	stare, glare	want person some	Start off, selle away	startle, catch	unawares	startle, jerk	steal	lagi	stem (of maize.	millet, etc.)	sten over	sterile man (or	woman)	etick	Coloriso tot city of	Stir, mix by stiring	stir	stir up	stone	store un collect	Store up, collect	straight (make)	stranger, guest	stream, current	strength, power	stretch oneself	etrike, knock	etrike with a speaf	string (n)
ş	2	735	390		202	799		830	618	900	554		826	315	2	644	5	44	850	78	61		228	154	268	661	798	140	305	080	282

KiBèndè/KiTòòŋgwè	kūkööŋgâ	kwitéhá	kūkūūntūkā	kūtônā			kúyóónká	kūmimā		South Arman of Ba	iguparina yapa	isycopaminasycopi	Kusyuulguiuka	kūmilā	kūlāhilā	kafita	kūtivaahila, kūkoonkaanya		künyááhílá	-lydohile	P.Offirmha	- Administration	Secretary.	Inpadijaa	mūsila/misila	kütäähyä	kūklijmā mfūlā		kūtwáálà			
KiLòòŋgò	kūkūūzūlā	kináámba ?	kirkirima	kirkomó	KUNOTIA	kürülhaza	kundonka	Kinnifina	Authority Stanfordown	Kutinga umuganya	iguba	(zooga	küzöŋgölöka	kūmilā	Kulahita	Amniità	4444	KUZOOM	Kimobanita	Octobal and	bunda	Kuziimpa		lupaanga	múchilà	kütäähvä	Shiring shiring	VALIBRIUM COLUMN	Littudalia	Valendaria		
SiSuumbwa	kūkūūzolā, kohololā	And 190 American	Lange Company	KWIIKUUIIIDA	kūdūmāala	kindadahata 7	The state of the s	KWOONKA	-Kumima		igúba	Izyooba	küpilimä	Kornita	videbile.	Adjust the same of	onkoon		L. Land dealth	Kunyaagua	iseeme	kūvijmbā		üpääŋgä	misila	S. Carlotter	- Hardeniya	кмидетна	4.5-414	Kusola	170.00	513
Si-Sùùmbwà	kūkūūzūlā		Kwiipona	kwiikuumba	küsisä	inches an adding	Kuba na kamm	kwoonka		kwiigümilizya		ΙΖΛΟΟΒΆ	kúpilimá	10000	Kumina	Kulahila	mpita	sweep up, collect in a kůmlingů, kůzyčělů		Kühyaagila	nsêêmê	kůviimbá	lúpáángá	inaging	200	BITSHILL	kutaanya	kúhisyá		kößöösyä		
English	strip off (e.g. grains	of corn)	strut proudly	stumple	stunted (be); be	spoilt	stutter	suck (the breast)	suck (vt)	suffer, bear patiently	sugar cane	Sun linht	and the same	surround	swallow	swear	sweat	sweep up, collect in	heap (rubbish)	Sweep	sweet, pleasant	swell	sword (short)	parone	niows	tail	take leave of	take in (from rain,	etc.)	take, carry		
Š	487		518	407	266		948	594	480	012	802	323	200	184	438	TTT	908	392		943	517	5	808	000	200	360	875	778		565		

No	English	Si-Súùmbwá SiSilòòmbò	SíSúúmbwá SíYöömbé	KiLôôŋgô	KiBéndé/KiTòòŋgwè
233	take off (clothes), undress	kwààmbòlà	kwààmbòlà	kùzùùlà myèèndà	kùfúúlà
530	tangle			kùβúlàgizà	kůjôbáányá
898	taste (v)	kởlàβởzyà	kôláβůzyá, kůβôônzyá	kùβòònzà	kůbôônjá ?, kůliingisyá
985	teach, instruct	küläänzyä	kùlààŋgà	kwèégèsà	kùfúúndísyā ?, kùlāānsyā, kùlāāŋgisyā
621	tears	miisózi	miinsózi	màlilà	nditilò
412	ten	ikůmí	ikòmi	ikúmi	ikúmi
121	termite	itèmí	itiní	itémi	můswá/miswá
739	testicle	ivyà	ivyà/màvyà	igòsi/màgòsi	itülü/mätülü
1020	that	èbyò, èyò	ìyò	ėlyò	-lyélélí
455	thatched roof	kànô	•	mpálátó	2
767	there	àhà, èyènó	àhàlyá, tytlyá	áhô, ôků	kóköli, ùùkô
54	they	àβé	àβé	βònyénè	βèėnė
444	thick, fat	mùginé	-iginé	liginitė	ìhàmú
86	thicket *	isàlà/màsàlà	ìsàlá/màsàlá	isàkà/màsàkà	ihúúmpú/máhúúmpú
854	thicket	isálá, ipôôlú	isálá, sisáká	isàkà/màsàkà	ìhúúmpú/màhúúmpú, isìgò
619	thief	mwiivi	mwiivi	mwiiβì	mwiifi/bėèfi
23	thigh (of human)	sìβėlò		iβėlò/màβėlò	itààmbá/màtààmbá
22	thigh (of animal)	sitäämbó	sitäämbö	chilùùmbù/ßilùùmbù	itààmbá/màtààmbá
559	thing	siintü	siintù	chiintù	siintù/fiintù
987	think, imagine	kwiiganika	kwiigànikà	kůtěékůzá	kůláángáányá
651	thirst	nóótá, ŋkèló	nòótà	ilihò	ŋkááŋgú
740	thorn	liigwa	liigwà	iihwá/máhwá	liimfwá/méémfwá
689	threaten	kůtiísyá	kùtiisyà, kwôôβáhyà	kütíinisä	kùγóβáhyá, kùkáγá
532	three	isàtú	isátú	isātū	itátú
115	thrust into	küsömä	kúsômà	kůchůmitá	kůsômá
420	tick (cattle or dog)	ŋkùhà	ŋkùhá	ėėmbàlàßálá	

No	English	Si-Süümbwà SiSiloombo	SíSùùmbwà SíYòòmbè	KiLòòŋgò	KiBèndè/KiTòòŋgwè
1034	tie (fasten) (vt)	kùβòhá	kůβôhá, kůdáligá	kůβóhà	kùháámbá, kùháámbililà
258	tie up	kùβòhá	kùβòhá	kùβóhà	kùháámbá nê ŋkùsá
978	tingle with excitement	kwiyôólá	•	kwiimůká	kùjilimùkà
119	tip, point	hà wờờgi	ßůsòòngóké	můhéló	kánsóóngélélé
741	tobacco	itääßé	itàáβė	itàáßė	nsùùnkô
146	today	Bülééló	Bülèéló	lèéló	bwááléló
742	toe	můnwě	inòònò	lůkůmů	kàkůmó
445	tomato	nyàányà	nyàányà	ènyàányà	inyáányá ?
105	tomcat (half-wild)	siimbûûlû	simbòólò	můgôômbà	
743	tomorrow	igóló	igóló	nèéncà	ìsònéká
166	tongue	lúlimí	lôlîmi	lůlími/ěéndimi	tůtímí/ndimí
120	tooth (canine), tooth filed to a point	llinó			liinó/méénó
267	tooth	liinó/miinó	tiinó/miinó	liinò/méénò	liinó/méénó
306	top, peak			kàsů	kánsóóngélélé
293	tortoise	fülwè	füülwè	sógógóté/ másógógóté	
277	town	můjiínì ?		ìhàlà	lùgó/ngó
378	tramp of feet	sisiíndó	můsřindó	chisiindô/nsiindô	
270	travel	kůzyà lügěěndô	kàyààngà	kůvéélà	kůjá lwééndô
540	tree	múti	můtí	můtí	siti/fiti
538	tremble, shake (vi)	küzügümä	kůzůgůmá	kůzůgůmá	kůtětěmá
566	trickle away	küsèlèmà	kúsölölóká	kůtóčnyá	kúsôôβâ
401	trunk (of elephant)	kàβikó	kàβìkó	kàßíkò	kůBókó kwá nsófů
604	try	kügèmèzyà	kůgémězyá	kůgémézá	kůliingisvá
605	tsetse-fly	nsàálé		ééndólóβó ?	kájéémbé/tújéémbé
938	turn upside down, turn over	kûpilôsyâ	kúpilúsyá, kúpiindóólá	kûpîlûlâ	kühiindülä

174 tu 711 tu (r (452 tv 185 tv	,	SiSilòòmbò	SiYoombe		
	y puro oran	kūpilimya	kùpilimya	kůpilůká	küsyüŋgülüsyä
	ant's				llino lya nsofu
				to the standard of the	1hded/mohded
_		ihasa/mahasa	ihasa/mahasa	ihasa/mahasa	Bealing III
	roll, spin with	kösümä	Kùpèlègá	kūpėlėga	Kusokota
=			247-77	Limbah	kijsijka
483 1	wist, esp strands	kùpótá	kupota	Kupota	idio
752		ßiii	ißtif	itsii	met.
		sinėna	sißeele	ensconzi	alaasli
	leginal Ju	kirfinindükülä	küfüündökőlá	küsülüülä	küfüündüküla
		illadi	matoótó	ißisi	ißisí
	20	-io	Biei	ißisi	ißisi
	payoo	-bisid-	49-44	Month	kwilgülü, hèègülü
311 u	up, above	hilgúlyá	109010	pinhor	Presions
_		ßwilmé	Swiime	pwilme	10000000
-	defecate	kūniā, kūsūβāālā	kùnià, kùsừβààlá	kūniā, kūnyaala, kūkóyöla	Kusubaala
		magneti	maansü	èèŋkáli	masu
	•	neallia	tillianilla.	kükölélá	kütümilä ?
999	rse	kutumila	PULCIFIER	0-4-1	hèéniti
307	utmost, highest point hiigúlyá	hiigúlyá		Kasa	ninfa ou
	SEU JIOUE		mwaayú		
	rapour, and	minisá	mügiisa	mügilsü	mūsipa ?
	- Allen	svaalo	svááló	kijiji 2	lùyó
	/IIIage	11-11-	Shiphaniko	mühàlákázi	műhálá/βáhálá, niná
692	virgin (bride), girl	mwaanike	DIMAGNING		bwiinga
200	inion	kiißòná	kùßôná, můlôôtělô		kùlóótá
351	HOISIA		inchia	itáká	
330	voice, (finander)	WATER	4.660	v.itánaka	külüká
224	vomit	külöka	KUIOKA	411-44-114	Links by the
524	walk (take a)	kùyèèlä	küyeela	Kutuumbagiid	- Company

lokúrá kukóóβá βita ngili kúhihyá kwiikáiáβá kwiikáiága kwóódá
-51
kwooda
miinzí
kütégöölá
ifwé
múzòβė
kúsöösyä
kwaambala
kùsůkà
_
wiinzi, iziβà, sisimà iziβà
κὐΙόβà
Blindé, èsi
yė tyaani
lögödnzó
můzůůngů
lyèèpè
ende
niinzi cuteenguia wwe muzobe wwaambala wwaambala wwambala winiimbe wwinzi, iziga, si winzi, iziga, si winzi, iziga, si muzowaga

Š	English	Si-Süümbwa SiSilöömbö	SiSüümbwa SiYöömbe	KiLòòŋgò	KiBèndè/KiTòòŋgwè
28	wicked	÷	19.	múßi	-91
339	wife	mùkitmá	mükâzi, müké	můkázi	mùkási
187	wind up (thread)	kūviga	kügööndä	kùgòòndà	kūkūúniá
746	wind	mùyàgà	mùyàgà	müyaga	můsává
937	winnow	kühéhá, kwèèlülülá	kweelola	kühéhéélá	küpéépéétá
112	wipe	küsyäägülä	küsyäängölä	kühváágúlá	kūfūtā 2
88	wire (brass)	waaya ?	waaya ?	ènyétélé	
194	witchcraft	Bülözi	Bülözi, Bösüni	Bùlògi	bùlòsi
279a	withhold from	kwiima	kwiima	kwiima	kwiimė
279	withhold from, abstain	kwilyiimä	kwilylimá	kwíyiimá	külêkâ, kwillâ siintû
338	woman	múklimá/ßákiimá	můkiimá/Bákiimá	můkázi/Bákázi	mikéémá
747	мотр	lüsaango lwe mwaana, nda	ndà		iinda
812	pow	igáámbó/mágáámbó	igáámbó/mágáámbó	igååmbô/mågååmbô	ivaambo
772	work as a mason	kwóómběká	küzééngá	kwoómbeka	külüßáká küléénna
167	work (n)	můlimô/milimô	můlimó/milimò	mùlimò	můlimó/milimô, můsiká
81	wrap up	kühiná	kùgòòndà	kūgoonda	kühäämbä
344	wring (clothes)	küninä, kükâmülâ	kükâmöölä	kůkámodla	kükama
773	yawn	kwaayola	kwaayota	kwivávámůlá	kūdajūta
593	year	mwaanka	mwaaka	mwaaka	mwaaka
750	yesterday	igóló	igóló	myéénychiló	isónéká
15	you (sing.)	oßé	δβé	iwe	üünwe
1018	you (pl.)	imwé	imwė	imwė	üümwe
715	young man	mùyààndá	müyaanda, müsüdmba	můsígázi	mülüvəlüvə
637	your(s) (pl. 2nd) person)	yiinü	yilnú	yéényù	-éényú
693	youth	můsůůmbá/βásůůmbá	můsůůmbá/ Básůůmbá můsígázi, můhálákázi	můsígázi, můhálákázi	mülüyálüyá, mühálá
			į		
			200		

No	English	Si-Súùmbwà SiSilòòmbò	SiSúúmbwá SiYóómbé	KiLòòηgở	KiBèndè/KiTòòŋgwè
292	zebra	ntúlégé		èèntùlègè	mbėėya ?

Appendix 1. Zone F word-list: F22

No	English	KìDàkámà	KìNyànyèèmbè	KìKônôôngô	SiGálágáánzá
133	abdomen, stomach, belly	ndà	ndà	ndà	ndà
495	abscess, boil	iβiímbá	ifilá	ìpùté	iviimba
786a	abundant/abound	-pá	-òkálà	pà	kôkázyá
786	abundant	-pá	-òkálà	pà	kókázyá
571	abuse, insult	-dòkánâ	-tòkflà	-tòkílà	kötökízyá
252	abuse, reproach	-iyójá	-tòkflà	-tòkílà	kůtůká
809	accustomed (get)	-mànììlà	-lèéndélélà	-léndèlélà	-lèéndélèlà
274	act (vt)	-ììtà	-ßė́ézyà	-βéézyà	-iitá
229	add up	-òòngèjà	-òòŋgézyà	-òòngèzyà	-pômyá
927	adjacent (be); border (vi)	-Bìmbíhánà	βòbìthí	-ìhélà, -βìmbíŋkànà	lởβởớmbá (n)
662	adze, carpenter's	mbiizò	mbiizò	mbiizò	mbiizò
254	affair	můháyó	můháyô	můháyô/miháyô	igáámbó
1002	afraid (be)	-ògóhā	-ògóhà	-ògóhà	-òògóhà
168	agriculture	kòlìmà	ilimà	itimà	ilimà
926	all	-òósē	wòósè	-ðsè	-òósè
248	alter, change	-příndůlá	-gálósyá	-gàlờià	-pitòtà
595	animal	ndimú	nyàmà	ndimů	ndimú
617	answer a call	-idíkâ	-itáòkà	-itáùkà	kwitááßílá
782	answer, reply	-shòòshà	-sờβílìzyà	-itáúká	-zůmyà

Se Se	English	KiDakama	KiNyanyèèmbè	KiKónóángó	SiGálágáan
664 a	ant (reddish-brown biting)	shiilaamba	sifáámbá	siiläämbä	siiläámbá
122 a	ant-hill	kigðlið	kigðlö	kigilü	kigölö
	ant (small)	sờớngwa	nybánga ?	nsúdswa	,
586 a	anvil			ityáániló	
989 s	apply by stretching, spread over	-ßáámbá	-Báámbá	-ßámbá	-ßäämbä
976 a	appoint, set up	-ìmíkā	-imíka	-timica	,
	arm, hand	kikônó/mùkônó	κὐβόκό	gdkónó	κάβόκό
	armpit	lyààpá		ŋkwápá	lyaapa
	arrange, put in order	-ßèègélèjá	-paángá	-ßégélézyà	-paángá
	arrange, put right, repair	-Вееја	-ßéégélézyá	-ßégélézyá	
478	arrive	-shika	-fikā	-sika	-fikà
	arrow	isoonga	isoonga	isonga	mwaambi
	arrow (head of); spear head	Isoonga	isbonga	nsòngè	
337	ashes	iβú/màβú	matuunde	mawi	ivú/mávú
	ask for	lòómba	-lóómbá	-lómbá	-lòómbá
	assemble, collect (vt)	-lööndika	-sangila	-kūmiŋgà	-cháángá
•	aunt (father's sister)	sėėngi	seengi	sééngi	sèéŋgi
_	avoid, dodge	-éèpà ?	-kwèèpà ?	-ihégà	-Bisya
	awe, fear of God	βοόβά	-ògóhà	ùjáámů	-lóómbá
299	axe	mbàsá	mpàsá	mbásá	mpàsá
	paboon, ape	ngờkở	ntöömbili	ngùkù, ipôómá	ŋkökö
	back of (at the)	-nùmà	könyümä	nùmà	köönyümä
	back	m(ü)gööŋgö	mügööŋgö	ω(ὑ)βόρὐβο	mügööngö
æ	backbone	m(ù)gôôŋgô gwà múgáti	тизофуда	m(ù)súŋkíló gwá mkillodónaó	

No	English	KìDàkámà	KřNyányéémbé	KìKônôôŋgô	SiGàlàgàànzà
27	bad	-ßi	-βi	-βi	ißi
37	bad (become), rotten (vi)	-Bôlà	-воза	-wòlà	-Bòlà
87	bait	chảámbó	chààmbò	cámbó	châàmbó
398	banana (plant)	idookė	idookė	m(ù)dòòkè	m(ů)dôôkè
397	banana (fruit)	idóóké	idôôkė	idòòkė	idòòkē
399	banana (for cooking)	idôòkê		idóóké	mádóóké
1005	baobab	nwäändó		mbûyû	mbùyù
1022	bark (of tree)	igótá	igólà	igólà	igólá
313	barren (of living being) mùgở ở mbà	műgöömbá	m(ů)gůůmbá	mùgòòmbà
314	barren (of land)	lyáá bó	hàà ywà	kiláángá	
376	base of tree-trunk	itiná	itinà	itínà	itinà
650	bask (in the sun), warm oneself	-òòtá	-òòtétà	-òòtélá	kwiyóóntá
576	basket of open wicker-work	isäänzö	isáánzó	ntúúŋgà	itòóndò
577	basket (plaited)	kikàpó	kikàpó	ŋkàpứ	kikápó
643	bathe	-òògá	-òògá	-òògá	kwòògá
498	be fitting, behove	kisógá	-fààyà ?	-fkòòβòkànilè	-fààyà
1	be, become	-Bi	-pa	-βá	kòßá
955	beach, coast, shore	ŋwàání	hwàání	ghwàànf	mpwàání
827	bead(s)	βờsàlớ	wäämbó	waambo	wàmbó
416	bean, kind of bean (from Phaseolus vulgaris)	shiili	kápálá	kāfūtō	kāpālā
417	bean, small (from bean plant)	måhålågè	màhàlágè ?	måhålågê	mähälägè
844	bean (runner)	*	kāpālā	nstíli, kápálá	káfútó
1037	bear child	-Byàálâ	-Bútá	Byáálá, ìpékölá	-Bùtá

berand indexad indexad indexad berand -60,98 -60,98 -60,98 beroalful -60,98 -60,98 -60,98 beroalful -60,98 -60,98 -60,98 beroal -60,98 -60,98	No	English	KiDákámá	KiNyanyeembe	KìKônôôngô	SiGalagaanza
Depart - Globa - Glorina - Glorina Devided - SOga - SOga - SOga Devided - Glorina - Glorina - SOga Devided - Devided - Glorina - Glorina Devided - Glorina - Glorina - Glorina Devided - Glorina - Glorina - Glorina Devided - Glorina - Glorina - Glorina Derivativa - Glorina - Glorina - Glorina Derivativa<	147	beard	ndězů	ndêzû	ndézů	kalèvù
bod benafful -0.094 -0.094 bod benaff -0.094 -0.094 boer -0.094 -0.094 -0.094 beer -0.044 -0.044 -0.04 beer -0.044 -0.044 -0.04 beer -0.044 -0.044 -0.04 beer -0.044 -0.04 -0.04 beer -0.044 -0.04 -0.04 beer -0.044 -0.04 -0.04 beer -0.004 -0.004 -0.004 ber -0.004 -0.004 -0.004 -0.004 ber -0.004 -0.004 -0.004 -0.004 -0.004 ber -0.004 -0.004 -0.004 -0.004 -0.004 -0.004 ber<	768	peat	-tòlá	-gùmà	-aùma	-oimà
Decision	759	beautiful	-sòga	-sògá	-sòqà	nsòga
bedestoned OHHIRT OHHIR	162	peq	Polifit	OHH	, all	kitándá
	161	bedstead	ронн	OHHI	=	lòtàántá
Description widewide widewide misked problem Description	653	pee	nzòkí	nzdki	nzůki	nzòkí
	775	peer	walwa	waalwa	maalwa, waalwa.	Bösèlé
broad for work was an analyst of process of	497	befit, suit	-ßéégéjá	-ßėézyà	-ßéélélwá	-nôzvá
bendt (wold (w) - jejdondaal -	101	below, underneath	háásí	häänsi	m(ü)külüli	hàànst
beward (v) -jobonal -jobetal -jobnal beward (v) -jobnal -joba -joba conscraded -loga -joba -joba bine	186	bend, twist (vi)	-igòóndâ	-goonda	-iqómá	
blucreation, citigata - 1-0-pa	468	bend (vt)	-lgòóndā	-pėétà	-qómà	kweelddia?
Consecuency	193	bewitch	-lógá	-lògà	-lògà	-loa
the control of the co	930	bifurcation,	nzila maaka	0	kàmààkà	mâákà
bird up, spilice dubyilia - drinkilla bird up, spilice dubyilia - drinkilla bird up, spilice dubyilia - drinkilla dubidum, shekengo dubidu		COSSTORUS				
bird-time sheking	222	pile	ndòlilà		ndùilla	
bird dinne shehigo dilenta wilelenba ber mon mon mon mon mon mon mon mon mon mon	262	bind up, splice	-lágðlá		-přzyá, -tůngá	-tôớngá
Bird Decid	658	bird-lime	shèèngò	dlémbó	wileémbó	üléémbó
the fifty or a child (-)plass - child	811	bird	nòni	nyôni	noni	nyônyi
bite -lims -lims -lims bite -lims -lims -lims biteder -lims -lims -lims biteder -lims -lims -lims biteder -lims -lims -lims bited -lims -lims -lims bited -lims -lims -lims bite -lims	46	birth (give), to a child	-ßyàálâ	-Bùtá	-ipėkūlā, -Byāālā	-Bùtá
Here and another-jubblejubble and another-jubble and another-jubblejubble and another-jubble another-jubb	125	bite	-lùmá	-lùmâ	-lùmá	-lùmá
Lind person mitigates - intentity of the dependent mitigates - intentity of the dependent mitigates - intentity of the dependent mitigates mitigates of the dependent	221	bitter	ndòlò/-lòlò	-lolo	ndòliò	ndòlò
Hend person milloliholis mpokio miluhusi beland beland milulolis milogazi milogazi belan milulogazi belan milulogazi belan milulogazi belan milulogazi milulogazi distriba dilaman pelala persona milulogazi persona milulogazi persona mangali milulogazi persona m	223	bladder	chàasù		itöndizyö	
blood mitigates mitigates intropacts to mitigates to mitigate to mitigate in the mitigates to the mitigates of the mitigates	482	blind person	m(ü)höfü	mpófü	mùhòfù	mpôfû
blow on, blow up - ficials - polula - follitzya blow bellows - golda - idusia - idusia - idusia - idusia - idusia - idusia - idusia - idusia - idusia - idusia - idusia - idusia - idusia - idusia - idusia - idusia - idusia	699	plood	m(ü)gázi	m(ù)gázi	m(ü)gázi	mùgázi
blow beliows quiglia quiglia tidiquia tidiquia tidiquia biomone many inicipia tidiquia quelle del prosest pros	496	blow on, blow up	-fùùlà	-púùlá	-fülfizya	-puùgà
blow away -iuishâ -peétà -hehélûzya honseli nag, pralse -igalambâ -Beêzya -ikúmálúzya nonseli nag, pralse -igalambâ -Beêzya -ikúmálúzya	238	blow bellows	-gúßà	fükütä	-tùgùtà	-vůkůtá
boast, brag, pratse -igaámbá -ßéézyá -ikúmátózyá	463	blow away	-lüúshā	-pėėta	-héhélőzyá	-hèhá
	776	boast, brag, praise oneself	-igáámbá	-ßėėzya	-ikúmálózyá	-ikúmyá

670 body 671 body 672 body 673 body 673 body 674 body 675	lydatio mighti mighti elodomoka elojva igiona igiona igiona igiona igiona igiona igiona igiona igiona igiona igiona igiona igiona igiona igiona igiona igiona	ę.	m(u)piti -sipoka -sebya iguna -dula -dula	máshúwá ? múßití/míßití	waató múßit/mißiti
		RA S	m(u)βiii -siβökä -seβyä igünä -dölä -bütwä	müßiti/mißiti	múßili/mißili
		g.	-siβöká -seβyá igüná -dölá -bütwá	physical	
			-sėβya igūha -dūla -Būtwa	policia.	-sißökilä
			igùhá -dòlá -Bùtwá	-sėßya	-Bizya
			-dūlá -Būhvá	igùhá	ifûpâ
			-Bühvá	-dòlá	-dola
				-Byáálwá	-Bùtwá
			-kôpá	-gópa	-kôpà
			nsopa	nsoba	nsápá
			lößifmbí	lòßifmbí	lòßòómbá
	Potá Ibgóyè Robngó		Bôtá	ūtá, kwihína	Bota
	làgàyè Bòàngò libámbá		Bôtá	ùtá	Bùtá
	Boongo		lùgòyè		lúgòyè
	Hademple		woónko	wöŋkö	Bwoonko
	TOUR BOTT		itáámbí	itámbí	itaambi
		40	m(ü)kääté	múgááté	mükääté
			-nia ifūzi	-fwattbla	-nià ifùzi
			-pùtá	-Bèlá	-Bėlá, -vùná
9	-nyà		-nià ifùzi	-fwattila	-nià ifùzí
17 breast (of a woman)	_	mádůtů	máßéélé	máßéélé	máßéélé
	_		myddyė	myddyé	mùhèèmò
_		_	-èsyèémà	-èèsyèèmà	-hèèmà
			idalájá ?	idalaja	idàlájá
139 bridge (wooden)	-			ißòtíló	
885 bring, fetch			-lèétá	-leétà	-leeta
171 bring to light	ľ				
882 bring up (a child)	ild) -lėėmbá, kėjá	kojá	-lèlà	-lèlà	-lèlà
660 brook, stream	_	9	mòòngó	kámööŋgö	ogloom

No	English	KìDàkámà	KiNyanyèèmbè	KìKònòòŋgò	SiGàlàgàànzà
942	broom	m(ù)têéyû	m(ù)tèéywé	m(ù)téyè(njè), céèyô	
113	broth	m(ù)sòzí	m(ù)sòzi	m(ù)sôzi	můfwá
381	brother-in-law, sister-in-law	shėmėėji ?	m(ů)kwěélà	m(ů)kwélá	můkwěélá
341	brother (older)	m(ů)kôlő	můkůló	m(ů)kởlớ	ilòòmbó
673	brother, relative, fellow-tribesman	m(ù)dờgớ	můdôgô	m(ù)đôgớ	mùdờgớ
874	bruise badly, take the skin off	-ikúlúmbólá ?	-tyởôβởlà	-kùβởlà	
71	buffalo	mbògó	mbògò	mbógó	mbógó
807	build	-zèèŋgà	-zyèèŋgà	-zyėngà	-zėėnga
674	bull	iyàgáámbà	nzàgámbà	nzágámbá	
80	bunch (of hair)	m(ù)sinzí, màywitlû	můsinzí	m(ú)sinzì, málúndò	
890	burden, load	m(ù)ligó	mùligó	m(ù)lìgó	můligó
645	bum (vt & vi)	-βàká	-ßàká	-βáká	-ßàká
231	burnt (become)	-pyá	-βáká	-zìgá	-zìgà
179	bury	-jříká	-zyříká	-zyříká	-zììkà
555	bush	ìpòólú	ìpòòlú	ipòòlú	ipòólú
21	buttermilk	chàáβā	mbóβòtò	mbóβôtô	
514	buttocks	idákó/mádákó	idákó/mádákó	idákó/mádákó	itákó/mátákó
301	buy	-gởià	-gởià	-gùlà	-gôlà
873	calabash	nsòhá	kikòòndò/ vikòòndò	kikôndô, ikôndô	sikóóndó/vikóóndó
857	calf of the leg	nsálútá		lòsàlútà	nsálólá
877	calf	kādāmā	ndàmá	ndàmá	ndámá
31	call	iitáná	-itánà	-itánà	-itánà
675	canoe (dug-out)	lyààtó	ngàláβá ?	ηgālāβá	ìpààngô
602	canoe	lyààtó	lyààtó	lyátó	wäätó

No	English	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò	SìGàlàgàànzà
993	carry a child on the back (in a blanket)	-hėėkà	-pėėka	-pėėpà	-pėėkà
567	carry/lift on to head (take up) a heavy load	idwífká	-itwííká	-litwífkà	-itwiikà
97	carry astride on the hip	-héékà	-pėėkà	-tigíkà	-βờớsyà
560	carry, take	-sòlà	-sòlà	-sóómbá	-sólá
578	carry, convey	-sòómbá	-sòómbá	-sôómbá	-sòómbá
104	cat	nyàáβử	nyàáù	nyááβů	nyàáβů
286	cattle	mitùgó	mitůgó	-βisáwá	mitügő
486	cease, finish	-shilá	-màlà	-málá	-màlà
526	centipede	nyènzéléélé		itántàβí ?	nzůmáálí
247	change, turn round	-kéßétá	-gàlòkà	-gàlòkà	-pilòkà
334	charcoal	mákálá	m(ù)kàlá	ìkàlá/màkàlá	mùkàlá/mìkàlá
963	charm (esp. to ensure wife's fidelity) (n)	lůkômôólâ	-	Iðkägó	•
32	chase (away)	-pêêjà	-pėėzya	-pėėzyà	-liindà
515	cheek	itàmá	itàmá	itàmá	itàmá
92	cheerful (become)	-tôgwá	-chàángàmùkà ?	-zàámà	-sáángáßálá
106	cheetah	imóóndó		iβàlàβálá	-
585	chest	kikùβá	kikûβà	kìkùβá	sifüβá
672	chest (of animals and birds)	kiniini	kidálí	kikûβá, kidáli	•
431	chief, headman	m(ù)tèrní, m(ù)hànyā	můtémi	m(ů)těmí	můhányá, můkôlô
431a	chief	m(ù)têmí	můtémi	m(ù)tèmí, mwanaangwa	můtěmí
679	child, infant	ŋwàáná	mwààná	mwààná, kàkèkè	mwàànà
597	child, offspring	ŋwàáná	mwààná	mwààná	mwaana, lößütő
886	chin	kilėzū	kilėzů	kilêzû	kálévů
83	choose	chààgòlà	-saágóólá	-såågðlà	-sààgòlà

No	English	KìDàkámà	KìNyànyèèmbè	KìKônôôŋgô	SiGálágáánzá
109	civet cat	itùùŋgô ?		-tùùŋgô	
255	clan	lùdògớ	βάκόὸ ?	igóóngò	βθkόό
841	climb, ascend	-fèèhèlà	-pálámítá	-líínà	-kòtàándá
550	clod, lump	ilòóŋgò	ilóóngó	ìwóómbá	ilóòngò
851	close (the eyes, mouth, etc.)	-fùùmbà ?	-lùgàlà	-kůndíkilá	-tiindílá, -mùmyá
299	cloth	kitààmbààlà	kitámbálá	kitäämbälä	sitámbáálá
235	clothe	-zwitkâ	-zwiíkà	-zwííkà	-vwííkà
300	clothes, material	ŋwèndá	mwèndá	mwėėndá, myėėndá	mwèndá
305	cloud	ilûûndê	ilüündė	ilüündê	ilùùndè
817	coagulate	-gààndà	-gààndà ?	-gààndà	-gààndà
941	cobra (spitting)	swiflà	nswìflà	nswiilà	nswiilà
906	cohabit	-itòómbā	-iyáánzá	-ìikálá ná múháli wákwé	
465	cold	mbėhó	mběhó	mběhó	mbėhó
624	come	-iizà	-iizá	-liză	-iizà
505	come on suddenly, take in the act	-diimā, -sāŋgānījā	-dimyà	-sángáníkízyá	-diímà
230	construct, put together	-βėėjā	 ßèégélèzyà 	-βė́ézyà	-βèézyà
471	cook	-zùgà	-tèékà	-tèékà	-tèékà
557	cook in water or fat	-pògòmyà	-sėβyà	-pógómyá	-pôtômyà
43	cooking pan, small	kisèmè	ifúlflà	nyúúngð	nsởớmpớ
385	cool (become); get well	-pòlá	-pòlá	-pôlá	-pòlá
265	copper, brass	shàβâ	shàbà ?	-	shàβá
283	copy a pattern	lòndėlėjà	-loondélèzyà	-löndélézyá	-lòòndéézyà
894	cork, stopper	kikùndíkíjó		m(ù)fûndfkîzyô	kiβizyó
52	corpse, carcass	m(ù)zógà ?		m(ú)làmbò	můlámbó
1001	corpse (human)	màitì ?	mùyàgi	m(ú)làmbò, mùβímbà	můlàmbò, můβiímb
383	cough (vi)	-kòlólá	-kòsólà	-kólólá	-kòlólá

٩.	English	KiDákámà	KìNyànyèèmbè	KìKônôôŋgô	SiGalagaanza
	conut)saja	-ßazya	-Bázyá	-Bazya
	country (our)	nsf	ust	nsf	nsi yitó
	courtyard	lòβógá	ùwanja ?	iséésá	lùßáánzá
	cover (up)	-kündikíjá	-kündíkilà	-kūndíkizyā	-Bündikila
	COW	ŋöömbè	ŋóómbé	уо́отре	ŋdòmbė
1003	coward	ηὸὸβά	rnwòòβá	тмоора	mwdóßá
	crab			kányálögéégé	
	crawl, creep	-ihwéégà	-tambalala	-ààguúlà	-ààquulà
	cricket	kinyénzéléélé	m(ú)zénzéní	m(ù)zffnzflf	٠.
	cripple	Sùúnhì	mùlêmá	m(ù)lèmá, Bàlèmá	mùlèmá
	crocodile	imáámbá ?	ŋwijna	ŋwiinà	
	cross (a river)	-Bitá	-Bitá	-táámbúkà	-taambddka
	crow (n)	ŋhàŋgölö	ikadıgalı	ikúúngüülü	nhwahwa
	crown of the head			mpååndå	mpaanda
	crumple	-kờ ứn já			-viuingá
	crush by pounding, pulverize	pòòndàpòòndà	-poóla	-từná, -βàzáŋgà, -βèlá, - từnàngà	
	crust	nzigitlwa	ŋkökötö	mákôkôló	dkwaanoolo
	cry, wail	-tilà	-tila	-tilà	-tila
	cucumber, small	mdángá		kátángá	kataanoa/mataanoa
	cudgel	ilàángá	m(ù)kòmá	Böhili, igóóngó	ρουοροί
	cultivate	-lima	-līmā	-lìmà	-lima
	cure, cool, heal	-pójá	-pózyá	-pózyá	-pózvá
	cut	-tiná	-puta	-putá	-témá
	cut, lop	-têmá		-pùtángtlà	-kėėnza
	cut to shape, sharpen -pʊʊnza to a point	-pūūnzá	-pôónzá	-pôớnzá	-půťnzá
	dance (of men, to show courage)	ishiinya	3	-ikúmáálðsyá	
			527		

2	Fnalish	KiDàkámà	KiNyanyèèmbè	KiKônôôŋgô	SiGalagaanza	
23	dance	-Riná	-saápá	-saapa	-saapa	
622	dark black	yadpi	-pi, -taßózú	-pi, wiláßözü	-aapi, ilabõle	
481	darkness	ajti	giiti	giiti	lizímá	
824	(a) wasp	-Aelá	-Svá	-angaldka	makingilima	
359	dawn daybreak	mákinailímá	-weela	mákíŋgilimá	mākiiŋgilimā	
744	day after tomorrow	mázdáli	mázdőli	mázódli, igóló yáákwé	mázdáli	
130	day	lòshikò	ldsfkd	lðsikú, nsikú	nsiká/lósfkö	
682	day-time	itimi haoátí	hààpé	lyddga	múlydóßá	
860	day (all)		lėsikė lėzimė	lyddga zélélé	lösikö lözimä	
751	day before vesterday		mázööli	mázódli	màzdólí	
423	dead person	wa Dofe	m(ii)yàgi	mùßilmbå, m(ü)láámbó	m(ü)fű	
424	death	lofú	IÒTÚ	iòfù	lòti	
931	decorate	-Geegeleja	-paamba 7	-Beeleézya	-nógélézyá	
4460	defecate	- nva	-nia	-nia	-nia	
631	denial	múlémólémá	Köküünü	kökááná, ikáánó	kokaána	
821	denv	-lémà	-kàáná	-kaana	-kaáná	
648	destroy spoil	-Gifpvā	-Biipya	-Bipya	-piipya	
437	dew	lòmè	lòmò	lòsaangú	lòmè	
219	die (cause to); put to	-potája	-wolaga	-wolágá	-ßölágá, -fwiisyá	
1027	die •	49-	-fwa	-fwá	-fwa	
425	die	-19	-fwd	-fwa	-fwa	
504	dia up. dia out	-fokèètà	-füköölä	-füköölä	-füköölä	
503	dio	-silmba	-stimba	-stimba	-stimba	
466	diminish, grow less	-pongola	-dooha	-dôóhà	-pôdŋgdkâ	
635	dio	-koia	-kòzyá	-dovya	-kôzyá	
40	t ib	mákó. Böcháfú ?	úcháfů ?	ütakala	mátákálá, mákwé, máfitá	P)
680	district, province, country	igdóngálí	usi	igūngūli	igðángáli	

9	English	KìDàkámà	KiNyanyèèmbè	KiKônôôŋgô	SiGalagaanza
245	divide	-gàβởlà	-gáwðíá	-gawòla	-gáßölá
512	divorce	kölékááná	-saga	-lekaana	-lékàànà
367	do, complete, finish	-màlà	-málá	-málá	-målå
366	eg eg	-ittá	-ßėézyà	-ßéézyá	-titá
90	Bop	iwá, mbwá	mbwá	mbwá, mbwégésé, m(ú)kwiyiyi	mbwá
292a	donkey	nzòβė	pùùndà ?	ndógóßé	
685	door	ilūgātīlo	m(ú)láángó	ilimbá	m(ù)zigó
415	dove (red-eyed)	mhüündä	nkūúndā	ŋkûûndâ	ŋkuundya
188	doze	-tiindfla	-tindffta	-tindffla	-tiindiila
529	draw water (from well) -dåhå	-dáhá	-dahá	-daha	-daha
215	dream (vt. vi)	-loota	-loota	-loota	-loótélá
328	dream (n)	kilooti	ndôóti	ndôôti	ndôôtí
448	drink	-ŋwa	-nywa	-nwa	nywā
196	drizzle	mamato	mátóónyé	mátóónyé	
780	drop, throw down	-tùùŋgólá	-sūūubaja	-lcá	-palá
284	drum	ŋòmâ	ŋómà	norma	ŋgómà
598	dry (vt), set out to dry -aanfktla	-aanikila	-aanikila	-aniktla	-aanikita
346	dry	-aabo	chà ywa	-kazú	-gömé, hálámé
954	dry up, ebb	-ddmá	-kala	-póóngóla	-ddmá
345	dry up, become dry	-dômá	-kālá	-katá	-ddmå
289	duck	mbaata	mbáátá	mbáátá	mbäätä
243	dust, cloud of dust	ιθβάάβά	Ιθράσβο	ιοβάάβά	ιοβούβο
628	dwell	-iikata	-likala	-iikālā	-iikālā
492	eagemess, zeal	támá ? ŋhóló		waangdwangd	maangomáangó,
491	eagle, bird of prey	lógálá ?		phoniga	ndėėsi
563	ear	itwi	itwi	itwi/màtwi	itwi, matwi
20	earth, land	st	nsí	wildigo	nsf
			529		

8	English	KîDakámá	KiNyanyèèmbé	KìKônôôŋgô	
4	eartherware vessel for serving up food	ոմմղցժ	ηνάψηθο	kisèmè/visèmè, nsómpó	ó nùùŋgờ
156	eat	-lyá	-lya	-lyá	-lyá
006	effort, exertion	ngúzů		ngúzú	nàgá
273	669	igí/mágí	igi/mågi	igt/mågi	ĵōį
443	eight	mùnàáné	mùnàáné	m(ü)nááné	m(ü)nääné
705a	elbow	nyaanzwi		kákókóólá, tükő	kákôórjkölá
329	elephant	mhdit	nzóvů	mhúli, nzóßů	nzóvů
336	embers	ikálá/mákálá	ikālā/mākālā	ikālā/mākālā	ikálá/mákálá
842	embrace	-kůmbátílá	-kümbátítá	-fümbátá	-kůůmbátílá
394	end (come to an), cease	-mālā, -ōyā		-màlà	-pėlė
952	escape, recover	-pila	-pila	-pild-	-pologoká
899	examine, measure, test	-piimā, -òlā	-pilma	-piima	-piimà
45	excrement, dung	màáfí	mááví	maavi	maavi
958	exorcise, drive out a devil	-isééngá		-kiindila	-sana
784	explain	-iyéléjá ?	-eelézya ?	-yoomba, wiffa	-wfflà
620	eye	Miso	linsó/minsó	llinsó/máánsó	liinsó/miinsó
828	eyebrow	ngôhê	ŋgóhé	Küünzi	
838	eyelash	ngohé	ngohé	ŋgôhé	ngóhé
587	face downwards	-Bündáálá		-úndáálá	-Büündáálá
686	face	Basha	osyo	dsyd	Bosyó
940	fade, disappear	-ziinziila		-lėka kwigėla visoga	-fûβá
168	faint, lose	fá káßimbá ká ŋgi	i	-fûtâ myööyê	-zimílá
298	fall	-dwa	-awa	-qwa	-gwa
240	fall chort	elessel.	-lindfkilwa	-dóóha	-phónoblá
5					
			530		

20	English	KiDakama	KìNyànyèèmbè	KiKònòòŋgò	SiGalagaanza
462	fan, wave	-pūúgijla	-pùúgililà	-pooliga	-piniga
764	far	kölé	külé	-kölè	kötáli, kölé
921	fat (be) (of animals)	-nona	-nònà	-ginà	-ginà
922	fat (of animals)	-noni	-ginà	-ginà, -nònú	-non-
5319	father	Baaßa	ВааВа	Даа́Ва	daada, BaaBa
382	father-in-law, mother-in-law	ßááβá/mááyð βökwi	ßaaba/maayö ßökwi	m(ü)kwiŋgwà	βāáβā/mādyġ mükwé
531	father (mv)	ßàáßà	ВааВа	Ваява	dáádá, βááβá
687	fear	ροορά	wooßa	wòòβá	βρόβά
652	feathers, fur	mayoya	wódya	máyóyá	Booya
848	fence, enclosure	ισόβά	loopa		юфра
858	ferment, turn sour	-gaasa	-gaasa	-gaasa	-gaasa
762	few (a), not much	opu	9p-	qp.	ndó
757	fierce, sharp	ndáki	-daki	-daki	-kaii
421	fig-tree				
422	fig-mulberry tree	múkóyö	m(ü)kdyd	m(ü)köyö	műköyö
216	fight	-HOIA	-ligúmà	-lgümâ	-igúmá
804		-ooksja	-òòkázyà	-Okázya	ookazya
176	fill a hole. stop up	-chißå	-kißá	-kißá	-zißità
583	filter, strain	-keméka	-kama	-kenena	-swiiza
20	filth	makó		ütâkâlâ, mâtâkâlâ	màfitá, mákwé
516	final decisive	-mala		-málá mpéló	mpélá
760	fine, excellent	-8009	-soga	nsógá	nsógá
447	finaer	lyaala	lyaala	lyaala/maala	kaata/maata
323	fingemail	làndôngá	nzaala	noonga	lózálá/nzálá
474	fire	mooto	mòòtó	mòótó	můlilô/môðtó
280	fireplace, hearth, kitchen	liikó	ШКО	liiko	lijkó, sipeémbó

Hanlich	Kinskama	KiNyanyeembe	KiKonoongo	SiGalagaanza
English			HIRB newi	-taandola nkwi
firewood (collect, cut) -tèmà	-tèmá	-buta	mandi polin-	
(v)			-	impo
firewood	Idkwi	lūkwi/ŋkwi	ıjkwı	15007
Seh in pull out	-ziilia	-iipūla	-zumbola	-zadana
Hall up, pun out	-della	samáki ?	nsóómbá, nswi	nsámáki, nsóómba
(INSTITUTION CONTINUED INSTITUTION USIN	OITIN	400-	-tènà -zùßà	-lòßá
fish (vt), frap fish	-zúßa	ednz-	ries 'ries	Mondiff
fist	ngùmt ?	ngumi ?	ıjknanzı	OOF THE PERSON NAMED IN
five	saano, itaanô	itáánó	itaano	Itaario
flap wings wildly,	-pùùgilà ?	•	-pùtángá	-papapila
flutter			Ottonbodhed	-viimbėlwā
flatulence	-Biimbéélwá	-Biimbéélwa	-plimberiwa	4014619
flavoured (be properly -feetiganita	-leenganita	-kolééla	-beeta, -seema	NO POLICE
			4000	l'oud/mbind
flower	iúwa/mauwa ?	mauwa ?	ilupa/maiupa	The same of the sa
fly (house)	iai/nai	nsaast	m(ü)sáázi, nsáázi	nsaazı
fly (vi)	-lalá	-lùớkà	-falá	-goloka
foam *	máfüló	ifuló	máfüló	olinio
1100	makild	ifuló	mafūló	ifulo
IOSILI	Circulation	Special	-Ihòndèélà	-lôôndêzyâ
follow (in order)	-loondeela	BD11001-	-loònda, -koònkoma	•
	IAAndaha	-lòòndà	-lòòndà	-lòòndèzyà
Tollow	-looinggia	mośmbi	masandú	mpaamba
food supply for a	masaaildn	namadu	2	
journey	***************************************	100000	indólú	ipòólú, isòkóóla
forest	nloods	niondi		
forme	-poonda	-kūβā	-súla	
formet	-rißila	-tagsfila	lapitla	-lapinia
inger the maline	mode mhaanhi	mataambi	mhágwá	mpaanti
tork, biturcation	Ilyadko, modomi	1 1	qui	ine
four	iné	auii	2	

N	English	KìDákámá	KiNyanyeembe	KłKónoongo	SiGalagaanz
295	frog	chádlá	chddla	collà	choola
574	fuit	kisümö		kdsúβò	
349	Ų	-kalàángá	-káláángá	-káliŋgá	-káláángá
938	fully developed, be	-kòlá	-kůlá	-kòmėėlà	-kóméélá
625	full (become)	-òòkálâ	-òòkálà	-òòkálà	-òòkálà
316	aarden	Büsitááni ?	Büsitäáni ?	isaayi	busitani 3
419	gather (flowers, fruit)	-sooqola, -voßa	-ydßå	-yaßa	-yaßa
6	gathered (be), assembled (be)	-ikûmiiŋgâ	-saangya	-ikůmiíŋgà	-ikůmiiŋgâ
368	gazelle (Grant's)	nshà ?		mpóónzò	nsyá
454	gazelle, small (impala) mòòŋgè) mòòngè		mpálápálá	
108	genet (kind of speckled civet cat)	itùùŋgò	الاشتاران	itùŋgô	ifüüŋgö
408	get, obtain	-paandīka	-patá ?	-paandika	-paandika
684	ghost, sudden apparition	mizimú		mizyóká	můzydůká
568	giraffe	nhwiga	ntwiiga	nwiigalywiiga	ntwiiga
246	give away (present)	-fūmyá	-fùmyā	-isééngá, -fúpá	-fūmyā
449	nive	-linhá	ķd-	ęd-	-pà, -péélézy
916	give light to	-twimà	-mờiikà ?	-múliká, -kèéngéésyá	-mòlèkà
815	alide. trickle	-iidīkā	-sòlólá	-tónyékélá	ewv-
269	00	·ē	-ya	-ya	-ya
639	do in come in enter	-iinoffa	-iingflà	-ingflà	-lingflà
63	goat	mbôli	mbůzi ?	mbdli	mbůzí
694	goat, (he-)	itůláángé ?		ŋgülââti	ŋgùlààti
695	pob	sėėlyą	mülüüngü	mùliúungù	
758	pood	-sògá	-sógá	nsógá	nsògá
			533		

SiGalagaanza

ya

No	English	KìDàkámà	KîNyanyêêmbê	KìKônôôŋgô	SiGàlàgàànzà
388	goshawk (East African) (Astur tachiro	lờβálà)	-	lùβálà	-
68	grain (of cereal)	lἀβὶyά, lὰβèké	lờβėkė	mpėsė	lòpèsé
696	grandfather	gòòkô	gòókò	gùúkù	gůúků
697	grandmother	màámā	màámá	màámà	màámà
432	grasp, hold in arm	-kùúmbátílá	-kumbátilá	-díimà	-vùùmbátā
698	grass, reeds	iswà/màswà	máswá	máswá	mààwáási
406	grate	-kwaala	-kwààngólá	-kwàànùlà	-kwàáŋgólà
409	great, powerful, big	ihányá	-hányà	ŋkóló, -köló	-kòló, -hànyá
164	grief, sorrow	•	mísààyò	kònywààgàlà	
371	grind (grain with a millstone)	-shà	-syà	-syà	-sià/-syà
372	grind coarsely	-hàlàlà	-pálázyá	-pàlàlà	-pálálá
212	groove, furrow	mùlàlà		ŋkúlúlú	
801	ground, cultivated	mùgởờndà	mùgòòndà	m(ú)gùùndà	mùgòòndà
405	grow up, get large, become great	-kòlá	-kòlá	-kởlá	-kòlá
913	grow (of plants)	-mělà	-mėlà	-mělá	-mėlà
461	grown (be fully)	-kờlá	-kởlá	-kòmėėlà	-kòlà
373	gruel, light porridge	hòómbâ	mùntá	ŋhóómbà	ŋkòómbà
358	grunt, grumble	-kůmyá	-sìfmà	-kiimà	-kùmyá
205	guide aright	-hànà	-hèémbékà	-lôôndôôlà	-lòòngòòzyà
351	guinea-fowl	ŋhàáŋgá	ikàáŋgá	ŋkáànŋgá	ŋkàáŋgá
701	gun	ngôóhó	ngôóhó	m(ù)ndớớzi, ngoòhô	ngôóhó
702	hair	ldywifft	lûnyêlê/nyêlê	lànyèlè/nyélè	lònyèlé
977	hair (long straight- of animals and Europeans)	nzwiii ?	ösiingá	ůsiíngá	lòsiiŋgá
75	hair (white, grey)	mvt	mví	mvwí, mbwí	lòvwi/mvwi

No	English	KìDàkámà	KìNyànyèèmbė	KìKònòòŋgò	SiGàlàgàànzà
703	hand (flat of)	ipí	ikóófi ?	kigánzá	ikóófi
157	hand, right	kòliílà	kómůlyítá	m(ù)líflà, m(ù)lyfflà	kòliilà
439	hand (left)	kờmósỏ	kómůmósô	m(ù)mósò	kůmósò
476	handle, haft	můpřní	m(ů)přní	mpini	mpini
779	hang in mid-air	-ènèènà	-ènééná	-niŋgèèlà, -niŋgintlà	-èènèènà
655	hard	iláámbú	ndààmbú	ilàmbú	ilàmé
377	hardship, distress	máköyé	máköyé	lòdùkò	rnákôyé
294	hare	βởŋààndô	kásögóyá ?	ởnààndò, m(ú)nàsàyààyì	
781	haste	màảngờ màảngờ	wààngờ	wággờ	mààngờ
795	hate, detest	-chilwà	-gàyà	-kilwà	-gàyà
700	hay	màswà		máswá mákázú	mààwáási málàmé
678	head, chief person	můhányá	mùhányá	m(ù)kởló, m(ù)hányà	můhányá, m(ů)kôlo
356	head	můtwé	mútwé	m(ù)twé	rnůtwé
352	head-pad	ŋgàtá	nzíŋgá	ŋkātá	ŋgàtá
561	heap	ilòàndò	ilààndò	ilòndò	ítůmbř
391	heap up, ready/set on fire	-βàchá	-pêêmbá	-pèmbá mòòtò	-pèémbá
623	hear	-ììgwá	-ligwá	-dégéléká	-iìgwá
543	heart	mòòyò ?, hòló	mòòyò ?	m(ù)tìmà	mòòyò
944	hearthstone for putting pots on	màfigá, màtùúgè	màfigá	ifigá/máfigá	ifigá/màfigá
893	heavy, serious, dull	itiimbú	-tylimbú	-timbú	itiimbé
705	heel (of foot)	ipáándíjó ?		kářinzilá	
681	heifer	mờớgã	ndógóósá	ndógóósá	
418	hem, make a border	-příndá	-kởởnjá	-pindà	-kờớnzá
690	hen, fowl, chicken	ŋgòkó	ŋkökó	ŋkôkó	ŋkòkó
766	here	hèénààhá	hànó	àhà, ùkô	áhá, ôkô
863	hiccup	kisékúsékú		klisákwi	kàànsèkú

2	Foolish	KîDàkámá	KìNvànvèèmbè	KiKonoongo	SiGálágáanzá
2		1-10	Died	A 200	Rica
800	hide (vt)	-bisa	-bisa	BSId-	perd.
38	high, be (of meat)	-Bòlà	-gùùndà	-guinda	-lola
326	highway	ibálábálá ?	nzila	nzila ŋhanya	
309		lògòlò		káldgölö	ldgdld
928	oji,		m(ù)ktímbili	nyoonga	
317	hippopotamus	itómóómbó	kibóókó ?	ntómómbó	ntóómóómbó
396	hit with a hammer	-pobonda		-tůlá	-gůmá
206	hoe	igèèmbè	igèèmbè	igèmbè	igèèmbè
990	hold arrest	-dimå	-diima	-diima	-diimė
575	hole, nest	idòlóló	idòlòli	idòlòló	llinà, idòlóló
836	hollow out	-dòlá ?	-kôómbá	-kómbélélá, -dölá	-kwàáŋgʊ̃là
816	home	kökääyä	kůviswé	kở wìswé	kdwfftf
654	honev	Böökí	wòókí	wddkf	Böösí
150	honour	-kðjá		-kůzyá, -sóndóhyá	-kūzya
797	hook (for pulling down miggitità ? branches in plucking fruit)	mùgiùta ?		ndòβόgὸ ηκόπtὸΖyό	
189	hook (fish)	ndóßánó	ndówánó	ndóßááná	ndôβáánô
707	hom. ivory, tusk	ipèémbé	ipèémbé	ipėembė	ipèémbé
288	horse *			twanga Büléndè	fáláási ?
708	house	nửứmbà	nyùúmbà	núimbà	nyùúmbà
263	how many?	ziiŋga	-liŋgā	ziiŋgâ	ziiŋgå
572	hump (of hunchback)	igóòndé ?		ldgúkú	
573	hump (of cow)			lògákú	
756	hundred	igáná	igànà	igànà	igáná
320	hunger	nzálá	nzálá	nzálá, misyóóló	nzálá
33	hunt	-hiigā	-ßééndá	-ßééndá	-hifga
			536		

S.	English	KiDákámá	KîNyanyeembe	KiKônôôŋgô	SiGalagaanza
34	hunter (professional)	mühitigi	mùßééndí	mùßééndí, m(ù)hífgi	mùhtígí
35	hunting	ihitigilò	òβèéndi	ùßééndí	pohitigi
227	husband	můgóóshá	m(ú)góóshi	m(ù)góósi	mülümé
808	hut	nùúmbà	nyüümbà	kānüúmbā, kātūúmtū	ißdanda
402	hyena	mbiti	mbiti	mbiti	mfisi
1016	_	nèènè	èènè	nèèné	èènè
1013	idleness, sloth	βολοβώ	üvilä	dvilla	βοζόβο
901	ill (be); groan	-saata	-lwaálá	-hváálá	-lwaálá
902	illness, (crippting)	Bosaatú	ölwiile	ülwiile	Bolwifie
275	imitate	-ilémbékéjá	-londelela	lòòndèlà	igilizya
16	in front of	mbělé	köűmbélé	Bàtóngí	köömbélé
353	in the middle of	hàgátí	há kàtí	hágátí	hākātī
118	incite	-chôngánishà ?	-sôngélélá		-soongelela
206	increase, make	-ბბუგტ)ბ	ongézyá	ôŋgêzyâ	-oongezya
155	increase	-kwdflâ		-Brtfila	-zillisyà ?
426	inheritance	isaalo		masaalo	
542	inside, in	mügätf		mögátf	mûkâtf, mûnyûûmbâ
353a	inside, middle	hágátí	múgátí	hàgàtí	hakatí
132	intestines	Bota	wola	wola	-Bola
389	intoxicated (get)	-kolwá	-kolwa	-kolwa	-kólwá
513	iron ore	mawe gá chódmá		máwé gá cöömá	таме
264	iron	chôdmá	chòóma	coomá	sydòmá
710	island			kisiwa	
2	itch	-Вара	-Baßá	-вава	-Baßá
460	jammed (become)	-haga		-fyenyééŋkélá	-hágámílá
853	jaw (bone)	ilarjgáyő	·	izákúlá / mázákúlá	
096	jealousy		iβòβá	ірода	ιβόβά
			537		

8	English	KìDàkámà	KìNyànyèèmbè	KìKônôôngô	SiGalagaanza
271	journey	lògèèndò	lògèèndò	lùgèèndò	làaèèndò
909	Judge (vt)			-lamüla	-lámùlá
810	jump, leap	-idúúmởkà	-lờớkà	-lóóká	-důmůká
477	kidney	mfigó	mfigó	mfigó	mflaó
218	kill	-Bòlágâ	-wòlágà	-wdlaga	Bhláná
677	king	mùtèmi		m(ù)tèmi	mùtêmí
787	kite	lògatà ?	lòßálá	lößálá, nyáándá	
347	knead	 -kaanda, -Billinga 	-kaanda	-kaanda	-1003
348	knee	ixxi	iyango	ópnúyi	
427	kneel	-sùkàámbā	-sůkáámbá	-sùkámbà	-tůláámbá
607	knife	lòshó	kisyd	lósyð, naðößilö	kèèlè
402	knife, thin, curved, broad-bladed	lðshó		lúsyð lwá wígööndé	löttwéézyő
704	knot	iguúndó	igùúndó	ilindó	ifüündö
626	know	-manya	-manya	-manya	-manya
178	lake	nyaanza		nyanza	nvaanza
151	lame (be)	-söómhilá		-süüntá	-sùúntá
511	lamp	chééngé	κοιόβοί ?	tálá	lòmòlè, tálà
66	land (dry)	nsf yaa bo	há ŋàà, há bờ	ŋgờớkà	nsf ngðmé/ndàá
761	large, great, big "	-hanya	-hányá	-hányà	-kôló
94	laugh	-sėka	-sėka	-seka	-sėka
792	lay over on one side	-laaja		-iníká	-iinàmikà
1000	lazy	-zóßi	dvilà	-zòßù	izòßé
669	leaf, blade of grass	iswa	maswa	idótò	itiintà, bwáási
1025	leaf (tree)	idòótò	idoótó	idótò	itiintà
911	leak, ooze out	twiina	-zwa	-sulula	-wwa
8	lean, bend down, slope	-linàmà	-inámá	-inàmà	-kööŋkömà
536	lean on, rely on	-isányá	-tègémèlà?	-iliingifilà	-tègémèlà ?

àте

then, become; gook - galands then, become; gook - galands then beaming (be) infinited - in	No	English	KiDákámá	KiNyanyeembe	KiKônôôŋgô	SiGalagaanza
Interning (Per) Interning 2 Interning 2 Interning 2	962	me; grow	-gâàndâ	-gààndà	-gaanda	-kööndá, -gáár
listaking a middengal middengal mana middengal mana middengal midd	535	leaning (be)	-iinàmà ?		-éèlàmà	-sėgamila
leave commission chieflight of	613	leam	-iiláángā		-ihémbéká	-ifundiisyà
International Content	546	leave, permission	-zūnītījā	·	-lóómbà	löhúsá
langer models -widoka -widoka langer -widoka -widoka -widoka langer -widoka -widoka -widoka langer -widoka -widoka -widoka long for -widoka -widoka -widoka ling for -widoka -widoka -widoka ling for -widoka -widoka -widoka ling for -widoka -widoka -widoka ling for -widoka -widoka -widoka ling for -widoka -widoka -widoka ling for -widoka -widoka -widoka ling for -widoka -widoka -widoka ling for -widoka -widoka -widoka ling for -widoka -widoka -widoka	1011	leave over	-saaja	-silgáázyá	-silgázyá	-lėkėla
let over (of) -lékà -lék	547	leave, go away	-tinga	-wdóka	-wooka	-pooka
over co. (Pol.) remain -shigalah -shigalah -shigalah over co. (Pol.) remain -shigalah	544		-leka	-lėka	-leka	-lèkà
Ing. force Authority and mologopia mologopia mologopia mologopia mologopia mologopia mologopia mologopia mologopia mologopia mologopia mologopia mologopia mologopia mologopia authority mologopia authority mologopia authority mologopia m	975	left over, (be); remain	-shiigálá	-siigaalīlā	-sligálá	-siigázyá
lent, locor adaption inclusions desired and adaption inclusions desired adaption inclusion inclusion desired adaption inclusion desired adaption desired de		OAG!	1.4-414	elinothing.	miorità miorità	krioniti/manti
reput, borrow adminimal model and adminish temporal model and adminish adminish adminish adminish adminish adminish adminish adminish adminish temporal adminish temporal adminish temporal adminish temporal adminish temporal adminish temporal adminish temporal adminish temporal adminish temporal adminish temporal adminish temporal adminish temporal adminish temporal adminish temporal adminish temporal adminish temporal adminish admi	310	leg, roor	Kogolo	pipfinhi	làndà	- sazima 2
le copurd mobili	174	lend, borrow	-aazıma, laanda		-talina	, add.
le down diskinsta diskinst	107	leopard	nsöβí	nsóßí	nsolit	nsalsi
ile down islasia sisala sisala sisala baraba sisala harina te control	878	lick (vt)	-làámbá	-làámbá	-laámbá	-laamba
iff on one of the control of the con	134	lie down	-làálá	-laálá	-laálá	-laála
In tr., p. p. ck vo Industrial Industr	250	lie on one's back	-sagaalaala		-laálá kánságá	láálá kánságá
light sweight included include	791	lift up, pick up	-indòlà	-wdúsyà	-indlá	-nyanyddla ?
Injust. 494 Injust. 494	467	light in weight	mbddhú	mbööhű	mbööhű	ibòòhé
Injuring biblight - debta political	304	light, sky	ilûûndê	iliùundè	ilüündê	ilüünde
Imp. witherwasth roswalstale roswalstale roswalstale Imp. core Poddarybe Podyche Imp. state restimental rosymethele inp restimental rosymethele inp restimental rosymethele inp restimental rosymethele information rosymethele rosymethele information rosymethele rosymethele information rosymethele rosymethele information rosymethele rosymethele	805	liahtnina	löláßvá		ŋkάβá	ισκύβά/ηκσβά
Imp., row Pookskrype Imp., row Pookskrype Imp., row Pookskrype Imp., row I	657	lime, whitewash	nswaakala	nswaákálá	nswakala	nswáákálá
line, fishing resistand re	213	line, row	Bòòláángé		mühfilili	můsitááli ?
Ico	629	line, fishing			ligglyè	
lip mukuno mukuno mukuno mukuno libisan dagalekia dagalekia dagalekia dagalekia nipisa mukuno mukuno mukuno dagalekia salasa mukuno mukuno mukuno mukuno dagalekia salasa salasa salasa salasa salasa salasa salasa salasa	103	lion	nshiimbå	nsiimba	nyweele	nsiimba
listen degelekka degelekka degelekka listless (ze) mógóleka - nogóleka nyeka nyeka itura livor idensifiza itura itura itura sala salak salak	198	oil	mùlòmô	múlómó	mùlòmò	mülömö/milör
listless (be) -nogoléká -nogoléká -nogoléká litrná litrná litrná litrná litrná sálká -sálká -	926	listen	-dègélékà	-dègélèkà	-dègélékà	-hülikizyà
liver itemá/lima ltima itima ltima ltima ltima liversonx (keep.) -sálóa -sálóa -sálóa -sálóa	972	listless (be)	-nògóléká		-nyėka	-tàlàlà
livestork (keep) -safta -safta	1024	liver	itémá/ítimá	itimá	itîmâ	itimá
	429	livestock (keep)	-saßa	-ទង់ពីង	-safta	-saßa

٩	English	KiDákámá	KiNyanyèèmbè	KîKônôôŋgô	SiGalagaanza
319	lobster				
794	locust	màyigè	nzigė	nzigė	nzigė
155a	(ong (become)	-liihà	-liihà	-liiha	-taltimpa
144	long	lihú	ndjihú	-liihû	ntàlí
131	look after, care for	-aanga	-tūúŋgyá	-lėlė, -tūúnzyá	-tùúnzyá
871	look after grazing cattle, help a sick man on the road	-dilmā	-dijma	-diima	-dima
354	look at, examine	-lòlà	-liinga	-lingá	-liinga
354a	look around	-lolaalola	-gálðká	-lingálingá	-lingálingà
200	look for, hang around -igóóβiltjá (to get something), pursue	-lgóóβilijá	-κοόβά	-kūŋkúsyâ	
973	loose (be); faint, weak	-nógóléká	-légéà ?	-nôgóléká	-nôgóléká
181	lost, get	-zimtīla	-taagfka	-táágiká	-táágiká
1023	louse	idá/ndá	mpāni	mpani	idá/mádá
692	love, want	-tógwá	-tógwá	-tógwá	-silmà, tògwá
934	lung	maboopo		mapdpd	ipddpd/mapddpd
713	magic *	Bologi	Olózi	ülógi	Bologi
714	maize	múdégé	m(ü)dégé	m(ù)dégè	mühiindi
521	make offerings to the dead	-isééŋgá	-ѕарна	-iséŋgá	-isééngá
226	male	igoosha	-goosha	igoosya	m(ú)góósyá
2	mamba, green (kind of poisonous snake)	kipfit ?	ηλόβόκό	nyálödőótő	ηκόβδικό
793	many	-iŋgri	nyingt	nyiingf	nyingí
1019	many,	-ingr	nyingi	igniigi	nyingf
897	marriage	wiitòózi		witóózi, kwitóóla	kwitóóla
895	marry (of man)	-tòólā	-toola	-tóólá	-1001a
			240		

2	E I GII DI	Cloanaina	Lily ally delline	officonouta	Ol Calagaal La
988	marry (give in marriage-of parents,	-tòójā	-toozya	-ftóózyá	-tóózyà
814	master	mùtèmi			BaáBa/maavo m
888	match, harmonise (vi) -lêngântlâ	-léngánilá	-gélántlá	-gėlánā	-lingànità
935	mature	-hanya	-kôrněélá	-kôméélà	-kôměélé
969	meat	nyama	nyama	nyámá, kányúúngð köðmú	nyàmà
259	medicine, remedy	Adgotá	wogaanga	ganga	Bogaanga
260	medicine (art of medicine man)	ßölágözi	wdgaanga	dłągdzi	ßöfümü
261	medicine-man	mūfūmū	mùgààngà, mfùmù	m(ü)lágdzi, m(ü)fümü	múfûmû
90	meet	-saanja	-sárjgyá	-saanga. -saangya	-sààr)gà
198	melt	-ààßà, -nànà	-aaßa	-yeyükâ	-zágá
845	midwife	műkööngá		Iggiwith	
828	migrate, move away	-saama	-saama	-saama	-saama
1030	milk (n)	máßéété	maßéélé	maßéélé	måßéélé
20	milk (curdled), curds	máßéélé gá ßögáándé ?	mbóßótó	πρόβοιό	
19	milk, (fresh) (n)	máßéété	máßéélé	masydsyd	màßéélé
903	millet (bullrush)	рорене	dstga	dsiga	рорые
290	millipede	igóngóló	igoóngóló	igóóngóló	igoóngótó
73	mix (ingredients, season food')		-loguda	-kāliŋgizyā	-twiffa
72	mix, put together	-saŋgitija	-saŋgania	-saangania, -saangya	-sââŋgyâ
363	monkey (small lightish-coloured)	nhöömbílí	ntòớmbílí	ntömbílí, kányámúliló	ntòớmbílí

				Activities and an arrangement	1-11-11-11-1
9	English	КІДАКАША	Linyanyeembe	Nivolinoligo	SiGalayaanka
362	monkey (colobus- (with long black silk hair, white on shoulders)			,	
198	monkey (small, dark-coloured)	ŋgởkở	ntöömbílí	ŋgùkù	ηκόκό
716	moom	ŋweezi	mwėėzi	mwėėzi	mwêêzi
908	moonlight	ŋweezi	mwėėzi	mwángá gwá mwèèzi	mwėėzi
69	mosduito	ibó/mbó	lóbó	mbù	mbá
136	mother	yaayo	mááyö	maayo	màayó
35	mould (pottery)	-poómbá	dómbá	-póómbá	-Bodmbá
717	mountain	lògòlò	làgàlà	-logolo	lògòlò
163	mouming	Kilitio	Killio	Killió	sittiô
1026	mouth	mülómó	mülômô	m(ü)lómó	mülbmb
272	movement	lùgeèndò	lügèèndó	liggeendo	lùgèèndò
979	mud, mire	malóló	mátôpé ?	matóló	málóló
342	mushroom	βόόβά		νόόβά	βόόβά
152	mutilated (be)	-lemadia		-lemaála	-temáálá
281	name	liiná		lliná	lilná
539	namely	hở kủyôômbà		ilvi	nokówfilá
403	nape (of neck)	nhàgáláló		ükösi	Bokósi
256	navel	indkú	in in	ikoombo	Woondo
765	near	bithi	bithi	bithi	biihi
379	neck	nhlingó	hiingó	hiingó	ikòsi
843	need, request	ŋhdómbó		κίκδόβά	hàájà ?
962	new	-pyá, -géni	mpya	m(ii)pya	-pya
718	night	Bůziků	úziKő	Bůziků	Böfükü
755	nine	kééndá	kééndá	kêêndâ	kèèndá
484	nose	njindó	nyiindó	njindó	nyjindô

A		No 211	English	KỉDákáma naamba 2	KîNyânyêêmbê	KiKonoongo	SiGalagaanza
Control Cont	deStrond character charact		nambar	manifold :		mbazyo, naamba	m(u)laamba
	officiant diffigured and a state of the control of		JPO	nomuno		m(ü)tiiŋkö	m(ü)tiiŋkó
March Edyphaskow	March Edypatakow		obstruct	-ktingá	-kaana ?	-kiingá	-kàánà
malgota mateta magota magota mateta magota magota mateta magota mateta magota mateta magota sa ta ta ta ta ta ta ta ta ta ta ta ta ta	milydia middia middia middia middia middia middia middia middia middia middia middia middia middia middia wa kaba middia middia wa kaba middiada middiada wa kaba middiada wa kaba middiada wa kaba middiada wa kaba middiada wa kaba middiada wa kaba middiada wa kab		offspring	βààná, βöβyàálwá	mwaana/βaana	mwaana, mußütó	ισβάτό
oli (Innest ne pasa kabb malakah malakah malakah oli (Innest ne pasa kabb kabb kabb kabb barba kabb da barba da barba da barba kabb an mojoyab harba malakah malakah malakah da barba kabb an mojoyab kabb an mojoyab kabb an mojoyab kabb an modo waka kabba an modo waka kabba an modo waka kabb an modo waka kabb an modo waka kabb an modo waka kabb an modo waka kabb an modo waka kabb an modo waka kabb an wodo wakab kabb an wodo waka kaba an wodo waka kabb an wodo waka kabb an wodo waka kabb an wodo	oli (Innest ne pasa kabb malakah malakah malakah oli (Innest ne pasa kabb kabb kabb kabb kabb kabb kabb k		oil (from plants)	mágútá	máfútá	màgútá	màfùtá qá Bộtỏ
old times, the past kaken kaken kaken kaken ded personn (vi)undammäskinn(ölgijald ni)olgidald mindammäskinn(ölgijald ni)olgidald mindammäskinn(ölgijald ni)olgidald mindammäskinn(ölgijald ni)olgidald mindammäskinn(ölgijald ni)olgidald handis kaken kaken kaken yonn mindammäskinn(ölgidald kaken kaken kaken handis handis handis pom nice a ajac a dissema hasken handis	old times, the past kake that the table that the definition of the past kake that the definition of the past kake that the past kake that the past kake the		oil	mágùtá	máfútá	màgútá	màfûtá
of person m(s)/makemission (logishido) m(s)/makemission (logishido) mondmassi, makemission (logishido) one-eyed (being) s-boltokilo -à shate sichologic schologic open mendru wide skestma skestma skestma skestma open mendru wide skestma skestma skestma skestma open mendru wide skestma skestma skestma skestma open mendru wide shestma skestma skestma skestma open mendru wide shestma skestma skestma skestma outsis, jet street street skestma skestma skestma outsis, jet street street skestma skestma skestma outsis, jet street street skestma skestma skestma outsis, jet street strincita skestma skestma skestma outsis, jet street strincita skestma skestma skestma outsis, jet street strincita skestma skestma skestma	of person m(s)/maken/sident/logalisof m(s)/maken/sident/logalisof m(s)/maken/sident/logalisof mondarised, miskedia one-syed (being) shottler shottler shottler open month wide shottler shottler shottler out of jot away shottler shottler out of jot away shottler s		old times, the past	kálé	kálé	kalè	nsikó, kálé
one-specification sublishicition j skale Relativistion, lyskale one-specification sologistion j skale skinder open month wide skinder skinder skinder open month y less skinder skinder skinder outlet, plet st skinder skinder	one-speed (belief) scholokolto -à skale Reinkolto, (yakaste one-speed (belief) skohndo yafron skohndo open mondh wide akasima yafron yafron open mondh wide akasima yafron yafron open mondh wide akasima yafron yafron open mondh wide dayaka yafron yafron open mondh wide dayaka yafron yafron open mondh ye firmod yafron yafron out(s) pt 1 spresson yafron yafron yafron varquelis hight -furna -furna out(s) pt 2 spresson yafron yafron yafron varquelis -furna -furna -furna out(s) pt 2 spresson yafron -furna -furna varquelis -furna -furna -furna varquelis -furna -furna -furna pack to wide -furna -furna -furna pack to wide		old person	m(ù)nààmhálá/m(ù)giikól ố	m(ù)gikölö	múnámálá, műkikülű	m(u)kiikolo
one e-speci (beins) shortpool resolution association binno b	mer-eyed (bein) shortpoy inschippy sekkopo come comments with substance and sekkerne comments with substance and sekkerne comments with substance and sekkerne comments with substance and substance a		plo	-kölökölö	-à kálè	ikůůkůů, lyákálé	-köáköö
open menth wide abserting a skewma open menth wide abserting a skewma open menth with abserting a skewma abserting a skewma open menth with a skewma abserting a skewma abserting a skewma open menth and a skewma abserting a skewma abserting a skewma abserting a skewma abserting a skewma abserting a skewma and a skewma a	open menth wide absertind a shadown open month wide absertind a shadown open month wide absertind a shadown open month wide absertind a shadown a shadown open month of a shadown and a shadown a shadown or shadown and a shadown a shadown and a shadown and a shadown and a shadown and a shadown and a shadown and a shadown a		one-eyed (being)	soongo	nsóóngó	sóóngó	
open control, wide, a sistermal open control, with a sistermal open control, with a sistermal sistermal sistermal sistermal sistermal signals. Assistration of signals signals and signals sign	open month wide staken -skelma -skelma skelma		one	lómò	yfmò	yímó, söölő	imò
open dipolatal, inclination of control and control	open dipolata, inclination depotes		open mouth wide	ààsámâ	-àsámà	-aasama	-aasama
order (est ajan) a coro sabassanita a skappata supplica supplica suppliata supplica supplica supplica supplica supplisa suppliata suppliata supplisa suppliata supplica supplica supplica supplica supplica su	order (era ajan) a coro sabassamita a skappata subjects to core core core and core core core core core core core core		uado	-lùgởlà, -từúŋgởlâ	-lúgðlá	-lúgůlà	-kingðlá
ordic direct direct control control designing a deglizing a control co	ordic direct direct control co		open (set ajar) a door	-sáánsámíká	-kiŋgólà	-lùgởlà hàdóó	-siindīkā
out(s) pt 1st person) inchopped inchopped out(s) pt (sp), pp wwwy titings yillwwd yillwwd out(sige), pp wwy titings -furma -furma out(sige), pp wwy titings -fuinds -fuinds out(sige), pp wwy titings -fuinds -fuinds wangeller -footodat, ticknown -footodat, ticknown opster -footodat, ticknown -fuingsdenia pack, tross synopher -fuingsdenia -fuingsdenia pack, tross packer -fuingsdenia -fuingsdenia	aut (i)p L1 fat person) inchogod inchogod aut (iip) p L1 fat person) yiliswe richogod yiliswe -furna -furna outside -imma -furna outside -imma -furna outside -imma -furna vampas -imma -furna vampas -imma -furna vampas -imma -furna pack (wilgade) -imma -furna pack (wilgade) -imma -imma pack (wilgade) -imma -imma pack (wildage) -imma -imma <		order, direct	-tòmá	-làgilizyà	-lágilizyá	-laqilizva
one of (s0), go wave, pilished or (intra) yilkhed pilished pilished pilished pilished cluma oudside pilished controller. yilkhed pilished cluma oudside pilished p	or (go), go way jishee jishee jishee gilabe		ostrich	inóóngú		ndóngú	
outside - (units) - (units) outside - (units) - (units) outside - (units) - (units) outscorner, viv. - (units) - (units) outscorler, viv. - (units) - (units) oyaler - (units) - (units) oyaler - (units) - (units) park, from cyclopher - (units) - (units)	outside - furmata - furmata outside - furmata - furmata outside - highers - furmata overcome, win - kiinrida - kiinrida - wond by be - shorted - doorsal, toknowa oyster - shorted - fullogabania pack, forck, (longo patata - shorted - kinngabania pack, forck, group - shorted - kinngabania pack, forck, group - shorted - shorted pack forck, group - shorted - shorted pack forck, group - shorted - shorted pack forck, group - shorted - shorted pack forck, group - shorted - shorted pack forck, group - shorted - shorted pack forck, group - shorted - shorted		our(s) pl. 1st person)	yiiswè	yiiswė	yiswè	stftú
hadazea hi badaia kwithadaa -kiincia -kiincia -kiincia -koorakea -kooraka koorakea -kuongaa hamo -luungaa -kiincitia -kiincitia -kiincitia -kiincitia -kiincitia -kiincitia -kiincitia -kiincitia -kiincitia -kiincitia	Hadazea Ni badaia kwithakaa -kiincida -kiincida -kiincida -koonakaa -koonakaa koonakaa -kiincida		out (go), go away	iinga	-fümá	-fûmá	-fùmá
ini, -kiincid -kiinci	ini, -kiincla -kiincla -kiincla -kiincla -kiincla -kiincla -kiincla -tokorinka tokorinka tokorinka tokorinka tokorinka tokorinka tokorinka -kiincipa -kiinci		outside	háánzé	híi báálá	kwiibaala	hàànzé
Holombuka - dounga hamo - dounga homo - dounga hamo - doun	Holombus Holombus		overcome; win, vanquish	-kiindá	-kiindá	-kiindá	-klindá, -siindá
Po) - Noinga hamb - Noinga - Noingalania - Noindila - Noindila - Noindila - Noindila - Noindila - Noindila - Noindila - Noindila - Noindila - Noindila - Noindila - Noindila - Noindila - Noindila - Noindila - Noindila	Pe) - duinga hamb - duinga - duingalani		owed by, be	-tóóndwá		-tóóndá tóóndwá	-tôóndá
y) - Liúnga hám - Liúnga - Liúngadaia cyosther - Liúnga - Liúngadaia proup - Liúnga hám - Liúnga proup - Liúnga - Liúnga proup - Liúnga - Liúnga proup - Liúnga	y) - Lúdinga hám - Húdinga - Lúdingadania proup datale - Homb - Handia norde (ii) - Homb - Homba - Haldiani norde (ii) - Homba - Haldiani norde (ii) - Homba - Haldiani norde (iii) - Homba - Haldiania		oyster				
Alinchia Alinchia Grapher Cogether Cog	ogether		pack (luggage)		-เบ้นักดูล่	-túùnoáániá	-tining
group idabile -illondo idabilemadabile Aundle (n) - ildombá ildinásyi ndlinhó ndlinhó - ndlinhó	group idable -librido idablembalabe harde (n) - hidomba indeliza- ndifino - mitino - sas		pack, press together			-kiindila	-sómékélélá
sundle (n) - Hödmbá idinkásyi ndřínkó - mutilnykó	sundle (n) - Itotimbá lifekinsyi nditnhó - mulinyó mulinyó - 543		pack, flock, group		-ilòndò	idaalé/madaalé	idaale
ndžínhó - mutinkó	ndiinhó - muliipkó - S43		pack, bale, bundle (n)		îtôúmbá	ifûlûûsyi	
	543		paddle (n) *	ndiínhó		mütiiŋkö	m(ù)tiíŋkó

