# A Basic Sketch Grammar of Gĩkũyũ 

Edited by Robert Englebretson

# With Wambũi Mũringo Wa-Ngatho, Language Consultant 

A Special Issue of<br>Rice Working Papers in Linguistics<br>Volume VI<br>July 2015

This volume serves as the capstone project of the 2014-2015 Field Methods course at Rice University (LING 407-408). Listed alphabetically, the course participants whose contributions appear in this publication are:

Lisa Jeon
Jessica Li
Samantha Mauney
Anaí Navarro
Jonas Wittke

Englebretson, Robert (Ed.), with Wambũi Mũringo Wa-Ngatho (Language Consultant). 2015. A Basic Sketch Grammar of Gîkũyũ. Rice Working Papers in Linguistics, Vol. 6, Special Issue.

Licensed under Creative Commons, Attribution-NonCommercial 3.0 Unported License http://creativecommons.org/licenses/by/3.0/us/
©creative
cc) commons

Authors retain all copyrights, and are allowed to publish, present, and/or use any or all of the material in their contributions for their own purposes-prior or subsequent to the appearance of their work in Rice Working Papers in Linguistics (RWPL).

Contributions by:
Robert Englebretson
Lisa Jeon
Jessica Li
Samantha Mauney
Anaí Navarro
Jonas Wittke

## Table of Contents

List of Tables ..... ix
List of Figures ..... X
Orthography ..... xi
Glossing Abbreviations. ..... xii
Acknowledgements. ..... xiii
Preface Robert Englebretson ..... XV
Chapter 1 Phonology Anaí Navarro ..... 1
1.1 Consonants ..... 2
1.1.1 Stops and Affricate ..... 2
1.1.2 Nasals ..... 4
1.1.3 Tap ..... 4
1.1.4 Fricatives ..... 5
1.1.5 Approximants ..... 5
1.2 Vowels ..... 6
1.2.1 Front Vowels ..... 6
1.2.2 Back Vowels ..... 6
1.2.3 Low Central Vowel ..... 6
1.2.4 Diphthongs ..... 6
1.2.5 Triphthongs ..... 7
1.2.6 Vowel Length ..... 8
1.3 Syllable Structure ..... 8
1.4 Tone ..... 9
1.5 Morphophonology ..... 9
1.5.1 Dahl's Law: Velar Stop and Fricative Alternation ..... 9
1.5.2 Combining Vowels Across Morpheme Boundaries ..... 10
1.5.3 Syllable Initial Approximant Formation ..... 12
1.5.4 Avoiding Sequences of Three Vowels ..... 12
1.5.4.1 Blocking Lengthening ..... 13
1.5.4.2 Using the Palatal Approximant to Split Up Syllables ..... 13
1.5.4.3 Postalveolar Fricative Epenthesis ..... 14
1.5.5 Attaching Nasal Prefix N - ..... 15
1.5.5.1 N + Fricatives ..... 15
1.5.5.2 N + Voiceless Stops ..... 16
1.5.5.3 N + r ..... 16
1.5.5.4 N + Nasals ..... 16
1.5.5.5 N + Vowels ..... 17
1.5.5.6 Exceptions in $\mathrm{NC}_{9}, \mathrm{NC}_{10}$ ..... 17
Chapter 2 Nouns and Noun Phrases Jessica Li ..... 18
2.1 Nominal Morphology ..... 18
2.1.1 Noun Classes. ..... 18
2.1.1.1 Classes $1 / 2$ ..... 19
2.1.1.2 Classes $3 / 4$ ..... 20
2.1.1.3 Classes 5/6 ..... 21
2.1.1.4 Classes 7/8 ..... 22
2.1.1.5 Classes 9/10 ..... 22
2.1.1.6 Class 11 ..... 24
2.1.1.7 Classes $12 / 13$ ..... 25
2.1.1.8 Class 14 ..... 26
2.1.1.9 Class 15 ..... 27
2.1.1.10 Classes $16 / 17$ ..... 28
2.1.2 Semantics Of Gîkũyũ Noun Classes ..... 29
2.1.3 Singular/Plural Pairings. ..... 29
2.1.4 Noun-Noun Derivation ..... 31
2.1.4.1 Diminution ..... 31
2.1.4.2 Augmentation ..... 32
2.2 Components Of The Noun Phrase ..... 32
2.2.1 Pronouns ..... 35
2.2.1.1 Personal Pronouns ..... 35
2.2.1.2 Dependent Pronouns ..... 36
2.2.1.3 Possessive Pronouns ..... 37
2.2.1.4 Relative Pronouns ..... 39
2.2.1.5 Demonstrative Pronouns ..... 40
2.2.2 Adjectives. ..... 40
2.2.3 Demonstratives ..... 41
2.2.4 Numerals ..... 43
2.2.4.1 Cardinal Numerals ..... 44
2.2.4.2 Ordinal Numerals ..... 47
2.2.5 Quantifiers ..... 48
2.2.6 Associative Construction ..... 49
2.2.6.1 Possession ..... 50
2.2.6.2 Location ..... 50
2.2.6.3 Attributive ..... 51
Chapter 3 Verbs Jonas Wittke ..... 52
3.1 Introduction ..... 52
3.2 Prefixes ..... 53
3.2.1 Focus Particle ..... 53
3.2.2 Subject Concord Marker. ..... 54
3.2.2.1 Person ..... 55
3.2.2.2 Noun Class ..... 56
3.2.3 Negative ..... 57
3.2.4 Tense .....  59
3.2.5 Tone ..... 61
3.2.6 Object Concord Marker ..... 63
3.2.7 Reflexive ..... 64
3.3 Stem ..... 64
3.3.1 Reduplication ..... 65
3.4 Suffixes ..... 67
3.4.1 Reciprocal ..... 67
3.4.2 Intensive ..... 69
3.4.3 Middle Voice ..... 70
3.4.4 Reversive ..... 71
3.4.5 Causative ..... 73
3.4.6 Applicative ..... 74
3.4.7 Aspect ..... 75
3.4.7.1 Processual .....  .75
3.4.7.2 Imperfective / Habitual ..... 76
3.4.7.3 Perfect. ..... 76
3.4.7.4 Completive ..... 77
3.4.7.5 Progressive ..... 77
3.4.7.6 Sequential ..... 78
3.4.8 Transitivizer ..... 78
3.4.9 Passive ..... 79
3.5 Final Vowel ..... 80
3.6 Summary ..... 80
Chapter 4 Copular Clauses Jessica Li \& Anaí Navarro ..... 82
4.1 Copula ..... 82
4.2 Predicate Nominals ..... 85
4.3 Predicate Attributives ..... 88
4.4 Locative Clauses ..... 89
4.5 Possessive Clauses ..... 91
4.6 Existential Clauses ..... 93
4.7 Constructions with Koragwo ..... 95
4.7.1 Predicate Nominals and Attributives with koragwo ..... 95
4.7.2 Locative Clauses with Koragwo ..... 96
4.7.3 Possessive Clauses with Koragwo ..... 97
4.7.4 Existential Clauses with Koragwo ..... 97
Chapter 5 Grammatical Relations and Argument Structure Lisa Jeon ..... 98
5.1 Grammatical Relations ..... 98
5.1.1 Subjects ..... 100
5.1.2 Transitive Objects ..... 101
5.2 Ditransitive Clauses and Double Objects Lisa Jeon \& Samantha Mauney ..... 103
5.2.1 Ditransitive Clauses ..... 104
5.2.2 Verbs with Two Object Slots. ..... 109
5.3 Obliques Lisa Jeon ..... 110
5.4 Summary ..... 111
Chapter 6 Pragmatically-Marked Clause Types ..... 113
6.1 Yes/No Questions Anaí Navarro ..... 113
6.1.1 Asking Yes/No Questions ..... 113
6.1.2 Tag Questions. ..... 114
6.1.3 Answering Yes/No Questions ..... 115
6.2 Content Questions Jessica Li. ..... 116
6.2.1 'Who' ..... 117
6.2.2 'What'. ..... 119
6.2.3 'When' ..... 120
6.2.4 'Where' (Definite and Indefinite) ..... 121
6.2.5 'Why' ..... 122
6.2.6 'How' ..... 123
6.2.7 'How Many’ ..... 124
6.2.8 ‘Which’ ..... 125
6.2.9 'Whose' ..... 126
6.3 Negation Samantha Mauney ..... 126
6.4 Imperatives Samantha Mauney ..... 130
6.5 Focus and Topicalization Constructions Robert Englebretson ..... 133
6.5.1 Constituent Focus with nĩ ..... 133
6.5.2 Topicalization ..... 135
Chapter 7 Clause Combining ..... 137
7.1 Relative Clauses Robert Englebretson ..... 137
7.1.1 Structure of the Relative Clause ..... 139
7.1.2 Relative Pronouns ..... 140
7.1.3 Relative Subject Concord ..... 141
7.1.4 Negation of the Relative Clause Predicate ..... 142
7.1.5 Relativization and the Accessibility Hierarchy ..... 143
7.1.6 'Headless’ Relative Clauses ..... 146
7.1.7 Pseudoclefts and Related Constructions ..... 147
7.1.8 Summary ..... 148
7.2 Object Complements Lisa Jeon. ..... 148
7.2.1 Finite Indicative (S-like) Complement Clauses ..... 150
7.2.2 Less Finite Subjunctive Complements ..... 153
7.2.3 Non-Finite Complements ..... 154
7.2.4 CTPs and Their Complements ..... 155
7.2.5 Summary ..... 157
7.3 Adverbial Clauses and Converbs Samantha Mauney ..... 158
7.3.1 Time ..... 159
7.3.1.1 'Before’ ..... 159
7.3.1.2 'After’ ..... 160
7.3.1.3 Simultaneity ..... 161
7.3.2 Location ..... 163
7.3.3 Manner ..... 164
7.3.4 Purpose/Reason ..... 164
7.3.5 Concessive ..... 167
7.3.6 Conditionals ..... 168
7.3.7 Substitutive ..... 168
7.3.8 Additive ..... 169
7.3.9 Absolutive ..... 169
7.3.10 Summary ..... 170
Chapter 8 Miscellaneous Constructions and Observations ..... 171
8.1 Ideophones Robert Englebretson ..... 171
8.2 Color Terms Jonas Wittke \& Jessica LI ..... 173
8.3 Personified Animals Lisa Jeon ..... 176
8.3.1 Class 1 / 2 (Human) Agreement Marking ..... 177
8.3.2 The wama- Prefix ..... 178
8.4 Landscape Topography and Body Metaphors Jonas Wittke ..... 179
Appendices: Glossed Sample Texts ..... 181
Appendix A Picture-Book Narrative: "Frog Story" Class ..... 181
Appendix B Film-Viewing Narrative: "Pear Story" Jonas Wittke ..... 193
Appendix C Procedural Text: "Mataha" Anaí Navarro ..... 202
Appendix D Childhood Narrative \#1: "Swing" Jessica Li. ..... 213
Appendix E Childhood Narrative \#2: "Christmas" Jessica Li ..... 218
Appendix F Diary Narrative: "Day" Lisa Jeon ..... 221
Appendix G Historical Narrative: "Mũgo wa Kĩbirũ" Samantha Mauney ..... 227
References ..... 236

## List of Tables

Table 1: Summary of noun classes ..... 18
Table 2: Semantics of Gĩkũyũ noun classes ..... 29
Table 3: Singular/plural noun class pairings ..... 30
Table 4: Concord markers for noun classes ..... 33
Table 5: Personal pronouns for person forms. ..... 35
Table 6: Personal pronouns for noun classes 3-17 ..... 36
Table 7: Dependent pronouns ..... 37
Table 8: Possessive stems ..... 38
Table 9: Possessive pronoun paradigm ..... 38
Table 10: Relative pronouns ..... 39
Table 11: Adjectives in Gîkũyũ ..... 41
Table 12: Demonstratives ..... 42
Table 13: Numeral stems ..... 44
Table 14: Mwe 'one' with singular noun classes ..... 44
Table 15: ‘Two’, ‘six', and 'eight’ with plural noun classes ..... 45
Table 16: Ordinal numerals 2-10 ..... 47
Table 17: Associatives ..... 50
Table 18: Position classes in Gîkũyũ verbs ..... 52
Table 19: Person subject concord (SC) prefixes ..... 55
Table 20: Noun class subject concord (SC) prefixes ..... 56
Table 21: Tense prefixes .....  .59
Table 22: "Kikuyu main clause affirmative tenses" (Clements 1984:312) .....  .60
Table 23: Person object concord (OC) prefixes ..... 63
Table 24: Noun class object concord (OC) prefixes ..... 63
Table 25: Copula forms in Gĩkũyũ ..... 83
Table 26: Negative copula forms in Gîkũyũ .....  .84
Table 27: Question words ..... 116
Table 28: Interrogative quantifiers for all plural noun classes ..... 124
Table 29: Question-word determiners for all noun classes ..... 125
Table 30: Possessive interrogatives for all noun classes ..... 126
Table 31: Gĩkũyũ CTPs and their complement types ..... 156
Table 32: List of Gĩkũyũ ideophones ..... 172
Table 33: Associative constructions of colors in Gîkũyũ ..... 174

## List of Figures

Figure 1: Gĩkũyũ consonant phoneme inventory ..... 1
Figure 2: Gĩkũyũ vowel phoneme inventory ..... 1
Figure 3: Gĩkũyũ consonant orthography .....  .1
Figure 4: Gĩkũyũ vowel orthography ..... 2
Figure 5: Attested Gĩkũyũ diphthongs ..... 7
Figure 6: Sample declarative intonation ..... 113
Figure 7: Sample yes/ no question intonation ..... 113

## Orthography

All examples in this sketch grammar are presented in standard Gĩkũyũ orthography (first published in 1947 by the United Kikuyu Language Committee). The following two tables summarize the orthographic symbols for consonants and vowels. See Chapter 1 for more details of the phonology.

Vowel length is phonemic in Gĩkũyũ. It is often indicated orthographically by means of a sequence of two identical vowels. However, this is not consistent, especially across morpheme boundaries, and so the orthography cannot be taken as a reliable indicator of whether a vowel is long or short.

Tone in Gĩkũyũ is also phonemic. It is lexically contrastive, and plays a crucial role in the verb tense system. However, the orthography does not represent tone at all.

## Consonants

|  | bilabial | dental | alveolar | postalveolar | palatal | velar | glottal |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| stop | mb |  | t | nd |  |  | k |
| ng |  |  |  |  |  |  |  |
| nasal | m |  | n |  | ny | ng |  |
| tap |  |  | r |  |  |  |  |
| fricative | b | th |  | c |  |  | g |
| h |  |  |  |  |  |  |  |
| affricate |  |  |  |  | nj |  |  |
| approximant | w |  |  |  | y |  |  |

Vowels

|  | front | central | back |
| :--- | :---: | :---: | :---: |
| high | i |  | u |
| mid high | $\tilde{\mathrm{I}}$ |  | $\tilde{\mathrm{u}}$ |
| mid low | e |  | o |
| low |  | a |  |

## Glossing Abbreviations

| 1SG/PL | 1st person singular/plural | NMZ | Nominalizer |
| :---: | :---: | :---: | :---: |
| 2SG/PL | 2nd person singular/plural | NR.FUT | Near future tense |
| $\mathrm{AC}_{\text {* }}$ | Agreement class marker | NR.PST | Near past tense |
| ANA | Anaphoric | OBJ | Object |
| APP | Applicative | OBL | Oblique |
| ASSOC | Associative | $\mathrm{OC}_{*}$ | Object class marker |
| BRP | Bounded recent past tense | PV | Passive voice |
| CAUS | Causative | PERF | Perfect aspect |
| COMP | Complementizer | PERSF | Personifier |
| COMPL | Completive aspect | POS | Possessive |
| COND | Conditional | POST | Posterior clause |
| COP | Copula | PRO | Pronoun |
| CR.FUT | Current future tense | PROC | Processual/continuative aspect |
| CR.PRES | Current present tense | PROG | Progressive aspect |
| CR.PST | Current past tense | PROP | Proper noun |
| DEF | Definite | PROX | Proximal |
| DEM | Demonstrative | PST | Past tense |
| DEP | Dependent | Q | Interrogative |
| DET | Determiner | QUANT | Quantifier |
| DIST | Distal | RECIP | Reciprocal |
| FOC | Focus particle | REDUP | Reduplicated verb stem |
| FV | Final vowel | REFL | Reflexive |
| H | High tone | REL | Relative pronoun stem |
| HAB | Habitual aspect | REVERS | Reversive |
| ID | Ideophone | RM.FUT | Remote future tense |
| IMPF | Imperfective aspect | RM.PST | Remote past tense |
| INDEF | Indefinite | $\mathrm{SC}_{*}$ | Subject class marker |
| INTENS | Intensive aspect | SEQ | Sequential tense |
| JC* | Adjective class marker | SIM | Simultaneous tense |
| L | Low tone | SJV | Subjunctive |
| LOC | Locative | STAT | Stative aspect |
| MID | Middle voice | SUBJ | Subject |
| $\mathrm{NC}_{*}$ | Noun class marker | TRNS | Transitivizer |
| NEG | Negative | TRUNC | Truncated word |

## Acknowledgements

I would like to acknowledge, first, each of the five students enrolled in the field methods course for their hard work, enthusiasm, and insightful analyses throughout the year: Anaí Navarro, Jessica Li, Jonas Wittke, Lisa Jeon, and Samantha Mauney. You have been a thoroughly enjoyable group of students to work with, and I thank each of you especially for your commitments of time and energy, your flexibility, and your senses of humor throughout this course. I wish we had been able to have an extra few weeks of class to finalize this volume as a group and to engage in the editorial process together; but since we could not do that, I thank each of you for putting up with what were, in some cases, my rather heavy-handed edits to your chapters in order to tighten up the analyses and unify this work as a whole. I hope each of you will find a way to put your field methods background to good use in your future endeavors. Please keep in touch!

I gratefully acknowledge the support of the Rice Linguistics Department for finalizing this project: the funding to continue working with our consultant after class had ended to check last-minute details, and funding for an editorial assistant.

Thanks also to the Rice Linguistics Society (RLS), who graciously enabled us to publish this sketch grammar as a special issue in the Rice Working Papers in Linguistics series.

Major thanks, especially, to Jonas Wittke, the editorial assistant, who copy-edited the entire volume and offered numerous invaluable suggestions and comments along the way-all while preparing to leave for a summer in Indonesia. Thanks for your patience, tenacity, and for repeatedly cleaning up my formatting messes while this project kept taking up more and more time to finish.

And finally, we offer our heartfelt gratitude to our language consultant, Wambũi Mũringo Wa-Ngatho. Thank you for your tireless work with us, your patience with all of our questions, for providing elicitation data and texts, and for your insightful comments along the way. Any errors in this volume, in transcription or analysis, are entirely due to our own lack of understanding, and remain solely our responsibility. You have helped to make each of us a better linguist, and we dedicate this volume to you. Thank you for helping us glimpse the beauty and richness of the Gĩkũyũ language and culture!

We offer this sketch grammar as an accessible overview of the basics of Gîkũyũ phonology and morphosyntax, grounded in typological-functional linguistics. The volume is intended for an audience of linguists who are not themselves speakers of Gîkũyũ, but who wish to learn about its basic grammatical structures and characteristics. This grammar covers phonetic inventory, phonological processes, noun-class system and concord-marking, verb morphology, copular clauses, grammatical relations and argument structure, questions, negation, imperatives, focus constructions, and clause-combining, as well as other topics. The appendices contain 7 texts elicited from our consultant, subsequently transcribed and glossed by the students and the editor. MP3 files of these texts are available from the editor's web site at http://www.ruf.rice.edu/~reng/kik

Gîkũyũ (KIK) is currently spoken by approximately 6,623,000 people, mostly living in Kenya (Lewis et al. 2015). It is in the Central branch of the Bantu subgroup of the Niger-Congo language family, classified by Guthrie (1971: 43) as E.51. There are five major varieties of Gîkũyũ (Lewis et al. 2015): Gichugu (Northern Kirinyaga), Mathira (Karatina), Ndia (Southern Kirinyaga), Northern Gĩkũyũ (Northern Murang'a, Nyeri), and Southern Gĩkũyũ (Kiambu, Southern Murang'a). There is some degree of mutual intelligibility between Gĩkũyũ and nearby related Bantu languages of Kenya such as Kimeru, Ekegusii, and others. There is also extensive contact with Swahili and a high rate of multilingualism in both Swahili and English.

This volume emerged from the 2014-2015 field methods course at Rice University (LING 407-408). The primary goal of the course is to train students in best practices and techniques of documenting and describing a field language about which they have no prior knowledge, and to enable them to hone their analytic skills. (See Bowern, 2015, for a comprehensive overview of linguistic fieldwork.) Our field methods course consisted of five students (two undergraduates and three graduate students), plus the instructor. We met with our language consultant as a class for two 50-minute sessions per week, supplemented by an additional meeting every 1-2 weeks without the consultant present. Each student also met with the consultant individually for one hour per week. The main techniques we focused on were wordand sentence-level elicitation, plus the elicitation, transcription, and analysis of spontaneous texts (see the appendices). Early on in the course, students were not permitted to consult outside sources, but that restriction was lifted as the year progressed. The limitations of a field methods course are obvious: no exposure to the language in its natural, ecological habitat; basing the analysis on the speech of only one speaker; the artificial nature of a structured, classroom environment; etc. However, as the second semester progressed, it became clear that we were progressing faster than expected in our understanding of the basics of Gĩkũyũ
phonology and grammar, and rather than writing the usual end-of-semester term papers, we decided by consensus to focus our time and energy on jointly compiling a sketch grammar.

Our consultant, Wambũi Mũringo Wa-Ngatho, was born in the late 1950s in Nyeri, near Mt. Kenya, and speaks Gĩkũyũ from Mathĩra Karatina. She earned a Teaching Certificate for Primary Schools at Eregi Teacher Training College, Kakamega, Kenya, and later moved to the UK, where she earned a BA and MA in African Studies and also a Less Widely Taught Languages Teaching Certificate from SOAS \& UCL University of London. She has previously taught Swahili at SOAS and Cambridge, and has developed comprehensive curriculum material for teaching Swahili. Wambũi happened to be a visiting complementary scholar in Rice's Anthropology department during the academic year of our field methods class, and, auspiciously for us, had both the time and interest to serve as our language consultant.

In a field methods course, as in any linguistic endeavor, decisions have to be made that affect future analyses. One of those decisions, which we discussed in some depth during the latter part of the first semester, is the question of what orthography to use in our work. Up until that point we had been using the IPA for our lexicon and in the analysis of phonetics and phonology. We made a conscious decision to switch to the standard Gĩkũyũ orthography, essentially for three reasons: (1) it would enable our work to be accessible to readers of Gĩkũyũ, some of whom might not know the IPA; (2) it would allow us to use previously published work on Gîkũyũ with comparative ease; and (3) it would facilitate clearer interactions with our consultant. However, this decision came with some serious drawbacks, since the Gĩkũyũ orthography does not represent tone at all, which is phonemic and of crucial importance for verb tenses. The orthography also generally ignores phonemic vowel length. In other words, the orthography we are using in this sketch grammar actually obscures many of the contrastive and meaningful elements of the language. At the same time, I made a conscious decision to only spend three weeks on tone during the fall semester, so that we could move on to morphosyntax. Gĩkũyũ tone is complex enough that we could easily have spent the entire semester on it. Consequently, the discussion of tone in this sketch grammar is somewhat misleading, and superficial at best. Interested readers should consult more comprehensive analyses such as Clements (1984). I regret the lack of tone-marking and discussion of it in this sketch grammar, and I sincerely hope that linguists interested in this issue will revisit Gîkũyũ tone at some point in the near future.

Because this sketch grammar is based on elicitation and the speech of only one consultant, it must, of course, be understood as representing Gĩkũyũ as spoken by a particular person-a person with a specific age, gender, social background, and regional affiliation. By its very nature then, this sketch grammar lacks any orientation to sociolinguistic variation, cannot explore the use of Gîkũyũ in natural multi-party talk-in-interaction, and cannot discuss
the role of social interaction in motivating and shaping the observed systematicity in the language. All of these areas would be extremely interesting to explore in the multilingual, rich linguistic ecology of Kenya. And approaching Gĩkũyũ from the perspective of Conversation Analysis and Interactional Linguistics would provide a much-needed addition to both these fields as well as to Bantu linguistics more generally, which, as of yet, has seen very little work in the way of descriptive grammars based in corpora of everyday talk-in-interaction.

Finally, this sketch is not intended as a comprehensive reference grammar, and it does not include analyses of advanced theoretical issues in phonology or syntax. There are undoubtedly areas which would benefit from more thorough analysis, and there are undoubtedly things that we have gotten wrong in this sketch grammar, given our relatively narrow focus and short time period. However, shortcomings aside, we hope this sketch grammar will prove useful as an accessible introduction to Gĩkũyũ for those who are interested in learning about the basics of its phonology and morphosyntax. We further hope that it will spark interest among linguists in pursuing further work on Gĩkũyũ, and in promoting the study of this rich and fascinating language.

## Chapter 1

## Phonology

Anaí Navarro

Gîkũyũ has 25 contrastive speech sounds, consisting of 18 consonants and 7 vowels, summarized in Figure 1 and Figure 2, below.

Figure 1: Gîkũyũ consonant phoneme inventory

|  | bilabial | dental | alveolar | postalveolar | palatal | velar | glottal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| stop | mb |  | t nd |  |  | $\mathrm{k} \quad{ }^{\mathrm{n}} \mathrm{g}$ |  |
| nasal | m |  | n |  | n | V |  |
| tap |  |  | r |  |  |  |  |
| fricative | $\beta$ | ð |  | S |  | 8 | h |
| affricate |  |  |  | ${ }^{\text {nd }}$ 3 |  |  |  |
| approximant | w |  |  |  | j |  |  |

Figure 2: Gîkũyũ vowel phoneme inventory

|  | front | central | back |
| :--- | :---: | :---: | :---: |
| high | i |  | u |
| mid high | e |  | o |
| mid low | $\varepsilon$ |  | 0 |
| low |  | a |  |

Since we use the Gĩkũyũ orthography throughout this sketch grammar, Figure 3 and Figure 4 show the orthographic representations of each of the above segments.

Figure 3: Gĩkũyũ consonant orthography

|  | bilabial | dental | alveolar | postalveolar | palatal | velar | glottal |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| stop | mb |  | t | nd |  |  | k |
| ng |  |  |  |  |  |  |  |
| nasal | m |  | n |  | ny | ng |  |
| tap |  |  | r |  |  |  |  |
| fricative | b | th |  | c |  |  | g | h.

Figure 4: Gĩkũyũ vowel orthography

|  | front | central | back |
| :--- | :---: | :---: | :---: |
| high | i |  | u |
| mid high | $\tilde{1}$ |  | $\tilde{\mathrm{u}}$ |
| mid low | e |  | o |
| low |  | a |  |

Vowel length and tone are also phonemic, however they are not represented in the orthography. Because of this, we will only mark vowel length and tone when highlighting them specifically.

As noted above, the standard orthography will be used from this point forward. All Gîkũyũ words and examples are written orthographically unless otherwise indicated. Individual graphemes will be placed in parentheses, and IPA will be in square brackets when necessary, e.g. "the dental fricative written (th) is pronounced [ $\check{\text { d }}$."

The following sections argue for the phonemic status of each of these segments, providing minimal pairs where available. Note that minimal pairs are matched in terms of vowel length but not tone, so some are near minimal pairs that differ in tone pattern.

### 1.1 Consonants

### 1.1.1 Stops and Affricate

Gikũyũ has two contrastive voiceless stops, alveolar ( t ) and velar ( k ). Both occur with varying degrees of aspiration; there is no apparent conditioning environment for the alternation in VOT since there is variation within the repetition of a single word. Minimal pairs are shown below.


There is also a voiceless bilabial stop [p], but this segment is not phonemic. It is rare, only occurring in some borrowed words and ideophones.
(2) piũ: ideophone indicating completeness kinya igacamũka piũ
kinya i- ka- camũk -a piũ
until SC $_{8}$ - CR.PRES- boil -FV ID
'until it is completely boiled.'
(3) pa: ideophone indicating completeness
nĩwomĩte na ũkoma pa
nĩ- ũ- a- ũm -ĩt -e na ũ- ka- ũm -a pa
FOC- SC ${ }_{3}$ - PST- dry -PERF -FV and SC ${ }_{3}$ - CR.PRES- dry -FV ID
'It had completely dried.'

Piũ has a variant pronunciation beginning with the bilabial fricative (b) [ $\beta \mathrm{io}$ ], while pa can only be [pa].

Gĩkũyũ has four prenasalized voiced consonants, including three prenasalized stops ( $\mathrm{mb}, \mathrm{nd}, \mathrm{ng}$ ) and one prenasalized affricate ( nj ), which all contrast with one another, seen in the four way contrast below.

```
(4) mbũri 'goat'
    ndũri 'piercer'
    njũri 'always gets lost (noun-classes 9 and 10)'
    ngũũri 'tweezer'
```

The degree of prenasalization in these segments varies and can be absent altogether, resulting in a plain voiced obstruent. This is the only instance in which voiced stops $[\mathrm{b}, \mathrm{d}, \mathrm{g}]$ and the voiced affricate [d3] occur.

There are a few factors that support analyzing prenasalized consonants as single segments rather than as sequences of two phonemes. First, the acoustic duration of the entire segment is constant regardless of how much prenasalization is produced. Second, there are no other consonant clusters in Gĩkũyũ. Finally, prenasalized consonants serve as syllable onsets. The three prenasalized stops contrast with their homorganic nasal, voiceless stop, and fricative counterparts as shown in (5), (6), and (7), respectively.

| (5) mbata | 'duck' | nda | 'belly' | ngima | 'corn meal' |
| :--- | :--- | :--- | :--- | :--- | :--- |
| mata | 'saliva' | na | 'with' | ng'ima | 'complete' |

(6) ndoro 'mud' mwangi 'one who moves around'
toro 'sleep' mwaki 'fire'

| (7) mbata | 'duck' | ndimũ | 'lime' | ngathiĩ | 'that I should go' |
| :--- | :--- | :--- | :--- | :--- | :--- |
| bata | 'need' | thimũ | 'phone' | gagithiĩ | 'then it $\left(\mathrm{NC}_{12}\right)$ went' |

Examples in (8) give evidence for a phonemic distinction between the prenasalized affricate $(\mathrm{nj})$ and the alveolar nasal ( n ), the voiced dental fricative (th), and the voiceless postalveolar fricative (c), respectively.
$\begin{array}{llllll}\text { (8) } & \text { njogoo } & \text { 'rooster' } & \text { njũng'ũa } & \text { '3-legged chair' } & \text { njina } \\ \text { nũgũ } & \text { 'monkey' } & \text { thũng'ũa me!' } & \text { 'ankle' } & \text { cina } & \text { 'burn!' }\end{array}$

### 1.1.2 Nasals

Gîkũyũ has four phonemic nasals: bilabial (m), alveolar (n), palatal (ny), and velar (ng'). As shown above in (5), nasals also contrast with the corresponding homorganic prenasalized stops. Minimal pairs among the four nasals are shown below.

| (9) ma | 'of' | mama |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| na | 'with' | 'uncle' <br> nyama | 'meat' | mo <br> ng'o | 'those ones' <br> 'nothing' |
|  |  | no | 'but' | nyeni | 'greens' |
| ina | 'sing!' | no | ng'o | 'nothing' | ng'eni |
| inya | 'four' | new' |  |  |  |

Alveolar nasal (n) and palatal nasal (ny) are sometimes neutralized before high front vowel (i). (10) shows two examples where both the alveolar nasal and palatal nasal are acceptable. The third example, however, does not allow this alternation, although the same immediate environment is present. This alternation seems to be lexically conditioned, but further investigation is needed to determine what environments do and don't allow it.

| (10) | ni:ni | nyi:nyi | 'small' |
| :--- | :--- | :--- | :--- |
|  | iniũrũ | inyiũrũ | 'nose' |
|  | mũhikania | *mũhikanyia | 'groom' |

### 1.1.3 Tap

The alveolar tap ( r ) differs phonemically from the voiceless alveolar stop ( t ), and presumably from the alveolar fricative (th) and prenasalized stop (nd) due to similarity of environments.

| njara | 'hand' | rũma | 'bite!' | marĩa | 'that' $\left(\mathrm{NC}_{6}\right)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| njata | 'star' | ndũũma | 'taro' | mathĩa | 'nuns' |

The tap can also be pronounced as voiceless [r], trilled [r], bunched [a], and lateral approximant [1], but there is no observed systematicity in these alternations, nor are they very frequent.

### 1.1.4 Fricatives

Gĩkũyũ has fricatives in five places of articulation: labial (b), dental (th), postalveolar (c), velar (g), and glottal (h). As seen in the examples in (6) above, each fricative contrasts phonemically with its corresponding prenasalized stop. There is also evidence that the velar and alveolar fricatives contrast with their voiceless stop counterparts:
(12) mbogo 'buffalo' maitho 'eyes'
mboko 'whips' maitũ 'mother'
The bilabial fricative, (b), can be pronounced in four ways: $[\phi],[\beta]$, $[f]$, or [v] (voiced or voiceless, labiodental or bilabial). Variation can occur within a word, so that any of the following pronunciations of baba 'father' is acceptable:

| fafa | fava | faфа | faßa |
| :---: | :---: | :---: | :---: |
| vafa | vava | vaфa | vaßa |
| фafa | фava | фафа | фаßа |
| $\beta$ afa | $\beta$ ava | $\beta$ афа | $\beta \mathrm{\beta a}$ |

### 1.1.5 Approximants

Gĩkũyũ has two approximants: (w) and (y).
(14)

| wa | 'of' $\left(\mathrm{NC}_{3}\right)$ | ya | 'of $\left(\mathrm{NC}_{9}\right)$ |
| :--- | :--- | :--- | :--- |
| ndawa | 'medicine' | ruoya | 'feather' |
| nĩwomĩte | 'it had dried' | thayũ | 'peace' |

Both can be optionally inserted between some heterosyllabic vowels. $w$ can insert when the first of the two vowels is $u$ or $\tilde{u}$, and $y$ can insert when the first vowel is $i$. The acoustic difference is minimal.
(15) ngu.o ~ngu.wo 'hippopotamus'
riũ.a ~ riũ.wa 'sun'
ki.a ~ ki.ya 'ferment!'

### 1.2 Vowels

### 1.2.1 Front Vowels

Gîkũyũ has three contrastive front vowels: high front (i), mid high front (ĩ), and mid low front (e). Minimal pairs are provided below.

| ini 'liver' | mi:njire | 'the one I spat' | mĩtĩ 'trees' |  |
| :--- | :--- | :--- | :--- | :--- |
| -inĩ 'in/by/at' | me:njire | 'the people who dig' | mĩte | 'throw them away' |

### 1.2.2 Back Vowels

There are also three contrastive back vowels: high back ( u ), mid high back ( $\tilde{u}$ ), and mid low back (o).
(17) mbuku 'book'
mbũkũ 'rabbit'
mboko 'whips'

### 1.2.3 Low Central Vowel

Besides the three front vowels and the three back vowels, there is the low central vowel (a). It contrasts with all six other vowels:

| (18) | ina | 'sing!' | ina | 'sing!' | mbata |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ini | 'liver' | -inĩ | 'in, at, by' | mbete | 'ring' |
|  |  |  |  |  |  |
| kara | 'scratch!' | mboga | 'vegetable' | ira | 'yesterday' |
| kũra | 'get old!' | mbogo | 'buffalo' | iru | 'knee' |

### 1.2.4 Diphthongs

Most VV combinations are possible diphthongs. Figure 5 is a matrix of all possible vowel combinations, with an example word for attested diphthongs. N/A is written in place of
combinations of the same vowel. Dashes represent unattested diphthongs, and it is unclear whether these are impossible or just not present in the data we've collected. From the gaps in the table, it appears that low and mid low vowels $(e, a, o)$ are dispreferred in $V_{1}$ position.

Figure 5: Attested Gîkũyũ diphthongs

|  | V +i | V + ${ }_{\text {I }}$ | $V+e$ | $\mathrm{V}+\mathrm{a}$ | $\mathrm{V}+\mathrm{o}$ | $\mathrm{V}+\mathrm{u}$ | $\mathrm{V}+\mathrm{u}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{i}+\mathrm{V}$ | N/A | $\begin{aligned} & \text { thiĩ } \\ & \text { 'go' } \end{aligned}$ | cie.ro <br> 'thighs' | kĩũ.ria <br> 'question' | cio.ngo 'heads' | hiũ <br> 'hot' | kiu.mia 'week' |
| Ĩ + V | kĩi.mba 'corpse' | N/A | kĩe.ro <br> ‘thigh' | rĩa <br> 'eat!' | kĩo.ngo_head' | kĩũ.ria <br> 'question' | $\begin{aligned} & \text { rĩu } \\ & \text { 'now' } \end{aligned}$ |
| e + V | ndei.thia 'help me' | -- | N/A | -- | i.heo 'gifts' | -- | -- |
| $a+V$ | mai.ca <br> 'life' | -- | -- | N/A | -- | -- | nyau <br> 'cat' |
| $0+\mathrm{V}$ | -- | -- | mũ.ti.ng'oe <br> 'tail' | -- | N/A | -- | -- |
| ũ + V | wa.mbũi 'zebra’ | mbũ.kũũ.no <br> 'this rabbit' | mbũe 'fox' | tũa.na <br> 'babies' | kũo.na 'to see' | N/A | kũu <br> 'that place' |
| $\mathrm{u}+\mathrm{V}$ | $\begin{aligned} & \text { ngui } \\ & \text { 'dog' } \end{aligned}$ | mbu.kuĩ.no <br> 'this book' | i.thue.rĩ <br> 'both of us' | nyua <br> ‘drink!’ | ruo.ya <br> 'feather' | gĩ.kuũ <br> 'death' | N/A |

Although Gĩkũyũ orthography treats ũ in $V_{1}$ position as $w$, our analysis of diphthongs includes no glides, instead using vowel-vowel sequences. One reason for this is that orthographic $w$ and $\tilde{u}$ have the same pronunciation in this position (unless before 0 , in which case $w$ equates with $u$ ). In addition, no other consonant clusters exist in Gîkũyũ, and a VV analysis is consistent with this. A third reason is that all kinds of VV sequences are possible as diphthongs, many of which have no clear glide, so it's consistent to analyze them as VV throughout the language. We do, however, maintain the orthographic $w$ in place of diphthong-initial $\tilde{u}$ throughout our examples (excluding those in Figure 5).

### 1.2.5 Triphthongs

We have found evidence of one triphthong: ĩai. It is likely that others are possible.

| nĩai.na.ga | 'he/she sings' |
| :--- | :--- |
| i.ri.ma.rĩai.niũ.rũ | 'nostril (hole of nose)' |
| gĩai.ka.rĩi.re | 'that was sitting' |

### 1.2.6 Vowel Length

Any of the seven vowels can be long. We have found several examples of contrastive length, and one minimal pair for each vowel is shown in (20). However, in many of the contrastive pairs given there is also a tonal difference, so it's hard to say with certainty that vowel length by itself is in fact contrastive in those particular pairs.

| (20) | rĩo | 'then' |
| :--- | :--- | :--- |
| icere 'cuts' (n.) | ice: 'get drunk!' |  |
| tha 'sympathy' | inhabited place that is visited a lot' |  |
| nda 'belly' | tha: 'clock' |  |
| kũra 'get old!' | nda: 'louse' |  |
| kora 'bump into!' | kũ:ra 'to run away' |  |
| kura 'vote' | ko:ra 'little frog' |  |
|  |  | ku:ra 'to rain' |

Some long vowels are lexical (21), while others are derived (22).
(21)

| nda: | 'louse' |
| :--- | :--- |
| ko:ra | 'bump into!' |

(22) mĩ:rĩ (mĩ-ĩrĩ) 'bodies'
kũ:ra (kũ-ũra) 'to run away'

### 1.3 Syllable Structure

Gĩkũyũ allows only open syllables with no complex onsets, with seven syllable types. An example of each syllable type is shown in (23).

| (23) | V | i.ge.go | 'tooth' |
| :--- | :--- | :--- | :--- |
|  | V: | ĩ.:tũ.rĩe.ga | 'yes, we are good' |
|  | VV | ũi.ru | 'jealousy' |
|  | CV | mbu.ra | 'rain' |
|  | CV: | i.tu:.nda | 'fruit' |
|  | CVV | rĩa | 'eat!' |
|  | CVVV | nĩai.na.ga | 'he/she sings' |

### 1.4 Tone

Due to the time constraints imposed by a Field Methods course, it is unfortunately not possible to give tone the detailed treatment it deserves in a sketch grammar. Interested readers should consult Clements (1984) for details and a thorough analysis.

Gîkũyũ has two tones (high and low, represented here as H and L respectively) and downstep. Although we do not treat tone in depth, we do have evidence that it is contrastive since we have found many minimal pairs of words differing only in tone pattern.
(24) mata (LH) 'saliva'
mata (HH) 'big stomachs’
thũra (LL) 'hate'
thũra (LH) 'hate me'

Tone is essential in verb tenses (see section 3.2.5 for a discussion of this). Certain tone patterns indicate certain tense and aspect combinations, as seen in (25).
(25) nĩaro:kire (HHLH) 'he/she came early this morning'
nĩaro:kire (HHHL) 'he/she came yesterday'

### 1.5 Morphophonology

There are many phonological changes that are triggered by morpheme interaction. The following sections discuss several of these.

### 1.5.1 Dahl's Law: Velar Stop and Fricative Alternation

Although $k$ and $g$ have been shown to contrast (section 1.1.1), there are several morphological environments in which their difference is phonologically conditioned. This is due to Dahl's Law, a process of voicing dissimilation found in many Bantu languages. In Gĩkũyũ, voiceless stop $k$ surfaces as voiced fricative $g$ when the following consonant is $t, k, c$, or th. Examples (26)-(28) show how this affects noun class markers for classes 15 (kũ-), 7 (kĩ-), and 12 ( $k a-$ ), although all other morphemes starting with $k$ are affected by this as well.

| (26) | guoko | gũtara | gũce:ha | gũĩthamba |
| :--- | :--- | :--- | :--- | :--- |
| kũ-oko | kũ-tara | kũ-ce:ha | kũ-ĩthamba |  |
|  | 'arm' | 'to count' | 'to slash' | 'to bathe' |


| (27) | gîkere | gĩtĩ | gĩciko | gĩthĩrĩrĩka |
| :---: | :---: | :---: | :---: | :---: |
|  | kĩ-kere | kĩ-tĩ | kĩ-ciko | kĩ-thĩrĩrĩka |
|  | 'calf' | 'chair' | 'spoon' | 'big waterfall' |
| (28) | gacũcũ |  | gathugumĩra |  |
|  | ka-cũcũ |  | ka-athugumĩra |  |
|  | 'young grandchild' |  | 'gnat' |  |

### 1.5.2 Combining Vowels Across Morpheme Boundaries

When a morpheme ending in a vowel combines with a morpheme that begins with a vowel, this can lead to one of four possibilities: vowel lengthening, the creation of a diphthong, the coalescence of the two vowels into one, or a change in the quality of the first vowel, depending on which two vowels come into contact.

When the same vowel ends one morpheme and starts the next, a long vowel is produced. This occurs both within words and across word boundaries.
(29) nĩ-i-in-ag-a = nĩ.i:.naga 'they $\left(\mathrm{NC}_{10}\right)$ sing'

| mĩ-ĩrĩ = mĩ:.rĩ | 'bodies' |
| :--- | :--- |
| a-arĩ = a:.rĩ | 'daughters' |
| kũ-ũra = kũ:.ra | 'to run away' |

Vowel combinations that are permissible diphthongs (see section 1.2.4) become tautosyllabic, resulting in a diphthong that crosses the morpheme boundary and a mismatch between syllable structure and morpheme structure. Some examples are:
(30) ma-inabu = mai.nabu 'pineapples'

$$
\begin{array}{ll}
\text { rĩ-ithori = rĩi.thori } & \text { 'tear' } \\
\text { nĩ-a-mũ-end-ĩr-i-e = nĩa.mwe.ndei.rie } & \text { 'he/she sold him/her something' }
\end{array}
$$

Certain vowel combinations which are not allowable diphthongs undergo coalescence in all instances. These are shown below in (31). Note that coalesced vowels undergo compensatory lengthening.
(31)

$$
\begin{array}{ll}
a+\tilde{u}=0: & \begin{array}{l}
\text { ka-ũra = ko:ra } \\
\text { nda-ũk-aga = ndo:kaga }
\end{array} \\
a+\tilde{1}=e: & \begin{array}{l}
\text { ma-ĩkũ = me:kũ } \\
\text { andũ } a-i ̃ r i ̃ ~=~ a n d u ̃ ~ e: r i ̃ ~ \\
\text { ma-ĩciria = me:ciria }
\end{array} \\
a+e=e: & \begin{array}{l}
\text { ũra-endia = ũre:ndia } \\
\text { mbuku njega-ega = mbuku njege:ga }
\end{array} \\
a+o=0: & \begin{array}{l}
\text { ma-oko = mo:ko } \\
\text { nĩ-a-on-ag-a = nĩo:naga }
\end{array} \\
e+\tilde{1}=e: & \begin{array}{l}
\text { thegere ĩmwe = thegere:mwe }
\end{array}
\end{array}
$$

'small frog'
's/he doesn't usually come'
'where are they $\left(\mathrm{NC}_{2}\right)$ ?'
'two people'
'thoughts'
'you are selling'
'better books'
'arms'
'he/she sees'
'one wildcat'

The combination $\tilde{u}+u$ results in $u$ : in most instances (32), but this does not occur in the demonstrative determiners, as seen in (33).

| $\tilde{u}+u=u:$ | kũ-ura = ku:ra |
| :--- | :--- |
|  | kũ-una = ku:na |
|  | tũ-uma a-arimu $=$ tu:ma a:rimũ |

'to rain' 'to bend' 'we were teachers today'

$$
\begin{array}{ll}
\tilde{u}+u=u \tilde{u} u & \text { kũ-gũrũ kũ-u }=\text { kũgũrũ kũu }  \tag{33}\\
& \text { mũ-tĩ ũ-u }=\text { mũtĩ ũu }
\end{array}
$$

'that leg' 'that tree'

Other vowel combinations across morphemes result in a change in quality in the first vowel.

| $\tilde{u}+o=$ uo | kũ-oha = kuo.ha <br> rũ-oya = ruo.ya |
| :--- | :--- |
| $\tilde{1}+u=i u \quad$ | ga-kĩ-uma = gakiu.ma |
|  | kĩ-umia $=$ kiu.mia <br>  <br>  <br> ndĩ-um-aga = ndiu.maga |

'to tie'
'feather'
'and then it $\left(\mathrm{NC}_{9}\right)$ came out (before yesterday)'
'week'
'it ( $\mathrm{NC}_{9}$ ) doesn't get out (habitually)'

Both of these changes have exceptions. (35) shows an example where both $\tilde{u} o$ and uo are acceptable pronunciations of a $\tilde{u}+o$ sequence. (36) shows that the change in vowel quality from $\tilde{\imath}+u$ to $i u$ is blocked in the demonstrative determiners, like in the preceding examples in (32).
(35) kũona ~ kuona
(36) rĩ-itho rĩ-u = rĩitho rĩu
kĩ-ongo kĩ-u = kĩongo kĩu
'to see'
'that eye' 'that head'

That all of the vowel combinations in the examples in section 1.5 .2 produce bimoraic syllables suggests that vowel sequences have a tendency to combine into a single syllable nucleus and also that syllable weight is important in Gîkũyũ.

### 1.5.3 Syllable Initial Approximant Formation

The vowels $\tilde{u}$ and $\tilde{\imath}$ and are different from the other five in that these two become approximants $w$ and $y$, respectively, when in syllable initial position. Word-initial examples are given in (37), and word-medial examples are addressed in section 1.5.4.2.

| $\# \tilde{u}+V=w V$ | un-a $=\mathrm{wa}$ | 'of' $\left(\mathrm{NC}_{3}\right)$ |
| :---: | :---: | :---: |
|  | ũ-anyua = wa.nyua | 'then you drank (before yesterday)' |
|  | ü-ega = wega | 'good' ( $\mathrm{NC}_{3}$ ) |
| $\#{ }_{\text {I }}+\mathrm{V}=\mathrm{yV}$ | İ-a $=$ ya | 'of' ( $\mathrm{NC}_{9}$ ) |
|  | Ĩ-akwa = yakwa | 'my' ( $\mathrm{NC}_{9}$ ) |

Once again, the demonstrative determiner $\tilde{u} u$ seems to be an exception to this since it is not wu as we might expect.

It is unclear to what extent and under what conditions this approximant formation actually occurs in natural speech. It is reflected in the orthography, and there is an audible difference between $\tilde{a} a$ and $y a$, for example. The word-medial process described in 1.5.4.2 supports that there is in fact a difference beyond orthography between $\tilde{\imath}$ and $y$ between vowels.

### 1.5.4 Avoiding Sequences of Three Vowels

Although we have seen that Gîkũyũ has at least one possible triphthong, (see section 1.2.5), there are a number of processes that work to avoid a series of three vowels. This means that VVV, VV:, and V:V are all avoided, even across syllable boundaries.