Lightsh	KIDakama	Minyanyeempe	Aironoulgo	The state of the s
	ilaángó		ilánkö	ilaarjgo
oalm (date)	mülêéndé	mùtêéndé	müténdé	
	waalwa		waalwa	
asim (of hand)	konaanza	kłgaanza		igáánzá/mágáánzá
safm (raphia)			múhàmà	m(ü)sününü
(SI	mühama	mühâmâ	,	muhama
	màwésé ?	m(ü)chikichi ?	mûßêsê	m(ü)chikichi
palpitate, flutter, tremble	-détémá	,	-tetema	tetema
parent, s/he who	müßyffyé	mūðtí	múßyáázi	majati
	kásúků ?	kásúků ?	kásúků	Kásúků
sass. Surpass	-Bitá	-Sha	-pma	-Bita
	nzila	nzila	nzila	nzila
	-Hoh	-lipà	-līpā, -sößyā	, if på
pay attention, take	-101#	-lingfilla	-Hings	-liftygå
eel, shell	-tòóndólā	-paáta	-paata	paata
	idòlóió/màdòlóió		mbagó	
peds (tent)	máámbó, mákömélő	maambo	lòmààmbó/ mààmbó	tómáámbó/máambó
penetrate	-Bita		-ifyéényénkézyá	-dola
	mbolo	igoló	ilòga	ologui
sanknife tancet	iohémbé	kageembe	kagèèmbè	Kageembe
	minimp	moonto	mūūntā	müüntü
	nwdishi	mükööŋkö	ιπ(ü)kööŋkö	mwitnst
	nobliße	ngülüßè	ngülüßè	ngülüßè
pipeon kind of	hidada phidada	nkūūnda	ŋkinda	ŋkùúndyà
oile up, pile loads on		-lùndìkà	-lòndìkà	-londika

Š	Fnotish	KîDakáma	KiNyanyeembe	KiKonoongo	SiGálágáánzá
479	pinch, make narrow	-shina	-sinà	-sinà	-sinà
357	pipe (tobacco)	ntéèmbà ?	mütéémbá	m(ù)têêmbâ	müléémbá
552	oit hole	llínha	liina	liina, ikolobrygwa	liinä
974	place put (vt)	-dttflå	-ingizyà	-toola	-tītīlà, -tòólā
722	place (n)	hàànhỏ	hànó	háántů, hákimbátí	hàntò
892	place of the dead	könhálíkíló		kở gafú	közimű
225	plait	-sùkà	-súká ?	-sißå	-súkà
932	plant sow	-haamba	-haamba	-haamba	-téélà
510	platform	igtālā	lòtàlá	lòtàlá, lòtààlè	lötálá, lötáántá
834	please, satisfy (vt)	-igótyá	-kölöélá	-tósyà	-nòzyá
63	pleased (be)	-tôgishiwà	-tògiiziwà	-tógéziwa	-nòzya
13	plot of ground	lòβóógá	khwanja ?	seesa	lóßáánzá
647	plunder (a town)				
1014	plunge into, cause to -pônějá sink	-pònèjà	-tmbūkizyā	-táágilá	-důmbůktzyá
114	poke	-soosela	-pêmbélèzyà	-pėėmbėla	-pėémbėlėzya
737	pole, thin	liggitó	lògitò	-lùgitó	lògitô/ŋgitô
Ξ	polish, clean by	-nèlėja		-giùisà	-kūūsā
177	pool poud	ilaámbó	iláámbó	kalaambo	katáßá, iláámbó
923	porcupine	ndöngöll		ոցցույ	nddygdii
374	pomidge (stiff)	Bogáli	ùgálí	úgálì	Bogali
42	pot (metal)	ikóópő	ikópó	ikópó	ikópó
4	pot, vessel	kisėmė	kisėmė	kisėmė	sisémé/visémé
39	pot, mug	mùkéébé	m(ü)kébé	mükébè	mükebe
40	pot, cooking (earthen) nüüngd	nùùŋgờ	nyùùŋgð	nyúúngð	nuingo
749	potato (sweet)	kafü	kàfů	káfű	kāfū
646	potter's kiln	itánúlů ?		ttimito	itimiliò

hoolish	KiDakama	KiNyanyeembe	KiKonoongo	SiGálágáánzá
ain in a get off the	-pòólā	pùúia	-póólá	-twàángá
	-	4	488	-seesa
onr away	-IIIa	-MG		CALLES ABOUT
. onc	-ditila	,	-kenena	-tuuka, uula
rennancy	nda	nda	mwiltüüŋgö	nda
9	-knßi ná ndå	-ßà ná ndà	 -kößá ná mwittúúŋgó, ndà -ßa na mwittuu 	-Sa na mwiituu
	-Reéaéléiá	-Bégélèzyà	-kwiißáángá	-nógélézyá
t (oil seed.	-góóngá	-sindíkà	-goonga	-siindika
				W.m.s.
forth,	-fūmyā	-fúmyå	-fúmya	-tumya
	1000	Comp	-fomfokáná	-fûmâ
prominent (be); put	-tuminja			
pronounce	-voormba		-yoompa	-yoompa
charm	-kāgā	-kàgá	-kágá	-kāgā
(medicine)			****	4004
protect by charms (target)	-kāgā	-kāgā	-kaga	offer.
ouff.adder	imámbáhili	Kipfil	Kipfit	Kipiii
	-littà	-kwèèsà	-kwėėsa	-kwèèsa
that a of amon on	-thm4	-thmá	-timá	-ttmå
pull up, control to a man	dibrilla	elibrid.	-dūbėla	-dúbôlà
pull up, root up	adodta	-kokota 2	-kwèèsa	-kwėėsa
ball, ulag	The state of	Bómbá	iBóómbá	igoomba
dund	pooring.	d appoint	-tėnka	-siindfka
bush	-Shillings	DALLING.	41444	-10019
put, place, set	-toola	-toola	-toola	Bookuland
put together for	-léngánijá	-liinga	-linganizya, -gėlanizya	-migamzya
Company	*****	40.444	-oloka	-teéngá
put a pot on the fire	-teeriga	10014		2
		546		

oßlir

я 9	English	KìDàkámà	KINyanyeembe	KiKônôôŋgô -tùúŋgâ	SiGálágáánz -liingá
981 p	put together, compose -(see)a	-Beeja	sato	nsató	ilsald edola
862 p	python	isato	-ikénià	-ikėnia	wires.
_	quarrel (vi)	-iyilwa	-zimya	-zimyā	-Silliya Idambada
180	quench, extinguish	-Zittiya		-léémbéélá	- printer
	dniet (be)	-pola	mvúlá	mbülâ	Silvm aming
	rain	mbula	-tôónvà mvütá	-tóónyá mbúla	- Samuanili
	rain (vi)	-1019		mwanuli	-in-in- oldiky
60	rains, the lesser	nwaanon	kidiki	kidiki	Sipwa, siuma
	rainy season	kidika		-Iljudimå	-luluing
280	numble	-dudumoka	,	ndèzi	KUSWA 1
98	rat, kind of	osobu		nséénzi	rjkoso
488	rat (field)	(fükö/műűkö	okoso	ŋkĠsġ	nkoso
24	rat	ngoso	mfilko	mfükò	
3	rat- (very large,	ngoso			Maddanhi
3	long-tailed)		whitempe	lùgèèmbè	- one
883	razor	Юдеетре	sómà.	-soma	-Somethia
949	read	-soma	-imbdla	-imbola, -pula,	miodilli-
1007	reap, harvest	timbola		-tona	-nòkėėla
		pokobla	-pokėėla	-pokeela	måtété
273	receive	- ddbt	mådété	makuumaa	-kaana
537	bead	Hadele	-kaáná	-kaana	kaána
632	refuse, say no		-kāānā	-kaana	ikala
633	reject, refuse, dislike	(e -lema	-siga	-siiga	ikala
545	remain, stay behind		-sliga	-siigālā	-izrìkilà
1035	remain, stay	-Smigale	-izókilá	-izokila	šlývi.
840	remember	-IZOKIIA	-ikóla	-likola	ikólá
499	resemble,	-tikola	-lkòla	-iikola	now!
879	resemble (very	-IJKOIS			
	Closely)				

No	English	KìDàkamà	KiNyanyeembe	KìKônôôŋgô	SiGálágáánzá
1031	resemble *	iikólá	-ikólá	-ijkólá	-ikólá
149	rest heavily on, be burdensome	-lèmèèlà		-zóβélwá	-timbilwå
964	rest the cheek on the -iidiímāā Itāmā hand (in brooding mood)	-ildiímāā Itāmā	-isúmátá	-idiímá itámá	-idiima itama
957	rest, take a holiday	-isúúhyá	-suùhà	-sūūhā	-itóózyā
249	return, go back	-iiza	-sùßà	-sùßá	-soba
1004	retum	-shooka	-sùßa	-süßa	-soßá
200	revive	-pėmbódiā		-héémbádca	-fotoola
318	rhinoceros	mhèlá	mpémbélé	mpētā	
988	e	lòßàzü	lòpazú	юβаzü	Ιοβάνώ/πράνύ
473	ripe	lya Bópyè	-pillé	lya Bopya	iplillé, ßöpyé
966	ripen (vi) *	-pyá	-pya	-py4	-pya
472	ripen (vi)	-pya	-pyá	-pya	-pya
209	river	ффидор	ogloom	moorgo	οβίορομ
239	roar, numble	-hillá		-lindima	-lükimila
644	roast	-ôôchâ	·	-kāliiņgā, -bānīkā	-banfká ?
350	roast (in/by fire)	-twitma	-banika ?	-tiimá, -óócá	-tima, -papoola
808	rock	iwė	italé	Italé	italé
291	rooster (cock)	ikadnadiamé	-küngülümê	ikingulumé, hüngülümé	ŋkiŋgülümé
169	root	můzi	m(û)zi	m(ü)zi	múzi
29	rotten	ißi, -Bölé	mbi	ißi, -kenágökílé	βοβοιέ
1012	(Da) puriou	Jaonzééla		-filingana	-Billinga
183	round (go), turn round -igoonzá	·igóónzá	-ziingá	-ipilinga	-ziiŋgå
566	round become	-Billinga	-Billinga	-Bilinga	-ipilimyà
110	- F	-kota		-kúlůůzyà	-sogóla
2	outhich garbage	Richals 2		matakata	matakala
5	a Room R				
			548		

400-1	Kinskémě	KiNvanveembe	KrKonoongo	SiGalagaaliza
English	The state of the s		(iline) cuilti	izvaala
rubbish heap	ishima ?	,	pinfinan	1,444
900	-pėėla	-pėėlą	-peela	-IIOKa
- Consider	mathmóló	,	kálýmbiló	
Sacriffice	minimi	minimi	mūūnyū	moonyo
Sail	Illumin and a second	- Contraded	m(ii)sėnoėsėnoė	můsééngá
sand	m(u)seerigera	Interdiagning	- C - C - C - C - C - C - C - C - C - C	-ilevità
satiated (be); have	-igótà	·ikótà	-ikūta	-INDIG
enough to eat or drink				physics
satisfy	-fûjà	,		1102.90
of let to	-wifi8	willa.	-wfflà	-Swilla
say lo, ten to	ikòmi	kàmiinà	kâmină	kamiina
acorphose.	tour house 15	-kwaanorija	-pala	-palángdzya
scrape	-Kvidal jyola	buddendilla.	-kwáánotilá	-kwaangola
scrape, grate	-palala	BIOGIPPAN-	P. Andrews	singanila.
scratch, grate *	-ishinágðlá	-sinaagula	BIIRBWY-	diam'r.
ecidho cirklo	imòòió	imoózyó	imóózyó	Ilweezyo
acquire, storms	kóóßá	-kōōßà	-κόοβάκοοβά	-kooga
Sealon Io	philiphials	élúséu-	-kùlà	-besa
search diligenily	palaabala	14 170	jejnímbí	ifinimbi
seat, stool, chair	isuumpt	Suumot	1 1 11	Bàná
See	-Bòná	-wôná	-wona, -linga	-polia
-	InRhofi	mbivó	mbiyó	mpato
nooc .	dima	-difma	-diima	-diima
2018	and of the life	-èníkílí	mwenikili	m(ü)sáßá ?
Sell	- Alib	- Suzdio	-gôzvà	-gòzyà
lles	-Bolos	Paris de la constante de la co	-trimfilzva	-tòmá
send	-toma	PRATITION-	Total Control of the Parket	SARAIA
senarate, set apart	-teéngá	-bàágðlá	-toola heeke heeke	-gaboia
separate, leave each	-leksana	-lékááná	-lékááná	-lekaana
other			4444	thát.
set a trap	-légá	-tega	Real	- Sample
set (of the sun)	-loká	ίγουβα κόσνα	loka	Pilippå7-

971			Drilland in the later		D7 InnSupple
24	settled (be); be in good order	-lèémbéélá	-ßégélézyá	-gėlanila	-liŋganila
	seven	mpüüngätī	mpùúŋgàtí	mpüŋgáti	mpüürigätf
1033	sew.	-sūmā	-sůmá	-sūmā	-súmá
589	sew	-sùmá	-sûmá	-súmá	-súmá
135	sexual intercourse with (have)	-Мобитьа	-iyáánza	-yaanzana, ilaala, -toomba -itoomba	oomba -itoomba
169	shadow, shade	chiniini	kinziminzimi	m(ú)táká	m(ú)táká, kinzémé (hůmán)
198	shame, disgrace	nsoni	nsoni	nsóní	insoni
116	shame	nsoni	nsoni	nsòní	nsoni
724	shame, modesty	usoni	nsoní	nsoni	nsoni
386	sharp (be)	-ddgfha	dgihà, -gùmà li ngddlyd		-tyáálá
920	sharpen	-nòòlà	-nòòlà	-nôôlà	-noota
915	shave	-móógá, -söönzöölá	-seénya	-séényá, -móógá	-mòógá, -sönzöölá
603	she, he	weel	mwenfkfif	mwenikiti	aawe
287	sheep	hôló, ŋhôló	ŋkólò	nholo	ntaama
1009	shell, cowrie	nshlimbí		kômbélélé	nsilmbi
822	shell	nshiimbi	tokombélélé	kômbělété	
725	shield	ŋktinga, löŋödda		lökööngá	
712	shin (bone)	m(ü)ldöndí	mülööndf	m(ü)löndf	mülööndi
896	shiver, shudder *	-détémà	-tetémá	-tétémà	-tétémà
528	shiver	-détémà	-tetema	·tétèmà	-tètèmà
434	short	ngühí	ngühí	ngúhí	sifüpf, -gühf
430	shoulder, tip of	igoondi	ißégà	nsoto ya maßega	ißėga
588	shoulder	ißègà	ißègà/måßègà	ißégá/máßégá	ißégá
839	shout	-yògá	úpití ?	-tota iboobó	-yógá
946	shrivelled (be); wrinkled	-ikúná		-kaakanyala	ikôơnjá

Ñ	English	KìDàkámà	KìNyànyèèmbè	KłKónoóngo	SiGalagaanza
763	sick	-saatú	ndwifilė	m(ü)lwiilé	m(ü)lwitilé
870	sift	-chèká, -yddnga	-yoonga	-yddnga	-vòờngà
615	sing	itmbá	-tîmbá	-imba	-timbá
က	singe	-βáβá, -biishâ	-Baßá, -zúzúúlá	-BàBá	-BàBóólà
980	sink, be drowned	-twiinā	-юва	-dumbukila	-talala
170	sink	-lißità	-zyaama	-zyaama	-zvaama
726	sister (his)/ (her) brother	káltiðmbó	ilômbô	ilòmbò	ildmbó
627	sit	-iikālā	-ikālā	-ikálà	-iikala
753	six	mùkàágá	mùkàágá	mùkáágà, hààgá	můkádoá
785	size, measure	kigėmo, nshimo	m(ü)kimó	Böhányá	stimó
123	skin (of person)	ndili, ndilii	ndili	ndfit	ndili
124	skin/rind (of fruit)	igólá	ipàlàlà	ikůůmbá	itākalā
303	sky	llùùnde	ilüünde	ilüündé	iliùùndè
865	slander, accuse falsely, often secretly	-léémbékéjá	-songèlelà	-sóóngéélá	-sóóngélélá
470	slap	-tòlá ípì	-láátðlá ikóófi	-tòlá ipí	-qùmà ikóófi
970	slash	-tèmá		-pùtá	-tèmá
220	slaughter	-siinza	-siinzá	-siinza	-siinzá
727	slave, bond servant	m(ü)sésé	m(ü)sêsê	m(ü)zyå, m(ü)sésé	mtòmwa ?
728	slave (female)	m(ü)sėsė	m(ü)sėsė	m(ii)zvà	
729	slave, (male)	m(ù)sèsè	m(ù)sèsè	m(ù)zyà	
136	sleep (vi)	-làálå, -tiindílâ	-laala tõló	-làálà	-laala
731	sleep (n)	tiblió	tůló	tòió	tòió
730	sleeping-place, accommodation	hà kờiáálá	há úlááló	ndàáló	hà (kỳááló
296	slip, be slippery	-nyééléléká, -nyöülölöká	-tyėėlėmūka	-tyèèlèmùkà	-tvėėlėmūūnka
1021	small	pdo	ndó	opu	sidó
332	smallpox	ndöbí	ndößí	kááléémbé	ndöví
			155		

					- It- III-
Š	English	KiDakama	KINyanyeembe	KiKonoojgo	SiGalagaanz
241	smell (sweet) (vi)	-mòòtá	-nüŋkditlá	-möðtéélá	-nüŋktitla
242	smell (bad, of fish)	ίεθό, ἰπὰῦβό	-nūūŋkā	ցունային	könüüŋkâ
240	smell (bad) (vi)	-nùữnhà, -nùữhà	-nùùŋkā	-nüühä	-nüüŋkā
629	smoke (n)	lyóóchí	lydrjki	lyöki	lyòònsí
428	smoke (give out) (vi)	-zūūkā	-zúúká	-zùùkà	-túúŋkā
387	snail, slug	ŋgòòfú		ηκόιόξα	mfwèėlò
837	svail	ngoofii		ŋkölöfü	mfwèèlò
145	snake, serpent	nzóká	nzóká	nzóká	nzóká
158	snare, trap (n)	ißtindó, m(ù)tégő	mddpå	m(ü)tègó	můtěgó
864	sneeze	-ityáámůlá	-tyaamüla	-ityaamüla	-ityáámůlá
924	sniff, smell out	-nüünyhä	-núùnsya	-nūūhyā	-nüünsyà
296	snore, snort	-kólómá	-kölömà	-kòlòmà	-kölömá
69	soil	βθίφφημά	φιρφούρ	ðlóóŋgó	βοιοφήθο
732	Song	lyttmbó/mttmbó	lwffmbó	lwitimbó/ nyitimbó	Milmbó
616	* sonos	mttmbó	nytimbó	hvitmbó	nytimbó
36	soot	mákilí	makili	mākili	māķili
195	sorcerer	mülògi	m(ü)lözi	m(û)lôgi, m(û)kônikôni	mülőzi
201	sore	iloónda	ilòòndà	kiloonda	kilóóndá
734	soul, spirit	nhòló, hòló	modyo, nkolo	hóló	môôyô
331	sound, cry	m(ü)zwi	kolita	m(ü)zwi	můzwí
64	space (open)	hàapé	dwánjá ?, lwilgó	lòwóŋgà	lògóóhá
82	spark	masast	sasé	nsèsé	nsèsé
253	speak	-yoomba	-yoomba	-yoompa	-yoompa
733	spear (n)	Ichimú	ikimû	itimó	isúmű
137	spend time	-tomilá mákáánzá ?	-sonsúmola	-sósómólá	-sgánsámólá
1038	sperm, semen	wiinê		wiinė	Bötökö
62	spider	ювові	кардорі	itántáßì	ιόβορβι
182	spirit (of dead person) múzimú	múzimú	mūzimū	múzimú	můzimů

No	English	KìDàkámà	KìNyànyèèmbè	KìKônôôŋgô	SìGàlàgàànzà
464	spirit (disembodied)	můzimů	můzimů	můzímů	můzimú
683	spirit (evil)	můzimú	můzimú	můzimú	můzimů
582	spit	-tùùgâ	-tùúgà	-tùùgà màtyé	-tùùgà
533	spittle	màté	màtyé	màtyé	màté
601	split, crack (vt)	-tààndòlà	-tààndòlà	-tààndôlà, -nènà	-tààndòlá
951	spoil, blind (vt)	-hôfúshà	-pôfůzyà	-hôfúsyà	-pòfùlà
649	spoil (a child)	-lègėlà	-sènèkà	-sènèkà	-nyènyèkà
998	spoil	-Biipyā	-Biípyà	-Biipyà	-Biipyà
813	spoon	můdřínhó	m(ů)tiíŋkó	m(ù)tiíŋkô	můtřínkó
5	spot, speckle	ibàdó, idölé,	iβálá/máβálá	ißálá, ibádó	iβàlá
959a	sprain an ankle	-tègùkâ	-tėgólòlà	-tègólà	-tyèègòkà
141	spread out (be)	-èènélâ ?	-sààmbázyà	-sàámbáálà	-sàámbáálá
527	spread	-àànzà	-àànzà	-àànzà	-àànzà
908	spread abroad, be; become generally known	-kùmởókâ, -èénélâ ?	-mànyìkà	-mányířká	-mànyìilà
592	spread, smear on	-βìlá	-βitá	-ßilá	-ìsffgà
591	spread, scatter (vi)	-sàámbáálá	-sáámbálá	-säämbäälä	-sáámbáálá
880	spring (of water)	nzwitió	mòòngó	kásélá	-
965	spring, machine	můtàámbó		můtáámbó	mùtàámbó
866	spy out	-βờớgftijà	-pėlėlėzya ?	-βóólizyá	-pèlélézyá
849	squat (on the haunches)	-itòóndá	-sởớnzớβàlà	-sónzóβálá	-sởớŋkómàlà
991	squeeze oneself up against a wall (e.g. to allow another to pass)	-isómá	-pényèzyà ?	-ìhégà	-itsyááná
914	squeeze out	-kàándá	-minyá	-kámá	-kàmớớlà
343	squeeze, milk	-shèémá	-syèémá	-kárná, -syèémà	-kàmá
102	squirrel		lfŋkàlà	káwůůndí	

notich	KiDakama	KINYanyeembe	officellovin	and and
Hellen	13.3-44	Indika	-làndà	-töömbíká
ack, pile up	-loona	- Indiana	1	Hand
and (vi)	-timá	-tima	-IIma	- Trilla
ar	sòòndá	sóòndá	sonda	nsoonda
are olare	-Ritindalà	-kônólá minsó	-tómólá minsó	-tómólá miins
and off sound major	-Pholo	-furnvá	-tīnjā, -siſmyā	·fümyå
afte catch	-kaanna -kaanda		-tinókila	-sitókizyà ?
nawares	and and and			
adle lerk	-kaanda	shitókizyà	-tinókilá	-sitókizya ?
leal	-iißá	-lipsá	-IID9	-iißá
local	chihima	chòòmá	codmá	
tem (of maize, millet, maßelélé	maßelélé	ipoidié/ magoldié	ißelélé/máßelélé	Belete
('01	1914	domoka	-idûùmôkâ	-taamboka
tep over	-KIIB	-dollows		Admin danha
terile man (or voman)	múgddmbá	mùgddmbå	т(и)даатра	вашообпш
tick	múláángá	mülääŋgä	múláánga	mulaanga
the mix by elimina	-ebbnia	-külüağ	-sangania	-saanzya
tic	-Saangilia	-kūlūgā	-külügå	-saanzya
	afundi mano		-wümbölá	3
dn an		hand from hands	Arri	iOwe
tone	iwe	aweill/awi		Limitary
store up, collect	-lööndikà	-kūsāānyā ?	-kūmiiŋga	-Kuminga
straight (make)	-gòlòòlà	-gólóólá	-gólóólá	-goloola
stranger duest	mùaeni	mügeni	mûgênî	mügeni
drage current		тоблао	ŋkūtūlū	moongo
steam, coron	noise.	00020	ngúzú	nágá
strength, power	ijguzu	Jack All	-loolools	-ladiodia
stretch onesett	-igolopia	Bloomi.	100000	4-4-
strike, knock	-gonoonéja	-gómízyá, -tölá	-goonga	-goma
strike with a spear	-chimàlàsà	-sômà	-kimâ	-soma
string (n)	úzi ?	ç izi	ßòzi	úzi

4	Coolieb	KiDakárná	KiNyanyèèmbè	KìKônôôŋgô	SiGálágáánz
487	strip off (e.g. grains of -hölölä	-hůlůlà	-yal3a	-politia	-pulula
519	strut proudly	-iikúmyá	-ißóná	-ikúmáálósyá	-ikúmyá
407	stumble	-iaúúmhá	-kūúmpá	-ikúúmpá	-ikuumpa
799	stunted (be): be spoilt -tééndéélâ	-tééndéélá	-dùmàálà		-dùmáálà
948	Stuffer	-nanantia	-gùgùmilà	-gúgúrnīlà	-gügümilə
594	suck (the breast)	-oonha -ooha	oonjka	-ôôŋkâ	-oonka
480	Suck (vt)	-milma	-òòŋkâ	-miima	-milma
040	suffer hear nationtly	-ivoomitia	-vūmilila ?	-lyömílízyá	-ilgümfitzyà
802	Sunar cane	ioùBâ	igúßà	igúßá	igúßá
333	Sun linht	litmi	lyddga	lyddga	Ιλορβά
184	Surround	-ivóngódlá	-pilima	-pilima	-zydngólóká
438	Swallow	-mila	-mila	-milá	-mila
777	Swear	-lantia	-lahfilzya	-ilahila	-tahita
908	sweat	lodyfilo	idôtá	lùdyflo	HOTO
392	sweep up, collect in a -logndika heap (rubbish)	-löðndíka	-zyoola	-kûmiiŋgâ	-kókómölá
043	Couper	- nyhônthh	-pvåágólá	-pyáágólà	-pyaagula
547	come pleasant	-noni	nseemi	-seemi	sisèèmé
5	swell	-Bilmbá	-Bilmba	-Blimba	-plimba
ROB	sword (short)	lòshó	hálá	ηβορβιιο	Kisyð
033	Sword	lòpáángá	lòpángà	lòpáángá	lópáángá
360	tail	mikila	múkilá	múkitá	müstlá
875	take leave of	eydab.	-daahya	-daahya	-dââhyâ
778	take in (from rain, etc.)	-00β8		-ikíŋgíífzyâ	-Ilôkā mvūlā
565	take, carry	-sólà	-sold	-sola	-sola
233	take off (clothes), undress	-zúulâ	-vūūlā	-zúúlá	-vūūla

No	English	KìDàkámà	KìNyànyèèmbè	KìKônôôŋgô	SiGálágáánzá
530	tangle	-tùŋgwá		léétá úláámbú	-pòmyá
898	taste (v)	-ßòònjà	-lòzyà	-gèmà	-βòònzyà
985	teach, instruct	-hànà, -làànjà, -lààngà	 làảŋgà, héémbékà 	-hèémbéká	-fùùndffsyā
621	tears	milisózi	ndřířió	milsózi	mítnsózi
412	ten	ikòmi	ikòmi	ikòmi	ìkòmi
121	termite	miswá	m(ù)swá	m(ù)swá	můswá
739	testicle	idòòsò	itùúnyà	màtúúnyà	ivyà/màvyà
1020	that	ìyò	ffyò	ìyò	ìyò
455	thatched roof	hàándì	iβándá	kwigólyà	
767	there	ἀkỏ	àhò, ùkò	áàhò, ùkò	áhô, ởkô
54	they	βὸὸί	βènfkflf	ààwò	àβò
444	thick, fat	igìnú	ngìnú	ŋgìnù	-gìnú
86	thicket *	másáká	isáká	isáká	isókóólá
854	thicket	isáká	isáká	kàsákà	isókóólá
619	thief	ηνὶὶβί	mwiβí	mwìiβí	mwlizi
23	thigh (of human)	itàáŋgó	itàáŋgó	itàángó, màtàángó	itàáŋgó
22	thigh (of animal)	kòtààmbò	itàáŋgó	itàángó, màtàángó	itàáŋgó
559	thing	kiinhò	kintò	kíínú	sìintò
987	think, imagine	igáníká	-igánìkà	-igánikà	-igánikà
651	thirst	nòótá	nyòótà	nyòótà	nyòótá
740	thorn	liíŋhwà	liighwà	lifhwà/mìihwà	liigwá
689	threaten	-ògóhyâ	-kàángá	-ògóhyà	-òògóhyà, -kàángá
532	three	idátó	idátů/yààtů	itátó, idátó	itátó
115	thrust into	-chimà	-kimà	-kimà	-sòmà
420	tick (cattle or dog)	ikùùndyá	ŋkùùndyá	ŋkùùndyà	třnkůpá
1034	tie (fasten) (vt)	-tùúŋgá	-tùùŋgá	-tùúŋgá, -lúgàlá	-tùúŋgá
258	tie up	-tùúŋgá	-tùúŋgá	-tùúŋgá	-tùúŋgá
978	tingle with excitement	isátólá ?	-itfmùltlà		-isisimòlà

119					
	tip, point	mhèló		mpěló	
741	tobacco	itúúmbátí	nsùùŋkò	sùùnhò	itááßè
146	today	lèèló	waaleelo	waaleelo	waáléélő
742	toe	lwaata, Iküütüme	lyáálá, linkúmyá	lyaala, linkumwa	kaala/maala
445	tomato	mányáányá	lůnyáányá	nyaanya	m(ù)tòlé/màtòlè
105	tomcat (half-wild)			kimbálá	stimbóló
743	tomorrow	igótó	igóló	igóló	igóló
166	tongue	iòlimi	lòlimi	iòlimi	lolitmi
120	tooth (canine), tooth filed to a point			màsòŋgà mbwa	
267	tooth	liinó	liinó/miinó	llinó/milnó	liinó/miinó
306	top, peak	kwigólyá	higdlya	mpėló	hilgólyá
293	tortoise	gülümüğti		güümääti	füülwe
277	town	ust	F Iğim	kaaya	lògò
378	tramp of feet	Idkiindó	lòkiindò	lòkiindó	m(ü)siindó
270	travel	-ydómbá	-ydómbá	-yoʻdmba	-ya lögèèndó
540	tree	mott	mùtt	m(ú)tř	mùtí
538	tremble, shake (vi)	-détémà	-tétémá	-tetema	-tétémà
566	trickle away	-twiinā	-solola		-toonya
401	trunk (of elephant)	nywittó		кадеко	m(ü)kööngä gwä
604	ty.	-gemå	-gema	-gėmą	-gema
605	tsetse-fly	másááli, göbölő	lògèémbé	kágéémbé	ntiika
938	tum upside down, tum -pitindölä over	-piindėla	-gálðlá	-galdla	-pilola
174	furn round	-ydómbyá	-pilimya	-pilimya	-zöngőlősyá
111	tusk, elephant's (middle size) *		filnő lyá nzövű	miinó gá nzóβú/mpờtì	
452	twin	ißásá/máßásá	mapasa	mápásá, máβásá	ipásá/mápásá

nzóvů

N	Fnolish	KłOakáma	KiNvánvéémbé	KiKônôônaô	SiGalànaànza
	1000	10444	-1644	44400	242044
8	fingers	-sogota	-sundia	efaint-	eloffoe-
483	twist, esp strands	-shißà	-pėla	-pelégá	
752	two	ipiri	ibili	ibiti	ilgii
18	ndder	kißèélē	kißeele	kißéélé	
945	uncover, reveal	-kūúndólā	-kündőkölá	-kündükülä	-vúndúkölá
551	unripe, half grown	-Bist	-gaági	itindi, -Bisi	itindi
984	unripe, uncooked	-pisí	mbisi	-Bist	-pist
311	up, above	higólyá	higólyá	higólyá	higólyá
614	upright	wifmå	wifmå	wifmà	wifima
446	urinate/defecate	-nyā, -súßāālā	-nià, -sùbààlà	-niā, -sūβāālā	-nià, -sùβààlà
745	urine	māāsū	maasú	mátúúnzi	màsù
569	nse	-tòmílă	-tòmflà	-tòmítà	-tomfla
307	utmost, highest point	halfkilö	higólyá	kwigdłya	
904	vapour, gas	BoseBú ?	mütüŋktiilö	Hútú	můvůůkě ?
380	vein	ŋwàânzi/myâânzi	mūshipā ?	m(ü)sipá	
276	village	kißáándá, igdóngóli	kijili ?	igongoli	igoongoif
692	virgin (bride), girl	müünyhä	mwaniki	mwāniki	mwānikī
327	vision	Вороні	ndoòti	ndoóti	ndôótí
330	voice, (thunder)	юкова	mdzi	m(ú)zwi	müzwi
224	vomit	-loká	-lūkā	-loká	-loká
524	walk (take a)	-yddmbá	-yoʻomba	-yoompa	-túmbágílá
269a	walk	-ja	-ya	-ya	-ya
847	wall	hàándì	igèlélé	igèlèlè	igèlélé
983	want, need, wish	-коода	-коова	-κόόβ	-κόόβά
507	war	Bolingo	wdldgd	wdldgd	vità ?
790	wart-hog	ngtit	ngill	ngili	ngin
860	wash oneself (after	-ishénéenhà	-táßáásyá ?	-ipyáágölá,	 ipyáágölá, -ipipá, -
	evacuating)			-syèènèntélà	isyénééntá
			825		

Enalish	KiDakama	KINyanyeembe	KIKononigo	SiCalagaaliza
wash (hands)	-igúúsà	-kūūsa	-ikáláßá	-ikalaßa
wash (clothes)	-kaánzá	-kaánzá	-káánzá	-káánzá
wash, take a bath	-òògá	-0094	-oogá	-òògá
water	miinzi	mijnzi	milnzi	milinzi
wave, let off a trap,	-lògôôlâ	-1eòlòlà	-lógódíólá	-fògòòlá
98	vijswė	ilswé	yiiswé	ifwé
weak	-2004		-nôgólékú	-zóháálá
wean a child, give	ėji6-	lèkyà	-lècà	-zizyà
wear, dress	-zwaálá	-vwaala	-zwaala	-vwadla, -aambala
weave knit	-súmáfúùmá ?	-füümå	-súmá	-fûmâ
weight chuthm	Rhtlimbü	òtiimbù	-Bötimbü	götimbé
well	hvinzi	Minzi	Minzi	iziba
wet (net)	-dota	-10βà	-tôtà	-tāβālā
what?	7	7	¥	ī
which?	III kinéhé	P4	yithe	yaahe
whisting	mülöli	müldönzi ?	m(ú)lôzi	mülözi
white man	mizitinoù	můzyůůnngů	můzůngů	mūzyningū
white	vaabe	yaape	mweeld, yaape	nyéélű
who?	naani	naani	inàani	ndêé
poloin	701	igE	m(ú)kénágôzi	ißi
note.	mikitma	múlktímá, múlké	m(ü)kifmå	mükfimä
word up (thread)	-odonda	-koćnjá ?	pilimya, piliga	-gòòndà, -köúnzá ?
wind	mùyàgá	mùyàgà	mběhó, můyágá, kikůngölyá	mběhó, můyágá
winnow	-beeta	-pėėla	-hehá, -péétá, -hehéélőzyá,	-heha, -pėėta, -ėėlūdla
wipe	-fútà ?	-fûtà ?	-pyààgôlà	-pyáágúlá

No. 1128

9	English			SiGalaganza
88	wire (brass)			
194	witchcraft			Bollózi
279a	withhold from			-limá
279	withhold from, abstain			-iviimá
338	woman			mùkíímà/ßàkíímà
747	womb			ndà và BờBùti
812	word			iożambó/maożambo
772	work as a mason			-zèènaà
167	work (n)			milimo
81	wrap up			-oritinda
344	wring (clothes)			-kamöölä
773	yawn			-avūūla
593	year			mwżaka/mvaaka
750	yesterday			jaóló
15	you (sing.)			ėwė
1018	you (pl.)			îmwé
715	young man			miyaanda
637	your(s) (pl. 2nd) injwe person)	yiiŋwè	yiinwê	ilnú
693	youth	niki	mùyáándá, mwániki	músödmbá, mwáániki

Appendix 1. Zone F word-list: F21

zebra

0	English	KimunaSukuma	JinàKitya	GinaNtúzů
33	abdomen, stomach, be	celly ndà, ŋhùùmbì	ndà, ŋhùùmbì	nhùùmbì, ndà
32			ißütě/máßütě	ißütė
36a	abundanVabound	kókólá	-seesa, -pa	-pa

S	English	KimunaSukuma	JinaKiiya	GinàNtùzù
786	abundant	kökölä	-iìngi, -a ßöyágá	-pá. nijnaí
571	abuse, insult	-dòkilâ	gödökā, gödökijā	addokilā
252	abuse, reproach	-sókómbéjá	godokā	gódóká
809	accustomed (get)	-manitla	gymaniila	admaniila
274	act (vt)	-tittà	gwitta, gütééndá	qwitta
529	add up	òòngejá	gdsáánjá, gdóngéjá	gòòngèià
927	adjacent (be); border (vi)	-ilöléélá, -zéérgánwá	gwithelâ, gößimbíkáná	qößimbikáná
662	adze, carpenter's	mbiizò	mbizó	mbizò
254	affair	mháyó, ŋgủnỏ	mhàyô/mihàyô	mháyó/miháyó
1002	afraid (be)	-òògòhá	gòògòhâ	aòaòhâ
168	agriculture	ilima	ilima/βölimi	ilima
926	all	-pyė, -òósė	pyé, -òòsē	-òòsēpvė
248	alter, change	-gálờchá	gogaldca, gogalidla	adaálóchá
595	animal	ndìmù	ndimū	ndimù
617	answer a call	-idìká, shòōkėja	gwidika	qùdĩkâ
782	answer, reply	-shòòshà	gyshoosha	adshoosha
664	ant (reddish-brown biting)	shiilaamba	linegů, jillaamba	sanagú
122	ant-hill	shigdid	iigolo	ajaglig
663	ant (small)	sòóngwa	mfå, nswå; sööngwä	sgónawa
586	anvil	ipôòndělô, ikômělělô		isuitlô
686	apply by stretching, spread over -βààmbà	-Ваатра	gdßäämbä, gdkömä, gdgönyä	adkómá
976	appoint, set up	-tmilichā, imilija	gdsómá, gdcáágdlá, gwitmilíká	götöölä
55	arm, hand	ŋkônô	ŋkònŏ	ŋkônô
171	armpit	mhángwá	maangwa	mháángwá
203	arrange, put in order	-tòòndà, -pààngà	gohela	adaéléká
204	arrange, put right, repair	-Bėegėlėja, -shookėja	goßeeja	goßeeja
478	arrive	-shika	goshiga	gdsika
999	arrow	isóóngá	isoonga	isoonga
		199		

ş	English	KimunaSukuma	JinàKiìyâ	GinàNtùzù
999	arrow (head of); spear head	ichimù, ntwè gwi' chimù	ntwe, sono	sono
337	ashes	тари	ißū/māßū	i6ú/má8ú
199	ask for	-lòòmbà	gðlóómbá	gölöömbá
88	assemble, collect (vt)	-Billingå, -kümüüngä	gdsóógá, gdsóléléjá	gdsggmbya
789	aunt (father's sister)	sèèŋgi	seengi	seenai
148	avoid, dodge	-lékà, -gweepa	qwfliga	güligá, gögwelená
688	awe, fear of God	Büzünya	Bóößā, Iyögöhyá, gözünyá	Büshiqwa
299	axe	mbāsā	mbásā	mbásá
364	baboon, ape	ŋgởkở	ŋgökö	ngởkở
634	back of (at the)	köönümä	nùmà	godnuma
297	back	ŋgòòŋgò	ηθόδηθό	οβίοροβίο
297a	backbone	Isánágóóngó	isanagoongo	Isanagoongo
27	bad	-61	-61	-aa Boßi
37	bad (become), rotten (vi)	-ßòlà	gößölä	gdßölä
87	bait	wambó	cáámbó	waambo
398	banana (plant)	ldóóké	ndôôkê/mìdôôkê	ndôôkě
397	banana (fruit)	ndôôkê	ìdôókè	ndóóké
399	banana (for cooking)	idöökè	îdôôkê	ndoòkè
1005	baobab	ŋwààndô	ŋwààndô	ŋwaandú
1022	bark (of tree)	igởớlà, igàámbà	İgölà	ihaango
313	barren (of living being)	ŋgởởmbà	ndáásá, ngöömbá	ngddmba
314	barren (of land)	ŋházù	Ibaambasf, Iwaawa	ißáámbásí
376	base of tree-trunk	itinà	Itina	itina
920	bask (in the sun), warm oneself	-òòtà	gooti sána < goota fsána < goota isana	gòòtà
9/9	basket of open wicker-work	ŋgônô	cáánjó, ndándámő	isaanzo
222	basket (plaited)	shigabo	jigabo	gigábů, gànànà, isoo
343	bathe	-òògá	góógā	googa
86	be fitting, behove	-iigėlā	gůßlizá cééné, gůshigááná	gößéémbá
		562		

ozuç

4	deline.	KiminaSükümä	JinàKityà	GináNtúzů
2	Eligilari	61 0112A	andiliza andli	aòßi, aòßilzá
-	be, become	-px, -puza	defi banden	ohushani
955	beach, coast, shore	ŋhwaani	waalo, nnwaani	(present)
827	pead(s)	Bosalo	Bosalo	posalo
416	bean, kind of bean (from	ndúūlū	idshiili/shiili	Silli
	Phaseolus vulgaris)			4.44.4
417	bean, small (from bean plant)	māhālāgē	ihalage/mahalage	Mazoleka
844	bean (ninner)	IOSHIII	iOshiii/shiiii	Sills
1037	bear child	-Byaala	gdfyaala	gdßyaala
227	presed	ndézü	ndêzû	ndêzû
100	Died Control	-1019	goldía	gotola
200	Too and the same of the same o	در سازيه	-sodāizā	-soompa
80	nunnag	Bostins	Bolitit	PORTIT
162	pag	Course stants to condition	CANAN	BORRE
161	bedstead	points, totala, numera	1000	oznicke.
653	pee	nzóki	nzoki	NOON
775	peer	waalwa	waalwa, josele, masele	Walliwa
407	heeft sail	-Beerela, -iigela	gwigeleelwa, golfseelela	golseelela
	below underneath	hàsilit	háási, műűsi	naasi
90	Con the proof	-pitndasoliva	gökünă, gögööndá	gollinga
00	Della, mark (11)	poppado	ondroma organa.	ggggmå
468	bend (vt)	- BNIDOR	gogopoda	,
403	Constitution	-loas	gèlògà	gológá
200	Memoration cross-roads	nzila maaka	nzilá mááká, máßásá	nzīlā māākā
220	Page 1	ndelta	ndolo	olobn
222	Nied un splice	-landla.	gogaanga, gottoinga	gölööngányá
707	mind up, spince	Administration of the second	withmbh Rhala	Billeembo
658	bird-lime	Willeling	Topic Control of the	noni
811	pird	noni	HOLL	AND WASH
46	birth (give), to a child	-Byaala	golyyaala	gopydala
125	pite	-lūmā	golisma	goruma
221	piller	ndòlò	-lölö, ndölö	-1010
İ				
			563	

bladder	mfûkô gô miině	JinaKirya	GináNtúzú
	mòkù	mbóků	ток
	miiniingā	miniingā	mfniingā
blow on, blow up	-füülâ	gởfiùùlà, gởfiùibà,	golfüülä
	-füülä möötö	gdpúgútá	göfüülfilä
	-yĕŋgèèjá	göfééfülá, göhwééhülá, gönéhééjá	gðlájá
boast, brag, praise oneself	-isanyâ	gwihaya, gwihaja, gwigitmba, gwihalala	gödöösá, gößöná
	lyaato	ibiinhi, lyaato	lyaato
	mili	-miti < mûßiti	mtlt/mimtlt
	-dūdūmā	göpögömä, gölßiillä	gösißöká
	-sebya	göséßyá, gösígöcá	gösißöchá
	ligūhā	igùhā/màgūhā	igühá
	-bùiòiá	góciβölá, gödöla	chißölä
	-ßyààlwâ	gdßyaalwa <βyaala	gößyäähvä
	-boka	göláándá	gdgdpa
	jóbá	jobá	lòbá
	lößtimbi, ngèlèló	lößtimbí	lößitmbí
oow, bending	wigoónde	Bota	Bùtà
	Bôta	ßötä	Bota
	Bdji bo Bota	ldgė, ldgóyė	lògé
	βοόηgό	βοάηβό	βόόηgό
	itaambí	itaambi	itaambi
	ngaati	ŋgààtí	Bòfuló, ngààti
	-būùlā	gðjúúcá, gönya ifúji	gdnya isuzi
	kößiinzá	goßinzá	gdßtinza
	-būūla ifūdi	gojuúcá, gönya ifúji	gönyá isúzi
breast (of a woman)	ndůtů. Ignôônő, mběělě	Introduction in income	noon mhoolo

873	csjspsap	ólóli	jisaabo, soha	ódáásig
301	pnA	-90là	909018	gógólá
115	pnttocks	jąsko/madako	idákő/mádákő	idákó/mádákó
51	buttermilk	mábéélé máláálá	málitótó, máflóflótó	mábóbóló, másüké
999	ysnq	ülöögi	íságá, ípóólú	ülööqi
641	Ainq	-јпка	göjiikâ	дојцка
531	pnut (pecome)	-byà, nyègètèlà	θορληθορίας θολίθε	\$6izû6
949	bum (vi & vi)	-рака	доосэ, дорэсэ, дорэка	доруже
068	burden, load	o bju	QBįu	oßin
08	bunch (of hair)	ilniiden	Tįniinten	izniizi , ilifwzn
149	llud	édmégésn	ędméégésn	êdméégésn
708	blind	-seeuga	gyzééngá	gözééngá
11	puffalo	ógódm	ogódm	ogódm
			მეიეესეც	
₽78	bruise badly, take the skin off	-chòòbòià	gűködzőlá, gölsáágá,	göküüßölä
	nsmeadht-wollet		100-000	
673	brother, relative,	ógóbn	ŏgóbn	ógóbn
341	brother (older)	υκόιο	ŋkòlü, nsizā	rykalá (óóné)
185	brother-in-law, sister-in-law	ŋkwèèlâ	ŋkwèèlâ	ŋkwèélà
113	proth	ijóan	ìįbsim\īįban	izūsu
942	тоол	ikûûmbö	cęęλo, ikadmbo	ikūgmpo
099	brook, stream	káhůlúlů, kámbóngó	śgróól	śgńóól
288	bring up (a child)	6lél-	gūlėlà	gūkūjā
LLL	frigit of grind	ėlėlėdnė-	θόβλοσος, φόπλοτίτος, φότωγδ	gökümööchä
288	bring, fetch	édnéé-	gweenhà	gwèènhà
139	bridge (wooden)	ikililö	ódnásaból	ódnásbúl
138	egbind	nháámbókiló	ódnáából	ódnáábúl
061	breathe, rest	ęspeemba-	gweesheema	дмергирент
681	breath, breathing	myddyi	myöüyě, jéshéémó	шхаады
ON	English	KimúnàSúkúmà	åyiiyå	GináMtúzú

Section 2	Dinaming			gurana	lyaato	lyaato gúßátá	gúdžká	Albita	goldshops	150		doiling	Spirito	and a	Shadele	Segment in the second		4144-4	gopeeja	gdyégá	4-4-	nana	grkußa	gidáli	ŋköjiwä	ntėmi	
JinaKiiva	shinds	addmy, addition	marna, nomaaanna	think habit	think, yaar	gwißälä	gwłdiłka	gðbáápá	adbodca	addodca adshisha	niáánad. nyááßú	mitùgō	odshilb	ndůmítáháRití	ododítká	ikala/makata	łókagó, rósodmbó,	Ochobia	Hama teaus	gösaangaβala		10770	echyif	jigüükü	ntêm1/βàtêm1	ŋwànàáŋgwà	
Kimunasukuma	SAKI	ndama	-Itana	nnáláľá	lyaato	iigata	idiikā	-kittja	-Boocha	-fwaálá	nyaáßü, ßüúshi	mitugo	-shila	ndůmilá hàßili	-gálðká	ikala/makala	lökómöölő, lötéégő	-Dôbia	isava, itama	-záláßáná, záláműká, (sángágálá)		shikida	Britaning	shiguükü	ŋköjiwa	ntėmi	
English	calf of the leg	call	call	canoe (dug-out)	canoe	carry a child on the back (in a blanket)	carry/lift on to head (take up) a heavy load	carry astride on the hip	carry, take	carry, convey	cat	cattle	cease, finish	centipede	change, turn round	charcoal	charm (esp. to ensure wife's fidelity) (n)	chase (away)	cheek	cheerful (become)	cheetah	chest		chest (or animals and birds)	cnier, neadman	chief	
N _o	857	877	31	675	602	993	292	26	260	578	104	286	486	526	247	334	963	32	515	85	106	585	070	770	2	431a	

No	English	KimunaSukuma	JinàKitya	GinàNtùzù
679	child, infant	nweeleele, nigini, nwaana	nwaana, ntorni, nweeleele	nwaana ntotot nweelee
265	child, offspring	nwaana	nwaana	nwaana
886	chin	shilèzù	illezů	allezu
83	choose	-cháágðlá	gocaagoja	athtóchiá
109	civet cat	nhūngo	jeewe	nhijinao
255	clan	lùgaanda	ntálă, lògààndà	Riddian
841	climb, ascend	-liinhā, féétélá	göliinhå, gödäänhä	adilinha
550	clod, lump	igééngéli, ilíndó	ikiindo, iloopho	ikiindo
851	close (the eyes, mouth, etc.)	-Hilmà	gölilimå (eyes), gömimyå (mouth, anus).	gölilimá, göküümbá
299	cloth	shitaambaala	jitaambalala	qitaambaala
235	clothe	-zwitchâ	gözüřká/gözwříká	gòzwaáiā
300	clothes, material	myèèndà, ŋgößö	nweenda/mienda = myenda	naòBò
305	cloud	llùùndè	Ilûûndê/mâlûûndê	ilùùndè
817	coagulate	-lààlâ	golààlâ	qùlààlâ
941	cobra (spitting)	swifià	fifflà, jipàlànòôngá	swifila
906	cohabit	-itòòmbā	qwilaala	qùiệhvà
465	cold	lònyili	трено	mbeho
624	come	-iiza	gwiza	qùzà
205	come on suddenly, take in the act	sáángitíjá	gðsángáníjá, götügá	götüüüŋgilíjá
230	construct, put together	-ßeejå, -hööndá	güßeejá	adfüla
471	cook	-zúgå	goznga	qûzûqâ
557	cook in water or fat	-sėßya	gotogotya, gosißoca	qòpòqòmva
43	cooking pan, small	liikijō	lùßīgā, lüsēnēkō	nùnuag
385	cool (become); get well	-pola	gopola, gohola	adotla, adobla, aditia
265	copper, brass	shaba	shāβá?	shàßā
283	copy a pattern	-loondéléjà	gölööndéléjá gököbílítiá	gůshôókèélá

No	English	KimûnāSükümā	JinàKììyā	GìnàNtùzù
894	cork, stopper	ikùndìkíjò	iciβijô, ikùndíkíjò	ikůndikíjů
52	corpse, carcass	miimbă	milmbá (mu-βilmbá)	nyàmàfû ?
1001	corpse (human)	mili	miimbá	miimbà
383	cough (vi)	-kólólá	gůkôlôlâ	gðkölölá
4	count	-βàlà	gòβàlà	gởβàlà
100	country (our)	si	sī yìísė	si yilswé
14	courtyard	lùgààŋgå	gwáálúgwá, lóßóógá	lờβờờgắ
852	cover (up)	-kùndîkijà	gòkòndíkíjà, gòkòndíkílà, gògùbă, gòkùùmbà	gðkùùndikija, gögúbá
285	cow	ŋôòmbè	ŋòòmbè	ŋòòmbè
1003	coward	ηὸὸβὰ	ηὸὸβὰ	ηὸόβὰ
335	crab	igégéléká	ngègèléhyá	hàgà
520	crawl, creep	-lààndààlà	gwaagula, goshooloma	gwààgùlā
612	cricket	tóndógósó	jiyèènzé, jinyèènzélèlà	shéènyé
153	cripple	nèmà	nèmà	ndėβilė
803	crocodile	ŋwiinà	ŋwìnà	ŋởnà
319	cross (a river)	-kila	gòkilā	gčkilá
846	crow (n)	ηλούησούδο	ηλασημασία	ηλούησούδο
308	crown of the head	ntwè gátř	lòondóji, mhàanda/nhàandà	ntwè gátř, (lòondóózí)
79	crumple	-hàliβởlà	gòkùnă	gðlingállingá
370	crush by pounding, pulverize	-kòmààŋgâ	gợpôôndà, gờbùùdâ gợpôôndàgởlà	gðtwáángá
393	crust	βάgókwà	ŋgàkōlò	lógökölő
160	cry, wail	-lità	gôlilà, gôŋôôlâ	gölflá, gwááná
966	cucumber, small	liimbé	filmbê	liimbê
736	cudgel	ŋhóómě, lờβúgù	igóónhó/mágóónhó, iláánhá	ßöhili
165	cultivate	-limà	gálimá	gálimá
950	cure, cool, heat	-pôjà	gòpòlà, gòpìlà	gòpijà

Š	English	KìmùnàSùkùmà	JinaKitya	GináNtúzů
355	cut	-pùtà	götémá, gößütá, götíná	gößütá
86	cut, lop	-gèèdéjà	gdseenga	qūsweekela
117	cut to shape, sharpen to a point -pùònzà, -sòòngòlà	-pūdnzá, -sóóngólá	gdsóónjá, gdsóóngólá, gönöölá, gdpddnzá gdpddnzá	gdpddnza
365	dance (of men, to show courage)	-itààmbókà	götáámbíílá	gößiná
53	dance	-ßinà	gὐβinā	qờBinà
622	dark, black	yaapi	giiti, -pi	ē
481	darkness	giiti	gilti	giiti
824	dawn (vi)	kwangaloka	makiingó, gweela	gwaangaltika
328	dawn, daybreak	mákitygó	ikiingó	gwèèlà
744	day after tomorrow	ntööndö ßööŋgi	mázddlí	ntòndòòngi
130	day	iðshíkð	lòshīgò	lòsíkò
682	day-time	lîtîmi	lltm1	litmi
869	day (all)	lðshikð pyé	lītmī bū	lîtmi ji
751	day before yesterday	mázööli	mázddlí	mázööli
423	dead person	mfü	mfū	nzůmáálíké
454	death	Iờfü	lòfū	lòsù
931	decorate	-tônà, -tôôndà	götönä, gökömä, gößéégéléjá	qdBeeqeleja
446a	defecate	-nyà	gdnya	gunya
631	denial	Войеті	ßölèmi	nèmò
821	deny	-lèmà	gölémá	gölémá
648	destroy, spoil	-Biihyā, -Biipyā	gdßiipyā	qdBiipyā
437	dew	lởmè	lởmề	lòmè
219	die (cause to); put to death*	-ßölägä	gởβðlágá	gößölágá
1027	die.	-cha	gởcả < ciả	gdchà
425	die	-chà	gůcā/cià	gùchà
504	dig up, dig out	-jdðlá	göfügöölá, göjököölá	gdsüköölä
503	dig	-sītmbā	göstimbá	gösitmbå

4	Fnotish	KimunaSukuma	JinaKitya	GinaNtuzu
2 5	age and alerianis	- neeha	gogeeha, godooha	grigeeha
99	diminish, grow iess din	-dabya	gosoombyá, -zößiká, godábyá,	gösöömbyá
2	t		gököja	
9	dia	Bosósó	įkō/makō	-2020
2	district province country	jahanarili	jißanda, caaló, st	iggidiggili
200	distille, province, coming		qruaga, gragabaanyha	gögágáányhá
243	divide	- Parish	orliekaana. Britimo <orbiimola< td=""><td>ndèkaanya</td></orbiimola<>	ndèkaanya
212	divorce	-lenadila	odmála	gòmàlà
367	do, complete, finish	-mala	oughts.	gwitta
366	op	em-	and the same	mvà fmvàl
90	6op	mva (mya)	BATHY BAH	n-ARA
2928	donkey	nzòßè	uzote	odozu
200	door	nváángó	naango, lwigi	nyaango
200	done fred eved	mhùindà	nhoold, nheele	nhinde
415	dove (red-eyed)	slodelf blooder	oritindilla	grindita
188	doze	-minna, -migecia	diffic diffic	ondáhá míinzi
529	draw water (from well)	-daha	додана, должа	South At A
216	dream (vt. vi)	-loota	gülöötä	Blooms
220	(a) Cheese	shilòòti	jilootí	grioon
350	ricalii (ii)	- Paris	gdnwā	gdrjwa
449	CILLIA	the contract of the responsibility	defablata daswaatala	maswaalala
98	drizzle	lozuniczanie, maswalanie	delah ahahah	orhowisha
780	drop, throw down	-suungola	gopojia, goguina, gogwiisha	i i i i i i i i i i i i i i i i i i i
700	ti di	nòmà	ŋòmà	noma
107	de the cat to do	-aanikila -aanikila	gwaanikfila, gwaanika	gwanikija
280	diy (vi), set out to diy	- Sandyland	-bami	-òòmū
346	dry	ninosiii.	- And Anna	orineehâ
954	dry up, ebb	-tiindona	govania	outino.
345	dry up, become dry	-kàmà	gooma	goonia
000	dick	mbáátá	mbáátá	mbaata
200	the plant of their	IABIORO	(α) βιάμβιά, (α) και αναθή	leguigi
243	dust, cloud of dust	Johnston Health	mytkala nwtoaasha	göglishá
628	dwell	-igadsha, -ilkala	Statement Statement	

2	English	KimunaSukuma	Jinakiiya	GinaMtüzü
492	eagemess, zeal	դինծանն	jaáha, lwaahaahí	gdßülügütá
491	eagle, bird of prey	inààndà	mběěshi	ikoona
563	ear	gdtd	gờtô	giðtið
70	earth, land	si	si	15
4	earthenware vessel for serving up food	liikijō	lößīgā, núúŋgð	lwaapya
156	eat	-lyà	qqivaylla	atilva
900	effort, exertion	wihaambi	ngúzú	ßökómágöki
273	66a	igi	igl/mági	igt/mågi
443	eight	inááně	ľnááně	inàánè
705a	elbow	igóókóólá	Igóókóólá	igookoola
329	elephant	mhòli	mhòli	mhàli
336	embers	ikalá	ikálă (lyà môtō) = ikálá lyá mộtō	ikālā/mākālā
842	embrace	-kùmbátílá	gökümbátílá, gößügä	adqüümbâ
394	end (come to an), cease	-gėlėla	góóyá, göshila	qòòyà
952	escape, recover	-pilá, -pölögöká	göpölögöká, göpilá	adpilla
899	examine, measure, test	-gèlèkà, -piimà	gdgėma, gdgėlėka	gògèlà
45	excrement, dung	màashi	mààshǐ	maashi
958	exorcise, drive out a devil	-pėėja	gölágölá, gößiná Böfümű	gdpėėja masaamva
784	explain	-lóméélá, -sóómbóólá, -háyá	gdshóðmélejá, gðwillá, gðsóðmbóðlá	gdwillâ
620	eye	liisò/milsò	liisō/misō	liiso
828	eyebrow	ngóhé, máküümbítsó	mákúúmbíťsó	mágóhé
838	eyelash	ŋgöhè	lògòhê/ŋgòhē	igóhè
287	face downwards	-Bûndaala	gößündáálá	gdßöndààlā
989	face	ßöshö	ßöshö	Busho
940	fade, disappear	-shilfflà	göjlmå, göllmálímá, göjimitlá	gösilá

Š	English	KimunaSukuma	JinaKitya	GinaNtuzu
891	faint, lose consciousness	-jima	göféélwá, göcá gáßimbá gá ngī göféélwá <göcá gá="" gáßimbá="" ngi<="" td=""><td>göféélwá</td></göcá>	göféélwá
298	fall	-gwa	gdgùà/gwà	gdgwa
549	fall short	-léßéélwá, -shilífíwa	güléßå, güléßélä	adaééhéhvá
462	fan, wave	-pùùŋgilà	gdpůúgitlá, göhéhéélá	adoùùaillà
764	far	kůlé	-kůlé	kölé
921	fat (be) (of animals)	-gina	gdgina, gdnona	gànônà, gàgin
922	(at (of animals)	-gini	-ginū	-ginù, -nònù
531a	father	ВааВа	Ваава	Baaßa
382	father-in-law, mother-in-law	Ваа́Ва/таа́уд Во́ко	Bááßá/mááyð Bökö	BàáBà/màávò [
531	father (my)	ВааВа	Ваара	Ваава
687	fear	βόόβά	βόόβā, tiniini	Воова
652	feathers, fur	Booya	Вооуа	Bòòyà
848	fence, enclosure	ŋgitli	lờgốtờ, ỉgôóβè, lờờβâ	lòòßā
828	ferment, turn sour	lôlà (gààsà)	gölöjä, gölölä, gögääsä	gögáásá
762	few (a), not much	-gèéhù	-gèèhù	ngèèhù
757	fierce, sharp	ŋhàit/-kàit	-kalf, -òògī	nháli/-káli
421	fig-tree			ntiini
422	fig-mulberry tree	ηκάνά	ŋköy6/miköy6	nkàyà
216	fight	-hwà	gwikėnya, gdłwa/lùa	qūkėnyā
804	產	-òòkòjā	gòòkàlâ	gdmátá
176	fill a hole, stop up	-chißå	gocißa	quchiBà
583	filter, strain	-kènènhéjá	gdyddnga, gdkenena, gdgida	quswiza
20	füth	ßösösö	-sòsò	mákáámbálálá
516	final, decisive	ηλàlikíjó < -kālā 'end'	ngėlėlė, nhaitiė <gokalā gokatikā<="" td=""><td>ŋgèlèlò</td></gokalā>	ŋgèlèlò
760	fine, excellent	nsởởmbá, nyêèlá	-sógå, -izå, -söömbä	-soòmbà, -iiza
447	linger	hvāalā	lwaala/maala	Iwaala
		173		

на Роко

Grnathiza iyaala modio iiiko gotoola nho	operation and control of control	
Jinaktiya iyaalahvaalakijaala mooto iiiko gotseena gotsoleela lokutiput lokohino	goodploa a goodploa goodpart, jappinost Haano, poblachar, gobicilina poblachia, gobicilina poblachia, gobicilina poblachia, politico politica politi	573
KimünaSükümä İyalik mödiö ilikö seemtä rjivd		
English fingernali lire irepjace, hearth, kitchen firewood (collect, cut) (vt) firewood	ists up, pull out inter the pull out inter lodd Southin issue) isten lodd Southin issue) isten lodd Southin issue) isten lodd Southin issue lodd inter interest inter	
No 323 474 280 970a 413	191 126 190 190 190 190 190 190 190 190 190 190	

	, ci	-kalaanga	gökáláángá	gökáláángá
	fully developed, be	-aaloka	gokóméélá, gökülá	göshikááná
272	full (become)	-ookola	góókálá	gömádíká, göökálá
316	garden	shilúgů	jisastia, jilaaga	ilàgò
419	gather (flowers, fruit)	-yóβá, -sùúngðlā	доуова	gögésá, göyößá, gösölá
16	gathered (be), assembled (be)	-iBilingà	gwtgillinga	gòmàanyhâ
368	gazelle (Grant's)	láálá	lààlà, ŋjà	làalà, njà
454	gazelle, small (impala)	mhálá	mhala	mhálá
	genet (kind of speckled civet cat)	nhùùŋgô	nhūingo	ոՒմայցծ
408	get, obtain	-paandika	gopaandika	göpäändikä
684	ghost, sudden apparition	káβéeβá, néŋgééji	thogi?	litoinga
568	giraffe	nhwitiga	nhiga	nhiga
246	give away (present)	-saamba	gdsáámbá, gönöönna	gdsûnyâ
449	give	-iinhā	gwinhâ	günhâ
916	give light to	-twiims	göttmå	gümîkâ
815	glide, trickle	-sela	gdcddldldkå, gdsdldldkå	gösélá, göhöörná
569	offi	-ja	goja/gojia	goja
639	go in, come in, enter	-ingittà	gwingilâ	gwingtta
63	goat	mbdii	mboli	mbūli
694	goat, (he-)	ŋgùlyâáti	ngülyaati	ŋgülyâati
695	pofi	mùlùùŋgû	кооре, Іуоора	lyởởβà, mùlùùŋgû
758	poofi	ya wiiza	-sógā, -izā	nsógá, -áa Búzá
388	goshawk (East African) (Astur fachiro)	húúŋgwê ?		юраіа, ікої
89	grain (of cereal)	logekė	tößekē/mbėkē	lößéké/mbéké
969	grandfather	gddkô	gdůků	godko
269	grandmother	māāmā	maama	maama

	KìmùnàSùkùmà	JinaKilya	GinaNtúzů
grasp, hold in arm	-òòmiilà, -diimiilà	gökümbántjá, gödiimä, gödiimífilá	gögüümba
prass, reeds	iswa/maswa	máfá, máswá	màswà
	-kwaála	gókwáálá	gökwäälä
preat powerful big	nhààlé/tààlé, -kởlờ	-kölő, -táálé, -důmá	-táálé/nháálé, -kölö
ndef, sorrow	Rdsûndûhâzû	Boptina, tyddnzu	Büsündühazü
oring (orain with a millstone)	-shà	göshiá/shá	gosha
arind coarsely	-halala	gohālālā	gdhálálá
proove, furrow	ihölómélá	nholoombā, ngokā	lóóngá
pround, cultivated	ngdðndá	nggonda	ngoonda
grow up, get large, become	-k01å	gökölä	gökölä
prow (of plants)	-mèlà, -mèlèèlà	gozwa	gózwa
(villy)	-hoola	gokolā, gokomėėla	gokolá, godsoká
Just light portidae	nhoòmbâ	ŋhóómbâ	ŋhóómbâ
nunt animple	-kūūmā	gökiimä	gðkúmyá
aude aright	-tòŋgéélà	götöŋgéétá	gðtóðngéélá
uinea-fowl	nhààngà	ŋhààŋgá	ŋhààŋgá
	oblooble	ŋgòòŋhò	ngoonho
	ldywill	nzwijit	Isiinzi
hair (tong straight- of animals and Europeans)	rishlinji ?	whitings	koyeenze (kotiinga)
nair (white, grey)	lðbú/mbú	nzwł/nzdł, mvł	mvr
and (flat of)	lòpí, ipi	ipi, Idpl/mhi	ipi
and right	niila	niilà	Bályó, nkônó nitlá
and (left)	lòmósó	lómòsó	lūmoso
andle haft	mpfni	mpini	mpini
hang in mid-air	-nùùŋgêlâ	gwiningéléjá, göningéélá	gůniiŋgèėlà

of the state of th	dimù	Jinaktiya -dàamú/dàam -dìlmú/dìim	GinàNtùzù ndilmù
	makoye	mákóyé	makóyé
	sayaayi	löŋwáàndö	Böngándó
	waangd	waango waango	waangd
	-gilà	gdkólwa	ankolwa
	máswá	máswa mödmű	poitti
head, chief person	ntaale	nywanaangwa, nkolo, nsomba ntaale	ŋkōjiwa
	nhwè	nhwe/mihwe	dudo
	ngata	- Constant	Days.
	IDIDI	Moderate philipses	rigata
neap up, ready/set on fire	-kômělá	gopeémbá (móotō)= peémbá móotō	gdlingffila
	-iigwa	gwdowy	orioned
	nhòlò, mòàyò	oholo	Shows
nearthstone for putting pots on	ihiga	Ishiob/mashiob	lejohómbeloh
neavy, serious, dull	ndito	dito	odito
	ishiigina	ishilaina	isioina
	ndógóósa	ndondosa	ndonden
nem, make a border	-pitinda	göhlinda, göhlindöla	gohiinda, göptinda,
	пдоко	naoko	optimo
	aha, oko	aha	and dry
	kiisākāmbūlė	ilebrámhélé ilehkidimhé	aletated ONO
	-Bisà	addish	gradamue
	4140	Beiring	gobisa
	-pod-	goguinda	gößölä, gögüündä
	ibaanda	ibalabāla, ipaánda	ipaanda
	káálógölő	lògòlò	làgàlà

English	KimunaSukuma	JinaKitya	GìnàNtùzù
hip	lökünü	lòkùnū	lònòòngà
hippopotamus	ŋgùβó	ngùBô	ngùBò
hit with a hammer	-kómáángá	gdkòmā, gdtdlā	götölá ná núúndó
hoe	igéémbé	İgêêmbê	igèèmbé
hold, arrest	-diimâ	gödilmá, gögwááshá	godiimā
hole, nest	ηδόβό, ipởớndů	cáánjó, njóópó, ipdóndó	ipodndo, ichoongo, no
hollow out	-bákóólá, -pöönzá	gdküümbå, gdköömbá	gůkôômbá
home	kößilsé	kaaya, gökaaya	gở kảavá
honey	Booki	BOOKI	Booki
honour	-kůjá	gdköjä	adkoja
hook (for pulling down branches ilόβèló in plucking fruit)	іювею	ηgwàákờ, ηgόβγό	ŋgwáákö
hook (fish)	ιίὸβὸ	ndóßáánð	ilòßò
hom, ivory, tusk	mhèèmbè, ipéémbé	mhèèmbè, îpèèmbé	mhèmbè, ipéémbè
horse *		fālāàsā	fálásá ?
house	nùúmbà	nùùmbà	nùúmbà
how many?	shiinga	-ŋgà	sííngá
hump (of hunchback)	lògùkù	lờgùkũ, igèèmbè	lògùkù
hump (of cow)	lôgúků	lògùkū	lògùkù
hundred	igànà	İgànà	igànà
hunger	nzálá	nzálá	nzálá
hunt	-доруа	gohwiimā	göwiimâ
hunter (professional)	ηдоβуй	ŋhwdimi	ŋwtimi
hunting	βάgόβyā	Böhwitimi/ göhwitimä	gdwtimā
husband	ηθόόξη	-дорб-	ŋgöösi
hut	nùúmbá, ißáándá	ißáándá, sömblilii, söngěléli	làdsô
hyena	mbiti	mbiti	mbiti
_	nèènè	nèèně	nèènè
	1112		

ροβορί

Engish dienes, sich dienes, sich dienes, sich dienes, sich dienes, sich die Volg gewan die Volg
Eng iile iile iile iile iile iile iile iil

Š	English	KìmùnàSùkùmà	JinaKitya	GìnaNtùzù
347	knead	-maanda	adlūßa	ONLINES ONKSONES
348	knee	izwi	izwi	izui
427	kneel	-tújà	activia, odsinamba	orbitis
607	knife	lòshò	lòshō	literal
402	knife, thin, curved, broad-bladed	ifyeegeló ?	îmòòlèlò	mhóóló
704	knot	igüündö	fgüündö	fairinds
626	know	-mana	gòmànà	admana
178	lake	nyáánzá	nyàánzá	Uváánzá
151	lame (be)	-tigită	gogigită	abiloilă
511	lamp	tala	tàlà, cééngé	tala
66	land (dry)	st nyddmű	18-	st nzńymi.
761	large, great, big *	nhàale	-table, -koto	-killy nthalalahahahah
94	laugh	-sėkā	göségá	adseka
792	lay over on one side	-sūūndā	awinika, adophinia	k d O d v v v
1000	lazy	βθαθκοίο	-obkolo -obb ostanskins	- Homodobine
669	leaf, blade of grass	idooto, iswa	idnith/made shi	1do day
1025	leaf (tree)	idoótó	idolito	idhótó
116	leak, ooze out	-zwa	physical	oloon,
96	lean, bend down, slope	-linama	odkimama	gozwa
536	lean on rely on	chhadhadib	and and and and and and and and and and	gokunama
208	lean become grow thin	-Seendamila	goseendamila, gwisana	gösákífiwá
3	carry parontie, grow unit	-gaarina, -koonua	ankonda	gökööndá
535	leaning (be)	-laaiffa	gwinama, gwiyinamitla, gösendama	güseendamila
613	leam	-illåŋgâ	gwilaanga, gwiyitga, gwiyitgila	gʻdlaanga
546	leave, permission	-zūnītija	golágwa <golága< td=""><td>odzinililiwa</td></golága<>	odzinililiwa
1011	leave over	-saaja	gůsáájá, gölékéélá	gůsáájá
			579	

No	English	KìmùnàSùkùmà	JináKříyá	GìnaNtùzù
547	leave, go away	-tingà	gwìngà, gòjà, gòßòòkā	gwiinga
544	leave (off)	-lèkà	gůlěká	gůlěká
975	left over, (be); remain over	-shiigā	gòsààgā, gwikala	gờsààgâ
310	leg, foot	gògòlò/màgòlò	gògòlò/màgòlò	gàgàlà/màgàlà
774	lend, borrow	-gôpà, -bôkà, (lààndà)	gòlààndà	gòlààndà
107	leopard	sòβì	sòβì	sòβì
878	lick (vt)	-lààmbà	gòlààmbá, gòkòliinhā	gòlààmbá
134	lie down	-lààlâ	gòlàálā, gòlàmbálálá	gòlààmbààlà
250	lie on one's back	-sāgālālā	gðságálálá	ságááll
791	lift up, pick up	-nùùŋgêèjà	βόδcā, gwiimilikā gögööngömölā	gòβòðchā
467	light in weight	mbòòpù	-bởợpů	-bòòpù
304	light, sky	igóló	igòlò	igóló
805	lightning	lòtàβì	Iἀκὰβà	ßàmémė ?
657	lime, whitewash	swääkälä	fáágálá, swáágálá	ndòβà
213	line, row	láhítítí, Báshóólé	láhtitit, nsáláló, βóólé	Böölélé, lögőlöölé
659	line, fishing	BOJI	•	ntėgė ?
103	tion	shìimbà	shìimbá	shìimbà
198	lip	nômô	nômô/mìtômô	nômô
956	listen	-dégéléká	gddėgėlėkā	gódégéléká
972	listless (be)	-něděká	gdyógómá	gùyôôhà
1024	liver	itimà	itimā	itèmà
429	livestock (keep)	-súgá	gròsàβà	gờ sùgà
819	lobster			
794	locust	njigè	njigė	nzigė
1558	long (become)	-lìhà	gòlihà	göliipá, gößitilíjá
144	long	ndříhů	-lihū	ndîpů, nîpů
131	look after, care for	-ààngàlflà	gờlànhánà, gờlàβàdâ,	gwààngàifià

		VisnonASolvima	JinaKitva	GINANUZU
õ	English		owkimp onliannana	gödilmä, götööngéélá
871	took after grazing cattle, help a	-diima	godinia, gonesijama,	
	sick man on the road		2010	adkééngéélá
354	look at, examine	-lola	gologa	SAIMAGI
0640	Portoge store	-ilalangija	gwrialangrija	
2040	Too of house and its and	-loondela isooniia	gösöößilia, gösöömilia	винфаабаб
200	look for, flatty and the go-			
	Sometimely, parage	4444	adleßa, gönögöléká	gdnógoleka
973	loose (be); faint, weak	enan-	opinosillo.	adzimtila
181	lost, get	-jimtila	gojimuna	spo
1023	louse	ndâ	nda	A11
-		-throwing	götögwa, göhaya	gotogwa
492	love, want	matherine	ibacopo/mábodopo	głkúßå ?
934	lung	manopola	Relivoi	Bologi
713	magic *	Isalogi	the state of the s	Wordens
744	maize	Hindege	Windegermaandege Windegermaandege	ALCO ALCO ALCO ALCO ALCO ALCO ALCO ALCO
	the offerings to the dead	-taambikā	gogaßa, gogaßtla.	Budabaa
25	make olienings to the second		gwigabitija, gotaamba	
0.000		poodeth	-accepta, toehi	phoosna
226	male	Noon in	ACCOUNTS AND ADDRESS OF THE PARTY OF THE PAR	shwhddi 2
10	mamba, green (kind of	lodooto	paguipalui	
	poisonous snake)		*	poling
707	Many	nyiingi	10/11-	- Bi
Car		dioni	-tinat	uningi
1019	many,	tighting.	Shoot inches	Beltobzi
897	marriage	wiitooji	Without, Illinois	2000
900	mam (of man)	-10018	gittoola	alono de
000	to openion of mind and	-tooia	gūtoojā	gotooja
9	marry (give in mannage or			
	parents, pnests)	1011	Repoblica	nyaangogo
814	master	seelsa	poponie o	oplobnophila
888	match harmonise (vi)	-leengantja	gölééngantla	gordalyanan
		ikòmèèillè	-koméezű	goognea
656	Marine	- Andread	nama, nama	nyama, nama
280	meat	111	Receions Recons	Boacta
259	medicine, remedy	Sogota	moscy) 'nslinsoy	