### 1.5.4.1 Blocking Lengthening

The vowel lengthening processes described throughout sections 1.5.2 are blocked when the otherwise long vowel becomes part of a syllable with another vowel. The vowels in the examples in (38), for example, still coalesce but do not undergo the compensatory lengthening we would expect. Rather than allow the vowels to lengthen and therefore form CVV: or CV:V syllables in conjunction with another vowel, the lengthening is blocked and bimoraic syllables are maintained. Similarly, instances of identical consecutive vowels, as seen in the examples in (39), collapse into only one instance of the vowel due to the presence of a third vowel in the same syllable.

$$
\begin{align*}
& \text { nĩ-a-ũk-aga = nĩo.kaga }  \tag{38}\\
& \text { nĩ-a-ĩ-thamb-ire = nĩe.thambire } \\
& \text { nĩa-ega = nĩe.ga } \\
& \text { kahĩ: nĩka-o-ũ = nĩkoũ }
\end{align*}
$$

(39)
ndi-ra-a-ina = ndirai.na
'he/she comes'
'he/she washed him/herself (today)'
'they $\left(\mathrm{NC}_{2}\right)$ are good'
'who is the boy?'
'I am not currently singing'

### 1.5.4.2 Using the Palatal Approximant to Split Up Syllables

There are a couple of environments in which triple vowels are instead avoided by splitting instances of three consecutive vowels into two syllables. The first of these two makes use of the approximant formation described in section 1.5.3. When $\tilde{\imath}$ appears between two vowels, it becomes $y$ so it is the onset of the syllable it forms with the following vowel. This occurs when the subject marker for noun class 9 , $\tilde{\imath}$, attaches to vowel-initial verb stems:
(40) $\mathrm{V}+\tilde{+}+\mathrm{V}=\mathrm{V} . \mathrm{yV}$

$$
\begin{array}{ll}
\text { nĩ1̃1̃-ũk-aga }=\text { nĩ.yũkaga } & \text { 'it }\left(\mathrm{NC}_{9}\right) \text { comes' } \\
\text { nĩ1-1-eth-aga }=\text { nĩ.yethaga } & \text { 'it }\left(\mathrm{NC}_{9}\right) \text { searches' } \\
\text { nĩ-ĩ-um-aga }=\text { nĩ.yumaga } & \text { 'it }\left(\mathrm{NC}_{9}\right) \text { gets out' } \\
\text { nĩ-1̂-oy-aga }=\text { nĩ.yoyaga } & \text { 'it }\left(\mathrm{NC}_{9}\right) \text { takes' }
\end{array}
$$

There are two exceptions to this. When the verb stem starts with $\tilde{\imath}$, the three consecutive vowels collapse to two since they are all identical. When the verb stem starts with $i$, the subject marker stays as ĩ instead of surfacing as $y$. This is the only instance out of all of the examples in section 1.5.4 where all three vowels are maintained, though they are split into two different syllables.
(41) $\quad \tilde{1}+\tilde{1}+\tilde{1}=\tilde{1}: \quad$ nĩ-1̃-1̃tîikĩr-aga $=$ nĩ:.tĩkĩraga $\quad$ it $\left(\mathrm{NC}_{9}\right)$ agrees'
(42) $\tilde{1}+\tilde{1}+\mathfrak{i}=\tilde{1}: i \quad$ nĩ-1̃-in-aga $=$ nĩ:.inaga $\quad$ it $\left(\mathrm{NC}_{9}\right)$ sings'

It seems that this would be a productive rule across other morpheme boundaries as well, and even as $\tilde{u}$ becoming $w$ between vowels, but examples of morpheme combinations that concatenate three vowels with $\tilde{\imath} / \tilde{u}$ in the middle other than this one (focus particle $n \tilde{\imath}+$ subject marker $\tilde{\imath}+$ vowel-initial verb) are hard to come by.

### 1.5.4.3 Postalveolar Fricative Epenthesis

The subject marker for nouns in noun class 10 undergoes a similar process in intervocalic position. Subject marker $i$, when appearing intervocalically, becomes ci and breaks up the series of three vowels it would otherwise be a part of.

$$
\begin{array}{ll}
\text { nĩ-i-ũk-aga }=\text { nĩ.ciũ.kaga } & \text { 'they }\left(\mathrm{NC}_{10}\right) \text { come' }  \tag{43}\\
\text { nĩ-i-in-aga }=\text { nĩ.ci..naga } & \text { 'they }\left(\mathrm{NC}_{10}\right) \text { sing' } \\
\text { nĩ-i-um-aga }=\text { nĩ.ciu.maga } & \text { 'they }\left(\mathrm{NC}_{10}\right) \text { get out' } \\
\text { nĩ-i-ag-aga }=\text { nĩ.cia.gaga } & \text { 'they }\left(\mathrm{NC}_{10}\right) \text { lose' } \\
\text { nĩ-i-eth-aga }=\text { nĩ.cie.thaga } & \text { 'they }\left(\mathrm{NC}_{10}\right) \text { search' }
\end{array}
$$

Postalveolar fricative epenthesis is mandatory in the above examples but optional when the following morpheme, whether the verb stem or a tense prefix, starts with a consonant. In the case of the examples in (44), the epenthesis does not serve the same purpose of splitting up unallowable sequences of three vowels. It looks as though the optionality of inserting the fricative arose from association with the instances in which the $c$ is mandatory, and since it creates equally acceptable syllables, both forms are accepted.

| nĩ-i-thi-aga $=$ nĩi.thiaga | $O R$ | nĩ.ci.thiaga | 'they (NC10) go' |
| :--- | :--- | :--- | :--- |
| nĩ-i-ra-ũka $=$ nĩi.ro:ka | $O R$ | nĩ.ci.ro:ka | 'they (NC10) are coming' |
| nĩ-i-ra-ina $=$ | nĩi.raina | $O R$ | nĩ.ci.raina |

That the sequence $\tilde{l}+\tilde{l}+i$ is maintained, as seen in (42), means that some sequences of three consecutive vowels are more acceptable than others, since all other sequences shown in the examples in this section undergo processes to eliminate one of the vowels and surface as only two. Further, that these three vowels (though all maintained) were split into two syllables suggests an avoidance of trimoraic syllables.

### 1.5.5 Attaching Nasal Prefix N -

Prefix $N$ - is made up solely of what appears to be an unspecified nasal consonant, given the wide variation in how it surfaces. It has two unrelated uses, one being the first person singular concord marker on verbs (both subject and object) and the other the concord marker for noun classes 9 and 10 on nouns and adjectives. Since this prefix has the same form for both uses and patterns in the same way for both, it is treated as a general morphophonemic process and its description is organized based on its phonological environment rather than according to the two uses.

Since it is just a single consonant, the prefix $N$ - is rarely a stand-alone syllable; in most cases it coalesces with the following segment. As a 1 SG morpheme on verbs, it sometimes remains separate from the following morpheme, however, and appears as its own syllable ndĩ.

In each of the examples throughout the next several sections, the stem that the $N$ - is attaching to is first made clear by presenting either the verb in the imperative form or the noun/adjective inflected for another noun class. When a verb is listed, the $N$ - represents $1 S G$, and when a noun or adjective is listed, the N - represents $\mathrm{NC}_{9}$ and $\mathrm{NC}_{10}$ concord.

### 1.5.5.1 $\mathrm{N}+$ Fricatives

The combination of prefix $N$ - and a fricative results in the fricative's respective prenasalized stop or affricate counterpart if available. When combined with fricatives that do not have a prenasalized counterpart, the prefix is unrealized.

| (45) | $N+b=m b$ | ma-buku (n.) <br> rũ-baru (n.) | N -buku $=$ mbuku <br> N -baru = mbaru | 'book' <br> 'rib' |
| :---: | :---: | :---: | :---: | :---: |
|  | $\mathrm{N}+\mathrm{g}=\mathrm{ng}$ | ma-gathĩti (n.) | N -gathĩti $=$ ngathĩti | 'newspaper' |
|  |  | ka-gui (n.) | N-gui = ngui | 'dog' |
|  |  | kĩ-gũatu (adj.) | N -gũatu = ngũatu | 'saturated' |
|  | $\mathrm{N}+\mathrm{c}=\mathrm{nj}$ | ka-cata (n.) | N -cata = njata | 'star' |
|  |  | cora (v.) | N-cora $=$ njora | 'draw me' |
|  | $\mathrm{N}+$ th $=$ th | ma-thibitarĩ (n. | ) N-thibitarĩ = thibitarĩ | 'hospital' |
|  |  | gĩ-thaka (adj.) | N-thaka = thaka | 'beautiful' |
|  |  | thoma (v.) | nĩ-N-thom-aga = nĩthomaga | 'I read' |
|  | $\mathrm{N}+\mathrm{h}=\mathrm{h}$ | ma-hekaru (n.) | N-hekaru = hekaru | 'temple' |

### 1.5.5.2 N+Voiceless Stops

When the prefix $N$ - combines with a voiceless stop, the resulting segment is the voiced prenasalized stop at the same place of articulation.
(46) $\mathrm{N}+\mathrm{t}=\mathrm{nd} \quad$ ma-tuka (n.) N -tuka = nduka 'store'
kĩ-tungu (adj.) N-tungu = ndungu 'thick'

$$
\text { tema (v.) } \quad \text { N-tema }=\text { ndema } \quad \text { 'cut me' }
$$

$$
\begin{array}{llll}
\mathrm{N}+\mathrm{k}=\mathrm{ng} & \text { ma-kari (n.) } & \mathrm{N}-\mathrm{kari}=\text { ngari } & \text { 'car' } \\
& \text { ha-kuhĩ (adj.) } & \mathrm{N}-\mathrm{kuhĩ}=\text { nguhĩ } & \text { 'short distance' } \\
& \text { ku:a (v.) } & \mathrm{N}-\mathrm{ku}: \text { = ngu:a } & \text { 'carry me' }
\end{array}
$$

### 1.5.5.3 N + r

When $N$ - combines with the alveolar tap $r$, it becomes $n d$. This coalescence of $N$ - and $r$ into nd does not occur, however, when preceding the tense/aspect prefix $r a-$. In this case the sequence of the two morphemes is realized as $N$-'s full syllable ndĩ, followed by ra-. The fact that the two morphemes do not coalesce suggests that speakers have some motivation to keep them separate. This makes sense given that $r a$ - is a tense/aspect prefix and it might be more difficult to maintain the meaning if it is changed.
$\begin{array}{llll}\text { (47) } \begin{array}{lll}\mathrm{N}+\mathrm{r}=\text { nd } & \text { rũ-rĩmĩ (n.) } \\ \text { rĩa (v.) }\end{array} & \begin{array}{l}\text { N-rĩmĩ = ndĩmĩ } \\ \text { nĩ-N-rĩ-aga }=\text { nĩndĩaga }\end{array} & \begin{array}{l}\text { 'I eat' }\end{array} \\ \text { N+ra- = ndĩ.ra } & & \text { nĩ-N-ra-a-ina = nĩndĩraina }\end{array} \begin{aligned} & \text { 'I am singing' }\end{aligned}$

### 1.5.5.4 N + Nasals

When N - attaches to a nasal, the two segments coalesce into the specified nasal.

| (48) | $\mathrm{N}+\mathrm{n}=\mathrm{n}$ | ka-nũgũ (n.) <br> ka-nini (adj.) | $\begin{aligned} & \text { N-nũgũ = nũgũ } \\ & \text { N-nini = nini } \end{aligned}$ | 'monkey' 'small' |
| :---: | :---: | :---: | :---: | :---: |
|  | $\mathrm{N}+\mathrm{ny}=\mathrm{ny}$ | $\begin{aligned} & \text { ka-nyamũ (n.) } \\ & \text { nyua (v.) } \end{aligned}$ | $\begin{aligned} & \text { N-nyamũ = nyamũ } \\ & \text { N-nyu-ire = nyuire } \end{aligned}$ | 'animal' <br> 'I have already drunk (today)' |
|  | $\mathrm{N}+\mathrm{m}=\mathrm{m}$ | ma-ma:bu (n.) | $\mathrm{N}-\mathrm{ma}$ : $\mathrm{u}=\mathrm{ma}$ : bu | 'map' |

### 1.5.5.5 N + Vowels

When prefix $N$ - precedes a morpheme starting with a vowel, it almost always surfaces as $n j$. This is not the case, however, when the consonant following the vowel is a nasal or prenasalized segment, in which cases $N$ - instead becomes $n y$.

| (49) | $N+V=n j V$ | rũ-ũĩ (n.) | N -ũĩ $=$ njũĩ | 'river' |
| :---: | :---: | :---: | :---: | :---: |
|  |  | kĩ-ega (adj.) | N-ega = njega | 'good' |
|  |  | ũka (v.) | nĩ-N-ũk-aga = nĩnjũkaga | 'I come' |
|  |  | oya (v.) | nĩ-N-oy-aga = nĩnjoyaga | 'I take' |
| (50) | $\mathrm{N}+\mathrm{VN}=\mathrm{nyVN}$ | rũ-ĩmbo (n.) | N -ĩmbo $=$ nyĩmbo | 'songs' |
|  |  | mĩ-ingĩ (adj.) | N -ingĩ = nyingĩ | 'many' |
|  |  | uma (v.) | nĩ-N-um-aga = nĩnyumaga | 'I get out' |
|  |  | ona (v.) | nĩ-N-on-aga = nĩnyonaga | 'I see' |
|  |  | ina (v.) | nĩ-N-in-aga = nĩnyinaga | 'I sing' |

### 1.5.5.6 Exceptions in $\mathrm{NC}_{9}, \mathrm{NC}_{10}$

For some nouns in classes 9 and 10, attaching the noun class prefix $N$ - does not result in the expected segment. Since these words are borrowed, it is not unusual that they don't conform to the paradigms described in this section, though many borrowed words do in fact conform. Some examples of nouns in classes 9 and 10 where the $N$ - is not realized:

$$
\begin{array}{lll}
\mathrm{N}+\text { bunda = bunda } & \text { 'donkey' } & \text { *mbunda } \\
\mathrm{N}+\text { benjũ = benju } & \text { 'pencil' } & \text { *mbenjũ } \\
\mathrm{N}+\text { cukuru = cukuru } & \text { 'school' } & \text { *njukuru } \\
\mathrm{N}+\text { karati = karati } & \text { 'carrot' } & \text { *ngarati } \tag{51}
\end{array}
$$

## Chapter 2

## Nouns and Noun Phrases

Jessica Li

The noun phrase in Gîkũyũ consists of a noun and any modifiers. Section 2.1 and its subsections deal with noun classes while section 2.2 and its subsections address the structure of the noun phrase and the modifiers that can occur within it.

### 2.1 Nominal Morphology

### 2.1.1 Noun Classes

Gĩkũyũ participates in a noun class system of 17 classes, where noun class membership is marked by a prefix on the noun (except for nouns in noun class 14 and some exceptional nouns in noun classes $1,2,9$, and 10 ). Number is also indicated by noun class, as some noun classes are inherently plural, while others are inherently singular.

Table 1: Summary of noun classes

| CLASS | PREFIX | EXAMPLE | EXAMPLE GLOSS |
| :---: | :---: | :---: | :---: |
| 1 | mũ- | mũndũ | 'person' |
| 2 | $a-$ | andũ | 'people' |
| 1a | -- | tata | 'aunt' |
| 2a | -- | tata | 'aunts' |
| 3 | mũ- | mũaki | 'fire' |
| 4 | $m i \underline{-}$ | mãaki | 'fires' |
| 5 | rĩ-/i- | ihũa | 'flower' |
| 6 | ma- | mahũa | 'flowers' |
| 7 | kĩ-/gĩ | kîrĩma | 'mountain' |
| 8 | ci-/i- | irĩma | 'mountains' |
| 9 | N - | mbata | 'duck' |
| 10 | N - | mbata | 'ducks' |
| 9a | -- | batĩ | 'party' |
| 10a | -- | batĩ | 'parties' |
| 11 | rũ- | rũig | 'eagle' |
| 12 | ka-/ga- | kanua | 'mouth' |
| 13 | tũ- | tũnua | 'mouths' |
| 14 | -- | cukari | 'sugar' |
| 15 | kũ-/gũ- | gũtũ | 'ear' |
| 16 | ha- | handũ | 'place (definite)' |
| 17 | $k \tilde{u}-/ g \tilde{u}^{-}$ | kũndũ | 'place (indefinite)' |

The above table summarizes the 17 noun classes in Gĩkũyũ, and follows the numbering system set forth in Mugane's grammar (Mugane 1997: 26). Nouns tend to pattern into pairs of singular and plural noun classes, with some more common than others. The singular/plural pairings will be discussed in section 2.1.3.

Membership of nouns in noun classes is determined morphologically by the prefix occurring on the noun (if any) and the concord triggered by the noun as prefixes on other elements of the noun phrase and the verb.

The singular noun classes are noun classes $1,3,5,7,9,11,12,14$, and 15 . The plural noun classes are Noun Classes $2,4,6,8,10$, and 13 . Noun Classes 16 and 17 can be singular or plural depending on context.

### 2.1.1.1 Classes 1/2

Classes 1 and 2 comprise mostly human, animate nouns. However, some non-human nouns (e.g. wakahare 'squirrel') belong to these classes.

Classes 1 and 2 seem to consist of two different types of mostly person nouns that pattern differently in terms of class prefixes, already exhibited in Table 1. Besides the split in prefix patterning, all members of the class pattern the same way in terms of concord. Collapsing these two types into two Classes 1 and 2 , where 1 is singular and 2 is plural, seems beneficial as it highlights the semantic similarity among class members as well as the concord marking on verbs.

Classes 1 and 2 are formed as follows:

Class 1: mũ- + stem
Class 2: $a-+$ stem

Some examples are given below:
(52) mwarĩ, arĩ

| mũ- arĩ | a- arĩ |
| :--- | :--- |
| $\mathrm{NC}_{1}-$ daughter | $\mathrm{NC}_{2}-$ daughter |

'daughter, daughters'
(53) mũndũ, andũ

| mũ- ndũ | a- ndũ |
| :--- | :--- |
| $\mathrm{NC}_{1}-$ person | $\mathrm{NC}_{2}-$ person |

'person, people'

Classes 1a and 2a are composed mainly of kinship terms that do not take prefixes in either the singular or plural form. However, not all of the nouns that belong to these noun classes fall under this criterion. Since Classes 1a and 2a do not take prefixes, they are formed as follows:

> Class 1a: $\varnothing$ - + stem
> Class 2a: $\varnothing$ - + stem

Some examples are given below:
(54) wagui, wagui

| $\varnothing$ - $\quad$ wagui | $\varnothing$ - wagui |
| :--- | :--- |
| $\mathrm{NC}_{11^{-}}$grandfather | $\mathrm{NC}_{2 a^{-}}$grandfather |
| 'grandfather, grandfathers' |  |

(55) baba, baba

| $\varnothing$ - baba | $\varnothing$ - baba |
| :--- | :--- |
| $N C_{12}$ - father | $\mathrm{NC}_{2 \mathrm{a}}$ - father |
| 'father, fathers' |  |

### 2.1.1.2 Classes 3/4

The semantics of Classes 3 and 4 -which are singular and plural, respectively-are less concrete than those of Classes 1 and 2. A good number of words in Classes 3 and 4 are nature or landscape terms, but by no means all.

Classes 3 and 4 are formed as follows:

> Class 3: mũ- + stem
> Class 4: mĩ- + stem

Some examples are given below:
(56) mũri, mĩri

| mũ- ri | mĩ- ri |
| :--- | :--- |
| $\mathrm{NC}_{3}-$ root | $\mathrm{NC}_{4}-$ root |
| 'root, roots' |  |

(57) mũaki, mĩaki

| mũ- aki | mĩ- aki |
| :--- | ---: |
| $\mathrm{NC}_{3}$ - fire | $\mathrm{NC}_{4}$ - fire |
| 'fire, fires' |  |

### 2.1.1.3 Classes 5/6

The semantics of Classes 5 and 6-singular and plural, respectively-are again less concrete than those of Classes 1 and 2. A general semantic trend of words in Classes 5 and 6 are plant and landscape terms, but again a good number of words in these noun classes also do not fall under these semantic categories.

Classes 5 and 6 are formed as follows:

Class 5: rĩ-/i- + stem
Class 6: ma- + stem
The variation of $r \tilde{i}-/ i$ - depends on if the stem is vowel-initial. If the noun stem is vowel-initial, it is prefixed by rĩ-, and if it is consonant-initial, it is prefixed by $i$-. Some examples are given below:
(58) rĩinabu, mainabu

| rĩ- inabu | ma- inabu |
| :--- | :--- |
| $\mathrm{NC}_{5}-$ pineapple | $\mathrm{NC}_{6}$ - pineapple |

'pineapple, pineapples'
(59) rĩciria, meciria

| rĩ- Ĩciria | ma- ĩciria |
| :--- | :--- |
| $\mathrm{NC}_{5}{ }^{-}$thought | $\mathrm{NC}_{6}-$ thought |

'thought, thoughts'
However, there are also other words in the class that do not follow this pattern exactly. The form of the Class 5 noun appears to match. However, the Class 6 prefix attaches to the Class 5 form of the noun, and not to the noun stem itself. What could be happening here is that the Class 5 prefix has gotten reanalyzed to the stem. Some examples are given below:
(60) rĩtũa, marĩtũa

| rĩ- tũa | ma- rĩ- tũa |
| :--- | :--- |
| $\mathrm{NC}_{5}$ - name | $\mathrm{NC}_{6}-\mathrm{NC}_{5}-$ name |
| 'name, names' |  |

(61) riũa, mariũa

| rĩ- ũa | ma- rĩ- ũa |
| :--- | :--- |
| $\mathrm{NC}_{5}$ - sun | $\mathrm{NC}_{6}-\mathrm{NC}_{5}$ - sun |
| 'sun, suns' |  |

Noun Class 6 seems to be a very productive way of making plurals, as it serves as a possible plural for various other noun classes, such as Noun Classes 1, 9, 11, 12, 14, and 15.

### 2.1.1.4 Classes 7/8

Classes 7 and 8 are the classes for augmentatives, used to denote objects that are big in some way. The use of this class as an augmentative will be explored in further detail in section 2.1.4.2. There are also many nouns that inherently belong to Classes 7 and 8 . However, there doesn't seem to be any discernable semantic motivation behind these nouns.

Classes 7 and 8 are formed as follows:
Class 7: kĩ-/g $\tilde{\imath}-+$ stem
Class 8: ci-/i- + stem

The variation of kĩ-/gĩ- depends on the identity of the following consonant, as described in 1.5.1. The variation of $c i-/ i-$ depends on whether the stem is vowel-initial. If the noun stem is vowel-initial, it is prefixed by ci-, and if it is consonant-initial, it is prefixed by $i$ - Some examples are given below:
(62) kĩimba, cimba

| kĩ- imba | ci- imba |
| :--- | :--- |
| $\mathrm{NC}_{7}$ - corpse | $\mathrm{NC}_{8}$ - corpse |

(63) kîboko, iboko

| kĩ- boko | i- $\quad$ boko |
| :--- | :--- |
| $\mathrm{NC}_{7}-$ whip | $\mathrm{NC}_{8}-$ whip |
| 'whip, whips' |  |

### 2.1.1.5 Classes 9/10

Classes 9 and 10 do not seem to have a clear semantic motivation. However, most animals and a few body parts belong to this class. This class also seems to be the default class for words borrowed into Gîkũyũ. Because of the borrowed words, there are inconsistencies in this class.

The prefixes proposed for Classes 9 and 10 are nasalization, indicated with $N$-. This is proposed for three main reasons:

1) Most words in these noun classes begin either with a) a nasalized consonant (mb, $n d, n g, n j, m, n, n y, n g$ ), or $b$ ) a consonant in a place of articulation for which a nasalized alternative does not exist (th, w, h). The words that do not begin with these consonants are mostly, if not all, borrowed words such as batĩ 'party', karati 'carrot', and cukuru 'school'.
2) When a different class prefix, such as the diminutive class, is attached to these noun stems, the prenasalized consonants ( $\mathrm{mb}, \mathrm{nd}, \mathrm{ng}$ ) seem to "lose" their nasality to become $b, t$, and $g$, for example:
a) mbata 'duck' > kabata 'small duck'
b) ndaa 'louse' > gataa 'small louse'
c) ngui ‘dog' > kagui ‘small dog’
3) The concord form for this noun class of an adjective beginning with a vowel, such as ingĩ 'many' is nyingĩ.

Thus, Classes 9 and 10 are formed as follows:

Class 9: N - + stem
Class 10: N - + stem
If there is no nasalized alternative at the specific place of articulation, the nasalization does not change the stem. Some examples are given below:
(64) mbakũri, mbakũri

| $\mathrm{N}-$ bakũri | $\mathrm{N}-$ bakũri |
| :--- | :--- |
| $\mathrm{NC}_{9}$ - bowl | $\mathrm{NC}_{10}$ - bowl |
| 'bowl, bowls' |  |

(65) ndahi, ndahi

N - dahi N - dahi
$\mathrm{NC}_{9}$-grasshopper
$\mathrm{NC}_{10^{-}}$grasshopper
'grasshopper, grasshoppers'
(66) nyamũ, nyamũ

| $\mathrm{N}-$ nyamũ | $\mathrm{N}-$ nyamũ |
| :--- | :--- |
| $\mathrm{NC}_{9}-$ animal | $\mathrm{NC}_{10}-$ animal |

'animal, animals'
(67) thia, thia

| $\mathrm{N}-$ thia | $\mathrm{N}-$ thia |
| :--- | :--- |
| $\mathrm{NC}_{9}$ - antelope | $\mathrm{NC}_{10}$ - antelope |
| 'antelope, antelopes' |  |

Most borrowed words fall under Noun Classes 9 and 10, and some of these borrowed words begin with a non-nasalized consonant that may violate the above rules because of their status as borrowings. However, other than the lack of nasalization prefix, they pattern exactly the same as the other words in the class. It is clear that these borrowed words, while being borrowed into this noun class, are still unique in the fact that they do not take the nasalization prefix. These can be seen as Classes 9 a and 10a, and as they do not take prefixes, they are formed as follows:

> Class 9a: $\varnothing$ - + stem
> Class 10a: $\varnothing$ - + stem

Some examples are given below:
(68) batĩ, batĩ

| Ø- batĩ | $\varnothing$ - batĩ |
| :--- | :--- |
| $\mathrm{NC}_{9 a^{-}}$party | $\mathrm{NC}_{100^{-}}$party |
| 'party, parties' |  |

(69) cerobu, cerobu

| $\varnothing$ - cerobu | $\varnothing$ - cerobu |
| :--- | :--- |
| $\mathrm{NC}_{92}$ - shelf | $\mathrm{NC}_{10 \mathrm{a}}$ - shelf |
| 'shelf, shelves' |  |

### 2.1.1.6 Class 11

Class 11 consists mainly of nouns that are long and thin, or string-like. However, like most other Gîkũyũ noun classes, it also contains many semantically-non-related nouns. The plural form of Class 11 nouns can belong to either Noun Class 10 or Noun Class 6. As most nouns whose plurals can occur in Noun Class 6 can also occur in Noun Class 10, it seems that Noun Class 10 is the default plural class for nouns in Noun Class 11.

Noun Class 11 is formed as follows:
Class 11: rũ- + stem

A hypothesis in the case of a stem beginning with $r \tilde{u}$ is that if the prefix $r \tilde{u}$ - is added to a stem that already begins with $r$ ũ, the prefix is deleted.

Some examples with plurals in Noun Class 10 are as follows:
(70) ruoya, njoya

| rũ- oya | $\mathrm{N}-$ oya |
| :--- | :--- |
| $\mathrm{NC}_{11}$ - feather | $\mathrm{NC}_{10}$ - feather |
| 'feather, feathers' |  |

(71) rũĨgĩ, ndũũgĩ

| rũ- rũ̃̃̃ | $\mathrm{N}-$ rũ̃̃̃̃ |
| :--- | :--- |
| $\mathrm{NC}_{11}$ - eagle | $\mathrm{NC}_{10}$ - eagle |
| 'eagle, eagles' |  |

An example with a plural form in Noun Class 6 is as follows:

```
(72) rũguoya, maguoya
    rũ- guoya ma-guoya
    \(\mathrm{NC}_{11}\) - fur \(\quad \mathrm{NC}_{6}-\) fur
    'fur, furs'
```

The Class 6 plural form of Class 11 nouns follows the same variation as Class $5 / 6$ plurals (2.1.1.3), the reason for which is hard to pinpoint. Sometimes the Class 6 prefix, ma-, attaches to the noun stem itself, and sometimes it attaches to the whole class 11 form of the noun. A similar analysis can be applied here, assuming that the prefix has gotten reanalyzed into the stem. An example in which the Class 6 prefix attaches to the whole Class 11 form of the noun is as follows:
(73) ruoya, maruoya

| rũ- oya | ma- rũ- oya |
| :--- | :--- |
| $\mathrm{NC}_{11}$ - feather | $\mathrm{NC}_{6}-\mathrm{NC}_{11}$ - feather |
| 'feather, feathers' |  |

### 2.1.1.7 Classes 12/13

Classes 12 and 13 are the classes for diminutives, used to denote objects that are small in some way. The use of this class as a diminutive will be explored in further detail in section 2.1.4.1. There are also many nouns that inherently belong to Classes 12 and 13 . However, there does not seem to be any discernable semantic motivation behind these nouns.

Classes 12 and 13 are formed as follows:
Class 12: ka-/ga-+ stem
Class 13: tũ-+ stem
The variation of ka-/ga- depends on the identity of the following consonant, as described in the phonology chapter. Some examples are given below:
(74) kahiu, tũhiu

| ka- hiu | tũ- hiu |
| :--- | :--- |
| $\mathrm{NC}_{12}-$ knife | $\mathrm{NC}_{13}$ - knife |
| 'knife, knives' |  |

(75) kahĩĩ, tũhĩĩ

| ka- hĩĩ | tũ- hĩĩ |
| :--- | :--- |
| $\mathrm{NC}_{12}$ - boy | $\mathrm{NC}_{13}$ - boy |
| 'little boy, little boys' |  |

### 2.1.1.8 Class 14

Class 14 contains nouns for abstract concepts. However, other than abstract concepts, Noun Class 14 also contains many other nouns, so this, like most other noun classes, is only somewhat semantically motivated. Class 14 generally pairs up with Class 6 for the plural form of nouns.

Class 14 is formed as follows:
Class 14: Ø- + stem

Abstract ideas fall into this noun class. Abstract ideas tend to begin with the letter $\tilde{u}$, as will be seen in the following examples. Thiriti 'friendship' is a special case, as according to our consultant it used to be spelled and pronounced ũthiriti in the singular, but over time the ũ was dropped. However, its remnants can still be seen in the plural, which is mothiriti (ma-+ ũthiriti) as opposed to mathiriti, which would be expected if thiriti were the stem instead of ũthiriti.

Some examples of nouns in this class are as follows:
(76) thiriti, mothiriti

| $\varnothing$ - | thiriti |
| :--- | :--- |
| $\mathrm{NC}_{14}-$ friendship | ma- ũthiriti |
| $\mathrm{NC}_{6}-$ friendship |  |

'friendship, friendships'
(77) wendi, mawendi
Ø- wendi
ma- wendi
$\mathrm{NC}_{14}$ - wish
$\mathrm{NC}_{6}-$ wish
'wish, wishes'
(78) cukari, macukari

| $\varnothing$ - cukari | ma- cukari |
| :--- | :--- |
| $\mathrm{NC}_{14}-$ sugar | $\mathrm{NC}_{6}-$ - sugar |
| 'sugar, sugars' |  |

### 2.1.1.9 Class 15

Class 15 seems to contain only body parts and verbal infinitives. This class is more semantically and syntactically motivated than other noun classes in Gĩkũyũ. If the plural form of a Class 15 noun is possible, it is in Class 6.

Class 15 is formed as follows:

Class 15: kũ-/gũ-+ stem
The variation of $k \tilde{u}-/ g \tilde{u}$ - depends on the identity of the following consonant, as described in 1.5.1. The three body part examples belonging to this noun class are as follows:
(79) gũtũ, matũ

| gũ- tũ | ma- tũ |
| :--- | :--- |
| $\mathrm{NC}_{15}$ - ear | $\mathrm{NC}_{6}$ - ear |
| 'ear, ears' |  |

(80) guoko, moko
gũ- oko ma- oko
$\mathrm{NC}_{15^{-}}$arm $\quad \mathrm{NC}_{6^{-}}$arm
'arm, arms'
(81) kũgũrũ, magũrũ
kũ- gũrũ
ma-gũrũ
$\mathrm{NC}_{15}-\mathrm{leg}$
$\mathrm{NC}_{6}-\operatorname{leg}$
'leg, legs’
Some examples of verbal infinitives are as follows:
(82) kũgũa
kũ- gũa
$\mathrm{NC}_{15}$ - fall
'to fall'
(83) gũtheka
gũ- theka
$\mathrm{NC}_{15}$ - laugh
'to laugh'

### 2.1.1.10 Classes 16/17

Classes 16 and 17 are locative classes. Only one noun was available to be elicited for each: handũ 'place (definite)' and kũndũ 'place (indefinite)'.

Class 16 is the definite location class. Definite in this case means the speaker knows where the location is and is referring to a definite, specific place. Definite location is used when a specific place is known, within the given universe of discourse.

Class 17 is the indefinite location class. Indefinite in this case means that the speaker is referring more to thereabouts than a specific place. We will return to a discussion of this distinction in our discussion of locative clauses in 4.4.

Classes 16 and 17 are formed as follows:
Class 16: ha-+ stem
Class 17: kũ-/gũ-+ stem
Classes 16 and 17 can be singular or plural based on context.
The class 16 example is as follows:
(84) handũ
ha- ndũ
$\mathrm{NC}_{16^{-}}$thing
'place' (definite)
The class 17 example is as follows:
(85) kũndũ
kũ- ndũ
$\mathrm{NC}_{17}$ - thing
'place' (indefinite)

### 2.1.2 Semantics Of Gĩkũyũ Noun Classes

Each of the above sections on the noun classes in Gĩkũyũ mentions some of the semantic characteristics of the nouns belonging to the noun classes. Most noun classes do not seem to be semantically motivated. Some noun classes follow general semantic tendencies, though there are always nouns in these noun classes that do not match the general tendency. Following is a table summarizing semantic tendencies of Gîkũyũ noun classes.

Table 2: Semantics of Gîkũyũ noun classes

| CLASS | SEMANTIC TENDENCIES |
| :--- | :--- |
| $1 / 2$ | Humans |
| $3 / 4$ | Landscape terms, nature terms, other |
| $5 / 6$ | Plants, landscape terms, other |
| $7 / 8$ | Augmentatives, other |
| $9 / 10$ | Animals, body parts, borrowed words, other |
| 11 | String- or stick-shaped objects, other |
| $12 / 13$ | Diminutives, other |
| 14 | Abstract concepts, other |
| 15 | Body parts, verbal infinitives |
| 16 | Location (definite) |
| 17 | Location (indefinite) |

### 2.1.3 Singular/Plural Pairings

There are 17 noun classes which pair into 15 singular-plural pairings. Common pairings are $1 / 2,3 / 4,5 / 6,7 / 8,9 / 10,11 / 10,12 / 13,14 / 6$, and $15 / 6$. Less common pairings are $9 / 6,11 / 6$, and $12 / 6$. Extremely rare pairings are $7 / 6,1 / 8$, and $14 / 10$. These pairings are summarized in the following table, where dashed lines indicate less common pairings and dotted lines indicate rare pairings.

Table 3: Singular/plural noun class pairings


The class 6 plural seems to be very productive, especially with borrowed words, and can form plurals from multiple singular noun classes, as seen in sections 2.1.1.3, 2.1.1.6, 2.1.1.8, and 2.1.1.9. In addition to these, it can also form the plural in some instances from nouns in noun classes 7,9 and 12. Class 6 plurals of class 7 nouns usually only occur with augmented nouns, and not nouns that are inherently in class 7 . Class 6 plurals of class 9 and class 12 nouns seem to be mainly borrowed words. To explain the variation in $12 / 6$ plural forms, possibly along the lines of the hypothesis offered in section 2.1.1.7, the following could be said: Sometimes when plural noun class prefixes, especially from class 6, are attached to borrowed words, they are attached to the whole singular noun class form, rather than what is perceived to be the noun stem.

Following are examples of $7 / 6,9 / 6$, and $12 / 6$ noun pairs, respectively:
(86) kîbakũri, mabakũri
kĩ- bakũri
$\mathrm{NC}_{7}$ - bowl
ma- bakũri
$\mathrm{NC}_{6}-$ bowl
'big bowl, big bowls'
(87) mbata, mabata

| $\mathrm{N}-$ bata | ma- bata |
| :--- | :--- |
| $\mathrm{NC}_{9}$ - duck | $\mathrm{NC}_{6}-$ duck |

'duck, ducks'
(88) karatathi, maratathi, makaratathi
ka- ratathi
ma- ratathi
$\mathrm{NC}_{12}$ - paper
$\mathrm{NC}_{6}$ - paper
ma- ka- ratathi
'paper, papers, papers'

### 2.1.4 Noun-Noun Derivation

### 2.1.4.1 Diminution

To form diminutive forms of nouns-nouns that are seen as a smaller variant of the non-modified noun-from nouns not already in Noun Classes 12/13, the prefixes for Noun Classes $12 / 13$ are used. That is to say, the diminutive form is formed as follows:

Singular: ka-/ga- + stem
Plural: tũ- + stem

Following are some examples:
(89) gĩkwa, ikwa, gakwa, tũkwa
gĩ- kwa
i- kwa
$\mathrm{NC}_{7}-$ yam
$\mathrm{NC}_{8}$ - yam
ga- kwa
$\mathrm{NC}_{12}-$ yam
tũ- kwa
$\mathrm{NC}_{13}-$ yam
'yam, yams, small yam, small yams'
(90) njata, njata, gacata, tũcata

| $\mathrm{N}-$ cata | $\mathrm{N}-\quad$ cata | ga- cata | tũ- cata |
| :--- | :--- | :--- | :--- |
| $\mathrm{NC}_{9}-$ star | $\mathrm{NC}_{10^{-}}$star | $\mathrm{NC}_{12^{-}}$star | $\mathrm{NC}_{13^{-}}$star |

'star, stars, small star, small stars'

### 2.1.4.2 Augmentation

To form augmented forms of nouns-nouns that are seen as a larger type of the nonmodified noun-from nouns not already in Noun Classes 7/8, the prefixes for Noun Classes 7/8 are used. In some cases, the prefixes for Noun Class 6 can be used for the plural as well. The variation between these two forms is not clear from our data. The augmented form is formed as follows:

Singular: kĩ-/gĩ- + stem
Plural: ci-/i- + stem
Plural: ma-+ stem
Following is an example:
(91) mbakũri, mabakũri, kĩbakũri, ibakũri

| $\mathrm{N}-$ bakũri | ma- bakũri | kĩ- bakũri | i- bakũri |
| :--- | :--- | :--- | :--- |
| $\mathrm{NC}_{9}-$ bowl | $\mathrm{NC}_{6}-$ bowl | $\mathrm{NC}_{7}-$ bowl | $\mathrm{NC}_{8}-$ bowl |

'bowl, bowls, big bowl, big bowls'

### 2.2 Components Of The Noun Phrase

The remainder of this chapter is dedicated to other components of the noun phrase, and the structure of the noun phrase. Gîkũyũ is a head-initial language, which means that within a noun phrase, the head noun occurs first and is followed by any modifiers. When a head noun is followed by multiple modifiers, the order of the modifiers is generally relatively flexible.

These modifiers are bound stems that require concord prefixes. There are two sets of concord prefixes-noun class prefixes and agreement class prefixes-which will be discussed later in this section.

Demonstrative pronouns generally occur right after the head noun, and numerals generally occur at the end of a noun phrase, but adjectives, possessive pronouns, and quantifiers can occur in any order, as shown in the following diagram:

| Noun | Poss. pronoun | Adjective |
| :---: | :---: | :---: |
|  | Dem. pronoun | Quantifier |
|  |  | Numeral |

Though a noun can be followed by all of the modifiers listed in the diagram on the previous page, it is more common for nouns to be modified by one or two noun phrase constituents. In Gîkũyũ, a noun phrase can include both a demonstrative pronoun and a possessive pronoun.

Gîkũyũ’s noun class system governs a system of concord, in which other components of the noun phrase agree with the head noun. Each noun class has two concord markers which mark concord on different types of modifiers.

The following table shows both types of concord markers for all 17 noun classes.

## Table 4: Concord markers for noun classes

| CLASS | ADJECTIVE <br> CLASS PREFIX | AGREEMENT CLASS PREFIX |
| :---: | :---: | :---: |
| 1 | mũ- | u- |
| 2 | $a$ - | $a$ - |
| 3 | mũ- | $\tilde{u}^{-}$ |
| 4 | mĩ | $\tilde{1}^{-}$ |
| 5 | rĩ-li- | rioli- |
| 6 | ma- | ma- |
| 7 | kĩ-/gĩ- | kĩ-/gĩ- |
| 8 | N - | ci-/i- |
| 9 | N - | $\tilde{1}^{-}$ |
| 10 | N - | ci-/i- |
| 11 | rũ- | rũ- |
| 12 | ka-/ga- | ka-/ga- |
| 13 | tũ- | $t u{ }^{-}$ |
| 14 | mũ- | ũ- |
| 15 | kũ-/gũ- | $k u ̃-/ g u ̃-$ |
| 16 | ha- | ha- |
| 17 | kũ-/gũ- | $k \tilde{u}-/ g \tilde{u}^{-}$ |

The first type of concord marker is the adjective class prefix. For all classes except 8 and 14 , the adjective class prefix is identical to the prefix that prefixes nouns of that particular class. The adjective class prefix marks adjectives and some quantifiers that seem to be considered adjectives: nini ‘a few', ingĩ 'many’.

The second type of concord marker is the agreement class prefix. The agreement class prefix marks cardinal numerals, demonstratives, possessives, the associative, and some quantifiers that do not seem to be considered adjectives: othe 'all', ingin 'other', mwe 'some', mwe na mwe 'a few'.

Following are some noun phrases that illustrate the order of modifiers and the concord marking on modifiers.

The following example must have the demonstrative pronoun and possessive pronoun in the order given, which shows that demonstrative pronouns can come before possessive pronouns in the noun phrase:
(92) mahũa maya makwa
ma-hũa maya ma- akwa

'these flowers of mine'
The following example must have the adjective and numeral in the order given, which shows that numerals can come after adjectives in the noun phrase:
(93) mahũa manene matano
ma-hũa ma-nene ma-tano
$\mathrm{NC}_{6}$ - flower $\mathrm{JC}_{6}-$ big $\mathrm{AC}_{6}$ - five
'five big flowers'
The following two examples show that again, the demonstrative pronoun can occur immediately after the head noun. These examples also show that the possessive pronoun and the adjective are interchangeable in a noun phrase in terms of sequence:
(94) mahũa maya manene makwa
ma-hũa maya ma-nene ma- akwa
$\mathrm{NC}_{6}-$ flower PROX.DEM ${ }_{6} \mathrm{JC}_{6}-$ big $\mathrm{AC}_{6}-1$ 1SG.POS
'these big flowers of mine'
(95) mahũa maya makwa manene
ma-hũa maya ma-akwa ma-nene
$\mathrm{NC}_{6}-$ flower PROX.DEM $\mathrm{AC}_{6}-1$ - $\mathrm{SG}^{-P O S} \mathrm{JC}_{6}-$ big
'these big flowers of mine'
The following two examples show that, in a noun phrase, quantifiers and adjectives are interchangeable in terms of sequence:
(96) mahũa makwa mothe manene
ma-hũa ma-akwa ma- othe ma-nene
$\mathrm{NC}_{6}$ - flower $\mathrm{AC}_{6}-1$ SG.POS $\mathrm{AC}_{6}$ - all $\mathrm{JC}_{6}-$ big
'all my big flowers'
(97) mahũa makwa manene mothe
ma-hũa ma-akwa ma- nene ma- othe
$\mathrm{NC}_{6}$ - flower $\mathrm{AC}_{6}-1$ SG.POS JC $\mathrm{C}_{6}$ - big $\mathrm{AC}_{6}$ - all
'all my big flowers'

The next example below shows that order of constituents in Gĩkũyũ does not seem to be completely fixed. The order of constituents in a noun phrase is fairly flexible.
(98) mahũa maya makwa mothe matano manene ma-hũa maya ma- akwa ma- othe ma-tano ma- nene $\mathrm{NC}_{6}$ - flower PROX.DEM ${ }_{6} \mathrm{AC}_{6}{ }^{-}$1SG.POS $\mathrm{AC}_{6}{ }^{-}$all $\mathrm{AC}_{6}$ - five $\mathrm{AC}_{6}$ - big 'all five of these big flowers of mine'

### 2.2.1 Pronouns

### 2.2.1.1 Personal Pronouns

Personal pronouns for person forms and classes $1 / 2$ are shown in the following table.

Table 5: Personal pronouns for person forms

| PERSON | PRONOUN |
| :---: | :--- |
| 1SG | niũ/niũ |
| 2SG | wee / weũ |
| NC1 | we |
| 1PL | ithuĩ |
| 2PL | inyuĩ/inyuũ |
| NC2 | o/mo |

Personal pronouns may take the place of a noun or a noun phrase. Personal pronouns are not obligatory, especially since person and noun class are marked on verbs. They are usually only used emphatically. Personal pronoun use is shown in the following example:
(99) nĩ niĩ ndĩ mwarimũ
nĩ niĩ $\quad \mathrm{N}$ - rĩ mũ- arimũ
FOC 1SG.PRO 1SG- COP NC ${ }_{1}$ - teacher
'It is I who am a teacher.'

Personal pronouns for noun classes other than 1 and 2 are used only in the response to a question. The personal pronouns for these noun classes are generally formed by prefixing the stem of the personal pronoun o with the corresponding agreement class prefix. Exceptions to
this rule are noun classes 3 and 14 , which seem to take gũ- or $g u$ - as a prefix instead, for an unknown reason. The following table shows the personal pronoun forms for classes 3-17.

Table 6: Personal pronouns for noun classes 3-17

| CLASS | PRONOUN |
| :--- | :--- |
| 3 | guo |
| 4 | yo |
| 5 | rio |
| 6 | mo |
| 7 | kio |
| 8 | cio |
| 9 | yo |
| 10 | cio |
| 11 | ruo |
| 12 | ko |
| 13 | tuo |
| 14 | guo |
| 15 | kuo |
| 16 | ho |
| 17 | kuo |

Following is an example of how one might answer the question, "Is the flower beautiful?":
(100) rĩo nĩ rĩthaka
rĩ- o nĩ rĩ- thaka
$\mathrm{NC}_{5}$ - PRO FOC AC $5_{5}$ - beautiful
'It (the flower) is beautiful.'

### 2.2.1.2 Dependent Pronouns

The dependent pronoun has the meaning 'and/with X ' and is formed by fusing the comitative preposition na 'and/with' with the appropriate personal pronouns described above in section 2.2.1.1. Only the dependent pronoun for noun class 1 does not follow this pattern. This pronoun can be used as an oblique NP, and is a necessary component of relative clauses that relativize oblique NPs. The following table shows the forms of the dependent pronouns for person and noun classes.

Table 7: Dependent pronouns

| CLASS | DEP. PRON. | CLASS | DEP. PRON. |
| :--- | :--- | :--- | :--- |
| 1SG | naniü | 8 | nacio |
| 2SG | nawe | 9 | nayo |
| 1PL | naithuĩ | 10 | nacio |
| 2PL | nainyuĩ | 11 | naruo |
| $\mathbf{1}$ | nake | 12 | nako |
| 2 | nao | 13 | natuo |
| 3 | naguo | 14 | naguo |
| 4 | nayo | 15 | nakuo |
| 5 | narĩo | 16 | naho |
| 6 | namo | 17 | nakuo |
| 7 | nakĩo |  |  |

Following are some examples of dependent pronouns:
(101) njokire narĩo

N- cok -ir -e na- rĩ- o
1SG- return -COMPL -FV and- AC5- PRO
'I returned with it (the flower) (today).'
(102) nĩnjokire nao
nĩ- N - cok -ir -e na- a- o
FOC- 1SG- return -COMPL -FV and- $\mathrm{AC}_{2}$ - PRO
'I returned with them (the women) (today).'

### 2.2.1.3 Possessive Pronouns

There are multiple methods of marking possession in Gĩkũyũ. One method uses a possessive pronoun, and another uses the associative construction. The method that will be discussed in this section is the first, the use of the possessive pronoun.

The possessive pronoun is formed by prefixing the appropriate possessive stem with the agreement class prefix of the possessed noun. There are six possessive stems in Gĩkũyũ, corresponding with $1 \mathrm{SG}, 2 \mathrm{SG}, \mathrm{NC}_{1}, 1 \mathrm{PL}, 2 \mathrm{PL}$, and $\mathrm{NC}_{2}$. Though the possessive stems for $\mathrm{NC}_{1}$ and $\mathrm{NC}_{2}$ can be used with the other noun classes corresponding to singular and plural respectively, this usage is very rare. The possessive stems are as follows.