JinàKiiyâ GinàMtúzù	Sobjakanga, Bofumu Bolagoji	mfúmű, ngàánga nàgözi, ngàánga, mfúmù		gwaaßa, gobalaasana	galangi, myaaja ngomi	gdsaama	máßéélé máßéélé	málliótó, máßógótó máßógótó	máßéélé, másötngá máßéélé, másötngá		-		gdsaanja	nhờở mbili	nhàòmbílí	удажа пафка	lweeji nweezi		_	māāyô iyā, māāyô	gdβddmbá gdβddmbá	ເຕີອູຕໍາເອີ	դիմոցծ դունցոցծ	nómò	tògèèndò, gàjitiè lògèèndò	Bolioló, téémbě	
KìmùnàSùkùmà	βögáárgá, βöfümü βö βö)gàánga mí	-sáángá gời	-ááβá gw	kāàndī	saama	та́Вѐе́Іе̂ та́		máßéélé má	Вареје вој	=		-saanja gds			ngoko ngo	_	36 ŋwèèji ŋwe	mbd mbd	mááyů má	99	الثهرات	յիժժղցծ դին	nôm òmòn	dgeendo làga	30lótó Böl	603
English	medicine (art of medicine man) β	medicine-man ŋ	meet	melt	midwife	migrate, move away	milk (n)	milk (curdled), curds n	milk, (fresh) (n) n	millet (bullrush) ß	millipede	mix (ingredients, 'season food') -tòβėkā	mix, put together	monkey (small lightlish-coloured) nhödmbili	monkey (colobus- (with long - black silk hair, white on shoulders)	monkey (small, dark-coloured) n	moon n	moonlight B	mosquito m	mother m	mould (pottery)	mountain lờ	mourning n	mouth ne	movement lò	mud, mire Bo	
N	280	261	90	861	845	828	1030	20	19	903	290	73	72	363	362	361	716	609	29	436	92	717	163	1026	272	979	

English	KimůnáSůkůmá	JinàKilya	GináNtúzú
mushroom	βοόβα	βοόβά	βόόβά
mutilated (be)	-lèmèhálá	gölémáálá	gdießå
name	liinà	lilinā	lijna
namely	giffki	mmhō, ndðlö	òná
nape (of neck)	ßökösi	ŋhôdni	ßdgdsi
navel	löküündi	nkööndi	ŋkúűndi
near	hááhó	-biint, -hiint	nin
neck	nhilingô	nhiingó	ohilingó
need, request	-daka	Bötögwa, göhaya Bölöömbi, ŋhöömbö	godáká
new	mhya, -pya	-pyā, mhyā	mhya, -pya
night	ројјко	Bojiko	Boziko
nine	kėėnda	keenda	kééndá
nose	lyddid	lyddlö, niindó	lyddid
number	ŋhààŋgàtà	gdβálá ?	gigalo
oar	ŋgáhi	ndiinhó	ißügilő
obstruct	-lemeja	gdcißå, gdcååmå	golija
offspring	рорутие	ŋwaana	ŋwaana
oil (from plants)	mágütá	Bonálá, mágútá	Bogoondo 2
lio	mágútá	mágútá	mágütá
old times, the past	kalè	kālē	kálé
old person	nāāmhālā, ŋgīkölö	naamhala (m) rygikóló (f)	nāāmhālā, ŋgīkölö
plo	ηλοιόκοιο	-kölükülü	ητοΙοκοίο
one-eyed (being)	soongo	sóóngó	sódrigó
one	truō	-tmô	tmô
open mouth wide	-aasama	gwaasama	gwaasama
apen	-lúgðíá, -kúúndölá	gölügölä	golùgola
open (set ajar) a door	-lúgðlá	golúgölá, götőjá	götöjá
		583	

GinaMtúzú	götömijá	nòòngū	iswė	gwiinga	háánzé	qūkiinda	adtóóndwá		götüüngä	gökáándikíjá, göshjindilá	igina	Isulúsi ?	ndîînhô	ilaango	nteende	waalwa	qiqaanza				gödétémá	mváází		göβitá	nzila	quipa	gütégéléjá
JinàKiiyâ	golágijá	nòòngú	(y)iisė	gwiingá, göfúmá	-háánzě	gökiindá, göhèéßà	götööndwá < götööndá		gdtùingányá	gðsógá, gðshidányá	idaale/madaale, igita/mbiita/magita	ntùùmbá/mitùùmbá	ndiinhó	ilààngó	ntèndè	ŀ	jigaanza	2	nghàmà/mihàmà	~	götiniinhā, gödētēmā, gözügümā	myaaji/ßaßyaaji		golßitä, gökilä,	nzīlā	gölipá	göláfítilá, gölölá gölááŋháná
KimunaSüküma	-làgijà	nòòngù	yilsé	-iinga	háánzé	-tiindà	-toondwa		-tùùŋgilâ	-soongela	idaale	ilòßótá ?	ŋgahi	ilààngở	ntèndè	ī	shigaanza		ihāmā	nchikichi	-zùgùmà	myaaji	kāsūkū	-pita	nzila	-Itpa	-lòlà
English	order, direct	ostrich	our(s) pl. 1st person)	out (go), go away	outside	overcome; win, vanquish	owed by, be	oyster	pack (luggage)	pack, press together	pack, flock, group	pack, bale, bundle (n)	paddle (n) *	palate	palm (date)	palm-wine	palm (of hand)	palm (raphia)	palm (borassus)	palm (oil)	palpitate, flutter, tremble	parent, s/he who begets	parrot	pass, surpass	path	bay	pay attention, take care
Š	876	961	640	909	324	217	995	835	207	208	456	457	236	342	6	719	257	9	7	80	459	47	720	232	325	159	900

2	English	Kimunasukuma	JinaKitya	GinaNtuzu
820	peel, shell	-ydgölá, -tööndöölä	gopala, gokuußola, gotoondola	gůtôôndôôlâ
12	bed	mbàgó	2mbàgó	maambo
Ξ	pegs (tent)	lở màảmbô/màambó	lở mà ám bỏ/mà ám bỏ	maambo
464	penetrate	-nwèėlâ	gůshèèbà	qwiingilâ
721	penis	ιθβοίό	ndöðsö?, mbólð	alsobnab
884	penknife, lancet	kageembe	lòshō	lòshò ló Bógóóndè
558	person	müünhö	mininhò	müünhö
638	pestle	ŋwitsi	nwitsi	nwisi
312	pig	nhddmba	ngùlùbé, nhờờmbá	nhöömbä
414	pigeon, kind of	mhùùndà	nhiùundà	nhèélè
619	pile up, pile loads on head	-Bilingfllà	gwidilkā, götülífilà	qòtòttilà
479	pinch, make narrow	-shìnà, -jòòngà	gdshina	qòsinà
357	pipe (tobacco)	lůsěkě, isěkě	lüsene	litseke
552	pit, hole	ichòóngò	Icoóngó, nóógó, iptióndti	Ichódnaó
974	place, put (vt)	-tobia	gotobia, goditita	gòtòdíá
722	place (n)	háánhú	haanho, haleße, lwaande	háánhö
892	place of the dead	kölimü	gölimű	gờ Báchi
225	plait	-shißå, -sükå	gölöká, göshißá	gdshißá
932	plant, sow	-hààmbà	göháámbá	göháámbá
510	platform	lòtááli	lòtàlā	hitálè, lötálá
834	please, satisfy (vt)	-yėjà	gölöðmbyá, göpöjä gölögiishá, gösújá gölöjá	gðsújá
6	1		gwigotya, goyeja	
200	pleased (be)	-yejiwa	gūtogwa, gūyėga	göyéjiwá, götögishiwá
13	plot of ground	logaanga, logooga	ibāālā	lößöögä
647	plunder (a town)	-nyègètèjá, -tèmà	gdsóónzá	gòdiimâ
1014	plunge into, cause to sink	-nwėėjā	golißijā	gdnweejâ
114	poke	-sóósélá	gdsóósélá	gdsóósélá
		THE COUNTY		

shiwa

GináNtúzů	liggito	gởkônđôolâ	ilaambo	ոցնանա	Bogali	igóbó	sisèmè	лкеве	nùúngờ	nddmbd	lyááni	göpöölä, götwäängä	gùtà	gðsáamílíjá	ndà	gößiizá ndá	gởmàttlà	götwiinà	grisinya	güséésá	göhäyä	gðkágá	gdkágá	gipili	
JinàKitya	iðgitó/ŋgitó	gobalā, gotelēlējā, gotelējā, gokolā, gokiliishā	flambó, ftáßá	ກຕ້ປ່າງຊຸດັ	Bögáli	łgöbó	ilsèmè	ŋkèβê/mìkèβē	nùúngở	nởờmbở, màandóòlò	ttimilò	gdpddiâ	gwita	gwītā, gdsāāmyā, gopùmuúnhā, gddītītā	ndà	gößiizå nda gwitta nda <götitä nda<="" th=""><th>gờgờia, gờgờiana, gờpeajapeaja</th><th>gokama, götlina</th><th>göfünă, göölécá</th><th>gòpùùnå, gờfùmā, gwìgèlâ</th><th>göháyá, göyöömbá</th><th>gökágá</th><th>grìkàgà</th><th>lipili</th><th></th></götitä>	gờgờia, gờgờiana, gờpeajapeaja	gokama, götlina	göfünă, göölécá	gòpùùnå, gờfùmā, gwìgèlâ	göháyá, göyöömbá	gökágá	grìkàgà	lipili	
KîmûnàSükûmà	lößáálé	-kúlūūsā	ilāambo	იმმემმ	ßögali	igóbó	shisèmè	луке́βе		nggmpg	ichômělô	-lwaanga	-iità	-sààmyà	ndā, ŋhùùmbì, βöditó	kößi ndá/ßödító; kößi ŋhùùmbí g	-Ĥeejā	-kêmêkâ	-fûnyà		-hām(ù)kā	-kàgà	-kàgà	shiptit	989
English	pole, thin	polish, clean by nubbing	pool, pond	porcupine	pomidge (stiff)	pot (metal)	pot, vessel	pot, mug	pot, cooking (earthen)	potato (sweet)	potter's kiln	pound (grain in a mortar to get off the husks)	pour away	bour	pregnancy	pregnant, be	prepare	press out (oil seed, sugar cane)	produce, put forth, display	prominent (be); put out	pronounce	protect by charm (medicine)	protect by charms (target)	puff-adder	
8	737	11	177	923	374	45	4	38	4	749	646	369	441	149	748	929	288	553	986	606	218	340	947	475	

Š	English	KimunaSukuma	JinàKitya	GìnàNtùzù
244	llnd	-dùtà	goduta, gogweesa	qūqwėėsa
173	pull up, come to a halt	-třmá	gwiimā, gwimíila	gwilma
172	pull up, root up	-dùbởià	gòdùbòlà	addübülä
833	pull, drag	-gweesa, -dùta	gòdùtà	qdqweesa
22	dwnd	iβóómbá	iβômbà	прока
548	hsud	-shiindikâ	göshiindikä	gösiindikā
992	put, place, set	-1001a	götöölä, gößitcä	götöölä
887	put together for comparison	-helà	gdlééngántjá	göléngántjá
696	put a pot on the fire	-tégà	gðtégā	gotobla (fügó)
981	put together, compose	-túùŋgà	gölööngá, göβééjá götööngá, götüüngá	götüündâ
862	python	sátó, ndélémá	sado	sátó
959	quarrel (vi)	-lwà	gdyógá, gwikéná	adkėnva
180	quench, extinguish	-jimyà	quimvā	adzimva
485	quiet (be)	-leenda	göfüliká, gölémbéélá göhüümőlá	gulēėndā
9/	rain	mbūlā	mbùlā	mbùlà
917	rain (vi)	-tölá mbülá	gotolā mbùlā	adtolá mbůlá
1006	rains, the lesser	Iswaalaala	gafaalala, gaswaalala	mayaayi
197	rainy season	kidikò	jidikō	aidiki
280	rumble	-ildúúsilà ?	gölüündümä	addúdúmá, adlúmá
56	rat, kind of	ŋgòsò		sùna
488	rat (field)	ŋgósó	1	ngósó
24	rat	ŋgósó	ngósó	mbéßà
52	rat- (very large, long-tailed)	ŋgòsò		sėėnzi
883	razor	lògèèmbè	lùgèèmbè	lògèèmbè
949	read	-sómà	gdsómá	quèsoma
1007	reap, harvest	-gėså, -yόβå	gögésá, göbükőőlá, gökülá, göyöljá	gögésá, göyößá, göstim gökülá

mba,

powadanious, optokeela preferencelea politica po	9	English	KimunaSukuma	JinàKitya	GinaNtúzů
reduce, sey no middlete identification deficies, so the control middle identification deficies, so that control middle identification deficies, deficies of the control of	523	receive	-àanùkờià	gwaanukola, gobokeela	awanukala anbokeela
repect, refuses, distince defend options of polithers, say to the control of the	537	reed	màdètè	idětě/mádětě	mådètè
remain, stay behind - q-jala opinion-garden erratum, stay behind - q-jala opinion-garden erratum, stay behind - jala opinion-garden erratum, stay behind - jalada opinion-garden erratum, stay behind - jalada opinion-garden erratume - jalada opinion-garden erratume - jalada opinion-garden erratume - jalada opinion-garden erratume - jalada opinion-garden erratume - jalada - jalada opinion-garden erratume - jalada - jalada opinion-garden erratume - jalada - jalada opinion-garden erratume - jalada - jalada opinion-garden erratume - jalada - j	632	refuse, say no	-lèmà	qùlèmà	atylema
remain, say behind - salaple globaled quicklas entering stay exhibit - salaple globaled quicklas entering stay - salaple globaled quicklas entering - salaple globaled quicklas entering - salaple globaled global	633	reject, refuse, dislike	-gilà	gölèmà, gölèmėja	gölémá
remain; stay i-labida globalda	545	remain, stay behind *	-saaga	gosaaga, gwikala	gūsaaga
recentrate circumstance control contro	1035	remain, stay	-ikálá	gdsaaga, gwikala	gdsäägä
resemble (* very closely) - il-ilolah gondola resemble (* very closely) - il-ilolah gondola resemble (* very closely) - il-ilolah gondola resemble (* very closely) - il-ilolah gondola resemble (* very closely) - il-ilolah gondola resemble (* very closely) - il-ilolah gondola resemble (* very closely) - il-ilolah gondola resemble (* very closely) - il-ilolah gondola resemble (* very closely) - il-ilolah gondola resemble (* very closely) - il-ilolah gondola resemble (* very closely) - il-ilolah gondola resemble (* very closely) - il-ilolah gondola resemble (* very closely) - il-ilolah gondola gondola resemble (* very closely) - il-ilolah goldonola resemble (* very closely) - il-ilolah goldonola goldonola resemble (* very closely) - il-il-il-il-il-il-il-il-il-il-il-il-il-i	840	remember	-iizūkā	gwżzdka	güzökä
resemble (very closely) -j-jilickka godekoka incentible (very closely) -j-jilickka godekoka incentible (very closely) -j-jilickka godekoka incentible very closely godekoka godekoka rest flerely on the budiersome -ddichlekwa godekoka gode	499	resemble *	-iikola	gwikólá	gükölä
rest heavy on, be burdensome i-dioblehow godelness, god	879	resemble (very closely)	-iyiikola	gwikólá	gùkòlá
rest the evely on, the burdersome action the way on the street on the burdersome action the way on the country and on the burdersome action the way of the country and on the country and the country and on the country and on the country and on the country and on the country and on the country and the country ane	1031	resemble *	-iikola	gwłkóla	gùkòlá
rest the cheek on the hand (in -pitrithiab), -siondithiab appoint than a control shain a control cheek and the che	149	rest heavity on, be burdensome	-didôhėlwa	göléméélá, gößünä, göhééßá	qößünwä
return, go back - indicida godinidas return, go back - saboka godinidas return, go back - saboka godinidas return, go back - saboka godinidas return - saboka godinidas - godi	964	rest the cheek on the hand (in brooding mood)	-pîînîhâlâ, -sûûndûhâlâ	gwitöli tàmb < gwitölá ítámb < göttölá ítámb	götölä pöháßi
refurm go back subooks golastooga stretum subooks golastooga strong subooks golastooga strong subooks golastooga strong subooks golastooga golastooga subooks golastooga golastooga subooks golastooga strong subooks golastooga strong subooks golastooga strong subooks golastooga su	957	rest, take a holiday	-ifúúla	gwiftiùla	gùfùùlà
review shooks goldendogs review shooks review shooks review shooks review shooks review shooks review shoots review shoots review shoots review shoots review shoots review shoots review shoots review shoots review shoots review shoots review shoots review shoots review shoots review shoots review review review review shoots review revie	249	retum, go back	-shooka	gdshóógá	göshöökä
revive right and an articles and an articles and articles and articles and articles and articles and articles and articles and articles and articles and articles and articles articles and articles articles articles and articles articles articles and articles articles articles and articles a	1004	return	-shóóká	grishooga	gdshóóká númá
thinocens makes makes the control of	200	revive	jodchá	gàpìmbáácâ, gùjððcà	gðjöðchá
th bighaci pighacimbaci dependence of the bighacimbaci dependence of the control	318	rhinoceros	mhélá	mhèlà	mhèlà
ripe shihile -jaile ripen (v) - hya golpya and ripen (v) - hya golpya and ripen (v) - hya golpya and ripen (v) - hya golpya and ripen (v) - hya golpya and ripen (v) - hya golpya and ripen (v) - hillima golpya and ripen (v) - hillima and salahaya, do'micha goloca, golkima and -dalahaya, do'micha goloca, golkima - do'micha goloca, golkima - do'micha - do'micha - goloca, golkima - do'micha - goloca, golkima - do'micha - goloca, golkima - do'micha - goloca, golkima - do'micha - goloca, golkima - do'micha - goloca, golkima - do'micha - goloca, golkima - do'micha - do'mic	988	d e	lößázú	lðβázú/mbázú	lößázű
ripen (v) 1- 1-yd gdypda gdypda ripen (v) 1-yd gdypda ripen (v) 1-yd gdypdigdia ripen (v) 1-yd gdypdigdia ripen (v) 1-yd gdypdigdia ripen (v) 1-yd gdypdigdia ripen (v) 1-yd gdypdigdia y 1-yd gdypdia gdyffina, 1-yd gdybra gdyffina, 1-yd gdybra gdybrad cost (riby fire) - ddybrad gdybrad ianana had gdybrad cost gdybrad	473	ripe	shihiile	-pillé	-piilė
river (v) - hyd gogyddogold frier (v) - hyd gogyddogold rhefren - railland gollondolland, gollondolland, gollondolland, gollondolland, gollondolland, gollondolland, gollondolland, gollondolland, gollondolland, gollondolland, gollondolland, gollondolland, gollondollandol	966	ripen (vi) *	-hyà	gdpyā	göpyá
ricer mologo mologo, m	472	ripen (vi)	-hyà	göpyá/göpiá	gdpya
roar, rumble -hillimà gobilocidma, gohjoda, golisma, roast (mby fire) -dahangai, -bòmircha goboca, gobilome cost (mby fire) -dahangai, -bòmircha goboca, gobilomeá rock shoakana inanna haka	509	river	móóngó	mòóngô	тоболдо
roast -kalaángá, -dómíchá gdóca, gdxómelá roast (infby fire) -chómá rock shipálana iranna thak	539	roar, rumble	-hilima	gölüündümä, göŋöölä, gölümä, göhilimä	gờŋởolâ
roast (infby fire) -chòmà golòca rock shladana shladana	644	roast	-kalaanga, -domicha	góócá, gökómélá	góóchá
rock shiqaanaa iinaanaa itala	350	roast (in/by fire)	-chômà	góóca	góóchà
Jugar San	806	rock	shigaanga	jigángá, ítálě	italė

2	English	KìmunaSukuma	JinaKitya	GináNtůzů odoortlootinoù obůůnaůlů
291	rooster (cock)	դիմարցնկնուծ	huungumuu	izu
169	root	Ť.		-86zÿ
58	rotten	rpoute		onlinoa
1012	round (be)	-ikòònzéélá	gwininga, gwininga gwininga, gwininga gwininga, gwininga gwininga, gwininga gwininga, gwininga gwininga, gwininga	anchiga
183	round (go), turn round	-gálóká, -gálóchá	gonniga, gojiniga, gwyddag	aritiginal
666	round, become	-ikoonzeeta	gwiphings Anthony administ	niktila
110	up	-külüüsä	gosminga, gogunsa	makambalala
50a	rubbish, garbage	Rososo, mapalala	mapaiaia	makambalala
321	rubbish heap	ichóóŋgó	Ikaandro	orobela
826	מוט	-pėėla	gopeela stabbook	nhôlà
522	sacrifice	shitaambo	Jigapiro, Jugarina	midnhü
723	salt	mūūnhū	manufa	shanohshanoh
95	sand	maseni	saangasaanga, masalo	ojodia
630	satiated (be); have enough to	-igòtà	gwdgota	gugora
	eat or drink		Andread addition to the A	onsola
788	satisfy	-ligela	gwigetya, geleeninga	odwylla
251	say to, tell to	-wills	gowilla	phomi
783	scorpion	ŋhômi	ghomi	ghoddaza
453	scrape	-pālā, -kwāālā	gobala	gopoonea
855	scrape, grate	-kwabla	gopaga	gokina
956	ecratch orate	-snina	göshina, gökwaala	mp/qui
888	southe, sickle	imoòleto	moolo, imoolelo	nillouis ankoogs
84	search for	-cnoota	gáccola, gokooba, gocooba	gowody
8	search diligently	-külä	gokuta	gokud
738	seat stool, chair	isciumbi, shift ?	tsaumbt	especial and a second
270	9	-Bona	gollona	Bilogop
2 5	200	mbiyo, mbégů ?	mblyö	mbiyo
0	nase	-dima	gödiimä	godiima
404	seize	- Andread	enikiji	-èènèkèlè
611	self	-enekele		
			686	
			101	

ımè

send		Silanus	-
sequence, set apour elebalanya separate, lesva and separate, lesva and other elebalanya est a trap	-gôjá	göjiinjá	gojiinja
sequence, set spart elebádado a sequence, seave each other elebádado a set a trap sea a trap sequence, seave en control elebádado a set of the sam) eneder (belo te seven eleberado a seave en control elebado a seave elebado	-toma	gotomā, gocaalā	götömá
sequence, severe each other - lebbland sea a trap are each other - lebbland seal of the sun) - good litting severe each other - lebbland severe - lebbland - good litting severe - lebbland	-lékáányá	gölékáányá	gölékáányá
es a trap cented (for the sum) cented (for): be in good order - debenda sever cove	-lèkàànà	gülékááná	gölékááná
serie (or the sun) - grow titm) series (or). Le in good corder - deviceda, serven - scienta - sc	-tègà	götégä	götégá
sented (de); be in good order - sleekinds serven in control - sleekinds serven serven serven - sleekinds serven serven serven serven - sleekinds serven serven serven - sleekinds sleekinds - sleekind	-gwà itimi	gogwa, gölifitla, gösalattla, gölöka	gögwá, gülá
serown repriumpated serown activing and a serown activing a serown activing a serowal serowal by the serowal s	-leenda	gdteenganfla	gdßeegeleja
servine servin	mpùùngátí	mpüüŋgátī	mpüüngati
summer second interactions with throwy second interactions with throwy second interactions and second interactions and second interactions as sharen motivate of second interactions as sharen motivate of second interactions as sharen motivate interactions as sharen motivate interactions as sharen motivate interactions as sharen motivated interactions as shared interactions as a shared interaction as shared interactions as a shared interaction as a shared interaction as a shared interaction as a shared interaction as a shared interaction as a shared interaction as a shared interaction as a shared interaction as a shared interaction as a shared interaction as a shared interaction as a shared interaction as a shared interaction as a shared interaction as a shared interaction as a shared interaction as a shared interaction as a shared interaction as a shared interac	-súmà	gdsúmā	gdsóná
season intercourse with theve) -dominal, -thickmish estation, shadow shadow, shadow minish shame, digratic or minish shame, digratic or shame, modesty minish shape they could be shape they could be shape they could be shape they be shape they be shape they they could shape they be shape they could shape they could shape they could shape they could be shaped they could be shaped they could be shaped they could be shaped they could be shaped they could be shaped they could be shaped they could be shaped they could be shaped they could be shaped they could be shaped they could be shaped they could be shaped they could be shaped to shaped they cou	-súmà	gdsúmā	gdsóná
shadow, shado mbeho shame displace minish shame displace minish shame melash motable shame behavior motable shame (be) and shapen motable shapen motable shapen motable shapen motable shapen motable shapen motable shapen motable shapen motable shaped motable sha	-töömbá, -ltöömbá	gwitomba, gwilaala	gülaala, gütöön
sharme, disparce minish sharme, disparce on this sharme, modesty minish sharp feet of the sharp feet o	mbéhó	ŋweŋgéeji, mbehō	mbéhó
sharme, modesty minish sharme, modesty minish sharpen modesty modest sharpen modest sharpen modest sharpen modest sharpen modest sharpen modest sharpen modest sharpen modest sharpen modest sharpen modest sharpen modest sharpen modest sharpen modest sharpen modest sharpen modest sharpen modest modest modest modest modest short point modest short point modest short modest	minālā	soni	gügöökä
sharm, modesky minish sharm, modesky minish sharp (be) obgith, sharm sharp (be) obgith, sharm sharp (be) obgith, sharp sharp modesky sharp	soni	son1	minālā
sharp (be) -00gths, -taiths a charpen -00gths, -taiths sharpen -100gs sheep rholo sheep rh	minálá	son1, minala	minălă
sharpen n-hoòga staure n-hoòga ster, no web sterep n-hobo sterep n-hobo	-oògihā, -kalihā	gödginå, gökáliná	gökálihá
shave nn-hogg sheep n yhdo sheet cowfe shimbi sheet iowfe shimbi sheet iowdoda shiver sheder caption short sheder caption	-noola	gdnóólá	gdnddla
sheep photo sheep photo sheep photo sheep photo sheet count or sheet count or sheet	-mooga	gdmóógá	gdmóógá
sheep photo sheep photo sheep photo sheet sheet broads before the control of sheet sheet control of sheet sheet control of sheet she	weel	weei	weel
shell cowrie shimt) shed shed shed shed shed shed shed shed	nholo	nholo	nholo
sheel noodal sheet londods sheet londods noodral sheer sheder scigima sheer short gall her short right	shiimbi	shilmbi	shiimbi
shied (inhobda shir (bone) redonat shiver, shudder - crigima shiver fludder - crigima shiver fludder - righth		lògalatà, lòdelēkā	gilòòngó
shin (bone) nadhat shiver, shudder * -zùgumà shiver 'sògumà short ngànt	lòmòdda	làŋàḍda	londoda
shiver, shudder * -zùgùmà shiver short ŋgùhi	nggudi	noondf	nggudi
shiver -zügümâ short ŋgüht	-zúgúmá	gödétémá, göniginá	göfülámá
short	-zùgùmà	gödétémá	gödétémá
	ngùhi	-gühī	ŋgùhì
430 shoulder, tip of iDégà/má/Bégà	iDéga	ißégá/máßégá	ißégá

mbå

No	English	KimûnàSûkûmà	JinàKììyā	GřnáNtůzů
588	shoulder	ißėgė	iβėgà	iβėgà
839	shout	-hàmùkā	gòyògà, gòyògànâ	gwààntilà
946	shrivelled (be); wrinkled	-tìtà miinyà	gðnáálá, gwihóbá, gwinúlúdá	gwiità siizòkòlò
763	sick	-saatú	-sààdů	-sààtù
870	sift	-yddggā	gdyddnga	gòyòòngà
615	sing	-iimbà	gwitmbă	gwitmbà
3	singe	-BàBà	gởβàβà	gờβàβà
980	sink, be drowned	-tůβilà	gòlißìlå, gònwèèlâ	gònwà nhúli
170	sink	-nwèélā	gòlißilä	gòlißitä
726	sister (his)/ (her) brother	ilòòmbò	řlůmbůdyě	ildómbó
627	sit	-ikālā	gwigaasha	gògitshā
753	six	itàándátó	itāndātō	itàándátó
785	size, measure		nshimō, ngètě	ngélékélő
123	skin (of person)	ikòβà, ndřtí	ikòßă, nditi	ikòònzà, nditi
124	skin/rind (of fruit)	lyöótá, igööngwá, igáándá, igöólá	îgōlā, îkùlūlū, îkòòlēlė	igódiá
303	sky	ilüündè	igòlò, itùundè	ilüünde, igölö
865	slander, accuse falsely, often secretly	-sááyílá	gösöönéléjá, gößöölá	gopoola
470	slap	-tôlà ípì	gòpààlà	gòpààlà, gòtòlà ip
970	stash	-tèmà, -fèègà ?	gòsèèngà, gòtèmà	gósweeka ?
220	staughter	-stinzà	göstinzá	góstinzá
727	slave, bond servant	nsėsė	nsèsè, mfügwä	nsèsè
728	slave (female)	nsùgwà	nsèsè, mfūgwà	nsèsè
729	slave, (male)	nsúgwà	nsèsè, mfūgwà	nsėsė
136	steep (vi)	-tiinditá	qòlààlâ	góshiltólá
731	sleep (n)	-tůlô	6161	tôlô
730	sleeping-place, accommodation	ndààlô	ndááló > göláálá	ndààlô

No	English	KimunaSukuma	JināKityā	GinaNtùzù
296	slip, be slippery	-chở diời ở Kả	gocooja, gotyooja, gocoojoloka, gotelela	götyöbjá
1021	small	opu	-dólóló, -dóó	ndólóló, ndő
332	smallpox	ytina, ndößi	ndößī	Idobi
241	smell (sweet) (vi)	ŋwààsô (n)	gðnúúnhá	gdnüüŋhtila
242	smell (bad, of fish) (n)	βοπώνητώ, κόβλησίτα ?	նեն, թծուննդին	gönüüŋhâ
240	smell (bad) (vi)	-ทบันทุกล	gởnúnhà	gờnúinhà
629	smoke (n)	lydóchi	lyóóci, göbéhá (vt)	lyóóchi
428	smoke (give out) (vi)	-zūūkījia	grizuika	gözüükâ
387	snail, slug	ngooků, noonga	пдоожи, јідоожи	ŋgöökü
837	snail	ŋgóökü, nööŋgá	ŋgóókű	ŋgôôkù
145	snake, serpent	nzóká	nzókā	nzóká
158	snare, trap (n)	ntėgò	ntègô	ntègó
864	sneeze	-ityaamula, ityaamucha	gwityaamula	gütyáámúlá
924	sniff, smell out	-nùùnyhà	göbehā, gönüüphā	gờnùùnyhâ
296	snore, snort	-hòlòòtà	gūnjoolā	gdŋöólâ
69	soil	Bellindo	βοιοόηλο	βάΙδόηβό
732	buos	lyżimbó	lytimbb	lyttmbó
616	souos	mtimbó	lytimbő	mijmbo
36	soot	milâgé, njijô, mbilô	mbilő/ŋhil1/mákil1, milágé	mbiló/máßiló
195	sorcerer	nògi	nógi	nógi
201	sore	nhôôndô	Ilòònda	ilòònda
734	soul, spirit	ηλόδιό, πόδγό	ŋhòiō	ŋhòló
331	sound, cry	ilākā	ilakā	ŋwaanò
64	space (open)	lüßüügä	lößöögá, íbáálá	haape
82	spark	isási	isasi	isásé/másási
253	speak	-yoomba	gdydombá	gðlöðngálóóngá, g
733	spear (n)	ichimi	İcimű	ichimi
137	spend time	 hóóyá, jimíjá mákáánzá 	gdhóóyá	göfityá mákáánzá
		56	592	

gòhàyà

4	Foolieh	KimunaSukuma	JinaKitya	GinaNtúzú
2	Ligilari	4	wine	Bone
1038	sperm, semen	Wille		44.6
62	spider	Юрфрі	itaandala, löößi	Dieenda
182	spirit (of dead nerson)	linhààngi	isaamva	ntaale/bataale
464	spirit (disembodied)	isaamva [isaamva]	mijimű, isáámvá, ihögi	isaámvá/másaamvá
683	crisis (excit)	isaamva (isaamva)	isáámvá ikáli	таатуа аа вов
582	free vilde	swa	göfā/göfüä	gdswä
533	spille	mate	màtě	mátě
500	enlit crack (vd)	-Bela	gopaandola	göpáándölá
964	spoil blind (vf)	-Bôkùià	gðbókújá	gößöküjá
649	spoil (a child)	-gegela, -leendeeja	gdgegela	gögégélá
860	Sopil	-Bihyâ	gößipå, gökénáágöká	gößiipyä
613	drous	nditinhò	ndiinhó	nditipho
2	appear to a	maßala	ißala, ibadō	igala, idoonhē
0		toloopend toloopend	grikalaBánika	götiingölä
959a		- Ciceptanya	ordesania	admalamala
141	spread out (be)	-Saaringala		grademph
527	spread	-ààmbà	gwaanza, gwaamiba, gwaala	gwaaiina
806	spread abroad, be; become	-sáánjá, -kůmöðká	gökümdökä	gökümöökä
	Serios and Serios Serios	Alth-	aci Bită, actobă, gdshitga	goßila
285	spread, sriledi oii	nud.	-3-10-14-616	orhibkaana
591	spread, scatter (vi)	-saambaala	gosaambaala gobalaasana gosalaanhana	guidhaalia
880	spring (of water)	shinyélè	lözéléélá, lwinzi lókölő < lwinzi ginélé lókölő	i ginėlė
965	soring machine	mashiine	máshiné	gitòmàmíló
866	spv out	-détá mátů	gögistítjá	goßoogilija
849	squat (on the haunches)	-itòùndà	gwitddndâ	guldenda

8	English	KimunaSukuma	JinàKitya	GinàNtùzù
991	squeeze oneself up against a wall (e.g. to allow another to pass)	-isùindâ	gwigiginíká, gwishidéléjá	gügêgêbêkâ
914	squeeze out	-twiinà	gökámá	qökäändä
343	squeeze, milk	-shèèmhâ	gùshèèmâ	adsheema
102	squirrel		gaßüùndi	aàBùùndi
582	stack, pile up	-sùùmbya	gölööndá, götölíflá	gòtòlífla
1029	stand (vi)	-tìmifià	gwitimā, gwitimfila	awitmitia
735	star	sòòndà	sòòndă	sòònda
390	stare, glare	-βyởởlà	gdβyddlå, gdβüündölä	gòmògòtá mils
202	start off, send away	-pėėja	gwitnja	gwiinja
799	startle, catch unawares	 kùúŋgá, -sááŋgánijá 	gðkáángá	gwisambókija
830	startle, jerk	-gùtờiâ	gokangá	qwisambóktja
618	steal	-iißå	gwißa	gùßà
266	steel	chởởmà		chởởmá ngành
554	stem (of maize, millet, etc.)	ißelele	îβélélé/máβélélé/ mbélélé	ißèlèlè
825	step over	-itââmbûkâ	gökilā, gökilāņhā, götāāmbökā	gðkíláányhá
315	sterile man (or woman)	ŋgởởmbà	ngddmbá	ngoòmbá
541	stick	náárygá	náánhá	náánhá
74	stir, mix by stirring	-lūβyà	gdsagaja, gdbùgùsâ	gðbúgúsá
820	stir	-lùβyà	gdsagaja	gūsagaja
78	stir up	-teèja ?	gdßülücå, gökömyä	gölümyá
61	stone	iwė	iwė (pl. máwė)	iwe/mawe
228	store up, collect	-sû ûmbyà	gösöömbyá, gölööndá gößilingá, götölíflá	gdβiliiŋgâ
154	straight (make)	-gólólóchá	gögölöölä	gögölöölä
268	stranger, guest	ŋgèni	ŋgènì	ŋgèni
991	stream, current	ikoondo	lóóngá, nhườmó	nülümä
		894		

GináMúzů	ŋgúzù	gùgòlóólá	gögüüdíjá	gðchimá	poji	gdydgdlà	güsányá	goguiumhá	gdβiiptlwa	gðháhátíjá	goonha	gðbipá	gdydmlilja	iguiwa	IE;E	göptinditlä	gdmila	gütööngá, güláhtlá	liidüütü	gðkúmiiŋgā	gðsháágólá	-nônù	gößlimbá	lùshù	páángá	ŋkila	gờiảgà	
JinàKilya	ŋgúzů	gwigólóólá	götöfä, gögüüdfjá	gócimà	роюра	göhölölä, göyögölä	gwihājá, gwihàyā, gwigilmbā gwigéétá	gwłpama, gwłgiumna	gdßilpå	göháhádíjá	góónhá	gởbipā, góởnhã	gwłydómilija	igūwa	itimi, iyooga	gðpindtila, gögößa	gůmilá	gwilahila	lờờyilô, lildùùtũ	gūpyāagūlā, gūsūdmbyā	gòpyààgólà	-บุงมก	gdβilmbá	löshö	ldshū	ŋktilâ	gòlàgà	\$6\$
KimunaSukuma	ŋgùzù	-igòlóólà	-gùùdíjà	-chimà	Boji	-ydgdlå	-ilsányâ	-igüümhà	-géédélá	-hyáhyátíjá	-òòŋhà	-bipa	-lgümilijà	màgúwà	Ithmi	-lyddygddla	-milà	-iilahfla, -iihaakila	lòdyiló	-kùmiiŋgâ	-hyààgólà	-nonū	-ßiimbá	lòshò	ipáángá	ŋktlâ	-làgà	
English	strength, power	stretch oneself	strike, knock	strike with a spear	string (n)	strip off (e.g. grains of com)	strut proudly	stumple	stunted (be); be spoilt	stutter	suck (the breast)	suck (vt)	suffer, bear patiently	sugar cane	sun, light	surround	swallow	swear	sweat	sweep up, collect in a heap (rubbish)	sweep	sweet, pleasant	swell	sword (short)	piows	taii	take leave of	
No.	798	140	395	982	282	487	519	407	166	948	594	480	912	802	333	184	438	111	906	392	943	517	51	608	933	360	875	

No	English	KìmůnàSůkůmà	JinàKììyâ	GìnàNtùzù
778	take in (from rain, etc.)	-ờờβà	gởởβã	gờờβà
565	take, carry	-βòùchâ	gờsôlà	gởβờờchâ
233	take off (clothes), undress	-zùùlâ	gòzùùlâ	gôzùùlâ
530	tangle	-yaanjiwa	gờtàβà, gờtàβàŋà	gôzwàànjà
898	taste (v)	-lôjà	gởlôjá	gðgèmá
985	teach, instruct	-lààŋgà	göláángá, göhéémbéká	gðláángá
621	tears	shiisòji	jiisóji	miisòzî
412	ten	ìkòmi	ikòmì	ikòmi
121	termite	nswà/miswà	nswā/miswā, mfā/mifā	nswà/miswà
739	testicle	mákříndá ?	lġβòlō/mbòlō lġβògòlò/mbògòlō	mbòlò
1020	that	i yò	řyô	-yò, -chò, -β
455	thatched roof	tβlimbilė	jisóónzó	iβiimbilė
767	there	áhô, ởkô	áhó, ökö	àhô, ởkô
54	they	βόὸὶ	βόὸγί, βὸ	βòòi
444	thick, fat	nginù	-gìnũ, -nònũ	-gìnù
86	thicket *	isákà/màsákà	ìsăgà	isáká/másák
854	thicket	kásáká	isāgā	ìsáká
619	thief	ŋwiiβi	ηwiβ1, ηwiiβ1	ηὰβί
23	thigh (of human)	itààngò	ìtààngó	itààngò
22	thigh (of animal)	gölögmbó	jilòòmbò/ìtààngó	itààngò
559	thing	shìinhò	gřinhò, jikólò	gììnhờ
987	think, imagine	-iiganika	gwigáníká	gùdètà
651	thirst	nòòtâ	nòòtâ	nòòtâ
740	thom	liihwà	liifà	liiswà
689	threaten	-kàảngà	gókáángá	göögöhyä
532	three	idátó	ìdàtó	idátó
115	thrust into	-chimà	gůcimá, gůsômá	gòchimà
420	tick (cattle or dog)	nhùùndyà	nhùùndyă	nhùùndyà

8	English	KìmùnàSùkùmà	JinàKitya	GináMtůzů
1034	tie (fasten) (vt)	-dêênyâ	götüüngá	götüüngá
258	tie up	-tùùŋgà	götüüngá	götüüngá
978	tingle with excitement	-yėga	gwłgilimola	gùtà nààmbā
119	tip, point	Basoonge	nėno, Basoonjė	mhèlò
741	tobacco	itüümbáti	ftùùmbátf	itüümbäti
146	today	Ièèiò	lèèiō	lèèlò
742	toe	lwaala	Bonoono, Iwaala	lwaala
445	tomato	inyaanya/manyaanya	nyányá	itólé/mátólé
105	tomcat (half-wild)	kimbölö	kiimbėlė	kiimbölö
743	tomorrow	ntôôndô	ntòòndò	ntòòndò
166	tongue	lðlimi/ndimi	lòlimi	lölimi/ndimi
120	tooth (canine), tooth filed to a point	liinò		iwitmilò
267	tooth	liinò	liinō/minō	liinò/miinò
306	top, peak	ŋgèlèlò	igolya	hilgólyá
293	tortoise	mhůlů	gùlùmààdi	quumaadi
277	town	njilini	kaaya	mádöóká ?
378	tramp of feet	ntiindò	ŋkiindó	nkiindó
270	travel	-yėėlā	gdyėėla, gdja/gdjia	gůjá lůgěèndo
240	tree	lifnti	ntt	lifnti
538	tremble, shake (vi)	-détémà	gòdètèmà	gödétémá
999	trickle away	-zwa	götiinā, gösölölökā	gdzwa
401	trunk (of elephant)	ŋkööndö	ŋkööndö	ŋkôôndô
604	try	-gėma	gögémá	gùgèmà
909	tsetse-fly	ibàbàlà	ηὸηὁΙὸ, ηց Ι	bóbóló
938	turn upside down, turn over	-gàldchá	gösinölá, göhtindölá, gögálöcá, gögálölá	göküündikâ
174	turn round	-piìnd00la	göpitndilija, göpilimya gwiyööngéőja, göpilöla	gùyddygddja
		265		

No	English	KìmùnàSùkùmà	JinàKitya	GìnàNtùzù
711	tusk, elephant's (middle size) *	mhèèmbè	liìnō, îpêèmbé	filnò, mhèèmbè
452	twin	màβàsà	iβàsā/màβàsā	màβàsà
185	twist roll, spin with fingers	-dòsà	gờdósă, bòtă	gòdòsà
483	twist, esp strands	-sòβyà	gàbòtā	gòliingàliingà
752	two	-Biti	ißilí	ißilf
18	udder	shinènà	jinėnà	ginènà
945	uncover, reveal	-kùùndòlâ	gờfùnởià, gờkùùndớiā	gởkùnởià
551	unripe, half grown	itiindi	itindi, -βisi	ndòβėjà
994	unripe, uncooked	ißisi	-Bisi	-βisì
311	up, above	hìgólyà	hìgōlyà	hiìgólyá
614	upright	witmâ	witmā	witmā
446	urinate/defecate	-nyà, -sùβààlà	gờsùβààlà, gờnyà gờtùùndàgà,	gờnyà, gờ tù ủn dàgà
745	urine	mìinė	mîně	miinė
569	use	-tòmìlâ	gòtòmàmílà	gòtòmàmílà
307	utmost, highest point	ŋhàlikíjö	jisòònzò	ßòkálikíjó
904	vapour, gas	myðdyž, lyóóchi	myddyl, myddyl	ηθάγθάγθ
380	vein	ŋwàànji	ŋwàànjī	ŋwàànzi
276	village	chááló	igòòngólí, cààlò	gijíji ?
692	virgin (bride), girl	ŋwààlòkì	ηwiβėémbù	ŋwààníkử
327	vision	shilooti	jilòòtí	gilóótí
330	voice, (thunder)	nùùndùmò	naka	ilàkà
224	vomit	-lòkà	gòlòkă	gölöká
524	walk (take a)	-simiinzâ	gòsimizā, gòyēēlā	gờsimiinzâ
269a	walk	-jà	gôsimîzâ	gójá
847	wall	ndùgù	ndùgù	isèèngè
983	want, need, wish	-likánwá, likůômvá, -dáká	gởhảyà	gòdàkà, gùkôômvá
507	war	βċlċgċ	βόlògō	βόΙὸgờ
790	wart-hog	ngili	ngiti	ngiti

		KiminaSiikiimä	JinaKitya	GinaNtuzu
2	English		and and any she she she she	grishaagdia, güsheeneen
860	wash oneself (after evacuating)	-iisheeneenna	Santahanahari Baranah	Sant Alang
127	wash (hands)	-ooja	góójá, gökalajsa	goveraba
1	(melanta)	-fills	götölá, gükánzá	gokaanza ngobo
178	wash (cluthes)		مؤيؤه	qòdda
129	wash, take a bath	-ooda	of the same	indian
322	water	miinzi	mtinzi	17111117
950	wave let off a trap, remove a	-sóBóólá	gökágöölá, gölögöölá	gozimya
3	spell			
1017		Bilse	(v)iise	Sise
2	2	Rhotedii	-gákálá, -léßű	-neneela
1010	weak	-iid	arileca aribiishâ	gògijà, gòbùùshâ
881	wean a child, give leave, send	-Bila	gologe, gomen	
	away		Alexander Section 1	ori-zwaala
234	wear, dress	-zwaala	goznalagozwasia	gosphond
501	weave, knit	-súmà	gotuma, gosuma	BIOLEOG C
1015	weight rhythm	podito	podito	poone
200	manufacture, manufacture,	lwiinzi	Minzi	Wijnzi
212	Mell	- Notice	αὐdötà, gùβöômbà, gölöβà	gūdota
SS.	wet (get)	ndo:	vitation/left?	kffvi
919	what?	2	The state of the s	fifth
469	which?	ndöki	-	- Table 1
192	whistling	shilibji, ndji	ngij	
475	men etide.	nzúngů/βázúngů	nzivingů	edoo-
2 0	1	-aape	-tillő, -pé	-aape
010	Wille	naani	naani/naani?	dyalf(he)
918	WIIO	95 6961	18-	-aa Boßi
8	wicked	idod sp.	1	nkė
338	wife	nykrima	pull.	philipop
187	wind up (thread)	liinga	gonnyga	gome gar
746	wind	lòyágá	ldyaga	loyaga
9	Dill.	haha -eela	goheha, gobeeta, gweela	gweela
93	AAUTI DAA	hubborila	gbováágúlá	gūshaagola
112	wipe	or the Contract	Handaldimetholdh	Rezzi Bó chóómá
88	wire (brass)	Sudoodi 7, waaya 7	achiel de la la la la la la la la la la la la la	
			600	

-e

No	English	KimůnáSůkůmá	JinàKììyā	GìnàNtùzù
194	witchcraft	βởlògì	βάlógì	βởlògì
279a	withhold from	-gòβà	gwimä	gůmá
279	withhold from, abstain	-Bistlå	gwilecā <gólékā< td=""><td>gůléchá, gwiyilmá</td></gólékā<>	gůléchá, gwiyilmá
338	woman	ŋktfmà	ŋkīmā	ŋkìfmà
747	womb	ndà, ŋhùùmbî	ndá, nhùùmbi	ghùùmbi
812	word	mhàyò/mihàyò	mhàyò	mhàyò
772	work as a mason	-zêèŋgà	gözééngá	gôzééngá
167	work (n)	nîmô/mitimô	nimó/ milimó	ntmô/mittmô
81	wrap up	-liingá	gógóóndá, góllingá	gòllingă
344	wring (clothes)	-kâmâ, -bigisâ	gökámá	gòkàmá
773	yawn	-ilyáhyólá	gwaayola	gwaaydla
593	year	ŋwààkà	ŋwààkā	ŋwààkà
750	yesterday	ìgòlò	igòlò	igóló
15	you (sing.)	BééBé	βèeβě	ßèèßè
1018	you (pl.)	Bilinwè	(y)ligwě	ßilgwè
715	young man	nyáándá	pååndå	nyàándà
637	your(s) (pl. 2nd) person)	ylinwè	(y)ìíŋwè	linwè
693	youth	nsòòmbá, mùùnyhá	nsoomba, nwaaniki	ŋwààlòkì
292	zebra	ndòólò	ndòólò	ndòólò

Appendix 1. Zone F word-list: F31

No	English	KináUshôólá	KiniLäämbä Central	KiniHàànzù
133	abdomen, stomach, belly	ndà	ndàà	ndà
495	abscess, boil	pyó	pyóó/mápyóó	ipůtě/mápůtě
786a	abundant/abound	pà, pò	milgi	idó
786	abundant	pà, pò	póó	ntènyā

No	English	KřnáUshoolá	KiniLäämbä Central	KînîHàànzù
571	abuse, insult	kòtókànà	kòtókilá	kötökíláná
252	abuse, reproach	kökötákilá	kòlágánílá	kòlėà
809	accustomed (get)	kòjiňà	kòkìjihà	kizóólá
274	act (vt)	kờjipyà	kôtěěndá	kitòmà
229	add up	kàyóóngèèlyà	kàyóŋgèélyá	kòhàngilinkànya
927	adjacent (be); border (vi)	köyíímbiŋxànà	kökímí imbillá	míimbi (n)
662	adze, carpenter's	nsėsò	nsèèsó	nséésó
254	affair	lòkááni/ŋāááni	lòkááni	lðkànì
1002	afraid (be)	káyóópóká	köyőópöká	kògópá
168	agriculture	lyìmà	kilímó	kilimò
926	all	swė, túlwė	swèė	ihi
248	alter, change	kůkářlá	kòkàilà	kòkàilà
595	animat	nimů	ntmù	m(ù)nyàmà ?
617	answer a call	köyítiká	köyfftiká	kiitfkä
782	answer, reply	káshóókéélyá	kờshôôkêêlyà	kôjibù ?
664	ant (reddish-brown biting)	nělěli	nėlėli	nyèèli
122	ant-hill	kigðið	ànìŋéŋờ	kigòlò
663	ant (small)	júúndwt	nsôngôi	můtwá
586	anvil	tyáánító	túfilò	mwààndà
989	apply by stretching, spread over	kàkómà	kůkômá	kògòòlà
976	appoint, set up		köyfímikyá	
55	arm, hand	mákónó	mákónó	màxônô
771	ampit	ŋkwáápà	mpyéégènè	křsůkôsůkô
203	arrange, put in order	köpáángá	köpáángá	kàpààngà
204	arrange, put right, repair	kôjipîilyà	kôzîpyà	kôzipyá
478	arrive	kůpiká	kôpiká	kůpiká
665	arrow	nsòòngà	nsòòngà	mòyì
666	arrow (head of); spear head	-	nsòòngè	ndifimà

No	English	KináUshóólá	KřníLààmbà Central	KřnřHàànzů
337	ashes	máů	màù	màù
199	ask for	kůlóómpá	kůlóómpá	kòlòòmpà
89	assemble, collect (vt)		ilingittà	kôhángôilà
789	aunt (father's sister)	sééngi	nókókálá	mààmâ
148	avoid, dodge	kờshógà	kôtyêègà	kìhéjà
688	awe, fear of God	kůkúlyà, kůlyóómpá	wítěkěli	kölóómpá
667	axe	mpóópó	mpóópó	ihėėngo
364	baboon, ape	mpóómà	mpóómá	mpòmā
634	back of (at the)	nůmá	nùmà	kônyùmà
297	back	mùgôôngô	σορούρου	mágáángá
297a	backbone	ŋkòmé yà mùgôôŋgô	nkòmé yà mògòòngò	màgòòngò
27	bad	mbf	mbf	ibi
37	bad (become), rotten (vi)	kôyôlà	ktyólá	kòòlà
87	bait		kitégélő	łódyà
398	banana (plant)	múgóómbà ?	můdízí ?	mágóómbá 1
397	banana (fruit)	ndizi ?	ndizi ?	ndizi ?
399	banana (for cooking)			můzůzů
1005	baobab	mwáándó	mwàándó	mwäändö
1022	bark (of tree)		gyóè	igáámbá
313	barren (of living being)	mügöömbä	ngòòmbà	mògódmbà
314	barren (of land)	bámbási	đớmù	řiángwà ?
376	base of tree-trunk	shlinkwt	tinà/màtinà	itinà/màtinà
650	bask (in the sun), warm oneself	ktyóótá	kůyóótá	kôtá
576	basket of open wicker-work	kigáángé	kisóónzó	kisėmė ?
577	basket (plaited)	kikápů	kiżyó	kikápů
643	bathe	kůvôógà	köyöögä	kògà
498	be fitting, behove	tjíptilè	ktifptilė	ifáilé ?
1	be, become	kûtúlà	kátúlá	kòtòlā

SN S	Foolieh	KinàUshòòlà	KiniLáambá Central	KiniHàànzù
2		in desired	mowsani	mpwani
955	beach, coast, shore	шрмааш	1	Shood
827	pead(s)	nsaanga	nsaariga	man ya
416	bean, kind of bean (from phaseous vulgaris)	ŋkúindê	ŋköönde	ikaanaa
417	bean small (from bean plant)	máhálágé	máhálágé	mahalage
844	bean (ninner)	nkúvindě	ndüüli	ŋküündê
1037	bear child	kütélá	koleta	kötügà
147	beard	ndělů	ndelü	ndělů
788	beat	köküà	KOKOB	kököä
759	peantiful	liza	müüzâ	nzáá
162	ped	kitaándá, öltli	OHH	Oilit
161	bedstead	OHII	они	ditti
663	9	nzóki	nzóki	nzóki
775	peer	ntóló	ntóiò	ntòit
497	befit suit	kökijipilä	Kökijipila	közipilá
101	below, underneath	paansi	nstitit	plht
186	bend, twist (vi)	kökágóóndá	könyöngötölyä	kiköönzá, köpítn
468	bend (vt)	kogoonda	köpéétá	kököönzá
103	hamilton	keloga	kölögá	kölögá
020	bifurcation cross-foads	misââmbî ya nzîtâ	ntáágántlyö	miisaambwa nzil
222	Dillo	ntóóndó	ntóóndö	oghooyn
282	bind up splice	kökíliká	köyörnbékéélá	kökiifkwä
828	hid-lime	Ontià	bmia	10neembg
811	pid	nôni	noni	nyonyi
46	birth (give), to a child	külelä	kolela	kitüngöilé
125	bite	kölümä	kölümä	kölümä
221	bitter	dsgadad	nyali	nddld
223	bladder			
482	blind person	můpôků	můpôků	трока
			109	
			600	

dà

No	English	KřnáUshoolá	KiniLaamba Central	KiniHàànzù
669	blood	mìgàlî	mìgàlí	nsákámi
496	blow on, blow up	köpéémbèélá	kôpéémbèélá	köpéémbéélá
238	blow bellows	kòlùgùtà		köpèémbéélà
463	blow away	kôpéémbà	kởpůpůtyá	kòlůmyà
776	boast, brag, praise oneself	kôkisániá	kökísámáádyá	kikôzá, kikôly
676	boat			máshúá ?
670	body	mwitt/mitt	mwitii/myitii	mwłii/miżli
581	boil up	kópókótá	köpüütä	kůtěkôtá
30	boil (vt)	kötéléká, köpyőópyá	köpyőópyá	kôpyôpyà
433	bone	kúpá	kyúpá	ikúpà
564	bore a hole	kůbósôlá	kůpósôlá	kôtôbólà
1008	born (be)	kůlětvá	kòlèlwà	kátúgwá
910	borrow	kůkôpá	kůkyôpà	kůkôpá
872	bottle	nsởópá	nsópá	nsópá
928	boundary	míímbì	mffmbf	mimbi/mimbi
671	bow, bending	òótà	ůkôtů	òtà
508	bow	òótà	òòtá	òtà
953	bowstring		lòligì	làdigi
58	brain	óóŋkő	óóŋkő	òòŋgwè
509	branch	lótáámbí	lótáámbi	itámbi
375	bread	můkáátě ?	múkááté ?	můkátě ?
B31	break wind *	kờshùlà	kôsůlá	kôhůlá
77	break, snap	kờună	kôúná	kòùnáŋgà
1036	break wind	kðshúlá	kôsůlá	kôhůlá
17	breast (of a woman)	mbélélé	mbétélé	iyèèlé
489	breath, breathing	mwááò	mwááů	mihùpô
490	breathe, rest	kůshůůpá	kôsûûpâ	kòhùpà
138	bridge	dálájá	tiingitiingi ?	idálájá ?

No	English	KináUshòólá	KřníLáámbá Central	KřníHàànzů
139	bridge (wooden)		lyáló	kipůtilô
885	bring, fetch	kùléétà	kůléétà	kůlėėtā
171	bring to light	kökúmöölä	külööngyä	kigèlyà
882	bring up (a child)	kůkólyá	kůkúlyà	kòlėlà
660	brook, stream	kàmóóngò	mwáápô	mòòngò
942	broom	kyööyö	kyôôyô	ùpyàgiò
113	broth	můsởởii	másáálí	mòhòli
381	brother-in-law, sister-in-law	mùlámwì (màlè), sháámbà (fèmàlè)	můlámůwí	mùnyáŋkởmbán
341	brother (older)	mùgớli	mùnùnà	můkôlô
673	brother, relative, fellow-tribesman	mòntówá	montówa	áhêú, tóótî, álúi
874	bruise badly, take the skin off	kůkwàámůůlá	köŋwéétölá	kipónólá
71	buffalo	mbòògō	mbògó	mbògò
807	build	kòjèėŋgá	kôzèèŋgà	közééngá
674	bull	nzágáámbá	nzágáámbá	nzàgààmbà
80	bunch (of hair)	•	pyópi	nsiingä
890	burden, load	můlígô	mùligò	můligò
645	burn (vt & vi)	kòyáákilà	kòyákilá	kàkilà
231	burnt (become)	kòpfà	kůpyá	kůpyà
179	bury	kòyííkà	kdyffká	kờikâ
555	bush	sáká	òòwi	ìhàkà
21	buttermilk	mbóótó	másởớngà ?	mákwásó
514	buttocks	tákô/màtákô	tyákò//mátákô	ðkúnó/ŋkúnó
301	buy	kògòlà	kògòlà	kògòlà
873	calabash	kfindi, kisääö	kfindi	shiindi, yiindi
857	calf of the leg	nsáků	-	-
877	calf	ndààmá	ndààmá	ŋòŋóómbè
31	call	kòyíítà	kòyíítà	kitáángà

•	English	KináUshoola	KiniLaamba Central	MINIMAINZO
ď	Canno (din-nin)	3	pyaango	ngalawa ?
0 0	(2000		bytini	mittivimbi ?
y	Callod		1	Lakhanka
0	carry a child on the back (in a blanket)	Кораара	Кораара	voveelve.
7	carry/lift on to head (take up) a heavy load	kötvrífká	kūkitvrikā	KILIKA
	cam astride on the hip	kůkóléélá	köpyáápillyá	kökwäliflä
9	carry take	köshölä	kösölä	köhölä
	Carry, convey	kůkéénká	kükkenga	kůkéényká
4	cat	nyááú	níááů, záángů	nyáű
98	cattle	mitigo	mitúgó	mitügö
92	cease. finish	köshila	krisila	kömálá
8	centinede	ngi và ôtvááná	ngi ya mütyaana	nhààndô
2	change fum round	köpilökä	köpilöka	köpilöká
34	charcoal	kyálá/mákálá	kyálá/mákálá	mükala
33	charm (esp. to ensure wife's	nsaamba	mptgi	
	ndeiny) (n)	4	Labellow	kelphamilia
2	chase (away)	koymoga	KOymiga	11.5.5.4
15	cheek	Küündä	kyddnda	IKuunda
2	cheerful (become)	köshógökáángá	kükénüka	köhögökä
98	cheetah		nsyà ?	ibdi
8	chest	kikuwa	kiküs	kikûâ
22	chest (of animals and birds)	kikiwa	kyókóómbé	kidali
3	chief, headman	môtémi	mútémi	mümböl, manaŋgwa
2 5	chief	millemi	mülemi	mütêmi, mümböi
200	Dido	mwhánh	mwaana	nwaana, münenya
0 1	Cilia, miana	400	- Andrew	Characha
97	child, offspring	mwaana	liwania	District of the second
86	chin	kidėlū	kidėlū	kidelu
6	choose	kúsháágölá	kösäägölä	küsäägülä

Š	English	KinaUshoola	KiniLaamba Central	KiniHaanzu
109	civel cat		nfifft	iséénsé
255	clan	lóóli	ndòqō	ndràori
841	climb, ascend	könáánkilá	konáánkilá	könáánhílá
550	clod, lump	glindi	ddmba	ikiindi
851	close (the eyes, mouth, etc.)	külütyä, kümümä	kötütyá, kömümá	kötityá, kömüm
299	cloth	kítáámbálá	mwééndà	kitäämbälä
235	clothe	kojáályá	kðjáályá	kötügályá
300	clothes, material	ntiilä	ntiila	ngùó ?
305	cloud	lüündê/mâlüündê	lùindè	iliùinde
817	coagulate	kdgóná	kögáándá	kögáándá
941	cobra (spitting)	mwillü	mwille	milo
906	cohabit		kðkiinjílilá	kiingilana
465	cold	mpépò	mpépò	moèno
624	come	kölizá	kölizá	kiza
202	come on suddenly, take in the act	kògwītlá öshiishá/öláándī	kdyáágánililyá	kowaamba ilaa
230	construct, put together	kůjěěngá	köyööndá	kůzřová
471	cook	kūlūgā	kùlúgà	kölügá
257	cook in water or fat	kötéléká	kütéléká	kötökötvá
43	cooking pan, small	kikáláángó	nsúpůlíá ?	kikalaangilo
385	cool (become); get well	kởpólá	kůkámyá	köpölá, kükómy
265	copper, brass		shaba	shàbà
283	copy a pattern	kūlūtyà	kölälillä	köshátíflá
894	cork, stopper	lifmbi	lytímbi	kiküníkilö
25	corpse, carcass	mùiimbà	mùiimbà	můzógá ?
1001	corpse (human)	mùlímbà	mùilmbà	mùimbá
383	cough (vi)	kūkólólā	kökölölä	kůkôhólà
4	count	köyályá	köyályá	koalya
100	country (our)	nsf yiltò	nsf	ihitù, ihi (flù)
		209		
		3		

andî

iya

nya

No	Foolish	Kinallehööla	Kini thmbs Control	Wandlibband
:		nio di control	William Cellina	DZIIIDANIILI
4	courtyard	kiyaanza	kiyáánzá	kisáll
852	cover (up)	kökünikilä	kökünikilä	kökünfkilà
285	cow	ŋöömbê	ŋòòmbè	ŋöömbè
1003	coward	mwóóà	mwöóà	mwòòá
335	crab	ŋgêgêlêgêgê		nkáá
520	crawl, creep		köváágúlá	kaaouula
612	cricket	jénzélé		naaaa
153	cripple	mùlémà	můnákřtělé	mòlémà/àlèmà
803	crocodile		máámbá ?	
319	cross (a river)	kopuuta	köpüütä	kgpiuta
846	crow (n)	ηκοίσιβοίδ	ηκόὐησόΙό	nhànaálà
308	crown of the head	nsaansî	nsaanst	nsaanst
79	crumple		kölindikáliindiká	kökönzáköönzá
370	crush by pounding, pulverize	kötüláángá	kůsůkólà	kopoonda, kotwa
393	crust	ŋkókö	kyókó	lòkókó
160	cry, wail	kölilá	kölilä	kölilä
996	cucumber, small	góógó	kyóóli/ákyóóli	φόδαφ/άμδαρ
736	cndgel	kipfni	gyóóngó	kidüünhüli
165	cultivate	kölimá	külimä	kolima
950	cure, cool, heal	kdpólyá	kūpónia	kůpôlyá, kůpôlisá
355	cnt	kůtémà	kůtémá	kůtémángá
86	cut, fop		kůpógôlà	kötémángá
117	cut to shape, sharpen to a point	könöölä	küséésá	kdpálá
365	dance (of men, to show courage)	kờinà		kờinà
53	dance	kởinà ngómà	kůjná ngômá	kojnà
622	dark, black	nzilè	nzild	ndwaalú
481	darkness	willò	willd	Kiti
824	dawn (vi)	küyéélá	köyéélá	wėlė

N.	Fnolish	KinaUshoola	KiniLáambá Central	KiniHåånzü
		Application	offined kiefined	kötölőká
328	dawn, daybreak	offirif	British California	adaba Mil
744	day after tomorrow	illi.	gyolo lya	pasuaora
130	dav	lùtóóndó	lötőéndő	lohiko
682	day-lime	mūūnsī	monst	manywe
980	(la) rep	mūūnst pii	monst pil	monwe with
9 5	day (mi)	ioon	iggi	izòli
10.	day belote yearday	midelio	molki	mòlimíli
423	dead person	200	nkia	köshä
175	desorate	kwivoonelva	kūgomolā	köpáámbá
100	defenda	kindia	kdnia	köniä
8000	defecate	krikaana	Osfiti	köhiitä
200	delinal	100000000000000000000000000000000000000	kokfkáná	köhiitä
821	deny	NORMANIA	44444	kryodzania
648	destroy, spoil	kayonoona	Koyonouna	the same
437	dew	lòsólòli	losololi	moor
219	die (cause to); put to death *	köyölágá	köyölágá	koolaga
1027	die *	KOKIA	kökiá	köshá
426	-	kökia	kökíá	kosha
200	alo olo out	köshimböölä	kösfímböölä	kötühöölä
5 6	and fin the fin	Lochitmbd	kösitmba	köhitmbá
202	dip	Late de de	4044400	khohndólá
466	diminish, grow tess	Mondaya	4.1444	Vind
635	dip	kotoelya	Koloeiya	Dill o
49	hip	ðsháfú ?	gdobū	osnatu 7
880	district province country	USI	nst	kisali
245	divide	kwivomolania	köyémólániá	kögáláná
643	district of the same of the sa	kriktieka talaka	KÖKİJEKA	kilékà
200	divoscoloto Goieb	in the second se	kdmálá	kůmálá
000	do, compació, missi	4 Manual Control	kokftörná	kitòmà
366	QD	VOICEINA	400	mbud
9	gob	mbūā	mpna	PAGIII

No	English	KřnáUshoolá	KînîLââmbâ Central	KřníHàánzů
292a	donkey	ndògwí	ndògái	ndògwè
685	door	můláángô	lwiigi	mùlààngô
415	dove (red-eyed)	ŋkờởlô	nzřá	ŋkờờndà
188	doze	kôtiíndiilà	kòtiíndìlà	kòtiindflà
529	draw water (from well)	kötépéélá máázi	kötépéélá máázi	kötépéélá máz
215	dream (vt, vi)	kôlyóótà	kůlôôtà	kòlòòtá
328	dream (n)	ndóóti	fòlóóti	ndôtí
448	drink	kởkôpà	kůkôpá	kòŋwà
196	drizzle	másisilá	másisitá	másisílá
780	drop, throw down	kòkálà	kôkónôôntà	kòxàlà
284	drum	ŋgòmà	ŋgòmà	ŋgòmà
598	dry (vt), set out to dry	kòyánikilà	kờớmyà	káníká
346	dry	nớớmù	nómů	tòmů
954	dry up, ebb	kòpwéélà	kôpôá	kòhilà
345	dry up, become dry	köyőámá	kôómà	kòòmà
289	duck	mbààtà/mbààtà	mbààtà	mbàtà
243	dust, cloud of dust	lòŋkòòndì	löŋkööndî	lòŋkòndì
628	dwell	kòkikàlà	kòkyálá, kòdíílá	kikihi
492	eagemess, zeal		dyágá	púpà ?
491	eagle, bird of prey	nààndâ	nààndà	ndt
563	ear	kůtář	kitói	kòtwi
70	earth, land	nst	nsì	pìhì
44	earthenware vessel for serving up food	πὰάηgὰ	γάδηgδ	nyờờngờ
156	eat	kůlyá	kůlyá	kòlyà
900	effort, exertion	kòkàmàtíkà	kôkâmátiká	ngùlù
273	egg	gì/màgì	gyi	řjié/májiě
443	eight	mònááná	mònááná	mùnànà
705a	elbow	kiŋkóköölä	kintíginò	kiŋkökóólá

N	Enalish	KináUshòòlà	KiniLaamba Central	KINIHaanzu
329	elephant	nzógů	nzógů	nzògù
336	embers	kvàlà/màkálà	kyálá/mákálá	ixala
842	embrace	kökúmbásílá	köpüüngáttlá	kůkůmbásilà
304	end (confide to an)	kůpélà	kůpělá	köléxá
662	escape recover	kopona	kökâmyâ	kðxómyá
899	examine measure test	kögémélá	kügémá	kūpiimā
45	excrement, duna	mabi	máí	mábi
958	exorcise drive out a devil	köpölyä		kögáángítá
784	explain	kwiloondya	kökénééntyá	kitäämbülyä
620	eve	liisò/miisò	liisò/miisò	liihó/miihò
828	evebrow	köömbö	ŋkġmbġ	ŋkópè/ŋkópi (pl)
838	evelash	kígì	ŋkſġi	ŋkópi
587	face downwards	rindaala	köündäälä	kūūndāālā
989	face	ósió	osio	qsq
940	fade, disappear	kölimiilä	-limitla	kölimílá
891	faint, lose consciousness	kwiyólökä	kögáálá	közimílá
862	(all	kdgwa	kögwá	kdgwa
548	(all short	kůkéépá	kůkéépá	köpöngőlá
462	fan, wave	kůpéémběélá	kūpėpėlä	köpépélá
764	(ar	kòli	KÖIÌ	kòli
921	(at (be) (of animals)	kogina	köginä	köginá
922	(at (of animals)	ŋginû	nônů	grillé
5319	father	dáádá	tálá	tààtā
382	father-in-law, mother-in-law	můkwí	mðkới	mükwiiŋgwâ
531	father (mv)	dáádá wááné	fâtâ wâânâ	táátá
587	fear	óówá	ooa	wóóa, kógópa
652	feathers, fur	màùil	maùli	nzóyá
070	fence enclosive	ińkekeela	lókötö	lòxòtò

	English	KináUshoola	KiniLaamba Central	MINISTRACTION
	and the same	krikáliná krináásá	konaasa	kögáásá
929	leiment, tuili soul	Petri	19940	nhèéhò
762	few (a), not much	ijkeei	inovi	1
757	fierce, sharp	můkáli, můtáki	nzógi	ntaki
107	Go-Irao		můláángáli 7	
	South Company and and	milketen	mûkûû	můxáyů
774	ng-mulberry nee	DONOLL	40000	kiritking
216	fight	kökikköä	KOKIKOA	THE PERSON NAMED IN COLUMN NAM
804		kökíjölyá	kökfjölya	kozolya
178	Gil a bole ston in	kölilmbvá	tiniità	közibá ?
583	filter strain	köshöözá, köyööngyá	köshöözá	kökámá
200	100	mnálálá	mālāgālā	mpaala
	and desired to the	omegic	moeto	paampelo
216	Inal, decisive	Olechii.	della de	bahrd, nza saána?
760	fine, excellent	KIIZB	11711791	- Ath Authors
147	finger	hváátá	Iwaala	nzala, ogadnza
323	finaemail	Külükülü	IOKūlūkūlū	takalakala
474	900	móótó	móótó	móótó
080	Granlace hearth kitchen	na chicello, lilko ?	kdmapigwa	like
200	Heplace, hearth, sucher	tolioons nich	kötééná nkői	kötényá nkwi
8/08	firewood (coneca, cur) (v)	Total minds	okuji	libbad, ryad
413	lirewood	Thor.	oimole	köböğ
191	fish up, pull out	Kolopoa	BOOM	3
126	fish (old Swahili nswi)	nsámáki ?	usit	11811
190	fish (vt), trap fish	kójúá	kôzúá	Kopna
5		ngirmi ?	ŋkūūndi	դցմող ?
909	979	taano	kātāanô	itáánó
200	Date of the control of the control		kökipünüümä	küténéntá
200	liap wings which, maner	Lylimbelluch	kololvá	köindíflwá
935	naturence	Appendix a	whichelp	köxöélá
384	Havoured (ne property)	SIGNOVA.	0 447	109.7
206	flower	lyona c	1	-
278	(ly (house)	nsagi	nsagi	ISagi

No	English	KřnáUshoolá	KřníLáámbá Central	KřnìHàànzù
1028	fly (vi)	kởpùpùtà	kðpùpùtá	kòpùtà, kòlùmà
1032	foam *	póómbólů	pyómbólů	ipômbôôlù
502	foam	póómbólů	pyómbólů	ipómbóólů
143	follow (in order)	kòlòondèèlà	kötyáátíilá	kòshàtà
142	follow	kůlôôndéélá	kůtyáátá	kòshàtììlà
823	food supply for a journey	mpäämbä	mpékè	mpéké
556	forest	shàkā	thing	iháká
584	forge	kôtyááná	kůtyááná	kờtyànâ
889	forget	kòyiiwà	köyííwá	kììwà
458	fork, bifurcation	pyáándá/mápáándá	pyáándá/ mápáándá	ìpàndà
442	four	káníí	kànfî	iiné
295	frog	ntòàndô	ntòòndô	nhờờndờ
574	fruit	ŋkàlî	ŋkâfî	itúúndà ?
349	fry	kòkálààŋgà	kòkàlààŋgà	kòkàlááŋgà
936	fully developed, be	kòkólà	kůlilůká	kòxòlà
625	full (become)	kůkíjůlá	kůkíjůlá	kìzólà
316	garden	nsóózá	nsóózá	bůsitááni ?
419	gather (flowers, fruit)	kòkyàlà	kòkálá	kůxálá
91	gathered (be), assembled (be)	kůkílůůndřílá	kökílóöndíilá	killingitilä
368	gazelle (Grant's)	láálá	láálá	mpàlà ?
454	gazelle, small (impala)	mpålå	mpälä	mpàlà
108	genet (kind of speckled civel ca	t) ntùùngỏ	nsákáálá	ntùùŋgô
408	get, obtain	kwiligià	kòlígyà	kờlijà
684	ghost, sudden apparition	múntùùŋgå	sìímwì/màsìímwì	minhúúngà
568	giraffe	ntwitga	ntwitgå	ntwiga
246	give away (present)	kòpúnià	kôpúnià	kôpůmyà
449	give	kòpéélà	kópéélá	kôpůnyá, kôpá
916	give light to	kòmilikà	kòmilikà	kòmòtiká

N	English	KînàUshòòlà	KiniLaamba Central	KiniHaanzu
815	glide, trickle	köshámáámbá	kðsámáamba	kölágálá
569	ob	küyééndá	kůlóóngôlà	kölöngölá
638	go in, come in, enter	köyiiŋgilâ	kùingilà	kiingilä
63	goat	mbáli	mbóli	mbdli
694	goat, (he-)	ŋgðlááti	mpáái	ngüláti
695	poß	nzóa	nzóa	itùùndà
758	pood	müüzâ	mùkééndé	nziza
388	goshawk (East African) (Astur tachiro)	nsáánsi ?	kisamwega	Ipu
89	grain (of cereal)		mbéù	
969	grandfather	köűkö	köűkö	isékölő
269	grandmother	maama	nökökülö	mààmā
432	grasp, hold in arm	kökúúmbásá	köküümbásá	kökümbásilá
869	grass, reeds	másáánsi	másáánsi	màfà
406	grate	kökwáámöölá	köŋwèétölá	kikwála
409	great, powerful, big	-kálð	ηκόιὸ	nkálá
164	grief, sorrow	Okta	dkia	másigo
371	grind (grain with a millstone)	köshia	köshíá	kösiá
372	grind coarsely	köpálálá	köpálálá	köpáálá
212	groove, furrow	kámwáápó	nyóótáli	
801	ground, cultivated	mögööndá	mdgddnda	mögööndá
405	grow up, get large, become great	kūkūlā	kökőlá	köxőlá
913	grow (of plants)	kökülá, kökülyá	kökiindä	kökiindä
461	grown (be fully)	kökölä	kölilökä	kötőlá
373	gruel, light porridge	ntili	ntili	ŋköömbä
358	grunt, grumble	kůkáná	kökàná	kokánvá
205	guide aright	kởtóóngêêlà	köliingyä	kölágiilá
351	guinea-fowl	ŋkááŋgà	ŋkááŋgà	ŋkààŋgá

_	tearinguonen tearingal servicing a servici
monthia monthia solvoda 7 solvoda 7 solvoda 1 solvoda monthia solvoda	
Gsingsa mayiti kodoşi ? konditio konyağı müzini müzini müzini müzini nizağı müzini olakarığı etağı etağı	
Osinga mbyti kodopi 7 kodopi 9 konditio konduja mbjani mbjani plakoj	
usinga mbyti kyobpi ? konditio kohykgi mbpini	
	# ¥
	Z E
	000

KiniHaanzù	ηκόκϋ	ápá, ökő	kîhèhühèkü	kdpiha	köölä	ipaanda	lógálá		mpêêmbêlê	kökönöntéélá	igèèmbè	kůmwáámbá	ipólómyó	köhiìmbá	kitô (itô)	θkī	kůkůlyá		ndôanô	lópéémbé, ipéémbé/ mápéémbé		nyúúmbá	-lingâ	křkůků	Iðkükü	igânâ	nzálá	
KîniLââmbâ Central	ηκάκὸ	ipà, kwáshó	kiséküsékü	küpisä	kölüündä	balabata	mögöángö	ylliganö	ŋgṇo	tùià	gyéémbé	kdyaamba	Kitii	kdsiimbä	könsí ftö	dóki	köshimilià	ηκόδηβγδ	ŋgwàatyô	kîpéémbé		nùúmbà	ziiŋgå	kikúků	lòègà	gyáná	nzálá	919
KînàUshòòlà	ηκόκὸ	ipa, dkò	kinsékünsékü	kôpísá	kởyôlá	balabala	kindidió	ldkúnd	ngirá	kököa na nööndö	gyèèmbè	kögwillä	kitii		könsi fiö	dóki	kökölyä			löpéémbè/mápéémbé, mpéémbè		nùúmba	ziinga	kikúků	lweega	gànà	nzálá	
English	hen, fowl, chicken	here	hiccup	hide (vt)	high, be (of meat)	highway	hall	hip	hippopotamus	hit with a hammer	hoe	hold, arrest	hole, nest	hollow out	home	honev	honour	hook (for pulling down branches in plucking fruit)	hook (fish)	hom, ivory, tusk	horse *	house	how many?	hump (of hunchback)	hump (of cow)	hundred	hunger	
8	069	766	863	800	38	326	308	925	317	398	902	066	575	836	816	654	150	797	189	707	288	708	263	572	573	756	320	