## 38 Jessica Li

Table 8: Possessive stems

| PERSON | STEM | GLOSS |
| :--- | :--- | :--- |
| 1SG | akwa | 'my' |
| 2SG | aku | 'your (sg.)' |
| NC1 | ake | 'his/her/its' |
| 1PL | itũ | 'our' |
| 2PL | anyu | 'your (pl.)' |
| NC2 | ao | 'their' |

Following is a table showing the paradigm of forms of possessive pronouns for all noun classes.
Table 9: Possessive pronoun paradigm

| CLASS | 1SG | 2SG | NC1 | 1PL | 2PL | NC2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | wakwa | waku | wake | witũ | wanyu | wao |
| 2 | akwa | aku | ake | aitũ | anyu | ao |
| 3 | wakwa | waku | wake | witũ | wanyu | wao |
| 4 | yakwa | yaku | yake | iitũ | yanyu | yao |
| 5 | rĩakwa | rĩaku | riake | riitũ | rĩanu | rão |
| 6 | makwa | maku | make | maitũ | manyu | mao |
| 7 | giakwa | giaku | giake | gitũ | kĩanyu | kĩao |
| 8 | ciakwa | ciaku | ciake | ciitũ | cianyu | ciao |
| 9 | yakwa | yaku | yake | itiũ | yanyu | yao |
| 10 | ciakwa | ciaku | ciake | ciitũ | cianyu | ciao |
| 11 | rũakwa | rũaku | rũake | ruitũ | rũanyu | rũao |
| 12 | gakwa | gaku | gake | gaitũ | kanyu | kao |
| 13 | tũakwa | tũaku | tũake | tuitũ | tũanyu | tũao |
| 14 | wakwa | waku | wake | witũ | wanyu | wao |
| 15 | gũakwa | gũaku | gũake | guitũ | kũanyu | kũao |
| 16 | hakwa | haku | hake | haitũ | hanyu | hao |
| 17 | gũakwa | gũaku | gũake | guitũ | kũanyu | kũao |

Some examples of possessives are as follows:
(103) mwaki wakwa
mũ- aki ũ- akwa
$\mathrm{NC}_{3}-$ fire $\mathrm{AC}_{3}-1 \mathrm{SG} . \mathrm{POS}$
'my fire'
(104) huhu ciao

N- huhu ci- ao
$\mathrm{NC}_{10^{-}}$bat $\mathrm{NC}_{10}-$ 3PL.POS
'their bats'
(105) mahũa maitũ
ma-hũa ma-itũ
$\mathrm{NC}_{6}$ - flower $\mathrm{AC}_{6}-1$ 1PL.POS
'our flowers'

### 2.2.1.4 Relative Pronouns

Another type of pronoun is the relative pronoun. Relative pronouns are used to relativize nouns. Relative pronouns are formed by adding the relevant agreement class prefix to the relative stem ria. For classes 8 and 10 , vowel harmony occurs and the $\tilde{\imath}$ in the stem is raised to $i$. The following table shows the forms of the relative pronoun for person and number combinations, and all noun classes.

Table 10: Relative pronouns

| CLASS | REL. PRONOUN | CLASS | REL. PRONOUN |
| :--- | :--- | :--- | :--- |
| 1 | ũrĩa | 10 | iria |
| 2 | arĩa | 11 | rũrĩa |
| 3 | urĩ̃a | 12 | karĩa |
| 4 | irĩa | 13 | tũrĩa |
| 5 | riria | 14 | urĩa |
| 6 | marĩa | 15 | kũrĩa |
| 7 | kĩĩa | 16 | harĩa |
| 8 | iria | 17 | kũrĩa |
| 9 | irĩa |  |  |

As can be seen from section 2.2.3, the relative pronouns have the same orthography as the distal demonstratives. However, the two are distinguished in spoken Gîkũyũ by vowel length, as the first syllable of the relative pronouns is a short vowel, while the first syllable of the distal demonstratives is a long vowel.

Examples of relative pronouns can be found in section 7.1.2.

### 2.2.1.5 Demonstrative Pronouns

Demonstrative pronouns can stand alone as pronouns. Demonstratives themselves are discussed more in detail in section 2.2.3. The following examples show demonstratives used as pronouns.
(106) ũrĩa nĩ mwathĩki
ũ- rĩa nĩ mũ-athîki
$\mathrm{NC}_{1}$ - DIST.DEM COP JC $1_{1}-$ obedient
'That one (the child) is obedient.'
(107) ũyũ nĩ mwathĩki
ũyũ nĩ mũ-athĩki
PROX.DEM ${ }_{1}$ COP JC ${ }_{1}$ - obedient
'This one (the child) is obedient.'
(108) rĩrĩa nĩ rĩthaka
rĩ- rĩa nĩ rĩ- thaka
$\mathrm{NC}_{5}$ - DIST.DEM COP JC $5_{5}$ - beautiful
'That one (the flower) is beautiful.'

### 2.2.2 Adjectives

Adjectives in Gĩkũyũ, much like in other Bantu languages, seem to be a smaller, closed class. The adjectives gathered so far include attributes of size, age, value, color, and human propensity. Adjectives in Gĩkũyũ are bound stems that must be prefixed with the appropriate noun class prefix.

Since adjectives are such a small class, Gĩkũyũ employs other methods of showing attribution. One method that serves the same purpose is predicate attributive clauses, which will be described in further detail in section 4.3. Another method that serves the same purpose as adjectives used in noun phrases is the associative construction, which will be described in further detail in section 2.2.6.3.

Following is a table of the adjectives gathered thus far, grouped into their semantic categories.

Table 11: Adjectives in Gîkũyũ

| DIMENSION | AGE | VALUE | COLOR | HUMAN <br> PROPENSITY |
| :--- | :--- | :--- | :--- | :--- |
| nene | kũrũ | ega | tune | rũaru |
| 'big' | 'old' | 'good' | 'red' | 'sick' |
| nini | erũ | uru | erũ | athîki |
| 'small/young' | 'new' | 'bad' | 'white' | 'obedient' |
| kuhĩ | kenge | thaka | irũ |  |
| 'short' | 'baby' | 'beautiful' | 'black' |  |
| raihu |  |  |  |  |
| 'tall' |  |  |  |  |

Following are some examples of adjectival noun phrases, which show noun class concord:
(109) gĩtĩ kĩũru
gĩ- tĩ kĩ- ũru
$\mathrm{NC}_{7}$ - chair $\mathrm{JC}_{7}$ - bad
'a bad chair'
(110) mũtimia mũkuhĩ
mũ- timia mũ- kuhĩ
$\mathrm{NC}_{1}-$ woman $\mathrm{JC}_{1}-$ short
'a short woman'
In the adjective class, Gĩkũyũ has three colors: tune 'red', erũ 'white', and irũ 'black'. See 8.2 for a discussion of these and other expressions for color in Gĩkũyũ.

### 2.2.3 Demonstratives

There are three types of demonstratives in Gĩkũyũ. Demonstratives can be used to indicate proximity, and contrast between proximal (closer to the speaker) and distal (farther from the speaker). There is also a demonstrative that can be used anaphorically to refer to something not physically present but understood to be the topic of reference to both interlocutors.

Thus, there are three demonstratives: a) a proximal demonstrative, b) a distal demonstrative, and c) an anaphoric demonstrative. The anaphoric demonstrative can have full and shortened versions in some noun classes. In other noun classes, only a shortened version exists.

The proximal demonstrative seems to be formed from reduplication of the agreement class prefix of each noun class, where if the agreement class prefix begins with a vowel, a $y$ is inserted between each repetition. However, this explains only the behavior of noun classes 1 , $2,3,5,7,8,10,11,12,13,14,15,16$, and 17 . It is unclear what principle is behind the patterning of noun classes 4,6 , and 9 .

The distal demonstrative is formed by prefixing the stem ria with the appropriate agreement class prefix. As can be seen from section 2.2.1.4, the distal demonstratives have the same orthography as the relative pronouns. However, the two are distinguished in spoken Gîkũyũ by vowel length, as the first syllable of the relative pronouns is a short vowel, while the first syllable of the distal demonstratives is a long vowel.

The anaphoric demonstrative common to all noun classes is formed by prefixing the stem $u$ with the appropriate agreement class prefix. Noun classes $1,2,3,4,6,8,9,10$, and 14 can also form a full version of the demonstrative by prefixing the stems yo (if agreement class prefix vowel is $\tilde{i}$ ) or cio (in all other cases) with the appropriate agreement class prefix. It is unclear why some noun classes have a full version and others do not.

Following is a table with the proximal, distal, and anaphoric demonstratives for all noun classes:

Table 12: Demonstratives

| CLASS | PROXIMAL | DISTAL | ANAPHORIC |
| :---: | :---: | :---: | :---: |
| 1 | ũyũ | unrãa | ũcio / ũu |
| 2 | aya | arĩa | acio / au |
| 3 | ũyũ | ũrãa | ũcio / ũu |
| 4 | ino | irio | กyo/ĩu |
| 5 | rirri | ririõa | riu |
| 6 | maya | marĩa | macio / mau |
| 7 | gîkĩ | kirĩa | kiu |
| 8 | ici | iria | icio / iu |
| 9 | ino | iriõa | ǐyo/ĩu |
| 10 | ici | iria | icio / iu |
| 11 | rũrũ | rũria | rũu |
| 12 | gaka | karĩa | kau |
| 13 | tũtũ | tũrĩa | tũu |
| 14 | ũyũ | ũrãa | ũcio / ũu |
| 15 | gũkũ | kũrĩa | kũu |
| 16 | haha | harĩa | hau |
| 17 | gũkũ | kũria | kũu |

Some examples of noun phrases using the demonstrative are as follows:
(111) mĩaki ĩno
mĩ- aki ĩno
$\mathrm{NC}_{4}$ - fire PROX. $^{2} \mathrm{DEM}_{4}$ 'these fires'
(112) twana tũu
tũ- ana tũ- u
$\mathrm{NC}_{13}$ - child $\mathrm{NC}_{13}$ - ANA.DEM
'those children (referential)'

### 2.2.4 Numerals

Numbers $1,2,3,4,5,6$, and 8 consist of a stem prefixed with the agreement class prefix of the head noun. Other numbers do not inflect for class. Ordinal numerals are formed using the associative construction followed by a numeral marked with the agreement class prefix for noun class 12 , if it does not already have a noun class marker. These are discussed in the following sections.

Numbers 7 and 9 do not inflect for class because of historical reasons that result in their already having a class marker.

Number 7, mũgwanja, means 'person who falls outside the door', and can be parsed as follows ${ }^{1}$ :
(113) mũgwanja
mũ- gũa -nja
$\mathrm{NC}_{1}$ - fall -outside
'person who falls outside the door'
Number 9, kenda, means 'child inside stomach' and corresponds with nine months of pregnancy. This word can be parsed as follows:
(114) kenda
ka- $\tilde{1}^{-}$nda
$\mathrm{NC}_{12}$ in- stomach
'child inside stomach (pres.)'

[^0]
## 44 Jessica Li

### 2.2.4.1 Cardinal Numerals

Gĩkũyũ numerals have a base-ten system. Numerals $1,2,3,4,5,6$, and 8 are bound stems that are prefixed with the appropriate agreement class prefix, while all others are uninflected nouns. Numeral stems are summarized in the following table.

Table 13: Numeral stems

| NUM. | STEM | NUM. | STEM |
| :--- | :--- | :--- | :--- |
| $\mathbf{1}$ | mwe | 9 | kenda |
| 2 | $\tilde{i r \tilde{u}}$ | 10 | ikũmi |
| 3 | tatũ | 10 s | mĩrongo |
| 4 | na | 100 | igana |
| 5 | tano | 100 s | magana |
| 6 | tandatũ | 1000 | ngiri |
| 7 | mũgwanja | 1000 s | ngiri |
| 8 | nana |  |  |

Note that the word for ' 10 s', even being plural, is not the plural of the word for ' 10 '. This may have arisen historically. The singular form mũrongo can be roughly translated as 'set of ten', so mĩrongo would mean 'sets of ten'.

Other than ' 10 ' and ' 10 s', the words for ' 100 ' and ' 100 s ', and ' 1000 ' and ' 1000 s' correspond to the singular and plural. '100' and '100s' belong to Noun Classes 5/6. '1000' and '1000s' belong to Noun Classes 9/10.

Following is a table showing the forms of 'one' for each singular noun class. All of the forms follow the addition of the agreement class prefix to mwe without exception.

Table 14: Mwe 'one' with singular noun classes

| CLASS | ONE |
| :--- | :--- |
| 1 | ũmwe |
| 3 | $\tilde{\text { ümwe }}$ |
| 5 | rĩmwe |
| 7 | kĩmwe |
| 9 | ĩmwe |
| 11 | rũmwe |
| 12 | kamwe |
| 14 | ũmwe |
| 15 | kũmwe |
| 16 | hamwe |
| 17 | kũmwe |

Following is a table showing the forms of 'two', 'three', 'four', 'five', 'six', and 'eight' for each plural noun class. Noun Classes 8 and 10 are exceptions, as simply adding the agreement class prefix for these two classes will not result in the correct forms. Interestingly, when speakers are asked to count from one to ten, the forms of the numerals for Classes 8 and 10 seem to be the preferred form.

Table 15: 'Two', 'six', and 'eight' with plural noun classes

| CLASS | TWO | THREE | FOUR | FIVE | SIX | EIGHT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | erĩ | atatũ | ana | atano | atandatũ | anana |
| 4 | ĩrĩ | îtatũ | ĩna | îtano | îtandatũ | ĩnana |
| 6 | merĩ | matatũ | mana | matano | matandatũ | manana |
| 8 | igirrĩ | ithatũ | inya | ithano | ithathatũ | inyanya |
| 10 | igirin | ithatũ | inya | ithano | ithathatũ | inyanya |
| 13 | tũĩrũ | tũtatũ | tũna | tũtano | tũtandatũ | tũnana |
| 16 | herĩ | hatatũ | hana | hatano | hatandatũ | hanana |
| 17 | kû̃rĩ | gũtatũ | kũna | gũtano | gũtandatũ | kũnana |

To indicate multiple '10s,' '100s', and '1000s', a numeral between 1 and 9 is used to modify it. This numeral takes the agreement class prefix for the appropriate class: Class 4 for ' 10 ', Class 6 for ' 100 s ' and Class 10 for ' 1000 s'. This can be seen in the following examples:
(115) mĩrongo ĩrĩ
mĩ- rongo $\mathrm{I}^{-}$ĩrĩ
$\mathrm{NC}_{4}$ - set.of.ten $\mathrm{AC}_{4}$ - two
'twenty'
(116) magana matano
ma- gana ma-tano
$\mathrm{NC}_{6}$ - hundred $\mathrm{AC}_{6}$ - five
'five hundred'
(117) ngiri inya

N - giri inya
$\mathrm{NC}_{10}$ - thousand four ${ }_{10}$
'four thousand'
When numerals are used to count specific objects, if they are inflected numerals, they will inflect to take the agreement class prefix of the particular object being counted. If they are uninflected numerals, they are nouns that already belong to a noun class, and do not inflect to
take the agreement class prefix of the object they are counting. This is shown in the following examples:
(118) mwana ũmwe
mũ- ana ũ- mwe
$\mathrm{NC}_{1}$ - child $\mathrm{AC}_{1}$ - one
'one child'
(119) matũ matatũ
ma- tũ ma-tatũ
$\mathrm{NC}_{6}$ - ear $\mathrm{AC}_{6}$ - three
'three ears'
(120) mĩaka igana
mĩ- aka i- gana
$\mathrm{NC}_{4}$ - year $\mathrm{NC}_{5}$ - hundred
'a hundred years'
Numerals 11-19 are formed with the construction 'ten and X'. Agreement on the final numeral, if it inflects, agrees with the noun being counted. However, if the final numeral is 'one', it agrees with the singular class of the noun being counted, because the numeral 'one' is singular, even if the noun being counted is plural. This can be seen in the following examples:
(121) arĩ ikũmi na erĩ
a- arĩ i- kũmi na a- ĩrĩ
$\mathrm{NC}_{2}$ - daughter $\mathrm{NC}_{3}$ - ten and $\mathrm{AC}_{2}$ - two
'twelve daughters'
(122) irĩma ikũmi na kĩmwe
i- rĩma i- kũmi na kĩ- mwe $\mathrm{NC}_{8}-$ mountain $\mathrm{NC}_{3}-$ ten and $\mathrm{NC}_{7}$ - one 'eleven mountains'

Numbers above 19 are formed in a similar fashion. Following are some examples:
(123) tũgui igana rĩa mĩrongo ĩrĩ
tũ- gui i- gana rĩ- a mĩ- rongo $\tilde{1}^{-}$ĩrĩ
$\mathrm{NC}_{13}$ - dog $\mathrm{NC}_{5}$ - hundred $\mathrm{AC}_{5}{ }^{-} \mathrm{ASSOC} \mathrm{NC}_{4}$ - set.of.ten AC 4 - two
'a hundred twenty puppies'
(124) tũgui igana na mĩrongo ĩrĩ
tũ- gui i- gana na mĩ- rongo $\tilde{1}^{-}$ĩrĩ
$\mathrm{NC}_{13}-\operatorname{dog} \mathrm{NC}_{5}$ - hundred and $\mathrm{NC}_{4}$ - set.of.ten $\mathrm{AC}_{4}$ - two 'a hundred twenty puppies'
(125) matũ mĩrongo ĩtatũ na matandatũ ma-tũ mĩ- rongo $\tilde{1}-\quad$ tatũ na ma-tandatũ $\mathrm{NC}_{6}-$ ear $\mathrm{NC}_{4}-$ set.of.ten $\mathrm{NC}_{4}$ - three and $\mathrm{AC}_{6}-$ six 'thirty-six ears'

### 2.2.4.2 Ordinal Numerals

Ordinal numerals are formed using the associative construction, discussed in section 2.2.6. The ordinal numeral is formed with the associative followed by the numeral. Class 12 prefixes are used with inflecting numerals in ordinal numerals. Non-inflecting numerals still do not change. Numerals 2-10 in ordinal numbers are as the following table shows:

Table 16: Ordinal numerals 2-10

| NUM. | NC12 |
| :--- | :--- |
| 2 | kerĩ |
| 3 | gatatũ |
| 4 | kana |
| 5 | gatano |
| 6 | gatandatũ |
| 7 | mũgwanja |
| $\mathbf{8}$ | kanana |
| 9 | kenda |
| $\mathbf{1 0}$ | ikũmi |

Instead of using the numeral kĩmwe ' $\mathrm{NC}_{12}$-one' in an ordinal numeral construction to indicate 'first', there are two other words. Both of these words still occur after the associative in an associative construction. The words in question are mbere and kĩambiririria. The latter means 'beginning'.

Examples of these two constructions are as follows:
(126) nyamũ ya mbere

N- nyamũ ĩ- a mbere
$\mathrm{NC}_{9}$ - animal $\mathrm{AC}_{9}$ - ASSOC first
'the first animal'
(127) nyamũ ya kĩambĩrĩria

N - nyamũ $\mathrm{I}^{-}$a kĩ- ambĩrĩria
$\mathrm{NC}_{9}$ - animal $\mathrm{AC}_{9}-\mathrm{ASSOC}^{2} \mathrm{NC}_{7}$ - start
'the first animal'
Another construction is used to denote 'last'. The word that occurs after the associative to give this meaning is mũthia, which is formed as in the following example:
(128) nyamũ ya mũthia

N- nyamũ ĩ- a mũthia
$\mathrm{NC}_{9}$ - animal $\mathrm{AC}_{9}$ - ASSOC last
'the last animal'
Some examples of other ordinal numbers are as follows:
(129) kagui ga kerĩ
ka- gui ka- a ka- ĩrĩ
$\mathrm{NC}_{12}-\operatorname{dog} \mathrm{AC}_{12}-$ ASSOC $^{-1 C_{12}}$ two
'the second puppy'
(130) ũtukũ wa mĩrongo ĩrĩ
ũtukũ ũ- a mĩ- rongo $\tilde{1}^{-}$ĩrĩ
$\mathrm{NC}_{14}$. night $\mathrm{AC}_{14}-\mathrm{ASSOC}^{-1} \mathrm{NC}_{4}$ - set.of.ten $\mathrm{AC}_{4}$ - two
'the twentieth night'

### 2.2.5 Quantifiers

Some quantifiers take the agreement class prefix of the appropriate noun, while some take the adjective class prefix. The quantifiers that take the agreement class prefix are: othe 'all', ngĩ 'other', and mwe 'some'. When ngĩ 'other' is used with a singular noun class, it means 'another'. Another more complex quantifier that takes the agreement class prefix is: mwe na $m w e$ 'a few'. The quantifiers that take the adjective class prefix-and thus may function more as adjectives-are nini 'few' and ingĩ 'many'.

Following are examples of each of these:
(131) mĩaki yothe
mĩ- aki 1 Ĩ- othe
$\mathrm{NC}_{4}$ - fire $\mathrm{AC}_{4}$ - all
'all fires'
(132) mwana ũngĩ
mũ- ana $\mathfrak{u}-\quad$ ngĩ
$\mathrm{NC}_{1}$ - child $\mathrm{AC}_{1}$ - other 'another child'
(133) irĩma imwe
i- rĩma i- mwe
$\mathrm{NC}_{8}$ - mountain $\mathrm{AC}_{8}$ - some 'some mountains'
(134) handũ hamwe na hamwe
ha- ndũ ha- mwe na ha- mwe
$\mathrm{NC}_{16}$ thing $\mathrm{AC}_{16}$ one and $\mathrm{AC}_{16}$ one 'a few places (definite)'
(135) mĩaki mĩnini
mĩ- aki mĩ- nini
$\mathrm{NC}_{4}$ - fire $\mathrm{JC}_{4}$ - few 'a few fires'
(136) mahũa maingĩ
ma-hũa ma-ingĩ
$\mathrm{NC}_{6}$ - flower $\mathrm{JC}_{6}{ }^{-}$many
'many flowers'

### 2.2.6 Associative Construction

The associative construction in Gîkũyũ is used to connect two nouns or noun phrases where the first noun, which is the head noun, is modified in some way by the second noun. The associative is formed by prefixing the stem $a$ with the agreement class prefix of the head noun.

The associative construction can be used in Gîkũyũ to 1) indicate possession, 2) indicate location, 3) form non-adjectival expressions of attribution, and 4) form ordinal numerals. The first three types will be discussed in the following sections. Ordinal numerals were discussed in 2.2.4.2.

The following table shows the forms of the associative construction.

Table 17: Associatives

| CLASS | ASSOC. | CLASS | ASSOC. |
| :--- | :--- | :--- | :--- |
| 1 | wa | 10 | cia |
| 2 | $a$ | 11 | rũa |
| 3 | $w a$ | 12 | $k a$ |
| 4 | $y a$ | 13 | tũa |
| 5 | ria | 14 | wa |
| 6 | ma | 15 | $k \tilde{a}$ |
| 7 | $k i ̃ a$ | 16 | $h a$ |
| 8 | cia | 17 | $k \tilde{a} a$ |
| 9 | $y a$ |  |  |

### 2.2.6.1 Possession

A way to denote possession besides using the possessive pronoun is to use the associative construction. The head noun is possessed by the second noun.
(137) mwarĩ wa maitũ
mũ- arĩ ũ- a maitũ
$\mathrm{NC}_{1}-$ daughter $\mathrm{AC}_{1}-\mathrm{ASSOC}^{\mathrm{NC}}{ }_{12}$. mother
'my sister' (Lit. 'daughter of my mother')

### 2.2.6.2 Location

The associative is also used with certain expressions of location. In expressions of location, the associative agrees with the noun class of the location word (which is also the head noun), and not the noun class of the noun whose location is being described.
(138) rungu rũa metha
rũ- ungu rũ- a $\mathrm{N}^{-}$metha
$\mathrm{NC}_{11}$ - under $\mathrm{AC}_{11}-\mathrm{ASSOC}^{\mathrm{NC}} 9_{9}$ - table
'under the table'
(139) gatagatĩ ka rũgiri
ga- tagatĩ ka- a rũ- giri
$\mathrm{NC}_{12}-$ middle $\mathrm{AC}_{12}-$ ASSOC $\mathrm{NC}_{11}$ - fence
'in the middle of the fence'
(140) thutha wa gĩtĩ
$\varnothing$ - thutha ũ- a gĩ- tĩ
$\mathrm{NC}_{14}$ behind $\mathrm{AC}_{14}{ }^{-}-\mathrm{ASSOC}_{\mathrm{NC}}^{7}$ - chair
'behind the chair'
(141) nyunjurĩ wa gĩtĩ
$\varnothing$ - nyunjurĩ ũ- a gĩ- tĩ
$\mathrm{NC}_{14}$ behind $\mathrm{AC}_{14}-$ ASSOC $^{2} \mathrm{NC}_{7}$ - chair 'behind the chair'
(142) igũrũ rĩa metha
i- gũrũ rĩ- a N - metha $\mathrm{NC}_{5}$ - above $\mathrm{AC}_{5}-\mathrm{ASSOC}^{\mathrm{NC}} \mathrm{C}_{9}$ - table 'on top of the table'
(143) mwena-inĩ wa metha
mũ- ena -inĩ ũ- a N- metha
$\mathrm{NC}_{3}-$ side -LOC AC ${ }_{3}-\mathrm{ASSOC}_{\mathrm{NC}_{9}}$ - table
'next to the table'

### 2.2.6.3 Attributive

The associative construction can also be used to form attributive phrases. Because of the small number of adjectives in Gĩkũyũ, this is a common way of modifying nouns. Some examples are as follows:
(144) irigũ rĩa cukari
i- rigũ rĩ- a cukari
$\mathrm{NC}_{5}$ - banana $\mathrm{AC}_{5}$ - ASSOC NC14.sugar
'a sweet banana' (Lit. 'banana of sugar')
(145) ndimũ ya goro

N- timũ 1 - a $\quad \varnothing$ - goro
$\mathrm{NC}_{9}$ - lime $\mathrm{AC}_{9}$ - $\mathrm{ASSOC} \quad \mathrm{NC} 14$. expense
'an expensive lime’ (Lit. 'lime of expense')

Colors that are not included in the adjective class can be expressed using the associative construction. See 8.2 for examples and more details.

## Chapter 3

## Verbs

### 3.1 Introduction

Gîkũyũ verbs are highly agglutinating, with many position classes for various grammatical functions including tense, aspect, subject and object concord marking, and so on. This chapter discusses each of the position classes in the order they appear in the verb.