No.	English	KinàUshòòlà	KiniLaamba Central	KınıHaanzu
33	hund	kölyíímá	ködyágtilyá, kölytímá	kðláhá
34	hunter (professional)	mölyffmi, müntáándö	mūdāgžilyā, mūlyffmi	mülâhi
32	hinting	kölyífmá	ddagiilya, dlyffmi	köláhá, öláhi
700	hishand	mùgóóshá	shééniè	mùgóhâ
808	T T	Kataando	kiyaanda	kitàlâ
602	hvena	dyddid, mpitt	ŋkyaalū	mpiti
1016		tíně	inė	neene
1013	idleness, sloth	Ukátá	Okátá	Ukata
901	ill (be); groan	kòlwáálá	kolwaala	kůlwálá
902	illness. (crippling)	DIMÍTIE	diwifile	gpėlė
275	imitate	kolófikillvá	köyfígillyá	kdlágitlá
16	in front of	köntőóngélá	ntóóngélá	könhööngéélá
353	in the middle of	nakatt	pàkàtî	pákáti
118	incide	kosishikiliya	kükinilä	kösőéngéélá
208	increase, make greater	kwiyoongeelya	kökültilyä	
155	increase	kökfiłkiłlya	kdyóóngèélyá	kůkřiá
426	inheritance	dsaali	dsaali	küsälä
542	inside in	mùkàtî	müünsü	mükâtî
353a	inside, middle	mükátt	mükätî	mükâtî
132	intestines	Òlà	dià	màlà
389	intoxicated (get)	kögáálá	kökígáályá	kôgálá
513	iron ore	mágüè má kyöómá	mágüè má kyöömá	
264	iron	kyðómá	kydómá	möhöká/máhöká
710	island		kitingddngd	
6	igh	köváágá	köyágá	kaaga
460	iammed (hecome)	kūdaga	kösiitillä	kůkwámá ?
853	iaw (bone)	nzágásá	nzákásá	müläämbö
096	jealousy	willū	willū	wili

basis is is is is is is is is is is is is	journey judge (vt) jurnp, leap kidney	mùsffnzò		
Jump, leap (10) Additionable Ad	judge (vt) jump, leap kidney		mustinzo	Incifozólocifosó
kalimey kajootala kalimey madeka mele	jump, leap kidney	kölámülá	kylamida	to stiff controlling to
kinding minjoh king melana benjadaja king melana sebejadaja melana sebejadaja melana sebejadaja melana sebejadaja melana sebejadaja	kidney	köpöötä	kholida	Kolemula
sulface modeling to the selection of the		mojao	more	Kaputa
shing midden shing midden shing midden shing midden shing sh	_	Kuinfland	OBOTO CO	obidu
with the control of t	rico	kwiyolaga	Koyolaga	kowolaga
kneed home creatives creatives creatives creatives creative creatives creative creatives creative creatives creative creatives creative creatives creative creatives creative creatives creative creatives creative creatives creative creatives creative creatives creative creatives creativ	200	muterni	mūtėmi	mòtémi
formed significant formed significant formed significant formed significant formed formed significant formed formed significant formed formed formed formed significant formed formed formed significant formed form	KIRG	nsaansi	nsáánsí	málélé
from the house businession from the form of the form o	knead		kdydóná	krikaanda
Annoted Administration of the control of the contro	knee	túú/mátúú	. 000	NO.
kinnine med broad-beladen ralime, njobolo kunine min, curved, broad-baladen ordinana kunine beladen kuninana kunine beladen kuninana kunine beladen kuninana kunine beladen kuninana kunine beladen kuninana kunine beladen kuninana kunine gesat, bejar kecitel kunga g	kneel	kötűűngámá	kritingama	Latinatana
knote, the curved, broad-bladder, summer, separate horses that horses bladder, summer, separate horses that horses that have been been been been been been been be	knife	psilmė piodio	and forth	Kotugarna
interest interest consequences of politically majoritorial patricular political politi	Mind the man old block	name, mode	nsime	lopyd
stored spiritually implicated stored	Kille, Inin, curved, broad-bladed		myöölélő	nzólő
strown karminal lake lake lake lake lake lake lake lake	knot	gyüündő/ mágüündő	liindo	ikūūndo
lumin (the little between the standard of lumin (the lumin of lumi	know	kòmáná	kômáná	komanya
larme (the) sharkerish larme (the) sharkerish larme (the) taken (t	lake	láámbó ?	naanza	Inhari 2
things the first part of red free free free free free free free	lame (be)	könönilä	Könünilä	krysinkila
and (ory) not richmid lump. Oracle (ory) not richmid lump. Oracle (ory) not richmid lump. Oracle ora	lamp	tàlà	ntala	othin ohile
lump, great, big holds lump, great and holds lump great or one side holds middlich leaf todal or grass middlich leaf (teel) holds leaf (teel) holds leaf todal	land (dry)	nst nöömü	ust	the of photo
Integrate the state of the stat	large, great, big *	kyóló	karilih	oholo
lay over on one side miskala ent their of grass shakezt leaf (tree) loka leas, coze out Adonts leas, coze out Adonts leas, coze out Adonts leas, coze out Adonts leas, coze out Adonts leas, coze out Adonts leas, coze out	laugh	kdshoeka	44444	DION!
lazy Truck of the second mukital Truck data Truck d	abia and an rayo val		NOSCHA .	Koneka
leaf, blade of grass shakazzi leaf (tree) (blade of grass shakazzi leaf (tree) (blade of blad	azal	2000	KONIMIKA	köküntxa
lear, Diade of grass shaknzi 5 feaf (tree) libka leak, coze out kd-sholola lean, bend down, slope kditina		linvata	mukala	
ldká leak, ooze out kdyhdidlá lean, bend down, slope kdytiná	leaf, blade of grass	sháánzí	shaanzi	ifa/mafa
leak, ooze out köshülölä lean, bend down, slope kötünä	leaf (tree)	óká	lóká	itobto
lean, bend down, slope kötűná	leak, ooze out	cosholola	kösülülä	kribirità
	lean, bend down, slope	kötünä	kötünä	kritina
536 Iean on, rely on .	lean on, rely on		krisania	P. Pribridge
	ean herome oron thin	the state of the s		MINOLIA
	can, become, grow tilli	conyecta	konyeeka	konyeka

KînîHâânzû	kwèégémèlà	kilingasa		kösájá	kölöŋgólá	köléxá	kösäägilä	mügölö/migölö	kázímá	ihût	köláárnbá	KOIAIA	kolala hangaili	köhömbölyá	mhèpèèlè	Hüünde	lightto	shòkálá	mösitááli ?, músili	lòdigi	ihiimbâ	mòlòmò	kötégéélyá	kötööntä	itima/matima	köpügá		nzigė		
KiniLààmbà Central	köyéégámílá	kökfilingyä	ögőémbigwá	kösáágyá	kölégá	köléká	kösáágá	magala	köyáázimá	nsói	kölyáámpá	kdgdnå	kögöná nsángállít	könyáánsölá	mpépéélé	gydld	ùmémè ?	ŋkééŋkè	münyölööli	múŋkaanda ?	nsiimba	mülömö	kötyégéélá	könyékétá	tyfmå	köpüügä		ŋköömbi	9	
KînàUshòòlà	kdyégémélá	kökfmänlä	kögömbigwa	kösháágyá	kölégá	köléká	kösháágá	mögölö/migölö	kðyáázüm(w)á	nsoi	kwfiyaampa	kdgóná	kögönä nsángálítí	könáánsölá	-pépéélé	lüünde	léptité	ŋkêêŋkê	mósitááli ?		nsiimba	můlômô/mílômô	kötégéélá	kůtôčntá	tylma	kðsháá		nzigė		
English	leaning (be)	leam	leave, permission	leave over	leave, go away	leave (off)	left over, (be); remain over	leg, foot	lend, borrow	leopard	lick (vt)	lie down	lie on one's back	lift up, pick up	light in weight	light, sky	lightning	lime, whitewash	line, row	line, fishing	lion	dil	listen	listless (be)	liver	livestock (keep)	lobster	focust		
8	535	613	546	1011	547	544	975	310	774	107	878	134	250	791	467	304	805	657	213	629	103	198	926	972	1024	429	819	794		

2	English	KináUshoolá	Kinil aamba Control	What had had a seen
155a	long (become)	krilvitos	Lat 19-1	KINIMBanzu
144	lana	1.46-3	kolytipa	kölipá, kökilyá
	fin	hduki	lyfipi	fòffoù
5	look after, care for	kůkéndégèélà	kükééndénèéla	Labeliand of
871	look after grazing cattle, help a sick man on the road	ködítmá	kðsúúngá	ködījmā
354	look at, examine	kolváa	Links A.	
354a	look around	kritálaála	Moldawa	kögözéélá
200	look for, hang around (to get	kösheendelyä	којајава кодийта	kögözá kdíindřířá
973	loose (he): faint want	Libert Annua		
181	lost aet	konyementala	kůtôontá	kötölyä
1023	louse	KOIIIIIIIIII	külimitliä	kölimílá
789	Course second	mpaul	mpáni	mpani
034	love, wall	Kulyoogwa	kởlóógwà	kůlówá
t :	fund	pyddpd/mapddpd	ργάσρα//πάργάσρα	innini/manini
13	magic *	dlógi	dlòqi	didai
714	maize	mpókilè	ofield	in the same
521	make offerings to the dead	kopólva	kehodus	amodulia
226	male	mhhhhhh	a total	kokoa Indago 2
0	mamba, preen (kind of	Modernh	Moosua	igóhá
	poisonous snake)	Apundi	kapiimbi	
.63	many	iinai	pilos	
1019	many *	focii	The last	opi
397	marriane	344414	Ig(IIII)	ido
805	(com joj nasm	ottoole	ntoola	kdtīnā
	many (or man)	KOTOOIA	kůtóólá	kritina
90	marry (give in marriage-of parents, priests)	kötőóliishä	kötőóliisyá	kötinisä
814	master		Cherry of the	
888	match, harmonise (vi)	köliaaniila	Killsobullio	Ilogom
935	mature	-kálðkámi	politica	kwimpyani

KiniLààmbà Central KiniHàanzù	nàmà	Úkótá Úgáángá	ðgáángá .	mùgààngà	kdyáágáná köháángá	köněkěntůká köyěvůká ?	můlěėsi můtôgísyá	kösäämä köhämä	másöönső máséélé	- Kilāhā	másóúnsô	dwele	gyöngölő	ànià	kösáálinkániá	_	kijiljii mhiimbi ?	mpóóma mpdmá		mwééli mblika nwééli	mbó	mááù iyáá	köyővűmbá yölöngő kölümbá	ιθαθίο	kililó sökä	
KînaUshòòla	nàmà	dkótá c	ðgáángá c	mögaanga	kðtáágáná k	kônyèkèntùkà k		k d shaama	mástitinst, mástitinga	nástitinsti mágónű	nasconso	dweele	góngóli	kdyödngá náni k	k k k k k k k k k k k k k k		*		mwééli	_	n pó		köyőémbá	mülima	sởớkà k	
English	meat n	medicine, remedy &	medicine (art of medicine man) o	medicine-man m	meet	melt	midwife .	migrate, move away kd	milk (n) m	milk (curdled), curds m	milk, (fresh) (n) m	millet (bullrush) dv	millipede	mix (ingredients, 'season food') kd	mix, put together kd	monkey (small lightish-coloured) ntóómbili	monkey (colobus- (with long - black silk hair, white on shoulders)	monkey (small, dark-coloured) -	moon	- moonlight	mosquito m	mother	mould (pottery) kd	mountain m	mouming sở	
N _S	989	259	260	261	90	861	845	829	1030	20	19	903	290	73	72	363	362	361	716	609	69	436	99	717	163	

9	Enalish	KinaUshòòlà	KiniLaamba Central	Nimagusa
020	mid mire	málóló	lyölö/málálá	majolo
0 0	mind, mind	oowa glooze	lyóózé	Inùnwè
7 5	THE PARTY OF THE P	wyjemaala	kölémáálá	kölèmálá
25	multiated (be)	Note Paris	lina	liina
281	пате	lima	C leader	Ξ
539	namely	kinaiti	yadılı	- Cincipal
403	nape (of neck)	kiiŋkôti	dkosi	The state of the s
256	navel	nyókü	nyókü	iyuumbu
302	1000	pijoi	piipt	pakupi
6 6	lieali	nklingo	ŋkiiŋgò	ŋhiiŋgó
2 :	Heck	Myymol	lyóómpi	nhákilé
843	need, request	ducati	- ejour	mova
362	new	mpya	Colores Colores	Mike
718	night	ötikö	DIIKO	The state of the s
755	atitu	Keenda	keenda	Keenda
2 :		modila	mpdla	mpölä
484	nose	- Catalona address All		köálvá
211	number	muloolygo, ridariibali		•
237	oar	màtlinkó		4.000
636	obstruct	köpitingá	köktíngámyá	Kontraya
8	offspring	mwááná	mülelwä/alelwä	nwaana
98	oil (from plants)	mākútā	mākūtā	makuta
3 5	Oll (HOLL) During	makitta	mākūtā	mākūtā
2	100	344	kàlí	kālī
818	old times, the past	Company of the control of the contro	minemals mikdombi	munyampala, muxoombi
411	old person	monaampala, Illukooliiki	Land and	okaliskalis
410	pio	ηκοίοκοιο	ηκοισκαια	Jaconordo
21.0	(hein)		kyópő	
	(Burne) podo-one	Labora.	kàmw1	kanyvi
440	one	- Continue	A. A. Landon	kamaha
290	open mouth wide	kdyánsáma	Koyaansama	photograph
984	oben	kòdùgðíá	kokigola	BIOGODIA.
829	open (set ajar) a door	ködindölä	kökígölá	Kologola

No	English	KřnáUshôòlá	KřníLáámbá Central	KiniHàànzù
876	order, direct	kòlàgììlyà	kůlágřílyá	kòlàgìilyà
961	ostrich	nóóngù	núúŋgù	nyòòngô
640	our(s) pl. 1st person)	yiitū	yìitû	itò
506	out (go), go away	kàpůmà	kôpúnà	kůpůmá
324	outside	kòónzì	kòòzi	kônzì
217	overcome; win, vanquish	kòdólá	kòdólá	kůshlindá ?
995	owed by, be	kờdààì	kờdyàigwà	kůdááyá
835	oyster			
207	pack (luggage)	köyííká pálómwi	kòtúúŋgà	kötüüngá pálönwi
208	pack, press together	kòpààngà	köpimbiziilyä	kizólyá
456	pack, flock, group	dyálé/mádálé	dyálé/mádálé	idáálé/mádáálé
457	pack, bale, bundle (n)	mùligò	búúŋkù/ màbúúŋkù	můligô
236	paddle (n)	můtífykô	mátífykő	
342	palate			ilààngờ
9	palm (date)		můtééndě	
719	palm-wine		ntólò	
257	palm (of hand)	gàànzà, kigàànzà	gyáánzá	lógáánzá
6	palm (raphia)		kiálálé	mwäälé
7	palm (borassus)	múpáámá	múpäämä	
8	palm (oil)		-	
459	palpitate, flutter, tremble	kůkikimá	kðpúnúntíká	kòkàgàtà
47	parent, s/he who begets	můlěli	můlěři/áléli	mòléli/áléli
720	parrot			
232	pass, surpass	kôkílá	kôkílá	kòkílà, kòhítà
325	path	nzítá	nzítá	nzilà
159	pay	kòlìpà	kởlípà	kůlipá
600	pay attention, take care	kòlyààwà	kòliíndììlà	kògòzèèlà
820	peel, shell	kòkáátá, köyőlöölá	köyöólöölä	kòbályá

õ	English	KinaUshoola	KrniLaamba Centrai	KiniHaanzu
12	090	lolo	lðkífngi/nkífngi	mabolómyó
! =	neos (lent)	lòkífnai/nkífnai	lökiinai/nkiinai	lòmààmbò/ mààr
404	pega (term)	kokisilva	kökíshilyá	kòdóólá
121	popula	kildaá/mildaá	kidōaà/midōaà	ilòqà
884	penknife lancet	káltísokondé	kaqeembe	ldpyd
558	Derson	mòùntò	moonto	moonto
638	pestle	mwiisi	můkóóŋků	můtwáárygřiló
312	pia	ngúlúmà	ŋgúlùmà	ngülimâ
414	pigeon, kind of	ŋköńndä	ŋköúndá	ŋkööndà
579	pile up, pile loads on head	kölööndiilä	kökítwiiká	kitika
479	pinch make narrow	köshiná	kdsinà	köhinà
357	pipe (tobacco)		műtéémbá	kixò ?
552	off. hole	lyiindi	lytind1	ikóómbó
974	place, put (vt)	köyííká	köliká	köiikä
722	place (n)	på lwååndt	lwaand!	kdsali
892	place of the dead	kở điờdngớ	kở ởlờờngở	kở ảlờởngở
225	plait	köshükä	kðpótá	kohuka, kopotya
932	plant, sow	kūpāandīlā	kūpaandīla	kötémélá
510	platform	kiyààndà	kitálá	kitálá
834	please, satisfy (vt)	kölöömbiliyá	kůtôôntià ŋkólô	kölöówéshá
93	pleased (be)	kòlóèligwá	kölöógèélwá	kůlówá
13	plot of around	Klyáánzá	kiyaanza	ktwádnjà ?
647	plunder (a town)	kölégélyá		kowamba
1014	plunge into, cause to sink	kögömilá	kökápilyá	kogumila
114	poke	küköléélyá	kūshoonsėla	kůpémbéélá
737	pole, thin	IĐKIIÔ	libkitó	lòxitò
111	polish, clean by rubbing	kökölösá	komíftyá	kösögölä
177	pool, poud	lyáámbó/máláámbó	lyaambo	ilaambo

de

8	English	KinaUshoota	Kinil samba Contrat	Was 2000 and
923	porcupine	káboosolo minnoniii	مؤمنياة	LININAANZU
374	porridge (stiff)	dodle	Ilogoli	iséénse
42	(inc) against	Ogali	dgali	ògali
7 :	por (metal)	gyóbó	kyópő/mákyópő	ixónó
4	pot, vessel	kisémé	křshěmě/řshěmě (ol)	Linkship Colonia Con
38	pot, mug	műkébé	mrìkéhè	(id) amagnamary
40	pot, cooking (earthen)	kyddnag	Language Control	шокере
749	pofato (sweet)	Kandóóló	phonika	nyaanga
646	potter's kiln	chydredia	KINGOOIO	kaandólö
360	The second second	Shoulseld	shoonselo Iya nddyggd	,
000	pound (grain in a mortar to get off the husks)	köpyöölä, kököözölä	kösókólá	kütwáángá
441	pour away	kwiità	krijità	Laber Lander
641	bont	kihoritinorila	ratio de la constante de la co	ROHUHON
748	Dregnancy	and the same of th	NOIdagila	Kadubunsha
636	Constant ho	inda	nda, iimbi	nda
200	pregnant, be	kotola ni nda	kdkééŋká iímbi	múlitó
800	prepare	kėjipiilyė	köjipiliya	kůzinitivá
200	press out (oil seed, sugar cane)	kökásimá	kūkásimá	krikamítá
986	produce, put forth, display	köpífshá	kripunia	kindimid
606	prominent (be); put out	kôpúntlá	kriminilia	adminda.
518	pronounce	kitáámbítá	bitidambilia	Bunday
340	protect by charm (medicine)	krikáná	Consultable	Kotaambola
770	protect by charms do not	novaga	KOKaga	kůkágůlá
475	potent by clarifies (talget)	KOKaga	kötűűngítlá	kükiingá
2	pull-auder	Kisciopa	kínsöópá	mòmà
***	lind	kölütá	kölütá	kolista
13	pull up, come to a half	kdytímá	köyímiká	kimika
172	pull up, root up	kökötilá	knikrinis	100
833	pull, drag	kritità	Policie de la compani	Kipa
22	umin		NONONOIS	Koluta
879	dina	Ballina		ibóómbá
3	lishd	kügümä	kögömá	kdsiikiimä ?
885	put, place, set	köyííká	kdyffka	kůtxá

No	English	KináUshoolá	KřníLààmbà Central	KřnřHàànzů
887	put together for comparison	köligániilyá	kðligánillá	kòltingàsyà
969	put a pot on the fire	kôtélèkà	kòtélèkà	kůtěléxá
981	put together, compose	kờtúúŋgà	kờiliŋgììlà	kötüüŋgà
862	python	nsátó	nsátó	nsátò
656	quarrel (vi)	kòkílèèà	kökílééà	kiléà
180	quench, extinguish	kòdibyà	kờdíbyà	kòlimisà
485	quiet (be)	köliká, kötőúlyá	kởtóólyà	kòkilágà
76	rain	mbula	mbúlà	mbûlâ
917	rain (vi)	kòkóá mbúlá	kở kớa mbúla	kůkůá mbůlá
1006	rains, the lesser	mwáánðli	sòòngólá	msisílá
197	rainy season	kitikò	kitikò	kitikò
580	rumble	kògùgùmà	kðgùgùmà	kùùŋgùlùmà ?
26	rat, kind of	•	kádólî	ŋkéénzi
488	rat (field)	ŋkôsô	m(ù)kííŋki	mpòxò
24	rat	ŋkôsô	mpáká	mpůxů
25	rat- (very large, long-tailed)	-	můklinki	-
883	razor	lówèémbè	lówèèmbè	kiwéémbè
949	read	kðshómá	kởshòmà	kůsômá ?
1007	reap, harvest	köyiimbòlà (maize), köyögölà (millet), kökünà (hard peanutst), kökyàlà (cotton)	kởyôgôlà	kờôgôlà (millêt), kôhììmbà (pêānùt)
523	receive	köyáánúŋkölá	kôpôkéélá	kôpôkéélá, kôhôlá
537	reed	màtétè	külüflî/mákülüflî	matété
632	refuse, say no	kôshíítá	kðslitá	köhitä
633	reject, refuse, dislike	kôshíítá	kðsiítá	köhitä
545	remain, stay behind *	kòsháágá	kở sá ágá, kờ só ló kà	kòsiijā
1035	remain, stay	kôsháágá	kðsáágá	kösiigā, kösäägā
840	remember	kòkíjòká	kökíjóká	kókómbókilá
499	resemble *	kôkímpyááná	kðkímpyááná	impyáání

9	Fnallsh	KinaUshòòla	KiniLaamba Central	KiniHaanzu
879	resemble (very closely)	kökímpyáániká	kökímpyááná	impyáání
031	resemble *	kökímpyááná	kökímpyááná	impyáání
149	rest heavily on, be burdensome	kdłyėmėėligwa	köléméélá	kilėmėėla
964	rest the cheek on the hand (in brooding mood)	kdyáambá tyámá	kủyààmbà tyámà	kwaambila itama
357	rest, take a holiday	köshüüpyä	kösööpyä	kösöpyä
249	return, go back	köshöökä	kdshóóká	kösükä
1004	return	köshöökä	kdgómóká	kösöká, közá
200	revive	köiyöölä	köyiőőlá	kůkůťshá
318	rhinoceros	mpėėmbėlė	mpėėmbėlė	
988	윤	lòbalù/mbâlù	lwaalü/mbalü	lòbálù/mbálù
473	ripe	mpffsù	mbflü	tilyė
966	ripen (vi)	kdpíá	kdyflâ	kdilya
472	ripen (vi)	köpiá	köyílá	köllyä
509	river	móóngó	mòòŋgō	форма
239	roar, rumble	kðlúlúmá	kölümä	kdüŋgülümä ?
644	roast	kðkómélá	kökáláángá	kökáláángá
350	roast (in/by fire)	köyááshá	kdyaasia, kdsoonsa	kwadsa
908	rock	gờè	pyaampa	lògòlò
291	rooster (cock)	móómbì	móómbi	mómbí, nsámbáligdy
169	root	mởli/mili	möli/mili	mùli
29	rotten	yölü	yölü	ţ
1012	(eq) puno	kökiilingilä	köpiindiŋkania	
183	round (ao), turn round	köpilimikiliyä	kölőéngétülyá	köpilimä
666	round, become	kökfilingilä	kolydygottilya	kūpilimā
110	- and	kökülüsä	kůkwěémá	kösögölá
50a	rubbish, qarbage	mpālālā	mpālālā	mpáálá
321	rubbish heap	kińgobilo	lyiindi lya malagala	izólá
826	LOU	kůmáánjká	kůmááŋxá	kůmáánjká
		627	13	

gg

ž	Foolish	KinaUshoola	KiniLaamba Central	KiniHàànzù
2		-44.4	contino	isoongeelyo
522	sacrifice	polyo	photo	2
723	salt	mölééngé	müléérjgé	manuan
90	Local	můnsáángá	műnsáángá	mihaangahaanga
630	satisted (be); have enough to	kökíkötá	kökikyötä	kikötä
	eat or drink		Albert A. A. A. A. A. A.	Libradohili
788	satisfy	,	Kotooniya njkoto	KOLOOSHA
251	say to, tell to	köyifia	köyiña	KOKWIIIA
783	scorpion	ngit	ŋgti	ŋkami
463	Scrabe	kůpyálá	kôpyálôlá	kôpala
866	scrape grate	kókwáámödlá	körywéétőlá	köpádlá
866	scratch orate *	kökwaamöölä	KÖSÖB	kökwádlá, köhdá
888	scrabe sickle		myöölelö	izóló
3 6	separate for	khdiimh	kūdūūmā	ködümä
1 4	search diligently	kolküláánná	kökfpükyä	kökwáölá
0	and an inches		199000	itionto
/38	seal, stool, chair	office	Particol de la constitución de l	krìona
170	see	Koyona	e local	144
67	seed	mbéd	mpen	OPCILI
404	seize	kögwilla	kôgwilia	kowaamba
611	Jies	nzili	mükölä	nyéénsó
302	100	kogolya	kdgdlya	kógólyá
670	pass	kotómá	kötwáálá	kotómá
451	cenarate set apart	kolekandla	kökámátölá, kölágilíyá	kölékánsyá
450	separate leave each other	kökilèka	kökfléká	kilékándlá
634	est a fran	krytová, kotégá	KOtyégá	kötégá
868	set (of the sun)	kösháálítlá	kösálíliá	köhálítlá
024	cettled (he). he in good order	khiina	köjípá	külembélá
	בריים	- designatif	mpüünaáti	mfüngåti
10	Seven	rollima	kdtima	kdlümä
1033	sew.	Kotuitia	4-11-11	to the same
589	sew	kötümä	Kotuma	BILINOV
			200	
			970	

No	English	KřnáUshoolá	KiniLaamba Central	KřníHáánzů
135	sexual intercourse with (have)	kờtôômbă	kôgôlôlyà	kiltómbá
691	shadow, shade	mülüle, lölimilimi	můlůlě	můlůlě, kilimfli
867	shame, disgrace	nsóni	nsóni	minyàlà
116	shame	nsóni	nsóni	minyálá
724	shame, modesty	nsóni	nsóni	minyálá
386	sharp (be)	kwiyóópiká	köyőpiká	-táki ?, nyìgì ? (àd)s
920	sharpen	kờnôôlà	kônôôlà	kừnôlà
915	shave	kůmôá	kòmòà	kôzůlá
603	she, he	dyó	θyō	ŋwèènsò
287	sheep	ŋkölö	nxòlò	ŋkòlò
1009	shell, cowrie	ŋkúlā	kúlůkúúmbà	nstřmbř
822	shell		-	ntingòlò
725	shield	•	ŋgờlâ	ngôlà .
712	shin (bone)	můlóóndž/milóóndž	mòlóóndì	-
968	shiver, shudder *	kởkikimà	kòkikimà	kòkágátá
528	shiver	kòkikimä	kůkíkímá	kòkàgàtà
434	short	kúpi	kúpř	ŋkùpł
430	shoulder, tip of	-		iyègà/màègà
588	shoulder	yègà/màègà	yėgà/màėgà	iyègà/màègà
839	shout	kờjógòlyà	kòkítòòntà	kůkůtá
946	shrivelled (be); wrinkled	kůkísinà	kòkfsinà	kihinààngà
763	sick	lwifiè	lwfilè	-Įwààlà
870	sift	köyööŋgyà	kösékéénsyá	köhégéénsá
615	sing	köyíímbá	kdyffmbà	kilmbá
3	singe	káyádlá	köyáölá	kásóónsá
980	sink, be drowned	kòtótá	kůtôôntá	kòtòontà
170	sink	köyúmílá ?	kòtúìlà	kölimflä
726	sister (his)/ (her) brother	mùgóli, mùnúnă, thờở mbở	mùgúlt, mùnúnà	ilámbà

No	English	KřnáUshóólá	KřníLáámbá Central	KřníHàànzů
627	sit	kòkikáláánsá	kòkíkáláánsá	ikit
753	six	mùtáándátð	mùtáándátò	mùtààndátò
785	size, measure		ηgèlê	
123	skin (of person)	ndilt	můkáánzá	ndili
124	skin/rind (of fruit)	gyáándá	kúlůkúúmbá	igándá ?
303	sky	lùùndè	gòlò	ilüündė
865	slander, accuse falsely, often secretly	káshóöngéélá	kůshôôngéélá, kůsôôngéélá	kösöönséélá
470	stap	kòkóả ŋkói	kůkůá kôôpi	kököá ikópi
970	slash	kôtémà	kůtiá	kötémá, ködömöli
220	slaughter	köshífnzá	kösítnzá	kúsinzá
727	slave, bond servant	můsěsě	můsěsě	mùnyà mìtìmò
728	slave (female)	mòsèsè	mútůgwà	mùnyà mìlìmò
729	slave, (male)	můsésé	mútůgwá	můnyá mílímô
136	sleep (vi)	kờgônà ndóólò	kògônà ndôôlô	kòlààlá tòlò
731	sleep (n)	ndóólò	ndóóló	tôlò
730	sleeping-place, accommodation	pà ởgônô	pà k ù gònà	pà kờiáálà
967	slip, be slippery	kötyéléműáká	kůtyělělá	kůtělězá ?
1021	small	níinò	niinò	niínò
332	smallpox	ndwì	ndôž	ndòì
241	smell (sweet) (vi)	kànùùŋkttlà	känüüŋktilä	könyünkilä
242	smell (bad, of fish) (n)	kònùùŋkà	könüüŋkä	kờnyùùŋkà
240	smell (bad) (vi)	könüüŋkä	kònùùŋkà	kônyùùŋká, kởôlà
629	smoke (n)	lyóóki	lyóóki	lyòòkì
428	smoke (give out) (vi)	kôjôôká	kờtùùŋkà	kötüüŋkä
387	snail, slug	ŋköökű	ŋkòòkū	ŋkòòkù
837	snail	ŋkòòků	ŋkôôkû	ŋköökü
145	snake, serpent	nzóká	nzóká	nzóká
158	snare, trap (n)	mátégó	mátėgò	můtégô

sinf, smele of kohiukaya kohiuka kohiukana sinf, smele of kohiuka kohiukaya kohiukaya sona sona kohiuka kohiukaya kohiukaya sona hidongo olokongo o	õ	English	KřnáUshòòla	KiniLaamba Central	KiniHaanzu
Second	864	sneeze	kötyáámúlá	kötyáámúlá	kötémúlá
Some store	924	sniff, smell out	könüüŋkyä	könüüŋkyä	konvuunsha
song billiongs disciple song song billiongs disciple song songs - militabo song songs - militabo song songs - militabo song song song song song song song son	596	snore, snort	kůkôlômá	kůkôlômá	kökölömä
songa Vifrinco julimbo songa songa vifrinco mitimbo songa songa mitimbo mitimbo songa songa mitimbo mitimbo songa songa mitimbo mitimbo songa so	69	soil	dłódngő	φιοριασ	gdoonao
songs militarbo mitimab sord militarbo mitimab sord militarbo militarbo sord spari phobybo phobybo sound cyp militarbo motilita sort phobybo phobybo phobybo sound cyp motility motilit	732	Song	lyffmbó	lyffmbö	wimbo
makkili makkili makkili socrece makkili makkili socrece makkili makkili makkili socrece phobogo pykol	919	* sonos	mífmbò	mífmbö	mimbó
sorcent nicky) misky misky sorcent nicky misky sorcent nicky misky misky sorcent nicky misky sorcent nicky misky sorcent nicky misky sorcent nicky misky sorcent nicky sorce (open) kryderab syak sorce (open) kryderab syak sorce (open) kryderab nicky syak sorcent tene ordinara cellinara sorcent tene ordinara cellinara sorcent tene ordinara nicky speciel misky sorcent tene ordinara nicky speciel cellinara nicky speciel (ordinara) misky misky misky misky misky misky misky misky misky speciel (ordinara) kohyderaby speciel (ordinara) kohyderaby speciel (ordinara) kohyderaby speciel (ordinara) kohyderaby kohyderaby speciel (ordinara) kohyderaby kohyderaby kohyderaby speciel (ordinara) kohyderaby kohyderaby kohyderaby speciel (ordinara) kohyderaby kohyderaby kohyderaby speciel (ordinara) kohyderaby kittirpyć kitt	36	soot	mākili	màkili	olidm
sour, spein photopid photopid sour, spein photopid sour, spein photopid source or motitio motitio motitio motitio motitio motitio motitio motitio motitio motitio speint speint statistical speint statistical speint speint motition and motition of speint s	195	sorcerer	můlôgi	mùlògi	mùlòai
sound, sprint pholo proble sound, sprint pholo count, sprint pholo count, sprint pholo count, sprint	201	sore	ηκόἀηκό	ηκόδηκδ	nkômělě
spance (open) heighbo melibbo spance (open) this sp	734	soul, spirit	ŋkólô	ηχόΙό	nkóló
spank (epen) kiylakura kydiadura kydiopa spank (epenk kotalanst) malakast malakast malakast conserve (epenk kotalanst) malakast m	331	sound, cry	mòtilò	mòlilò	mülilö
speak kodakanst nsakanst speak speak speak kodakanst kodakanst speak (n) nodilina kodakanst nsakanst speak (n) nodilina kodakanst mbeb 2 speak (n) nodilina kodakanst mbeb 3 speak (speam, Semu,	64	space (open)	ktyáánzá	kyűűgá	kipölá
speak kodalambula kodalambula speak caract time kodalambula ndilima ndilima ndilima ndilima ndilima caract time kodabondapenda nima kodabondapenda nmbab 7 spelat (deemoclase) nimabapul spelat (deemoclase) nimabapul spelat (deemoclase) nimabapul spelat (deemoclase) nimabapul spelat (deemoclase) nimabapul spelat (deemoclase) nimabapul spelat (expert (expert) kodyabunat kodyabunat kodyabunat kodyabunat kodyabuna kodyabunat kodyabuna ko	85	spark	nsáánsī	nsaansî	nsási
spent (w) nofilinal nofilinal continual spent (w) nofilinal spent (m) the continual co	253	speak	kötáámbölá	kůtáámbůlá	kötáámbólá
spermt filmen kögberhaligberhala innbid 7 spolder semmen yakit berhaligberhala innbid 7 spolder december yakit berhaligberhala innbid 7 spold (deembedeen) renistropist altohrapis (spold (seembedeen) renistropist) and innbid spold (seembedeen) renistropist, altohrapis (spold (seembedeen) renistropist) and innbid spold control (sook beached) renistropist (spold beached) renistropist (spold beached) renistropist (spold beached) renistropist (spold seembedeen) renistropist (spo	733	spear (n)	ndilima	ndilima	ndilimà
spider emm. semen yali mizko ? mizko ? spider spider yali yali spider spider spider spider spider spider spider spider spider spider spider spider (deembodre) mininfungak alkhinging spider cruck (vi) khokakanis kohakanis spider cruck (vi) khokakanis kohakanis spider s	137	spend time	kögééndágééndá	,	köligityá
speint (of ender person) yeight (yeight speint (of ender person) readingly all of the speint (deembodiest) readingly all oblights of minimizings all oblights of minimizings speint (ever) readingly all oblights of minimizings speint (ever) readingly all oblights of minimizings speint creat (v) ready-amenic and an experiment of the proposal branch (vice) readingly all oblights of the proposal readingly all	1038	sperm, semen		mbéd ?	mànálà
sprint (of dead person) mibliotypia stimmed sprint (deembodies) mibitiorypia (printe) mibitiorypia (printe) mibitiorypia (printe) mibitiorypia stobybia mibitiorypia stobybia mibitiorypia stobybia mibitiorypia mibitiorypia mibitiorypia mibitiorypia mibitiorypia mibitiorypia mibitiorypia mibitiorypia mibitiorypia kopytelogia kopyt	62	spider	tyáti	tyáti	itáti
sprift (desembodied) minintugui, aloʻtogi (p) minintugaja sprift (eval) minintugui, aloʻtogi (p) minintugaja sprift (eval) toʻrida matt sprift matt matt matt sprift carak (v) kohyakancis kabakancis kohyakancis	182	spirit (of dead person)	mởlờởŋgờ	sffmwì	minhúúnaá
spini (w.n.) minimanya, akongo (pi) mubhago spinie mukinanya, akongo (pi) mukinanya, akongo (pi) mukinanya spinie mati mati mati mati mati mati mati mati	464	spirit (disembodied)		múntùùŋgâ	minhúúngà ?
splitte ködya mätt kötila makt splitte makt makt makt makt makt makt sellir crock yot kodyakanish kodyakanish kodyakanish kodyakanish kodyakanish kodyakanish kodyakanish kodyakanish kodyakanish kodyakanish kodyakanish kodyakanish kodyakanish kodyakanish kodyakanish kodyakanish	683	spirit (evil)	miintúŋgà, álddŋgd (pl)	mòlòdigô	minhuúngà ?
spille matt matt spille with the control of the con	585	spit	kôtyá mátî	kötíá mátř	kötyá máti
in carek (v) kohyekahota kotakanda kotakanda kotakanda kotakanda kotokaya k	533	spittle	matt	màt1	màti
spoil, binni (vi) kopokiiya katpokiiya spoil (a chiii) kopunia kulelema spoil kulelema katyonokia kopunokia spoon mulattiyo kitiiyo	601	split, crack (vt)	külyékánölá	kötäändölä	kůpásůlá
spoil (a child) kūpunila kdielema spoil kuyūndona kūyūndona spoon multinko kiltinko	951	spoil, blind (vt)	köpökülyä	köpökülyä	kdpókülyá
spoil köyönöönä köyönöönä spoon mutifinkö kitiinkö	649	spoil (a child)	kūpūnia	külélémá	kůděkyá
spoon mùtífnkó kitífnkó	866	spoil	kdyónóóná	kdyónóóná	kögázánjá
	813	spoon	múttíŋkö	kitífykó	můtiřnkó

8	English	KînàUshòòlà	KiniLáamba Central	KiniHaanzu
2	spot, speckle	dyòà/màdòà	dyóa/mádóa	málóa, mábáa
959a	sprain an ankle	kütyégüká	kötüümbölä	kisónkóélvá
141	spread out (be)	kwiyééndélá	kūtānāantya	kizúlá
527	spread	köyáálá	kůyáálá	kwaanza
806	spread abroad, be; become generally known	kökümöökä	kökúmöökä	kůmányřká
285	spread, smear on	kůpyáká ?	kůdobiá	kinàkà ?
591	spread, scatter (vi)	kösháámbáálá	kösápátilá	küsambaila
880	spring (of water)	nzyžiló	lyátó	ndiilyo
965	spring, machine	7	máshiini ?	
998	spy out	kůkôlěkěělyá	kököléélyá	kòdùmà
849	squat (on the haunches)	küshünsama	kūsūnsama	kösöönsámá
991	squeeze oneself up against a wall (e.g. to allow another to pass)	u.	küyégámilá	kwéégémà
914	sdneeze ont	kôminà	kòminà	köminyá
343	squeeze, milk	köshéémá	kösőnsölyá	köxámá
102	squirrel	kyiindi	kíindi	ŋkffndî
562	stack, pile up	kölöndiilä	kòlóndiìlà	kögündili
1029	stand (vi)	kdyfmika	kdyfmika	kimika
735	star	nsòòndā	nsoonda	nzótá
390	stare, glare	köláángölá	kůkúúlá miísó	kögözéélá
202	start off, send away	köléégyá	köléégyá	kůhějá
799	startle, catch unawares	kūpúmpūktlya	kdgddnddla	köliimbá
830	startle, jerk	köpümpükilyá	kötüümbä	köhögőlvá
618	steal	köyiä	köyiia	kiia
266	steel			
554	stem (of maize, millet, etc.)	làpèlèlí	lùpelėli	ipėėli/mapėėli
825	step over	kởpởờtả	kūpūūtā	kůkilá, kůpůtá

No	Enalish	KinàUshòòlà	Kîni[Lââmba Central	KiniHaanzu
315	sterile man (or woman)	môgôômbà	mügddmbä	mügddrnbà
541	stick	ŋkòmē	ŋkômê	mülââŋgâ
74	stir, mix by stirring		kökülügá	köhángilinkány
850	stir	kökölögániá	kökülügäniä	kökülügá
78	stir up	kölisölä	kösákölilyá	köpümyä
61	stone	güé/mágüè	gùé/màgùé	igwė/mágwė
228	store up, collect	köllingittä	kölilingillá	köhángwitlá
154	straight (make)	kögölöölä	kögölölä	kdgdólá
268	stranger, guest	mùgèèndâ	mùgèéndà	mùgèni
199	stream, current	kámwáápó	kámwápó	můxóóndô ?
798	strength, power	ŋgġţġ	ŋgölü	ngülü
140	stretch oneself	kökigölöölä	kökígölölä	kigóólá
395	strike, knock	kögööngá ?	kökünilä	kököä
982	strike with a spear	kdshárná	kdsórná	köhömä
282	string (n)	dsûnê	dsúnt	lòsinè
487	strip off (e.g. grains of com)	kdpdldlâ	kāpādiā	köpöölä
519	strut proudly	kökíkúmyá	kökísámáájyá	kióná
407	stumble	köküümpä	kôkúúmpá	köküümpä
266	stunted (be); be spoilt	kökáŋkánálá	kökákliá	kittilä
948	stutter	köshékimá	kösékémá	köhátáttilyá
594	suck (the breast)	kdyóóŋka	köyööŋkä	kóónyká
480	suck (vt)	köpipá	kôpípà	kdónsé ?
912	suffer, bear patiently	kögigimiliya	kökígigimitlyá	kögimyá
802	sugar cane	тодмя	mddwa/mydda	múwá ?
333	sun, light	pásô/mpásô	nzówa	lyddwa
184	surround	köpilimiilä	kôpilima	köpilimá
438	swallow	kômilâ	kòmità	kòmilà
777	swear	kwilapa	kwilapa	köláápá

	4	KinàUshòòlà	KiniLaamba Central	VIIII MANIE
2	English	*	vilà	
905	sweat	упа	Laldadilla	kiliingillä
392	sweep up, collect in a heap	kollingita mpatata	KOLOHOZNA	
	(usiggin)	chariotal a	kibováágbíá	kopyaagola
943	deews	Kopyagora	physicial	mülyö
517	sweet, pleasant	noun	the first of	kdimba
51	swell	kolimba	Kulling	lòpvò
608	sword (short)	nslimė	Silling	paanda
933	sword	mpáárjgá	mparanga	mikilà
360	tail	mokula	HIOMIA	kollana
876	take leave of	kwilaga	Kolaga	kolylod
778	take in (from rain, etc.)	kwiyddwâ	Koyoowa	kohota
909	take cam	köshölä, kökééŋká	kūsola	KOHOLE
9	second or of the second sundense	kölőőlá ntillá	kojoota ntiita	Kolugola
233	take off (clothes), unuless		kokaankania	kózógá ?
530	tangle	****	kovoonza	köönzä
868	taste (v)	Konnia	kinging a	kdiingasa
985	teach, instruct	kūmania	ACTION AND ACTION	miholi
621	fears	misholi	IIIIsiloii	linhmi
412	19	kómi	kyomi	and the
7		aninééü	mòsóa	muras
121	termite	manage manage	tvombo	ttöömbö
739	testicle	tyddmbo/ maconing	ON OWNER	łyb
1020	that	iyo	demph	ipata
455	thatched roof	teembe	dod kudded nadso	OKO, III
787	there	оро, око	Abely 40	éènsò
54	they	gho	poloci	nènè
444	thick, fat	grug	nu file	ihākā/mā/
98	micket	shaka	STIRKE	ihaka/mal
854	thicket	shaka	mandi, silana	mii (sg), i
619	thief	IIMI	111111	kinama
23	thigh (of human)	kitga, kitaambo	PATRIC	
			634	

haka haka ii (pl)

No	English	KřnáUshoolá	KřníLáámbá Central	KřníHáánzů
22	thigh (of animal)	kiiga	kiiga	kinàmà
559	thing	kiintò	kiintö	intò
987	think, imagine	kðshítgá	kůshřígá	kòsigà
651	thirst	nóótà	nóótá	nyòòtā
740	thorn	líigyà/miigyà	liigià/mìigià	liijā/miijā
689	threaten	kwiyópókyá, kötüümbá	kötüümbä	kontisha?
532	three	kātātô	kātātò	itààtó
115	thrust into	kòkinà	kðsómá	kwaasa
420	tick (cattle or dog)	ŋkópà	ŋkópá	ŋkôpá
1034	tie (fasten) (vt)	kötűűngá	kötűűngá	kötüüngä
258	tie up	kötűúngá ná lókúsá	kôtùùŋgà nà lôtfgì	kờtúúŋgà
978	tingle with excitement	kôzánzámůká	kôzwáámá	kůlówá
119	tip, point		nsóöngé	nsòòngè
741	tobacco	tyúúmbátř	tyúúmbátí	itůmbátí
146	today	nántééndé	nàntééndè	tétó
742	toe	lwáálá (nálókóló)	lwáálá lwá múgöló	lwààlà/nzàlà
445	tomato	ntôlè	ntôlė	nyáányá ?
105	tomcat (half-wild)	tyó	nftiti	
743	tomorrow	mùdááð	můdááð	můdáti
166	tongue	lòtimi/nimi	lölfmi	lðlimi/ndim
120	tooth (canine), tooth filed to a point			•
267	tooth	liinò/miinò	liínó/miínó	liino/miino
306	top, peak	mpélò	nsóöngé	mígólyá
293	tortoise	kíshishóóló	ŋkólókáká	gölőlágólő
277	town	múji ?	múji ?	
378	tramp of feet	màkiindò	můkiíndô	kihiindò
270	travel	kòlóónji' músffnzó	köyééndá müsffnzó	kôhègà
540	tree	kyötä/mäkötä	kyótá	mòtì/mìtì

KiniHàànzii	kokāgātā	köhőólá	kábixó	kögémá	můnyimpápà	kögéőlá	köpindölä		miintótí	kůpěémbá	kūpotvā	吾	maele	kökünőkölá	lòttìndì	mbihi	młaćivá	qòòlâ	köniá, kötüündá	mátůůndi	kötömílá	migólyá	mülüke	mùhìpâ	kijiji, kisali	munaanso	ndöti	lòli
KînîLââmbă Central	kökikimà	kösönööntéká	kyòòngà	kdgėma	υφώ	kökünikä	köpilimä	lòpéémbè	mîntyóti	kůpótyá	kůpótá	kābīlī	Idwelele	kůkúnůkůlà	mbífísi	mbífsi	kyáániá	wifmika	kůtóúndá	màtòóndi	kötómílá	nsógòni	mülükê	mushipa wa migali	kisááli	můnáánsó	ndóóti	HOI
KinàUshòòlà	kökikimä	köshölölä	makono	kdgèmà	ndòlóbó ?	köpilölä	köpilöká		miintớt	köshökötä	kopotya	kábiti	kinėnė	kökünökölä	tákátá	yiisi	kyáányá	wífmíká ké	könlá, kölööndá	máticondi	kötömilä	mpélò	mölöké	mdsipa ?	kdjiji 2	mùnáánsó	ndóóti	lióli
English	tremble, shake (vi)	trickle away	trunk (of elephant)	try	tsetse-fly	turn upside down, turn over	turn round	tusk, elephant's (middle size) *	twin	twist roll, spin with fingers	twist, esp strands	two	udder	uncover, reveal	unripe, half grown	unripe, uncooked	up, above	upright	urinate/defecate	urine	nse	utmost, highest point	vapour, gas	vein	village	virgin (bride), girl	vision	voice, (thunder)
8	538	999	401	604	605	938	174	711	452	185	483	752	18	945	551	994	311	614	446	745	699	307	904	380	276	692	327	330

٤	English	KřnáUshoólá	KiniLaamba Central	KiniHaanzu
224	vomit	kwòlóká	külükà	kölökä
524	walk (take a)	kögééndá	köyűómbágömbá	kögééndá
269a	walk	kögééndá, kölééndá	kölóngólá	külööngölä
847	wall	gyélélé	pyrútpa	nkùtà
983	want, need, wish	kötáká ?	kdsiia	kötáká ?
202	war	mbiità	mbiità	mbità
790	wart-hog	ŋgili	ŋgili	naili
860	wash oneself (after evacuating)	kökfiyeelä	kütyéélá	kitééntvá
127	wash (hands)	kökálálá	kökálálá	kójá
128	wash (clothes)	kökáánzá	kOkáánzá	kòpùa ?
129	wash, take a bath	kdyóógá	kdyóógá	kòga
322	water	máázi	máázi	mazi
656	wave, let off a trap, remove a spell	kütégüülá	kölögölä	kölágölá
1017	we	ishé	isiė	sèèsè
1010	weak	góigóí ?	nèkétů	könvéká
881	wean a child, give leave, send away	kòtiíshà	kölèkyá	küléküülyä
234	wear, dress	kůjáálá	kūjāālā	kötügálá
501	weave, knit	kütümä	kötúmá	kgtima
1015	weight, rhythm	chitch	ülütö	òlitò
210	well	löözi	انافرتا	lóózi
99	wet (get)	kötötá	kötööntä	kotoonta
919	what?	yááni	yaani	ntòòni
694	which?	nyffmbi	niii	ni dif
192	whistling	mðlóli	mpilifmbi	mòlòli
175	white man	mùzúúŋgù	můzůůngů	múzuungú
610	white	mwéélő	nzėlė	nzėlò
918	who?	wááni	waáni	nyaanyû

No	English	KináUshóólá	KiniLaamba Central	KiniHàànzù
28	wicked	-bf	mòlàándò	iti
339	wife	mòsóóngò	másáángá	músởờngờ
187	wind up (thread)	kòtáliingtityà	kökóónzá	kôkôônzà
746	wind	nzėgà	nzėgà	ŋwèègà
937	winnow	kôpéétà	kòpéétà	kôpéétá
112	wipe	kòpůtà ?	kòpútá ?	kởshààgớlà
88	wire (brass)		wááyà ?	
194	witchcraft	òlògi	òlògi	òlògi
279a	withhold from	kôlimà	kòlimà	kớimà
279	withhold from, abstain	kòkíyiimä	kôkìyíimà	kilmá
338	woman	másáángá	můsóóngů/ àsóóngů	můkřmů/ákřmů
747	womb	ndà	imbi	ndà, kừsừừŋgử
812	word	lòkááni/ŋkááni	lòkááni/ŋkááni	lókáni/ŋkáni
772	work as a mason	kởjèèŋgà	közééngá	közééngá
167	work (n)	můlimô/milimô	můlímô	můlimó
81	wrap up	kògòòndà	kờyúnà	kökönzá
344	wring (clothes)	kòminà ntiilà	kòminà	kðkámðlá
773	yawn	köyáölá	köyááölá	kámáhá
593	year	mwááká	mwáká	ŋwààkà
750	yesterday	igòlò	igàlò	igởlò
15	you (sing.)	dwè	dwé	wėèwė
1018	you (pl.)	ìnyė	iniè	nyéényé
715	young man	sòòmbátí	můlííshá	můhởởmbà
637	your(s) (pl. 2nd) person)	yàànî	yàànî	nyéényé
693	youth	sòòmbáti, munáánsö	músömbáti (m), műnáánsó (f)	mùhòòmbà , mùnàànsò
292	zehra	ndôólô	ndôólô	ndůlů

Appendix 1. Zone F word-list: F32

٩	English	GíRwána	GiÁhi	yinyaMunyinany
33	abdomen, stomach, belly	ndà	ndà	ndà
95	abscess, boil	iròòndà	iyoonda	ipüRé
186a	abundant/abound	nyiingi	sú	nyilıŋgf, ijðè
186	abundant	nytingí	so	nyiliŋgf, ijöè
173	abuse, insult	dRdkáná	tòxànà	dtökáná
52	abuse, reproach	gixóà	jiémwa	üsögösä
608		dzóéa ?	kůRáá	gijfvta
74	-	ùRèndà	köténdá	ùtèndà
528		òòngèyà	köúŋkànyà	köxößiyà
327		hởmbéyả	dgiffwa	miimbi (n)
362		sèèsò	sèésò	sèèsò
254		ihanyo	tinto, kiRonga	ihanyo, nxaani
1002		οὸγόῖα	obyofa	οογόfà
168		malitma	Ulima	irimà
928	all	nyòòne	-oone	nydone
248	alter, change	ffindoa	-xaßisyā	òxáβisá
595	animal	mởnyámà ?	ilimwaana	
517	answer a call	iRíká	iRika	gitika
782	answer, reply	sůkťá	súchà	dsúsa
564	ant (reddish-brown biting)	nyėli	nyèli	nyèèri
122	ant-hill	giyêê	giydd	glgdd
563	ant (small)		sòòngwi	anythkööngö
586	anvil		inóóléó	igwė ló tyaania
989	apply by stretching, spread over Rantaya	r Rantaya	xòmèkà	дkómá
926	appoint, set up	imíchá	ímichá	wàRèmwå
55	arm, hand	màxònò	mūxģuģ	mởkônó

S	English	GíRwánà	GiÀhi	yfnyaMunyinanyi
177	ampit	kwaafa	kwaafa	ginyankwapa
203	arrange, put in order	fààngà	niŋanijya	Uninantya
204	arrange, put right, repair	Rèndà	chàanda	dsókivá
478	arrive	dja	rèà	òfika
999	arrow	iRùùmbò	iRüümbö	mddßyė
999	arrow (head of); spear head	möyt, isómó	möyt/miyi	sòqude
337	ashes	màù	màù	màù
199	ask for	rởómbá	óómbá	dròmpà
88	assemble, collect (vt)	kösányá ?	köniŋantiya	ΰκόβίγα
789	aunt (father's sister)	ið á RáRá	maama	ijó mùhàjá mwàRátà
148	avoid, dodge	ðréká	ðRóRó	ðRáná
688	awe, fear of God	óyáánjá		σοροφορ
667	axe	geheendo	géhééndó	gihééndó
364	baboon, ape	mpóómà	mpóómá	mpómà
634	back of (at the)	nyùmà	nyúmá	ónyúmá
297	back	màyoòngó	mùyòòŋgò	můyoongo
297a	backbone	ishina müyööŋgö	ikúfá yá mùyôôngô	ikufa muvoongo
27	bad	mbf	ibi	mpį.
37	bad (become), rotten (vi)	oyola	yöörä	ΰγόrä
87	bait		münyöyőyä	aixòònaévò
398	banana (plant)	mögómbá ?	mùdisi ?	mögómbà ?
397	banana (fruit)	ndizi ?	ndisi ?	ndiizi ?
388	banana (for cooking)	ndizi ?		
1005	baobab	mwaando	mwaando	mwaando
1022	bark (of tree)	ibàdá	ibaada	ibada/mabada
313	barren (of living being)	mdyddmba	ntááhá	ntáhá
314	barren (of land)	chíimá	ůxáxů	ibáámbáhi
376	base of tree-trunk	iRina	ishiiná	itinà

2	English	GIKwana	GIANI	vinyaMunyinanyi
650	bask (in the sun), warm oneself ooRá	òòRá	óóRá	kóóRá
929	basket of open wicker-work	akáfů	gixáfů	
577	basket (plaited)	káfů	gixáfů, kápô	ikáádů
643	bathe	òòyá	óóyá	aòòaà
498	be fitting, behove	Idaike	nônééya	nònèèya
-	be, become	óRéndééká	djó óhéndééká	9
955	beach, coast, shore	mpwaani	mpwaani	тwàáфò
827	bead(s)	nààngó	giintò	girntò
416	bean, kind of bean (from Phaseolus vulgaris)	ŋkdsa	ŋkösá	ὐkờsá/ŋkờsá
417	bean, small (from bean plant)	máhárágé	maharage	máhárágé
844	bean (runner)	mdŋkdsá	ŋkờsa	ůkůsá/nkůsá
1037	bear child	Ofââfâ	Ofaafa	ůRůngóká
147	beard	ndêû	nděů	ndéù
768	beat	хо̀Ва	xðá	окива
759	beautiful	njija	dojá (fémálé), öhöömbá (málé) njiijá	njiija
162	peq	yîRândâ	giRándá	giRándà
161	bedstead	iRendégů	gìRándà	òrii
653	pee	njöökí	njóókí	njóókí
775	peer	ntới	ntời	ntới
497	befit, suit	Inónė	nônééyá	ůnônéěyá
101	below, underneath	hááŋè	háání	fàànè
186	bend, twist (vi)	fiinda	-bìidà, fiindà	głkúnyá
468	bend (vt)	fènèèntà	-biida	ökünyá
193	bewitch	rôyà	ἀτόόγὰ	bloya
930	bifurcation, cross-roads	mpásá		mátáyánió à njíá
222	bile	mpóóndó, gisdánga	kisdöngö	ntóóndó
262	bind up, splice	dyáángá	ðráγðá	ΰtàβíhà
658	bird-lime	dnitmbó	ůněembó	ûniimbò

				ATTINGUINING ATTIN
811	bird	nyôônyi	nyôônyì	nvoonvi
9	birth (give), to a child	dfaafa	Ufaafa	dfaafa
125	bite	òrùmá	drümá	òrimà
221	bitter	nyddygd	ndòlò	ndòlò
223	bladder	ihòrò	iháú	
482	blind person	múfóků	mờfôhủ, mờφôků	màpóků ?
698	plood	sáyámi	sayami	sayami
96	blow on, blow up	fèmbérá	fémbéyá	ùfèmbérà
238	blow bellows	ókúnúntíyá	òfémbéyà	
163	blow away	drùmya		dsésééryá
92.2	boast, brag, praise oneself	dgiRéndà	dgihómya	atyóniá
976	boat			
929	body	mdßi/mwitri	mwitti	mwdiri
181	boil up	ðRáyáRá	chófyà	wókitra
2	boil (vt)	chófyá	chúfyà	òchófvá
33	bone	ikūra	iyúfá	ikùфà
64	bore a hole	féyéhá	dőűŋká	ů bô ó rà
800	born (be)	faafwa	fàafwá	ὐΦààΦwà
10	borrow	ůkôfâ	dyófá	ðkópá ?
172	bottle	chờớfà	chóófá, chòógá	chôófá
958	boundary	mờfáákà ?	mwffmbf/mffmbf	mitmbi
171	bow, bending	ikdnjiė	ΰRà	dtà
808	bow	υRa	ΰRá	òtà
153	bowstring	óγόhè	ôyôhè	ûyôhè
89	brain	waangwe	waangwe	waangwe
60	branch	isáánjá	isaánjá	isaambi
175	bread	mùkáté	můxátě	můkáátě
131	break wind *	ohirra	dhúá móndiíso	wèhééra únyuma

2	English	GíRwànà	GiÁhi	yinyaMunyinanyi
11	break, snap	ùnà	ðbélóá	ởγὑnááŋgà
1036	break wind	dhùrà	ðhúà	òhùrà
17	breast (of a woman)	mbéè	ivéé, dvéé/mávéé	maanya
489	breath, breathing	mwaahu	éhéá	mwááhť
490	breathe, rest	göhèà	ehéá	göéhéá
138	bridge	idalaja	idaaja/madaaja	táámbókó
139	bridge (wooden)	idalaja la maRi	ðRámbókó	tààmbókiló
885	bring, fetch	éRá	éRá	lèétà
171	bring to light	dmányřká	wéélyá	důlyá, kůmďá
882	bring up (a child)	òrià	drėa	üréá
999	brook, stream	gayoongo	gamoongo	gayoongo
942	broom	ifyáytirió	Ifáyðó	chágirò
113	broth	mihòli	máhöli	mihàri
381	brother-in-law, sister-in-law	mòlàmò	mwáámú	mwâmwánī
341	brother (older)	múúna ní mököó	múúnà, mùūnà	mùúnà nì mùhàjà
673	brother, relative, fellow-tribesman	mùnyàndó y ð	múúnà, mùúnà	můnyàndó y d
874	bruise badly, take the skin off	dsindká	sifóá	dsdydka
7	buffalo	mbóyó	mbóyó	πρόδγό
807	pnild	djeenga	ðjééngá	djeenga
674	pnil	njáyámbà	njâyámbà	ŋkaama, njayamba
80	bunch (of hair)	mātiiŋgā		ipágátié
890	burden, load	můliyò	mwityó	rnwiiyd
645	bum (vf & vi)	gwaaka	ààxá	gwaacha
231	bumt (become)	ստիցնուհ մարցնուհ	lífyá	dpyå ?
179	bury	ΰβϊτκὰ	fiha, txa	dßika
555	pnsh	iyaaka	ihááxá	ìhàká
21	buttermilk	mááyá	máé ni málðlö	giŋkaanda

N _o	English	GíRwàna	GiÀhi	yfnyaMùnyiŋanyi
514	buttocks	iRááxó	iRáyó/mRáyó	ffakó
301	buy	dydra	dyda	υγότά
873	calabash	ησόδία	ŋóófà	ηθυφά
857	calf of the leg	ŮSAAKU	dsaxd	dsaaku
877	calf	máŋöömbè	ndáámá	mwaŋöómbe, mudama
3	call	giRáná	iłRá, fiRáná	ùtááná
675	canoe (dug-out)	ŋgàlàwà ?	ngáláwa ?	
602	canoe	mülümbwi?	ngáláwa ?	
993	carry a child on the back (in a blanket)	ùfàfà	fāafā	dyeeka
292	carry/lift on to head (take up) a gtRfka heavy load	giRíká	giRwíká	gitika
26	carry astride on the hip	ůxwáRirá	ůxáRtá	Okindika
960	carry, take	kėėnjka	ùhỏrà	okeenka, ohora
578	carry, convey	kêêŋkâ	-ùRóa	фееуа
104	cal	nyáù	nyaù	nyáù
286	cattle	miRiyo	mifüyö	mitügö
486	cease, finish	hiirá/siirá	hiá	hira
526	centipede	xởmi à Ryánà	ŋxởmî yàflánà	
247	change, tum round	föndöká	gifyiRühliyà	dsóká gřnyúmá
334	charcoal	màxáá	ixaá/maxaa	makaa
963	charm (esp. to ensure wife's fidelity) (n)	gisðmbá	mởRéyỏ	ðsindíka
32	chase (away)	jonchá	jūnchā	ůirà
515	cheek	iháyá/máháyá	küündâ, ŋààyà	màhàyà
95	cheerful (become)	-yaanja	-yaanja	bithe ?
106	cheetah	ŋdövi	dúmà	,
585	chest	gikùà	gixid	giküßä
672	chest (of animals and birds)	giküà	gtxitβá	głküßà

étinodo

ślnóónló

λιυλφωριμουλίσουγ

385	cool (pecome): det well	олудка	дıλарş	ојлодка
43	cooking pan, small	ognienig	υλορμθο	
299	cook in water or fal	6 Я6х6Я0	6x9AU	ριθχέιλε, δεπάνγέ
110	соок	έγνηδ	ôRêxâ, ởŵγâ	9,00
230	construct, put together	gamba	6bn990	9Rêndê
	ect			
909	come on suddenly, take in the	óhángityá	óhángityá	éyignásháw
624	come	6j6	600	elo
991	copp	gιλοκη	óφądω	офээдш
906	cohabit	imbôyà	BB10	witómbyá, ötáyáná
146	copts (spitting)	Olilwm	Olilwm	ühimm
418	coadniate	KWARITA	omitte	Oméérá
305	cloud	əpunnu	9punnAj	epunțul
300	clothes, material	éézém	6626m\662i	éési
532	cioline	Rytchâ	gyaa	ត់ព្រប់បំវង្គ
589	ctoth	giRâmbââ	giRâmbââ	66dm6ftg
158	ctose (the eyes, mouth, etc.)	RuRya, mumuŋka	оконув	ötütyá, ögiryá
980	cjoq' jnub	ikiŋki	ógnóśmiógnóóli	γιοφιλάς λφομλό
148	climb, ascend	emuen	popula	
522	clan	oppieswm	6Ait0m	окоо 3
109	civet cat		oßlinnau	ο 60ηημ
83	сиорзе	pineor	gohoania	Binoono
988	chin	graeu	gapig	gtdeu
469	cuild, offspring	énééwm	ensewm	ènééwm
6/9	child, intant	mwaana	eyninom, eneswm	eneewm ,edmillum
4318	chiet	moRemi	шокеші	тояет
431	chiet, headman	шакаа	manyampaa	möRémi
	and the same of th	2.6.16		

shábá sókérá

GIRwana

S83 cobà e bettem

Seg cobbet' puses

	English	GíRwáná	GiAhi	yfnyaMunyinanyi
	cork, stopper	műkünfkő	mūfūnikito	kivifrò
1001	corpse, carcass	mwiimbā	mwiimbá	gibúdů ?
383	corpse (human)	mwiimbâ	mwiimbä	můviimbá
	cough (vi)	dxóóā	dxóóra	üköörä
	count	(Salya	Gaalya	dßäryä
100	country (our)	ŋff	nyf	ıje
41	courtyard	giwanja ?, ököömbi	mðsáé	můséé
852	cover (up)	köníkyá	Ofuntkia	ükünikiya
285	cow	ŋôômbê	пофтре	ŋòòmbè
_	coward	тимоова	пумофра	тννδόβά
	crab		ndéyéyé	
520	crawl, creep		aalúa	Kūūrā
612	cricket		nyéénjé	nyeènjè
153	cripple	Oremie	gilémá	gfrèmà
803	crocodile	máámbá ?		
319	cross (a river)	dRambóka	öRámbóxá	ötámböká
846	crow (n)	դեժդցժժ	ηκουβού	ηκομασό
308	crown of the head	bosa	bóósá	bosa
62	crumple	dminyaanga	ohoangitya	
370	crush by pounding, pulverize	öfööndä	ORDánga	ótörá, öfööndá
393	crust	máxóxó	maxóxó	IKOKO
160	cry, wail	kdra	Oita	wifrà
996	cucumber, small	mayooyo	iRáángó	miimbė
736	cudgel	iffni	infui	ittnt
165	cultivate	drīmā	limà	irima
950	cure, cool, heal	dryddchâ	üfööryä	σφορίνα
355	ont	Rema	Rèmà	ô Rêmà
86	cut, lop	dninantiya	öRèmáŋgà	офеелда

S	English	GíRwáná	GiÀhi	vínváMůnvinánvi
117	cut to shape, sharpen to a point dsesa	dsésá	Oseesa	ůséèsa
365	dance (of men, to show	ὐγiiná	òginisyà	imáá
63	(affects)	4-1-4		
3	dalice	ogina	oginisya	ogina mawitndr
622	dark, black	jóriki	-iild, njiild	jóRiki
481	darkness	kiiRi	kiiRi	kijti
824	dawn (vi)	gwácháá	dòchá	dið ní nköö
359	dawn, daybreak	gwèráa	máèléó	ůchééró
744	day after tomorrow	iŋkiô	hiŋkiô, kishitò	φüηκίὸ
130	day	iRikó	ishiixó	iRiko
682	day-time	möömwi	товт	müümwi
869	day (all)	πουπνί νοόηθ	möðmwí wöónè	mùùmwf wòónė
751	day before yesterday	ijooli	igi	iigguj
423	dead person	mwiimbà	mwilmba	můkůvů
454	death	ŋkùyà	ŋkūùyà	nkůvá
931	decorate	ûnônéya	dxósánsťá	gnóněévá
446a	defecate	ờnià	dnià	ònià
631	denial	ixáná	òxánò	bkaána
821	deny	ůxánà	òxánà	ükäáná
648	destroy, spoil	ປ່ານີ້ຄືສ້ສ່າງga	òrùvà	ðrúßáángá
437	dew	lðómè	lóòmè	lòòmi
219	die (cause to); put to death *	óráyá	òràyà	kònóà
1027	die *	küyä	kùyà	kůvá
425	die	küyä	küyä	kùyà
504	dig up, dig out	kúrá	ühüä	ökürá, öhitmbá
203	dig	hilmba	ôhiìmbà	óküà
466	diminish, grow less	kėėfà	òxéfà	kéépa ?
635	dib	sóómbyá	óhóómbyá	dsiniya
49	dirt	ixwè	İxwé	mpäärä

680	English	GiRwana	GiÁhi	vínváMůnvinánvi
	district, province, country	ijt.	ihöömbi	
245	divide	yaania	dgawa	ờβàyànià
512	divorce	lèká, ởchùinchà	giréka	aîrêka
367	do, complete, finish	hiirya	óméévá	dméévá
386	ф	Reenda	òReèndà	UReenda
90	gob	mbwá	mbwá	mbwá
292a	donkey	ndôôywé	ndôòywé	ndòywė
385	door	ginyámwáángó	ginyámwáángó, rööli	nyddye
415	dove (red-eyed)	köörwé	ŋkúinda	nkddwi
188	doze	oRindiya	òRiindiyá	otindfya
529	draw water (from well)	ðRáfá máájí	óRáfá máájí	Otafá máají
215	dream (vt. vi)	góRéa	dóRéa	gòótéa
328	dream (n)	ndóóRi	ndóòRi	ndôoti
448	drink	nywá	únywa	nywa
96	drizzle	isisii	isiisi/masiisi	másisiírá
180	drop, throw down	iichá	dhàà	Ükâà
584	drum	ŋgòòmà	ŋgòòmà	пдоота
	dry (vt), set out to dry	ànfkà	daníxa	gdáníka
	dry	ŋkakŭ	xâàxù	nkáákú
954	dry up, ebb	fwehera	dmfrå, døéhéá	gůképá, girůká
345	dry up, become dry	ggmą	ðómá	gúómá
683	duck	mbááRá	mbààRá	mbaRa
43	dust, cloud of dust	მხმისმმ 3	ghạquag	dkadnad
	dwell	īhā	gògixáa	qikaa
192	eagemess, zeal	lóómbé	ηκόσιπρό	Daxa ?
161	eagle, bird of prey			òsèentà, déédé witüümt
993	ear	kůRwi	giRwi	ikůRwė
0	earth, land	fááŋt	fáánt	ŋè

- oq

44 califlemente vessel for serving chologigh - chologith, kin 155 est out 0.04 0.04 0.04 223 egg out phyrmaby, Eytmay from ministent 0.04 0.04 225 egg opp flood phyrmaby, Eytmay from ministent 0.04 0.04 225 egg opp flood phyrmaby, Eytmay from ministent 0.04 0.04 236 embrare photo phot 0.05 0.04 0.04 236 embrare phot 0.05 0.04 0.05 0.04 236 embrare phot 0.05 0.05 0.04 0.04 236 embrare phot 0.05 0.05 0.05 0.05 236 embrare phot 0.05 0.05 0.05 0.05 0.05 236 embrare phot 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 <	Š	English	GíRwáná	GiÁhi	vínváMůnvinánvi
effort centrion planting depth of the centrion planting of the centrion	4	earthenware vessel for serving up food	chödŋgó		chờờngờ, kipákớiló
enfort, continon polymicable principated monifestration engist minimidates refundades engist minimidates principates engist politoria principates engisterer politoria principates engisterer politoria principates endistration politoria principates envisioner beat principates envisioner principates principates envisioner principates principates envisioner principates principates envisioner principates principates envisioner principates principates envisioner principates principates principates principates principates principates principates principates principates principates principates principates principates principates principates principates principates principates <td< td=""><td>156</td><td>eat</td><td>Ülá</td><td>ddiyá</td><td>Ġlá</td></td<>	156	eat	Ülá	ddiyá	Ġlá
opp Pop Minishe, Fyfrmay of the Christophe o	006	effort, exertion	páámpáhů	mwiiRómí	naiù
dight	273	66a	ilyé/mályé, iyi/máyi	ilyí	irvé/márvé
an ethonom plobu, nijvo nijvo an embrans and martines in the control of the contr	443	eight	mùnàánà	mūnāānā	mùnàanà
Page Page	705a		ixòxóa	gihóhóà	qikokoa
Inchest	329	elephant	njóù, njóyů	njòù	niói
Internation	336	embers	ixaa	ixaa	ixaa
	842	embrace	kůmbáRia	gòxùmbàtià	kômbàRiả
Seaspa, concernent of the an optiod according massever of the an optiod according defined and an optiod according defined according and according defined according defined according defined according a properties of the according according a properties of the according according according a properties of the according accord	394	end (come to an)	hòòndyà	hóóndyá	kwiiya
continue, insessure, test of quinta de contronnent, dung contronnent, dung mitals or contronnent, dung contronnent, dung contronnent, dung contronnent, dung contronnent, dung contronnent, dung contronnent, dung contronnent, dung contronnent, dung contronnent, dung contronnent, dung contronnent, dung contronnent, dung contronnent, dung contronnent, dung contronnent, dung controlnent, dung	952	escape, recover	fórà	gờfôá	dødra
exocrement, dang maki maki exocrament, dang heba exocrament, dang heba exocrament, dang heba exocrament, dang heba exocrament, dang heba exocrament exocra	899	examine, measure, test	фiima	òfiimà	ořváánió ?
concision, office cout a deval in highly a constraint of the physical control of the physical control of the physical control of the physical control of the physical control of the physical control of the physical control of the physical control of the physical control of the physical control of the physical control of the physical control of the physical control of the physical of the physical control of the physical control of the physical	45	excrement, dung	mábi	maabi	maabi
explain Olithyspa Otherhold eyestrow Inthohinition Inthohinition eyestrow Into All Inthohinition Inthohinition performed Introduction Inthohinition profession Inthohinition Inthohinition first comments Inthohinition Inthohinition first comments Inthohinition Inthohinition final, loss consciousness While Inthohinition Inthohinition final short Assertion Onderform final short Assertion Onderform final total control Inthohinition Inthohinition final total control Inthohinition Inthohinition final control Inthohinition Inthohinition final control Inthohinition Inthohinition final control Inthohinition Inthohinition	928	exorcise, drive out a devil	hèyà		qihima
eyero initionimo into into operaco into into operaco into into operaco into into operaco into into operaco into into operaco into into operaco into into operaco into into operaco into into into into into into into int	784	explain	öliyiRya	öhànyà	giigityà
prestrow and control a milho publication or protop or control and no note of control and no note of control and no note of control and no note of control and no note of control and	620	eye	liihò/miihò	lihó	riihò/miihò
postable principation protect	828	eyebrow	ntởká, ligotôntô á milhô	ŋköömbö	nköömbö
Iter downwards	838	eyelash	ŋkġġmbġ	ηχόξλο	ðkóΦė
Race	284	face downwards	ráá nà ndà	drád i ndáandáa	rérà ndà
India, disappear dictate (pija dictate) (pija) India, lose consciousness wakkala dictate) India (pija) India short defende, kedia dedeth India short handeleya dictate India short handeleya dictate India (pija) India (pija) India (pija) India (pija) India (pija) India (pija) India (pija) India (pija) India (pija) India (pija) India (pija) India (pija) India (pija) India (pija) India (pija)	989	face	dsyd	dsyó	dsó
Initial, Lose consciousness wideling through plaish	940	fade, disappear	offidělé Bija	öRöRya, öllöölya	ůnwerá
fall Cypys	891	faint, lose consciousness	wakila	öhöyá, nklishi	dwffinva
fall short Address, Releta Outerfall far, wave hobbids for the (or names) fat (the) (or names) review) or year fat (or names) review review	298	fall	-gwa	oogwa	dawa
fan, wave hendelyn ûntstea Andelyn xwelengi fat (be) (of animals) rehyle? ûvjrha fat (of animals) rehile yrinu	549	fall short	-kééféwà, kèéfà	òxééfã	dféérvá
far Noblengal xweengi far (Tat (be) (of animals) rehyle? Oytna (at (of animals) rehile yrm.	462	fan, wave	hèndèélyà	óhéhéá	
fat (be) (of animals) rényié ? òyinà fat (of animals) rénié yinú	764	far	köléngi	xwééngi	kweengi
fat (of animals) rènie yìnú	921	fat (be) (of animals)	rènyié ?	ôyînà	dyina
	922	fat (of animals)	rèniè	yini	yìnù, yilù

No	English	GíRwànà	GiÀhi	γίηγὰΜὐηγἰηὰηγί
531a	father	RàáRà	RàáRà	RàáRà
382	father-in-law, mother-in-law	můxwě	můxwé	můkwě
531	father (my)	RááRà	RàáRà	RááRá
687	fear	wòòβà	wôôβà	wòòβà
652	feathers, fur	njôôyá	májóóyá	màβờri
848	fence, enclosure	ikiRà	mòsáè	ikiRá
858	ferment, turn sour	òsàsà, òlòlà	òsàsà	O SÁSÁ
762	few (a), not much	kééó	xii	chèèβò
757	fierce, sharp	xàii	ffyf	xálí
421	fig-tree			
422	fig-mulberry tree			mákáyá
216	fight	γἰxờβà	dytxdá	gtxάβà
804	fill	głjóyà	głjóyà	głjóyà
176	fill a hole, stop up	głjóyà	òxìRà	ògivyà
583	fitter, strain	òfènéntà	òxàmà	ókámá, ókénéná
50	fitth	mààntú	mpäärä	ipäärä/mpäärä
516	final, decisive	òdàhà	ihūniiyō	áfikéá ?
760	fine, excellent	ijà	njiijā	njiljá, nóởmbá
447	finger	mwáchá	mwàáshàà	châ
323	fingernail	ðkúkú	ðhúúhú	ókúúků
474	fire	mòòRò	môôRô	mòòRò
280	fireplace, hearth, kitchen	driko	ôjíxô, màfiwá	riikō
970a	firewood (collect, cut) (vt)	ôRényà	òRényà	ôtényà ŋkwî
413	firewood	ŋkwi	ŋkwi	ŋkwi
191	fish up, pull out	ôhéyà	òsòmbòá	òkòórà
126	fish (old Swahili nswi)	sámákì ?	sóómbá	sóómbá
190	fish (vt), trap fish	kwàRà		ókóórá
400	fist	nkùùndì	nxòòndè	nkùùndì