The central unit of meaning in a given verb is its stem. The stem cannot stand on its own, however; it must take at least one suffix: the 'final vowel' described in many grammars of Bantu languages (see Morrison, 2011; Mugane, 1997; and others). The verb stem and final vowel together comprise the Gĩkũyũ imperative, which is the most basic verb form in the language. This form is the verbal root. An example of a Gĩkũyũ imperative (the verb root) can be seen in (146):
(146) ina
in -a
sing -FV
'Sing!'
Here, verb stem in takes final vowel (FV) - $a$ to form the verbal root, which functions as an imperative. Several affixes can also appear before and after the stem. See example (147), which is followed by a template for the position classes:
(147) nĩmaragonyagonyanithirie
nĩ- ma- ra- gonya- gony -an - -ith $-\tilde{i} \quad$-ir $\quad$-i $\quad$-e
FOC- $\mathrm{SC}_{2}-$ NR.PST- REDUP- bend -RECIP -CAUS -APP -COMPL -TRNS -FV
'They made each other zigzag (yesterday).'
Table 18: Position classes in Gîkũyũ verbs

| FOC | SP | NEG | T | OP/ <br> REFL | REDUP | stem | RECIP | INTENS | MID/ <br> REVERS | CAUS | APP | ASP | TRNS | PV/ <br> FV |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Not all position classes can appear in the same verb. Furthermore, although some position classes are in fixed position relative to others (i.e., certain suffixes must appear before, and not after, other suffixes), some others are flexible in terms of relative location in the verb. The present chapter summarizes position classes and morphology, and describes the grammatical
suffixes, which include voice and valence operators. Unless otherwise noted, all data were elicited from our consultant; Mugane (1997) and Clements (1984) helped shape my analyses.

### 3.2 Prefixes

The following sections discuss the focus particle, the subject prefix, the negative formative, tense prefixes, the object prefix, and the reflexive prefix.

### 3.2.1 Focus Particle

The focus particle nĩ- appears in first position in finite verbs. It serves to pragmatically mark (Payne, 1997: 268) or raise the pragmatic status of a verb or clause. Other sentence constituents can be focused as well; in such cases there is no focus particle on the verb (see section 6.5.1). The following examples show functions of the (verbal) focus particle in describing the events of an elicited "Pear Story" (see Appendix B).
(148) nĩhokire kahĩĩ
nĩ- ha- ũk -ir -e ka- hĩi
FOC- SC ${ }_{16}$ - come -COMPL -FV NC C $_{12}$ - boy
'There came a little boy (before yesterday).'
(149) nĩguo tũhĩĩ twacokire
nĩ- guo tũ- hĩĩ tũ- a- cok -ir -e
FOC- thus $\mathrm{NC}_{13}$ - boy $\mathrm{SC}_{13}$ - RM.PST- return -COMPL -FV
'That is when the boys returned (before yesterday).'

In (148), nĩ- focuses indefinite place as a presentative; in (149), nĩ focuses the moment of return. In a narrative such as a pear story, where the consultant is describing sequences of events, the focus particle is often used in conjunction with the introduction of new referents:
(150) gagĩcemania
ka- kĩ- cem -an -i -a
$\mathrm{SC}_{12}$ - SEQ- cross.paths -RECIP -TRNS -FV
'He crossed paths'
na tũhĩĩ tũngĩ tũtatũ
na tũ- hĩĩ tũ- ngĩ tũ- tatũ
with $\mathrm{NC}_{13}$ - boy $\mathrm{AC}_{13}$ - other $\mathrm{AC}_{13}$ - three 'with three other little boys.'
tũhĩĩ tũu nĩgwa—nĩtwahĩ--

$$
\begin{aligned}
& \text { tũ- hĩĩ tũ- u nĩ- gwa-- nĩ- twahĩ-- } \\
& \mathrm{NC}_{13} \text { - boy } \mathrm{AC}_{13} \text { - ANA.DEM FOC- TRUNC FOC- TRUNC } \\
& \text { 'Those little boys, they- they p-' }
\end{aligned}
$$

nĩtũahĩtũkire kahĩi kau

```
nĩ- tũ- a- hĩt -ũr -ĩk -ir -e ka- hĩĩ ka- u
FOC- SC 13
'they passed that little boy (before yesterday).'
```

The events leading up to the section of the Pear Story shown in (150) discuss the actions of a little boy (the boy who crossed paths with three other little boys). The last line of example (150) shifts focus from the actions of the little boy to the actions of the three other little boys. The focus marker serves the function of highlighting the three little boys as subject referents.

Our consultant commonly refers to focus particle nĩ- as "the affirmative [marker]," such as in situations when it affirms the occurrence of an event, as in example (151):
(151) gũcoka kuona nĩkagwa
kũ- cok -a kũ- on -a nĩ- ka- gũ -a
$\mathrm{NC}_{15}$ - return - $\mathrm{FV} \mathrm{NC}_{15}$ - see -FV FOC- $\mathrm{SC}_{12}$ - fall - FV
'returned, and saw that the boy fell (before yesterday).'
'the boy fell' is the focal point of (151); the focus particle affirms the event.

### 3.2.2 Subject Concord Marker

In finite verb forms, the subject concord marker follows the focus particle as in the following example:

## (152) nĩainaga

```
nĩ- a- in -ag -a
FOC- SC 1- sing -HAB -FV
'He/she sings (habitually).'
```

The subject concord prefix appears verb-initially in verb forms with no focus marker. However, in some instances, a negative marker precedes the subject prefix. The subject prefix also takes second position in verbs with the negative formative prefix (see section 3.2.3 on negative formative prefixes). Section 3.2.2.1 below touches on person subject concord prefixes; section 3.2.2.2 discusses the noun-class subject concord markers.

### 3.2.2.1 Person

Table 19, below, shows the underlying morpheme for the person subject prefixes.
Table 19: Person subject concord (SC) prefixes

| Gloss | Form |
| :---: | :---: |
| 1SG | N- |
| 1PL | tũ- |
| 2SG | ũ- |
| 2PL | mũ- |
| $\mathrm{NC}_{1}$ | a- |
| $\mathrm{NC}_{2}$ | ma- |

Only discourse participants ( $1^{\text {st }}$ and $2^{\text {nd }}$ person) have unique affixes that represent person marking. All $3^{\text {rd }}$-person referents, on the other hand, are indexed on the verb by means of the subject concord marker that corresponds with their noun-class. This is true whether the $3^{\text {rd }}-$ person referent is human ( $a$ - for noun-class 1 and ma- for noun-class 2 ) or nonhuman (the remaining classes). While it is tempting from the perspective of speakers of European languages to gloss $a$ - and ma- as 3SG and 3PL respectively, there is actually no justification for doing so. There is nothing to warrant treating these two noun-classes any different from the others, and so we are glossing them as we would any subject concord marker, using $\mathrm{SC}_{1}$ and $\mathrm{SC}_{2}$.

The underlying 1 SG subject morpheme is $N-$, a nasal that takes various forms depending on the conditioning environment. For example, underlying $N$ - takes the form ndĩ- in (153), below:
(153) nĩndĩrora
nĩ- N - ra- ũr $\quad \varnothing \quad-\mathrm{a}$
FOC- 1SG.SUBJ- CR.PRES- run.away -PROG -FV
'I am running away.'
The form ndĩ- occurs in environments immediately preceding certain prefixes, such as tense prefix ra- and noun class 1 object prefix mũ-. See 1.5 .5 for a complete discussion of $N$ - and its conditioning environments.

### 3.2.2.2 Noun Class

As discussed in 2.1.1, there are at least 17 noun classes in Gĩkũyũ. The respective subject concord prefixes ('SC') are shown in Table 20:

Table 20: Noun class subject concord (SC) prefixes

| \# | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NC | mũ- | a- | mũ- | mĩ- | i- | ma- | kĩ- | $\begin{aligned} & \text { i- / } \\ & \text { ci- } \end{aligned}$ | N - | N - | rũ- | ka- | tũ- | ũ- | $\begin{aligned} & \text { kũ-/ } \\ & \text { ku- } \end{aligned}$ | ha- | kũ- |
| SC | a- | ma- | ũ- | ก1- | rĩ- | ma- | kĩ- | $\begin{aligned} & \mathrm{i}-/ \\ & \mathrm{Ci}- \end{aligned}$ | ก̃- | ci- | rũ- | ka- | tũ- | ũ- | kũ- | ha- | kũ- |

As already discussed in 2.2, Gĩkũyũ demonstrates noun-class concord across many word classes, as seen in (154) below:
(154) tũhĩĩ tũu tũngĩ twĩri twatigĩtwo
tũ- hĩĩ tũ- u tũ- ngĩ tũ- ĩri tũ- a- tig $\begin{aligned} & \text { int } \\ & \text {-wo }\end{aligned}$ $\mathrm{NC}_{13}$ - boy $\mathrm{AC}_{13}$ - ANA.DEM $\mathrm{AC}_{13}$ - other $\mathrm{AC}_{13}$ - two $\mathrm{SC}_{13}$ - RM.PST- abandon -PERF -PV 'Those other two boys that had been left behind (before yesterday)'

This chapter focuses on only the concord markers that appear on verbs; this section looks specifically at noun-class subject markers. In example (154), noun class marker tũ- appears first on the noun ('boy') and then four more times as a concord prefix. The verb twatigitwo begins with subject concord prefix $t \tilde{u}-$.
$\mathrm{NC}_{1}$ includes nouns for human names and professions. Example (155) shows the corresponding subject concord prefix $a$ - on the verb:
(155) arĩmaga matunda ma pears
a- rĩm -ag -a ma-tunda ma-a pears $\mathrm{SC}_{1}$ - cultivate - $\mathrm{HAB}-\mathrm{FV} \mathrm{NC} 6_{6}$ - fruit $\mathrm{AC}_{6}$ - $\mathrm{ASSOC}^{2} \mathrm{NC}_{9}$.pears
'He grew pears (before yesterday).'
Following is an elicited example to illustrate noun-class 2 (plural human) subject concord with the prefix ma-:
(156) arimũ nĩmagũthoma mbuku
a- arimũ nĩ- ma-kũ- thom-a N - buku
$\mathrm{NC}_{2}$ - teacher FOC- $\mathrm{SC}_{2}$ - CR.FUT- read - $\mathrm{FV} \mathrm{NC}_{10}$ - book
'The teachers will read the books (today).'

Subject markers for noun classes $3,4,5,9$, and 10 are less common in my data, and not at all found in the elicited Gĩkũyũ Pear Story, perhaps because these classes refer to inanimates rather than humans. Still, they can be found in sentence elicitation, as in the following:
(157) mbembe nĩciakũrire

N - bembe nĩ- ci- a- kũr -ir -e
$\mathrm{NC}_{10}$ - corn FOC- $\mathrm{SC}_{10}$ - RM.PST- grow -COMPL -FV
'The corn grew (before yesterday).'

### 3.2.3 Negative

In discussing negative formations, Clements (1984) refers to a "negative formative," the prefix ti-. This prefix does appear following the subject in some negative formations, but not all. Below I discuss person-subject negative formatives, followed by noun-class subject negative formatives. See also section 6.3.

In verbs with single-vowel subject forms, such as those seen in (158) and (159) below, the negative formative appears word-initially as $n d$-, preceding the (single-vowel) subject prefix. Verbs with other subject forms are marked with negative formative ti-, which follows the subject prefix. Examples (160)-(162) show this very clearly. Example (163) also shows negative formative ti- in second position, although this is less obvious on the surface.

## (158) ndũthiaga

nd- $\tilde{\text { un }}$ - thi $-\mathrm{ag}-\mathrm{a}$
NEG- 2SG.SUBJ- go -HAB -FV
'You(sg) don't go (habitually).'
(159) ndaroka
nd- a- ra- ũk -a
NEG- SC ${ }_{1}$ - CR.PRES- come -FV
'He/she is not coming (now).'
(160) tũtiũkaga
tũ- ti- ũk -ag -a
1PL.SUBJ- NEG- come -HAB -FV
'We don't come (habitually).'
(161) mũtiũkaga
mũ- ti- ũk $-\mathrm{ag}-\mathrm{a}$
2PL.SUBJ- NEG- come -HAB -FV
'You(pl) don't come (habitually).'

## (162) matiũkaga

ma-ti- ũk -ag -a
$\mathrm{SC}_{2}-\mathrm{NEG}$ - come - $\mathrm{HAB}-\mathrm{FV}$
'They don't come (habitually).'

## (163) ndigũthiĩ

N- ti- kũ- thi-ĩ
1SG.SUBJ- NEG- CR.FUT- go -FV
'I won't go (today).'
Above I have shown examples of both of the person-subject negative formatives. Negative formatives pattern the same way among the 17 noun classes: When the subject marker is a single vowel, the negative formative will appear in first position as nd-; when the subject marker has a CV structure, the negative formative appears in second position as ti-.
(164) mũithikiri ndũagũire
mũ- ithikiri nd- $\mathfrak{u}-$ a- gũ -ir e
$\mathrm{NC}_{3}$ - bicycle NEG- $\mathrm{SC}_{3}$ - RM.PST- fall -COMPL -FV
'The bicycle did not fall (before yesterday).'
(165) mĩithikiri ndĩagũire
mĩ- ithikiri nd- $\mathfrak{1}-\quad$ a- gũ -ir e
$\mathrm{NC}_{4}$ - bicycle $\mathrm{NEG}^{-\mathrm{SC}_{4}-\text { RM.PST- fall - }-\mathrm{COMPL} \text {-FV }}$
'The bicycles did not fall (before yesterday).'
(166) itunda rĩtiagũire
i- tunda rî- ti- a- gũ -ir e
$\mathrm{NC}_{5}$ - fruit $\quad \mathrm{SC}_{5}$ - NEG- RM.PST- fall -COMPL -FV
'The fruit (SG) did not fall (before yesterday).'
(167) matunda matiagũire
ma- tunda ma-ti- a- gũ -ir -e
$\mathrm{NC}_{6}$ - fruit $\quad \mathrm{SC}_{6}-$ NEG- RM.PST- fall -COMPL -FV
'The fruit (PL) did not fall (before yesterday).'

### 3.2.4 Tense

Tense and aspect appear in separate position slots in Gîkũyũ verbs; tense morphemes appear before the stem, while aspect suffixes appear near the final vowel. Independent of aspect, there are seven tenses in Gĩkũyũ, but tense prefixes change depending on tense/aspect combinations. Table 21 shows tenses and their respective prefixes. Not listed in Table 21 is narrative tense prefix kĩ-, which I discuss below:

Table 21: Tense prefixes

| Tense | Remote <br> past | Near <br> past | Current <br> past | Current <br> Present | Current <br> future | Near <br> future | Remote <br> future |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Prefix | a- | ra- | kũ- <br> a- <br> $\emptyset$ | ka- <br> raa- <br> $\varnothing$ | kũ- | rĩ̃- | kaa- <br> $\varnothing$ |

As shown in Table 21, the tense prefix cannot always be predicted by knowledge of tense; similarly, tense cannot always be predicted from the tense prefix alone. Consider the following:
(168) nĩnjũkaga
nĩ- $N$ - $\quad \varnothing$ - unk $-\mathrm{ag}-\mathrm{a}$
FOC- 1SG.SUBJ- CR.PRES- come -HAB -FV
'I come (habitually).'
(169) nĩndĩroka
nĩ- N - ra- ũk $\varnothing$-a
FOC- 1SG.SUBJ- CR.PRES- come -PROG -FV
'I am coming.'
For reasons illustrated above, tense must be considered alongside aspect. I chose the above examples to show how the meanings of the individual tense markings can vary. Typically tone (discussed in 1.4 and briefly in the following section) conveys additional information required to determine tense. In (168) "current present" tense is not marked. However, in (169), Current present tense is instead indicated by the prefix ra-. This serves to show that tense cannot (by a speaker or a researcher) be considered independently of tone.

Clements (1984:312) lays out a chart of [almost] all the possible combinations of tense prefixes, aspect suffixes, and final vowels; it is included as Table 22 below, in Girkũyũ orthography.

Table 22: "Kikuyu main clause affirmative tenses" (Clements 1984:312)

| "Tense sign" | "Name" |
| :---: | :---: |
| $\emptyset \ldots$... | Stative present |
| $\emptyset$... aga | Current habitual |
| $\emptyset$... ĩte | Current perfect |
| $\emptyset$... ire | Current past completive |
| ĩ + kũ ... a | Current future |
| ĩ + kũ ... aga | Current past imperfect |
| Ĩ + kũ ... İte | Current past perfect |
| ra + a ... a | Current progressive |
| ra + a ... aga | Near past imperfect |
| ra + a ... ĩte | Near past perfect |
| ra + a ... ire | Near past completive |
| a ... a | Immediate perfect |
| a ... aga | Remote past imperfect |
| a ... ĩte | Remote past perfect |
| a ... ire | Remote past completive |
| rĩ + 1 İ... a | Near future |
| rĩ + ĩ ... aga | Near future imperfect |
| ka + a ... a | Remote future |
| ka + a ... aga | Remote future imperfect |
| ka ... a | Current consecutive |
| a ... a | Current past consecutive |
| ra + a ... a | Near past consecutive |
| kĩ ... a | Remote past consecutive |
| $\emptyset$... e | Future consecutive / subjunctive |
| $\emptyset$... age | Future imperfect consecutive / imperfect subjunctive |

The tense referred to by Clements as "remote past consecutive," kĩ- was glossed "narrative" tense by our consultant and other class participants. It appears frequently in story elicitation (e.g., the Pear Story, the Frog Story) and in other descriptions of past events. Our consultant considers the kĩ- prefix to mean "and then"; for this reason I refer to it as "sequential" (SEQ) (see also section 3.4.7.6). The same marker is used to indicate that two events happened simultaneously (rather than sequentially). In such constructions, tone patterns distinguish the simultaneous and sequential functions of kĩ-. Compare (170) and (171):
(170) akîhaica ngathĩ
a- kĩ- haic -a ngathĩ
L L H HH
$\mathrm{SC}_{1}$ - SEQ- mount - $\mathrm{FV}^{2} \mathrm{NC}_{9}$, ladder
'And then he climbed up a ladder.'
(171) akîhaica ngathĩ
a- kĩ- haic -a ngathĩ
L L L LL
SC $_{1}$ - SIM- mount - FV NC ${ }_{9}$ Iadder
'As he climbs up a ladder,'
In (170), where kĩ- indicates sequentiality, all syllables following kĩ- take high tone; while all syllables following kĩ- in (171), which indicates simultaneity, take low tone. A brief discussion of tone follows in section 3.2.5.

### 3.2.5 Tone

Due to Dahl's Law, and to other phonemic processes discussed in section 1.5 such as the avoidance of three-vowel sequences, the morphology of Gỉkũyũ verbs is not always transparent on the surface. What's more, Gîkũyũ orthography, which lacks a representation for tone, obscures the underlying tense structure of verbs even further. For a thorough discussion of tone, see Clements 1984. Following are a couple of the relevant issues regarding tone and its role in Gïkũyũ verbs. Generally speaking, verbs with no negative prefix begin with high tone and end with low tone, while negative-marked verbs begin with low tone and end with high tone. See examples (172) and (173):
(172) nĩmũũkaga
nĩ- mũ- $\quad$ - $\quad$ ũk $-\mathrm{ag}-\mathrm{a}$
H H
H H L
FOC- 2PL.SUBJ- CR.PRES- come -HAB -FV
'You all come (habitually).'
(173) mũtiũkaga

| mũ- | ti- | $\varnothing$ - | ũk | -ag | -a |
| :--- | :--- | :--- | :--- | :--- | :--- |
| L | L |  | L | H | H |

2PL.SUBJ- NEG- CR.PRES- come -HAB -FV
'You all don't come (habitually).'

As the phenomenon of downstep in Gĩkũyũ (see Clements 1984) is beyond the scope of this sketch grammar, I have used only high and low tone in my analysis (represented by ' H ' and ' L ', respectively). The following pairs show alternation in tone patterns for some tense/aspect combinations. Crucially, the tense distinctions within each pair is due to tone; tone serves to differentiate the otherwise (segmentally) identical pairs. Syllable boundaries-which do not necessarily correlate with morpheme boundaries-are indicated with a period; as would be expected, the number of tones matches the number of syllables in each example.
(174) nĩa.ro.ki.re

| nĩ- | a- | ra- | ũk | -ir | -e |
| :--- | :--- | :--- | :--- | :--- | :--- |
| H | L |  | H | H |  |
| FOC- | SC $C_{1}-$ | CR.PRES- come -COMPL -FV |  |  |  |
| 'He/she came (early this morning).' |  |  |  |  |  |

(175) nĩa.ro.ki.re

| nĩ- | a- | ra- | ũk | -ir | -e |
| :--- | :--- | :--- | :--- | :--- | :--- |
| H | H |  | H | L |  |

FOC- SC ${ }_{1}$ - NR.PST- come -COMPL -FV
'He/she came (yesterday).'
The above examples differ only in terms of the tone on tense prefix ra-, with low tone in example (174) and high tone in example (175). The same type of difference is seen between examples (176) and (177), which are segmentally identical but tonally different:
(176) nĩai.ni.re

| nĩ- | a- | a- | in | -ir | -e |
| :--- | :--- | :--- | :--- | :--- | :--- |
| H | L |  |  | L |  |

FOC- SC ${ }_{1}$ - RM.PST- sing -COMPL -FV
'He/she sang (longer ago than yesterday).'
(177) nĩai.ni.re


Examples (176) and (177) illustrate well the mismatch between syllable boundaries and morpheme boundaries. Tones are represented in the examples as (underlyingly) associated with morphemes, but in actuality tones instead associate directly with the syllable. Clements
(1984) provides a thorough analysis of Gîkũyũ tonology, which was not possible for this sketch grammar given the constraints of our field methods class.

### 3.2.6 Object Concord Marker

The object concord prefix follows any tense prefixes. Many object prefixes match the form of their respective subject concord prefix, but some do not. Table 23 and Table 24 show all class markers, subject prefixes, and object concord prefixes ('OC') for person classes and other noun classes, respectively. Following these tables is an example from the Pear Story of a verb with an object prefix.

Table 23: Person object concord (OC) prefixes

|  | $1 S G$ | $1 P L$ | $2 S G$ | $2 P L$ | $N C_{1}$ | $N C_{2}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| SC | N- | tũ- | $\tilde{u}^{-}$ | mũ- | a- | ma- |
| OC | N- | tũ- | kũ- | mu- | mũ- | ma- |

Table 24: Noun class object concord (OC) prefixes

| \# | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NC | mũ- | a- | mũ- | mĩ- | i- | ma- | kĩ- | $\begin{aligned} & \mathrm{i}-/ \\ & \mathrm{ci}- \end{aligned}$ | N - | N- | rũ- | ka- | tũ- | ũ- | $\begin{aligned} & \text { kũ-/ } \\ & \text { ku- } \end{aligned}$ | ha- | kũ- |
| SC | a- | ma- | ũ- | ก̃- | rĩ- | ma- | kĩ- | $\begin{aligned} & \text { i-/ } \\ & \text { ci- } \end{aligned}$ | ก̃- | ci- | rũ- | ka- | tũ- | ũ- | kũ- | ha- | kũ- |
| OC | mũ- | ma- | mũ- | mĩ- | rĩ- | ma- | kĩ- | ci- | mĩ- | ci- | rũ- | ka- | tũ- | ũ- | $\begin{aligned} & \text { kũ-/ } \\ & \text { ku- } \end{aligned}$ | ha- | kũ- |

(178) gakĩmageithia
ga- kĩ- ma-ge -ith -i $\quad-\mathrm{a}$
$\mathrm{SC}_{12}$ - SEQ- $\mathrm{OC}_{6}$ - have -CAUS -TRNS -FV
'Then the boy greeted them (before yesterday).'
(179) twagateithia
tũ- a- ka- te -ith -i -a
$\mathrm{SC}_{13}$ - RM.PST- $\mathrm{OC}_{12}$ - help -CAUS -TRNS -FV
'After they helped him... (before yesterday),'
As with other prefixes, vowels in object prefixes can coalesce across morpheme boundaries, as discussed in 1.5.2. In (180), $a$ and o coalesce across the boundary of the prefix $k a$ - and stem on to become 0 :
(180) nĩarakona
nĩ- a- ra- ka- on -a
FOC- SC $1_{1}$ - CR.PRES- OC 12 - see -FV
'He/she is seeing him (the boy).'
Object prefixes are used only in the absence of a full object noun phrase. In such cases it is up to the hearer to figure out which noun is the intended referent based on the class of the object prefix and previous discourse.

A small subset of verbs allows two object prefixes; see section 5.2.2 for further discussion.

### 3.2.7 Reflexive

Gîkũyũ has an affixal (i.e., morphological) reflexive, which can be seen by comparing (181) and (182). This reflexive prefix $\tilde{\imath}$ - is an invariant prefix: it does not index person, number, or noun class. Reflexive prefix $\tilde{i}-$ also shows a frequent pattern of coalescence: subject marker $a$ - and reflexive prefix $\tilde{i}^{-}$combining to become $e-$, as in example (182):
(181) mũtimia nĩathambirie kana
nĩ- a- $\varnothing$ - thamb-ir -i -e ka- ana
FOC- SC $1_{1}$ - CR.PST- wash -COMPL -TRNS -FV NC ${ }_{12}$ - child
'The woman washed the child (today).'
(182) mũtimia nĩethambirie
nĩ- a- $\varnothing$ - $\tilde{1}^{-}$thamb-ir -i $\quad$-e
FOC- SC ${ }_{1}$ - CR.PST- REFL- wash -COMPL -TRNS -FV
'The woman washed herself (today).'
Because the woman is washing herself in (182), the reflexive prefix is required. Noun class 1 subject prefix $a$-coalesces with reflexive prefix $\tilde{\imath}^{-}$, becoming $e$ - in form.

### 3.3 Stem

As discussed in the introduction to this chapter, the verb stem is one of two obligatory members of the Gĩkũyũ verb schema, the other being the final vowel. Section 1.5 discusses morphophonemic processes, many of which apply to the verb stem. (183) shows one example, in which the initial $c$ of the verb becomes $j$ :
(183) nĩnjoraga
nĩ- N - cor -ag -a
FOC- 1SG.SUBJ- draw -HAB -FV
'I draw (habitually).'
Reduplication is another common morphological process. The following subsection provides examples of reduplication and discusses how these reduplicated forms affect meaning.

### 3.3.1 Reduplication

As illustrated in the examples throughout this section, reduplicated verb stems generally indicate either a decrease in intensity of action, the continuance of an action, or a combination of both. Formally, the reduplicant typically consists of the first two syllables of the stem, ends in $a$, and is then followed by the stem itself. Example (185) shows the reduplicant thoma- appearing before the verb stem thom 'read', followed by the final vowel $-e$. This form indicates the continuance of an action ('reading') to a lesser degree of intensity.
(184) gũthoma
kũ- thom-a
$\mathrm{NC}_{15}$ read -FV
'to read'
(185) thomathome

N - $\quad \varnothing$ - thoma-thom-e
1SG.SUBJ- RM.FUT- REDUP- read -FV
'so that I will read a little more (today)'
Example (186), below, is similar in form and function:
(186) ambaambata
amba- ambat -a
REDUP- ascend -FV
'ascend a little'

Here the reduplicant is amba-, consisting of the first two syllables of the stem ambat 'ascend', losing the final $t$ so that it ends in $a$. This form indicates a decrease in intensity of an action, 'ascend a little' as contrasted with 'ascend'.

Even when the final vowel of the original root is not $a$, the reduplicant must always end in $a$, as in the following example. Compare (187) and (188), and note that the final vowel of the root is ĩ, but the reduplicant nonetheless ends in $a$ :
(187) thiĩ

$$
\begin{aligned}
& \text { thi - } 1 \text { I } \\
& \text { go -FV } \\
& \text { ‘Go!’ }
\end{aligned}
$$

(188) thiathia
thia- thi-a
REDUP-go -FV
'Go a little!' / 'Move a little!' (as when asking someone to scoot over to make room on a seat.)

As in the above example where the final vowel of the root changed from $\tilde{\imath}$ to $a$, some reduplicated verbs also involve modifications to the final vowel of the root as well as to the reduplicant. Other morphophonemic processes are often at work as well, as observed in the following pair of examples:
(189) irima nĩrĩrenjirwo
i- rima nĩ- rĩ- ra- enj -ir -wo
$\mathrm{NC}_{5}$ - hole FOC- $\mathrm{SC}_{5}$ - NR.PST- dig -COMPL -PV
'The hole was dug (yesterday).'
(190) irima nĩrĩrenjenjirwo
i- rima nĩ- rĩ- ra- enja- enj -ir -wo
$\mathrm{NC}_{5}$ - hole FOC- $\mathrm{SC}_{5}$ - NR.PST- REDUP- dig -COMPL -PV
'The hole was deepened (yesterday).' (Lit. 'the hole was dug a little more.')
In (190), the final $a$ of reduplicated morpheme enja coalesces with the initial $e$ of the stem enj 'dig', resulting in the form enjenj, as seen in nĩĩrenjenjirwo.

In cases where the initial consonant of the reduplicated stem assimilates with the 1SG subject prefix $N$-, the assimilated consonant does not carry over to the main verb stem. That is, ultimately, the reduplicated form does not always exactly match the stem. The below examples illustrate this:
(191) cora
cor -a
draw -FV
'Draw!'
(192) coracora
cora- cor -a
REDUP- draw -FV
'Draw a little!'
(193) nĩnjoraga
nĩ- N - cor -ag -a
FOC- 1SG.SUBJ- draw -IMPF -FV
'I draw (habitually).'
(194) nĩnjoracoraga
nĩ- N - cora- cor -ag -a
FOC- 1SG.SUBJ- REDUP- draw -IMPF -FV
'I draw a little (habitually).'

Reduplication is prefixal in Gĩkũyũ. That is, the reduplicated form appears to the left of the verb stem. It follows that any additional prefixes (e.g. 1SG subject prefix $N$-, as in (194) above) affix to the reduplicated form; any morphophonemic processes resulting from affixation will affect only the reduplicated form. Therefore, in (194), we see ninjoracoraga rather than *ninjorajoraga; the original stem remains intact. Only the reduplicated form (which appears first) takes the form jora.

### 3.4 Suffixes

The following sections discuss the reciprocal marker, an "intensive" marker (Mugane, 1997), a middle voice marker, the applicative, a reversive suffix, a causative marker, a transitivizer, suffixes of the tense/aspect system, and the passive marker.

### 3.4.1 Reciprocal

Gĩkũyũ expresses the reciprocal with suffix -an. Compare (195) and (196):
(195) nĩtwĩthambirie
nĩ- tũ- $\quad \varnothing$ - $\tilde{1}^{-}$thamb-ir $\quad$-i $\quad-e$
FOC- 1PL.SUBJ- CR.PST- REFL- wash -COMPL-TRNS -FV
'We washed ourselves (today).'
(196) nĩtwĩthambanirie
nĩ- tũ- $\quad$ - $\tilde{1}^{-} \quad$ thamb-an $-i r \quad-i \quad-e$
FOC- 1PL.SUBJ- CR.PST- REFL- wash -RECIP -COMPL -TRNS -FV
'We washed each other (today).'
The two structures are identical except for the presence of the reciprocal marker in (196). Given the reflexive marker, both (195) and (196) involve 'washing ourselves' (an action reflected back on the same participants); Given the reciprocal marker, (196) also includes the washing of each other-an action reciprocated or distributed among participants.

Reciprocal suffix -an is also somewhat flexible in terms of its relative location among suffixes. It can come either before or after causative marker -ith, as seen in examples (197) and (198):
(197) thingo ciĩgonyagonyithanĩtie
thingo nĩ- ci- $\tilde{1}^{-}$gonya-gony -ith -an $-\tilde{i} t \quad-i \quad-e$
$\mathrm{NC}_{10}$.wall FOC- $\mathrm{SC}_{10}$ - REFL- REDUP- bend -CAUS -RECIP -PERF -TRNS -FV
'The walls zigzag around each other.'
(198) thingo ciĩgonyagonyanithĩtie
thingo nĩ- ci- $\tilde{1}^{-}$gonya- gony -an - -ith $-\tilde{t}$-i $\quad$-e
$\mathrm{NC}_{10}$.Wall FOC- $\mathrm{SC}_{10}$ - REFL- REDUP- bend -RECIP -CAUS -PERF -TRNS -FV
'The walls zigzag around each other.'
Example (197) shows reciprocal -an following causative -ith; (198) shows reciprocal -an preceding causative -ith. There is a slight difference in meaning, however: (197) involves the walls together (fictively) zigzagging around each other, while in (198) the walls are separately (fictively) zigzagging around each other. Admittedly this difference in meaning may be difficult to grasp.

Examples (199) and (200) again show the flexibility of the position of reciprocal -an, but with no change in meaning (according to our consultant) between the two forms. Intensive marker -ĩrĩ is discussed in the section that follows.
(199) tũkĩambĩrĩrania
tũ- kĩ- amb -ĩrĩr -an -i $\quad-a$
$\mathrm{SC}_{13^{-}}$SEQ- start -INTENS -RECIP -TRNS -FV
'Then they started (to do something) together (before yesterday).'
(200) tũkĩambanĩrĩria
tũ- kĩ- amb -an -ĩrĩr -i $\quad-\mathrm{a}$
$\mathrm{SC}_{13}$ - SEQ- start -RECIP -INTENS -TRNS -FV
'Then they started (to do something) together (before yesterday).'
The -an suffix may have additional functions beyond (just) reciprocal. See (201):
(201) nĩaramĩonanirie
nĩ- a- ra- mĩ- on -an -ir -i -e
FOC- SC $1_{1}$ - NR.PST- OC ${ }_{9}$ - see -RECIP -COMPL -TRNS -FV
'She showed it off.' ('it' = a ring)
It would be difficult to classify (201) as a reciprocal construction, given the singular subject. Further analysis is needed to determine the function of the -an suffix in contexts such as the one above.

### 3.4.2 Intensive

The intensive morpheme takes one of two forms: -irĩr or -ũrũr. Compare (202) and (203):
(202) nîkambire
nĩ- ka- amb -ir -e
FOC- $\mathrm{SC}_{12}$ - start -COMPL -FV
'He started with (before yesterday)' (giving them three fruits)
(203) tũkĩambĩrĩria
tũ- kĩ- amb-ĩrĩr -i -a
$\mathrm{SC}_{13}$ - SEQ- start -INTENS -TRNS -FV
'Then they started (before yesterday).' (to go)

Both examples contain verb stem amb 'start'; the intensive suffix in the second example changes the meaning of 'start' to mean something like "starting or beginning a particular process." In the first example, 'start' means "doing something first in a sequence of events". (Examples of -ũrũr can be seen in section 3.4.4 on the reversive suffix.)

### 3.4.3 Middle Voice

Payne (1997: 216) defines a middle construction as "one that expresses a semantically transitive situation in terms of a process undergone by the [semantic] patient, rather than an action carried out by an agent". Therefore such constructions are "neither passive nor active". The term 'middle' in this sense means 'somewhere between passive and active'.

Compare the following:
(204) gĩtĩ nîkĩraunwo
gĩ- tĩ nĩ- kĩ- ra- un -wo
$\mathrm{NC}_{7}-$ chair $\mathrm{FOC}-\mathrm{SC}_{7}-$ CR.PRES- break -PV
'The chair is being broken.'
(205) gĩtĩ nîkĩraunĩka
gĩ- ti nĩ- kĩ- ra- un -îk -a
$\mathrm{NC}_{7}$ - chair $\mathrm{FOC}_{-} \mathrm{SC}_{7}-$ CR.PRES- break -MID -FV
'The chair is breaking.'
In (204), the chair (the subject and semantic patient) is undergoing a process carried out by an agent-in this case an unmentioned agent. Someone or something is (agentively) breaking the chair. (205), on the other hand, does not describe an action carried out by an agent. The chair (again the subject and semantic patient) is, by itself, undergoing a process. The -îk morpheme in (205) is referred to as "stative potential" in Mugane (1997); our consultant independently defined -îka as 'state'. However, 'middle' is a better term for this morpheme, as the meaning matches the definition of the middle voice. Another example (compare (71) and (72)):
(206) nĩnjitire iria
nĩ- N - it -ir -e i- ria
FOC- 1SG.SUBJ- spill -COMPL -FV NC $5_{5}$ - milk
'I spilled the milk (today).'
(207) iria nĩrĩitĩkire
i- ria nĩ- rĩ- it -îk -ir -e
$\mathrm{NC}_{5}-$ milk FOC- $\mathrm{SC}_{5}-$ spill -MID -COMPL -FV
'The milk spilled (today).'
According to Payne (1997), "Instead of starting with a non-causative verb and adding a morpheme to make it causative, a middle construction starts with a causative verb and results
in a non-causative verb." It follows that 'break' and 'spill' are lexical-causative verbs in Gĩkũyũ; their meanings imply causation. (Causatives are discussed further in section 3.4.5.)

### 3.4.4 Reversive

The Concise Oxford Dictionary of Linguistics (2014) defines the function of a 'reversive' as "indicating the reversal of an action. Thus the prefix un- in English has a reversive meaning in untie." Muriungi (2009) discusses the reversive suffix in Kĩtharaka, another Bantu language of Kenya. The same reversive suffix is found in Gĩkũyũ. Gĩkũyũ and Kĩtharaka are both classified by Ethnologue as "Kikuyu-Kamba" languages, of which there are eight in total; when comparing data from Muriungi (2009) with data elicited from our consultant, it appears the two languages may be closely related.

Compare the following Gîkũyũ verbs:
(208) hinga
hing -a
close -FV
‘close!’
(209) hingũra
hing -ũr $\quad-\mathrm{a}$
close -REVERS -FV
‘Open!’ (Lit. ‘Unclose!')
(210) hingũka
hing -ũr -îk -a
close -REVERS -MID -FV
'come open' (Lit. 'become unclosed')
In (209), the reversive suffix reverses the action of the stem: 'close' becomes 'open'. Example (210) also contains the reversive suffix. However, the meaning 'become unclosed' involves a "process undergone by the [semantic] patient, rather than an action carried out by an agent" (Payne, 1997: 216). As we see, there is also an underlying middle voice morpheme; the reversive and middle voice morphemes together become one imbricated form: -ũk. See example (211):
(211) nĩtũahĩtũkire kahĩĩ kau
nĩ- tũ- a- hĩt -ũk -ir -e ka- hĩĩ ka- u
FOC- SC $_{13}$ - RM.PST- hunt -REVERS.MID -COMPL -FV NC $\mathrm{C}_{12}$ - boy NC $\mathrm{NC}_{12}$ - ANA.DEM
'They passed that little boy (before yesterday).' (Lit. 'They became no longer hunting the boy.')

In the Gĩkũyũ Pear Story, from which (211) is excerpted, a group of boys had been walking toward a little boy. The verb nĩtũahĩtũkire contains verb stem hĩt, meaning 'hunt'. The group of boys had not been literally hunting the little boy, but they were walking toward and approaching him, or perhaps pursuing the physical space in front of them that was occupied by the boy. According to our consultant, the meaning of 'hunt' can be metaphorically extended in this way. Imbricated reversive/middle-voice suffix - $\tilde{k}$ indicates the reversal of this action: When the group of boys passed the little boy, they were no longer approaching ('hunting') him. The boys became un-hunting the boy. Also from the Pear Story:
(212) makĩinũka

```
ma-kĩ- in -ũk -a
SC2- SEQ- sing -REVERS.MID -FV
'Then they went home (before yesterday).' (Lit. ‘They became no longer singing.')
```

Although inũka means 'go home', the stem of this construction is in, meaning 'sing'. Our consultant has suggested that this verb may have derived from the verb 'sing', and that inũka means something like 'go home from singing'. In English, children having fun away from home can be said to be 'out playing'; in Gîkũyũ, children are said to be 'out singing'. Therefore, in the above construction, the action of singing is undone by the reversive suffix: The children have become no longer singing (and have gone home).

In elicitation of fictive motion, our consultant also produced the following construction:
(213) rũgiri rũthiũrũrũkĩirie nyũmba
rũ- giri rũ- thi -ũrũr -ũk $\quad-\mathrm{i} \quad$-ir $\quad$-i $\quad$-e $N$ - yũmba $\mathrm{NC}_{11}$ - fence $\mathrm{SC}_{11}$ - go -INTENS -REVERS.MID -APP -COMPL -TRNS -FV NC $9_{9}$ - house 'The fence surrounds the house.'

The stem of the verb rũthiũrũrũkĩirie is thi 'go'. Noun class prefix rũ- refers to the fence, which is the subject and actor in this construction. As we can see from the applicative and the transitivizer, the fence is (fictively) acting on the peripheral-made-central applied object. The reversive, then, somehow changes or undoes the fictive motion. The literal interpretation of
the above construction could be considered 'the fence goes and returns upon the house (surrounding it)'. The middle voice indicates (logically) that the surrounding in this context is not an action carried out by an agent.

### 3.4.5 Causative

We have already seen lexical causatives (e.g., 'break', 'spill'), which do not require any sort of morphological causative. Gĩkũyũ also has a morphological causative, which is discussed here, as well as analytic causatives, illustrated in section 7.2.2. Payne (1997: 176) defines 'causative' as "a linguistic expression that contains in semantic/logical structure a predicate of cause, one argument of which is a predicate expressing an event". Further, "causatives can be divided into three types: lexical, morphological, and periphrastic/analytic. A morphological causative is one kind of 'valence increasing' operation". Nearly every token in our data containing morphological causative -ith also contains the transitivizer -i (see section 3.4.8), as in (214) and (215), below. We were only able to elicit one token of a verb with the causative marker and no transitivizer, as seen below in (216):

## (214) gaikithirio

ka- ik -ith -ir -i -o
$\mathrm{NC}_{12}$ - throw -CAUS -COMPL -TRNS -PV
'(The child) was made to throw (before yesterday).'

## (215) gakĩqũithia mũithikiri

ka- kĩ- gũ -ith -i -a mũ- ithikiri
$\mathrm{SC}_{12}$ - SEQ- fall -CAUS -TRNS -FV NC ${ }_{3}$ - bicycle
'He dropped the bicycle (before yesterday).' (Lit. 'He caused the bicycle to fall. / He made the bicycle fall.')
(216) nĩaramũthaithire
nĩ- a- ra- mũ-tha -ith -ir -e
FOC- SC $C_{1}$ - NR.PST- OC ${ }_{1}$ - pity -CAUS -COMPL -FV
'He caused her to feel pity (yesterday).'
It could be, however, that thaitha 'cause to feel pity' has become lexicalized. If so, -ith might not be functioning as a morphological causative in this context.

### 3.4.6 Applicative

The applicative is a valence-increasing operation that "brings a peripheral participant onto center stage" (Payne, 1997). The most common form of the applicative marker in Gĩkũyũ is -ĩr. Compare (217) and (218):
(217) nĩndĩramũthura
nĩ- $\mathrm{N}^{\text {- }}$ ra- mũ- thur -a
FOC- 1SG.SUBJ- CR.PRES- OC $1_{1}$ - elect -FV
'I am electing her/him.'
(218) nĩndĩramũthurĩra
nĩ- N - ra- mũ- thur -ĩr -a
FOC- 1SG.SUBJ- CR.PRES- OC ${ }_{1}$ - elect -APP -FV
'I am electing for her/him.'

Example (217), with no applicative, involves the subject and semantic agent ('i') electing the object and semantic patient ('her/him'), perhaps to fulfill some job or position. The person being elected is marked as mũ-. In example (218), the action carried out by the subject is on behalf of 'him/her'; the applicative indicates that the marked object is not the semantic patient but rather a third (in this case benefactive) argument. Compare with examples (219) and (220):
(219) nĩmaraikia mũbira
nĩ- ma-ra- ik -i -a mũ- bira
FOC- SC $_{2}-$ CR.PRES- throw -TRNS -FV NC $3_{3}$ - ball
'They are throwing (a ball).'
(220) nĩtũramaikĩria mũbira
nĩ- tũ- ra- ma-ik -ĩr -i -a mũ-bira
FOC- 1PL- CR.PRES- $\mathrm{OC}_{2}$ - throw -APP -TRNS -FV NC ${ }_{3}$ - ball
'We are throwing them a ball.'
In examples (219) and (220), due to the presence of the object noun phrase mũbira 'ball', there is no verb marking for this object. Example (220) involves a third argument, (recipient) 'them', marked by ma-. The applicative marker in this example indicates to the listener that the marked object is not the object being thrown, but rather is the recipient.
(221) nĩmaikĩirio mũbira
nĩ- ma- $\varnothing$ - ik -ĩ -ir -i -0
FOC- $\mathrm{SC}_{2}-$ CR.PST- throw -APP -COMPL -TRNS -PV
'They were thrown a ball (today).'
The applicative can also appear as -ĩ, as seen above in (221). This -ĩ form typically appears when the applicative precedes completive aspect suffix -ir. Applicative suffix -ir is isomorphic with processual marker -irr, which I discuss later in this chapter.

### 3.4.7 Aspect

There are five aspect suffixes found in our data: the processual marker -ĩr, which can be found in verbs involving some sort of persistive action (e.g., swimming, hugging); -ag, which can be described as "imperfective" or "habitual"; -it ('perfect'); -ir ('completive’); and - $\varnothing$ ('progressive' and 'sequential' are both unmarked).

### 3.4.7.1 Processual

The processual marker is specific to persistive event verbs. Morrison (2011: 255) defines persistive events as those which "began at some point in the past and occur continuously until the time of speaking". See (222); note thamb means 'wash', with -irr marking the persistive event 'swim' which is now fully lexicalized; our consultant sees these verbs as clearly related due to the ongoing activity in water:
(222) nĩndĩrathambĩra
nĩ- N - ra- thamb-ĩr -a
FOC- 1SG.SUBJ- CR.PRES- wash -PROC -FV
'I am swimming.'
We have confirmed that processual marker -irr can co-occur with applicative -ĩr, as in (223):
(223) nĩndĩramũthambĩrĩra
nĩ- N - ra- mũ- thamb -ĩr -ĩr -a
FOC- 1SG.SUBJ- CR.PRES- OC $1_{1}$ - wash -APP -PROC -FV
'I am swimming for him/her.'
According to our consultant, the above construction (which she produced) is totally acceptable, but she feels she has never said it before. This is unsurprising, given the strange situation involving 'swimming for another person'. For this reason, constructions like these
are probably uncommon in general. Further research could reveal which constructions allow both suffixes (together) and which do not.

### 3.4.7.2 Imperfective / Habitual

Along with the progressive (see section 3.4.7.5), habitual and imperfective aspects are classed in a group of "non-perfective aspects" (Payne, 1997: 239), with habitual a subclass of imperfective. In perfective aspect, "the situation is viewed in its entirety, independent of tense"; the aspect marker -ag usually functions to indicate an event regularly occurs (or occurred), and is therefore not viewed in its entirety. Two Pear Story examples:
(224) arĩmaga matunda ma pears
a- rĩm -ag -a ma-tunda ma-a pears
$\mathrm{SC}_{1}$ - cultivate -IMPF -FV NC ${ }_{6}$ - fruits $\mathrm{AC}_{6}-\mathrm{ASSOC}^{-} \mathrm{NC}_{9}$.pears
'He grew pears (before yesterday).'
(225) tũgĩthakaga
tũ- kĩ- thak -ag -a
$\mathrm{NC}_{13}$ - SIM- play -IMPF -FV
'As they (the little boys) were playing,' (at that time)
In (224), the subject referent (the farmer) grew pears for a living. Thus the growing of pears can be considered an ongoing or habitual event. (As a profession or a lifestyle, he always or reliably grew pears.) The 'playing' in (225) is slightly different. The children were not playing habitually; rather, the playing is described "as an ongoing process" (Payne, 1997: 239). The same morpheme -ag is used for these two similar, non-perfective aspects. Given their similarity in meaning and the fact they are both non-perfective, I have glossed both as 'IMPF'.

### 3.4.7.3 Perfect

Not to be confused with 'perfective,' the perfect aspect "normally describes a currently relevant state brought about by the situation (normally an event) expressed by the verb" (Payne, 1997: 239). An example from the Pear Story:
(226) twatigĩtwo
$\begin{array}{llll}\text { tũ- } & \text { a- tig -int -wo } \\ {S C_{13}}^{-} \text {RM.PST- abandon -PERF -PV }\end{array}$
'The little boys that had been left behind (before yesterday),'

In example (226), the speaker is describing the state of the little boys as having been left behind. If the sentence were instead 'the little boys were left behind,' this would be a situation viewed in its entirety, and therefore perfective. (It would also take completive marker -ir, which is discussed below in Section 3.4.7.4.)

In non-passive constructions, perfect aspect is always followed by final vowel $-e$, as in (227) and (228). Completive marker -ir is also always followed by final vowel -e. A discussion of this can be found in Section 3.5, which covers the system of final vowels in Gĩkũyũ.
(227) nĩagũthiĩte
nĩ- a- kũ- thi -ĩt -e
FOC- SC ${ }_{1}$ - CR.PST- go -PERF -FV
'He/she had gone (today).'
(228) thingo ciĩgonyagonyithanĩtie
thingo nĩ- ci- $\tilde{1}^{-}$gonya- gony -ith -an -ĩt -i $-e$
$\mathrm{NC}_{10}$.wall FOC SC ${ }_{10}$ - REFL- REDUP- bend -CAUS -RECIP -PERF -TRNS -FV
'The walls zigzag around each other.'

### 3.4.7.4 Completive

The completive aspect marker indicates that an event is complete. Compare (229), with no completive marker, and (230), with completive -ir. Just as with the perfect aspect, the (context of the) completive marker changes the final vowel to $-e$.
(229) nĩakũina
nĩ- a- kũ- in -a
FOC- SC $_{1}$ - CR.FUT- sing -FV
'He/she will sing (today).'
(230) nĩainire

```
nĩ- a- Ø- in -ir -e
FOC- SC - CR.PST- sing -COMPL -FV
'He/she sang (an hour ago).'
```


### 3.4.7.5 Progressive

Also a "subtype of imperfective" (Payne, 1997: 239), the progressive aspect "implies an ongoing, dynamic process". The progressive aspect is unmarked in Gîkũyũ, as in (231):
(231) nĩmaraina
nĩ- ma-ra- in - $\varnothing$-a
FOC- $\mathrm{SC}_{2}-$ CR.PRES- sing -PROG -FV
'They are singing (now).'