No	English	GíRwànà	GiÀhi	yínyàMûnyiŋàny
525	five	iRáánó	ìRáánô	itàánô
493	flap wings wildly, flutter	ìkùnùúntà	ðxúángá mbááyá	òrùmà
832	flatulence	ndà ìjwè	òbèòxà	ògiðká
384	flavoured (be properly)	ikwàRyè	dxòléà ?	nòywéérà
907	flower	ìúà ?	séémbé, iúá ?	
278	fly (house)	ŋgii	ngii	ngii
1028	fly (vi)	drůmá	ðrúmá	òrùmà
1032	foam *	ifómbóú	ifòòmbòò	ifóómbólú
502	foam	ifómbóú	ifòòmbòò	ifóómbólú
143	follow (in order)	-hòòngà	-såàmbìyà	gìhóóngà
142	follow	-hòòngà	gìhóóŋgà	gihóóngà
823	food supply for a journey	máháángú	málffwá á múhilnjó	máháángú
556	forest	ihááká	ihääkä	iháká
584	forge	θRyánà	ðfyááná	òtyàánà
889	forget	gììwà	òvíRà	gììßà
458	fork, bifurcation	mpásà	gřfwáándwá	mákákó
442	four	linė	gáně, líně	líně
295	frog	ntòòndò	ntòòndwí	ntòòndò
574	fruit	itùùndà ?	-	4
349	fry	ἀχὰάηgà	dxàángà	òkàángà
936	fully developed, be	òxòmáà	ởwèèndà ở njí (m), ởhyá ởριùùmbá (female)	òkòrâ
625	full (become)	ìjớà	ògłjóa	gìjớà
316	garden	bùsitááni ?	bůsitáání ?	njérá
419	gather (flowers, fruit)	θxàà	dxàà	dkāā
91	gathered (be), assembled (be)	gèèngérà	ògihóàngìlyà	giháángôyà
368	gazelle (Grant's)	sàsứngà	-	mpáá
454	gazelle, small (impala)	mpàà	mpåå	mpáá

108				
	genet (kind of speckled civet cat)	ntùùŋgô	ntùùŋgò	ônyêêŋgwê
408	get, obtain	ohaanga	hàànna	Ababasa
684	ghost, sudden apparition	máRůmbůká	and annual	oridarija draferit
568	giraffe	ntřivá	4000	OWING
246	give away (present)	ddhhya	Affined (dobbeet)	nuya
449	give	042	ofth Catalana)	odoya
916	give light to	mudika	description of	dooya
815	olide trickle	shmbbanch	OHIOOHIXA	Omwitka
280	-	Someoning	Osamaamba, Oseneemba	dsemeempa
000	200	-eeuda	dweenda	gweenda
870	go in, come in, enter	iŋgta	dxya	gingfyà
63	goat	mbdii	mbóli	mphol
694	goat, (he-)	mpáhi	noùàRà	Downship
695	pob	melehood	and the said	ijywaara
758	pood	oillo	officer	mwaluunda
300	and the second second	nhiba.	copa	Jiyana
200	gosnawk (cast African) (Astur tachiro)	Oseenta		mpáfiyáná
68	grain (of cereal)	mpěěké	mpééxé	modded
969	grandfather	kókö	why the wife	- Andrews
269	grandmother	mdxikad	loud with	KOOKO
432	grasp, hold in arm	LimbéDob	niye xoo	nyinyakaa
808	and a second	railinary a	xumbarkya	Okumbatia
000	glass, reeds	mahwa	máhwá, máránjimbá	mahwa
90	grate	kwaara	Uxwaara	kwaara, kwaraanoa
409	great, powerful, big	köű	nköö	nkhh
164	grief, sorrow	öhwéRé	simba	
371	grind (grain with a millstone)	dsya	evel (i	shere
372	grind coarsely	Öfðara	offished	naken i
212	groove, furrow	gahômbó gauðoga		Koorya
804	Total Man Postone	Ballondas 'sallondas		mokwiira
00	ground, curryated	moonda	mdygndá	moonda

å	English	GíRwána	GiÀhi	yfnváMůnvinánvi
405	grow up, get large, become great	kūrā	θχθά	ðkórá
913	grow (of plants)	bôhá	dxdá	ökiindâ, ökörá
461	grown (be fully)	RayaRa	ůxámá	wihókià
373	gruel, light porridge	ŋxóómbà	ŋxóómbá	nkôómbà
358	grunt, grumble		üxlééyá	dydßa
205	guide aright	Röŋgèèrá	dłódgya	ðRóngéérá
351	guinea-fowl	ŋxààŋgâ	ŋkaaŋga	nkààngà
701	unb	bůndúúki ?	igóbólé ? búúndúki ?	
702	hair	ởRúká/ntúká	Bjó	otuka
214	hair (long straight- of animals and Europeans)	ikiiŋgà		gákiiŋgá/mákiiŋgá
75	hair (white, grey)	mbùyì	mbúyí	mbivi
703	hand (flat of)	iyanja	ixou	ikówi
157	hand, right	gittio	gittio	alitio
439	hand (left)	głmóhò	grmohó	atmóhó
476	handle, haft	mòffnì	mòfini	mobini
779	hang in mid-air	Oninjiniya		chinina
655	hard	ŋkákù	xáámů	nkáků
377	hardship, distress	ðkáků	úxáxú ?	sááyô, síídá ?
294	hare	múnyángáá	mùnyángáá	műnyángáá
781	haste	ángöfá, wáángwá	aangofa	gwaangd
795	hate, detest	dhörá	ohówa	öhörá
200	hay	ôbábáli/mábábáli	máhwá ní máxáxů	máhwá mákáků/níðn
678	head, chief person	mākāū	mòxóó, mòRémi	mököd
356	head	iRwė	iRwé/màRwé	itwė
352	head-pad	ŋkáRá	ŋxáRá	nkàRá
561	heap	iniundó	inndò	ilààndò
		,		

mie

No	English	GíRwànà	GiÀhi	yínyàMùnyiŋànyi
391	heap up, ready/set on fire	féèmbérà	Rèndá mòòRò	òRèndà, òfèmbéérá
623	hear	Ráàyà	Rèyèà	Règéà
543	heart	ηχόό	ŋxóó	ŋkóó
944	hearthstone for putting pots on	màfiywà	ìfiwá/màfiwá	ifiyó/máfiyó
893	heavy, serious, dull	iriRò	ndiRò	iritò, nditò
705	heel (of foot)	gìRìginò	gìRíninyò	gitininyò
681	heifer	ndámá á ŋòòmbé	-	mùgôyô
418	hem, make a border	břídá	ởRùmà, ởhúnjá isảà	ůkůnyá
690	hen, fowl, chicken	ŋkởkở	ηχάσλά	ŋkààkà
766	here	àfà	háfái, húkó	àфâ
863	hiccup		ŋkiishi, ŋkiiçi	gřhékůmwá
800	hide (vt)	fiihà	òfihá	dbihà
38	high, be (of meat)	θγόrà	ðγúúndá	θγότὰ
326	highway	bàlàbálà ?	njià, bààbáà ?	ibáárá
309	hill	άγόδησό, gìγάὰ	gågìRààntò	gàRùmbì
925	hip	ŋkùnù	-	nyòòngé yà ginàmá
317	hippopotamus	ntómóöndő	ntômôôndô	ntômôôndô
396	hit with a hammer	óRòà	óxờá nyùùnđô	òtùrá nà nyùùndò
706	hoe	ikòòjò	ixòòjó	ikájó
990	hold, arrest	ðxwááRá	ůxwááRá	òkáRá
575	hole, nest	ihòòmbò	ibóyó/mábóyó	ikòòmbò
836	hollow out	ðkúlá		ðkúrá
816	home	ἀxὶRů	θxítô	àniità
654	honey	òòkì	róóxí	òòkí
150	honour		-	gògòфà
797	hook (for pulling down branches in plucking fruit)	nwáádá	ŋwáádà	ŋgwàádà
189	hook (fish)	ndóáná	ndôánà	ndôánô
707	horn, ivory, tusk	ôféémbé, mpéémbé	òféémbé	ἀφέèmbè

No	English	GíRwànà	GiÀhi	y í nyà Mùny i ŋàny i
288	horse *	fàràsì ?	fàrásì ?	
708	house	nyùùmbà	nyùùmbá	nyùùmbà
263	how many?	lingà	iingä	iingà
572	hump (of hunchback)	gikúků	mpôôků	gikůůků
573	hump (of cow)	gikúků	gixúxú	gikûûkû
756	hundred	ìyànà	iyana	iyana
320	hunger	njàà	njàà	njàà
33	hunt	dséémpá	ú séémpá	òhèdà
34	hunter (professional)	můsěémpi	můséémpi	môhèdì
35	hunting	dseempi	dséémpó	öhèdò
227	husband	mùyósyá	mờγósyà	mòyósá
808	hut	gádímů	ŋxààŋgò	ìkùùmbù, gìβàànda
709	hyena	mpiRi	mpiiRi	mpiti
1016	1	ntini	něéně	néèné
1013	idleness, sloth	d xaró	ňRňRň	wèènyè
901	ill (be); groan	òlwá	ùrwáá	òrówà
902	illness, (crippling)	ờlwá	òrwif	òrwè
275	imitate	ìyèyà	wilyeya	gìyèèyà
16	in front of	nsòòngė	dsööngé	nsòòngè
353	in the middle of	můxáRí	můxáRt	můxàRí
118	incite	gở hông cản và	ohoongeeya	hòŋgèèryà
206	increase, make greater	òngèèyà	ἀὸηgèèyà	ôŋgèèyà
155	increase	kiyániyá	kijóà	gìjóyà nààngờ
426	inheritance	òrékèwà		ůsál, sáò
542	inside, in	xàRì	inoom	můxáRř
353a	inside, middle	můxáRř	můxáRí	můxáRř
132	intestines	ilà/màlà	mààlà	màlà
389	intoxicated (get)	ờγàà	dyáá	òyàà

513 264 710	English	GIRwana	GiAhi	yfnyaMunvinanvi
710	iron ore	mágwė níná ichöðmá	mágwe níná ichtótmá	
710	iron	icddma	ichóómá	ichòòmà
c	island	gàngé nti gíráambó		
,	itch	gwaaya	wáyáá	waaya
460	jammed (become)	kwàámà	kwàámà	oxáRlwá, oxáRlá
853	jaw (bone)	ihāvā	Ohává/náává	mahava
980	jealousy	gixo	willi	wilci
271	Journey	möhèènjó	mühiinjö	můhěěnió
909	judge (M)	drámbá	damúa	
810	jump, leap	dhankiya, dnankiya	ùlimà	drivima
477	kidney	mpiyò	ðfiyó/mpilyò	mpivo
218	T I	ddlaya	ddlává	ddrává
2119	king	mùRèmi	mùRémí	mittem
787	kite	ůsééntá	ůsééntá	dsééntá
347	knead	ðfingifRyà	ůminyá	dxaandova
348	knee	ili.	ilú/màlú	:2
427	kneel	dxdá málů	dxdá málů	òRùnoámá
209	knife	ldfyd	mòyi	rdfvd
402	knife, thin, curved, broad-bladed	lờfyở wá mpilmbó	ólóóln	njòòlò
704	knot	ikūūndō	ixúúndó	aifòrà
979	know	dmanya	dmányá	dmanva
178	lake	ilaambò	iyaambo	voonao
151	lame (be)	sún)kíyá	ðsúŋkíya	dsünkiya
119	lamp	gimwi, Ráá	gimwii, Ráa ?	aimwijko
66	land (dry)	ŋí nì ŋkākù	fáánt ní nkáxö	nî nkakê
761	large, great, big *	-kűő	ηχά	-kóú
94	laugh	dhèka	ùhéká	òhèkà

792				
	lay over on one side	óránóßálú ?	dninintiva	disasticha okinya
1000	lazy	iRòrò	RoRo	-èènvè
669	leaf, blade of grass	ihwà/màhwà	ihwa/mahwa	itótó
1025	leaf (tree)	IRÓRO	iRóRó/máRóRò	itótò
911	leak, ooze out	bhólá	ðhólyá	òhóórá
96	lean, bend down, slope	inama	inaama	ginàmà
536	lean on, rely on		¥	
962	lean, become; grow thin	dxoxoa	üxöxöä	kokoa
535	leaning (be)	wéélà	üharamia	ůrééra
613	learn	Hüünza ?	Ojifüünză ?	giffüünza ?
546	leave, permission	mùrèkèa	rùhúsà ?	yaaniiwwa
1011	leave over	sáyá	sááyá	sáává
247	leave, go away	óká	fwaaya, heeya	dhèyà
544	leave (off)	rèka	èèxà	òrèka
975	left over, (be); remain over	saaya	sááyá	Sáává
310	leg, foot	môyởờ	mdydd	mgyág
774	lend, borrow	O KÓTÁ	aalüma	aanima
107	leopard	nddvi	mwf	ηθόνί
878	lick (vt)	ráámbá	láámbá	óráámbá
134	lie down	ràä	ðláá	ráa
250	lie on one's back	ráa nyéngèlélè	láa waamba	ráá ná ngèèrè
791	lift up, pick up	dmbda	fümbőá	hòmbòà
467	light in weight	ifòfü		mpööfü, áángöfyá
304	light, sky	ilûndê	iùndè	iniunde
805	lightning	mpéló ?	OffRo	öffRó, öffRá
657	lime, whitewash	chòkáá	chókáá ?	kéénké
213	line, row	ifáándá	möhilil/mihilil	yoora ?
629	line, fishing	iyóhé	άγόhè	gyóóhé

No	English	GíRwànà	GiÅhi	y ínyà Mùnyi gànyi
103	lion	niimbà	níímbá	ŋiimbá
198	lip	mwòòmò	mwóómó	mwòòmò
956	listen	Rààyà	táráyá	ờtėγééyà
972	listless (be)	můlèyèků (ádj)		gilèyékà
1024	liver	iRìmà	iRímá	itimà
429	livestock (keep)	ờRùγà	θRúγá	ôtùyà
819	lobster			
794	locust	ŋkờởmbî	ŋkớớmbí	
155a	long (become)	òlifà, òliifyà	difà	ờliφà
144	long	ndîtù	liifù, ndiifù	ndifù
131	look after, care for	gìhééngà	ờlááγà	òlèà
871	look after grazing cattle, help a sick man on the road	òdììmà	òdììmà	òdììmà
354	look at, examine	ihééngá	òlááγà	gihééngà
354a	look around	ihééngàngà, dlááyá	wihééngá	gihééngà, wìhééng
200	look for, hang around (to get something), pursue	gófèènjà	òlóólà	isègéjérá
973	loose (be); faint, weak	lèyèkà	ởlêγè	lèyèkà
181	lost, get	gdyáyá	yàyáá	yàyàà
1023	louse	ndà	ndá	ndà
769	love, want	tryaanja	yàànjá	dyżanja
934	lung	fófð/màfðófð	ifófð/máfófð	màφάφὰ
713	magic *	θίογί	ήγοιο	θίὸγὶ
714	maize	mòhlindi ?	intáámá/ mántáámá	ihiindi ?
521	make offerings to the dead	òkùmbìkà	òhúmbíká	ikùmbíkà
226	male	môyôósyá	môyôósyà	ŋgòósá
10	mamba, green (kind of poisonous snake)	máámbá ?	ndàálò	ηgòòkii
793	many	nyiingf	-iingf	-lingf

	idmööln	śmbóqm	de la constantina del constantina de la constantina de la constantina del constantina de la constantina de la constantina de la constantina de la constantina de la constantina de la constantina de la constantina de la constantina de la constantina de la constantina de la constantina de la constantina de la constantina de la constantina de la constantina de la constantina de la constantin	198
			black silk hair, white on shoulders)	
¥	Igwooju	mpooma		Z98
	74-774-	γωημοω	lightish-coloured)	698
idmööln	idmööln	mpadma	workey (small	898
xqlgiya	opeanla	οχοριίλο	wix' bni together	27
e6Uaa	ORexa nyanyi		mix (ingredients, 'season food')	273
эміообіоц	inonwea/mahonwea	ролдоме	millipede	062
Overe/mavee	99^0	99^0	millet (bullrush)	506
egnödem	ացրոնդեր 1	ացրդում	milk, (fresh) (n)	61
gikaanda	maaya ni malolo	maaya	milk (curdled), curds	
таауа	тавув	määyä, mähööŋgä ածձչե	milk (n)	1030
onaama	ohaama	ohaama ohaama	migrate, move away	698
	******	Otalisya axema	midwife move away	
арака	оханока			845
արցան		. Oféhérá	melt	198
moyaanga	έρηέκηδ	śęnśśnó	neet.	06
	égnééyém	égnééyém	medicine-man	192
άgnášγό	άgηάάγθ		medicine (an of medicine man)	260
ihüká/máhüká	êxbrûm\êxbrîi	éxòrlém	medicine, remedy	529
ém éé y n	émééyn	śmżyn	meat	969
âkūrāà	émééx	éimóx	malure	935
ėsiinėpinių	énépinigó	é ytínápinő	match, hamonise (vi)	888
iməlüm	(14)	mūkūg	master	118
			bateurs' buests)	
ńyjeweży	βόόγ	bióywees	namy (give in mamage-of	968
άλγόν	φόγόβ	śwyóló	many (of man)	568
gilóóyóá, dvírá	iyooyoa	οιόγνώ	ывтаде	468
,6Uii-	16UII-	16 ໄກເຊັນ	_ Auew	6101
YinyaMünyiqany	GIAhi	GIRWana	English	ON
DESCRIPTION OF THE PARTY OF THE	14410	Of Burkey	Foolieb	Old

No	English	GíRwáná	GiÀhi	γέηγὰΜὑηγἰηὰηγί
716	moon	mwėėli	mwééli	mwèèri
609	moonlight	mwěčlí wélié	mwèèli	fààndà mwééri
59	mosquito	mbá	mbő	mbó
436	mother	ió	íð	iyáð
65	mould (pottery)	òòmbá	dómbá	άβἀmbá nyờờngở
717	mountain	giyòòŋgò	gìRààntò	ηὸὸηgὸ
163	mourning	ŋkùyà	gitiò	ŋkùyà
1026	mouth	mwóómó	mwòòmò	mwòòmò
272	movement		kihúká	mwènèèndò
979	mud, mire	Rôfé/màRófé	iRòφė/màRòφè	itòfè
642	mushroom	mpóRà/màmpóRà	impóRà/màmpóRà	máninó
152	mutilated (be)	òlèmiè	•	òlèmáà
281	name	liiná	tiinä	riinā
539	namely	lintò	òhányè	ngwif
403	nape (of neck)	nyůmá á nkilngô	ginyánxóRi	můkiφà
256	navel	nyěků	ibúsí	nyèèkù
765	near	nitt	fifti	pliфt
379	neck	ŋkiiŋgò	ŋkiiŋgò	ŋkiiŋgò
843	need, request	ůsíyà, ôyàànjó, séyèRà	ờsiγà	sėya
962	new	ifyà	-fyá	mpyà
718	night	òRixò		òRikò
755	nine	kěěndá	xèèndá	kèèndà
484	nose	mpòlà	mpċá	mpòòrà
211	number	mäβälyö	-	
237	oar	ixwéélő		můRítnkó
939	obstruct	xiRà	θylà	òhiRà, yìlyà
48	offspring	môněnyá/áněnyá	mòfààfò	το φάφο Ο φάφο
66	oil (from plants)	ikùRà	màxúRá	ókúRá

old firmes, the pasts inhabitical analysis of a cold firmes, the pasts inhabitical analysis of a cold person in mining-impact a cold person in mining-impact a cold person in mining-impact a cold person in mining-impact a cold person in the play a cold person in the play a cold person in the play and cold person in the play and cold person in the play and cold person in the play and cold person in the play and cold person in the play and cold person in the play and cold person in the play and cold person in the play and cold person in the play in the play in the play in the play in the play in the play in the play in the play in the plant (all person in the person	S	English	GíRwána	GiÀhi	yfnyàMùnyiŋànyi
do firms, the peak inhelegols skinglight of different the peak inhelegols shipped and do expend (birth) and the peak inhelegols shipped and do expend (birth) and birth and birt	435	oil	mákůRá	máxúRá	mákútá
ded personn mingwarpski, ninchtod mingwarpski ded on one-speed (being) problem	818	old times, the past	hèèŋgè	xàiŋgí	káéngé
old cone-specification belongs belongs to cone-specification belongs on cone-specification belon	411	old person	münyampáá, müxököö	mùnyâmpáá	münyâmpââ
one envert (being) photogo prodogo one con-envert (being) photogo prodogo one one of the control	410	plo	ikóð, ixóómbi	Ithille	axaenge
one permittant with the primary open control wide gammins open control wide permittant open control wide permittant open certaint of the primary open control wide permittant open certaint of the permittant of the permittent of the permittant of t	214	one-eyed (being)	ηδόηθό	ηδόηβό	οβιορία
open mouth wide gainntha vakasharina open cere ajuri ya door to hiyata ofonyala moore open cere ajuri ya door to hiyata ofonyala moore ofonyala moore outside the cere ajuri ya door to hiyata ofonyala moore outside ya door to hiyata ofonyala moore outside ya door to hiyata oo outside ya door ya door ya bee of outside ya door ya bee of outside ya door ya bee of outside ya door ya bee of outside ya door ya bee of outside ya door ya bee of outside ya door ya bee of outside ya door ya bee of outside ya door ya bee of outside ya door ya bee of outside ya door ya bee of outside ya door ya bee outside ya door ya bee outside ya bee outside ya bee outside ya bee outside ya bee outside ya bee outside ya bee outside ya been outside ya been outside ya been outside ya been outside ya been outside ya been outside ya been outside ya been outside ya been outside ya been outside ya been outside ya been outside ya been outside ya been outside ya been outside ya wa wa wa wa wa wa wa wa wa wa wa wa wa	440	one	imwė	imwè	gámwè
open of the stand	290	open mouth wide	gàmáhá	waasama	gàmáhà
oren (end alin) a door layua during haran orent (end can can can can can can can can can can	984	obeu	lòyùà	dniyda	rùyùà
ootes, client layta syta ootes, client layta and control. out (60), go away linea in the control out (60), go away linea out	829	open (set ajar) a door	lòyùà	druyda mwai	dsóklá
outify it is person) out (80), go away out (80),	876	order, direct	làyià	âyîà	ðrágítá
out (of) List person) (Rith) (Rith out of o	196	ostrich		mbuúni ?	nyguda
ountide of the control of the control of the control out (so), go away of thins out out out on our or or or or or or or or or or or or or	640	our(s) pl. 1st person)	iRò	iRò	9
outside going doing outside overcome, who vampules double doines overcome, who, vampules double doines outside	909	out (go), go away	òfùmà	dfúmà	ddoa
overcomery, in varieties oddshiwa desineds? overfaller, be desined oddshiwa oddshiwa? operate (uggrape) offetings	324	outside	gànji	dnji	göğnif
oyear or or or or or or or or or or or or or	217	overcome; win, vanquish	ddaha	dsindá ?	ghùmà
opster pack (utgopen)	982	owed by, be	ddaiwa	ddáiwa ?	odálwa
peak diagogether of Mingla discharge discharge pack diagogether of Mingla discharge through pack from cycle from mingly the factor of the fact	835	oyster			
pack, press logether of Melings de Calesgoa, Chrisines de Calesgoa, Chrisines de Calesgoa, Chrisines de Calesgoa, Chrisines de Calesgoa, Chrisines de Calesgoa, Christines de Calesgoa, Christines de Calesgoa, Christines de Calesgoa, Christines de Calesg	207	pack (luggage)	ðRúngá	ðRúngá	dtůnařnkániá
pack, flock, group Idakémbádé pack bumde (n) műliyó kalaf? padde (n) kalaf? padm (dan) nozlécndé? nagRende? padm velme nozlécnde? nagRende? padm refere (nagra padm refere) padm refere (nagra padm refere) padm refere (nagra padm refere) padm refere (nagra padm refere (nag	208	pack, press together	ðRúngá	ðfáángá, ðhúúngá	dignditia
pack, bake, burndle (n) mulity'o kalafi ? packer (n) palate (n) patente (n) palate (n) p	456	pack, flock, group		idáé/màdáé	ide
passible (n) kalaf ? passible (n) misherude ? kalaf ? passible (n) misherude ? mmSRenede ? paten roll famon) i yamja prodonote paten (not hazo) i yamja prodonote paten (passible n) midlenal	457	pack, bale, bundle (n)	müliyö		
palate journal moterné? moterné? palatende? palatende de moterné moterné moterné palatende palatende moterné moterné moterné moterné moterné moterné moterné moterné palate (moterné palatende moterné	236	paddle (n)		kááfi ?	kiRiŋkó
palm (dale) mnielende? molekeude? palm-wiele nich indication in jeding palm (of hand) i-jeding palm (odende) jeding palm (odende) mullama in mu	345	palate		iyaxaxa	lyakaaka
patin-wine ntòi nydoide paim (o thaid) i yanja nydoide paim (o taka) nydoide paim (o taka) nidamà nidamà .	6	palm (date)	můtééndé ?	mòRéndé ?	
pairri (of haid) iyahiya ppairri (of haid) pahir (apatis) 'ulahiya pahiri (apatis) 'mulama '	719	palm-wine	ntòi		
palm (raphia) palm (borassus) mulâmà	257	palm (of hand)	iyanja	ŋxóóndé	ivaania
mulâmà -	9	palm (raphia)			
	7	palm (borassus)	mùfàmà	11.0	mùфààmà

No	English	GíRwànà	GiÀhi	γίηγὰΜὐηγἰηὰηγ
8	palm (oil)	mùchikíchi?		
459	palpitate, flutter, tremble	xàxàRà	ůxàxàrà	xàxàRà, gilnà
47	parent, s/he who begets	můfàfi	můfáfí	тофафі
720	parrot	siliingwa	mônyásôswí	
232	pass, surpass	ókilá	ΰxlà	òkirà
325	path	njià	njià	njià
159	pay	òitfà	òtifà	ðliφà
600	pay attention, take care	gìhééngà	láává	gìhééngà
820	peel, shell	òbàdòà	òbàdòà	ðbàdðà, ðsöðβyà
12	peg	máxômbó	máhómbů	
11	pegs (tent)	ŋktiŋgi	ðxífngí/ŋkifngí	máámbó
494	penetrate	hèfèrà	ėfėėya	dhèфèèrà
721	penis	mbóló	dyóósyá ?, mökiá ?	iròyà, ijòòngà
884	penknife, lancet	gákôjô		gàkởờjô
558	person	mòòntò	mòòntò	mòàntò
638	pestle	máxánkó	máxóónxó	máxóónxó
312	pig	ŋgómà	ngůlúwě ?	ngùúmà
414	pigeon, kind of	ŋkờớndà	ŋkúúndě	ŋkùúndà
579	pile up, pile loads on head	gìRìíkà	ògiRwikà	gòRífkà
479	pinch, make narrow	hìnà	òhíná	òhìnà
357	pipe (tobacco)	ifüündė	ifúúndé	ifùùndè
552	pit, hole	ixôômbô	ihóómbú	ikóómbó
974	place, put (vt)	òRèndè à	∂Rèndéá	òβíkià
722	place (n)	ŋìí	fààntô	kóókò
892	place of the dead	áláángá	gwààlddngd	giyòò
225	plait	ðsúká, ðhúká	sùùxá	ůsůkà ?
932	plant, sow	òfàndià	gðfándiá	òfàndìà
510	platform	gichánjá		

Š	English	GíRwànà	GiÀni	vfnváMinninán
834	please, satisfy (vt)	aikóRá ?	disphania	Y III yalwaliyildan
93	pleased (be)	rychaniwa	Oyaanjia	ororya
13	polo of orong	nufamile of	Oyadiijiwa	gyaanjiiwa
2	plinois in soid	giwanja 7	mūsae	ikūja
140	_	Ohôrá, Ohèeywa	ohúma ?	
1014	plunge into, cause to sink	ojoboliya	digadRvá	hinoriDita
114	poke	sòsèèyà	despession of the second	dododu.
737	pole, thin	OKIRO	digo	OSOSCON
=======================================	polish, clean by rubbing	rikwaranna	2000	OKIO
177	pool. poud	ościembó	Claire	ofuta ?
923	Dorcapine	and an analysis	gaambo	raambo, ixaandi
374	Office (elifo	non in the same	obliga	იმტემი
4	(Hard Salar)	okee	oyai	dyee, ntoora
¥ :	pot (metal)	ikófó/mákófó	ixófó	ikóódo
4	pot, vessel	njire	ibélé/mábélé	ailde
38	pot, mug	műkébé	mükébé	mikaaha
9	pot, cooking (earthen)	nydngd	children	opposite and a second
749	potato (sweet)	idokímádók	1444	officero
RAG	notion bile	000000000000000000000000000000000000000	MOOVIMAGOO	idoro
2	PORTE S MILL	Ikanuu 7		Randó ?
308	pound (grain in a mortar to get off the husks)	ofora	göángá	dpdrå ?
4	pour away	hùnùà	adhinda	himsh
641	nod	mimina ?	mimine 2	April 0
748	pregnancy	nda	- Addition	onung
636	pregnant, be	Adioph perhability	DVIIM	nda
200	2000000	O'MAN INTERNAL OF	Wina wilko	ohanga nda
000	prepare	oRenda	niŋanttya	dnónéeva
223	press out (oil seed, sugar cane) öxámá	ôxâmâ	Sindfxa ?	
986	produce, put forth, display	ddddnya	fûnvâ	delibera
606	prominent (be); put out	höönafrá	direct	adoption of the same
518	pronounce	ohanya	Day of the control of	dham's dalant
340	protect by charm (medicine)	dRendvá máhóká	dxome	Olienya, rigitya
				gikaya na mpigi

2	English	GíRwáná	GIAhi	yinyaMunyinanyi
947	protect by charms (target)	ðRendya máhóka	dláimá	gikâyâ nà mpigi
475	ouff-adder	pafara	iRúRúmbáá	
244	lind .	θRà	dùRá	drùRá
173	pull up, come to a halt	imíkà	fmíká	imíká
172	pull up, root up	kởởrà	dùRâ, hớmpớa	okooRa
833	pull drag	ðrúRá	θùRà	drùRà
25	dund	ibóómba ?	bóómba 7	ibóómba ?
548	hsud	súntitya	dsúntiyá	ösüntityä
992	put, place, set	Bifkå	ifxà	opiřká
887	put together for comparison	òniŋaniiya	dgihwèà	gixwáániá
696	out a pot on the fire	дКеека	Rèndéá, nyddŋgd	UBIKITA
981	put together, compose	Bitka iRambi imwi	ðRúngá	ühaŋgwiiya
862	python	mwillò ?	nsááRó	saRù
656	quarrel (vi)	ixóβà	dgixáá	irérà
180	quench, extinguish	limyà	límyá	drimyà
485	quiet (be)	Kilà	Okia	Ükira
76	rain	mbùlà	mbūa	mbürà
917	rain (vi)	mbülá nià	mbúá yáxdá	dxdßá mbùra
1006		Isisi	mbúá ŋktì	ntáángé
197	-	máfiká ?	giRixó	mäRiká
580	numble	xoma	X	
56	rat, kind of	ndėsi	mpáxá	
488	rat (field)	ŋèèŋgî	mpóxó	mpdkd
24	ie.	mpdkd	mpáxů	ŋköhö
25	rat- (very large, long-tailed)	mpökö	ŋkáhò	ŋköhö
883	razor	giweembe	wéémbè	giwéémbé
949	read	dsómá	sòòmá	dsómá
1007	reap, harvest	ůxáá	dyonoa, chinaanga	dRinángá, dtémá, dkúá

No	English	GíRwànà	GiÀhi	γſnyàMůnyiŋànyi
523	receive	órà	ờfôkêà	ἀφόkèà
537	reed	mátété	(-)	
632	refuse, say no	híRà	hiirà	òhità
633	reject, refuse, dislike	híRà	hiirà	hità
545	remain, stay behind *	sàáyà	sááyà	òsliyà
1035	remain, stay	sààyà	sááyá	òsiíyà
840	remember	kòmbòkwà	dkůmbókwá	kòmbòká
499	resemble *	gwixwèRè	ògininana na	gixwà
879	resemble (very closely)	gwixwèéré nà ŋgở	giixwà	gixwá gi
1031	resemble *	gwixwèrė	gìihwà	gixwà
149	rest heavily on, be burdensome	wíRófèwà	léméá	ðRönyèèyó ?
964	rest the cheek on the hand (in brooding mood)	kwàRà ihàyà	dsilmbá	òkáRà ihàyà
957	rest, take a holiday	Ròdyā	Róóyà	ùtúyà
249	return, go back	sòkà	sóxà	ùsòchà
1004	return	sòkà	sóxà	sòkà
500	revive	ờờớchả		ðsðchítyá
318	rhinoceros	mpėmbėė	mpèmbèè	mpěmběě
988	din	ðbálú	ðbálú/mbálú	úbàrů
473	ripe	iβìyè	iβíyé	ißìviè
996	ripen (vi) *	àβìyà	βíyá	ὐβἐἐyà
472	ripen (vi)	àβìyà	βfyá	θβίτνα
209	river	yôôŋgô	mööngö	yòòngò
239	roar, rumble	òrùmà	ðxöðmá	ůxôômá
644	roast	gòòchà	ůchôomá ?	dyùmikà
350	roast (in/by fire)	gòòchá	ůchôomá	góóchá
806	rock	ηὸὸηgὸ	igwė	ηδόηgδ
291	rooster (cock)	njôlôlô	njóólóló	njölölö
169	root	mòòyi	mwiiti	módryi

No.	English	GíRwánà	GiÀhi	yínyàMùnyiŋànyi
29	rotten	ivülle	iipi	iyoolu
1012	round (be)	finditya	giffindflya	gifindityà
183	round (go), turn round	finditya	giffindtiya	ofimitya
666	round, become	findilya	giffinditya	Offindity å
110	- g	fiingá	ogintiya ?	ohùRa
50a	cubbish, garbage	mpaala, maantd	mpāālā	mpáárá
321	rubbish heap	ixôômbô	ijalala ?	ixóómbó
826	un	o maanka	dòà	ůmáánká
522	sacrifice	gidddya	ŋkùúmbi	
723	salt	mūūnyū	mūūnyū	móónyó
96	sand	máháló	ihaangahaanga	máhángáhángá
630	satiated (be); have enough to eat or drink	kikóRá	ixóRá	kikóRå
788	satisfy	dahikyè	ī	òdáhá, ikúrá
251	say to, tell to	hánià	hánia	òxánià
783	scorpion	ŋköðmi	ŋköómí	ŋköśmi
453	scrape	theydanja	dòbŋkā	Офа́ага
855	scrape, grate	òfàrða	dxwaára	Opania
856	scratch, grate *	hößä	hùná	ókwaára
899	scythe, sickle	nyèèŋgò		njoblo
84	search for	fèènjà	héénjá	dpeenja
85	search diligently	kūrā	dxwaara	ókúrá
738	seat, stool, chair	iRüümbi	iRúúmbi	gitüümbî
770	See	gòònà	ooná	oona
19	seed	mbėyd	mbééyő	mbèèyò
404	seize	kwáRá	xááRá	ókáRá
611	self	-èèsò	-éésó	njėėso
302	les se	riinja	liinja	dgůsá
570	pues	Ròmà	Rómá	ðtðmá

8	English	GíRwana	GiÀhi	yfnyàMùnyiŋànyi
451	separate, set apart	báyůá	hámáRúá, giréká	dpagatya
450	separate, leave each other	giréka	ögíréxá	Ör ákánöká
534	set a trap	Rèèyà	Rééyá	ὐRėėga
868	set (of the sun)	weela	iiliá	òòchá
971	settled (be); be in good order	niŋanitya	xóóndá	oyooka
754	seven	mùfúŋgåRì	müfüŋgaRì	mùfúŋgát
1033	sew.	Rúmá	fúúmá	dRůmá
589	Sew	Rùmá	fúúmá	ðRúmá
135	sexual intercourse with (have)	giRómbà	dgiRómbá	witómbié
691	shadow, shade	mpéfó	mởmími, mpèégó	фффф
867	shame, disgrace	minyaa	minyáá	minyáa
116	shame	minyaa	minyáá	minyáá
724	shame, modesty	minyaa	minyáá	minyáà
386	sharp (be)	iyífá	lyffà	iγíφà
920	sharpen	nòà	nóá	unoa
915	shave	chúúyá	mósóá	ðjóRá
603	she, he	тимее́ѕо́	mwésó	mwėėso
287	sheep	ηχόδ	υχορ	ŋkóó
1009	shell, cowrie			
822	shell			
725	shield	ŋgàà	ŋgóớá	ŋgörá
712	shin (bone)	mööndi	mööndí	mòòndì
896	shiver, shudder	ÖxáxáRá	ůxáxáRá	dxaxaRa
528	shiver	dxaxaRa	üxaxaRa	dxaxaRa
434	short	kùff	küff	ŋkùpī
430	shoulder, tip of	sòòngé	ikûfá lá íyêgá	ißeya
588	shoulder	ißėya/maßėya	iyègá/máégá	ißeya
839	shout	xöβā mūkiindö	hởRá mwàảnỏ	kônyá můkiindô

No	English	GíRwànà	GiÅhi	yínyàMùnyiŋàny
946	shrivelled (be); wrinkled	màkùnyà (n)		gìhínà
763	sick	-ilwė	ůlwíé	-rwė
870	sift	òkìŋítà	úsèkésyà	ờsèyésà
615	sing	gììmbà	fímbá	witmbà
3	singe	dldngwillya	òβàờrà	ờβàwffyà
980	sink, be drowned	ðlòβà	òRòRùfà	ἀxàRìà
170	sink	ðjúbúlíá	θρύπθγέ	òxàRìà
726	sister (his)/ (her) brother	ildámbá	můná à gixtmá	můhájá
627	sit	ixàà	îxââ	gřxáá
753	six	můRándáRô	mùRándàRờ	mùRándàRờ
785	size, measure	mànigàntiyò	ðxóó, ðlífû	giyàànjò
123	skin (of person)	ndří	ndff, ikààndà	mákáánjá
124	skin/rind (of fruit)	màbàdà	ibàdà/màbàdà	màbàdà
303	sky	ilùùndè	ìùndè	irùùndè
865	slander, accuse falsely, often secretly	òsèsèà	ôhôŋgêéà	òhòngèèryà
470	slap	ůxờá ìxóófi	ůxůá ixóófi	xờá màkóófi
970	slash	Rèmà	òRėma mòRi	òtvà
220	slaughter	chitnjà	hihíRá	òkigítà
727	slave, bond servant	můRômwà?	mùRómwà ?	műfáyáási ?
728	slave (female)	můRůywà	mùRớmwà	
729	slave, (male)	můRůywà	mùRớmwà	můfàyáási ?
136	sleep (vi)	òráà	ráá Rờó	òráá tóó
731	sleep (n)	òrèè	Rôó	tóó
730	sleeping-place, accommodation	áráó, áróó	ohlio	nyúmbá tiráta
967	slip, be slippery	ờsèRyà	syèRyå	ùtyigùtyà
1021	small	πγάγά	nyái	nyòòyò
332	smallpox	ndůi	ndòì	
241	smell (sweet) (vi)	ἀηγάηκβιβά	ðnyúnkið	ònyùnkłà

å	English	GíRwána	GiÀhi	Vinchilling
242	smell (bad, of fish) (n)	Onvigoka	Minuinki	district the same of the same
240	smell (bad) (vi)	dominoka	and the same	manyaanjko
629	Smoke (n)	Dal market	onyunika	Onyúúnjka
420	the section of the se	JOOK I	youx	yooki
200	STIDNE (give out) (vi)	odoya	ở Rùŋkà	ở Rùŋkà
201	snail, slug	monyolwi	sobyo	nkoonie
837	snail	mányálwi	sóóvo	-frank
145	snake, serpent	njóxá	niôxá	646610
158	snare, trap (n)	müRéyò	myBény	rijuoka mid 44mi
864	sneeze	aiRvámúá	Spell Samin	ofinokeego
924	Sniff smell out	The state of the s	goginyamua	otyaamua
900	Sports single out	onyuuncha	nyūchá	dnyûûnchâ
200	snore, snort	dxdoma	xóómá	dxdoma
20	soil	dródrigó	faant	φιφουφ
132	Song	lytimbó	wifmbo	dimpo
316	souds .	nytlmbó	nyffmbó	or district
98	soot	makii	phylip	DOMINION OF THE PARTY OF THE PA
195	Sorcerer	milder		molina
5	0 0	i domin	Moloki	moloyi
2 3	ajos	grdonda	gidonda	nkoome
4	soul, spirit	uxóo	ηχόδ, πόδνό	Oppo
331	sound, cry	mwiilo	mòlto	mudich
*	space (open)	dmůnváxári	mose	UIIWIIIO
32	Spark	neabea	9890	lyaanja
53	Speak	Special	nsaase	saase
22	100	onanya	haanya	Ohânyâ, Grigityâ
3 !	(II) IBade	токона	môkôhà	mököhä
37	spend time	Uhwaraanga	òdóßà	Akobasa asabasa
038	sperm, semen	máányi a ofodosva	mohand & oftobar.	Oponina inamino
0	Spider		Brookly a Hannay	maanyi
00	The state of the s		nduywali	sayðöndi
70	shill (or dead person)	lorima		miggnag
4	spirit (disembodied)		alchingo	middngd

_	English	GíRwáná	GiÀhi	yinyaMunyinanyi
383	spirit (evil)			
582	spit	ðRyá máRé	óRyá máRé	otya mate
	Spille	måRé	màRé	mate
	split crack (vt)	öxámöká	àxánóá	ghákóa
	spoil blind (VI)	Фохия	hòxùà, фòxùà	ghókúyá
	epoil (a child)	aiRéndva	öhekeywe	ðhékéyá
	SBOIL	Ölößängä	üxölüángá	ðrúángá
	Spoon	aiRenxo	giRénxó	giRiŋko
	enot speckle	mahada	idôné/màdôné	màdòà
0609	sperin an ankle	ofamáva	Réyőá	ðRúmböá
	spread out (be)	gènévà	niŋantya	gtyényén
	soread	anika	Randixa	waara
	spread abroad, be; become	gðmányiká	gởmànyíkà	kůmáká
602	spread smear on	OBHA	gilla	opira
201	spread scatter (vi)	Bávántká	ayaRa	ofágáRá
000	Contract of contract	ARARO	mülfht	ginyêêrê
2 2	spirite machine	mytáámbó ?	müRámbò ?	môtáimbó ?
000	aprilla, maximus	Afabria		gööryámpáa mpwá
9 9	early (on the hamches)	offinia vind	süsámá	dsüsámá
166	squeeze oneself up against a wall (e.g. to allow another to	gifiántáámyá	dgixdRa	igóRá
	pass)	dmino	miinva	óminyá
# 5	streeze ou	- Ambi	-xama	òxàmà
343	squeeze, mink	-Xellia	20024-0	Ióónai 2
102	squirrel		Thursday.	Alabada
562	stack, pile up	ijwttya	gouda	PRODUCE
1029	stand (vi)	ißixä	imixa	IMIKA
200	-	Poplar	niòRà	njôRâ

send seepy dishiph obinition binitions of dishiph and unaweres charles of dishiph and unaweres of dishiph and unaweres of official and unaweres of official and unaweres of official and unabolism individual and unabolism individual and unabolism individual and unabolism individual and unaweres of unabolism individual and unaweres of unabolism individual and unaweres of unawere	No.	English	GíRwànà	GiÁhi	yfnyàMùnyiŋàn
sand off send away control to make a salama surate, pink the parameters of containing salama surate, pink the parameters of containing salama surate, pink containing surate,	390	stare, plane	oddya imiho	òòndòà	òndòà
stantine, carch untrewares ordering staining staining staining staining staining staining staining staining staining staining staining staining staining staining state or milect staining staining state or milect staining state or milect staining state or milect staining state or milect staining state or milect staining state or milect staining state or milect staining state or milect state or mileting or mileting state or mileting state or mileting state or mileting or mileting state or mileting state or mileting state or mileting state or mileting state or mileting state or mileting state or mileting state or mileting state or mileting state or mileting state or mileting state or mileting state or mileting state or mileting state or mileting state or mileting sta	202	start off, send away	dötyá	hééyá	óhèèyà
susarith, jerk 4, chriftenba sistema containing the chriftenba sistema containing the christophan sistema containing the christophan sistema containing the christophan sistema containing	799	stadle catch unawares	omaanva	sààmà	ômůxáángá, ôóg
seed of control of chiffrida in the control of chiffrida in the control of chiffrida in the control of chiffrida in the control of chiffrida in the control of chiffrida in the control of chiffrida in the control of chiffrida in the control of chiffrida in the control of chiffrida in the control of chiffrida in the chiffrida in the control of chiffrida in the control of chiffrida in the control of chiffrida in the control of chiffrida in the control of chiffrida in the control of chiffrida in the control of chiffrida in the control of chiffrida in the control of chiffina in the control of chiffrida in the control of chiffrida in the control of chiffrida in the control of chiffrida in the control of chiffrida in the control of chiff in the control of chiff in the control of chiff in the control of chiff in the control of chiff in the control of chiff in the chiff in	830	staffe ierk	óvófvá	saama	óxáángá
sees change etc. Indoornal incidental sees of contracts. Indoornal incidental incidental sees of contracts. Indoornal incidental incidental sees of contracts o	618	steal	ohffmba	iißá	giißå, öhtimbà
steen (of malze, miles), etc.) Randolds, etc.) Randolds, etc.) Randolds, etc.) Randolds, etc.) Randolds, etc.) Randolds, etc.,	266	a dis	ichdomá	ichdamá	
stage over term for worman Remittible illima better man (or worman Remittible and term for worman remittible and term for worman remittible and term for worman remittible and term for worman remittible and term for worman remittible and term for worman remittible and term for worman remittible and term for worman remittible and term for worman remittible and term for worman remittible and term for worman remittible and term for worman remittible and term for worman remitted for the speak of the common remittible and term for worman remitted for the speak of the common remitted for the speak of the common remitted for the speak of the common remitted for the speak of the common remitted for the speak of the common remitted for the speak of the common remitted for the speak of the common remitted for the speak of the common remitted for the speak of the	554	stem (of maize, millet, etc.)	maboßa	ibóá	ibößá/mábößá
sterifor mann (or worman) muskapa makababa asi cick muskapa muskapa or origidanga asi cick muskapa origidanga asi cick baringa origidanga origidanga asi cick baringa origidanga origidanga asi cick baringa origidanga origidanga asi cick baringa origidanga asi cick baringa origidanga asi cick baringa origidanga asi cick baringa origidanga asi cick baringa origidanga origidanga asi cick baringa origidanga asi unterior origidanga origidanga origidanga origidanga asi unterior origidanga origidanga origidanga origidanga asi unterior origidanga origid	825	step over	Ramböka	limá	öliimå, öRåmbö
stick makings makings makings stick makings somewhat the still makings of makings of makings still makings somewhat the still makings still makings still makings still makings still makings still makings still makings still making still ma	315	sterile man (or woman)	miyydmba	ntààhà	ntààhà
stir mit by stirring socialishings d'utiglabiga a stir mit by stirring socialishings d'utiglabiga d'utiglabiga stirring socialishi d'utiglabiga situng de le sepoit d'utiglabiga situng de le sepoit d'utiglabiga situng de le sepoit d'utiglabiga situng de le sepoit d'utiglabiga situng de le sepoit d'utiglabiga situng de le sepoit d'utiglabiga situng de le sepoit d'utiglabiga situng de le sepoit d'utiglabiga situng de le sepoit d'utiglabiga situng de le sepoit d'utiglabiga situng de le sepoit d'utiglabiga situng de le sepoit d'utiglabiga situng de le sepoit d'utiglabiga situng de le sepoit d'utiglabiga situng de le sepoit d'utiglabiga situng de le sepoit d'utiglabiga situng d'utiglabiga situng de le sepoit d'utiglabiga situng d'utiglabiga s	541	Slick	mwaanga	mwaanga	mwaanga
set of the control of	74	stir mix by stimina	xòmbàngà	ðrúßáángá	xóómbá
site up Refrige widds widds store of control	850	1	qêenga, dReenda	dyániá	ólúβá
stoom (speekhadypark (speekhadypark) stoom (78	an Jis	Rwffya	wadda	ἀχάβίγά, ἀχόόπ
store up, collect nicincia halpprofits of severe up, collect nicincia halpprofits of straight (make) hoborate objective and straight (make) historial nicincial historial straight (make) minchengo straight, nower special straight, nower special historial straight, nower special historial straight, nower special historial straight, nower special historial straight, nower special straigh (n) special polytopie objective straigh (n) special polytopie objective straigh (n) special straigh (n) special straigh (n) special straigh (n) special straigh objects of special straigh objects objects of special straight (d) spe	19	stone	igweimagwe	igwė	igwė/mågwė
stranger, gases and production of cyclotic stranger, gases and production of cyclotic stranger, gases are stranger, gases are g	228	store up. collect	rùùndà	hangwiiya	dlddnda
stannigar, guest micyknyy micyknyy micyknyy stannigar, guest micyknyy micyknyy micyknyy stanni, current rigioi rigioi micykny	154	straight (make)	hóóchá	dyddra	dyòòra
Stream, current (shahada) glamdorgo stream, current (shahada) (spid) stream, corest (spid) (spid) stream, knock (spid) (spid) stream, knock (spid) (spid) stream, knock (spid) (spid) stream, knock (spid) (spid) stream, pordy (spid) (spid) stream, proxidy (spid) (spid) stream, proxidy (spid) (spid) streamed (por) (spid) (spid) streamed (por) (spid) (spid) streamed (por) (spid) (spid) streamed (por) (spid) (spid)	268	stranger, quest	müyenyi	mdyenyi	müyènyü
stangth, power ngois rights (rights asset oneself the state of the sta	661	stream, current	ifaanda	gàrnòóŋgò	yoongo
streta consent lycocha lycocha lycocha streta consent lycocha defeating defe	798	strenath power	ngúù	ոյցում	ngini
sinte, broose, defectings of PRus of PRus a stelle with a spear though of the problem of thems and of the problem of the probl	140	stretch oneself	iyóóchá	iyoora	giyóórá
states with a sporar thickning thinking thinking a single (e.g. grains of com) thinking thinking thinking thinking study grounds of com) thinking thinking study grounds grawath grawath thinking thinking study (e.g. be spoilt dutil class) 'chick (e.g.) the spoilt dutil class thinking thinking study or study (e.g. be spoilt dutil class) 'chick (e.g. be spoilt dutil class)'chick design of the spoilt dutil class that the study of the spoilt dutil class that the spoint dutil cla	395	strike, knock	dRdanga	ðRúá	òtùrà
sting (n) dy-thé by-double siting (n) dy-thé by-double situation of comp) dy-thé by-double situation of comp) divina by-double situation dy-the-dy-th-dy-the-dy-t	982	strike with a spear	Uhómá	ohoma	òhòmà
strip ort (e.g. grains of com) blicks of blicks of blicks of blicks of blicks of strip proudly gloward place of strip proudly a stumber (be). Be spoilt (44) of blick (44) of blicks of blick (44) of blicks o	282	string (n)	dyöhè	gyoghė	άγόhè
strut proudy gióna gilvará gilvarás struthe gilvarás gilvarás haligotoxa stumbe gilvarás dodo (dot (dot) do golfornovista do dupalania sutter	487	strip off (e.g. grains of com)	òfùrà	dfüárá	dpddnwa
stumble gitwafrå hangdbxå sulmed (pe): be spoilt dibt (skill) dibt (sk	519	strut proudly	gióna	gihórnyá	gijéémbá
stunted (be); be spoilt dúbt (adí) dúnkáaniá stufter dúnkáaniá	407	stumple	gikwárá	hángddxá	ókůmíá
stutter bgdRómbóyiishá búnkáániá	266	stunted (be); be spoilt	dúbì (àdi)	,	
	948	slutter	ogoRomboyiisha	D úŋkaania	γόgόβὶγά

No	English	GíRwànà	GiÀhi	yínyàMùnyìŋàny
594	suck (the breast)	gòòŋkà	óóŋká	gòòŋkà
480	suck (vt)	gòòŋkà	fiifá	ἀφίφὰ
912	suffer, bear patiently	yờimityà	dyimítá, dyimítá	ògimììyà
802	sugar cane	mùŋkényè	můnkéényi/ minkéényi	můrjkényè
333	sun, fight	lyòòβà	yΰóβà	lyờởβà
184	surround	wènèndààngà	filmá	òφiimà
438	swallow	millà	ààŋktà	òmilà
777	swear	gitáfià	ààfá	ờràφà
905	sweat	mûRúRû	můRůRů	můRůRú
392	sweep up, collect in a heap (rubbish)	ėyanja mpaara	ðhóángiá mpáárá	ójóà mpáárá
943	sweep	fyáγờà	fáyðá	ùchágửá
517	sweet, pleasant	lòòmbè	lòòmbè	lòòmbè
51	swell	giimbá	iímbá	òβiímbè
608	sword (short)	sìimè	slímė	sìimè
933	sword	ìfááŋgà	òfááŋgá	Ιἀάφγὰ
360	tail	ìfúúmbú	òfóómbó	έφασπρο
875	take leave of	òràyà	wààgà	gòàgà
778	take in (from rain, etc.)		òòvá	gòòyá ?
565	take, carry	òhòòrà	òhóá	òhòòrà
233	take off (clothes), undress	hèyá màsàà	ytwa	òyớa màsaa
530	tangle	iRímányíkit ?	giffndiyō ?	
898	taste (v)	òsòòyà	òònjá	òγònjà
985	teach, instruct	ðfúundfsyá ?	fůůndísyá ?	ifuundisya?
621	tears	ndìyíyò	mihóóli	ŋwài
412	ten	ikòmi	ixómi	ikòmi
121	termite	mùŋhwà	můhényi	mòhwà
739	testicle	màRờmbở	måRòmbò	ànányààngà

No	English	GíRwànà	GiÅhi	γίηγὰΜἀηγίηὰηγ
1020	that	iyó	-ló, -yó	isi
455	thatched roof	iRémbè	ifèmbè	màhàфà ?
767	there	áfó, ökó	hàhó, ởxỏ	-φó, ἀkò
54	they	-èèsò	βėėnsö	ßèèhò
444	thick, fat	èyènif	yínié	ayêniê
86	thicket *	gàRùŋkù	gàhàkà, Róŋkò	gàRúŋků, gàhákà
854	thicket	gàRúŋkù	gàhàkà, Róŋkò	gàRùŋkù, gàhákà
619	thief	můláků	mwliví	mwiivi, mühttmbi
23	thigh (of human)	ginàmà	gînâmâ, inâmâ	gìnàmà
22	thigh (of animal)	ginàmà	gìnàmà, inàmà	ginàmà
559	thing	iintù	giintò	žintò
987	think, imagine		yèmá	θsèγà
651	thirst	nywèéRà	nywéRá	nyòóRá
740	thom	ìγùúyà	ìgúyà/mà(i)gúyà	igúyá
689	threaten	òγófyà	óógófyá	ðkáángá
532	three	iRáRů	iRáRó	täätú
115	thrust into	òhòmà	xìinyà, hòòmà	òhòmà
420	tick (cattle or dog)	ŋkờfà	ŋxờfà	ŋkóфà
1034	tie (fasten) (vt)	Rùngà	gðRúngá	ðhúkiá
258	tie up	Rùngà, òchtìyà	gởRúngwà ở yôhê	ờtùngá
978	tingle with excitement	sisimókyá ?	-	
119	tip, point	sööngè	sòòmé	sòòngè
741	tobacco	RůmbáRí	řRůmbáRô	itůmbátí
146	today	lėėò	itò	rėó
742	toe	mwäächä	mwáánchá	chà gò mùgùù
445	tomato	nyàányà	nyàányà	nyèényè
105	tomcat (half-wild)	iβúlyàáká	éélé	ntyó
743	tomorrow	fádíó	pádió	φàdiờ

8	English	GíRwànà	GiÁhi	vfnváMůnvinánvi
166	tongue	òlimi	òtímí	àrimi
120	tooth (canine), tooth filed to a point	liìnó	Binó	riinó
267	tooth	liinò	líinó/milnó	riinò/miinò
306	top, peak	gööntő		góóntö
293	tortoise	ŋkùù, mbaliyôyô	ηκύΰ	ŋkiù
277	town	múji ?	máóji ?	ibómá ?
378	tramp of feet	Ohoriyaanga		
270	travel	mühêênjö	tėėnda mihiinjô	gởRêndá mùhèènjò
540	tree	mùRì	môRi	mòòRé
538	tremble, shake (vi)	xáxáárá	xàxáRá	dxayata
999	trickle away	ðhórá, igiiká	sèméémbá	dhướca
401	trunk (of elephant)	můxônô wá njôú	můxônô wá njôú	mdxddnga
604	try	sóóyá	sôôyá	dsóóyá
909	tsetse-fly		ndòlóßò	ndòróßò
938	turn upside down, turn over	fintòà, findòà	ù фìnikà	υφėnt0à
174	tum round	fintðáángá	ugiffindilya	dpiimiya
711	tusk, elephant's (middle size) *	ï		opeembe
452	twin	máfáhá	ifáhá/máfáhá	maqaha
185	twist roll, spin with fingers	sòxóRá	sòxóRá	dsóxóRá
483	twist, esp strands	gòyóhà	òyóhá	υφόRà
752	two	-btt	Ivili	ildi
18	ndder	mbéé ya ŋöömbé	ginėna	ginėna
945	uncover, reveal	künüköä	fünüköä	dkùnókda
551	unripe, half grown	inyékê, ittíndî	mpóóndó	iRéké
984	unripe, uncooked	iRóRó	iwihi	ibihi
311	up, above	göntő	gàntó	gddntó
614	upright	gwifma	wifmà	wėėmė
446	urinate/defecate	nyà, xòjà	ůniá, ůxójá	ònià, ŭkôoja

S.	English	GfRwånå	GiÁhi	yfnyaMunyinanyi
745	urine	māányi	máanyé	maanve
569	nse	Růmia	Romía	rithndèa
307	utmost, highest point	gántó		òdáhá
904	vapour, gas	yddki	möbxió	můlůké
380	vein	múshipá wá sáyámi	müsifa wa sayami	můsípá á sávámi
276	village	KIJIJI 2	KIIII 2	odiiii 2
692	virgin (bride), girl	monchá	mincha	mddncha
327	vision	gooRya	ndóóRó	ndòòRi
330	voice, (thunder)	mòriò	mòxiindó/ mixiindó	rờiné
224	vomit	òrðká	rúxá	- drdka
524	walk (take a)	göènèèndà	ènééndá	göèntèèndà
269a	walk	èèndà	èèndá	èèndà
847	wall		nxàándá nyùùmbá	idoba
983	want, need, wish	gúhèènjà	dsilya	άφêênia
207	war	ixòßi	ılRa	MilRa
790	wart-hog	ngii	ngit	naii
860	wash oneself (after evacuating)	οπάγυλ	ogiff rf há, ögixöhtiyá, ögisééntá, öyirtindá	gicháyðá, giséŋéèni
127	wash (hands)	òòyá	óóyá	góóvá
128	wash (clothes)	góhômbóá	hómbóá	ohomboa
129	wash, take a bath	gdóyá	óyà	gòòvà
322	water	māājī	maaji	maaji
959	wave, let off a trap, remove a spell	óhělwá máhóká	ààγờà	Oheyea
1017	we	sèèsè	séésé	seese
1010	weak	mòláyékö	dhàngdwè	nyėnyė
881	wean a child, give leave, send away	Ůſwéésyà	èèchá mwààna iβèè	ò¢wéésyà
234	wear, dress	ðlyáá	yaaa isaa	

No	English	GíRwànà	GiÀhi	γέnyàMùnyiŋànyi
501	weave, knit	òRùmà	ðRúmá	òRùmà
1015	weight, rhythm	ùrìRò	wiiRò, àliRò	ờitò, ŋàâŋè
210	well	làòjì	tjóón	lóóji
56	wet (get)	dRòRùfà	dRóRúfá	òlòβà
919	what?	ntòóni	ntòónì	ntờớni
469	which?	уáфè	ìфė	yááфė
192	whistling	mòòlyì	mòlòli	mòòryè
175	white man	můjůůŋgů	mðjúúŋgú	mòjùùŋgù
610	white	-èėlò	-ėėló	njèèrú
918	who?	nyàányů	àányù	áányú
28	wicked	mbi	òòßí	mòrèyì ?
339	wife	môxémà	mòxémà	mòxémà
187	wind up (thread)	kůůnjá	ðxúúnjá	òfèndiyà
746	wind	úféfő	ôféfő, kiφúRiá	треефо
937	winnow	fêféRà, wêérà	òweera	ἀφènéntà
112	wipe	òfùRà	füüRá	òhùRà
88	wire (brass)		máxómò	
194	witchcraft	ἀτὸγὶ	dròyi	ἀτὸγὶ
279a	withhold from	glimá	limá	giimà
279	withhold from, abstain	gínylimá	ògìnyiimà	giyiimà
338	woman	môxémà	můxémá/áxémá	mòxémà
747	womb	ifàfiò	nyùùmbà/ndà ἀφààφì	
812	word	ihànyò	ihànyò	ihányó, nkàání
772	work as a mason	djėėnga	djěéngá	djééngá
167	work (n)	múltmó	mwimo	mwitmò
81	wrap up	kůůnjá	húúnjá	dkódnjá
344	wring (clothes)	xàmà	òmlinyà	ókáángúá, minyóósá
773	vawn	wà màáhà	hwá mwáhů/miáhú	ôlá miàyô

yfnyaMinyipanyi mwaaka iyoo jyoo jeejee nyenye mohoomba aanyi mahoomba, mohyikdombo,	ndátá
GiÁhi mwáaka iyoo peejpe nyeenye mohodomta aanyu mohodomta	ndóð
GIRwana mwakaka iyob Peelge myeenye monyagityosya aanyi mwikaimbo, muincha	ndôô
English year year year you (sing.) you (pl.) you'g man you'g (pl. 2nd) person) you'th	zebra
No 593 750 15 1018 715 637	292

Appendix I. Zone F word-list: F25, F33 and F34

	English	iCiWddygd	KiiRangi	KèèMbùwè
_	abdomen, stomach, belly	èndà	Iìnda	ndà
	abscess, boil	ipùùmbà	isdángá	sóóngó
eg	abundant/abound	àmiŋgi	fwèé	pàrà, nyiingí
"	abundant	àmíŋgi	fwèé	pàrà, nyiingí
	abuse, insult	kötökáná	kötőkírá	òtókànà
•	abuse, reproach	kūkalīpila	kůdálányà	òtókànà
•	accustomed (get)	közőlélá	kwijdvira	wéjjévérá
_	act (vt)	kölööŋgá	kùbòyà ?	jisha
•	add up	kököóngéjá	kwòòngéryà	òsaania
	adjacent (be); border (vi)		kühákáná	óláánérérá
	adze, carpenter's	imbitjo		mpáángó
_	affair	ijáámbó/ámáámbó	isááré/másaáré	трободаб
2	afraid (be)	kůkóógópá	kwòófá	woofa
_	agriculture	ichilimò	irima	rėma
	all	yèèsi	óósi	-dónsè

9	English	iCiWeenge	KiiRángi	KeeMbuwe
848	alter, change	köpilölä	kūpadilisha ?	waalorya
982	animal	inyaama	nyama	máká
317	answer a call	ůkwítikílá	kwiftikà	wèitèkà
782	answer, reply	köjiibù ?		ótáálólá
984	ant (reddish-brown biting)	İsalafü	mböríkási	nyèrèri
55	ant-hill	řinshwá, dkichágůlů	kydold	chóóló
963	ant (small)		majaja	milré
986	anvil			
686	apply by stretching, spread over		kůváámbá	òváámbá
976	appoint, set up	kùkùntèmà	kwiimya	ófà
25	arm, hand	üŋkönó/îmíkònó	múkônô	maxana
171	armpit	ffngwapa	kinyésü	kwaawa
203	arrange, put in order	kúpáángá	küpääŋgä	ovéká těrérě
504	arrange, put right, repair	küténgántjá	kùténgènèshà ?	ójiishà
478	arrive	kdsdka	köfikä	ofikà
365	arrow	ùndòùndà	mpààndô	mòòyé
999	arrow (head of): spear head	pàlàlà	mwiwi	mpààndò
337	ashes	itwiitwi	ľvů	yúú
199	ask for	kőlééngá	kölőómbá	òlóómbà
88	assemble, collect (vt)	kösäängä	köziiŋgä	óbósá
789	aunt (father's sister)	sééngi	m(ù)dálá	mààwé
148	avoid, dodge	kůkwéépá		ódérá
688	awe, fear of God			
299	ахе	iindėmò	chááryá	chởớmà
364	baboon, ape	iimbòrná	nchwė	ntúvě
634	back of (at the)	köönümä	nyùmâ	nyima
297	back	mùgòòhgò	mwóóngó	ωφούχο
297a	backbone	фффффф	σομορισο	mdgóórù
			95	
			×/4	

re bab b. kisiirgab ab	N	English	iCiWöðŋgð	KiiRangi	KèèMbùwè
and thecome, rotten (v) (a blowwappta a koda barante barat the content (v) (a blowwappta a koda barante dent) (challendo freedom content (challendo freedom	27	bad	iwi	yaveha	kivi
boname (gent) indialmob indialmob comman (gent) indialmob indialmob comman (gent) indialmob indialmob comman (gent) indialmob indialmob indialmob comman (gent) indialmob indial	37	bad (become), rotten (vi)	kölüwángiká	koola	wüündä
munication (mail) minds (mail) moderate (from) moderat	87	bait	icháámbó/ ivyáámbó	chââmbó	weisha
Industrial Ind	398	banana (plant)		mügöömbä	mögöómbā
Indizionale (for cocking) Deschable (for the	397	banana (fruit)	indizi	udizi	ndisi
banchold of minchy of minched of	399	banana (for cooking)		ndizi	udisi
beants (of leich being) (palamba) (hobbo) beants (of leich being) (abanta) (basha) (basha) beants (of leich being) (basha) (basha) (basha) beant (of leich being) (basha) (1005		dmbdyd	mwifwi	mwaauye
barren (of lusty) even barren (of lusty) even barren (of lusty) even barren (of lusty) even barren (of lusty) existain barren (of lusty) experient even barren (of lusty) even barren (1022		Igaamba	ikókó	jólá
base of treatment staken benear of treatment of treatment of treatment staken benear of treatment staken benear of treatment staken benear of treatment benear of treatment benear of come wicker-coret staken benear (gallero) treatment ben	313	barren (of living being)		müümbä	tààsà
abase of tree-tu-works consent holokelels drottlo. basked of core wicker-work basked of core wicker-work relating pattern basked of core wicker-work relating pattern basked of core wicker-work relating pattern basked of core wicker-work relating pattern basked of core wicker-work relating pattern basked of core wicker-work relating pattern	314	barren (of land)	kisaana	fsókólá	ókálóků
basis (in the sum) warm onnessed fundable chrolis o knodolis personal or sum) warm onnessed fundable chrolis or breaker of cores wicknework histologis or herbrigation basis (gallering) treating the chrolis of the chr	376	base of tree-trunk		chinà	ntiindė
Institute of open wicker-word in this plant in the plant	650	bask (in the sun), warm oneself	kökötélá öndílő	kwòótà	wòóta
Internation Internation	976	basket of open wicker-work	ikisaanga	lheèngèrè	kákèkápů
uniting kolating kolating kolating kolating kolating kolating kolating kolating kolating kolating kolating kolating kolating katang kolati	577	basket (plaited)	ichíkápó	kikáápó	kekápü
the filting bethove kolwiduyla yddodda box Secret kolwiduyla kolvid prach, cuset, shore kohrthwalkni kohrid prach, soute, shore kohrthwalkni kohringo, kalinga prach, shor of pean (from frayoniti kukaria prach, shor of pean (from makiliga makiliga prach, shor of pean (from kohelea kohelea prach (cump) kohelea kohelea prach kohelea kohelea prach kohelea kohelea prach kohelea kohelea prach kohelea kohelea prach kohelea kohelea prach kohelea kohelea prach kohelea kohelea prach kohelea kohelea prach kohelea kohelea prach kohelea kohelea prach kohelea kohelea prach kohelea kohelea prach kohelea	643	bathe	köchfinda	kóóhá	woova
be become known known known bench, countries known known bench, countries known known known bench, countries known	498	be fitting, behave	köfwáayá	yabooha	tèrèrè
beneath, counts, shotner knowland beneath, counts, shotner knowland beneath, counts, shotner fossion with the peace of season where the peace of season where the peace of season widered in makings of makings benevit small (from bean plant) makings of makings in state of peace of the peace o	_	be, become	kdwá	kdvá	ova
benado) dealo katinipal benado) dealo katinipal benado) dealo katinipal benado dealo katinipal dealo dealo katinipal dealo dea	955	beach, coast, shore	kömbwaani		mbarèmbáé yá láává
power, bind of been grown from thywinti bindsal phaseolas suggests of power from the power from the power from the power from the power from the power child be power the power from the power from the power from the power power from the power from	827	bead(s)	ósáló	kichlingó, kisiíngá	visifigó, ntótó
been small (from bean plant) in makingh 2 mahilaga 2 ma	416	bean, kind of bean (from Phaseolus vulgaris)	Injuriedif	füküsä	ŋkoosa
Desart (current) Libridish Desart (current) Kobleta Kobyasha Desart (current) Kobleta Kobyasha Desart Kobleta Kobasharba Desart Kobasharba De	417	bean, small (from bean plant)	mààlàgè ?	māhālāgā	Idosi
bear child kobles koyukisa poser child kobukisa koyukisa peser nededu peser kobusamba koyukis bearlinda kobusa bearlinda kihasa	844	bean (runner)		lüküsä	ŋköósá
Depart Inchesion indication in control in the contr	1037	bear child	kölélá	kövyäälä	óyáálá
beauth kolikembal koloka beauthid indoniu bekab bod kitala kitala kitala bedsead	147	beard	İndêvü	ndēdū	mbùló
benaturia inchoni boha benaturia inchoni boha benaturia kitalan kitalanda benaturia ofirif 670 670 670	788	beat	küläämbä	köváá	ôtúlá, ômútá
bed kitala kitalanda bedalanda - Ortri 679	759	beautiful	Indônú	bòhà	keeja
Peristead - Ortif	162	ped	kitala	kitaanda	órèrè
629	161	bedstead		briri	kůcháánjá, kétáándá
			9	62	

No	English	ìCìWàờŋgà	KiiRàngi	KééMbùwè
653	bee	izáchí	njôkí	njókè
775	beer	indiimbà	iròsò	rùsù
497	befit, suit	könönéélá	kòbòòhyà	òvėėrėra
101	below, underneath	pààsi	èsé	nséiséi
186	bend, twist (vi)	kůpřindá	kòwòdá	òkònà
468	bend (vt)	kôpřindá, kôgôôndá	-	ófólóryá
193	bewitch	kölöwä	kůlówá	òlòvà
930	bifurcation, cross-roads	pàzità pààndà	tùnjèrà jérùmánírá	mábású
222	bile	ndôlà	kisòàŋgò	kèsóóngó
262	bind up, splice	kônyêêpâ	-	óláwòlá
658	bird-lime	dáléémbó	ùréémbó	òrèėmpò
811	bird	inòòni	ndėė	mirė
46	birth (give), to a child	kòlėla	kůvyáálá	òyààlà
125	bite	kóùmá, kówáwá	kölümä	òlómà
221	bitter	kíkáli	sòòngò	òsóóngó
223	bladder		kisėlū	kèsúmèèrèrò
482	blind person	òchìpòfù	můhôků	mötifélü
669	blood	tiläändä	sákámi	mwààrì
496	blow on, blow up	kòpùtà	kůfwéérá	weiférá
238	blow bellows	kòpólitjá		-
463	blow away	kòpěpělôshá ?	kờfwéérèkà	òfáláryá
776	boast, brag, praise oneself	kòkwidàài ?	kwilyėrya	wélúnyà
676	boat	ingalawa ?	màshùà ?	mòrìingà, bóti ?
670	body	titidmini/itidmoo	můvtrí	móvěrě/měvěrě
581	boil up	-	kờfòōkérà	òvérà
30	boil (vt)	kòwíflà	kôchèm(ů)shá?, kôtôtyá	věríshá
433	bone	ifùpà/mìfùpà	ikúfá	kúfá
564	bore a hole	kůtówólá	kátábálá	tòòngà, òbùtòlà

Š	English	iCiWodnad	N. William	
1008	born (be)	Par I plant	Mirangi	KeeMbuw
910	_	Molenwa	kovyáálwá	öyäälwä
872	bottle	KOKWaazimya	kůkôpá	òkòfà
000		Isoba	chòpá ?	china 2
976	poundary	glówtimbili	mohaka	- mdmin
671	bow, bending	ddfa	- Paris	molanerero
508	bow	Add (made)	Ola	òtà
953	bowstring	Commission	Ota	ótà
85	ries d		iggipi	loowi
009	1	ogloowo	Bwoongo	woono
000	Dianch	isaambi	Itaampi	nedomo
3/2	bread	dműkáaté	mûkâşia 2	Billibacii
831	break wind *	kdsúlá	- Party	mokate ?
22	break, snap	ferbains	Koleera	ósúlá
1036	break wind	Pinacy -	Kouna	wuuna
47	The same of the sa	Rosula, kokonya	kösülá	ÓSÚIA
-	preast (of a woman)	maweele	málóómbó	mahali
489	breath, breathing	ômfútô, köfúta	PAPPA	110000
490	breathe, rest	köfütá	Labelle Labelle	ιλκοφίδο
138	bridge	Idelala 2	KOKUTA, KOKEDA	ofweerera
139	hidae (wooden)	Biograph	daraja ?	olalo
886	bring (state	idalaja 7		olato
000	bing, letch	köléétá	küreta	chdea
171	bring to light	közööshä		reera
882	bring up (a child)	kwaanoatta	******	órérékányá,
099	brook, stream	chilmbana	Muera	Orera
942	broom	CHILIDANA	miglo	mòóŋkànang
113	broth	pyaaya	ifyáaíró	shééró
381	brother is last sizes in	gnsoni, munsooni	músdůri	mòsòdri
9	oromei-in-iaw, sister-in-iaw	waashe	maange	magazko
341	brother (older)	Onkádvááné	derivative tradita of the same	and and and
673	brother, relative,	mwaantto	minds, saaka r, mwaanno	waafo
	fellow-tribesman		Drumin	wamèvèrè
874	bruise badly, take the skin off	külémáálá	kůchúbůlá	onofola
			189	

4	101000	Cutthing	KiiBanni	KabMhirus
2	English	officential	Burning	
7	buffalo	îmbógó	mpoo	mbóó, ŋkölömá
807	pnild	kůjééngá	kðjééngá	ójèèŋgà
674	pull	ilůmé/málůmé	kabaako	nyáámbá
80	bunch (of hair)	amanywaale		njééri párá
890	burden, load	Omuligo	mūrūwā	mórigò
645	bum (vt & vi)	kökwäkä	kðmúríká	waaka
231	burnt (become)	kůkůpyá	kðröðngöðrá	òòfyå
179	puny	kdjíká	köziikà	ôvéékà
555	pray	ipòòli, únsità	isaka	nimād
7	buttermilk	mbómóólè	mpôtôtô	masii ari nkakat
514	buttocks	itákó/ámátákó	táákó	tákó/mátákó
301	pny	kökálá	kodía	ddla
873	calabash	chíláángá/víláángá	kisówálvisówá	bááyi/mábááyi
857	calf of the leg	fmbaamba	ncháfů	lùsakù
877	calf	Indaama	ndámá	ndàmá
31	call	kökwitä	kwaanera	wáámöká
675	canoe (dug-out)	iŋgalaawa	ngáláwá ?	mòriingà
602	canoe	Úwaató	m(ü)túúmbwi ?	mòrilygà
993	carry a child on the back (in a blanket)	кдраара	küféréká	ùúvàlà
292	carry/lift on to head (take up) a heavy load	kölwükâ	kwiltifkâ	ótééká
26	carry astride on the hip	kopakaata	kòkíkà	ókéká
560	carry, take	kösééndá	kösümölä	wdúchà
578	carry, convey	kösöömbá	kötwäälä	otwaála
104	cat	înyââü	nyââú	nyààú
286	cattle	imifûgô ?	ŋòġmbė	vimáká
486	cease, finish	komalitja	komáríkirá	òsirà
526	centipede	táándó	iŋgimaga	ŋgàlóréri

KeeMbūwe ovdrekā mākālā mpeeŋgá	ókámátyá nykáásá páámpáálá nsóvé ktkívyá	kutuva ktkuva mosuungaati mosungaati mwaana kidedu	osablá chééfá ndtód ókwáává lóvé diímbíva, övímbá kitámbáa övékérá	ngo duindemaduinde dowałalana njoka ya keraato wingerera mpero
KiiRāngi kwiirōrā ikālā/mākālā m(ū)tééyō	körindirá isáyá kwáánjámüká sovi kiplímbi	kidaári mútémi mútémi mútémi m(ú)siliŋaa, mwaàná mwaàna kidedio	kosádola nchúngo lekolo kwalamboka iroóngo kochelenchiiya ktalambala ktalambala	tingo icho Kokwalana njoka njiro Kosangira, kwiliola mpeho 683
iCiWoongo kogeloka ikala/amakala inúmbó	kochtimbija Itaamya kofulaai ? - chifua	chtfüa mweene, mütemi dhmwäana ndù mwaana tchidevù	kosagoja Triungo Oloko kotaanda Iloongo Kotlindila, kwiinala kitaambala kowritsha	rnweendarmyeenda ikoombi, watngo kogaanda ihoogo kokwiingiiila imbepo
English change, tum round charcoal charcoal fidelity) (n)	chase (away) cheek cheerful (become) cheetah chest	chest (of animals and birds) chief, headman chief, infant child, offspring	civer cart civer cart cian cian, ascend clock, lump clock, lump clock (the eyes, mouth, etc.) clothe	ciodres, material ciodres, material cobra (spitting) cobrabit
No 247 334 963	32 515 92 106 585	672 431 431a 679 597 886	83 109 255 841 851 239 235	300 305 817 941 465

No 624	English come	İCIWGÖŋgö wiiza	KiiRângi kòojâ	KeeMbüwe ooja
505	come on suddenly, take in the act	köküündémwiljá	kösháánírírá	okundirira
230	construct, put together	köténgénéjá ?	kösáángyá	ójishá
471	cook	kötélééká	kởrúwá	ótéréká
292	cook in water or fat	kötétééká	kötöötyä	ôtààtyà
43	cooking pan, small	tnüúngð	kikáláángó	kálöömbwá
385	cool (become); get well	kdpóólá	köhólá	òfólà
265	copper, brass	ishaaba ?	shaba	
283	copy a pattern	kökweendeleja	kötüübiriryä	ookorerya
894	cork, stopper	ikifúnikô	mfünikò ?	kitishò
52	corpse, carcass	iviimbā/māviimbā	mūviimbā	môviímbá
1001	corpse (human)	amaiti ?	művifmbá	môvíímbá
383	cough (vi)	kököhölä	kökölölä	ökölölä
4	count	kökwésháábú ?	köválá	òvàlà
100	country (our)	tsf yeetü	isf yiltd	ust
14	courtyard	isaala	waama	chôówá
852	cover (up)	köfünikilä	kökünikira	ökünikera
285	cow	tydombė	ŋóómbé	ŋöömbé
1003	coward	ümwööwä	mwoowa	mòófà
335	crab	ikālā/mākālā		ŋkáláári
520	crawl, creep	kösélá	kwaavüla	waülâ
612	cricket	înyêênzê	nyéénjé	
153	cripple	tchilèmà	kigúrú ?	otaavalü
803	crocodile	Indóoló	maamba	maamba
319	cross (a river)	kölámböká	kürükâ	ótámbóká
846	crow (n)	ikööŋgöölö	ikööŋgölö	nkóóngóló
308	crown of the head	paantwe	itóóti	lóótóóti
42	crumple	kökönjáköönjá	kütfötáfötá	ôfináántà

No	English	ìCìWòòŋgò	KiiRàngi	KééMbùwé
370	crush by pounding, pulverize	kòvùnà	kòtwááŋgà	òtúlátůlà
393	crust	àmàkôkó	ùkôkó	lókóókó
160	cry, waii	kůlilà	körtrá	òrèrà
966	cucumber, small			táámbó/mátáámbó
736	cudgel	ikwi	mpòlò	môtůwámběryô
165	cultivate	kůlimá	kòrìmà	órèmà
950	cure, cool, heal	kògààngilà, kòpúlitjá	kờhônyà	yààndí
355	cut	kòputulà	kòkèrà	òtémà
98	cut, lop	kòpòlòlà	kökérééngá	òfénjérá
117	cut to shape, sharpen to a point	kờsôôngôlà	kásóóngólá	ófálá
365	dance (of men, to show courage)	kwiitūtūmėlā	kůvíná	òlingátéréryálingátéréryá
53	dance	kòchìnà	kôvinà	òvinà
622	dark, black	nyilò	njîrô	mwèiràmà
481	darkness	ờsikờ	kiíjà	dùù
824	dawn (vi)	kwààchà	kwèérá	kôchééyè
359	dawn, daybreak	mìzáánjá	kwìtrirè	kötyékánöká
744	day after tomorrow	isikwítnjé	lůvíriryá	òkééyé
130	day	lòsíkó	síků	nsíkô
682	day-time	dnsáná rjköld	můůsť	mônsékáti
869	day (all)	òmùsànà wéésí	chírirė	chòòbúchóòbú
751	day before yesterday	isíkwitnjé	érà sikù	ėra nsiko
423	dead person	òmfwilè	můvíímbá	môviímbà
424	death	ìchífwó	ŋkùyá	ŋkúyà
931	decorate	kólèémbá ?	kòrémbà	ójíféréryá
446a	defecate	kůkůnyá	kònià	ònià
631	denial	kòkàánà	síítà	òslità
821	denv	kòkàánà	kòsiità	òsiità

9	Enalish	iCiWddngd	KiiRangi	KeeMbuwe
848	destroy sooil	kölüwáángá	kösaamböla	òsámbólá
437	deux	diddmi	lggmė	lómé
200	die france tol: out to death "	kokômaanda	köülää	òláà
4007	die 'cause to', put to deute	kalfwa	kởkủyả	kúyá
40.0	200	koltos	kūkūvā	kúyá
200	THE STATE OF THE S	Laterianha kelifikelelia	kefűkeliá	ofókölá
500	and up, and our	kakadanta kofikadia	kösiimbä	ôslimbà
202	dig	kachènè	köchinchèrékerá	ökééfá
900	diffillish, grow iess	nda room	keltújavá	otákéryá
200	din 1	S. September	kosii	hááli
000	district provinces position	get a	is.	nsé
000	district, province, country	the state of the s	krigava	ôvâniâ
240	divide	Loloto de la constantina della constantina della	talaka 2	irèkò
212	divorce	Koleka	4-14-4	mhrderh
367	do, complete, finish	komalitja	marikirya	THE PARTY
366	op	kölööŋgâ	köböyá	ojisha
eo.	doo	timbwa	kðri	diyó
292a	donkev		ndákwi	ndáákó
685	door	gudyaango	mülyaango	moreerigo
416	Course (red-eved)	thinka 2	nifvá	njevá
0 0	(pada-pai) ann	kollindia kosimila	kolaala	onyaasha
000	dozen	Lathon mahari	kotábá mááiii	otafa
670	draw water (florin well)	Lalots Heats	kalódiéra	olotera
0 0	diealli (Vi, Vi)	And Add A	pdooto	Kèróótó
328	dream (n)	O CONTINUE O	4700074	good
448	drink	Kumweela	Kunyana	the standard
196	drizzle	amanyoonyo ?		monyliny
780	drop, throw down	kökwiishà	köfweitä	olya
284	dum	èŋóómâ	ntáángásá	néénga
598	dry (vd), set out to dry	kūkwāniklia	kwaanika	waaneka
			080	

8	English	tCtWddngd	KiiRangi	KeeMbuwe
346	dry	iŋgavù	yóóma	dómà
954	dry up, ebb	kwiizölä		dómá, chdóm
345	dry up, become dry	kokala	kddma	òòómà
289	duck	itmbātā	bààtà	kłdakó/vidakó
243	dust, cloud of dust	làngdàndi	irùri	túúmbí
628	dwell	kökwiikálá	kwiikālā	wiikala
492	eagemess, zeal	iyalaaka	mpiima	waanoo
491	eagle, bird of prey		ŋkúúmbà	lòòvé
563	ear	iktiótwi (of animals), isikíló (of kött) humans)	kůtů	kátů
20	earth, land	İst	isi	nsé
4	earthenware vessel for serving up food	isddmbd	nyiiŋgò	màgùùntí
156	eat	köködyá	kởnyà	124
006	effort, exertion	łŋgùvù		otómámi
273	66a	lyi/maayi	76	yààí/mààyí
443	eight	mùnàànè	inááné	nááná
705a	elbow	,	kikököölä	křkókóló
329	elephant	Inzóvú	njeù	njon
336	embers	ikala/makala	kiinga	kálá
842	embrace	köjiwa	kökwátírirá	kůmbátírá
394	end (come to an), cease	kůlěká	kūrėkė	òsirèrà
952	escape, recover	kůpóná	kühölä	òfònà
899	examine, measure, test	köpilmá	köláángá, köyérá	ópiimà
45	excrement, dung	mààví	máávi	mááví, isáká
958	exorcise, drive out a devil			òsità
784	explain	kůkwěélééjá ?	kölüsä	ólósékérá
620	eye	liisó/ámiisó	riisò	riisò/màisò
828	eyebrow	iingópé	māririmā	kėririma
		289	7	

9	English	iCiWòòŋgò	KiiRàngi	KeeMbuwe
838	eyelash			ŋkóóshò
587	face downwards	kükwinaama	rárà nà ndà	toya nda/nse
989	face	dwiiso	kishò	óshó/màshó
940	fade, disappear	közimilá	körèmèrà	òrimérèrà
891	faint, lose consciousness	köziliká	köyfréká	òrimārimà
298	fall	kököwä	kūūyā	ówà
549	fall short	köpöngökiilwa	küchèènchérèkèrà	otyékírá
462	fan, wave	kôpůlitjá ?	küfwèérá	ófáláláfáálál
764	far	kotani	kòli	kůlěi
921	fat (be) (of animals)	könönä	koneneha	ônôlà
922	fat (of animals)	indôni	neneha	ònòòlá
531a	father	ðbáábá, dönsó	táátá	báábá
382	father-in-law, mother-in-law	káyéémbá	můkwé	můkwi
531	father (my)	dnsó, dbáábá wàáně	taata witto	bààbá
687	fear	wòówá	wòówa	woofa
652	feathers, fur	àmàwéyà	bááérá	mbúúyé
848	fence, enclosure	Idwaya	waama	kútů
858	ferment, turn sour		kdsaasa	chùùndú
762	few (a), not much	itnje	ndūūdi	vikė
757	fierce, sharp	-kali	yahoomba	chiffú
421	fig-tree		mùtiini ?	
422	fig-mulberry tree		műkáyð	mởkớ
216	fight	kůkůdwá	kwiivähä	wetula
804	EIII	kwiizdja	közibá ?	wèéjűryà
176	fill a hole, stop up	köliimbá	kömèmyä	òtifà
583	filter, strain	kůměényá	kösööjá	òchúújá ?
20	filh	ůchááfů.	kósű	visáámbé
516	final, decisive			kilóókyé

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
760	fine, excellent	-nôônů	yà bòòhà	kėėja
447	finger	káánkönö	ř màámbá	mónwė
323	fingernail	initingwa	mpäähä	lòjálà
474	fire	àndilà/miindilà	máátá	mòótó
280	fireplace, hearth, kitchen	řfiyà, řjílkô	riikó	riikò
970a	firewood (collect, cut) (vt)	kôsêênyà	kôtémá ŋkwi	òviriŋgà
413	firewood	ingwi	ŋkwi	ŋkóó
191	fish up, pull out	kwiipòlà	kôtôôlà	òlòwòlà
126	fish (old Swahili nswi)	ishwi	sàmááki ?	nsiyé
190	fish (vt), trap fish	kòvùà shwi	kòkwáátá sámááki	òtėyà nsiyė
400	fist	ingùmì	ngómi	ŋkóóndé
525	five	zitàànò	ísàànò	sáánó
493	flap wings wildly, flutter	köpöpömökä	kòfàláfààntà	òfàlàlà
832	flatulence	kôvimbítlá	kôvóhìrwà	òfülümèrèrà
384	flavoured (be properly)	kỳnôgèélà	•	ókórérà
907	flower	iúwà/àmàùà ?	lúwà	òlóriwá
278	fly (house)	isángáázi	njóósi	ngià
1028	fly (vi)	kólóká	kòhólòkà	òfàlàlà
1032	foam *	ipòvù (of soap), ifuulò (the rest)	ifúló	fúlò
502	foam	ipòvù (of soap), ifùùlò (the rest)	ifúló	fülò
143	follow (in order)	kởfùátá ?	kôtúbà	nööngö
142	follow	kůfwáátá	kůtůbá	òtúúmbà
823	food supply for a journey	insòòmà	másóólá	ŋkáándá
556	forest	únsitú ?	ìsáká	sáfisááfi
584	forge	kůlěngánijá		òchááná
889	forget	kůkwítwá	kòrimììrvà	wėėvà

9	English	iCiWddngd	KiiRangi	Keembuwe
89	fork bifurcation	izila paanda, ikoowa (for use	táámbárikó	màbàsí
		in millet), ndèmééló (for pot)		
45	four	zini	iné	iinyė
95	frog	ůch ú ú là	ibūūlā	chóòrá
574	fruit		mátúúndá ?	,
848	fry	kůkálángiljá	kökáláángá	ókáláángá
336	fully developed, be	kůkweenjůká	kdvirwa	ókőlá
325	full (become)	kwiizūlā	kởmèmà	wejólá
316	garden		kawuunda	dààŋgi
119	gather (flowers, fruit)	köyäwä	költűűndá	otya
-	gathered (be), assembled (be)	kökwíwóná	kwītjiingā	wèviringà
368	gazelle (Grant's)		mbúúmà	mbwaala
154	gazelle, small (impala)	imbáátú	védö	njeera
108	genet (kind of speckled civet cat) offuingo	ðfúúŋgö	nchùùŋgö	chééfá
801	get, obtain	kūpātā ?	köpátá	ótóólá
584	ghost, sudden apparition	ddnzúká/mizdká	mùrèmò	mòrimò
268	giraffe	ndwliya	ntwitya	ntóóyá
246	give away (present)	köfünyá, köködmpá	köhöángínyá	ŋkóyi
449	give	кддтра	kötőólá	òfá
916	give light to	kūwāāshā	kdmürikà	òtónjèrà
815	glide, trickle	kokoova	kwiikà	wėkėrėra
269	08	kūwaala	koduma	ofetà
639	go in, come in, enter	kwiingilä	kwiingira	oingfrå
83	goat	imbózi	mböri	mbóri
694	qoat. (he-)	jibėbėėló, chibėbėėlū	ŋgùláàtá	ŋgùlàátà
695	pob	dmülödŋgö	mülüüngü	motáláanjá
758	pood	nòònù	ya booha	kėėją
388	goshawk (East African) (Astur tachiro)		mwėėvė ?	lòòvé

N _o	English	iCiWddngd	KiiRangi	KèèMbùw
89	grain (of cereal)		mpėkė	mpéké
969	grandfather	isákölö	bààbà	maamé
697	grandmother	ninākālā	maama	mámá
432	grasp, hold in arm	köméényá	kwaatera	kůmbátěrá
869	grass, reeds	isóté/másóté	másáámbé	saambé
406	grate	kökwálöjá	kökwäälä	onoota
409	great, powerful, big	ikòlò	kóóló	kinéné
164	grief, sorrow		mákivá	ôrfrīkānā k
371	grind (grain with a millstone)	kờshá (by mchine), kở jê embá	kdsya	ôsya
372	grind coarsely	kösiginá	köférá	ôférà
212	groove, furrow	kámféléji	mfülö	
801	ground, cultivated	chááló	iwddnda	waala
405	grow up, get large, become great	kökölá	kökölä	òkólà
913	grow (of plants)	küléémbá	komera	oùkôla
461	grown (be fully)	kökölá	kövirwa	Okóla
373	gruel, light pomidge	drigoombwa	00jl 2	táánté
358	grunt, grumble	könööŋgá	kökúwá	ósóóchá
205	guide aright	kökälipilä	kdröngöörä	wááněchá
351	guinea-fowl	frygåårygå	ŋkaaŋga	ŋkááŋgà
701	unb	imòdóósi	bondúúki ?	bundoka 2
702	hair	inyeele	Idjwilli	njere
414	hair (long straight- of animals and Europeans)	dsiinga	lðjwífít	nyêênjê
75	hair (white, grey)	ijmvwi	imbwi	mbiyé
703	hand (flat of)	ikigaanja	ikóóñ	koofi
157	hand, right	Bujitto	kölömé	kölómé
439	hand (left)	dmòòngó	kůmobso	kòmòònsò
476	handle, haft	- gmptni	mùhfni	môféné
		107		

No	English	ìCìWààngà	KiiRàngi	KèèMbùwè
779	hang in mid-air	kwiiläämbìllä		òniinèrà
655	hard	ŋkààŋgờ	éfáfá	mpàfú
377	hardship, distress		àmàrèmà	ötyéékérá
294	hare		chúúggúrá ?	chèèmí
781	haste		chảảngở	chàảngôchàảng
795	hate, detest	kòsiilà	kásáálá	òsóóchà
700	hay	àmákávú	másáámbí	lókókó
678	head, chief person	dŋkāālī	m(ù)kàlá	mökálá, mùnén
356	head	dontwe	můtwě	môtwé
352	head-pad	ìngàtà	ŋkàtà	ŋkátà
561	heap	ilòòndò	tlòòndò	kipùùmpà
391	heap up, ready/set on fire	kôpěémbá	kòkóryà mòòtò	òkóryá mòótò
623	hear	kôkwiirwá	kötéérá	òtéérà
543	heart	àmòòyò	môtimà	ŋkóló
944	hearthstone for putting pots on	ifiyà/màfiyà	ishá/màfià	fiya
893	heavy, serious, dull	ikôpààvů	èrùtàà	nditò
705	heel (of foot)		kichínó	ntútúnyá
681	heifer		ntiinò	ndámá ékôméé
418	hem, make a border	kòpììndà	kòùnànià	òfótà
690	hen, fowl, chicken	ngókó	ŋkákô	ŋkókô
766	here	ėpa, kėla	àhà	áfà, ókô
863	hiccup	nkwffnwi	gkwiigkwi	chénkwéénkwé
800	hide (vt)	kòpisà	kôvisá	visà
38	high, be (of meat)	kôwôlà	kôvúúndá	wóólà
326	highway	izilà	bálábálá	njerá
309	hill	kitòòndá	IOOIO	mwitmbf
925	hip	inyööŋgá	ntri ?	bóóngó
317	hippopotamus	tvůwò	kibókó ?	mwiiná ?

KèèMbùwè	òkòmérà	sèrè	ôkwaata	chùùni	ökőőmbá	kââyi	wóóki	,	gólídà	ndôánô	mpéémbé	fáráási ?	nyddmbá	íréŋgà, karéŋgà	Ιόκόκό	KÜKÜ	mèròòŋgó étáánó	njálá	ólóómbá	mòlòòmbá	káati lóómbá	mòlòmè	chüülö	mpiti	nèéné	òvirà	ólwáálá	pinipa
KiiRàngi	kůchúlá	İsèrè	kökwäätä	theengere	kököömbá	mittò	wööki	,	ŋkööndösö	ndóáná	mpėėmbė	fárási ?	nyüümbä	ingahi	mòòŋgò	moongo	mia ?	njálá	kdsákáatá	mùsákááti	kösakáatá, sakááti	mülüme	kīhaanda	mpichí	nèènè	dsókóló	kůlwáálá	professy bills
iCiWòòŋgò	kűköngóméélá	iyeembe	kööndémá	ilitindi	köküümbä	kökääyä	wddchi	kötögwá		Indówaánó	ípèèmbé/ mápèèmbè		inüümbà	ziinga	imbyódngó	inoondo	imyà ?	izálá	kdvwritma	dmwdmaaji	où wimaaji	ndůdmé	Inùumbá, ddiilà	ðlááwi/áálááwi	nèèné	dkatávů	köwfíná	dudini
English	hammer		hold, arrest	hole, nest		home	honey	honour	hook (for pulling down branches in plucking fruit)	hook (fish)	. tusk	horse *	house	how many?	hump (of hunchback)	hump (of cow)	hundred	hunger	hunt	hunter (professional)	hunting	husband	hut	hyena	_	idleness, sloth	ill (be): groan	The same of the sa
8	396	902	066	575	836	816	654	150	797	189	707	288	708	283	572	573	756	320	33	34	35	227	808	709	1016	1013	901	000

2	Fnolish	iCiWòònaò	KiiRàngi	KeeMbuwe
275	imitate	kūdéndėlėėja	kötöömilyä	òtúmbérèrà
16	in front of	kởmbèèlè	mbèrè	mbèrè
353	in the middle of	pākāsī	kàtí	kàtí
118	incite	kðsóngélá	kůsobngěryá	òsólólà
206	increase, make greater	kööngéjá	kwóóŋgêryá	ódúůmá
155	increase	kódngéjéká	kůmémà	òswáániá
426	inheritance			ólúwérèra
542	inside, in	ŋkási	isf, nyùùmbí	nydómbi
353a		pākāsi	mà isí	kátíkátí
132		òòlà	màtúúmbô	màlà
389	intoxicated (get)	kůkôdwá	kūrėvā	òrèèvà
513	iron ore			húúkúmèèrwà
284	iron		chddma	chòómà
710	island	ngáámbi	,	kètééŋgényéri
2	itch	kůnyěgělà	könyéérá	wilvává, onyèèra
460	jammed (become)	kůkwáámá	kůkwáámá ?	òfántérà
853	(aw (bone)	ikūpā/mākūpā	isáyá/másáyá	ŋkaasa
96	jealousy	wiivù	lytst	kifééyà, kíféyá
271	ionmex	ðnsáfálá ?	Meendo	weendo, lotaámbo
909	indoe (vt)	kökwámültlá	kötátölá	wùùkúmèrwà ?
810	iump, leap	kdičká	ktöröká	Öférérá
477	kidney		fiiwa	ŋkösääŋkösä
218	Kill	kökómáángá	kūćija	woola
677	king	mwèénè	mùtèmì	mùsúngáti
787	kite	ůmwèéwé ?	шwėėvi	mpóóngó
347	knead		ī	ofinanta
348	knee	igóótl/mágóóti ?	ichóóméró	kffrù
427	kneel	küláámbá	kůchwáámá	wėtúwámbėėrya
			694	

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
607	knife	chisù (of women), ômpyàànô (for men)	tříyò	lòshó
402	knife, thin, curved, broad-bladed	isèèngò	chádnyá ?, litkóktótyó	lòshò lá fótá
704	knot	ifùùndò	chòàngò	füündö
626	know	kòmàànà	kòtáángà	ómányá
178	lake	ůlůkůwá .	irivà	láává
151	lame (be)	kòsùngàflà	kờchénchèmà	òchéénchémèrya
511	tamp	itààlà	kimúri	táá
99	land (dry)	fsf ngààvù	táánů	nsí kálôků
761	large, great, big *	ingóló	kớlờ	néèně
94	laugh	kůsěká	kůsěká	ósékà
792	lay over on one side		kwisikirya	òkúbékà
1000	lazy		sóköölö	mòvirà
699	leaf, blade of grass	isòòtè/màsòòtè	isààmbí	sààmbí
1025	leaf (tree)	másóóté	ìsààmbí	sààmbí
911	leak, ooze out	kởkởởvwá	kòtóónyà	òsớlờià
96	lean, bend down, slope	kôkwiinàmà	kwinàmà	wėnàmà
536	lean on, rely on	kátégémélá	kwilláángyá	włyérééryà
796	lean, become; grow thin	kờtópà	kwòòndâ	wòóndà
535	leaning (be)	kòkwégàmìlà	kwisikitrya, winaantira	włsikirya
613	learn	kôkwifùùndiishà ?	kòtáángà	wìmànyishà
546	leave, permission	òlùhúsà ?		òlàànìrwà
1011	leave over	kòshàlitjà	kòchiíryà	òcháárà
547	leave, go away	kờờká	kờrókà	òféréŋkà
544	leave (off)	kůlěká	kôrèkâ	óréká
975	left over, (be); remain over	kôbàkííjá ?	kůchééryá	òcháálá
310	leg, foot	ichináma/imináma	kởở/màở/ò	kàảlà/màảlà
774	lend, borrow	kůkwáázimyà	kölőómbá	òtáánchà
107	leopard	ingòòi	nsóvi	sòví

9	Garlieb	CiWddnad	KiiRangi	KèèMbùwè
2	English	Liber Sparts	krìnaamoa	ònáámpá
8/8	lick (vt)	A STATE OF THE STA	kilisala	òláálá
134	lie down	Kolambalala	NOIGE STATE OF THE PARTY OF THE	عدوفهم مهم ماوفيد
250	lie on one's back	kökwanzika	kolaala cha moorigo	Oldald Cita Hoorig
701	life up pick up	kükwilnölä	kweendla	orenya
104	in in incidit	lmbhdai	fèrèkà	fóŋgófóóŋgó
100	ingin in wegan	(krytmbi	kürümö	yolo
304	ingin, sky	Chimilimit 2	kimôri	dmémė 7
000	december of the	1schala	chākālā	
100	mne, winewasi	dmisitaali 7	mùsitáári ?	mdxddmbf
213	line, low	ikôlóólá		mūri
800	Bannen 'ann	repara	nsiimba	nsiimbà
200	llon	godymydaniadomo	můlômô	тоюто
198	dir	krikoffylkishä	kötéérérá	ôtéérérérá
900	BStori	the model of the		onyori
972	listless (be)	Haraken hims	Himan	tima
1024	liver	TOWNS AND THE PARTY OF THE PART	Lab (Cont.)	Orisha
429	livestock (keep)	Korua	effica	police
819	lobster			- Carrie
794	locust	inzilė	ŋkġġmbi	nykoompi
1559		kôtáltímba	koliha	Oliffrirà
***		ndaani	ndfhì	noti
	took after care for	KONS	köläängä	òrèrà
871	look after grazing cattle, help a	kösööŋga	köriisha	óríshá
	sick man on the road			
354	look at examine	kolola	köláángá	olaariga
3549	-	Kövwäämbä	kwiròra	óláángá
200		kūdoleėla		olóómbálóómbá
808	something), pursue		:	41444
973	loose (be); faint, weak	kökátáálá	kūrėra	onyadia
181	lost, get	kózimitlá	körímirá	orimera
			969	

Medili	nodiii	waanja, osaaka	matricità	a committee	osavt	kilihnarilibidad	4	esnango	lómė, nyaamba	nicks va můvědá	and more	nviindi	jonina	things.	loola	òlòòlà	òlóónvà	26,000		òlànèrèrà	Skorive	D. OVOID	пуата	môti	mówà ?	mwaanga	òwłóna	otiintikä	mówa 7	Asaama	No.	masii	masii ya kwaatamia	māsii	
KiiRangi	nyingiri	huddanda		thugha	risavi		rjkowa	kntaambika	- Amilian	HIOIMILE	njoka ?		rietu	Irefo	ilòòlà	بالإجالاء	Biolog	KUloolya	inyour	10000	KWIIBBIIB	kdkárjgáálá	nyámá	mòòdà	é Océ é w	and done	Section 19	KOSHABIJA	KOCHARAIOKA		Kusaama	másdúsú	mpòtòtò	mashitst	
1C1W00ng0	tschimi	4	KUTOGWA	inchot/ámápdápa	1111	DIOZI	isaka/amasaka			ilùmè	ihòògò		fulluji	fujinji	disele	HOOR	kotoola	kůlóweějá		moonteemi		kókölá	invaama	1		_	onjaanga	kūģua	kůpěélá		kösáámá	àmàwèélè	فافضيفهم	alliaweele	amaweele
English		onse	love, want		Buni	magic."		maize	make offerings to the dead	elem	mamba green (kind of	opisonous snake)	wady	Litatis	many -	marriage	marry (of man)	mamy (give in marriage-of	parents, priests)	master	match, harmonise (vi)	- Control	matrice	meat	medicine, remedy	medicine (art of medicine man)	medicine-man	meet	melt	midwife	miniate move away			milk (curdled), curds	milk, (fresh) (n)
9		1023	69		934	713		41/	521	228	9 9		202		1019	897	895	968		314	888		200	8	528	260	261	90	861	845	010	9 9	030	20	19

KeeMbuwe	2:2:2:11	nyóŋgólá	odůměrèrà	Achaideddaid	Coampagamila	ntóórnbéré	nyàù kérèèrà			ntóómbéré	rnweeri	mwėėri	mbóó	madwd	idmoom admoom	HOOLING, HOOLING	Meeting	Kerero	molomo	Weendo	tófé/mátófé	marino	Arabanala	doing	- Compa	THE PART OF THE PA	ntautero	monyoku	fàúfè	nchilnañ	0 P	1996	Miele	
KiiRangi	mavere	indnödlö	Liberthown	a filmeov	kosaangirirya	plining				ntddmbfrt	nw6êrî	Deport	- Const	25.	ohi	koomba	lòdio	chirirò	mülümö	lityeendo	4444	4000	OHILI		Irina	yaani ?	ükósi	műköfő	hithi	4	nykingo	,	nsyâ	907
jCiWòòŋgò	rinwelle	Toppos Sell	Populgoon	Kosaangasaanga	krikolóna ?	PROPERTY.	Impwaaji			Jank did stock	Impounta	Omweezi	Weeld	timbo	Omaayt	kömäätä	kttöðndá	chillio	godopino	opening washing	Daweellaw III year		dyola	kölémáálá	illina	golf	Ingòòngò	Limitarduchambush		papinpi	isiingó	kölééngá	išmbya	
English	March de die	miller (buildsir)	millipede	mix (ingredients, 'season food')	and tomosthor	mix, put together	monkey (small lightish-coloured) Imbwaaji	monkey (colobus- (with long	black silk hair, white on	Shoulders)	monkey (small, dark-coloured)	тооп	moonlight	mosquita	mother	mould (pottery)	mountain	-	_	-	movement	mud, mire	mushroom	mutilated (be)	- ague	Nome	manney (of nock)	uabe (or neck)	navel	near	neck	peed request	new	
8		903	290	73		72	363	362			361	716	609	69	436	88	717		103	1026	272	616	642	152	284	2	200	403	256	765	379	843	962	

piops	dett.		
III Military	OSIKO	üchíkö	òtiků, nôtiků
nine	kééndà	kééndá	kėėndė
nose	iîmbòlà	mpülä	modia
number			milliphood
oar	ilnaén		District of the second
obstruct	kapijinaa	krikfotra	monko wa maaji
offspring	mwaána	Thursday.	OSIG
oil (from plants)	mattheta	Company of the Compan	njaala, mbyaala
lo lo	annua.	makuta	nsakaare
5	mafuuta	mākūtā	mākūtā
old times, the past	fŋgààlì	kālī	châkâlê
old person	dnykáálí, ílémbwénykölö (m)	mwoosi	mókóló
pio	Ikaaii	hasakaala	nswadda
one-eyed (being)	isóóngó	kifréká	choons
one	timwt	imiddo	moont
open mouth wide	kökwásámá	kwadsama	And dend
uedo	köfüünadia	köchffmháia	Codding
open (set aiar) a door	kripodopod	LA-SAIN	yoola
Con a Carlo son and a	philipadov	KOYOOIA	lūūtā
order, direct	kolagilija	köläyífriryá	tômá môtómi
ostrich	îmbûûnî ?	mbûûnî ?	núúnaú
our(s) pl. 1st person)	yttto	vitswi	Confessor
out (go), go away	kôtůmá	killima	Anima
outside	paazi	where	osuma
overcome; win, vanquish	krinota	C dischification of	
od ad busine	0 1 11 11	Philagilan	shootye
owed by, be	Kodaiwa ?	ködáiwá ? (nööngwá)	odái 2
oyster			
pack (luggage)	könyéépá	Köchúngántshá	titions
pack, press together	kösiindīlā	krichánobořehá	the designation of
mack flock orons	And the Assessment of the Asse	BIETING	Oliginerya
back, nock, group	Hakoonde	ikuundi ?	vitiiti

iCiWoongo

KeeMbûwe	mòtèkóó ó máaji	kálákálá	môtééndè ?	öóchúŋkùúnà	yáániá			i i	Ósingisa	mòyááyé	nkólósó	holooka	nièra	orefa	olaanga	ókônölá	ifyaatyo	lómáambó/máambó	téérérékà	KÍVÀ	kásèré	mòòntó	móónsė	nkáámbá	kèrùkwā	wėtėėka	òdidà	
KiiRangi mutuumba ?		ilaka	mùtèèndé ?		ihaanja				kütétémá	Bábdsi ?		kůlóóká	njira	kūrīhā	kðláángá	kūtonyola		maambo	kůkřnyà	mbóló		moduto	möösi	ngúrůvě		kötötiká	kokonya	
iCiWödŋgö ifülüshi ?	iŋgaafi		•	nditimbà	ikigaanja		dŋkômâ		kötétémá	òòndézi	kásúků ?	kópiitá	izilà	kditpa	kölölä, kösüüngámīlá	köpátölá		lở màảm bó/ îmà âm bó	kwiinjilà	ildwa	akâyêêmbê	oondo/awaando	3	iŋgölöwè	fŋgdơndà	kötwijká	kösiná	
English pack, bale, bundle (n)	paddle (n) *	palate	palm (date)	palm-wine	palm (of hand)	palm (raphia)	palm (borassus)	palm (oil)	palpitate, flutter, tremble	parent, s/he who begets	parrot	pass, surpass	path	pay	pay attention, take care	peel, shell	6ed	pegs (tent)	penetrate	penis	penknife, lancet	person	pestle	gid	pigeon, kind of	pile up, pile loads on head	pinch, make narrow	
No 457	236	342	6	719	257	9	7	80	459	47	720	232	325	159	900	820	12	F	484	121	884	258	638	312	414	629	479	

KèèMbùwè	kèbùùndé	siimbò	ôvěkérá	fààntò	körimű	òtínà	waala	palà ?	mbávárééri	ósinöónká	chóówá	ôvásôchà môôyê	óbülókèryà	sòònsérà	yölü	òfótólá	kiténgè nyèri		ware	mákópó		môkébè	υνόδησό	Kèrási	υνόδησο	òtwaa	
KiiRàngi	pùùnde	İdüündü	kößífká	hààntò	körimwi	kösükä	köhándá	kißäändä		köböűhyá	idaho		kögörökiryá	kdsóónká		köhönölá	káriívá	nddngd (cf. kinyésüké "hedgehog")	wàrī	ikópó	chòòmbò ?, nyttngó	mükébè	nytingó	kirási	riikò	kötwáángá	
iCiWoongo	dntéémbá	ilitindi	kówlika	apaando	kwaazimu	kösűwá	kösimikä	pádóló	kůnóněělá	könönèèzwá	isi	kökwáámbížlé	kůkwiiwījá	kösüüngántjá	imaambo	köküsä	lóköwá	յունոյցժունոյցց	Owaal!	ikópó/ámákóópó	ichtindd/lviindd		inuingo	childdmbd	e	jet kápödíá	1.34
English	pipe (tobacco)	pit, hole	place, put (vt)	place (n)	place of the dead	plait	plant, sow	platform	please, satisfy (vt)	pleased (be)	plot of ground	plunder (a town)	plunge into, cause to sink	poke	pole, thin	polish, clean by rubbing	pool, pond	porcupine	porridge (stiff)	pot (metal)	pot, vessel	pot, mug	pot, cooking (earthen)	potato (sweet)	potter's kiln	pound (grain in a mortar to get off the husks)	
8	357	552	974	722	892	225	932	510	834	93	13	647	1014	114	737	=======================================	177	923	374	45	4	39	40	749	646	369	441

No	English	ìCìWààŋgà	KiiRàngi	KèèMbùwè
641	pour	kòkwiititja	kòkòóròrà	òlòòngèrèrà
748	pregnancy	ìindà	èndà	mòkòvá
636	pregnant, be	kờkówá nìì ndà	kôvá nà ndà	òvá nà ndà
599	prepare	kůkwándálílá ?	kòtàyárishà ?	ójishà
553	press out (oil seed, sugar cane)	kókámódlá, kösílé		siyá yà kámà
986	produce, put forth, display	kófůnyá	kotoola	òsúnyà
909	prominent (be); put out	kófůmítjá	kòfůmyá	òsúmèrà
518	pronounce	kótělá	kölúsá	ólósá
340	protect by charm (medicine)	kótémá	kòkiingá ?	ôlàùriryà
947	protect by charms (target)	kóziindíkà	kôziindikà ?	òlàùriryà
475	puff-adder	Ifülü	itáfúfú	njóká yá kèrátů
244	pull	kòkwèèsà	kòrùtà	òlùtà
173	pull up, come to a halt	kwiimftflà	kwiima	wéémà
172	pull up, root up	kókómbódlá	kờŋôôlà	òkóólà
833	pull, drag	kůkwěésá	kôrůtá	óókúryá
57	pump	ibóómbà	βòòmbà	bóómbá
548	push	kðsúkúmá ?	kásúkůmá ?	òsiindèkà
992	put, place, set	kówiłka	kůvííků	véékà
887	put together for comparison	kölingánishá ?	kðfánániryá	wééryà
969	put a pot on the fire	kòtèèngà	kötérèkà	òsimèkèrà
981	put together, compose	kátàngà	kòtúúŋgà	òsóóngérèryá
862	python	fsátů	säätü	nsátô
656	quarrel (vi)	kôkúdwá	kwitóólá	wèrémèrà
180	quench, extinguish	kóziimyá	kòrimyà	rímyà
485	quiet (be)	kòkwiinàlà	kòtóólá	tóólà
76	rain	ìvùlà	mbùlà	mbúlà
917	rain (vi)	kớtônà rvùlà	kòvá mbůlá	ònià mbúlà
1006	rains, the lesser		mátóónti	múlá yà mbèrè

No	English	ìCìWòòŋgò	KiiRàngi	KèéMbùwè
197	rainy season	chísikà	kichikò	kėtikė
580	rumble	kólépölá	kòdèdérèkà	òtútùmà
26	rat, kind of	sėėzi		mbėvà
488	rat (field)	ibúků	ìfùdyà	chúùrú
24	rat		mpdkd	mbėvà
25	rat- (very large, long-tailed)	sêêzi	nyúúri	kèmůmůrů
883	razor	dweembe	wèèmbė	wéémbè
949	read	kösömä	kòsòmà	óláángi
1007	reap, harvest	köyáwá, kötémá, kösölá	káchwá	átyá
523	receive	kòpókělá	kàhókèrà	isókérá
537	reed	itété/mátété	mátětě	kitéété/vitéété
632	refuse, say no	kòkàánà	kòsiità	òsiità
633	reject, refuse, dislike	kókàánà	kòsiità	óslitá
545	remain, stay behind *	kôshààlà	kôcháálá	òcháálà
1035	remain, stay	kôshátíjá	kýcháálá	ócháálá
840	remember	kökómbökilá	kökümbókirá	òkómbókà
499	resemble *	kôkwiifwàànà	kwifwáánà	návyó viivi náchó
879	resemble (very closely)	kôkwiifwàànà	kwifááná	návyó víívi
1031	resemble *	kökwiifwäänä	kwifááná	návyó víívi
149	rest heavily on, be burdensome	kůkwééléměélwá	kwiláángyá	òrèmèrwà
964	rest the cheek on the hand (in brooding mood)	kðkwiinámílá	kwikwáátá máktvá	èkwátá itóómá/ kèbávéryé
957	rest, take a holiday	kôsúpá	köhümölökä	ótáálóká, öfwéérérá
249	return, go back	kóstwa	kờfytickà	ótáálóká
1004	return	kósówá	kờfytókà	ôtáálóká
500	revive	kờfüfülà	kôfûfûlâ	pôômbóryà
318	rhinoceros	mpėlò	mpèrà	mpérá
988	rib	ôlôwáávů/ îmbáávů	lòbàrů/mbárů	lóbálů/mbálů
473	ripe	íchillé (fruit), ípillé (in cooking)	livirwa	èvèríryé

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
996	ripen (vi) *	kôkwiímbá	kòvírwá	òvéryà
472	ripen (vi)	kůkwiímbà	kůvírwá	òvéryà
209	river	òmbáánà	ìβôté	môfùlò
239	roar, rumble	kötútúmá	körümä	òrùmà
644	roast	kòbáníkà ?	kôókyà	wóómyà mwóótwi
350	roast (in/by fire)	kůkóóchá	kůchímíká	wóóchá
806	rock	iwė	màwùyè	ìwè
291	rooster (cock)	ijógóló	gkökölőámé	nsésérő
169	root	ikwáázó	můri	móri
29	rotten	iwóvů	mbóóvů	kisäämbókú, iùndie
1012	round (be)	kóvwiliingwà	köviriingä	òvíringà
183	round (go), turn round	kòpitimà	kòriingirà	sóóntá
999	round, become	kóvwiliingwá	kövíriliggá	òvíriingá
110	rub	kòkùùsà	kðsúúntá	sóóntá
50a	rubbish, garbage	isáká	kôsů	visáámbé
321	rubbish heap	ilfíndí lá sáká	idůůndů lá kôsů	kipůůmpů
826	run	káchímbítlá	kôtíijà	òfééŋà
522	sacrifice	řsádááká ?	háryò	bósá
723	salt	ðmúúnú	säängäsä	mòónyó
95	sand	ນໍານໍsáángá	sáló	mòsààngà
630	satiated (be); have enough to eat or drink	kwiikòtá	kwiikòtà	óikótà
788	satisfy	kôtôgwééjá		mòò wáánjà
251	say to, tell to	kówitlà, kópódjá	wiira	òwéérá
783	scorpion	tingònyà	íggi	ngè
453	scrape	kópálá	kůkwáálá	òfàlàlà
855	scrape, grate	kópálá	kůkwáálá	ôkárôryà
856	scratch, grate *	kờsởwà	kôkùná	òkònà
668	scythe, sickle	imóójó		mùndù

Š	Fnolish	1C Withhard	Kilbhani	
84	search for	king danka	total total total	Veempna
5 6	Selection in	Mowdallina	KOSBAKA, KOSBAKITA	osakera
9	search diligently	kopaala	kösölä	ofükörá
738	seat, stool, chair	ichtt ?	Ichüümbî	túúmbí
770	see	kölölä	kwòònā	woona
87	pees	imbėyó	mbėėyú	mbéó
404	seize	külèmä	kūkwaata	ókwáátá
911	self	yffydonye	yènyèènyò	nvééné
302	sell	kūkājā	köchölöshä	ota
270	send	kötömä	kötómá	otómá
151	separate, set apart	kðsáámbáájá ?	kdvífká kisimá	tékánólá
420	separate, leave each other	kwiileka	kwiirėka	weereka
534	set a trap	kötééyá	kötéá	òtévà
898	set (of the sun)	kwiilà	kwiira	owera
971	settled (be); be in good order	kởnógèlèlà		vééká
154	seven		mùfúngáti	mòfúinkà
1033	sew.	kúshônà	köchümä	otúma
589	sew	kúshůná	kůchůmá	òtúmà
135	sexual intercourse with (have)	kókööndá	kwiibòòyà	óweesoóm
391	shadow, shade	páámpěpó, řchífnzilá (human) kivúúri ?, mpěhó	kivúúri ?, mpěhô	mòféfó
198	shame, disgrace	yaazi	sòni	nsóni
16	shame	yaazi	sòni	nsóni
124	shame, modesty	yââzi	sòni	nsóni
988	sharp (be)	kűkálipá	kūkolā	weefa
320	sharpen	kópyáángá	kờnóólà	onoola
115	shave	kűséényá	kökérá	ókásá
93	she, he	mweene	yèéi	wèé
187	sheep	indóó	müündi	árisa
600	shell, cowrie			ŋkálává

822 725 712	•	Officontar	KiiKangi	KeeMbuwe
725	shell	igòòmbė		nkálává
712	shield	iŋgàò ?		qàambòda
000	shin (bone)	ilöðndí/málðöndi	mùlóóndì	mòlóóndé
9	shiver, shudder *	kütètèmà	kütétémá	òsiinaisà
528	shiver	kületemä	kütetemä	osiingisa
434	short	fnipi	ηκά	ŋkúfè
430	shoulder, tip of	ηβόηγόηβόηγό	màvėà	mavee
588	shoulder	iwėà	ivėà/mávėà	vèè/màvéè
839	shout	kůlámbá ichóóngó	kůtělá isôsô	Obwaaka
946	shrivelled (be); wrinkled	kökwiisiinä	kwiikunya	,
763	sick	mbilini	ndwáálá, mülwífri	-hváávé
870	sift	kdyddyga	kůchékěsá	
615	sing	kwffmbà	kwijmbá	wèémbà
က	singe	kówawa	kölüngúúnyá	òréérvá
980	sink, be drowned	kökölöwä	küülövä	otoota
170	sink	ködődőmélá	kůzáámá, kůbůrůkírá ?	rivèrérà
726	sister (his)/ (her) brother	ilòòmbò	irddmbd	waalako
627	sit	kwiikālā	kwilkala	weikala
753	six		isásátó	saansato
785	size, measure	cháási	lijòré ?	káréngá
123	skin (of person)	İŋgweembe	ndíri	mbèró
124	skin/rind (of fruit)	igaanda	mākāámpī	kóókó
303	sky	iwffŋgð ?	körömüki ?	yoolo
865	slander, accuse falsely, often secretly	kởsốớngèèlà	5	ntùùŋgô ?
470	slap	kúláámbá ikóófi	kůvá mákóófi	tóóvá
	slash	kópütülä	külémá	témà
220	slaughter	kósiinzá ?	kösífnjá	kèrá
727	slave, bond servant	дпtóтwá	mùrèwa	mòsòòmbà

No	English	tCtWoongo	KiiRangi	KèèMbùwè
728	slave (female)	gritómwä		mwaana mwoka mosoomba
729	slave, (male)	drtfomwå		mwaana molome mosoomba
136	sleep (vi)	kökönä ötölö	kðiáálá tölö	ólálá tôló
731	sleep (n)	dtởió	tôlò	tóló
730	sleeping-place, accommodation	ichóónò	Kīlāāló	órérè
296	slip, be slippery	köséléémbődká	kötérírikyá	ôterereka
1021	small	ichi	ndúváli	kididi
332	smallpox	indddbe	ndůví	ndôvě
241	smell (sweet) (vi)	könüükiilä	könyűúkírá	wùindèrà
242	smell (bad, of fish) (n)	könüükä	dnyüükü	üünda siimpäivė
240	smell (bad) (vi)	könüünga Iviwi	könyüükâ	wūjuda
629	smoke (n)	ijoóshi	möökyi	móóki
428	smoke (give out) (vi)		köfükirá	ókúúsá
387	snail, slug	trjgónó	ίηόηδόΙδ ?	ŋkálává
837	snail	trigónó	itámbáálá	nkálává
145	snake, serpent	fzóóká	njóká	njókà
158	snare, trap (n)	áántééyő, iítégő (humans)	mùtêò	òtèyò
864	sneeze	köfyáátó	kůvá mááshá	ósúnyá mááti
924	sniff, smell out	könűűshá	kötáhyá	òndùshà
296	snore, snort		köhönä	mùyônô ?
69	lios	Noongo	iróóngó	nsáló
732	Buos	dlwffmbò	wifmbò	chéémbó
616	souds .	initimbò	nyiimbö	vyèémbó
36	soot	amátwiitwi	mikiri	měkíri
195	sorcerer	gudộộzi	mùsávě	mòsavé
201	sore	ilòónda	kilòòndà	kilwááyé
734	soul, spirit	amobyo ?	mùtîmà	тоф
331	sound, cry	ondilo.	mūrīrō	mòrèrò
		,-	707	

KèèMbùwè	,	nsáséénsásé	ólóséká	tímò	ólóóchá mpéendé	máájé, ŋkööŋgö	lòòvé	mòrimò	mòrimò	mòrimò	ôtyá mátá	màlá	öläändälälä	tifáryá	òdèènchā	ósáámbólá	môtiikô	ivālā/māvālā	òtáólá	ósámbániká	wààlà	òmányèkà	ósiisya	weesambasaamba	nchéémù	moowo	ódééndá	
KiiRangi	ldváá	séésé	koliúsa	ŋkööŋgö		mànyààri	mbwī	mòrìmù	mòrìmù	mòrìmi	kởchwá màtỉ	mátí	kwaatola	köhüköryá	kwijúvtrya	kůsáámbůrá	mittkó		kůlává	kwèémèrà	kwèénèrà	kütáángíkáná	köháká	kwèènèrà	chisóchà 7	mútámbó ?		
iCiWòòŋgò	ilâmbáázi	insasi	kůtělá	dndddndâ	kösüpä	imbėėyo, indolaango	amátaandó	ůmůzimů	undiimi	ijini/majini ?	küshwijlâ	amátwi	külèpülä	köpófüshá	kölémáájá	kölüwäärjgä	dntiingo	iwala/mawala, iwawa/ mawawa	küténgülá	kúsámbáálá	kůkwàálá	kůkwénèélá	kópáká ?	kösámbáálá	fusiimbo	ýntáámbó	kösiimba ?	
English	space (open)	spark	speak	spear (n)	spend time	sperm, semen	spider	spirit (of dead person)	spirit (disembodied)	spirit (evil)	spit	spittle	split, crack (vt)	spoil, blind (vt)	spoil (a child)	spoil	spoon	spot, speckle	sorain an ankle	spread out (be)	spread	spread abroad, be; become	soread smear on	soread scatter (vi)	soring (of water)	spring machine	sov out	
N _o	49	82	_		137	1038	62	182	464	683	582	533	601	951	648	866	813	vs.	959a	141	527	806	692	109	880	965	886	

English	iCiWeenge	KiiRangi	KèèMbùwè
squat (on the haunches)	köcháchámálá	köchönchömálá	chünchümälä
squeeze oneself up against a wall (e.g. to allow another to	kökwiimäänė ?	kwiivisä	òsirùsà
squeeze out	kökámölä	kůminyà	fináántá
squeeze, milk	kðkámölá	kůkámá	ókámá
squirrel		i	
stack, pile up		köziiŋgā	virifigå
029 stand (vi)	kwiimililä	kwtima	weema
star	fízótá	nyényééri	njótá
stare, glare	külőlééjá	kökódólá milső	kóólá méesó
start off, send away	kóởớshà	kösíyá	táányá, süünchá
startle, catch unawares	kögündülä	kotaángá	waalareni
startle, jerk	köshitölä ?	kövüündökyä	riindblà
steal	kůkwiíwá	kwiivà	iiva
steel	chôômà	· ·	chóórná kefáfů
stem (of maize, millet, etc.)	mápèlèlè	ibová/mábová	bóóvá/mábóóvá
step over	kölámböka	köffrá	òtámbóká
sterile man (or woman)	gmwddmba	mddmbė	móómbá
stick	sóómi	ŋkômè	mòrėsa
stir, mix by stiming	kókölögá ?, kóvülúgá ?	kösäängyä	òkólöðngá
stir	kókölögá ?	kökölöä	kölööngá
stir up	kóvwitmá	,	órindölá, ósárjgéré
stone	iwė/mawė	ißüyê	wee/mawee
store up, collect	kokusanya ?	köziíngá	òviríŋgà
straight (make)	kögőlőőlá	könyülüshá ?	wòòlòlà
stranger, guest	<u>'</u> unjeeni	mùyini	mwèènyò
stream, current	iléémbó	mbóté	mòŋkànànò
strength, power	ingúvů	ŋgṅlü	ŋgùlü
		squid (not hazancha) squid (not hazancha) valid (a. 10 allow another to valid (a. 10 allow another to squeeze out squeeze unit squieze (not squeeze unit squieze (not squieze unit squieze (not squieze unit squieze (not squieze	squarez ouranti que quanti de describación de

rènya

streich ontself 35 sinke, knock 25 sinke, knock 25 sinke, knock 25 sinke, knock 25 sinke with a 57 sinke with a 57 sinke with a 57 sinke knock power 37 sinker (bib is 34 sink	riedra oneself minder oneself minder with a spear minder with a spear minder with a spear minder (e.g. grain of cont) minder (e.g. grain of cont) minder (e.g. grain of cont) minder (e.g. grain of cont) minder (e.g. grain minder (e.g. grain minder (e.g. per mind	kojamba kojamba kojamba kodasa doża kopolola kontoniona kontoniona kontonia konyogelia konyogelia konyogelia	schlaufter schlaufter	depositional formal montant montant worldota pilitico Nokevatia kosta debia nutristani donpia donpia do
	intersent hi a spear hi a spear (e.g. grains of com) uddy (tos): be spouli e breast) bear patiently ave ave	külasinde Odzi Külasi Kopololia Kevikümüdi Kanyöngelela Kanyöngelela Kanyöngelela Kanyöngelela Kanyöngelela Kanyöngelela	kchindratia kchindrada kchindrada kchindrada kokinggonala kokinggonala kokinggonala kokindratika	innah mod modioosa voidoosa ojisto ojista okoka ndirikani odorjal ndirima
	to to the state of the special of the special of the spoiling (be); be spoiling the breast) because the spoiling of the spoil	KOlásak ódzi kopatola kopatola kwinkamóda kokukamóda konyódngelela kogógómtta kogógómtta kokokónga	kohiúngal lapbili kohiúngal kohiúngal kohiúngalula kohiúngalula konjal konjal konjal konjal konjal	idmah medil wediolota olitiko kokevalia kokevalia sekevalia olotyal edisima sekalases
	In a spear (e.g. grains of com) udiy (be): be spoili e breas) or any ni ni ni ni ni ni ni ni ni	kdiásá dózi kopololia kolokomóla kdikúambá kdnydongelelia kdodonga kokdónga kokdónga	richtungse richtungse Rougeleiche Rougeleiche Roberschaften Roberschaften Roberschaften Roberschaften Roberschaften Roberschaften Roberschaften Roberschaften Roberschaften	möri wordooda wordooda ojijiko kokevala osata okola ndirikani donjala katalane
	(e.g. grains of com) udly (be): be spoilt (be): be spoilt) acea pathently acea pathently in in	ddzi koptola koktikimdia kotkikimda kdrydorgelela kopdogomila kokdorga	kobiolopii kobiolopia kobiolopia kobiogaloula kobiolopia kopinalika koopia koopia koopia kohimtiroja muulekkinyi muulekkinyi	workloba ojitko okstevata ossta okola ndirikani okopka milima
	(e.g. grains of com) udity (be); be spoilt e breast) or and and and and and and and and and and	kapalala kwitutumala kafkuimta kajnyoongelela kaladagamta kalkoonga	koriúngala kovivelerya koskurgúvála koskurnoka korjaka korjaka korjaka korjaka korjaka korjaka korjaka rozsaketyvé medekétyvé medekétyvé	ojitko ojitko kokovala osita okola ndirikani ofopka milima
	(e.g. grans of conv.) (de): be spoilt (be): b spoilt average) H d	kolistismis kolistismis korologelelä korologomia kolologa	koviyéleryá kokonggoválá kotsáamboká kotsámboká kotojka kotojka kotojká kotojká medekényé medekényé medekényé	ojijiko kokovala osita okola osita okola odirkani oonjka miimma
	udly (be): be spoil (be): be spoil be breast) on and ht	kvikutumbia kdikuiumba kdinydongelelä kdidonga kdikonga krikulona	kotykotyjak kotykotyjakak kotyka kotyka kotyka kotyka kotyka kotyka kotyka mwebenyé mwakaso	kókoválá ósita okólá ndirikáni óónjká miirná
	(be); be spoilt e breast)) sear patiently and and d	köküümbä könyööngelelä kögögömilä kökööngä	Kodantoka Kodantoka Kodinalka Kodina Kodina Kodinintrya Walinintrya Marekekenye	osta okola ndirikani oonka miima
	(be); be spollf e breast) bear patiently and and d	kögögömtlá kögögömtlá kököángá	kotántatká kotántatká kotojká kotojká kotojká kotojnutritryá mwébkényé mwekényé mwekényé	ndirkani obrjka miima kataansi
	e breast)) pear patiently and ht	kögögömilá kököóngá kötsöömä	kötántátká ködyká ködytká köhintrítyá mwéékényé mwéékényé	oogka miima kataansi
	e breast)) ane ane ht	κάκδόημα	koóŋká koŋŋká köhimtriyá mwbekenyé mwdaso	oogka miimä kalaansi
	e breast)) none patiently ane th	kakoajja	Köönkä Köhimitryä mwéékényé mwáásó	miimā kalāānsi
) bear patiently and the think the the the the the the the the the the	SCHOOL S	könimirina mweekenye mwaaso	kátáánsi
	ane hatently ht	NO SOUTH	mweekenye mweekenye	
	m d	kövümilla ?	mweekenye	494141
	d wee	Lociesta	mwddso	кејета
	ž 0 .	The state of the s		loova
	ъ.	guzgwa	1	ilpostérens
		köpilimä	köringtrira	The same of the sa
		komila	kòmiryà	omera
		Lebidoolish	kwillaha	chadi ya motalanja,
777 swear		a distribution	Sections	biró
Sweat sweat		ijaasho 7	and a second	Africhestropes
	meen up collect in a heap	Koonzuilla	KOKUSA KOSU	
	-			Michaelend
		krinvēdiā	köfyáirá	Olycelerya
843 sweep		1	and the same	mòréré
517 sweet, I	sweet, pleasant	nuoou-	400-41	OSDUTA
54 swell		köviimba	ROSuba	dwiji
	(pode) become	Wisi 7	lofyd	211116
	(Silon)	in denna	ipáángá	panga
933 sword		pagilia	and the same of	mökérá
360 tail		guchila	BINDLIN .	Albhob
	10000	kölävä	kwaaga ?	Oldalia
_	ake leave or		kottiira	ôtéjérá
778 take in	ake in (from rain, etc.)		444444	otoola
	camy	köseenda	KOLODIA	

waapa ?

No	English	ìCìWòòŋgò	KiiRàngi	KèèMbùwè
233	take off (clothes), undress	kóvùúlá	kwifúmyà ŋgòò	ôsúnyá ngôò
530	tangle		kwitáringíriryá	òsànjàsàànjà
898	taste (v)	kờmyảàndà	kờsáèrà	ósèérà
985	teach, instruct	kůlífogá	kòfúndishà?	òmànyishà
621	tears	másóózi	miísóóri	mèėsóri
412	ten	íkòmi	ikòmi	kómi
121	termite	itshwa	môswà	měkěsě
739	testicle	àmàβôlô	ndôlô	mbyà
1020	that	yílà	(ki)-là	kérá
455	thatched roof	iviimbò	màkìnù	njáló
767	there	kôlá	kòrà	fárá
54	they	àwèèně	vôôvô	vôó
444	thick, fat	inénů	nénéhá	néně
86	thicket *	isáká, ipóólú	isáká	tòòndò/màtòòndò
854	thicket	isáká, ipôôlů	isáká	kátó öndő/mátó öndő
619	thief	òmwiivi	mwiivi	mwèívi
23	thigh (of human)	lópäámbá/ ìmbáámbá	ràáwà/màáwà	kivěrô/vivérò
22	thigh (of animal)	lópáámbá/ ímbáámbá	kijómbóló	kivěrô/vìvěrô
559	thing	chífndð	kiintò	kímáká
987	think, imagine	kòwáájá ?	kwiririkana	òríríkànà
651	thirst	inyöötä	nyòótà	nyòòtà
740	thorn	iliívwà/àmíívwà	mwiiwá	mwiiwà/miiwà
689	threaten	kökwóówóká	kööfyä	wùùmbà
532	three	zítátó	ítátő	säätö
115	thrust into	kótůùlà	kðtúúngá	òfishà
420	tick (cattle or dog)	řingôpě ?	ŋkúfà	ŋkóófà
1034	tie (fasten) (vt)	kônyèpà	kôchúủngà	òtúŋgà
258	tie up	kônyépá	kở chú úngà nà lờ đỉ	òtúngáná mòri

8	English	iCiWddngd	KiiRàngi	KèèMbùwè
978	tingle with excitement	köjilimükä	kwittígá mávérérá	dsisimoka 2
119	tip, point	sóóngófű		nsóló
741	tobacco	ltüümbä		tūbátí
146	today	ìléélò	isikū	ėnsiko
742	toe		ināāmbā	ngo
445	tomato	ìnyaanya	nyáányá ?	nváánvá
105	tomcat (half-wild)	íwákà	ihülümi	ndůnoári
743	tomorrow	iyòlò	là mùtóondó	lòòvi
166	tongue	dólimi/Indimi	lòrimi	lòrémé/ndémì
120	tooth (canine), tooth filed to a point			yèèó rá mbáre
267	tooth	lliino/āmiinò	ivoo	véd/máň
306	top, peak	pàlóólò	chůlwí	igali
293	tortoise	frigóóbé ?	kisámántóhé	nkúlů
277	town	İst	isi	mùii ?
378	tramp of feet	Ölwééndőőlé	Kiikii	mikindo
270	travel	kdwddkâ	kökírá njírá	ôtáámbà lötáá
240	free	ikwi	mùtî	mòté
538	tremble, shake (vi)	kütétémá	kötétémá	ósingisa
299	trickle away	kökwitika	kwiika	Ósólórá
401	trunk (of elephant)	,	mùlômô ?	ŋkónó
604	try	kūpāājā	köyévá	wėsėėrėrya
909	tsetse-fly	indólóbó ?	ndóróóbó ?	ngivà và nòòn
938	tum upside down, tum over	köpiindölä	köpíndülá	ówólá
174	turn round	köpilimyä	köriingiriä	ólingátérényá
711	tusk, elephant's (middle size) *	ipèèmbé	endo ?	chiika
452	twin	ímbásá/ámbásá	maasa	básá/mábásá
185	twist roll, spin with fingers	kúsókótá ?	köfótá	òfótérèrà
483	twist, esp strands	kúsókótá ?	köfőtá	fótà

	- 01	The same of the sa	
2	iwili	iviri	ivere
-	kiwėlė	kimífrá	kìmirė
ncover reveal	cófünölà	köfűnölá	ókúnólá
5	máwisi	itiindi	ntôkôôlô
	máwłsi	mbisi	mpisè
	palódió	mwith	yooli
	kwiimitila	witma	weema
advantation of the same	kütüündä, kükünyä	köniä, kökööjä	onia, osumaa
	màtóózi	műkáójó ?	masuma
	külümilia	kötűmiá ?	orá ndíhě
utmost, highest point	pálddíð, Ichiléélé ?	chòlò	lòkülü
Second Sec	dmyüükê ?		móóki
	múshlípá ?	iðbáási	möökiifä
	hala	Kajitji ?	kėjiji 2
vicale (bride) aid	mwaánóké	rnwāāri	mwääré
	fndoòtò	ndôôtô	virobto
voice (thunder)	delilingd	sauti ?	riyd
	KÓIÓÓKÁ	kötániká ?	oloka
walk (take a)	kökwééndá	köyééndá	otingoka
, and	kowala	kòdòmà, köyèèndà	fétà
	diówddmba	lðkáándé	ŋkaanda
wish beed with	kövaámbá	kŮSAAKA	OSBAKA
	rviità ?	ŋkôôndô	nggui
pod-pes	toitt	ngtri	ngiri
wash opeself (after evacuation)	kokwijoveela	köswéswéétá	weesoola
wash (hands)	kokúúsá	kôôyá	wodya
wash (clothes)	kökáándá	κθήτια ηθόό	waina ngoo
wash, take a bath	kochífndá	kóóhá	woova

000			AllKangi	KAARBAN
322	water	máázi	maaii	MECHIDIAN
656	wave, let off a trap, remove a spell	kölágölá	kdsíyá mütéhó	maayr
1017	_	chudáchud		
1010	-	Simple Simple	20030	siyè
881		garavu	ηκακοδίο	mònidùved
3	away	Kolesha	ködáániá	òrèchà
234	wear, dress	krivwaata	Andrew Street	
501	weave, knit	kriebon	PININI	ovekera
1015	-	iohilo 2	Kochuma	otrima
210		Comp	druto	drito
2 5	Man.	Ichisima	idüündü	sòòlá
90	wet (get)	kökölöwä	KÓÓIÓVÁ	AMINA
919	what?	chỉnđó chi	ché	2000
469	which?	chíchí	- Dickers	1777
192	whistling	dibibazi	month	KIroore
175	white man	drumphili	uolou	morori
610	-	Olimonio	agliaginu	mosoongo
200	wille	Ineelo	njerů	niéro
910	who?	ó náánú	ânié	how
28	wicked	įwi	évéhá 2	The same
339	wife	gnchima	C property	BAOH
187	wind up (thread)	khadándá	P P P P P P P P P P P P P P P P P P P	moka
746	wind	drawdyd	Kopunania	fota
937	Winnow	44444	upeno	mpéfó
	100000	Kopeeta	kwêêrâ	fáráryá
	adiw	köpyeelä	köfütá	soola
28	wire (brass)	fbáángili ?		Panishald
194	witchcraft	diázi	- Construction of the Cons	Milyaalo
279a	withhold from	bolonisma	2	olova, osave
970	withhold from shaking	Pillimayou	Kwiina	òtimà
0 0	withhold from, abstain	kokwiinyima	kwiima	weetima
220	woman	wachichima	mwaana/moonto mookwe	modulo mot

No			KiiRanni	Kadadhima
747			indà	nda
812			Isaáre	ntóónaó
772			köjièèngà	diisha dièènna
167			mbrimo	mòrèmò
8			kdúnánia	offolia
344			köfűűnchá	òòkāmā
773			kwaasama	ôrá mvááň
593			nàaka	mwaaka
750			uiiio	mèèió
15			weewe	with
1018			nyūūnyū	uvė.
715			m(i)Iāvānā	mwaana/mohnto molome
637			yaanyu	vàànyú
693		ðchijááná ?	mùtáváná (m), mùhiinjá (f)	mótáváná (m), mwááná mók
292	zebra		njaé	ndákò vá isáké (donkev of th

Appendix 1. Zone F word-list: F24 and Proto Bantu

No 133	English abdomen stomach helly	z		Proto-Bantu (Guthrie)
495				1609 -póté
786a	abundant/abound			
786	abundant			2082 -yingi 1296 -mém-
571 252	abuse, insult abuse, reproach	kótöxáná kötákílá	kút0xáná kütákíjá	1827 -tók- 1827 -tók-

2	English	KiKífmbò-N	KiKifmbò-S	Proto-Bantu (Guthrie)
809	accustomed (get)	kởmànytílà	kömänyílá	1284 -mán(i)-, 968 -júb- ?
274	act (vt)	kónójá	kúnója	1071 -kft- 1710 -tènd-
523	dn ppe	kóóngéélyá	kööŋgèlyá	285 -càŋg(àn)- 2129 -yòŋg-
927	adjacent (be); border (vi)	kößfímbíŋxáná	kößitmbiŋxànià	1419 -paka ?
662	adze, carpenter's	mbiijo	olijo	87 -b é(é)jó
254	affair	mpóla	mpólá	771 -gámbó
1002	afraid (be)	kóógópá	kóógópá	2110 -yógðp-
168	agriculture	kölímá	kölímá	574 -dimô
976	all	-900s	woose	302 -(n)cė 2120 -yona
248	alter, change	kögálölá	kögálólá	760a -gaddd- 1515 -piddk- 1528 -pinddd- 1529b -pinddk
595	animal	ndimwaana	ndimů	1909 -(n)yama ?
617	answer a call	kwiitixa	kwfffxå	2018b -yftlk-
782	answer, reply	kötáángólá		
664	ant (reddish-brown biting)	silaamba	nsíláámbá	ps 106 -cidáků
122	ant-hill	kdswa	kfswa	882 -gddd
663	ant (small)	nslinsi	manyansaale	422/3 -cdngd
586	anvil	,		965" -jöndö/jöndö 403 -cűb-
686	apply by stretching, spread over köβáámbá	ver kößáámbá	хо́βа́атbа́	39 -bà(à)mb- 58 -bàng-
976	appoint, set up	köláángá		2059 -yim(id)-
22	arm, hand	πάχδηδ/πίχδηδ	műxönö	158 -bôkô 1142 -kônô
177	armpit	ŋkwaapa	ŋkwaapa	1171 -kóápá

õ	English	KiKffmbò-N	KiKifmbò-S	Proto-Bantu (Guthrie)
203	arrange, put in order	kởpàảngà	xópààŋgà	1440 -pá(á)ŋg- 1459 -péd- ?
204	arrange, put right, repair	kónógélélyá	kůnógělělyá	
478	arrive	kůpixá	kdpfxa	1550 -pik-
999	arrow	isoonga	isòònga	386 -còngà
999	arrow (head of); spear head	kfntððló	kíntóúló	
337	ashes	máù	máů	216 -bij
199	ask for	kůlôómbá	kólóómbá	653 -dómb-
88	assemble, collect (vt)	kðsáángílá	kósáángfiá	285 -cáng- 459 -dáádtk-
789	aunt (father's sister)	sééŋgi	sééngi	303 -cé + 810 -ngí ?
148	avoid, dodge	kůkwěépá	kůkwèépà	521 -dèg- 1986 -yèp-
688	awe, fear of God	,	2	
667	ахе	ntèmò	ntémò	1408 -pácà
				1706 -témò
364	baboon, ape	mpdómá	mpöömä	
634	back of (at the)	kdönyúmá	xddnyuma	2182 -(n)yùmá
297	back	mùgóóngó	mùgòòngò	858 -gòŋgò
297a	backbone	ngálá mügööngó	ngálá mùgóòngó	273 -cánà +
				1273 -kúpà + 1731 -tí +
				858 -gòŋgò
27	paq	<u>iā</u>	īgi	1d- 7e
37	bad (become), rotten (vi)	kůwóla	kůwôlà	153 -bòd-
87	bait	•		1920 -yambò
398	banana (plant)	mùdóóké	múdôôkè	1779 -tóókè
397	banana (fruit)	màdôôkê	idôôkê	1779 -tôôkě
388	banana (for cooking)	mádóóké, kixölóbői		,
1005	paopap			214 -bùyú
			717	

Š	English	KìKífmbò-N	KiKífmbò-S	Proto-Bantu (Guthrie)
1022	bark (of tree)	ipátá	ipátá	1095 -kóbá
313	barren (of living being)	mùgờómbà	mügddmba	894 -gdmbå
314	barren (of land)	ŋxáků		
376	base of tree-trunk	itinà	itinà	1756 -tinà
650	bask (in the sun), warm oneself xóótá	xóótá	xóótéélá	2136 -yót-
576	basket of open wicker-work	isáányxá	isáánxá	
577	basket (plaited)	xikāpū	kíxapó	
643	bathe	xóógà	xóógá	2107 -y6(6)g-
498	be fitting, behove	köfááyá ?		
-	be, become	ко́ва	кора	2 -bá-
955	beach, coast, shore	ŋhwàáni	ŋhwaani	1900 -yàdó, 1585 -pó-
827	bead(s)	waambo	waámbó	291 -cáŋgá
416	Dean, kind of bean (from	ŋkdġndé	ŋkġġndĕ	1222 -köndé
.,,	Constitution of the consti	and the Assert of		
41/	bean, small (from bean plant)	manalage ?	mahalage 7	
844	bean (runner)	ŋkddndê	ŋkgġndê	1222 -köndè
1037	bear child	kolela	kòlélá	136 biád-, 512 -déd-
147	beard	ndézù	ndélů	519 -dêdû
768	beat	κόκθβά	хокора	1182 -kób-, 1590 -póód- 1820 -tódf, 1861 -túd-
759	beautiful	-sógá	-sôga	2046 -yija?
162	peq	kitáándá	kîtâândâ	1666 -lándà 1640 -ládà
161	bedstead	itáándwá	Olfili	563 -didi
653	pee	njôki	njoki	2156 -(n)yóki
775	beer	ntili	ntfi	1901 -yadóa
497	befit, suit	kónógélá	kůnógělá	
101	below, underneath	háási	paansi	332 -ci /pà-mò-nci
186	bend, twist (vi)	kwiigóóndá	kwiigòóndyà	
			812	

468	pend (vt)			
400		kwiigoonda	kwiigoondya	
22	bewitch	lòlógá	kólóyá	
930	bifurcation, cross-roads	maaxa		940 -jida + 1406 -pac-
222	bile	ndölílá	ndílò	689 -dódó, ps 190 -dòdòè 690 -dódòè
262	bind up, splice	kötüüngá	kótùúŋgà	785 -gàŋg-
658	bird-lime	willeembo	Oléémbó	ps 161 -démbó 578 -dímbó
811	bird	nyonyi	nyônyi	2121 -yöni/nyöni, 522 -dégé
46	birth (give), to a child	kölélá	kölélá	136 -biád-, 208 -böt-512 -dèd-
125	bite	kölümä	kölümä	-mop- 969
221	bitter	-xaii	-xall	688 -d0d0 984 -kádí
223	bladder	itondízyó	ikibófű ?	1839 -tönd-, ps 477 -tüüd-
482	blind person	mpófü	mpófů	1573 -póků
699	plood	múgázi	chááji	766 -gádí, 2081 -(n)yingá
496	blow on, blow up	köpüütä	köpüütyä	1613 -púd-, 1623 -púúp-
238	blow bellows	köpüütlitzyä	köpüüttitzyä	737 -dügöt-, 738 -düköt-
463	blow away	kópépélőshá ?	köpépélőshá	1489 -pêép-
977	boast, brag, praise oneself	kwiidāāi ?	kwiigaamba ?	
929	boat			1949 -yátó
670	body	müßiti/mißiti	müßiti/mißiti	112 -bidi
581	poil up	kösélőxá	kösélőxá, köfüllyá	1777 -tobg-
30	boil (vt)	kósichá	kösichá	
433	bone	ikūpa	ikūpā	1273 -kūpā
564	bore a hole	kòdòlà	kūdūją	1817 -tôd-
1008	(pe) moq	kölélwá	köléhvá	136 -biád-, 208 -böt-, 512 -déd-
910	borrow	καχορά	kóxópá	1152 -kôp-

No	English	KiKífmbò-N	KiKifmbò-S	Proto-Bantu (Guthrie)
872	bottle	nsúpá	nsópá	425 -cúpa
928	boundary	lóßimbi	lóßitmbi	1419 -paka ?
671	bow, bending	Bóta	òtá	1631 -ta
909	bow	Bóta	òtă	1631 -ta
953	Dowstring	ŋgðsa	ngósá	860 -qòyê 7, 1583 -pót-
28	brain	βόόηκὑ	O BOÓNKÓ	169 -bondo
509	branch	itaambi	itaambi	1636 -tabi
375	bread	můxáátě ?	můxáátě ?	101712 -kaaté
831	break wind *	köfüfümőlá	kdsülä	431 -cùd-
11	break, snap	kóbwáádá	kólůná	230 -bún 233 -búni-
1036	break wind	kösülä	kősülá	431 cùd-
17	breast (of a woman)	máßéélé	máßéélé	71 -bėėdė
489	breath, breathing	lyddhė	lyddpė	1468 -pèèm-
490	breathe, rest	kdsúúpá	kúsůůpà	1468 -pèèm-
138	bridge	idálájá ?, itiínxátilnxá ?	idàlájà ?	460 -dado
139	bridge (wooden)	idalájá ?	idalájá ?	460 -dàdò
885	bring, fetch	kőléétá	köléétá	546 -déét-, ps 355 -nént- ?
171	bring to light	,	köpöpílá	
882	bring up (a child)	kösödŋgá	kởlélà	510 -dèd 441 -cúna-
099	brook, stream	xàmóóŋgò	xámóóŋgò	662 -dóŋgà, 2000 -yiji 2041 -viai
942	broom	kftêêyô	köpöti	1141 -k ó(ó)mbó, 1509 -pfágid-
113	broth	mùsóli	müsőli	405 -cùdi
381	brother-in-law, sister-in-law	múlámů		479 -dámö
341	brother (older)	műkölő	mbdyéé, műkölö	1198 -kúdð
673	brother, relative, fellow tribesman	mùdògò	idógó	692 -dôgố
874	bruise badly, take the skin off	köfyöömpölä	köfyömpölä	398 -cddb-
7	buffalo	mbógó	mbógó	157 -bógó
			720	

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
807	build	kójééngá	kờjêêŋgà	935 -jèŋg-
674	bull	iyàgàámbà	ìgòòmbè	697 -dómě, ps. 193 -dómì
80	bunch (of hair)	isáánxá lyá nyélé	isáánxá	ps 103 -cici
890	burden, load	múligó	múligò	614 -dígò
645	burn (vt & vi)	kóβàxà	kóβàxà, kópèémbà	1902 -yàk- 34 -bàk(i)-
231	burnt (become)	kópyà	kòpyā	1502 -pf-
179	bury	kůzyříxá	kūpūsitīyā, kūzylikā	615d -diik-
555	bush	ípôôlů	ipoòlù	260 -cáká
21	buttermilk	mbάβὸtὸ	-	
514	buttocks	itàxò/mátàxò	ítáxô/mátáxô	1650 -tákô
301	buy	kògòlà	kògòlà	876 -gòd-
873	calabash	nsěénké	ìsèéηxè	426 -cúpà 296 -cápô
857	calf of the leg	lòsàlútà	nsálútá	264 -cáků
877	calf	ndààmà	idámá	1922 -yànà
31	call	kwiitáná	kwiitánà	105 -bid- 2096 -yit-
675	canoe (dug-out)		igáláwá	1949 -yátô
602	canoe		igàláwà	1949 -yátô
993	carry a child on the back (in a blanket)	kòpáápá	k ò pààpà	1448 -pááp- ps 520 -yíbád-
567	carry/lift on to head (take up) a heavy load	kwiitwiixa	kwiitwitxa	1812 -tóík-
97	carry astride on the hip	kòpágátá	kólélyá	1448 -pååp-
560	carry, take	kôsôlá	kösölä	197 -bóók-, 3651/4 -cód-
578	carry, convey	kúsóómbá	kwinòtiyà	1806 -tóád-
104	cat	nyàáù	inyàáù	1420 -pákà
286	cattle	nsáwó, mitùyó	ìmìfúvò	850 -gómbè

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
486	cease, finish	kòmálá	kómályá	351 -cíd-, 1281 -màd-
526	centipede	táándù ?	itáándò	
247	change, turn round	kờgẻlớxà	kôkélyá, kögélóxá	759b -gàdôk-
334	charcoal	íxálá/máxálá	ixàlà/màxàlà	980 -kádá
963	charm (esp. to ensure wife's fidelity) (n)	kúlègà	•	990 -kág-, 293 -cángó ? 1698 -tég-
32	chase (away)	kờβtíŋgà	kðßífŋgà	129 -bing-
515	cheek	itàmà	ítàmà	1652 -támà, 300 -càyá
92	cheerful (become)	kờsàngàlàmúxà	kðsängálámúká	287 -cáŋg-
106	cheetah	dúmà ?	isòβì ?	
585	chest	kikùßå	kfkùβà	1258 -kúbá
672	chest (of animals and birds)	kiküβà	kfkůβà	1258 -kúbá
431	chief, headman	mùhányà ?	műkölö	ps 436 -témi, 1195 -kódó, 1911 -yámi
431a	chief	mútěmi	mútěmi	1911 -yámì, ps 436 -témi
679	child, infant	mwàànà	mwááná	1922 -yánà, 1923 -yánàké
597	child, offspring	mwàànà	mwàànà	1922 -yánà
886	chin	kflėzù	kipópi	520 -dėdù
83	choose	kờsààgờờià	kòsògòólà	255 -càagòd-, 3651/2 -còd-
109	civet cat	wálálámúkříyá	-	1878 -tùŋgô
255	clan	múgànà	ůxôô	779 -gàndá, 552 -dìàngò?
841	climb, ascend	kòtáántá	kòtáántá	
550	clod, lump	ilòóŋgò	kiβòòmbà	
851	close (the eyes, mouth, etc.)	kötiindiilä, kömümyä	kötiindiilä, köküümbä mülömö	617 -dim- ?
299	cloth	kitámbálá	kitäämbálä	487 -dámbá ?
235	clothe	kólyìíxà	kůlyříxá	720 -dúád-, 728 -dúík- 1915 -yámb-
300	clothes, material	mwééndá/ myééndá	mwééndà	1978 -yéndà, 873 -gòbò
305	cloud	ilûûndê	ilüündė	748 -dùndè

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
817	coagulate	kògàándà	kògààndà	777 -gánd-
941	cobra (spitting)	nswiffa ?	ηκόβόκὸ	1857a -túíd-
906	cohabit	kwiháátá, kwilgóná	kwiyingfiffià	2016 -yingid-
465	cold	mpėpò	mpèpò	1492 -pépò
624	come	kwiijà	wijja	2045 -yij-
505	come on suddenly, take in the act	kößágánikilyá	βởshííshá ?	284a -càngàn- ?, 1940 -yànk- ?
230	construct, put together	kônôgêêlyà	kůnôgělělyá	86 -bèèj-
471	cook	kótěéxà	kůtěéxà	734 -dúg-, 1701 -téék-
557	cook in water or fat	kótèéxà	kòsèlókà	1777 -tóòg-, 1778 -tók-
43	cooking pan, small	kililio	kixàllìngflò	120 -bìgá, 134 -bìvá
385	cool (become); get well	kôpôlà	kópólá	1564 -pód-
265	copper, brass	shábà ?	shábà ?	•
283	copy a pattern		kòlondèlélá	654 -dond-
894	cork, stopper	kíkůndikřlyô	kikůndikílô, kifůníxô?	606 -dibó, 1268a -kúnik- 1271a -kúndik-
52	corpse, carcass	múβlimbá	múviimbà	145 -bimbà
1001	corpse (human)	múβiimbà	múvlimbà	145 -bìmbà 1832 -tòmb-
383	cough (vi)	káxólólá	kůkôtólá	1108 -kóód-
4	count	kởβàlyã	kòβályá	9 -bàd-
100	country (our)	nst yilswè	inst	331 -cf
14	courtyard	isėėsà	ìsėėsa	55 -bánjá
852	cover (up)	kóköndikilyá	kôkůndžkřiyá	1268 -kúník-
285	cow	ŋôómbè	ŋòòmbè	1402 -ŋòmbė
1003	coward	mwóòβà	mwóóβà	2103 -yóbá
335	crab	ngèdèlàlógèègè	likáá ?	981 -kádá
520	crawl, creep	kwáágůúlá	kwāāgūūlā	491 -dånd-
612	cricket		insiliti ?	1981 -vénié

2	English	KiKífmbở-N	KiKifmbò-S	Proto-Bantu (Guthrie)
153	cripple	mülèmà	mùgùláázů	533 -démá
803	crocodile	nwithd	maamba ?	869 -gdėna, 870 -gdīna
310	Cross (a river)	kritaambdxania	kūdixania	1051 -kid-, 1921 -yámbők-
846	(I)	ikėngėlė	ikóngóló	1233 -kángöödő
308	crown of the head	mpáándá	páwóóŋkü ?	
28	cumple	kökünyátyá	kökünjákünjá ?	1149 -kóny-
370	crush by pounding, pulverize	kdpóóndá	kopoondapoonda	1579 -pònd-
393	ouist Contract of the Contract	Báxòxò	βυηκόκό	1125 -kókö
160	crv. wail	kòlilā	kờifià	did-
996	cycumber, small	mataánga	máámbědé	
736	cudoel	ŋxómè	ŋxómê	
165	cultivate	kůlímá	kólimá	568 -dfm-
950	cure, cool, heal	kúpólyá	köpöléélyá	1565 -pód-
355	Cuff	kūpinla	kodúmólá	1703 -tèm-
86	cut lon	kónógélélwá	köpüngőlyá	321 -cèŋg-, 10 -bád-
117	cut to shape, sharpen to a point kopuunia	Kópüünjá	köpönjá	385 -côŋg, 1365 -nööd-
365	dance (of men, to show courage)	kwidaahi ?	κνίβοσίὰ	ps 428 -támb-
63	41000	kwiiniwa ntitintii	kwijoeva, xóbinaa	146 -bin-
623	dark black	-ààbi	nyttild	2037 -yídð, 1561 -pilpi ?
481	darkness	Kilti	kliti	1073 -kfti ?
824	dawn (vi)	kwéélá	wèéLá	1047 -kd-
359	dawn daybreak	weela	weeleela	
744	day after tomorrow	máiððli	majóóli	957 -jóádi
130	day	lúsiků/nsiků	lúsíků/nsiků	352 -ciků, 1750 -tiků
682	day-time	lyddnsi	lyddnsi	329 -cf, 955 -júbà
698	day (all)	lyóónsi lyóónsé	lyddnsî jêlêlê	
751	day before yesterday	májdöli	majóólí	957 -jóódi

No	English	KìKíímbờ-N	KìKíímbò-S	Proto-Bantu (Guthrie)
423	dead person	műhélé	múchì	1074 -kí-, 1247 -kú
424	death	lófů	nchà	1256 -kúô
931	decorate	kónógéélyá	könögélélyá	ps 161 -d èmbò, 578 -dìmbo
446a	defecate	kònià	kònià	1355 -ni-
631	denial	kóslítá	kóslità	1000 -káán-, 529 -dèm-
821	deny	kóslítá	kóslitá	1000 -kåån-
648	destroy, spoil	kóβiipyâ	kònóóná	
437	dew	lòmè	tômě	1290 -mè
219	die (cause to); put to death *	kówòlágà	kògùlààlyà	184 -bód(åg)-, 2095 -yít-
1027	die *	kờfwà, kògùlààlà	kòchà	1249 -kú
425	die	kògùlààlà	kòchà	1074 -kí-, 1249 -kú-
504	dig up, dig out	kờβůsởớlà	köpüsüülä	1621-pùkòd-
503	dig	kösítmbá	kstimbà	1754 -timb-
466	diminish, grow less	kòdòóhà	kòpòngóxà	1044 -kéép-
635	dip	kósápyá, kólitilyá	kôtápyá	732 -dúb- ?, 1781 -tômb- ?
49	dirt	ßòcháfù	igáágá	1093 -kó
680	district, province, country	nsì	nst	331 -cf
245	divide	kògàwòlà	kògàβà	754 -gáb-
512	divorce	külèxàànà	kůléxá	525 -dêk-
367	do, complete, finish	kòmályá	kòmályá	1281 -måd-
366	do	kònòjà	kônôgêlêlyà	1633 -tá- ?, 1710 -tènd-
60	dog	mbwa	mbwà	174 -bóà
292a	donkey	ndógóβê	mpůůndá	947 -jóbé ?
685	door	mulyáángó	gkiti	2039 -yigi, ps 153 -dángò
415	dove (red-eyed)	ŋkùúndà	ŋkuunda	939 -jíbà, 121 -kôôndá
188	doze		kötindíflá	1764 -tingi(id)-
529	draw water (from well)	kótápá mííjí	kôtápá miljí	1681 -táp-
215	dream (vt, vi)	kờlóótá ndôôti	kůlôôtá	672 -dóót-

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthri				
328	dream (n)	ndòòti	ndôôtì	ps 186 -dóóti				
448	drink	kờŋwà	kôŋwà, kôŋwéélá	1378 -nú-				
196	drizzle	mátóónyé	mányúúnyù ?	-				
780	drop, throw down	kởpáβá	kwitmbòla					
284	drum	ntúúntú	ntáúntú	844 -gòmà				
598	dry (vt), set out to dry	kwááníxá	kwáánikilyá	1924 -yánik-				
346	dry	-xáků, -ywà	ŋkàků	ps 557 -yómù				
954	dry up, ebb	kòxàlà	kúpítá	996 -kám-, 1585 -pô-				
345	dry up, become dry	kůxálá	kúxàlà	975 -kàd-, 2161 -yòm-				
289	duck	mbààtà	mbáátá					
243	dust, cloud of dust	Ισβάάβὰ	lànkóándi	1230 -kờngớ				
628	dwell	kwiixàlà	kwiixala	2053 -yikàd-				
492	eagemess, zeal	wààngówààngò	wààngúwààngù					
491	eagle, bird of prey	ixóónà	ixòònà					
563	ear	ítwi/mátwi	itwi	1243 -kátá, 1813 -tái				
70	earth, land	nst	insi	331 -cf				
44	earthenware vessel for serving up food	nyùúŋgð	nyùúŋgů, lùbêéhê	120 -bìgá, 134 -bìyá				
156	eat	kólyà	kúlyà	550 -df-				
900	effort, exertion	ŋgúlů	kwitùtùmúlå	890 -gòdù, 909 -gùdù ps 249 -gùdì				
273	egg	igf/mågf	igf	809 -gf				
443	eight	múnááně	nááné	1341 -náně				
705a	elbow	kiŋxöxöólâ	kixóxóólá chá můkônô	1130 -kókódá				
329	elephant	njògù	njògù	951 -jógů, 1708 -témbó				
336	embers	ixàlà	múxálá	980 -kádà				
842	embrace	kwiikumbatila	kökümbátílá	1211 -kómbát-				
394	end (come to an), cease	kởléxả	xúsilà					

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
952	escape, recover	kópônà, kôpôlôgôxà	kúpônà	1565 -pód, 1578 -pón-? 1594 -pódòk- ?, 1736 -tiid- ?
899	examine, measure, test	xòpìímà	xòplimà	797 -gèd-, 1519 -pìm-
45	excrement, dung	mábi	mábi	135 -bí
958	exorcise, drive out a devil	kölägölä	kòdàgà	1602 -pòŋg- ?
784	explain	kötééngá	kòpààlflà	
620	eye	liisò/miisò	liisò	2030 -yicó
828	eyebrow		nyélé já líiső	342 -cíti, 1153 -kópé 1079 -kígé, 336 -cígé
838	eyelash	ŋxòpè	lákáámbi	1155 -kópé
587	face downwards	kòfùlámà, kòwùndáálà	kůxůbámà	
686	face	βáshà	wáshà	391 -có, 347 -cló
940	fade, disappear	kólimáángílá	kòsilikilä	618 -dim(td)-
891	faint, lose consciousness	köfwá káßilmbá ká ngflí	xòpwèlâ màsàlà	617 -dim-
298	fall	kògwà	kògwà	863 -gů-
549	fall short	kôpôngôkiiwâ	kùpôngóxà	
462	fan, wave	kôpůůgflà	kôpůtříříyá	1489 -pèèp-, 1595 -pòk- ?
764	far	kôtálí	kôtálí	507 -dè, 1645 -tádî
921	fat (be) (of animals)	kônôná	nòònù	815 -gin-, 1370 -non-
922	fat (of animals)	-nónitė	-nóónité	815 -gin-, 1370 -non-
531a	father	dàádà, báábà	báábá	70 -bààbá, 1687 -tààté
382	father-in-law, mother-in-law	můxwè, můkwiingwà	můxwé	1092 -kó, 1174 -kóé
531	father (my)	dàádà	bàábà	7 -báábá, 1686 -táátá
687	fear	wóóβà	wóóβà	2103 -yóbà
652	feathers, fur	wóóyá	màgálà, wààgì	2140 -vôvá
848	fence, enclosure	Ιθόβà	Ιὸὸβà	2146 -yúb-
858	ferment, turn sour	kòsásà	kòsàsà	241 -cáců
762	few (a), not much	-dò	kidó	1044 -kéép-
757	fierce, sharp	kitáki	xáli ?	984 -kádi

8	English	KiKiímbở-N	KiKíímbů-S	Proto-Bantu (Guthrie)
421	fig-tree			
422	fig-mulberry tree	mülümbülü		1246 -köyő
216	fight	kwiikdßå	kwiikoßa	675 -dò-
804	墨	kwiijdlyä	kwiijdlyä	2049 -yijðd-, 1296 -mém-
176	fill a hole, stop up	kókißá	köpüsífílá	602 -dib-
583	filter, strain	kögigidá, köyööngá	kôminya	409 -cddj-?
20	fifth	ntáxálálá	ipita	
516	final, decisive	kűmpélő	kūsilā, kūdūngā	976 -kád-
760	fine, excellent	-sôgà	-sóga	2046 -yijā?
447	finger	lyaala	Iwaala	920 -jádá
323	fingernail	inòòngà	Iwaala	919 -jádá
474	fire	mòàtô	módłó	2138 -yótó 565 -didó
280	fireplace, hearth, kitchen	kixólyó, ijiixó	iliixó ?	2056 -yikò
970a	firewood (collect, cut) (vt)	kůněná	kösöléélá, kösálá nkwi	1079 -téén-
413	firewood	ŋkwi	ŋkwi	1181 -kői
191	fish up, pull out	könyámülá	kwiipölä	
126	fish (old Swahili nswr)	nstpå	fushi	333 -cf, 377 -cómbà 429x -cúf
190	fish (vt), trap fish	kölüßá nsipá	kölüßä	638 -dób-, 731 -dúb-
400	fist	ngúmì	ingúúmi	1225 -könt-
525	five	itaanó	jitaano	1662x -táánó
493	flap wings wildly, flutter	köpápáműxá	kūpāpāműxā	1447 -páp-
832	flatulence	kößiimbèélwä	köbyá imífmbi	432 -cúdi
384	flavoured (be properly.)	kűxölyä	kānógēlā	710 -dd/19-
206	flower	júa ?	iúa ?	681 -dūbā
278	fly (house)	ŋgiŋgi	ກຸຍກຸງຄຳ	819 -gi
1028	fly (vi)	könyáányá, köpápámúxá	kòdiixa	1447 -pap-, 889 -gdddk-
1032	foam *	ifülö/máfüló	ipūlô/māpūlô	1615 -púdô
			728	

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
502	foam	ifùlò/máfùlò	ipůlô/mápůlô	1615 -púdò
143	follow (in order)	kòlòòndà	kölööndálööndá	654 -dònd-
142	follow	kòlóóndà	kòlòóndà	654 -dond-
823	food supply for a journey	mpäämbä	mpäámbà	294 -cángó
556	forest	ipòòlù	ixòxò	260 -cáká
584	forge	kòtyàáná	kùlùgútà nì mùgùβà	403 -cód-, 1743 -tián-
889	forget	kwłißilà	kwitwa	1989 -yib(idid)-
458	fork, bifurcation	mpäändä	ímpääntř	1407 -pácà, 1435 -pándà
442	four	jiné	jînê	1345 -n(n)ė
295	frog	chòólà	bòdià	2150 -yùlá, 1032 -kédè
574	fruit	itúúndà ?	viligi	ps 128x - còm- ?
349	fry	kóxállíŋgá	kðxállingá	982 -kádáng-
936	fully developed, be	kòxòméélà	kököméélá	1190 -kód-, 1132 -kóm(ád)-
625	full (become)	kwiijdtä	kójólá	2047b -yíjód-
316	garden	bùsitáání	bùsitááni ?, kámúgóóndá	
419	gather (flowers, fruit)	kờyàβà	xóyàβà	2101 -yob-, 1045 -kèt-
91	gathered (be), assembled (be)	kwiikùŋgànyā	kwikungaania	
368	gazelle (Grant's)	swáálá ?	kāswā	(1075 -kiá) ?
454	gazelle, small (impala)	shà	pôdnjô	1411 -pádá, 1075 -kíá
108	genet (kind of speckled civet cat)	ntùùŋgò, ltfùùŋgò	întùùŋgò	1878 -tùŋgô
408	get, obtain	kòpátá ?	kôpôkéélá	1453 -pát-
684	ghost, sudden apparition	másóké	ifûmîkîtâ	
568	giraffe	ntwiigä	ntwiigä	ps 468 -tòigà
246	give away (present)	kófůmyá	kôfůmyá	1404 -pá-
449	give	kópèélà	kòpėélà	1404 -pá, 2085 -yíŋk-
916	give light to	kůmůlixá	kùβàchá, kờmùlixà	1330 -mòdik-
815	glide, trickle	kôyélà	kògėlà	406 -códô

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
269	go	kòyà	kôyá	820 -gi-, 1975 -yènd- 2045 -yij- ?
639	go in, come in, enter	kwiingilä	kwiiŋgtlà	2083a -yingid-
63	goat	mbàli	mbòli	185 -bòdi
694	goat, (he-)	ŋgùlààti	ngùlààti ?	1581 -pòngó
695	god	lyóóβà	mùlúúŋgù	715 -dòòŋgò, 955 -jóbà 2147 -yóbà
758	good	wósògà	nsògà	2046 -yijá
388	goshawk (East African) (Astur tachiro)		isäänst	
68	grain (of cereal)	mpěkě	lðsááŋxá	288 -càngà
696	grandfather	kóókó	kóókò	1204 -kóókó
697	grandmother	màámà	mbàyá	1282 määmä
432	grasp, hold in arm	kódiímà	kökûmbátilyá	1267 -kúmbát-
698	grass, reeds	másàànjè	isäänji	393 -cóá
406	grate	köxwääläängä	kökwäängölä	
409	great, powerful, big	ikòlò, ihányà	íkòlò	1195 -kódô
164	grief, sorrow	hůzůúní ?	kůsááyá ?	
371	grind (grain with a millstone)	kòshà	kôsyà	344 -ci-
372	grind coarsely	kóbáláágá	kôbàlágà	1409 -pád-
212	groove, furrow		xátwiíjí	
801	ground, cultivated	mùgờơndà	mügðándá	897 -gòndà
405	grow up, get large, become great	kókôlá	kókòlà	1190 -kód-
913	grow (of plants)	köléémbá	kôlêémbà	724 -dù-, 1273 -mèd-
461	grown (be fully)	kôxómèėlà	kökölilílá	1132 -k ôm(âd)-, , 1190 -kứ
373	gruel, light porridge	mpáápů	mpáápó	1135 -kómb-
358	grunt, grumble	kôŋùúlà	kôsááyá	
205	guide aright	kůlôôndôólà	kwíxálixá páánsi	670 -dòngàd-

Proto-Bantu (Guthrie) 1010 -kángá 1627 -pút 2180 -yúddí, 2179 -yúédé 359 -cingá, 1782 -lingá	22 -bui 7 1500-pt, 784 -ganja 1156 -koopi 555 -dro 1316 -moco 1521 -pfni	pa 243 -gdm-, 2161 -ydm- 1938 -ydrgol 1185 -4040 1265 -ldmü 1185 -4040 1265 -ldmü 106 -4040 1472 -ydmb- 1269 -ydgb- 2043 -ydgb- 2043 -ydgb-	1115 -kódó, 1738 -tímá 1548 -pígá 631 -díló, ps 448 -tímb-
KiKíímbö-S nxáangá múdóji nyéélé úsinga ?	mbył ktgdanja motifia mosó mpfrai koninintia?	pozami pozami kracioya kracioya Potrycko mulada ibve pred pada Raliúnno Kaliúnno kotokya mooto kotokya mooto	móbyó ? Réengápigá Riímbú 731
KiKíímbů-N nxáángá ngóchó lönyééhyélé Búslingá	mbyi ixdófi kdiyilia műmösö müpni köninintla	daywada olgabow Oggabow kabrjalandb kabrjalandb kabrlowa makanjog da ywa mukoho mukoho mukoho makanjog da ywa mukoho makanjog da ywa mukoho makanjog da ywa ma	móóyó mápigá itiímbú
English guinea-fowl gun hair mail (long straight- of animals and Europeans)	hair (white, grey) hand (flat of) hand, right hand (left) handle, haff hang in mid-air	hard murchib, distress hare haste hast detest hast detest head chief person head chief person head chief person head chief person head chief person head chief person head chief person head chief person head chief person	heart hearthstone for putting pots on heavy, serious, dull
No 351 701 772	75 703 157 439 476	955 377 294 781 795 700 678 356 352 361 391	543 944 893

		iflyö 1082 -kinä ?		1522 -oind-		2215.na	1180-441647			14 -bada, 940 -jida, 1435 -	pàndà	883 -gödö,, 1641 -tönda			1133 -kóm- 1182 -kóh-	1861 -túd-	436 -cúkà 803 -oèmbé			1134 -kómb-			1190 -kńd-	836 -góbé <góób-< th=""><th>640 -dôbô ng 181 -dôbông</th><th></th><th></th><th>niúmbà 2168a nuimbà</th><th></th></góób-<>	640 -dôbô ng 181 -dôbông			niúmbà 2168a nuimbà	
Kittimbia		kıtlırının	ndógóósá	kdkddnja	ηκόκὸ ηκόκὸ	ípà, ởxó ipà ùxó	_	kú jisa ků sweé xa	kögüünda	njila		kálógölð kitúindá	inyööngá ölibnyööngá	Itônôómbó ntômôómbó	kúgómělélá kúkůßá		isili	kódlímá kölbáámbá ?	idòlòli ishimò ?	kösitmbá, köxöömbá kösitmbá			kởwééshiimů ? kởkởlyá	ηχόπιδίδ ηχόπιδίδ	ndôwááni ndôánô	lind, ipeembe		nyuumba nxaai inviiumba	
Enalish	hood (of foot)	lieer (or root)	helfer	hem, make a border	hen, fowl, chicken	here	hiccup	hide (vt)	high, be (of meat)	highway	!	lin	hip	hippopotamus	hit with a hammer		hoe	hold, arrest	hole, nest	hollow out	home	honey	honour	hook (for pulling down branches in plucking fruit)	hook (fish)	hom, ivory, tusk	horse *	house	how many?
N	705	2	681	418	069	99/	863	800	38	326		308	925	317	396		206	990	575	836	816	654	150	797	189	707	288	708	263

No	English	KìKíímbờ-N	KìKíímbò-S	Proto-Bantu (Guthrie)
572	hump (of hunchback)	lờβégà	kikūkū	84 -bėgà
573	hump (of cow)	lòβėgà	nůůndů ?	
756	hundred	igáná	mià ?	774 -gànà
320	hunger	njálá	njálà	917 -jádá
33	hunt	kóβèèndà	kògúúβà	904 -gúfm-
34	hunter (professional)	můβèéndi	mùgùláji	904 -gúfm-
35	hunting	kóβèèndà	kðgúúβá	
227	husband	múgóóshá	mùgwiishà	1101 -kóci, 1102 -kóci 697 -dómě
808	hut	nyùùmbà	xáái, idiindígá	2168a -nyòmbá
709	hyena	mpiti	mpiti	1562 -piti
1016	1	nèènè	ùnééné	134412 -né
1013	idleness, sloth	óxátá	úxátá	529 -dèm-
901	ill (be); groan	kólwàálà	kôlwáálá	677 -dóád-
902	ittness, (crippling)	ßótwillé	úlwiilė	678 -dóádé, 679 -dóáldé
275	imitate	kôlôôndêêlà	kölööndélélá	1995 -yig-
16	in front of	kößölööngólö	kölööngölö	69 -bėdė
353	in the middle of	pàxàtì	páxáti	1018a/b -pá/mò-kàtí
118	incite	kòsòòngànià	kásóóngélélá	383 -còng-
206	increase, make greater	kôôngêlyà	kóóngélélyá	2129 -yöŋg(îdî)-, 1179 -kóf
155	increase	kööngéélyá	góöngélélá	2129 -yōŋg-
426	inheritance	isááló, kösáálá	másáátó	
542	inside, in	můxátř	můxáti	1018 -kátí, 443 -dá
353a	inside, middle	páxátř	páxáti	1018 -kátí
132	intestines	Bálá	ùlà	442 -dà
389	intoxicated (get)	kóxólwà	kůxôlwà	1107a -kódů-
513	iron ore		mábwé gá chóómá	2162 -yómá
264	iron	chòòmà	chóómá	1643 -tádė, 2162 -yómà
710	island	kisiwa ?	kisiiwa ?	ps 94 -cèngà, 676 -dóá

Š	English	KiKífmbò-N	KłKtímbò-S	Proto-Bantu (Guthrie)
2	itch	κύβάβά	künyègélá	4ii -báb-
460	jammed (become)	köfyéényénykélá, köxwáámá ? küxwáámá ?	küxwáámá ?	1421 -pákàm-
853	jaw (bone)	mázákölá	íkůpà	300 -cáyá, 61 -bángá
960	jealousy	ipopa	willû	2037 -yidb ?
271	journey	lògèèndò	mùstínjó	808 -gèndò
909	judge (vt)	köyáángólá	köyáángölilyá	480 -dàmòd-
810	jump, feap	kůjnáányxá	kūdiixa	889 -gdddk-
477	kidney	mpigó	impigó	1549 -pigò
218	Kill	kówdlágá	köwölágá	184 -búd(àa)-, 2095 -vít-
677	king	mútèmi	mùtêmi	1911 -vámř. os 436 -témi
787	kite	inààndà	isáánsi	ps 413 -póngôè
347	knead	köxáándá	kölößá	1001 -kand-
348	knee	iyddngó/ máyddngó	illo	729 -dúi. 722 -dú
427	kneel	kötüüngámá, kösüxáámbá	kötüüngámá	1261 -kúkám- ?
209	knife	lóshò	nsiimė	1544 -pió
402	knife, thin, curved,		moululo	
	broad-bladed			
704	knot	igùùndò	igüündö	1272 -kúndô
626	know	kómányà	komanya	1284 -màn(i)
178	lake	izíwa ?		1934 -vànià , 603 -dibà
151	lame (be)	kösüüntä	kütètémélá	
511	lamp	tálá	tálá	1638 -tád- ?
66	land (dry)	nsf yá ywáá/ŋxáků	nsť nxáxů/nxálů	331 -cf
761	large, great, big *	-külü, -hányá	-kölü	1195 -ködö
94	laugh	kůséxá	küséxá	312 -cèk-
792	lay over on one side	kúsúníxá	köküündixâ	2067 -yin(ik)-, 319 -cendik-
1000	lazy	múxátá	ùxàtà	529 -dèm-
669	leaf, blade of grass	ititi/mátiti	isáánjí/másáánjí	1928 -yáni
1025	leaf (tree)	ititi	filti/mátiti	1928 -yáni
		9		

Proto-Bantu (Guthrie)	723 -dù-, 1614 -púd-	2069a -yinam-	319b -céndàm- ?	ps 313 -kond-, 2125 -yond-	319b -cèndàm-	1995 -yíg-	463 -dàg-	345 -clád-, 525 -dék- ps 102 -clíc-/-clíc-	197 -böök-, 820 -gì-	525 -dèk-	1747 -tigad-, 2052/3 -yikad-	884 -gddd	1899 -yádim-	399 -cóbi	485 -dámb-	454 -dáád-, 483a -dámbádád-	764 -gàdàm-, 851 -gón-	197 -búúk-, 2064 -yimák-	1605 -pddp-	880 -gòdò					357 -cimbà	651 -dómó	1698 -tég-, 1589 -pód-
KiKiímbò-S	küsülőlá	kwiinama	kötégémélá ?	kùgàándà	kwéégàmilà	kwiffüündishä?	liùúsà ?	kdsigalilya	kůwúúxà	kůléxá	kösigálilyá	mùgálð/migálð	kwāálūmyā	nsóßi	kůxôômbiishá	kdgdnä	kögönä ká nságá	kwiinölä	kàpéélů	Bocháányá	kimüli ?	nswaaxala	mòkilili, müsitááli ?	lògùsà	nsiimba	mülômô	kütégélélyá
KiKífmbò-N	kósölőlá	kwiinama	kösééntámílá	kögaanda	kúseentámá	kwiifüündishä ?	lòhúsa ?	köléxá, kösilgályá	kówdóxá	kdléxá	kósilgályá	mügölö/migðið	kwáálůmyá	nsößi	kóxóómbá	kdgóná	kögöná ká nságá	kwiindlä	iboohi	ilüünde	láádi ?	nswaaxala	mūsitāāli ?	ngüsä	nsiimba	mülömö	kötékélézyá
English	leak, ooze out	lean, bend down, slope	lean on, rely on	lean, become; grow thin	leaning (be)	learn	leave, permission	leave over	leave, go away	leave (off)	left over, (be); remain over	leg, foot	lend, borrow	leopard	lick (vt)	lie down	lie on one's back	lift up, pick up	light in weight	light, sky	lightning	lime, whitewash	line, row	line, fishing	lion	dil	listen
8	911	8	536	962	535	613	546	1011	547	544	975	310	774	107	878	134	250	791	467	304	805	657	213	629	103	198	926

õ	English	KiKifmbò-N	KiKifmbd-S	Proto-Bantu (Guthrie)
972	listless (be)	kdnyðŋónyà	kúnyêxâ	
1024	liver	itémá	itèmà	1739 -tímà
459	livestock (keep)	kösáβá	kdsáßá	,
319	lobster			X
794	locust	nzigė	fnzigė	827 -qiqë
155a	long (become)	köliihä	kůtáálíímpá	545 -deep-
4	long	-lihû	kötálí	ps. 164 -dèépù, 1645 -tádì 507 -dè
131	look after, care for	kötüünzyä	külélá	441 -cúng-, 510 -déd-
371	look after grazing cattle, help a sick man on the road	ködítmá	kddffmà	441 -cùng-, 550 -dí- ?
354	look at, examine	kokuuna	kökúúná	641 -dòd-, 501 -dáng-
354a	look around	köküűná	köláBáláBá	501 -dáno- os 142 -dáb-
003	look for, hang around (to get something), pursue	кодореета	кодовены	
973	loose (be); faint, weak	könyöŋönyä	köxálálá	523 -dégid-
18	lost, get	kölimiflá	kůpwéélá	618 -dim(id)-
023	louse	mpàni	mpáni	446 -dá
69	love, want	kütögwä	kütögwá	1974 -vėnd-
34	lung	mápdópd	mapóópo	1607 - pòòpò
13	magic *	ßðlógi	Bologi	646 -dògi
14	maize	igáágwé/mágáágwé	igáágwé/ mágáágwé	
121	make offerings to the dead	kwiisėéŋgà	kwiiseeŋga	1659 -támb
526	male	igòóshā	igwiisha	697 -dómě, 1101 -kóci 1102 -kóci
0	mamba, green (kind of poisonous snake)	ηχόβόχό	ηκόβοχο	40 -bámbá, 41 -bámbá
693	many	nyiingi	nyiingi	2082 -vingi
019	many *	nyiingi	nyiingi	2082 -yiŋgi
			736	

No	English	KìKíímbờ-N	KìKíímbò-S	Proto-Bantu (Guthrie)
897	marriage	kwiitóólá	itòólé, ndòá ?	1175 -kớéd-, 1774 -tóód-
895	marry (of man)	kötöólá	kwiitòòlà	1774 -tóód-, 323 -céng- 1175 -köéd- ?
896	marry (give in marriage-of parents, priests)	kùtòòlyā	kòtòòlyâ	1774 -tóód-
814	master		mútěmi	
888	match, harmonise (vi)	kwiixòlà	kůlingánilá	583 -ding-, 584 -ding(an)-
935	mature	kòmèèlü	kökölífilá	1132 -kóm(ád)-, 1645 -tádí '
596	meat	nyàmà	nyàmà	1910 -(n)yámá
259	medicine, remedy	βờgààŋgà	ògààngà, ùgôtà	787 -gàŋgà
260	medicine (art of medicine man)	βớfùmù	űfürnű	1868 -túmô, 787 -gàŋgà 471 -dàgôd-
261	medicine-man	múfůmů	máfůmů	786 -gàŋgà, 1868 -túmở ?
90	meet	kwáágààná	kwiitááŋgà	284 -cáng-
861	melt	könyéméntúkà	kópéélá	1883 -yàbik-
845	midwife		můléliíshá	
859	migrate, move away	kôsàámà	kösáámá	265 -cââm-
1030	milk (n)	máβèélè	mäβéélè	73 -béédé
20	milk (curdled), curds	mbàβàtà	mäβäälė	
19	milk, (fresh) (n)	máshóshó	mäβéélè	73 -béédé
903	millet (bullrush)	βòβèlè	òβélè	70 -bèdé
290	millipede	igóóngóló	igóórggóló	859 -góŋgôdô
73	mix (ingredients, 'season food')	kókáliíŋgá	kösálíŋxániá	286b -cángáni-
72	mix, put together	kòsàànjà	kökülügäniä	286 -càng-
363	monkey (small lightish-coloured)	ntôômbili	ntôòmbili	
362	monkey (colobus- (with long black silk hair, white on shoulders)	ntóðmbíli	ŋkûûŋkû ?	

õ	English	KiKiimbö-N	KiKíímbở-S	Proto-Bantu (Guthrie)
361	monkey (small, dark-coloured)			
716	moon	mwééli	mwééli	1965 -yėdi
609	moonlight	mpėėmbá mwėėli	mwééli	1964 -yédi
59	mosquito	mbd	mbú	172 -bő
436	mother	maayi	mááyí	1289 -máayó
92	mould (pottery)	кодоотра	kdßddmba	199 -bóómb-
717	mountain	lògòlò	kitóóndá	883 -gödő, 707 -dőndő, 1842 -töndá
163	mourning	KING	KIIIIO	567 -dido
1026	mouth	mülômô	mülömö	652 -dómó
272	movement	lògèèndò	lügèéndő	808 -gèndò
979	mud, mire	málóló	Intopé ?	1797 -tópě, ps 466 -tótó
642	mushroom	wiipwa	wijpwa	2103 -yóbá
152	mutilated (be)	kölèmäálá	külèmáálá	534 -démàd-
281	name	lifinà	liínà	2068 -yinà
539	namely	yàáni ?	Kfft	
403	nape (of neck)		fŋxðti, ŋkliŋgö	1162 -kôti
256	navel	iwūūmbū	piwūūmbū	1224 -köndő ?
765	near	píípì	piipi	1274 -kúpí
379	neck	ŋkiiŋgö	fŋkiiŋgò	1086 -ki(i)ŋgô
843	need, request	köpörőgá	kölőómbá	
962	мен	mpyà	mpyá	1505 -pià
718	night	Bótiků	Botiko	1751 -tikð
755	nine	kėėnda	keenda	1039 -kėnda
484	nose	mpúlá	mpddla	1591 -pòdà, 960 -jódò
				ps 512 -yfdò
211	number	nàámbá ?	kößályá, igööngó, náámbá ?	664 -dö(ö)ŋgö
237	oar		múliiŋxö	1014 -kápí

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
939	obstruct	kópiiŋgà	kòsiitžlyä	1532 -píŋg-, 529 -dèm- 1069 -kíŋg-
48	offspring	múgànà, mwàànà	βòléli	1922 -yáná
66	oil (from plants)		mákůtá	211 -bótó
435	oil	mákůtá	mákůtà	1278 -kútà
818	old times, the past	xálè	xálé, pámyááxá	983 -kádě
411	old person	můxôómbi	můláálá, můxôómbi	1197 -kódô
410	old	nsáxáló, ixámá, lyá xálè	nsáxáló	1196 -kódò
214	one-eyed (being)	nsòòngò	nsòòngò	388 -còngò
440	one	lómò	ìmwí	1314 -mó
590	open mouth wide	kwáásámá	kwààsámà	1889a -yácàm-
984	open	kůdůgůlà	kòdìgólà	736b -dùgàd-, 2041 -yigàd
829	open (set ajar) a door	kůdůgůlá	kòdigólá	736b -dùgàd-, 2041 -vigào
876	order, direct	kòlàgililyà	kòlàgitilyā	496 -dàgìd(i)-
961	ostrich	mbúúnì ?	mbúúnì ?	
640	our(s) pl. 1st person)	yliswė, ylitu	-à kớwiiswè	2097 -yító
506	out (go), go away	kófůmá	kófůmá	1622 -púm-
324	outside	hàánji	páániř	928 -pà/-kờ -(n)jé
217	overcome; win, vanquish	kòkiíndà	kòkiindà	1084 -kind-
995	owed by, be	kàlòóndà	-	665 -dònd-
835	oyster			-
207	pack (luggage)	kötűúngá	kờ tú úngà pà fờ mwí	1877 -tùng-
208	pack, press together	kökimängilä	kòkiindilà	-
456	pack, flock, group	ìdáálé	idáálé/mádáálé	
457	pack, bale, bundle (n)	múligó	múligô	1833 -tòmbà
236	paddie (n) *		můtřígxô	
342	palate	ilàànxàmìlò	kináánxó	
9	palm (date)	můtééndě	můtěěndě	1712 -téndé
719	palm-wine	ntíti	ntili	

ŝ	English	KiKifmbò-N	Kikifmhn-S	a de constante de
257	palm (of hand)	klodániá	41-4-14	rico-bantu (Summe)
4	colon (carbin)	BlumBu	videania	784 -ganja
0 1	pailli (lapilla)	akindu ?		21 -bádé
_	palm (borassus)	mühâmâ	ipāmā/māpāmā	
80	palm (oil)	můchlkíchi	můchikíchi 2	1 - 10
459	palpitate, flutter, tremble	kütètémá	kütelemé	0 700 100 1
47	parent, s/he who begets	mideli	minoran	1001 -tud- 7
			IIIagail	136 -biad-, 208 -bot-, 512 -ded
720	parrot	kásúků ?	nvônvi 2	dand out
232	pass, surpass	krikila	Life al	
325	path	dijo	BINON	1536 -ptf., 1051 -kdd-
159	180	pinth.	njila	940 -jida
000	, and	Konpa	xditpå	-dtp- 689
900	pay aftention, take care	köküünä, kwáángálílá	köküünä	501 -dáno- 1026 -kéb- 2
820	peel, shell	köpäätä	köpáátá	1409-044
12	5ed	loßago/mbago	itabottio	- Park of
=	pegs (tent)	ldmaambd/maambd	id modden by feer deported	ps. o .nago
494	pepelcelo	O I I I I I I I I I I I I I I I I I I I	omaambo/maambo	44 -bambo
	O Paris	KWIIIENYEŊKEZYA	kwiiŋgila	2016 -yfngid-
7	benis	iloga	kliógá	155 bódó
984	penknife, lancet	lóshó	kásílí	1544 -nin 426 -chth
228	berson	mūūnto	mittinto	1708 -oth
338	pestle	mitins	in in the second	ONL OFFICE
312	pia	DOOMING	TO STORY	ZOVO -yinci
114	pigeon kind of	of all and a	dannbe	888 -gúdúbé
20	partie and and and and and and and and and and	granda	njitjsa	1121 -kű(ö)ndá
1	pile up, pile loads oil flead	KWIIWIIXA	kwiitwiixa	705 -dönd-, 1812 -töfk-
	pinch, make harrow	kösinä	kdsina	os 111 -cin. (1652 -nip.01.12
121	pipe (tobacco)	mütêêmbâ	midéemba	(d)) ind = 100 in in ind
52	pit, hole	liina	Hink	
7.4	Cho put Cod	Land and Allendar		2013 -yina, 582 -dindi
	pance, par (v)	Kotoola, kouttia	kataala	1818 -tööd-
77	place (n)	paanto	paanto	2215 -på + 1799 -ntrì
76	place of the dead	kózimű	kwiitaambixa	715 -döŋgö, 619 -dimö
			/40	

No	English	KìKíímbở-N	KìKíímbò-S	Proto-Bantu (Guthrie)
225	plait	kòsißà	kờsiβà	693 -dôk-
932	plant, sow	kòpáántá, kòháámbá	kờβyáálà	1432 -pànd-
510	platform		itààntíló	1640 -tádá
834	please, satisfy (vt)		kòtògwá	
93	pleased (be)	kòtôgêziwá	kờnògélà	312a -cêkid-
13	plot of ground	kìwāānjā 7	isèèsà	14 -bádá
647	plunder (a town)		kờβààmbà	
1014	plunge into, cause to sink	kòdùmbùktlyâ	kờsừtilyâ	2026a -yibìd-, 593 -diàm-
114	poke	köpémbélélyá	kůxôlêělyá	365 -còòc-
737	pole, thin	làkítô/ŋkítô	lòsitò	
111	polish, clean by rubbing	kòpālāāŋgólā	köslingá	1409 -pád-, 1693 -tédid-
177	pool, pond	ilààmbò	káláámbó	603 -dibà?
923	porcupine	nóongólf	nààngáti	1376x -nàŋgó
374	porridge (stiff)	βògàti	βògáli	765 -gàdi
42	pot (metal)	ikópô	ixópò	
41	pot, vessel	kisèmè/visèmè	ingégélé	2173 -nàngó /nyàngó
39	pot, mug	můxébě	můnilmbá	
40	pot, cooking (earthen)	nyùúngð	nyùúngờ	2173 -nàngó /nyàngó
749	potato (sweet)	káfů	kildámbá	
646	potter's kiln	itimflò	ishèléélő	
369	pound (grain in a mortar to get off the husks)	kópôólá	kótůlà	1807 -tớáng-
441	pour away	kwiità	kwiitä	2094 -yit-
641	pour	kôtitílà	kòdùmbùgìlyâ	2094 -yit(id)-, 435 -cùk(òd-
748	pregnancy	ndà, miltiùngò	ndà	443 -dà
636	pregnant, be	kởβì ní ndà/ná míitùùŋgò	kòβà nfindà	2062 -yimit- ?
599	prepare	kònògèlèlyå	kònògèlèlyà	
553	press out (oil seed, sugar cane)	kóxámá	kòxàmà	995 -kám(ôd)-
986	produce, put forth, display	kófümyà	kòfůmyà	1622 -púm-, 1916 -yámb-

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
909	prominent (be); put out	kófůmíflá	kópůmilyá	1263 -kúm- ?, 1622 -púm-
518	pronounce	kötééngá	kówuya	1719 -tét-
340	protect by charm (medicine)	kúsálá	kósálá	990 -kåg-
947	protect by charms (target)	kóxàgà	kóxàgà	990 -kåg-
475	puff-adder	kipfit, ímómá	kipftî	1513 -pídí
244	pull	kůkwéésá	kůkwéésà	749 -dùt-
173	pull up, come to a halt	kwitma	kwiimä	2006 -yfm-
172	pull up, root up	kòdùbólà	kálimbálá	1814 -tób(ôd)-?
833	pull, drag	kôkwèésà	kůkwěěsá	749 -dùt-
57	pump	ibóómbà	ibóómbá	
548	push	kờsờớηxà	kötéénkä	1758a -tindik-
992	put, place, set	kôtôólà	kôtóólà	1818 -tóód-, 122 -bfik-
887	put together for comparison	kògėlánžiyá	kògèlàntiyā	795 -qèd-
969	put a pot on the fire	kótèèngà	kötééxá, kötééngá	1696a -tédik-, 1702 -téék-
981	put together, compose	kòtòóngà	kötüüngáníá	1877 -túng-, 625 -díng-
862	python	nsàtò	nsátó, nsáwááká ?	297 -cátò
656	quarrel (vi)	kwiikėnià	kwiitàchā	
180	quench, extinguish	kólimyá	kölilmvä	617 -dim-
485	quiet (be)	kwiixala sele	kwiixālā nyēétē	1589a -pódik-
76	rain	mbùlà	mbùlà	225 -búdá
917	rain (vi)	kátôónyà	kůtóčnyá	1787 -tóni-/tóny-, 1352 -ni- 1861 -túd-
1006	rains, the lesser	mwáánóli	chóónsi	
197	rainy season	kitikó	kitikò	1751 -tíkò ?
580	rumble	kògilimà	kwiitòtòmólà	1853 -tôtôm-
26	rat, kind of	ŋkòsò	nsèèngi	306 -cèngi,
488	rat (field)	ŋkòsò	mbėβå	1597 -půků
24	rat	ŋkòsò	mbėβå	65 -bèbà, 1103 -kôcửė, 1597 póků

Proto-Bantu (Guthrie)	1597 -pákö	803 -qèmbé. 1328 -mito	379 -com- 2, 1543 -pióm-	231 -bún-, ps 287 -kéc-	1709 -téén-	1571 -pokid-	1723 -1été	1000 -káán- 529 -dém-	1000 -káán-, 529 -dém-	2030 -yilli-	1747 -tigad-, 2052 -yikad-	2053 -yikad-, 1747 -tigad-	2098 -vitôk- 1215b -kômbôk-	1612 -pián-	1612 cidadolo casa	1612 pushi(shi)-, 634 -uong-	1612 -puan-	527 -dèm(id)-, 528 -dèm	1267 -kúmbát-	1810 16640	-(1)0001-0101			San -diok-	1460 -pédà	30 -bàdù	107 -bid- 117 -bidi-	1503 -pf, 1504 -pf	1504 -pf. 107 -bfd-	107 -bfd- 1504 -pf	L
KiKifmbū-S	mbėβà	lògèèmbè	kösómá	kwitmbölá		köpökélá	matété	kösiítá	kösiltä	Paletto	Bullen	kösliga	kwiijokila	kwiixòlà	Kwiixòtà	ejevijask	and the same	Kourmbila	Kwisumata	kdsûûnê	kontoisa	keltringa	POROGODA	The state of the s	mpela	logalú	fpillé		köpyá	köpyä	743
KłKíſmbò-N	ŋkùtô	lûgêêmbê	kösömä	kwiimbölä	1.3-11.11.	kopokeela	matete	kósiítá	kökilwä	krisioa	the line	Kosiiga	kwiijôkīlā	kwiixòlà	kwiixòlà	kwiixólá	Parallhanh.	building home	AWILLINIA ILAMBA	kösüüpä	kdshddxa	köshööxä	kdßehmbddka	modify	libera	lojsalu/mbalū	fpiilė		kopya	köpyá	
English	rat- (very large, long-tailed)	razor	read	reap, harvest	distance	leceive	reed	refuse, say no	reject, refuse, dislike	remain, stay behind *	remain stay	Gillain, stay	remember	resemble *	resemble (very closely)	resemble *	rest heavily on he hurdensome	rest the cheek on the hand do	brooding mood)	rest, take a holiday	return, go back	return	revive	rhinoceros	4		ube			ripen (vi)	
8	52	683	949	1007	623	200	237	632	633	545	1035	200	9	488	879	1031	149	964		957	249	1004	200	318	000	000	4/3	900	000	4/2	

	river	móóngó	móóŋgô	662 -dóngá, , 664 -dó(ó)ngó ?
	roar, rumble	kölilä, köliindimä	kolülümile	740 -dim-
	roast	kotima	kötimá	2111
	roast (in/by fire)	kotima	kötimittla	2111
	rock	ibwe ipaampa	Door	1642 1646
	rooster (cock)	njógóló	nióaóló	1203u - Editor - 607 - demo
	root	mûli	mijiji	FOT ALL
	rotten	-Bólilé	mbólú	153 -byd(c) ==
	round (be)	kwiitiinga	krimilinoania	(a) colo de
	round (go), turn round	kóßilingániá	koolilood	-diland to the spanning-
	round, become	kwiiBilingania	Kholloobeis	-Bin- 670
	dp.	kritchichela	- Andrews	-Minnon- ear
	othich corboos	and the same	KOSIIIJGA	358 -cing-, , 1186 -kdc-
	debian, garbage	mutaxalaala	ißila, igaága	
	rubbish heap	llina lya matakalaata	iptio	918 -jádá
	E C	kökitmbilá	kökitmbítá	1062 -kímbid-, ps519 -yíták-
				1/42 -uy-
	sacrifice	sadaka ?	kwiiséénga	
	saft	mūūnyū	mùlééngé	1396 -nvr)
	sand	músengáseengá	Boloongo	288 -cana
	satiated (be); have enough to eat or drink	kwiikota	kwiikūtā	2057 -yikdt-
-	satisfy	kötögéézyá		701 -demb-
-	say to, tell to	köwifia	Manufild	100
	Comion	1	The state of the s	ps son -noid-
		ilge, gnomi	eŋge, xaxómi	1133 -kóm- ?
-	scrape	kopala	kūpālā	1409 -pád 1131 -kóköt-
	scrape, grate	kókwaangóla	köséénsá	1409 -pád-
	scratch, grate *	kdsdßå	kūsūßà	1552 -olo. 111 -clo.
	scythe, sickle	imóózyó	imóózyó	

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
84	search for	kờpởớgà	kðpúúgá	366 -cóód-
85	search diligently	kùpésà	kůpálísá	259a -cákôd
738	seat, stool, chair	kísùùmbì, kítì ?	kítí ?, kígódá ?	1874 -túmbí, 1692 -tébè
770	see	kówona	kówona	164 -bón-
67	seed	mběéyð	mbėėyò	96 -béyó, 211 -bótó
404	seize	kódiímà	kờβáảmbà	1172 -kóát-
611	self	mwèènê	yèènê	1970 -yéné
302	sell	kògòlyà	kôgôlyâ	876 -gàd-
570	send	kótómá, kölágítílyá	kótòmá	1831 -tóm-
451	separate, set apart	kôgàβàníà	kůlėgůnxàníà, kůgáßánià	525 -dėk-
450	separate, leave each other	kůléxááná	kwiiléxà	525 -dèk-
534	set a trap	kátěgá	kátěgá	1698 -tég-
868	set (of the sun)	kólòxà	kògwiilà	-
971	settled (be); be in good order	kůtéxááná	kờnôgèlèlyā	1702 -téék-
754	seven	mpúúŋgàtì	mpùúŋgàtì	ps 419x -púŋgàté, ps 419y púŋgàtí
1033	sew *	kósůmá	kðsúmá	1865 -túm-, 378 -côn-
589	sew	kósůmá	kôsůmá	1865 -túm-, 378 -còn-
135	sexual intercourse with (have)	kwiinyòmà	kwiigònià	1781 -tòmb-, 851 -gòn-
691	shadow, shade	mûlûlê, mûdâxâ, mûnyûmî (human)	kinyóómi	1492 -pépò
867	shame, disgrace	nsòni	nsònì	380 -cónì
116	shame	nsôni	nsònì	380 -côni
724	shame, modesty	nsònì	nsònì	380 -cónì
386	sharp (be)	kóógípá	kůkálípá, kůßá kixáxá	978 -kád(tp)-, 1803 -tú-
920	sharpen	kônôólá	kònóólá	1365 -nòòd-
915	shave	kősèényà	kómwà	1317 -möög-
603	she, he	ŋwèèné	mwèènê	1173 -kóé, 1954 -yé(é)
287	sheep	nxòlò	nxóló	ps 305 -kòdò

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie
1009	shell, cowrie	nsiimbi	nsità	42 -bámbá, ps 110 -címbí
822	shell		íxônjě	
725	shield	ŋgờlà	ngáo ?	906 -gùbà, 756 -gàbô
712	shin (bone)	múlóóndí	műlööndi	1526 -pindí ?
968	shiver, shudder *	kôtětěmá	kötétémá	1726 -tètìm-, 1012 -kàŋk-
528	shiver	kôtětěmá	kôtětémá	1012 -káŋk-, 1726 -tétîm
434	short	-kùpì	íkùpì	1274 -kúpí
430	shoulder, tip of	-	ìβėgà	84 -bėgà
588	shoulder	iβègà/màβègà	ìβėgà/màβėgà	84 -bėgà
839	shout	kúkòβá ibòbò	kửkửβá ìdóólô	
946	shrivelled (be); wrinkled	kwiikùnyátà	kwiisinääsinä	-
763	sick	-lwitté	-twille	677 -dóád-, 679 -dóáidé
870	sift	kdyddigga	kdyóóngá	969 -jùŋg(òd)-
615	sing	kwiimbà	kwitmba	2009 -yimb
3	singe	kóβàβà	kòßàßà	5 -báb-
980	sink, be drowned	kờsápà	kờsàpà	755a -gàbìd-, , 593 -diàm-
170	sink	kògàbílà	kòdòdòmèlà	
726	sister (his)/ (her) brother	ildánmbá	ilóómbó	703 -dòmbò
627	sit	kwiixālā	kwiixala	2052 -yikad-
753	six	múxààgà	můxáágá	1670 -tántátó
785	size, measure	ngėlò	álf mbí	795 -gèd-
123	skin (of person)	ntiilà	ntiílà	563 -dídí, 1095 -kóbá 1003 -kándá
124	skin/rind (of fruit)	ititi	itlíti, mákůůmbá	1003 -kándà
303	sky	iluundė	málùúndě	880 -gòdò
865	slander, accuse falsely, often secretly	kösöngéélá	kösööngéélélá	ps 80 -céb-, 383 -còng-
470	slap	kökößá iköófi	kókôβà, kôpàâtólà	1182 -kób-
970	slash	kópùtà	kòsèmùlà	1703 -tém-, 321 -cèng-

studynes of the control of the contr	1	deller	KłKffmbd-N	KiKifmbd-S	Proto-Bantu (Gunne)
State Control Contro	2	English		to de linia	341 -cfn -
altave, port of several mindese mindrings, inspects mindeses mindreses mindreses mindreses mindreses mindreses mindeses	220	slaughter	KOSIINJa	Andrew Andrew Manufact	
stave (fermale) mindebe mindeste senement.	727	slave, bond servant	músésé	mujimpa, mupisa, mwaasi	ibod. Ago + dady. coot
aitere, (male) mindestele mindestele mindestele mindestele mindestele mindestele mindestele mindestele mindestele mindestele mindestele mindestele mindestele mindestele mindestele mindestelee mindes	728	slave (female)	músėsė	mwaasi	256 - yang - 256
sulere (v) includes to the cholors of the cholors o	720	clave (male)	músèsè	mwaasi	
steep (v) careed to careed	67/	Start, (marc)	khoòna ndòólò	kògònà	455 -daad-, 851 -gon-
steep (n) the step (n) the steep (n) the ste	136	(iv) daals	And an analysis	éndòblò	1 851 -gôn-, 821 -tôdó
sile-ping yielon, accommodation (polithinia polithy plane) and sile-pine yielon, accommodation (polithinia polithy plane) and sile-pine yielon, according to the polithinia polithy plane according to the polithinia polithy plane according to the polithinia polithin	731	sleep (n)	naooio	on tringent on mount	635 -dó, 455 -dáád-
sing be signery they defined a budget contained as a second of the contained and a second of the	730	sleeping-place, accommodation	Bolitii	the hogolea, per ogen	1693 -tedid()-
straining chick chickenson chick chickenson chick chickenson chick chickenson chick chickenson chic	296	slip, be slippery	kötyéléműxá	Kotyeletituka	1362 -ollni
strendigocal code) in classification strendigocal code (see of (v)) including the classification of classification (see of (v)) including the classification of classification (see of (v)) including the classification of classification (see of (v)) including the classification of classification (see of (v)) including the classification of classification (see of (v)) included the classification of classific	1021	small	-dò	Kadokado	700
smell (weet) (v) inclination kultitude in control (weet) (v) inclination kultitude in control (weet) (v) inclination kultitude in control (weet) (v) inclination kultitude in control (weet) (v) inclination kultitude in control (weet) (v) inclination kultitude in control (weet) (v) inclination kultitude in control (weet) (v) inclination kultitude in control (weet) (332	smallbox	ndößi	ndößi	-damin 1386 -nimb
servent (text, of ries) (no.) submissions before a servent (text, of ries) (no.) submissions before a servent (text, of ries) (no.) submission before a servent (text, of ries) (no.) submission probability of	241	smell (sweet) (vi)	könühilifa	kötükilila	1300 -Huday, 1300 -Huday
smell (wal) (w) hotologia kultuka kult	242	smell (had of fish) (n)	könüühä	kờtúxà	390 -CO r, 1300 -Indus-
grande (m.) Anticology (m. out of m.) Anticolo	240	emell (had) (vi)	könüűhá	kötűxá	1380 -nunk-, 1350 -numjk-
strate (sive out) (vs) (actions bedscentrick) arrance (sive out) (vs) (actions bedscentrick) arrance (sive out) (vs) (actions bedscentrick) (actions bedscentric	000	Street (news) (11)	lvíríki	lydóki	2114 -yóki
strail 400g voit 100g poddible photoge patent 400g poddible photoge photoge poddible photog	670	Silione (ii)	Publish a	kdsúsúmóxá	596 -diùk- ?
anal, and problem plooning small, and problem plooning analysis agent model of the control of th	428	smoke (give out) (VI)	NOIDA	nkhhnip	981 -kádá?
strail rycholiu probuje strain spoliu probuje strain spoliu probuje strain spoliu probuje strain strain spoliu probuje strain st	387	snail, slug	nyona	- Philosophia	
strate, support riplods riplods assert training of the content of	837	snail	ŋxölöfü	ukooule	2445
Streege	145	snake, serpent	njôxâ	njoxa	2112 - your
ornecere to polyadamida kodyadamida sonff, sente de holischia kodyadamida sonff, sente de holischia kodyadamida sonfere, sond debetoga defente holischia kodyadamida song songe makkili makkili makkili makkili makkili makkili makkili makkili songere kiloschia kiloschia kiloschia kiloschia kiloschia kiloschia kiloschia kiloschia kiloschia kiloschia	158	snare trap (n)	mútègò	mùtègô	ofial- 6601
smit seel out knichda knichda knichda sinder, sondt knichdema knichdema sold knicht knichte song knithno knithno song mykimb mikkim sock mikkim mikkim soc mikkim mikkim soc mikkim kilkinda	664	929900	kötváámúlá	kotyaamula	
strain, serior and backdown backdown backdown backdown backdown backform of objecting a serior with the serior backform backform on which serior make the serior make the serior without backform backform to the serior make the serior without backform backf	5 6	Silver and	kritichä	kðtúúchá	1386 -nuŋk-
sord kidosyph kirimob	924	Shiff, Shieli Out	kitasilimi	kthyolómá	852 -gòn-, , 1113a -kòdóm)
soil toudogo Marimbo songs mydrimbo songs nyfirmbo nyfirmbo nyfirmbo nyfirmbo socos makin makin makini mulogi mulogi mulogi mulogi mulogi mulogi sore kilobrata, nyokopo kilobrata	280	Shore, short	4144000	φίοψου	688 -döngó
song withoo mainteen song song without a song song without song song making midking midking midking midking song song song song song song song so	69	soil	phono	- Si-	2010 -vfmbó
scrops - reptimo ryumbo sood makali makali makali socceer mulogi mulogi mulogi socceer kiloonda podopo kiloonda	732	Song	Mifimbo	William	otto depo
sod makili mikili midogi midogi sorcerer midomak modojno kilifondal	616	souds •	nyffmbò	nyttmbo	2010 July 2027 Vidi
socerer mukgaj mukgaj sore kiloćenda, podopko kiloćenda	90	1000	makili	mákili	141 - DIGO, , ODIG- TAT
sore kildóndá, nydónykó kildóndá sore	3 5	1000	millógi	mülögi	646 -dogi
sore kiloonda, ijxoulyko	200	sological	Annah an an an an an an an an an an an an an	kilóóndá	656 -dòndà
	201	sore	kiloonda, rjxouljxu	TO TO THE PARTY OF	

ido

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie)
734	soul, spirit	mùyì	môòyò ?	1738 -tímà, 1115 -kódó 2143 -yòyò
331	sound, cry	můlitô	idóóló	567 -dìdò
64	space (open)	lòómbògá	itàngàlàlò	190 -bògà
82	spark	nsàsè	ènsàsì	243 -cácè, 244 -cácì
253	speak	kôtěéngá	kóùgà	770 -gàmb-?, 1912 -yàmb- 1
733	spear (n)	íkimů	můxósà	ps 453 -tímô, 1868 -túmô
137	spend time	kösöönsömólá	kờsớớpà	
1038	sperm, semen	mùgàzi, mbèèyò yà kỉgôóshà	ùsèlè	
62	spider	nsùmà βớtààntà	itàndàbúú, isùmá βùtààntà	178 -bờbỉ
182	spirit (of dead person)	mizimù	mízimů	715 -dòngò , 619 -dimò
464	spirit (disembodied)	mizimù	(pèpò ?, (tìmúdtimi	619 -dimò
683	spirit (evil)	mizímů	ípèpò ?	•
582	spit	kốtyà mátyè	kờtyả mátyẻ	1857 -tú-, 1857a -túid- 1859 -túij-
533	spittle	mátyè	mátyè	1690 -(n)té
601	split, crack (vt)	kôtáándólá	kòdèmúlà	1433 -pánd(òd)-, 1434 -pánd
951	spoil, blind (vt)	köpöfülyä	kôpôkůlyá	1573 -pôků
649	spoil (a child)	kösènéxà	kòmúlèxànîlyā	-
998	spoil	kóβiìpyà	kừnóónà	133 -bífp-, 2119 -yón-
813	spoon	mútilŋxò	mútřínxô	2055 -yikò
5	spot, speckle	íβàlà	iβàlà	18 -bádà
959a	sprain an ankle	kờtėgờlà	kůtěěngáxá	1715 -tèng- ?
141	spread out (be)	kősàámbáálá	kwiijòlàiijólà	282 -cànj-
527	spread	kwáálá	kwaala	1916 -yàmb-, 1933 -yànj- 1890 -yàd-, 1633 -tànd-
908	spread abroad, be; become generally known	kůkůmůóxá	kůkůmóóxá	1263 -kúm-, 1284a -máni-
592	spread, smear on	kóβilà	kúpáxá ?	142 -bidò ?

S.	English	KiKifmbò-N	KiKifmbò-S	Proto-Bantu (Guthrie)
591	spread, scatter (vi)	kúsámbáálá	küsambáálá	1653 -támb-
880	spring (of water)	nsitmbó	nsitmbò	407x -cúdó, 338 -cimb-
965	spring, machine		mútáámbó	1661 -támbó
866	spy out	kópelelelyá ?	köstimbá ?	ps 117 -cód- ?
849	squat (on the haunches)	kósönjößálá	kösönjößálá	
991	squeeze oneself up against a wall (e.g. to allow another to pass)		kwiihégà	47 -bánd-, 1454 -pát(án)- ?
914	squeeze out	kòminyà	kóxámá	1313 -mini-/miny- 995 -kám(öd)-
343	squeeze, milk	kůshéémá	kóxámá	994 -kám-
102	squirrel	xáwúúndi	ŋxálá	
295	stack, pile up	kölöndíxá	kölöndíxá	705 -dönd(îk)-
1029	stand (vi)	kwffmå	kwiimitila	2006 -yim-/-yimidid
735	star	nsòòndà	njota	1791 -tóndùà, ps 543 -yó(n)ti 1983 -nyényédí
390	stare, glare	ködöölölä	kokúúna	
202	start off, send away	kówdóchá	kdwddchâ	197 -bőők- ?
199	startle, catch unawares	kwòógóhyà	kodijaa	284 -càng-, 1008 -káng-
830	startle, jerk	kwòógóhyà	ködiíxá, kwòógópyá	1008 -káng-
618	steal	kwiißà	kwiißà	2020 -yib-
566	steel		chòòmà	
554	stem (of maize, millet, etc.)	igòlòle/mágòlòlè	ibélégé/mábélégé, mánsáálé	70 -bèdé ?
825	step over	kötáámbööŋxániá	ködífáá	1051 -kid-
315	sterile man (or woman)	mùgởómbá	mùgờớmbà	894 -qůmbà
541	stick	ŋxómè	ŋxómè	500 -dáng- ?
74	stir, mix by stirring	kökülügániá	kögülűúngá	189 -bódöng-
820	stir	kökülügäniä	kökülügäniä	735 -dúg-
78	stir up		kögülümölä	286 -cárg-

8	English	KiKifmbò-N	KiKifmbò-S	Proto-Bantu (Guthrie)
61	stone	jbwé/mábwě	ibwė/mabwė	176 -bùè
228	store in collect	kökúúngániá	köküüngániá	704 -dond-, 36510 -cod-
154	strainth (make)	Kodoloola	kögölöölä	843a -gòdòd-
288	stranger guest	mühééniá	mühéénjà	805 -gėni
661	stream current	mógudo	lògèlà	941 -jidà ?
798	strength power	navki	ŋgölü	übüg- 606
140	stretch oneself	kwiigoloola	kwiigółódia	843a -gòddd-
305	Strike knock	krókoßa köxöömtä	kötölä	1148 -könt-
080	strike with a snear	kökímá, kölásá	köläsä	375 -com-, 449 -dác-
700	solice with a special			1752 -tim-, ps 453 -timb
282	string (n)	ini	wéenda, wùùji	592 -di
487	strip off (e.g. grains of com)	kópölőlá	köpölőlá	1588 -půd(ůd)-
519	strut proudly	kwiigümäälyä	kwillutumólá	,
407	stumble	kwiikūūmpā	kðkúúmpá	,
400	stinted (be). be spoilt	kūdūmāálā	kdnyweengemela	1132 -kòm-
948	Stuffer	kötámáántámá	kötámáántámá	1685 -tát- ?, 1447 -páp- ?
594	suck (the breast)	xwóónxa	kwóónxa	2135 -yáŋk-
480	Slick (vd)	kdmilma, xwóónxa	komiima	1559 -pip-
012	suffer bear natiently	komiaikilvä		2059 -yim- ?
802	Sugar cane	iqúßà	igúwà	872 -gðbá
333	Sun linht	Ivóúnsť, wáápě	lydónsi	955 -jóbá
184	punouns	köpilímá	köpilimä	1514a -pìdòd-?, 1529 -pin
438	wallow	kůmilá	kūmila	1306 -mid-
111	SWER	kwiilaha ?	kwilapilila	503 -dap-
905	sweat	idòtà	idôtà	1855 -tú, 2158 -yúki ? 2031 -yicódi ?
392	sweep up, collect in a heap (rubbish)	köküüngaania	kökwáángőlá	1509 -píágid-

papu

9	Continh	KłKiimbô-N	KiKiimbò-S	Proto-Bantu (Guthrie)
2 5		Phoughanfla	kůpvášqúlá	1509 -pfágid-
943	daaws	hopyaagora	-uộu-	1370 -nôn-
217	sweet, pleasant	nioi-	4411041	144 -himb-
51	laws	köβiimba	Kuputtua	
808	sword (short)		igóbiló, kísha, nsiime	
033	Sword	mpáángá	ipáángá	1441 -panga
2 0	1010	mikilà	múkílá	1053 -kida
200	tall loons of	khdaahva	kůdáává	463 -dág-, 503 -dáp-?
0/0	lake leave of	The state of the s		
178	take in (from rain, etc.)	kosoona mpula		1806 144dd.
565	take, camy	kösölä	kūsola	303 -000-, 1000 -000
233	take off (clothes) undress	kólydólá	kölyöölä	730 -duod-, 1915 -yann-
630	tandle	kdsaania ?-	kůpwéélá másálá	1685 -tát-
200	or and	wholene withhough	kögélvá	-(i)pe6- L6L
989	taste (v)	Nogelia, rotellian	4-119	500 -dann/idl. 1876 -tú(ú)n
982	teach, instruct	kúheembexa	Koliga	1284 -màn(i)- ?
			miledii	368 -códi
621	tears	misoli	lingolli	Language Language
412	ten	ikòmi	ikômi	TZUB -KUIIII
15	alimet	miswa	múswa	392 -coa
1	oldine.	Ninipad/matining	fntülü/mátülü	155 - bódó, 690 -dödűe ?
25	lesilcie	- funnitary funnit	4	2283 -VCVo), 551 -dfa
1020	that	iyo	ryo.	142 himb 639 -dobs 2
455	thatched roof	ißáándá	kochaanya	200 COLUMN COLUM
767	there	ipó, dxó	tpo, dxo	BIO. 100 + Bd- 0177
25	thev	Ìwó	iwó	152 -50
444	thick fat	-ofni	-gínù	815 -gfn-
9	- telopide	masaxa	isáxá/másáxá	260 -cáká
8	micket	424247	isaxa kasaxa	260 -cáká
854	thicket	Kasaxa	100mm	onse wihi
619	thief	mwiißi	mwith	1016-0202
23	thioh (of human)	itààngò	itààngô	/a -Dedo
2 6	(lemine Jo) deids	kitäämbö	kitäämbö	79 -bedo
559	thing	kifntð	kdintä	1789 -md
	,			
			751	

ģ

No	English	KìKíímbò-N	KìKíímbò-S	Proto-Bantu (Guthrie
987	think, imagine	kwiigànixà	kösiímánkálá, kölilinkálá	772 -gàn-
651	thirst	nyòòtà	nyòótá	2137 -(n)yótá
740	thorn	lííyà/mìiŋhwà	lilyá	9021/2 -ŋgùà/-yiŋgùà ps 399 -púá
689	threaten	kötiishä, kóxäängä	kötlishå ?	2110 -yògòp-, 1008 -káŋg- 1741 -tiin-
532	three	jitàtù	jítátů	1689 -tátů
115	thrust into	kôtímá	kātimā	375 -cóm-
420	tick (cattle or dog)	igðbá/mágðbá	kúpě ?	1236 -kópá
1034	tie (fasten) (vt)	kốtùủngà	kôtůůŋgà	1877 -túŋg-
258	tie up	kátůùŋgà	kátúúngá	1877 -túng-, 171 -bóp-
978	tingle with excitement	kwiigitiimbėtita	kötétémá	16
119	tip, point	nsòòngė	kó nsóóngé	387 -côŋgê
741	tobacco	nsúúnxô	ítóómbá	1870 -tù(ù)mb- + 1729 -tí 1
146	today	léélò	lèéló	518 -dèèdó
742	toe	lyäälä	lwäälä	ps 360 -nò ?
445	tomato	nyáányá	nyàànyà	
105	tomcat (half-wild)	kirmbóló	kižmbóló	
743	tomorrow	ìgòlò	ìgòlò	841 -gódó
166	tongue	látimi/ndimi	tòlámi	572y -dimi
120	tooth (canine), tooth filed to a point		nsòòngà mbwà	387 -còŋgè
267	tooth	liinò/miinò	liinô/miinô	2073 -yinò
306	top, peak	kờ cháảnyà	pà cháányà	881 -gòdò
293	tortoise	ŋkûlû	ikūlū	1260 -kúdů
277	town	íhálá	ŋxàài	818 -gí, 1020 -kááyá
378	tramp of feet	ŋkiindò	lókiindó, fŋkiindó	1085 -kí(i)ndô
270	travel	kôyà	kôwôóxá	807 -gènd-
540	tree	múti	ipiki	1729 -11

e	English	KiKifmbò-N	KiKífmbò-S	Proto-Bantu (Guthrie)
538	tremble, shake (vi)	kötétémá	kötétémá	1726 -tétim-
999	trickle away	kósölőlá	kösipä, kwiltika	406 -códó
401	trunk (of elephant)	múxônô gwá njógù	múxônô, isáaxò	
604	try	kdgėma	kögémá	797 -qèd(i)
909	tsetse-fly	kágéémbé	ndôlôbó ?	
938	turn upside down, turn over	köpiindölä	kögálólá	ps 202 -gàdòd- 1529a -pìndòd-
174	turn round	kòpilimyà	köpilimyá	1514a -pidòd- 1529 -pindòd
711	tusk, elephant's (middle size) *		liinò lyá njógů	1476 -pémbe 2, 20 -vinò
452	twin	ípásá/mápásá	ipasa/mapasa	1407 -páca
185	twist roll, spin with fingers	köpèlégá	küsißä	1583 -pót-
483	twist, esp strands	kópótá	kópótá	1583 -pót-
752	two	jipiti	jipin	113 -bidf
18	ndder	kíßěélé, nyôôŋkélô	kiβéélè	72 -béédé
945	uncover, reveal	kóköndökölä	kökündökölä	1268b -kúnðd-, 1269a -kúndðd
551	unripe, half grown	ittindi	ipisi, itifudi	102 -bfcl
994	unripe, uncooked	mbisi	(pisi	102 -bfct
311	up, above	kở cháányà, kwiigólyá	kở cháányà	883 -qddd
914	upright	witma	kwffmilflà	2059 -vím-
446	urinate/defecate	kötüündä, köniä	kötüündâ, köniâ	430 -cub-, 1255 -ni- 1839 -thnd-
745	urine	mátbóndi	màtóóndi	390 -cù, 1123 -kòió
699	nse	kötömílá	kötömílá	1831 -tóm-
307	utmost, highest point	kờ cháányá	kở cháảnyà	883 -gàdờ
904	vapour, gas	mútûtû	mūtūtū	1855 -tù, ps 415 -púdi
380	vein	mùsipà ?	lòpótá twá chááji	1583 -pót- 1087 -kipa
276	village	igddygdii	ihala	818 -0.
952	virgin (bride), girl	múhálá, mwáániké	múhálá	
327	vision	idôôti	ndóóti	ps 186 -dóóti
		ř		

No	English	KìKíímb∂-N	KìKíímbò-S	Proto-Bantu (Guthrie)
330	voice, (thunder)	můlí		474 -dákà, 954 -júi
224	vomit	kólůxá	kòdííxà	695 -dúk-
524	walk (take a)	kògèéndà	kögééndá	807 -gènd-, 820 -gi-
269a	walk	kôyà	kờyả	806 -génd-
847	wall	ígětětě	lógélélé	795 -gèd-, 1001 -kànd-
983	want, need, wish	kópöógá	kòpóógá	256 -cak-, 1974 -yend-
507	war	wòlógò	θίσοθ	184 -bód-, 151 -bitá, 1147 - kóndó
790	wart-hog	ngiti	ggiti	814 -gidi
860	wash oneself (after evacuating)	kwiipyägólä, kwiishėėntä	kwiisiingà	1539 -piágid-, 2107 -yó(ó)g-
127	wash (hands)	kóxàláβà	kòsiíŋgá	ps 303 -kóc-, , 2107 -yó(ó)g- 1186 -kóc-
128	wash (clothes)	kókàánjá	kòxàánjà	1001 -kånd-
129	wash, take a bath	kwóógà	kwòògà	2107 -yó(ó)g-
322	water	miljit	míjì	937 -jí
959	wave, let off a trap, remove a spell	kůlógôólá	kòtègólà	1698 -tég-, ps 276 -kákôd- <- kág- (990)
1017	we	liswė	sweeswe	395 -cáé/-cúé, 2099 -yítúé
1010	weak		*	528 -dèm
881	wean a child, give leave, send away	kòpėlya	kůléchá	526 -dék-
234	wear, dress	kòlyàálà	kòlyáálá	726 -dúád-, 1915 -yàmb-
501	weave, knit	kófůrná ?	kósùmá	1861 -túm-
1015	weight, rhythm	βάtfímbó	βàtlimbà	631 -dító, 1519 -pim-
210	well	kísimá ?	ísimá	1753 -tímá, 353 -címá 1999 -yíji
56	wet (get)	kòsápà	kósápá	161 -bomb-, 637 -dob-
919	what?	kíí	kintô kí	1046 -kf, 1926 -yàni
469	which?	kilfhé	kintò kí	1498 -pf

S	English	KiKiímbò-N	KłKífmbù-S	Proto-Bantu (Guthri
192	whistling	mùlôli	múlóli	642 -doodi 687 -dodi
175	white man	müjüüngü	můzúúngů, mwěělů, wáápě	599 -díúnað
610	white	yeelü, yaape	mwėėlū	1966 -yédð
918	who?	ánáánů	ànáánì	1343 -náni
28	wicked	74-	ig)	97 -bi
339	wife	műkifmá	múkítmá	1022 -ké, 986 -kádi
187	wind up (thread)	kògóóndá	köpilimà	625 -ding-
746	wind	mpèpò, ipúútà	mpèpò	1493 -pépò
937	winnow	kūpėėta	kůpéétá	1955 -yed., 1496 -pet- 419 -còng(òd)-
112	wipe	kőpyáágőlá	kofútá ?	1598 -póköt-, 1539 -piág 1509.5 -pfáng-
88	wire (brass)	0		268 -cámbò
194	witchcraft	Bológi	Bòlógi	646 -dógi, 647 -dógó
279a	withhold from	kwiimà	kwiimà	2058 -vim-
279	withhold from, abstain	kwiinyiimä ?	kwiinyiimà ?	2058 -yim-
338	woman	mùkitmà/βākitmà	műkilmá	970 -kå, 986 -kádi, 1022 -
747	womb	ndà ya Böléli	nda ya Böléli	443 -dà
812	word	mpola	mpòtà	771 -gámbó
772	work as a mason	kójééngá	kðjééngá	199 -búmb-, 935 -jéng-
167	work (n)	můlímô/milímò	mülfmö	574 -dîmô
81	wrap up	kögööndä	kůkůnjáníá	625 -ding-
344	wring (clothes)	kūminya	kdminya	995 -kám-
773	yawn	kwaayola	kwááyőlá	1953 -yáyðd-
593	year	mwaaxa	mwááxá	1904 -yákà
750	yesterday	igóló	igóló	841 -gòdò
15	you (sing.)	Вееве	wèèwé	64 -bé
1018	you (pl.)	iimwė	nyweenywe	1325 -műé, ps 366 -nűé
715	young man	múgöóshá, mülümyááná	mùgwisha	697 -dúmė + 1922 -yánà
		(-	755	

Proto-Bantu (Guthrie)

	KiKifmbò-N	KiKifmbò-S	Proto-Bantu (Guthrie
	yiiŋwè	yáányü	2074 -yind
youth	mùlùmyááná, mwáánikè	mùlùmyáánà	697 -dómė + 1922 -yána 1922 -yána + 986 -kádi ?
zebra	24.1	nsèèŋgélè	

No

Appendix 2. Phonological inventories of Zone F

Appendix 2a. Vowels

Morpheme எ® Language ∜		:=	н	Ħ	e e	9	æ	aa	0	90	ם	00	3	3
SiSuumbwa	+	+	,	,	+	+	+	+	+	+			+	+
KrSukuma	+	+	+	+	+	+	+	+	+	+	+	+	+	+
KINyamweezi	+	+	+	+	+	+	+		+	+	+	+	+	+
KiBende	+	+			+	+	+	+	+	+			+	+
KınıLaamba	+	+	+	+	+	+	+	+	+	+	+	+	+	+
KIRImi	+	+	+	+	+	+	+	+	+	+	+	+	+	+
KıKıımbu	+	+	+	+	+	+	+	+	+	+	+	+	+	+
IciWoongo	+	+	+	+	+	+	+	+		+	+		+	+
KiiRaŋgi	+	+	+	+	+	+	+	+		+	+		+	+
KeeMbuwe	+	+	,		+	+	+	+	+	+			+	+

Appendix 2b. Stops and pre-nasalized stops

Morpheme क Language ↓	d	٩	d d	e E	_	ъ	E	P	o o		2	Ē	-24	20	¥	98
SiSuumbwa	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
KrSukuma	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
KINyamweezi	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
KiBende	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
KiniLaamba	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
KrRınıi	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
КіКілтьо	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
IctWoongo	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
KiiRaŋgi	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
KeeMbuwe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

Appendix 2c. Fricatives and pre-nasalized fricatives

Morpheme •▼ Language ↓	0	9	J	>	Ē	MV	ø	N	2	22	_	×	>	хG	λũ	_
SiSuumbwa		ſć.	+	+	+	+	+	+	+	+	+					+
KrSukuma	7	+	+	+	+	+	+	+	+	+	+		,	,		+
KINyamweezi		+	+	+	+	+	+	+	+	+	+					+
KiBende		¢.	+	+	+	+	+	,	+	,	+		ć	,	,	+
KiniLaanıba		,	+		+		+	+	+	+	+					+
KıRımi	+	+	+	+	+	+	+	+	+	+	+	ć	6	ć	ć	+
KıKıımbu			+	+	+	+	+	+	+	+	+	ć		ć		+
crwoongo			+	+	+	+	+	+	+	+	+					+
KiiRaŋgi			+	+	+	+	+	+	+	+	+					+
KeeMbuwe			+	+	+	+	+	+	+	+	+					+

The phonological status of these phonemes is doubtful, since they are either context-sensitive, as in KIKIImbu (x-k), and sometimes they can be in free variation with homorganic stops, i.e., b-β, x-k, γ-g, or they are likely to be loans, as in the case of KIRImi, where the likely donor might be Southern Cushitic Iraqw which has the pharyngeal /x/ and /y/ opposition. Only two words in JinaKIIya could be readily found, nwidwa 'nephew/niece' and madwa 'rope-like cut and sun-dried slices of pumpkin meat used as a relish during the season when there are no fresh vegetables?.

All Zone F languages have fricatives, although only SiSuumbwa and KiBende have consistent BS. In the other languages BS is questionable focuse or being regular, expensions are possible of a sequential through borrowest orans. Three explanations are possible of a sequential through borrowing words with BS (b) from plantataition as a natural process before high from vowed, as KISukuma (c) in form of an open-ended questions how valid is the assumption that Proto Bantu did not have any fricatives?

Appendix 2d. Nasals, liquids, semi-vowels and voiceless connierparts, where relevant

anguage 🖟	ů	u	ů	u	ű	ď	Ģ	ũ	ı	R (ţ)	1	M	K
swdmuu2i	-	+	-	+	-	+	-	+	+	-	-	+	+
tSukuma	+	+	+	+	+	+	+	+	+	•	-	+	+
izəəvmayMı	+	+	+	+	r+	+	+	+	+	•	-	+	+
Spende	-	+	-	+	-	+	-	+	+	•	•	+	+
edmasalini	- [+	-	+	-	-	-	+	+	-	-	+	+
imIAI	11-1	+	1000	+	1-1	+	-	+	+	+	+	+	+
ıKıımbu	-	+	-	+	-	+	-	+	+	-	-	+	+
υλισυνισ	-	+	-	+	-	+	-	+	+	-	-	+	+
ignaAii.	-	+	-	+	-	+	-	+	+	-	+	+	+

' While KIDakama has voiceless nasals, the other varieties traditionally grouped in KINyamweezi (KIKonoongo, KINyanyeembe and SiGalagaanza only pre-nasalize those vowels

Morpheme so anguage ↓	E+	Ε	c.	=	q	<i>ح</i>	-	c	_	≈ ⊡	<u>-</u>		3	^
KeeMbuwe	١.	+		+		+		+	+	L	1.	+	1	4

The masal, fiquid and semi-vowel phoneme picture is relatively regular like the preceding phonemes save for three group, namely, (a) KISukuna and KIDakama for the voiceless nasals, (b) KIRtmi with the voiceless flap RV or /t/; (c) KIRtmi, KitRangs and KeeMbuve for the voiced flap /rl (which is a trill in KiiRangi and KeeMbuve). The presence of /rl in KiiRangi and KeeMbuve corroborates the earlier observations that they share some common linguistic history as well as geographical proximity.

Appendix 3 Dahl's Law in Zone F

Lexeme Po- Language .	*-tato 'three'	*-tapa 'draw water'	*-yikot- 'satiated (be)'	*-kuta 'oil'	*-kupa 'bone'	-poku 'blind person'
SiSiloombo						
SiYoombe	isatu	kutaha	kwiikuta	mafuta	(igufwa)	muhofu
KiLoongo			-	(mazuta)		
KımunaSukuma		kodaha	kwiigota		liguha	
GznaNtuzu	idato		gugota	maguta	iguha	moku
JinaKrrya	Idato	godaha	gwrgota	-	rguha	mboku
KıDakama			kwiigota	maguta		(muhofu)
KiNyanyeembe	idato			mafuta	iguha	mpofu
KiKonoongo	idato itato	kodaha	kwiikota	maguta		muhofu
SiGalagaanza	itato			mafuta	ifupa	mpofu
KiBende	itato	kutaha	kwiikuta	mafuta	ifuha	muhofu
KınaUshoola			kokikota		kupa	
KınıLaamba	katato	kotepeela	kokikyota	makuta	kyupa	mupoku
Kınıhaanzu	itaato		kikota		ikupa	mpoku
GrRwana		σRafa	kikoRa	makuRa	ikufa	mufoku
Giahi	iRaRo	oRafa	ixoRa	maxuRa	iγufa	тофоки
γτηγαΜυπγίηαπγί	taatu	otafa	kikoRa	makuta	īkuфа	mopoku
KıKızımbo N KıKızımbo S	jitatu	kotapa	kwiikuta	makuta	ikupa	mpofu
ıcıWaaŋga	zıtato	kotepa	kwiikota	mafuuta	rfupa	oczpofu
KilRaŋgi	itato	kotaha	kwiikota	makuta	ikufa	muhoku
KeeMbuwe	saato	otafa	oikota	makuta	kufa	

Lexeme 19	*-pute ' abcess,	*-tok- 'abuse, insult'	*-yrtik- 'answer a call'	*-pik- 'amiye'	*-tooke 'banana
Language .	boil'				fruit
SiSiloombo		kotoka	-		
SiYoombe	ihute	kutuka	-	kuhika	itooke
KiLoongo		-	-		
KımunaSukuma	iβute	kodokila	kwiidɪka	kofika	ndooke
GznaNtuzu	ıβute		godika	gosika	ndooke
JinaKrrya	iβute	godokila	gwidika	gʊʃiga	Idooke
KtDakama	-	kodokana	gwiidska	kufika	
KiNyanyeembe	-	2 22 2	-	kufika	idooke
KiKonoongo	ipute	kotokula		kosika	
SiGalagaanza	-	kutukizya	-	kofika	
KiBende	ihuute	kutuka	-	kufika	-
KınaUshoola	-	kotokana	koyıtıka		-
KınıLaamba	-	kotokula	koyutika	kopika	-
Kınlhaanzu	ipute	kutukriana	kiittka	-	
GzRwana	-	vRvkana			
Giahi	-	toxana	iRıka	-	•
yınyaMunyiŋanyi	ipuRe	otokana	gitrka	ofika	-
KıKıımba N					
KıKıımbo S	ipute	kotoxana	kwiittxa	kopixa	idooke
ıcıWaanga	-	kutukana	okwatakala	kosoka	
KilRaŋgi	-	kotoktra	kwɪɪtɪka	kofika	
KeeMbuwe		otokana	weiteka	ofika	

Appendix 3. Dahl'						
Lexeme o . Language .	*-kaate 'bread'	*-tako 'buttock'	*-copa 'calabash'	*-capo 'calabash'	*-pepo 'cold'	*-teek- 'cook
SiSiloombo	ŋkaate	-	-	sisyaabo		
SiYoombe		itako	•	sisaabo	mpeho	kuteeka
KiLoongo	mukaate	-	-	cisaaβo	-	
KımunaSukuma			-			
GznaNtuzu	ngaatr	idako	-	gɪsaaβo	mbeho	
JinaKrrya		Idako	soha	jisaaβo		
KıDakama	mugaate		nsoha			
KiNyanyeembe	mukaate	idako	-	-	mbeho	
KiKonoongo	mugaate		-	-		koteeka
SiGalagaanza	mukaate	itako		-		
KiBende	mukaate	itako	-	-	mpeho	kuteeka
KınaUshoola		tako		kısaao		
KınıLaamba	mukaate	tyako		-	mpepo !	
Kınılhaanzu		-	-	-		
GɪRwana	mukaate	iRaaxo		-	-	
Giahi	mukate	iRaγo	ησσfa	•	трефо	uRexa
γτηγαΜυπγίηαπγί	muxate	rRako	ησυφа	-	треефо	-
KıKıımbo N	mukaate		-	-		***************************************
KıKıımbo S	muxaate	itaxo	-	-	mpepo	koteexa
ıcıWaalda	omukaate	itako		-	ımbepo	koteeka
KilRaŋgi	mukaate	taako	kısowa	-	mpeho	
KeeMbuwe	mokate	tako			mpefo	otereka

Lexeme 🕫	*-koko 'crust'	*-kɪti 'darkness'	*-tiko 'day'	•-ciku 'day'	*-keep- 'diminish, grow less'	*-koto 'ear
SiSiloombo		-		-	-	
SiYoombe	ŋkokotwa	giiti	losiku	-		
KiLoongo	eeŋkogoto	-	-	-	kukeha	
KımunaSukuma	βogokwa		lofiko	-	kogeeha	
GınaNtuzu		giiti	losiko	-		gutt
JinaKrrya	lagakala		laliða	-	gogeeha	
KıDakama	-		lafika	-	-	
KiNyanyeembe	ŋkokoto	giiti	lasīka	-	-	
KiKonoongo	makokolo		losiku	-		
SiGalagaanza	-	-	lasika	-	-	
KiBende		-	-	-	-	
KınaUshoola	ŋkoko	-	-	-		
KınıLaamba	kyoko	-	-	-	kokeepa ***	
Kınıhaanzu	lakoko	kiti	-	lohiko	-	
G:Rwana			iRikσ	-	keefa	
Giahi	maxoxo	kiiRi	iʃiixʊ	-	oxefa	
yınyaMunyiŋanyi	tkoko	kiiti	iRiko		keepa	
KıKıımba N	βσχοχο		-		-	
KıKıımbo S	βαηκοκο	kiiti	-	losiko	-	
ıcıWauŋgu	amakoko	-	-	losiko	kocepa	-
KilRaŋgi	ukoko	-	-	siku		koto
KeeMbuwe	lokooko		- 1	nsiko	okeefa	kata

Lexeme 🕫 Language .	*-kokuda 'elbow'	*-kope 'eyelash'	*-kooko 'grandfather'	*-koopi 'hand (flat of)'	*-kata 'headpad'
SiSiloombo	ikookola		gaaka		
SiYoombe		ŋkohe		ikoofi	ŋkata
KiLoongo	lukookoola	eŋkohe	guuku		eŋgata
KımunaSukuma				-	
GınaNtuzu	igookoola	ŋgohe	gooko	-	ngata
JinaKrrya				-	
KıDakama	-	пдоhе		-	ngata
KiNyanyeembe	-		gooka	ikofi	
KiKonoongo	kakokoola	ŋgohe		-	ŋkata
SiGalagaanza	kakoonkola		guuku	ikoofi	ŋgata
KiBende	-	ŋkohe	kuuku	-	ŋkata
KınaUshoola	kıŋkokoola			koopi	
KınıLaamba	-	-	kooko	kyoopi	ŋkata
Kınıhaanzu	kɪŋkokoola	ŋкорі	-	Ikopi	
GzRwana	ixoxoa	-	koko	-	ŋkaRa
Giahi	grhohoa	ŋkofyo	XUXU	ixofi	ŋxaRa
γτηγαΜυηγίηαηγί	grkokoa	σкофе	kaaka	ikoфi	ŋkaRa
KıKıımbo N	kiŋxoxoola	пхоре		ixoofi	ŋxata
KıKıımbo S	kixoxoola	-	kaaka	-	ηkata
ισιΨσσηgσ		-	-	-	ıŋgata
KilRaŋgi	kikokoola	-	-	ikoofi	ŋkata
KeeMbuwe	ktkokolo		- 1	koofi	nkata

Lexeme ra- Language :	*-koko 'hen'	*-koko 'hen'	*-pic- 'hide'	*-piti 'hyena'	*-pa/mo-katt 'in the middle of	"-cek- 'laugh'
SiSiloombo		-	kubisa		hakati	
SiYoombe	ŋkoko	-	kuβisa	mfisi	hakatı	kuseka
KiLoongo	eeŋkoko	-	-	empisi	hagati	
KımunaSukuma		-	kυβisa			koseka
GınaNtuzu	ngoko	-		mbiti	hagatı	goseka
JinaKrrya		-	gσβisa			gosega
KıDakama	ŋgoko	-			hagatt	
KiNyanyeembe		-		mbiti	hakatı	koseka
KiKoncongo	ŋkoko	-	kσβisa		hagatı	
SiGalagaanza		-		mfisi	hakatı	
KiBende	iŋkoko	-	kofisa	-	hakatı	kuseka
KınaUshoola				mpiti		kojeeka
KınıLaamba	-	ŋkaka	kopisa	-	pakatı	koseka
Kınılhaanzu	-		kopiha	mpiti		koheka
GIRwana	-	ŋkơkơ	fiiha	mpiRi		
Giahi	-	ŋxơkơ	ofiha	mpiiRi	muxaRt	oheka
γιηγαΜυηγίηαηγί		ŋkơkơ	obiha	mpiti		
KıKıımbo N			kσβisa			
KıKıımba S	-	ŋkʊkʊ	-	mpiti	paxatı	kusexa
ισιΨυσηgσ	-	ngaka	kopisa	-	pakasi	koseka
KilRaŋgi	-	ŋkʊkʊ	kovisa	mpici	katı	koseka
KeeMbuwe		nkoko	visa	mpiti	katı	oseka

Appendix 3. Dahl's	s in Zone r					
Lexeme 🕫 Language .	*-paap- 'light (adj)	*-baapa 'lung(s)'	*-tope 'mud'	*-tika 'night'	*-prt- 'pass'	*-panto 'place (n)
SiSiloombo	-puupe	-	-	-		
SiYoombe	-baabe	-	-	-	kuhita	haantu
KiLoongo	-puupe	-	-	-	-	
KrmunaSukuma		таропро	-	βαjika	kυβιta	
GınaNtuzu	-раари			βoziko		haand
JinaKrrya		таропро	-	βσjikσ	gσβrta	
KıDakama		таропро	-	βσzikσ		haand
KiNyanyeembe	-boohu		matope	oziko	kυβrta	haand
KiKonoongo				βazika		haanto
SiGalagaanza	-baahe	шарооро		βσfuku		hanto
KiBende			matope	bufuku	kuhita	haantu
KınaUshoola			-		-	
KınıLaamba	-	тарооро		otiko	-	
Kınıhaanzu		тароро			kohita	
GrRwana	-fofu	mafoofo	maRofe		-	-
Giahi	-	mafofo	maRoфе	σRixσ	-	faantu
yınyaMunyinanyi	-paafu	тафофо	itofe		-	-
KıKıımbo N	-boohu		-		- 1	
KıKıımbo S		тарооро	Intope	βotiko '''	-	paanto
ıcıWaalda	Impaabn	атарооро	-	osiko	kopiita	apaandu
KilRaŋgi	-	mahuuhu	itohe	uciku	-	haanto
KeeMbuwe		mafoofo	matofe	otiku	-	faanto

Lexeme 😝 Language .	*-cato/cato 'python'	*-tiko 'rainy season'	*-kocue 'rat'	*-kec- 'reap'	*-poktd- 'receive'	*-tete 'reed'
SiSiloombo				-	kopokeela	-
SiYoombe	nsato		ŋkoso	kukesa		matete
KiLoongo	eensato		-	kugesa		madete
KtmunaSukuma		kidiko	ngoso	kogesa		
GınaNtuzu	sato	gidiko	-			madete
JinaKrrya	sado	jidiko	пдоѕо	gogesa	gobokeela	
KıDakama	isato		ngoso	-	kubokeela	madete
KiNyanyeembe	sato	kidiko		•		madete
KiKonooŋgo			ŋkoso	-	kupokeela	-
SiGalagaanza	nsato	sidiko		-		matete
KiBende	nsato	-	ikoso	-	kupokeela	matete
KınaUshoola	nsato	kitiko	ŋkoso	-	-	matete
KınıLaamba		kıtiku	-	-		-
Kınlhaanzu	nsato	kitiko	-	-	kopokeela	matete
GIRwana		-	-	-	-	matete
Giahi	nsaaRo	giRixu	-	-	ufokea	-
γτηγαΜυηγίηαηγί	saRu		ŋkoho	-	офокеа	-
KıKıımba N			ŋkoso	-	kopokeela	
KıKıımba S	nsato	kitiko	-	-	kopokela	matete
стМаанда	rsatu	cısiku	-	-	kopokela	matete
KilRaŋgi	saatu	kiciko	-	-	kuhokera	matete
KeeMbuwe	nsato	ketiko	- 1		isokera?	vitete

Lexeme ++	*-kuc- 'rub'	*-pepo 'shadow,	*-tetrm-	*-kupi
Language .	Nuo 14D	shade'	'shiver'	short
SiSiloombo		-		nuthr?
SiYoombe	kukuusa	-	-	niihr?
KiLoongo		тиβећо		-gufu
KımunaSukuma			-	
GınaNtuzu		mbeho		-guhi
JinaK11ya	goguusa		godetema	
KıDakama		-	kodetema	
KiNyanyeembe		-		
KiKonoongo	-	-	kutetema	-guhi
SiGalagaanza	-	-		
KiBende		-	kotetema	-
KınaUshoola		-		
KınıLaamba		-	-	-kupi
Kınlhaanzu	-	-	-	
GrRwana	-	mpefo	-	
Giahi	-		-	-kufi
yınyaMunyiŋanyi		трефо	-	-kupī
KıKıımbo N	-	-		
KıKıımbo S	-	-	koteterna	-kupr
ıcıWaanga	kokuusa	paampepo	koteterna	inipz
KilRaŋgi		mpeho	koteterna	-kufi
KeeMbuwe	-	mofefo	koteterna	-kufe

Lexeme ** Language .	*-poku 'spoil, blind'	*-yiko 'spoon'	*-caka thicket, bush
SiSiloombo	kuhofuzya		
SiYoombe	kuhofusya	mwiinko	
KiLoongo	kuhofula	,	isaka
KımunaSukuma	kσβokuja	ndπὐο	kasaka
GınaNtuzu		ndzzyho	isaka
JinaKrrya	gobokuja	udzzņo	ısaga
KıDakama	kohofuʃa	mudzzņo	
KiNyanyeembe	kopofuzya		isaka
KiKonoongo	kohofusya	mutiiŋko	kasaka
SiGalagaanza	kopofula	mutzzŋko	
KiBende	kupofusya	mwiiko	
KınaUshoola		mutzzŋko	
KınıLaamba	kopokulya	kitznjko	∫aka
Kınıhaanzu		mutzīŋko	ihaka
GɪRwana	фокиа		
Giahi	фохиа	gzReŋko	
γτηγαΜυηγίηαηγί	chokuya	gıRıŋko	gahaka
KıKıımbo N	kopofulya	mutiiŋko	
KıKıımbo S	kopokulya	mutzŋxo	kasaxa
ıcıWaanga	kopofuja	autridão	isaka
KilRangi	kohukurya	mutiko	isaka
KeeMbuwe		mutiiko	

Lexeme ** Language .	*-kopa 'tick'	*-paca 'twin'	*-pot- 'twist strands'	*-pepo 'wind'	*-pet- winnow
SiSiloombo				-	
SiYoombe	" ŋkuha	mahasa	kupota	-	
KiLoongo				-	
KımunaSukuma		maβasa	-	-	
GznaNtuzu		mapasa	-	-	
JinaKxya			gobota	-	gobeeta
KıDakama		maβasa	-	-	kobeeta
KiNyanyeembe		mapasa	-	-	
KiKonoongo		maβasa	-	10000000	kopeeta
SiGalagaanza	lıŋkopa	mapasa	-	mbeho	
KiBende		mahasa	-	-	kupeepeeta
KınaUshoola		-	kopotya	-	
KınıLaamba	ηκυра	-	kupota	-	kopeeta
Kınlhaanzu		-	kopotya		
GrRwana	ŋkʊfa	mafaha	-	ufefo	fefeRa
Giahi	пхога	marana	-	afefo	1-
γιηγαΜυηγίηαηγί	ηκσφа	maфaha	-	треефо	194
KıKıımbo N	igoba				
KıKıımbo S	kupe?	mapasa	kupota	mpepo	kopeeta
rczWaanga	плдоре	embasa	-		kopeeta
KilRaŋgi	ŋkʊfa	maasa	kofota	mpeho	•
KeeMbuwe	ŋkoofa	mabasa	fota	mpefo	

Appendix 4 Lexicostatistics: 100 word-list of 28 language varieties.

Appendix 4. D.166, F23, E.122e, F10

٩	Language variety ● PB and Gloss ୬	S/N	iGiHa (DJ66)	SiSuumbwa SiSiloombo	SiSuumbwa SiYoombe	KiLóòŋgó		KiToongwe KiBende
33	abdomen, stomach *-da	058	inda	ndà	ndà	ilußüünda		iinda
956	all *-(n)ce, -yona	010	-otse	-òòná	-oona	-óónà		-òónsė
55	arm, hand *-kono, -boko	057	ukußoko	κύβόκό	κόβόκό	mükónò		kúßókó
337	ashes -bu	071	umunyota	mávú	ivú/màvú	izù/màzù		ifuúndú/ máfuúndú
765	back (n)*-gongo	090	oblobnun	mùgòòngò	migoóngo	тідоолдо		művöðnað
7	padbr	021	호	ā	181	-101		iQi
	bark *-koba	036	ikigula	igúlà	igúlá	igúlá, iβááŋgwà	kishushu	
	bird -yoni, -nyoni, -dege	029	inyoni	nòni	inòni	nyonyi		inyonyi, kanyonyi
125	bite *-dum-	085	-dya	külümä	külümá	külümä		kirtetá
	blood *-gadi, (n)yinga	043	amalaso	magazi	mágázi	Вмаатра		málásó
	bone *-kupa	044	igufa	igufwa	igufwa	igúfwà		ifûhá/màfûhá
	breast *-beede	99	Beele	màbèélè	máßéélé	máßéélé, Itútú/mátútú		mabéélé
629	child, infant *-yana, - yanake	026	umwana	múkékö, mwààná	mwààná	mùkèkà, mwàànà		mwááná
	cloud *-dunde	890	igiho	máliúundé	liùùndè	iliùindè		ikūúsi/makūúsi
	oded: ploo	720	imbeho	mpėhó, ßálili	mpèhó	Ballii		mpéhó
	come *-yij-	982	-za	kwiiza	kwiiza	kwiiza		kwisa
471	cook (vt)*-dug-, -teek-	980	guteeka	kütééká	kütééká	kütéékä		kùtèéká
	dark, black *-yido, -piipi?	022	ilaβula	-pi, ßwillabülé	lyéépi	kwiilâgülâ		-fiitilé, -fiité <kúflitá< td=""></kúflitá<>
682	daytime *-crjoba	620	umutaaga	mwizyóóbá	mwizydoßá	iháángwé	omushana	isddßá
52	die *-ki-, ku-	091	-pfa/-hwela	küfwá	kùfwá	kúfwá	kuf(w)a	kulwa

No	Language variety ◆ PB and Gloss #	S/N	iGiHa (DJ66)	SiSùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	RuHyoza (EJ22e)	KiTòòŋgwè KiBèndè
60	dog *-bua	030	imbwa	mbwá	mbwá	éémbwa	embwa	iimbwá
448	drink (vt)*-nu-	083	ukunywa	kờnwá	kờŋwá	kùnywà	kunywa	kùnywá
563	ear *-toi, -koto	048	ugutwi	kùtwi	kůtwí	kůtwi	okutwi	itwi
156	eat *-d1-	084	ukudya	kùlyá	kùlyá	kůlyà	kulva	kůlyá
273	egg *-gı	039	igi	igi/mägi	igi/màgi	lyááyi/máyá áyi	eihuli	ijí/màjí
620	eye *-yico	049	idyiiso	liinsó/máásyó	lilnsó/milnsó	liinsò/mèèns ò	eliisho	liínsó/méénsó
652	feather *-yoya	042	ugwoya	màzòzá	mázóózá	βwòòyà	ebishanda	máfůůmbů, inyélé
323	fingemail *-jada	054	uluzaala	lyáálá	lyààlá	lyààlà/mààlà	empambo	lùsàlá/nsálá
474	fire *-yoto, -drdo	070	umulilo	mùlilò	můlilò	mùlilò	omuliro	můlilô/mililô
126	fish *-comba, -cur	028	inswi	mfwi, nsámááki ?	mfwi	èémfwi	emfuru	iséémbé/máséémt é
1028	fly (vi) *-pap-, -godok-	093	-guluka	kùgùlùkà	kùgùlùkà	kùgùlùkà	kuharara	kůyůlůká
449	give *-pa, -yiŋk	100	-ha	kùhá	kùhá, kùfùrnyá	kùhà	kuha	kùhá
269	go *-gi-, -yend-	094	-genda	kůzyà	kůzyà	kùgèèndà	kugenda	kùjà
758	good *-yija	020	-iza	mfùlá	nsògá	màzìmá	-rungi	nsògá
409	great, big, powerful *-kodo	014	-kulu	můkôló	ŋkùlú	iháángó	-hango	-kùlú
702	hair *-yuɪdɪ, -yuede	045	uluzwili	mùsàsì	mùsàsì	isókè	eishoke	nyèlé
303	he, she *-koe, -ye(e)	003	wene/nyene	àwénè	áwé	wènyénè	wenene	ùyò, yóyòli
356	head *-tue	046	umutwe	mùtwé	mûtwé	mútwè	omutwe	mùtwé/mitwé
523	hear *-yigu-, -teg-	088	-umva	kwiimvá	kwóómywá	kůhůlilà	kuhulira	kúhůliká
543	heart *-kodo, -trma	047	umutima	mwilzò	mwiizò	mùgányà	omwoyo	mwėėyò/myėėyò
707	horn, ivory *-pembe	040	ihembe	ihèèmbè	ihèèmbé	ihéémbè	eihembe	ihéémbé lvá nsòfù
016	I *-ne	001	je (we)	ònè	òné	inyè	inye	ûûnê
218	kill *-yit-, -bod(ag)-	092	-ica	kwiitá	kwiitá	kwiità	kwita	kwihaava
348	knee *-dui, -du	056	ivi	sivi	sivwi	chizwi/mázw	okujwi	ijùùŋgò

No	Language variety	S/N	iGiHa (DJ66)	SiSùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	RuHyoza (EJ22e)	KìTòòŋgwè KiBèndè
626	know *-man(i)-	089	-menya	kùmànià	kůmániá	kùmànyà	kumanya	kùmànyà
1025	leaf *-yani	034	іβаβі	mátůůtů	itùùtú	ίβάβί/máβάβ ί	ekibabi	lyáányí/máányí
310	leg, foot *-godo	055	kugulu	kûgûlû/màgûlû	kùgùlù/màgùlù	kùgùlù/màgù lù	okuguru	kùyùlù/màyùlù
1024	liver *-trma	062	igitiku	itimá	itimá	itimà	omwirima	itimá
144	long/tall *-deepu, -tadı, -de	016	-leshe	bùlèèlé	ilèėlė	iléélé	-la	ilèèhé
1023		031	enda	ndá	ndá/idá	èèndà	enda	iindá
226	male, man, husband *-koci	024	umugaβo	igòòsyá	igóósyá, múgóósyá	iséézá/másé ézá	omushaija	ngòòsí
793	many *-yiŋgɪ	011	inshi	-iiŋki	-iiŋki	nyiingi	-iŋgi	-lingí
596	meat *-(n)yama	038	inyama	nàmà	nàmà	èènyàmà	nyama	inyama
1030	milk *-beede	082	amata	màbèélè	màβèélè	àmátè	amata	màßéélè
716	moon *-yedi	064	ukweezi	kwéèzi	kwėėzi	kwéézi	omwezi	mwéénsi
717	mountain *-gudo, -dundo	076	umusozi	mùgàlà	mùgàlà, lùgùlù	iβààngà	eibaŋga	músósi/misósi
1026	mouth *-domo	051	umunwa	mùlòmò	můlômô	mùnwà	munwa	můlômô/mìlôm
281	name *-yina	080	izina	izìiná	iziiná	iziinà	eibara	isiina
379	neck *-ki(i)ŋgo	059	izosi	ŋkiiŋgó	ŋkiiŋgó	bichá	ebikvangoto	ikòsi/makòsi
962	new *-pɪa	019	-shaasha	nyhàáhyà	nyhyááhyá, ihyááhyá	ènyhyàhyà	-hya	nyhyá
718	night *-tiko	078	ijolo	bwiilé	willé	chilò	ekiro	bùfúkú
484	nose *-puda, -judu, -yıdo	050	izuulu	nììndó	niindó	ènyiindò	envindo	inviindó
435	oil *-kuta	081	amavuta	máfútá	màfùtá	mázútá	amajuta	màfùtá
110	old *-kodo	018	-zehe	ndàálà	ilàálá	-áá kálé	-kulu	lyà kàlè
140	one *-mo	012	-mwe	imwi	ilmwi	ímwė, kamwė	emo	ímwi
325	path *-jɪda	075	inzila	nzilá	nzilà	mùháándá	omuhanda	nsilà
558	person *-nto	027	umuntu	mùùntù	můůntů	mùùntù	omuntu	mùùntù

No	Language variety	S/N	iGiHa (DJ66)	SiSüümbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	RuHyoza (EJ22e)	KiTòòŋgwè KiBèndè
76	rain (n) *-buda	067	imvula	mvůlá	mvůlá	èènzùlà	enjura	(i)mfúlá
169	root *-di	035	umuzi	můzi	můzi	můzi	omuzi	můsísí/misisí
95	sand *-caŋga	073	umushenyi/um usenga	músééŋgá	músééngá	mùsèèŋgà	omushenye	mùsffnsf/misffnsf
251	say *-boid-	099	-vuga	kubwiila	kůwřílá	kùgààmbilà	-gamba	kùbálílá
770	see *-bon-	087	-βona	kùβòná	kùβòná	kùlėėβà	kubona	kùlòlà
67	seed *-beyo, -boto	033	imbuto	mbůtó, mběgů	mbùtó, βὰtùùŋgà	mbìβò	empambo	mbútó
434	short *-kupr	017	-gufi	nìthí	nìihí	-gùfù	gufi	ntófú
615	sing *-yɪmb-	098	-lilimba	kwììmbá	kwitmbá	kùzìnà	-hooya	kwiimba
627	sit *-yikad-	097	-icala	kwiikalisya	kwiikalisya	kwiikalisa	kushuntama	kwiikala
123	skin *-koba, -kanda, - dıdı?	037	ulushaato	ndili	ndilí	ikòβà	oruhu	ikóbá/mákóbá
136	sleep (vi)*-daad-, -gon-	090	-humila	kùgônà	kùtiindílá	kůlyámá	kunagira	kùγônà, kùláálà tùló
1021	small *-niini	015	-toyi	ndò	ndó	iké	-ke	-nsé, -sé
629	smoke *-yoki	069	umwosi	lyöönsí	lyòònsi	můhilínkà	omwika	lyóónsí
69	soil *-dongo	072	iβivu	βùlòòŋkó	βὐΙὸόηκὸ	Itáká	eitaka	bùlóóngò
1029	stand *-y rm(rdrd)-	096	-hagalala	kwiimililä	kwiimiiiila	kwèèmèlèlà	kwemeerera	kwiimililä
735	star *-tondua, -yo(n)ti	065	inyoota	nsööndá	nsòòndá	ènsóóndè	enyanyiinyi	lùtááŋgwà/ntááŋgw à
61	stone *-bue	074	iβuye	iβäälė	iβààlé	iβáálè/máβá álè	eibaale	iβwė/màbwė
333	sun *-joba	063	izuuβa	izyòòβá	izyòòbá	izóóβá	eizooba	isyóóβá/màsyóóβ á
360	tail *-kıda	041	umuliizo	mùstlá	můsilá	mùchilà	omukira	můsílá/misílá
1020	that *-da/e, -dra, VCVo	009	-dya	ėbyò, ėyò	ìyò	ėlyò	-0	-lyélélí
54	they *-bo	006	Bene	äβė	àßé	ßönyénè	boonene	ßèèné

No	Language variety	S/N	iGiHa (DJ66)	SiSùùmbwà SiSilòòmbò	SiSùùmbwà SiYòòmbè	KiLòòŋgò	RuHyoza (EJ22e)	KiTòòŋgwè KiBèndè
166	tongue *-dɪmi	053	ululimyi	lùlimí	lòtimi	lûlimi/èèndi mi	orulimi	lùlimi/ndimi
267	tooth *-yino	052	idyiinyo	tiinó/miinó	liinó/milnó	liínò/méénò	eliino	llinó/méénó
540	tree *-tɪ	032	igiti	múti	mùtí	mùti	omuti	sìti/fiti
752	two *-bidi	013	-Bili	iβiii	ißiti	iβin	ibiri	ißili
322	water *-jɪ	066	amaazi	miinzí	miinzí	miinzi	amaizi	màànsí
1017	we -coe, -cue, -yitue	004	twe (bwe)	îfwé	ifwé	ichwė	icwe	ùùfwė
919	what *-kr	007	iki	βiìndé	βìindé, ėsi	chihâ	-ki	nísí
610	white *-yedu	023	-ela	yèpé	lyèépè	kwèèlà	kwera	-áápé
918	who *-nani	008	inde	éndè	éndé	òhâ	owa	gànyi
339	woman, wife *-ke, kadi	025	umugolegole	můkřímá	můkází, můké	můkázi	omukazi	můkási
15	you (sg) (thou) *-be	002	we (we)	òβé	òβé	iwė	iwe	ùùgwè
1018	you (pl) (ye) *-mae, -nue	005	mwe (mwe)	imwé	ímwé	imwė	inywe	ùùmwè

Appendix 4. Lexicostatistics 100 word-list: G42d, G11, F23

No	Language variety	S/N	KiSwahili (KiSanifu)	CiGogo	KìmùnàSùkùmà	JinàKììyâ	GřnáNtůzů
133	abdomen, stomach *-da	058	tumbo	nda	ndá, nhúúmbí	ndà, nhùùmbì	nhùùmbì
926	all *-(n)ce, -yona	010	-ote	-ose	-pyè	pyé, -òòsē	-òòsé
55	arm, hand *-kono, -boko	057	mkono	muwoko	ŋkônô	nkònō	nkònò
337	ashes *-bu	071	majivu	ivu	màβù	tβū/màβū	iβú/màβú
297	back (n)*-gongo	060	тдолдо	тидопдо	ηρόηρό	ηφόδηφδ	ngòòngò
27	bad *-br	021	-baya	-bi	-βi	-β1	-àà βὸβὶ
1022	bark *-koba	036	gome	ibada	igóólá, igáámbá	igōlà	ihààngò
811	bird *-yoni, -nyoni, -dege	029	ndege, nyuni	ndeje	nòni	nôni	nôni

No	Language variety ◆ PB and Gloss #	S/N	KiSwahili (KiSanifu)	CiGogo	KìmùnàSùkùmà	JinàKììyā	GìnàNtùzù
125	bite *-dom-	085	-uma	-luma	-lùmà	gòlùmà	gòlùmà
669	blood *-gadi, (n)yinga	043	damu	sakami	miiniingā	miniingā	mfniingâ
433	bone *-kupa	044	mfupa	ifupa		igùhà/màgùhà	igùhà
17	breast *-beede	061	maziwa	itombo	ndútů, lờnôônô, mběèlê	lòβėèlė, lònoonhō	nòònô
679	child, infant *-yana, -yanake	026	mtoto, mwana	mwana	ŋwèèlèélè, nigini, ŋwàànà	ŋwàànā, nìgìní, ŋwèèlèélè	ŋwàànà, nìgìnì, nwèèlèélè
305	cloud *-dunde	068	mawiŋgu	ivunde	ilûûndê	îlûûndê/málûûndê	ilüündė
465	cold *-pepo	077	baridi	mbeho	lờnyili, mbéhỏ	mbėhō	mběhô
624	come *-yij-	095	-ja	-za	-iìzà	gwizà	gùzà
471	cook (vt)*-dug-, -teek-	086	-pika	-vua/-teleka	-zùgà	gờzùgă	gôzùgà
622	dark, black *-yido, -piipi?	022	-eusi < -yelu pi	-titu	yààpi	giiti, -pi	-pi
682	daytime *-cı, -joba	079	mchana	misi	litimi	liimi	ittmi
425	die *-ki-, ku-	091	-fa	-fwa	-chà	gờcă/ciă	gòchà
60	dog *-bua	030	mbwa	mbwa	mvà (mvà)	mvă /mvă	mvà (mvà)
448	drink (vt)*-nu-	083	-nywa	-ŋwa	ŋwà	gòŋwā	gờŋwà
563	ear *-toi, -koto	048	sikio	ikutu	gờtờ	gàtō	gòtò
156	eat *-dr-	084	-la	-lya	-lyà	gòlyā/liā	gòlyà
273	egg *-gr	039	yai/mayai	igaŋkʰa	igì	ìgi/màgi	igì/màgì
620	eye *-yico	049	jicho/macho	liso	liiso/miiso	liisō/mìsō	fiisò
352	feather *-yoya	042	manyoya	iweha	βòòyà	βòòyà	βόὀγὰ
323	fingemail *-jada	054	ukucha	lukombe	lyààlà	lùààlà/lwààlà/njààlà	lyààlà
474	fire *-yoto, -dido	070	moto	moto	mòòtò	mòòtŏ	mòòtò
126	fish *-comba, -cuɪ	028	samaki	somba	ndřílô	shì	shî, ndîîlô
1028		093	-ruka	-guluka	-làlà	gölálá	gòlàlà
149	give *-pa, -yiŋk	100	-pa	-pela	-iinhā	gwinhá	gùnhâ
269	go *-gi-, -yend-	094	-enda	-bita	-jà	gờjà/gờjià	gòjà
758	good *-yija	020	-zuri	-swanu		-sògà, -ìzà	nsògà, -àà βùzà

9	Language variety ● PB and Gloss ∜	Š	KiSwahili (KiSanifu)	CiGogo	Tage		GinaNtuzu
409	great, big, powerful *-kado	014	-kubwa, -kuu	-vaha		-kölő, -táálé, důmá	-taale/nhaale
702	hair *-yurdı, -yuede	045	nywele	mwili			islinzi
603	he, she *-kue, -ye(e)	93	же	mwene	weel		weel
356	head *toe	048	kichwa	itwe/mutwe	ntwè		ntwè
623	hear "-yigu-, -teg-	088	-sikia	-hulika	igwa		gugwa
543	heart *-kodo, -trma	047	moyo	nt^umpula	nhôlô, môôyô		phòlò
202	hom, ivory *-pembe	040	-pembe	hembe	mhèèmbè		mhembe
1016	l *-ne	00	imin	ane/nene	nèènè		nèene
218	kill *-yit-, -bod(ag)-	092	-ua	-ulaga	-Bolaga		goßölägä
348	knee *-dui, -du	056	goti/magoti	ifugamilo	izwi		izwi
626	know *-man(i)-	089	-jna	-manya	-mana		gománá
1025	leaf *-yani	934		hanze/ihamp na	Idoátó		Idôótô
310	leg, foot *-godo	055		mugulu	gdgglg/mågdlg	gogolo/magolo	ggglg/mågg
1024	liver *-tuma	062	-	itoga	itimà	itima	Itėmė
4	long/tall *-deepu, -tadt, -de	910		ilet	ndithù	-iihū	ndłpů, ntpů
1023	louse *-nyumba	031		mp'ani	ndå	ndà	ndá
226	male, man, husband *-koci	024		mulume	ngoosha	-góóshá, íbéhl	nhóóshá
793	many "-yingi	011		ini	nyilygò	-thngt	nlingt
969	meat *-(n)yama	038		nyarna	nyàmà	nama, nama	nyama, nama
1030		082		mele	måßeèlè	måßeelê	та̀Вѐе́іе
716	moon *-yedi	8		mwezi/mleng	nweeli		ıJwéézi
717	mountain *-godo, -dondo	076	mlima, kichuguu?	itunda/igoŋgo	ရာရာရှ	افهان	lògàlà
1026	mouth *-domo	051		mlomo	nomo	ndmd	nomo
281		080		itagwa	Ilina	Ilina	llinà
379		059		obus	nhiingô	nhiingó	obliju

e m

No	Language variety ◆ PB and Gloss	S/N	KiSwahili (KiSanifu)	CiGogo	KimunaSukuma	JinàKiiyā	GìnàNtùzù
962	new *-pɪa	019	-руа	-hya	mhyà	-pyà	mhvà
718	night *-tika	078	usiku	cilo	βὰjikờ	Bòiikō	Bôzikô
484	nose *-poda, -jodo, -yido	050	pua	mphula	lyòòlò	lyòòlā, niìndó	lyóóló
435	oil *-kuta	081	mafuta	mafuta	màgùtà	màqùtà	mágútá
410	old *-kodo	018	kuukuu	-zehe	ghólókókó	-kòlòkólò	nhôlôkólô
440	one *-mo	012	moja	-monga	imô	-ìmô	ìmô
325	path *-jɪda	075	njia	nzila	nzîlà	nzità	nzilà
558	person *-nto	027	mtu	munthu	mùùnhò	mùùnhò	mùùnhờ
76	rain (n) *-buda	067	mvua	mvula	mbùlà	mbùlà	mbùlà
169	root *-di	035	mzizi	mdela	nji	nzwi/mizwi	nzi
95	sand *-caŋga	073	mchaŋga	muhaŋkʰa	màsénì	sáángásáángá, másáló	säängäsäängä
251	say *-boid-	099	-sema, -ambia	-loηga/-ti	-wiilā	gòwìtlâ	gòwìllá
770	see *-bon-	087	-ona	-wona	-βònà	gờβònà	gờβònà
67	seed *-beyo, -boto	033	mbegu	mbeyu	mbìyò, mbègù ?	mbìvõ	mbiyo
434	short *-kupt	017	-fupi	-fupi	ngùhì	-gùhì	ngùhì
615	sing *-yrmb-	098	-imba	-imba	-iimbà	gwitmbā	gwitmba
627	sit *-yikad-	097	-kaa	-ikala	-ikàlà	gwìgààshà	gògìishā
123	skin *-koba, -kanda, -dɪdɪ?	037	ngozi	ncingo	ikòβà, ndìlì	ìkòβā, ndilī	ikòònzà, ndìtì
136	sleep (vi)*-daad-, -gon-	090	-lala	-gona	-tiindilä	gòlààlâ	gðshiltólá
1021	small *-niini	015	-dogo	-dodo	ndò	-dólóló, -dóó	ndólòlò, ndò
629	smoke *-yoki	069	moshi	lyosi	lyòòchi	lyòòci, gòbèhà (vt)	lyòòchi
69	soil *-dongo	072	udongo	ilongo	βċliindò	βὸlòánhỏ	βάlòóngò
1029	stand *-y rm(rdrd)-	096	-simama	-ima	-itmíflá	gwitmā, gwitmiilā	gwłimitia
735	star *-tondua, -yo(n)ti	065	nyota	nyelezi/ntond wa	sòòndà	sòòndà	sòòndà
61	stone *-bue	074	jiwe/mawe	ibwe	iwė	twè (pl. màwè)	iwė/màwė
333	sun *-joba	063	jua	izuva	ltimi	litimi, lyòòßā	litmi

No	Language variety	S/N	KiSwahili (KiSanifu)	CiGogo	KìmùnàSükừmà	JinàKììyâ	GìnàNtùzù
360	tail *-kɪda	041	mkia	mucila	ŋkilà	nykitä	ŋkilà
1020	that *-da/e, -dra, VCVo	009	ile	-la	ìyò	ìyò	-yò, -chò, -βò
54	they *-bo	006	wao	vene/wawo	βòòi	βὸὸγί, βδ	βόὸὶ
166	tongue *-dɪmi	053	ulimi	lulimi	lòlìmi/ndimi	lòlìm1	látími/ndími
267	tooth *-yino	052	jino/meno	lino	liinò	liinō/mtnō	tiinė/milnė
540	tree *-tɪ	032	mti	muti/ibici	liinti	nti	iliínti
752	two *-bidt	013	mbili	-ijete	-Bitti	ißití	iβití
322	water *-jɪ	066	maji	malenga	milnzi	miinzi	miinzí
1017	we -coe, -cue, -yitue	004	sisi	sese/ase	βiisė	(y)iisė	βisé
919	what *-kx	007	nini	cici	ki	kii/kii(y)i/kii?	kiíyi
610	white *-yeda	023	-eupe <yelu pe<="" td=""><td>-elu</td><td>-ààpè</td><td>-iilō, -pé</td><td>-ààpè</td></yelu>	-elu	-ààpè	-iilō, -pé	-ààpè
918	who *-nani	008	nani	nani	nááni	nààn1/náàni?	dyàlf(hè)
339	woman, wife *-ke, kadi	025	mwanamke	mudala	ŋkừimà	ŋkĕ	ŋkė
15	you (sg) (thou) *-be	002	wewe	gwegwe/agwe	βėėβė	βėεβĕ	βėėβė
1018	you (pl) (ye) *-mae, -nue	005	ninyi/nyinyi/nyie	nvenve/anve	Bilnwe	(v)iinwē	βiinwė

Appendix 4. Lexicostatistics 100 word-list: F22, G62

No	Language variety ◆ PB and Gloss	S/N	KìDàkámà	KîNyanyêêmbê	KìKònòòŋgò	SiGàlàgàànzà	iKiHehe
133	abdomen, stomach *-da	058	ndà	ndá	ndà	ndà	lileme
926	all *-(n)ce, -yona	010	-òósê	wóósé	-ŏsè	-òósè	-mbe-li
55	arm, hand *-kono, -boko	057	křkônó	kờβòkó	gůkônó	kửβόkó	liwoko
337	ashes *-bu	071	iβú/màβú	mátůůndě	máwú	ivú/mávú	kifu
297	back (n)*-gongo	060	m(ù)gòòŋgò	mùgòòngò	m(ù)gòòngô	mùgòòngò	mugongo
27	bad *-br	021	-βí	-ßi	-βi	iβi	-vi
1022	bark *-koba	036	ìgólà	ìgólà	ìgólà	Rock	libande

No	Language variety ◆ PB and Gloss	S/N	KìDàkámà	KìNyànyèèmbè	KìKònòòŋgò		iKiHehe
811	bird *-yoni, -nyoni, -dege	029	nôni	nyòni	nôni	nyònyì	kidege
125	bite *-dom-	085	-lùmá	-lùmá	-lùmá	-Jùmá	-luma
669	blood *-gadi, (n)yinga	043	m(ù)gàzì	m(ù)gàzì	m(ù)gàzi	mùgàzi	danda
433	bone *-kupa	044	ìgùná	igùhá	igùhá	ìfùpá	kisege
17	breast *-beede	061	máβéélê, mádútú	màβėėlė	màβéélè	màβéèlè	liveele
579	child, infant *-yana, -yanake	026	nwaáná	mwaana	mwaana, kakeke	mwaana	mwana
305	cloud *-dunde	068	ilüündė	ilùùndè	ilûûndê	itùùndè	lifufu
465	cold *-pepo	077	mbèhó	mbèhó	mbèhó	mbèhó	-sisimu
524	come *-yij-	095	-iizà	-iìzá	-ilzà	-iìzà	-sa
471	cook (vt)*-dug-, -teek-	086	-zùgá	-tėėkà	-tėékà	-tèékà	-teleka
322	dark, black *-yidu, -piipi?	022	yààpi	-pì, -làβớzú	-pi, wiláβózú	-ààpì, iláßólé	-titu
382	daytime *-cr, -joba	079	lììmi hágátì	háàpé	lyờờβá	múlyờờβá	munyi
425	die *-ki-, ku-	091	-fá	-fwá	-fwá	-fwá	-fwa
60	dog *-bva	030	iwa, mbwa	mbwá	mbwá, mbwégésé, m(ù)kwíyíyí	mbwá	mbwa
448	drink (vt)*-nu-	083	-ŋwá	-nywà	-ŋwá	nywà	uku-nywa
563	ear *-toi, -koto	048	itwi	itwi	itwi/màtwi	ìtwi, màtwi	lisikisa, lipulikilo
156	eat *-dɪ-	084	-lyá	-lyà	-lyá	-lyá	-lya
273	egg *-gı	039	igf/màgí	igí/màgí	igì/màgì	igf	likaŋa
520	eye *-yico	049	fiisó	linsó/minsó	liinsó/màànsó	liinsó/miinsó	liiho
352	feather *-yoya	042	máyòyá	wòòyá	màyòyá	βòòyá	lugala
323	fingernail *-jada	054	lònòóngá	nzáálá	nòóngá	lòzàlá/nzàlá	lunyove
174	fire *-yoto, -dido	070	mòòtó	mòòtó	móótó	můliló/móótó	moto
126	fish *-comba, -cuɪ	028	ndiflô	sámáki ?	nsòómbá, nswì	nsámáki, nsóómbá	somba
1028	fly (vi) *-pap-, -guduk-	093	-làlá	-lờớkà	-làlá	-gờiờká	-guluka, -gulunduka
149	give *-pa, -yiŋk	100	-iinhá	-pá	-pá	-pá, -pééLézyà	-pela

	" ooud par do				Blooman	OlOalayaansa	
	To and Gossa v	084	48	-48	÷yė	-ya	-bita
	and The Pool	020		-sógá	nsógá	nsógá	nJou-
	Annual big postered - kradit			-hánvá	nkálá, -kálá	-katá, -hànyá	-komi
	deal, pill powerial		:	lünvelé/nvělé	lònyèlè/nyélè	lànyêlé	Į.
707	all -yuldi -yuede		:	mwenikili	mwenikili	ââwé	тмеле
366	head this			můtwé	m(ü)twé	mútwé	mutwe
823 h	ear "violileo-		:	-ligwa	-dègélèkà	-ligwâ	-bulika
543	total tree		-0	mòòyò ?	m(ù)tìmà	тодуо	numbula
707	om koov "-pembe		:	pêémbé	ipèémbé	ipeémbé	Inpembe
1016	-oe		:	èèné	neene	èèné	nene
218 k	III "-vitbod(ao)-			-wolágá	-wolága	Bolágá	-wulaga
348 k	nee *-dui -du			iydngó	ógűnyi		lifugamil
	know *-man()-			-manya	-manya	-manya	-lukagul
	and "-van			idobto	idótó	Itiinta	Ilhamba
	lea foot *-anda			ლ(ი)მიქი	mûgölö, migölö	kdgðld/mágðld	ligulu
	iver "frms			itima	ittmå	itimá	mutima
	ononal *-deepu -tadı -de			ndiihü	-IIII-0	ntàif	Į.
	ouse *-nwmba			mpani	mpani	idá/mådá	Isonsoli
3.5	nale man husband -koci		:	goosta	1g66sya	m(u)gbbsya	umunyi
	many *-vinor			nyingf	nyiingf	nyingi	nJolo-
989	neat *-(n)yama			nyámá	nyama, kanyuungd koomu	nyámá	nyama
	milk *-beade	082	****	màßèèlè	maßeele	måßéélé	lisiva
	pov- coom	064		mwėėzi	mwėėzi	mwėėzi	mwesi
7.7	mountain * order - dender	076	Idadio	Stocks	ისემის	ျပုဒ္ဓတ်(ပ	kidunda
1026	mouth *-domo	051		můlômô	т(ü)юто	můlômô	mulom
281	name *-vina	080		iliná	ilina	Illina	ldawa

No	Language variety ► PB and Gloss #	S/N	KìDàkámà	KîNyànyèèmbè	KìKònòòŋgò	SiGàlàgàànzà	iKiHehe
379	neck *-ki(i)ngo	059	nhìingó	hiingó	hiingó	ikósi	singo
962	new *-pra	019	-pyà, -gènì	mpyå	m(ù)pyà	-pyà	-руа
718	night *-tiko	078		ùzikó	βòzikó	β∂fůkú	kilo
484	nose *-poda, -jodo, -yido	050	niíndó	nyiindó	niíndó	nyìíndó	megelo
435	oil *-kuta	081	mágútá	màfùtá	mägútá	máfútá	mafuta
410	old *-kada	018	-kölőkőlö	-à kálè	ikùùkùù, lyàkálé	-kởớkớờ	-gogolo, -vaha
440	one *-mo	012	lómó	yímò	yímô, sòòló	limò	-mwi
325	path *-jɪda	075	nzila	nzilà	nzilà	nzilà	nasi
558	person *-nto	027	mùùnhờ	mòòntò	mùùntờ	mùùntù	munu
76	rain (n) *-buda	067	mbùlá	mvůlá	mbùlá	mvůlá	ndonya
169	root *-di	035	mùzi	m(ù)zi	m(ù)zi	můzi	ludela
95	sand *-canga	073	m(ù)sèèngélà	mùsèngàsèngà	m(ù)sèngàsèngà	músééngá	luhanga
251	say *-boid-	099	-wiflā	-wìflà	-wiilà	-βwíílà	tigila
770	see *-bon-	087	-βòná	-woná	-wòná, -lìiŋgá	-βòná	-wona
67	seed *-beyo, -boto	033	Ιθβὶνό	mbìyớ	mbiyá	mbùtó	inyadikwa
434	short *-kupr	017	ngùhí	ngùhí	gùhí	sifupf, -guhf	-fupi
615	sing *-yɪmb-	098	ììmbá	-ììmbá	-ìmbà	-iimbá	-imba
627	sit *-yikad-	097	-iikālā	-ìkàlà	-ìkálà	-iikālā	-tengemala
123	skin *-koba, -kanda, -dɪdɪ?	037	ndîlî, ndîlîf	ndití	ndìlí	ndìlí	nyingo
136	sleep (vi)*-daad-, -gon-	090	-làálā, -tìindílā	-jàálà từ ló	-làálá	-làálà	-gonelela, -vasa
1021	small *-niini	015	ndó	ndó	ndò	sidó	-dodo
629	smoke *-yoki	069	lyòòchí	lyòŋki	lyòki	lyòònsí	lyusi, lisusi
69	soil *-dongo	072	βὰlöóngò	èlòóngò	dlóóngó	βèlóóŋgò	luganga
1029	stand *-y rm(rdrd)-	096	-timá	-tiriá	-itmá	-timá	-ima
735	star *-tondua, -yo(n)ti	065	sòòndá	sòòndá	sòndá	nsòòndá	inyenyesi
61	stone *-bue	074	iwė	iwė/màwė	iwė	iβwė	ligaŋga
333	sun *-joba	063	itimi	lyὐὐβá	Ιγὐὰβά	Ιγουβά	lisuva
360	tail *-kıda	041	mùkilá	můkilá	můkilá	músilá	mukila

No	Language variety ◆ PB and Gloss #	S/N	KìDàkámà	KîNyànyèèmbè	KìKônòôŋgô	SiGàlàgàànzà	iKiHehe
1020	that *-da/e, -dra, VCVo	009	ìyò	ffyò	ìyò	iyò	-la
54	they *-bo	006	βὸὸί	βèníkílí	ààwò	àβò	vene
166	tongue *-dɪmi	053	làlìmi	tótřmí	látřmí	làttmi	lulimi
267	tooth *-yino	052	liìnó	liìnó/miìnó	liìnó/mìinó	liinó/miinó	liino
540	tree *-ta	032	mòtí	mùtí	m(ù)tî	mùti	libiki
752	two *-bidi	013	ißfif	ißtif	ìβfif	ißilí	-vili
322	water *-jɪ	066	miinzf	mitnzí	miinzí	milnzí	luleŋga
1017	we -coe, -cue, -yitue	004	yiiswé	liswé	yilswé	ifwé	hwehwe
919	what *-kɪ	007	kí	kí	kí	síí	kiki
310	white *-yeda	023	yààpé	yààpé	mwėėló, yaapė	nyèèlú	-elu
918	who *-nani	008	nááni	nààni	tnáání	ndéé	nani
339	woman, wife *-ke, kadi	025	můkřímá	m(ù)kìímà, m(ù)ké	m(ù)křímá	můkfímà	umukimama
15	you (sg) (thou) *-be	002	βèèβé	èèβé	βèèβé	èwé	veve
101	you (pl) (ye) *-mae, - nue	005	lingwé	liŋwé	yiiŋwé	ìmwé	nyenye

Appendix 4. Lexicostatistics 100 word-list: F31, F32

No	Language variety ◆ PB and Gloss #	S/N	KînâÚshôôlà	KîniLââmbâ	KiniHàànzù	GiRwana	GiÅhi	y inyàMùnyiŋàny
133	abdomen, stomach *-da	058	ndà	ndàà	ndà	ndà	ndà	ndà
926	all *-(n)ce, -yona	010	swė, túlwė	swèè	ihi	nyòòŋè	-òòŋè	nyòòŋè
55	arm, hand *-kono, -boko	057	můkônô	môkônô	máxono	màxònò	màxònò	můkônô
337	ashes *-bu	071	màû	màů	màù	màù	máú	màù
297	back (n)*-gongo	060	mùgòòngò	mògòòngò	mògòòngò	máyóángó	műyööngö	mùyòòngò
27	had *-br	021	mbí	mbf	ibì	mbf	ißf	mbf

9	Language variety ► PB and Gloss ∜	S S	KinaUshoola KiniLaamba KiniHaanzu	KiniLaamba	KinjHaanzu	GIKwana	GIANI	yinyaMünyiŋany
1022		038		gyóé	igáámbá	ibada	İbaada	ibada/mabada
811	bird "-yoni, -nyoni, -dege	028	noni	noni	mybryi	inyoonyi	nyoonyi	nydonyi
125		085	kölümä	kölümä	kölümä	drùmá	òrúmá	òrùmà
699	blood *-gadi, (n)yinga	043	migáli	migálí	nsákámi	sayami	sayami	sayami
433	bone *-kupa	044	kúpá	kyúpá	ikúpá	ikūra	lyúfá	îkû¢â
	breast *-beede	98	mbélélé	mbélélé	iyeele	mbéé	ivéé, dvéé/mávéé	máányá éé
679	child, infant "-yana, - yanake	970	mwaana	mwááná	nwaana, munenya	mwaana	mwááná, möninyá	mújimbá, mwáán
305	cloud *-dunde	990	allüün		lküündê	Iniúndé		irùùndê
465	cold *-pepo	077	mpépò	mpépò	mpépó	dryókű	трефо	треефо
624	come *-yij-	980	kojiza		ktza	oja		oja
471	cook (vt)*-dug-, -teek-	980	Külügâ		kölügő	ðrüyá	-	ddya
822	dark, black *-yido, -piipi?	022	nzilò		ndwaald	joriki		joriki
	daytime *-ct, -joba	079	múúnsi		manwe	magam		müümw
	de *-ki-, ku-	091	kökíá		kosha	kûyâ		kúyá
	dog *-bua	030	mbúá		mbwa	mbwá		mbwá
448	drink (vt)*-nu-	083	kököpä		konwa	nywa		nywa
-	ear *toi, -koto	048	kötőî		kotwi	koRwi		ikdRwe
156	eat •dr	084	kolyá		kolya	òlá		Ola
273	ı6-, 66ə	039	gt/mågi		ijiê/mâjiê	ilyė/malyė, iyi/mayi	:	iryė/māryė
620	eye *-yico	048	ilisó/milsó	liisò/milsò	ilihó/milhò	ilihò/miihò	ilihó	riihð/miihò
652	feather *-yoya	045		máúli	nzóyá	njoôya	majóóyá	máßöri
323	fingemail *-jada	054		Ibkólúkúlú	lökülökölö	ökükü	ghúghú	Okúúků
474	fire *-yoto, -drdo	070		mòótò	тоот	mooRo	тооЯо	móóRó
126	fish *-comba, -cur	028		insif	insit	samáki ?	soomba	sóómbá

No	Language variety ◆ PB and Gloss	S/N	KináÚshoolá	KiniLaamba	KînîHàànzù	GìRwana	GiÅhi	y înyâMûnyiŋânyi
1028	fly (vi) *-pap-, -goduk-	093	kòpùpùtà	kòpùpùtà	kôpůtá, kôlůmá	ðrùmá	drůmá	drůmá
149	give *-pa, -yiŋk	100	kòpéélà	kòpéélà	kôpůnyá, kôpá	pá?	òfá	dóóyà
269	go *-gi-, -yend-	094	kùyééndà	kừlóóngòlà	kůlôngôlá	èèndà	dweenda	gwèèndà
758	good *-yija	020	mùùzâ	mùkééndè	nziza	njijà	ờờjá	jiyànà
409	great, big, powerful *-kodo	014	-kólů	ŋkúlù	ŋkàlà	kóó	ηκύΰ	ηκάά
702	hair *-yuɪdɪ, -yuede	045	lòtúúmbì	làtùùmbì	lðsilngá/nsilngá	ðRúká/ntúká	ðjíi	òtùkà
503	he, she *-kge, -ye(e)	003	θyό	Òγό	ŋwėėnsò	mwèèsò	mwésó	mwèèsò
356	head *-toe	046	túé	túě	itwė/mitwė	iRwė	iRwé/ màRwé	itwė
623	hear *-yigu-, -teg-	880	kùiigyà	kờigyà	kija	Rààyà	Rèyèà	Règèà
543	heart *-kodo, -tima	047	ŋkólò	ŋkólò	ŋkòlò	ηχόδ	ηχόό	ŋkóó
707	hom, ivory *-pembe	040	lòpéémbé/máp éémbé, òr mpéémbé	làpéémbè	lôpèèmbė, ipėèmbė/ màpèèmbė	ðféémbé, mpéémbé	ôféémbé	ðφėėmbė
1016	I *-ne	001	fíně	ìnè	nèèné	ntini	nèènè	nèènè
218	kill *-yit-, -bud(ag)-	092	kwiyólágá	kờyớlàgà	kòwòlága	οὐιάγὰ	σολάγα	ὸὸráγà
348	knee *-dui, -du	056	lúú/màlúú	lúù	ilù	îlù	řlú/màlú	ìrù
526	know *-man(i)-	089	kòmànà	kòmànà	kòmànyà	òmànyà	òmànyà	òmányá
1025	leaf *-yani	034	lókà	lókà	itòòtô	iRóRò	iRóRó/ màRóRó	itótò
310	leg, foot *-godo	055	mögölö/migöl ö	màgàlà	mùgởlở/mìgờlở	màyàà	môyờờ	mθγάθ
1024	liver *-trma	062	tyímá	tyímà	itimà/màtimà	iRimà	iRimá	itîmà
144	long/tall *-deepu, -tadı, -de	016	lyffpù	lyffpù	lôlipù	ndifů	liifů, ndiifů	ndifů
1023	louse *-nyumba	031	mpàni	mpànì	mpáni	ndà	ndá	ndà
226	male, man, husband *- koci	024	mògóóshá	ŋgöóshâ	igòhà	mờγòósyà	mθγόόsyá	ηgòósá
793	many *-yingt	011	iíngì	niiŋgì	idó	nyiingf	-iingt	-lingt
596	meat *-(n)yama	038	námá	nàmà	nyàmà	nyámá	nyààmà	nyààmà

No	Language variety ◆ PB and Gloss	S/N	KînàÙshòòlà	KìniLààmbà	KìnìHàànzù	GìRwana	GìÀhì	yżnyàMůnyiŋàny
1030	milk *-beede	082	másóónsó, másóóngá	másöönső	másóónsó, máèélé	mààyà, màhòòngá	mààyá	mààyà
716	moon *-yedi	064	mwééli	mwéélì	ŋwèèlî	mwèèlí	mwééli	rnwééri
717	mountain *-godo, -dondo	076	mùlfmà	ŋkóóŋkò	lògòlò	gryódngó	gìRààntó	ηὀὸηgὸ
1026	mouth *-domo	051	mùlòmò	mùlòmò	můlômô	mwòòmò	mwòòmò	rnwòòmò
81	name *-yina	080	liina	liinà	liínà	liiná	liiná	riinà
79	neck *-ki(i)ŋgo	059	ŋkiiŋgò	ŋkiiŋgò	ŋhiiŋgò	ŋkiiŋgò	ŋkiiŋgö	ŋkiiŋgò
62	new *-pra	019	mpyå	mpíà	mpyà	ifyà	-fyá	mpyà
18	night *-tiko	078	òtikò	ùtíkù	átiká	àRixà	àRiká	dRikd
184	nose *-puda, -judu, -yıdo	050	mpòlà	mpòlà	mpòlà	mpòlà	mpóá	mpòòrà
135	oil *-kuta	081	màkútà	màkútà	màkùtà	màkùRà	màxúRá	màkùtà
110	old *-kada	018	nkálákálá	nkólókóló	nkòlókòlò	ikóð, ixóómbi	lìhiilė	àxàèngè
140	one *-mo	012	kààmwt	kámwt	kànwì	ìmwè	ìmwè	gámwè
325	path *-jɪda	075	nzilà	nzilà	nzilà	njià	njià	njià
558	person *-ntg	027	mòòntò	mòòntò	mòòntò	mòàntò	mòòntò	mòòntò
76	rain (n) *-buda	067	mbúlà	mbúlà	mbúlà	mbùlà	mbùà	mbùrà
169	root *-di	035	mòli/mìlì	mòli/miti	mùli	mòòyì	mwiili	mòòryì
95	sand *-caŋga	073	múnsààŋgà	múnsààŋgà	mìhààngàhààng à	máháló	ihààŋgàhààŋgà	rnáhángáhángá
251	say *-boid-	099	köyíílá	kòyíflà	kòkwiìlâ	hánià	hánià	òxánià
770	see *-bon-	087	kôvônà	kôyónà	kòòná	gòònà	òòná	òònà
37	seed *-beyo, -boto	033	mbéð	mbéờ	mbèò	mbėyo	mbééyő	mbėėyò
134	short *-kupt	017	kúpi	kúpì	ŋkùpì	kůfî	kùff	ŋkùpì
315	sing *-yımb-	098	kôvíímbà	kôvíímbá	kirmba	atimbà	fímbá	witmba
327	sit *-yikad-	097	kókíkáláánsá	kókíkáláánsá	ikit	ixàà	ixáá	gixàà
123	skin *-koba, -kanda, - drdr?	037	ndili	můkóónzà	nditi	ndìì	-	môkôônjà

-	Language variety •	S S	KinaUshoola KiniLaamba KiniHaanzu	KiniLaamba	KiniHàànzù	GIRwana	E 5	i di di mala di Mala d
138	steep (vi)*-daad-, -gon-	060	kögönä ndóóló	kögöná ndóóló				Oraa too
		940	Ilah	piju				ολοολο
	small *-niint	5	2	4.44.3				yddki
	smoke *-yoki	690	OOK	IXOOKI				gródnad
	- done	072	gblooti	gloodo				1000
	Office and	800	nylmika	köyímiká				IIIII
1029	Stand -y mymary	980	soonda	nsoonda	nzota	njoRa	njoRa	njoKa
-	star -tonous, -your	3	A fem Apply	windminin.				igwe/magwe
-	stone -bde	5	200	and the second				lyddga
_	sun *-juba	8	osso/mpaso	IIZOWA				ithddmbd
-	360 tail -kida	041	nòkdià	mokila				İst
5	that *-date -dta VCVo	600	lyb	níaso, tyo				RAPPY
2		900)vQ	aasio, to				delane.
1		063	Milmi/utmi	lolifmi				
0	tongue -airm	060	Qui (m) (m)	Olino/milno				ulluo/millio
1	toothyino	3		44.8				mooRe
0	rree -tr	032	куота/такота	Kyota				iBH
	bwobids	013	Kabili	Kabili				mabit
	The second second	990	máázi	máázi				4444
v !		0	leho	isie				20000
	we coecue. Zince	200	vádni	vááni				nioon
6	whatKI	3		200				njeeru
0	white *-yedu	023	mweeld	Olazu				aanyū
•	jueu- oan	008	waani	waani				movema
2	women wife "-ke kadi	025	mdsddngd	masoongo				DAARA
2	ad thought	005	dwe	dwe				DODA'S
	Noun) (fig) nox		A	Ain!				

Appendix 4. Lexicostatistics 100 word-list: M31, F24, G42d, G11, F24, F25, F33, F34

9	Language variety ● PB and Gloss ∜	S.	ıKıNyakyusa	KiKíímbö-N	KiKiimbò-S		KiiRàngi	KèèMbùwè
133	abdomen, stomach *-da	058		ndà	ndà	èndà	iinda	ndà
	all *-(n)ce, -yona	010	-osa	-oose	woose	yèèsi	òòsi	-óónsé
	arm, hand *-kono, -boko	057		múxônô/míxônô	mùxónò	dŋkono/imikono	műkönö	mdXdnd
	ashes *-bu	071		máù	máù	itwiitwi	īvū	yùú
	back (n)*-gongo	090		mùgòóngò	mugóóngó	mùgòòngò	mwoongo	mòónxó
	bad *-br	021		igi	ĮQ.	iwi	yavéha	kivi
	bark *koba	036		ipata	ipátá	igaamba	ikòkò	jólá
	bird *-yoni, -nyoni, -dege	029		nyonyi	nyônyi	inooni	ndèè	mire
	bite *-dom-	085		kólůmá	kólümá	kóùmà, kówawa	kölümä	olómà
	blood *-gadi, (n)yinga	043		mùgàzi	chááji	Öláándá	sákámi	mwaari
	bone *-kupa	044		ikūpā	ikúpá	ifûpà/mìfûpà	ikúfá	kúfá
	breast *-beede	061		máßéélé	máßèélè	maweele	mátóómbó	màsii
	child, infant *-yana, - yanake	026		mwaana	mwááná	ðmwááná ndü	m(ü)siiŋgâ	mwaana
	cloud "-dunde	88		llùùndè	llüünde	lköömbi, iwiingö	Ìchờ	dùùndê/mâdù ùndê
	cold *-pepo	220		mpèpò	шреро	îmbêpô	mpėhò	mpéfò
	come *-yij-	095		kwiija	wiija	wiizà	kôojá	oója
;	cook (vt)*-dug-, -teek-	980		kütêéxa	kötééxá	kötélééká	koniwa	otérèkà
	dark, black *-yidu, -piipi?	022		-aapi	nytilò	nyliö	njtro	mweirama
••••	daytime *-cr, -joba	620		lyóónsi	lyddnsi	ðnsáná ŋkölö	müüsf	mônsékàti
	die *ki-, ku-	091		kogulaala	kòchá	köfwa	köküyä	kúyà
09	dog *bua	030	mbwa	mbwa	mbwa	ilmbwa	kởri	diyó
	drink (vt)*-nu-	083	_	kdŋwa	könwá, könwéélá	kůmwěélá	kùnywa	óònyá

No	Language variety ◆ PB and Gloss	S/N	ıKıNyakyusa	KìKíímbò-N	KìKíímbò-S	ìCfWààŋgà	KiiRàngi	KeeMbùwe
563	ear *-toi, -koto	048	mbolokoto	itwi/mátwi	itwi	ikóótwi (of animals), isikíló (of humans)	kòtò	kótó
156	eat *-d1-	084	-lya	kólyá	kúlyà	kůkůdyá	kờryà	rá
273	egg *-gı	039	ifumbı	igí/màgí	igí	iyi/mààyi	iyî	yààt/mààyí
320	eye *-yico	049	liso	liiso/miiso	liìsò	liiso/àmiiso	riisò	riísò/màisò
352	feather *-yoya	042	ijoja	wóóyà	màgálà, wààgi	ámáwéyá	bààèrà	mbůůyé
323	fingernail *-jada	054	kyala	inòòngà	lwààlà	intingwa	mpààhà	lòjálá
174	fire *-yoto, -dido	070	moto	mòòtò	móòtó	òndìlò/miindìlò	mòòtó	mòótò
126	fish *-comba, -cur	028	nswi	nstpa	Ínshì	ishwi	sámááki ?	nsívé
1028	fly (vi) *-pap-, -godok-	093	-pululuka	kònyáánxá, kòpápámúxá	kòdííxà	kólóká	kòhólòkà	òfàlàlà
149	give *-pa, -yiŋk	100	-ра	kúpèélà	kòpèélà	kòòmbà	kùtóólà	òfá
269	go *-gi-, -yend-	094	-buka	kůyá	kôvà	kòwààlà	kòdùmà	òfétà
758	good *-yija	020	กขกข	wósògà	nsògà	nòònù	và bòòhà	kèèiá
109	great, big, powerful *-kodo	014	-nywamu	ikòlò, ihányà	íkůlů	ikòlò	kóóló	kinénè
702	hair *-yuɪdɪ, -yuede	045	lunywili	lònyéè/nyélè	nyèèlè	învêèlê	lòiwíílì	njérè
303	he, she *-koe, -ye(e)	003	mwene	ŋwèèné	mwèènê	mwèènè	vėėí	wèé
356	head *-tue	046	onto	mútwè	itwé	òòntwè	mùtwè	môtwé
23	hear *-yigu-, -teg-	088	-priika	kůtěgěélà	kötégéélá	kůkwiirwá	kůtéérà	òtéérà
43	heart *-kodo, -trma	047	ndombola	môóyò	môòyò ?	òmòòyò	mötimä	ŋkólò
707	hom, ivory *-pembe	040	lopembe	liìnò, ípėėmbė	liinò, ipèèmbè	ípèémbé/ mápèémbè	mpèèmbè	mpéémbé
016	i *-ne	001	one	nêènè	ònééné	nèèné	nèèné	nééně
18	kill *-yit-, -bod(ag)-	092	-goga	kówòlágà	kòwòlágá	kòkómààngà	kòólàà	wóólá
48	knee *-dui, -du	056	ifundo	iyòòngó/ máyòòngó	íilù	igóóti/mágóóti ?	ichóómèró	kiirů
26	know *-man(i)-	089	-manya	kómányà	kòmányá	kòmàànà	kòtáángá	ómányá

No	Language variety ◆ PB and Gloss	S/N	rKrNyakyusa	KìKíímbò-N	KìKíímbò-S	ìCfWààŋgà	KiìRàngi	KèèMbùwè
1025	leaf *-yani	034	lyani	ititi	ititi/mátiti	másööté	isààmbí	sààmbí
310	leg, foot *-godo	055	kılunde	mùgởlở/migởlở	mùgálð/mìgá lð	ìchìnámà/ìminám à	köölö/mäölö	kààlà/mààlà
1024	liver *-trma	062	kınıe	itémà	itèmà	itimà/màtimà	itiman	tímà
144	long/tall *-deepu, -tadr, -de	016	-talı	-Nìhù	kôtálî	ndáání	ndíhì	ndři
1023	louse *-nyumba	031	ngolo	mpàni	mpáni	isòòmì	nylingiri	mpóti
226	male, man, husband *-koci	024	nyambala	igòóshà	igwiisha	ilùmè	můlůmě	lómě, nyáámbá
793	many *-yingɪ	011	-iŋgɪ	nyiingt	nyiingi	fniinji	ìréfù	nyiingt
596	meat *-(n)yama	038	nyama	nyàmà	nyàmà	inyaama	nyàmà	nyàmà
1030	milk *-beede	082	lukama	máβèélè	màβéélè	àmáwèélè	másodsó	màsií
716	moon *-yedi	064	mwesi	mwééli	mwééli	òmwéézi	mwėėri	mwėėri
717	mountain *-godo, -dondo	076	kyamba	lògòlò	kitóóndà	kitòòndà	lòòlò	mwèèmbf
1026	mouth *-domo	051	nkanwa	můlômô	mùlòmò	ùndòòmò	můlômô	môlòmò
281	name *-yina	080	ingamu	liinà	liinà	illinà	trinà	riinà
379	neck *-ki(i)ŋgo	059	makosi	ŋkiìŋgò	fŋkiiŋgò	isiingò	ŋkiiŋgò	nchiingò
962	new *-pra	019	-руа	mpyà	mpyá		nsya	kífèfé
718	night *-tiko	078	kilo	βótiků	ßótikò		ùchíkú	òtíků, nôtíků
484	nose *-poda, -jodo, -yrdo	050	mbulo	mpólà	mpòòlà	itmbòlà	mpůlà	mpòlà
435	oil *-kuta	081	mafuta	mákútá	mákůtá	mäfüütä	mākūtā	màkútà
110	old *-kodo	018	kolo	nsáxálò, ixámà, lyà xálè	nsáxáló	ìkààlì	hàsàkààlà	nswààlá
140	one *-mo	012	-mo	lómò	ìmwí	iìmwî	ìmódò	mòòntí
325	path *-jɪda	075	njila	njila	njila	izila	nitrá	nièrà
558	person *-ntu	027	mundo	mùúntờ	můúntờ	ở ở ndờ/àwà ản đờ	mòòntò	moonto
76	rain (n) *-buda	067	tfula	mbùlà	mbùlà	ivůlá	mbùlà	mbúlá
169	root *-di	035	onsi	mùli	můli	ikwáázó	mùrì	móri
95	sand *-canga	073	unsanga	můséngásééngá	Bàlóóngó	òlòsáángá	sáló	mòsààngà

No	Language variety ► PB and Gloss #	S/N	ıKıNyakyusa	KìKíímbò-N	KìKíímbò-S	ìCíWòòŋgò	KiiRàngi	KèèMbùwè
251	say *-boid-	099	-ti	kòwìílà	kòwiilà	kówitla, kópóója	wiirà	ówéérà
770	see *-bon-	087	-bona	kówona	kówóná	kůlůlá	kwòònâ	wòónà
67	seed *-beyo, -boto	033	mbejo	mbèèyà	mbėėyò	imbèyó	mbėėyó	mbéó
434	short *-kupt	017	-pimba	-kûpî	íkùpì	fnìpì	ŋkúfi	ŋkúfè
615	sing *-y1mb-	098	-ımba	kwiimba	kwitmba	kwiimba	kwitmba	wèémba
627	sit *-yikad-	097	-togala	kwiixàlà	kwiixala	kwiikala	kwiikàlà	weikālā
123	skin *-koba, -kanda, -dıdı?	037	mbapa	ntiilà	ntiilà	ingwèèmbè	ndírì	mbèró
136	sleep (vi)*-daad-, -gon-	090	-gona	kògònà ndòólò	kờgônà	kôkônà ởtôlô	kòláálá tòló	òlálà tòlò
1021	small *-niini	015	-nini	-dò	kádókádó	ichi	ndúúdí	kididi
629	smoke *-yoki	069	lyosi	lyóóki	lyóóki	ijóóshi	mòòkyì	mòókì
69	soil *-dongo	072	mfu	alóóngó	ἀΙάόηgὸ	iláángá	iròòngò	nsáló
1029	stand *-y Im(IdId)-	096	-ıma	kwíímà	kwitmilila	kwiimililä	kwiima	wèémà
735	star *-tondua, -yo(n)ti	065	ındondwa	nsóóndá	njôtà	fízòtá	nyényèèri	njôtà
61	stone *-bue	074	ibwe	ibwė/mábwė	ibwė/màbwė	iwė/mawė	iβùyè	wėė/màwėė
333	sun *-juba	063	isuba	lyóónsi, wáápè	lyóónsi	únzòwà	mwääsö	jòóvà
360	tail *-kıda	041	onswigala, imbikipiki	múkilà	múkílà	ònchìlà	mùkirà	mòkérá
1020	that *-da/e, -dia, VCVo	009	-la	ìyò	ìyò	yilà	(ki)-là	kérá
54	they *-bo	006	bene/babo	iwó	Ìwó	àwèènê	vôôvô	vôó
166	tongue *-dtmi	053	lolimi	lólimi/ndimi	itòlími	òólìmi/indimi	lòrimi	lòrémė/ndém
267	tooth *-yino	052	lino	liínô/miinò	liinò/miinò	iliinò/àmiinò	iyòò	yéò/máò
540	tree *-tı	032	mpiki	mútì	ipíki	ikwi	můtř	mòté
752	two *-bidi	013	-bili	jiβfti	jiβíli	ùwiti	iviri	ívèrè
322	water *-iɪ	066	misi	mijt	miijt	máázi	mààjì	màájí
1017	we -cge, -cue, -yitue	004	oswe	liswė	swèèswé	shwééshwè	sòòsó	síyè
919	what *-kr	007	ıfikı	kti	kinto ki	chỉnđó chi	ché	kíkí
610	white *-yedu	023	-elu	yèèlù, yààpè	mwèèlü	înéélò	njèrù	njérò
918	who *-nani	008	liku/iwani	ánàànù	anaani	ớ nàànù	ánié	ányú

,	
KeeMbuwe	moka wêewe nyê
KiiRangi	mookyé ? wééwé nyivinyii
iCíWöṅŋgö	ónchimá óweéwe Mwéémwe
KiKíímbö-S	muklima weewe nyweenxwe
KiKíímbò-N	müktima Béégé Jimwé
ıKıNyakyusa	nkikulu ugwe GITIWE
SAN	025 002 005
Language variety • PB and Gloss J	woman, wife *ke, kadi you (sg) (thou) *be you (pt), tmse,nve.
2	339 15 1018