### 3.4.7.6 Sequential

The sequential aspect is seen throughout narratives such as the Pear Story. Labeled 'consecutive' in Clements (1984:312), this aspect has a meaning similar to 'thus' or 'and then'. As discussed in section 3.2.4, tense prefix kĩ- marks this tense/aspect combination also labeled 'narrative tense' by our consultant; there is no aspect suffix. An example can be seen in (232):
(232) akĩhaica ngathĩ
a- kĩ- haic -a ngathĩ
$\mathrm{NC}_{1}$ - SEQ-mount - $\mathrm{FV} \mathrm{NC}_{9}$.ladder
'And (then) he climbed up a ladder.'

### 3.4.8 Transitivizer

The transitivizer is sometimes required based on particular verbs and meanings, and sometimes not required based on others. Consider example (233), in which the transitivizer is required:
(233) nĩmethambanirie
nĩ- ma- $\varnothing$ - $\tilde{1}-\quad$ thamb -an -ir -i -e
FOC- SC $2_{2}$ - CR.PST- REFL- wash -RECIP -COMPL -TRNS -FV
'They washed each other (today).'
In (233) agent and patient are different and distributed. Because 'wash' is not a lexical causative in Gĩkũyũ, this construction cannot exist without the transitivizer. Compare (234) and (235):
(234) nĩethambire
nĩ- a- $\varnothing$ - $\tilde{1}-\quad$ thamb-ir $-e$
FOC- SC $1_{1}$ - CR.PST- REFL- wash -COMPL -FV
'He washed himself (today).'
(235) nĩethambirie
nĩ- a- $\varnothing$ - $\tilde{1}^{-}$thamb-ir -i $\quad$-e
FOC- SC ${ }_{1}$ - CR.PST- REFL- wash -COMPL -TRNS -FV
'He washed himself (today).'
Example (234) has no transitivizer. According to our consultant, the meaning of this construction involves the object being washed-'himself-being one and the same as the person washing it. In example (235), however, according to our consultant, the object being washed is conceptually separate from the person washing it. One way to think about the difference in meaning between these two examples is to compare English 'himself' with 'his self'. Both (234) and (235) employ the reflexive marker, which is a valence-decreasing operation (Payne, 1997). Yet, given the above analysis, (235) involves a detachment or sort of separation from agent and (reflexive) patient. Although the difference in meaning may be slight, given the presence of the transitivizer, it can be understood that (235) is more transitive than (234).

### 3.4.9 Passive

The passive operation in transitive verb constructions serves to place "the [semantic] patient in the subject role and the [semantic] agent in an oblique" (Payne, 1997: 169). In Gĩkũyũ the passive suffix is a verb-final -o or -wo. This variation is conditioned by the preceding sound (usually the preceding morpheme). For example, when preceded by transitivizer $-i$, the passive takes the form -o; when immediately preceded by a consonant-final morpheme such as (completive) -ir, however, the passive takes the form -wo.

Example (102) below shows the semantic patient ('the porridge') as the passive subject. Here, the passive marker takes the form $-o$ due to the presence of transitivizer suffix $-i$ :
(236) ũcũrũ nĩũhondoririo
ũ- cũrũ nĩ- ${ }^{\text {un- }}$ hondor-ir -i -0
$\mathrm{NC}_{14^{-}}$porridge $\mathrm{FOC}-\mathrm{SC}_{14^{-}}$gulp -COMPL -TRNS -PV
'The porridge was gulped (today).'
The semantic agent (AKA the active subject) can be either omitted altogether, as in (236), or put in an oblique, as in (237):
(237) ũcũrũ nĩũhondoririo nĩ kana hondoro hondoro
ũ- cũrũ nĩ- ũ- hondor -ir -i -0 nĩ ka- ana hondoro hondoro
NC14- porridge FOC- SC14- gulp -COMPL -TRNS -PV by NC $\mathrm{N}_{12}$ - child gulp.ID gulp.ID
'The porridge was gulped by the child (gulp gulp) (today).'

In addition, other semantic roles can also be passive subject, by means of the applicative. In (238) below, 'they' represents the semantic recipient (c.f. 'We threw the ball to them').
(238) nĩmaikĩirio mũbira nĩ ithuĩ
nĩ- ma- $\varnothing$ - ik $\quad$ - 1 -ir $\quad$-i $\quad$-o mũ- bira nĩ ithuĩ
FOC- SC $2^{-}$- CR.PST- throw -APP -COMPL -TRNS -PV NC ${ }_{3}-$ ball by 1PL.PRON
'They were thrown a ball by us (today).'

### 3.5 Final Vowel

All verb forms (aside from those with a passive suffix) end with a different "final vowel" which carries information about tense and/or mood. This final vowel is -a in most situations; it appears to have no synchronic meaning. The final vowel always becomes -e following completive morpheme -ir and perfect -ĩt:
(239) nĩethambire
nĩ- a- $\varnothing$ - $\tilde{1}^{-}$thamb -ir -e
FOC- SC ${ }_{1}$ - CR.PST- REFL- wash -COMPL -FV
'He washed himself (today).'
(240) nĩagũthiĩte
nĩ- a- kũ- thi -ĩt -e
FOC- SC ${ }_{1}$ - CR.PST- go -PERF -FV
'He/she had gone (just now).'
And, on the opposite end of the realis-irrealis continuum (Payne, 1997: 245), the final vowel also takes the form of $-e$ in the subjunctive (e.g., the verb in the complement of polite requests):
(241) nĩndĩrenda ũine
nĩ- N - ra- end -a ũ- in -e
FOC- 1SG- CR.PRES- like -FV 2SG- sing -SJV
'I want you to sing (right now).'

### 3.6 Summary

In this chapter I have discussed the position classes for various grammatical functions in Gĩkũyũ verbs. Although these are the only classes I have evidence of, there could be more. Clements (1984: 291) makes mention of a 'directive prefix,' but we have not found evidence in
our work to support this. Mugane (1997: 59) refers to 'static' morpheme -am in the word rũg-am-a 'stand'. This is in fact the only example of a possible 'static' morpheme in our data:
(242) rũga
rũg -a
jump -FV
'jump!'
(243) rũgama
rũg -am -a
jump -STAT -FV
'stand'
Another major area for further in-depth investigation is tone, which this sketch grammar only mentions superficially.

## Chapter 4

## Copular Clauses

Gĩkũyũ has a verbal copula, which inflects for tense and is marked to agree with the subject in terms of noun class, person, and number. The Gĩkũyũ copula differentiates between first person and second person, and singular and plural. Third person singular and plural correspond to Noun Classes 1 and 2, respectively, and pattern in the same way. The copula is used in predicate nominals, predicate attributives, locative clauses, possessive clauses, and existential clauses. The only exception to this is the present tense, where noun classesincluding the people noun classes 1 and 2-instead use the focus particle nĩ and the negative focus particle $t i$ in predicate nominals and predicate attributives.

### 4.1 Copula

At least four tenses in Gĩkũyũ are accounted for with the copula: the present, the bounded recent past (BRP), the recent past, and the past. The bounded recent past refers to a condition that just happened, and lasted no longer than a day. The recent past refers to a condition that occurred yesterday. The past refers to a condition that happened sometime before yesterday.

The copula stem is ri, which takes $r a$ - and $a$ - prefixes to form the recent past and past forms, respectively, rarĩ and arĩ. The copula stem for the BRP tense is uma.

The following table shows the paradigm of forms the copula takes for each of the four tenses, the four person and number combinations, and the seventeen noun classes.

The first person singular forms are an exception when it comes to prefixing the various copula forms. For example, in the recent past, instead of prefixing $N$ - to rarĩ to form ndari, as would be expected, the form is ndĩrarĩ. In the past, instead of prefixing $N$ - to arĩ to form nyarĩ, as would be expected, the form is ndarĩ.

The present form of the copula includes shortened forms for all except the first person singular form. It seems that in the present tense, the $r$ in the copula stem $r \tilde{r}$ is optional. Shortened forms of these copulas can be formed by removing the $r$, and are seen to the right of the slashes in the paradigmatic table below.

Table 25: Copula forms in Gĩkũyũ

| CLASS | PRESENT | PRESENT (PRED. NOM, PRED. ATR.) | BRP | RECENT PAST | PAST |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1SG | ndĩ $(N+r \hat{i})$ | ndĩ $(N+r \tilde{i})$ | nyuma $(N+u m a)$ | ndĩrarĩ $(n d \tilde{\imath}+r a+r i \tilde{l})$ | ndarĩ $(n d+a+r i)$ |
| 2SG | $\begin{aligned} & \tilde{u} r \tilde{l} / w \tilde{l} \\ & (\tilde{u}+r \tilde{r}) \end{aligned}$ | $\begin{aligned} & \tilde{u} r \tilde{l} / w \tilde{l} \\ & (\tilde{u}+r \tilde{r}) \end{aligned}$ | uma $(\tilde{u}+u m a)$ | ũrarĩ $(\tilde{u}+r a+r \tilde{i})$ | warĩ $(\tilde{u}+a+r \tilde{i})$ |
| 1PL | $\begin{aligned} & t u \tilde{r} \tilde{l} / t \tilde{u} \tilde{l} \\ & (t \tilde{u}+r \tilde{u}) \end{aligned}$ | $\begin{aligned} & t \tilde{u} r \tilde{l} / t u \tilde{u} \tilde{\imath} \\ & (t \tilde{u}+r \tilde{l}) \end{aligned}$ | tuma (tũ + uma) | tũrarĩ $(t \tilde{u}+r a+r \tilde{u})$ | twarĩ $(t \tilde{u}+a+r \tilde{i})$ |
| 2PL | $\begin{aligned} & \text { mũrĩ/m } \tilde{u} \tilde{l} \\ & (m \tilde{u}+r \tilde{u}) \end{aligned}$ | $\begin{aligned} & \text { mũrĩ / m } \tilde{u} \tilde{l} \\ & (m \tilde{u}+r \tilde{u}) \end{aligned}$ | тита <br> (mũ + uma) | mũrarĩ $(m \tilde{u}+r a+r \tilde{i})$ | mwarĩ $(m \tilde{u}+a+r \tilde{i})$ |
| NC1 | $\begin{aligned} & \operatorname{ari} / e \\ & (a+r \hat{i}) \end{aligned}$ | nĩ <br> (FOC) | auma $(a+u m a)$ | ararĩ $(a+r a+r \hat{i})$ | arĩ $(a+a+r \hat{i})$ |
| NC2 | $\begin{aligned} & m a r i ̃ / m e \\ & (m a+r i ̂) \end{aligned}$ | nĩ <br> (FOC) | mauma $(m a+u m a)$ | mararĩ $(m a+r a+r i \tilde{i})$ | marĩ $(m a+a+r \hat{i})$ |
| NC3 | $\begin{aligned} & \tilde{u} r \tilde{l} / w \tilde{l} \\ & (\tilde{u}+r \tilde{r}) \end{aligned}$ | $\begin{aligned} & \text { ni } \\ & (F O C) \end{aligned}$ | uтa $(\tilde{u}+u m a)$ | ũrarĩ $(\tilde{u}+r a+r \tilde{r})$ | warĩ $(\tilde{u}+a+r \tilde{i})$ |
| NC4 | $\begin{aligned} & \tilde{i} r \tilde{l} / \tilde{l} \\ & (\tilde{\imath}+r \tilde{r}) \end{aligned}$ | nĩ <br> (FOC) | yuma $(\tilde{i}+u m a)$ | ĩrarĩ $(\tilde{l}+r a+r \tilde{r})$ | yarĩ $(\tilde{\imath}+a+r \tilde{i})$ |
| NC5 | $\begin{aligned} & \text { rĩri} / r \tilde{\imath} \\ & (r \tilde{\imath}+r \tilde{i}) \end{aligned}$ | $\begin{aligned} & \text { ni } \\ & (F O C) \end{aligned}$ | riuma $(r i \tilde{\imath}+u m a)$ | rirarĩ $(r \tilde{i}+r a+r \hat{i})$ | rĩarĩ $(r \tilde{i}+a+r \tilde{r})$ |
| NC6 | $\begin{aligned} & \operatorname{mari} / m e \\ & (m a+r \hat{i}) \end{aligned}$ | $\begin{aligned} & \text { nĩ } \\ & (F O C) \end{aligned}$ | mauma $(m a+u m a)$ | mararĩ $(m a+r a+r \tilde{i})$ | $\begin{aligned} & \operatorname{mari} \\ & (m a+a+r \tilde{i}) \end{aligned}$ |
| NC7 | $\begin{aligned} & \text { kirrĩ/gĩ } \\ & (k \tilde{\imath}+r \tilde{l}) \end{aligned}$ | nĩ <br> (FOC) | kiuma (kĩ+uma) | kĩrarĩ $(k \tilde{l}+r a+r \tilde{l})$ | kãarĩ $(k \tilde{\imath}+a+r \tilde{l})$ |
| NC8 | $\begin{aligned} & i r i \tilde{l} / i \\ & (i+r \tilde{l}) \end{aligned}$ | $\begin{aligned} & \text { nĩ } \\ & (F O C) \end{aligned}$ | ciuma $(c i+u m a)$ | irarĩ $(i+r a+r \hat{i})$ | $\begin{aligned} & \text { ciarĩ } \\ & (c i+a+r i) \end{aligned}$ |
| NC9 | $\begin{aligned} & \tilde{i} r \tilde{l} / \tilde{l} \\ & (\tilde{\imath}+r \tilde{r}) \end{aligned}$ | nĩ <br> (FOC) | yuma <br> ( $\mathfrak{i}+u m a$ ) | ĩrarĩ $(\tilde{\imath}+r a+r \tilde{r})$ | yarĩ $(\tilde{l}+a+r \tilde{i})$ |
| NC10 | $\begin{aligned} & \text { irĩ/i/cirĩ/ ciũ } \\ & (i+r \tilde{i}) \end{aligned}$ | $\begin{aligned} & \text { ni } \\ & \text { (FOC) } \end{aligned}$ | ciuma $(c i+u m a)$ | $\begin{aligned} & \text { irarĩ / cirarĩ } \\ & (i / c i+r a+r \tilde{i}) \end{aligned}$ | $\begin{aligned} & \text { ciarĩ } \\ & (c i+a+r \hat{i}) \end{aligned}$ |
| NC11 | rũrĩ / rũ ${ }^{2}$ $(r \tilde{u}+r \tilde{i})$ | nĩ <br> (FOC) | ruma $(r \tilde{u}+u m a)$ | rũrarĩ $(r \tilde{u}+r a+r \tilde{i})$ | rũarĩ $(r \tilde{u}+a+r \tilde{u})$ |
| NC12 | $\begin{aligned} & \text { karĩ / ge } \\ & (k a+r i ̂) \end{aligned}$ | $\begin{aligned} & n i \tilde{l} \\ & (F O C) \end{aligned}$ | kauma $(k a+u m a)$ | kararĩ $(k a+r a+r \hat{i})$ | $\begin{aligned} & \text { karĩ } \\ & (k a+a+r \tilde{i}) \end{aligned}$ |
| NC13 | $\begin{aligned} & t u \tilde{r} \tilde{1} / t \tilde{u} \tilde{l} \\ & (t \tilde{u}+r \tilde{i}) \end{aligned}$ | nĩ (FOC) | tuma <br> (tũ + uma) | tũrarĩ $(t \tilde{u}+r a+r \tilde{u})$ | tũarĩ $(t \tilde{u}+a+r \tilde{r})$ |
| NC14 | $\begin{aligned} & \text { ũrĩ/wĩ } \\ & (\tilde{u}+r \tilde{u}) \end{aligned}$ | nĩ <br> (FOC) | uma $(\tilde{u}+u m a)$ | ũrarĩ $(\tilde{u}+r a+r \tilde{u})$ | warĩ $(\tilde{u}+a+r \tilde{i})$ |
| NC15 | $\begin{aligned} & \text { kũrĩ/gũũ } \\ & (k \tilde{u}+r \tilde{i}) \end{aligned}$ | $\begin{aligned} & \text { nĩ } \\ & (F O C) \end{aligned}$ | kuma (kũ + uma) | kũrarĩ $(k \tilde{u}+r a+r \tilde{i})$ | kũarĩ $(k \tilde{u}+a+r \hat{i})$ |
| NC16 | $\begin{aligned} & \text { harĩ/he } \\ & (h a+r i \end{aligned}$ | nĩ <br> (FOC) | hauma <br> (ha + uma) | hararĩ $(h a+r a+r \hat{i})$ | harĩ $(h a+a+r \hat{i})$ |
| NC17 | kũrĩ $(k \tilde{u}+r \tilde{r})$ | nĩ (FOC) | kuma <br> (kũ +uma) | kũrarĩ $(k \tilde{u}+r a+r \tilde{i})$ | kũarĩ $(k \tilde{u}+a+r \tilde{u})$ |

## 84 Anaí Navarro \& Jessica Li

Table 26: Negative copula forms in Gîkũyũ

|  | PRESENT | PRESENT (PRED. <br> NOM., PRED. ATR.) | BRP | RECENT PAST | PAST |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1SG | ndirĩ $(N+t i+r \tilde{r})$ | ndirĩ $(N+t i+r \tilde{i})$ | ndiuma $(N+t i+u m a)$ | ndirarĩ $(N+t i+r a+r \hat{i})$ | ndiarĩ $(N+t i+a+r \tilde{i})$ |
| 2SG | ndũrĩ $(n d+\tilde{u}+r \tilde{u})$ | ndũrĩ $(n d+\tilde{u}+r \tilde{u})$ | nduma <br> ( $n d+\tilde{u}+u m a$ ) | ndũrarĩ $(n d+\tilde{u}+r a+r \tilde{i})$ | ndũarĩ $(n d+\tilde{u}+a+r \tilde{u})$ |
| 1PL | tũtirĩ $(t \tilde{u}+t i+r \hat{i})$ | tũtirĩ $(t \tilde{u}+t i+r \tilde{l})$ | tũtiuma (tũ + ti +uma) | tũtirarĩ $(t \tilde{u}+t i+r a+r \hat{i})$ | tũtiarĩ $(t \tilde{u}+t i+a+r \tilde{u})$ |
| 2PL | mũtiri $(m \tilde{u}+t i+r \tilde{i})$ | mũtirĩ $(m \tilde{u}+t i+r i)$ | mũtiuma ( $m \mathrm{u}+\mathrm{ti}+u m a$ ) | mũtirarĩ $(m \tilde{u}+t i+r a+r \tilde{i})$ | mũtiarĩ $(m \tilde{u}+t i+a+r i \tilde{l})$ |
| NC1 | ndarĩ $(n d+a+r \hat{r})$ | $\begin{aligned} & t i \\ & (F O C . N E G) \end{aligned}$ | ndauma <br> ( $n d+a+u m a$ ) | ndararĩ $(n d+a+r a+r \tilde{i})$ | ndarĩ $(n d+a+a+r i)$ |
| NC2 | matirĩ $(m a+t i+r \hat{i})$ | $\begin{aligned} & \hline t i \\ & (\text { FOC.NEG) } \end{aligned}$ | matiuma ( $m a+t i+u m a$ ) | matirarĩ $(m a+t i+r a+r i)$ | matiarĩ $(m a+t i+a+r i)$ |
| NC3 | ndũrĩ $(n d+\tilde{u}+r \tilde{u})$ | $\begin{aligned} & t i \\ & \text { (FOC.NEG) } \end{aligned}$ | nduma <br> ( $n d+\tilde{u}+u m a$ ) | ndũrarĩ $(n d+\tilde{u}+r a+r \tilde{i})$ | ndũarĩ $(n d+\tilde{u}+a+r \tilde{u})$ |
| NC4 | ndĩrĩ $(n d+\tilde{\imath}+r \tilde{r})$ | $\begin{aligned} & \text { ti } \\ & (\text { FOC.NEG) } \end{aligned}$ | ndiuma <br> ( $n d+\tilde{\imath}+u m a$ ) | ndĩrarĩ $(n d+\tilde{\imath}+r a+r \hat{\imath})$ | ndĩarĩ $(n d+\tilde{l}+a+r \hat{i})$ |
| NC5 | riãtirĩ $(r \tilde{i}+t i+r \tilde{r})$ | $\begin{aligned} & \hline t i \\ & \text { (FOC.NEG) } \end{aligned}$ | rîtiuma $(r i \tilde{+}+t i+u m a)$ | rîtirarĩ $(r \tilde{1}+t i+r a+r \tilde{l})$ | ritiarĩ $(r \tilde{\imath}+t i+a+r \tilde{r})$ |
| NC6 | matirĩ $(m a+t i+r i \hat{i})$ | $\begin{aligned} & t i \\ & (\text { FOC.NEG) } \end{aligned}$ | matiuma ( $m a+t i+u m a$ ) | matirarĩ $(m a+t i+r a+r i)$ | matiarĩ $(m a+t i+a+r i \tilde{i})$ |
| NC7 | gĩtirĩ $(g \tilde{l}+t i+r \hat{i})$ | ti (FOC.NEG) | gĩtiuma <br> (gĩ $+t i+u m a)$ | gĩtirarĩ $(g \tilde{\imath}+t i+r a+r \tilde{\imath})$ | gĩtiarĩ $(g \tilde{\imath}+t i+a+r \hat{\imath})$ |
| NC8 | $\begin{aligned} & \text { itirir } \\ & (i+t i+r \tilde{i}) \end{aligned}$ | $\begin{aligned} & \text { ti } \\ & (\text { FOC.NEG) } \end{aligned}$ | itiuma $(i+t i+u m a)$ | $\begin{aligned} & \text { itirarĩ } \\ & (i+t i+r a+r \hat{i}) \end{aligned}$ | $\begin{aligned} & \text { itiarí } \\ & (i+t i+a+r \tilde{i}) \end{aligned}$ |
| NC9 | ndĩrĩ $(n d+\tilde{\imath}+r \tilde{r})$ | $\begin{aligned} & \text { ti } \\ & \text { (FOC.NEG) } \end{aligned}$ | ndiuma <br> ( $n d+\tilde{\imath}+u m a$ ) | ndĩrarĩ <br> $(n d+\tilde{\imath}+r a+r \tilde{i})$ | ndĩarĩ $(n d+\tilde{\imath}+a+r \tilde{i})$ |
| NC10 | itirĩ $(i+t i+r \hat{i})$ | $\begin{aligned} & \text { ti } \\ & (\text { FOC.NEG) } \end{aligned}$ | itiuma $(i+t i+u m a)$ | itirarĩ $(i+t i+r a+r i \hat{)}$ | itiarĩ $(i+t i+a+r \hat{i})$ |
| NC11 | rũtirĩ $(r \tilde{u}+t i+r \tilde{i})$ | $\begin{aligned} & \text { ti } \\ & \text { (FOC.NEG) } \end{aligned}$ | rũtiuma <br> (rũ $+t i+u m a)$ | rũtirarĩ $(r \tilde{u}+t i+r a+r \hat{i})$ | rũtiarĩ $(r \tilde{u}+t i+a+r \hat{u})$ |
| NC12 | gatirĩ $(g a+t i+r \tilde{i})$ | $\begin{aligned} & t i \\ & \text { (FOC.NEG) } \end{aligned}$ | gatiuma <br> (ga+ti+uma) | gatirarĩ $(g a+t i+r a+r i)$ | gatiarĩ $(g a+t i+a+r i ̄)$ |
| NC13 | tũtirĩ $(t \tilde{u}+t i+r \hat{i})$ | ti (FOC.NEG) | tũtiuma $(t \tilde{u}+t i+u m a)$ | tũtirarĩ $(t \tilde{u}+t i+r a+r \hat{l})$ | tũtiarĩ $(t \tilde{u}+t i+a+r \tilde{i})$ |
| NC14 | ndũrĩ $(n d+\tilde{u}+r \tilde{u})$ | ti (FOC.NEG) | nduma <br> ( $n d+\tilde{u}+u m a$ ) | ndũrarĩ $(n d+\tilde{u}+r a+r \tilde{i})$ | ndũarĩ $(n d+\tilde{u}+a+r \tilde{u})$ |
| NC15 | gũtirĩ $(g \tilde{u}+t i+r \hat{i})$ | $\begin{aligned} & t i \\ & (\text { FOC.NEG) } \end{aligned}$ | gũtiuma <br> (gũ + ti + uma) | gũtirarĩ $(g \tilde{u}+t i+r a+r \tilde{i})$ | gũtiarĩ $(g \tilde{u}+t i+a+r \tilde{i})$ |
| NC16 | hatirĩ $(h a+t i+r i \tilde{i})$ | $\begin{aligned} & \text { ti } \\ & \text { (FOC.NEG) } \end{aligned}$ | hatiuma <br> (ha+ti+uma) | hatirarĩ $(h a+t i+r a+r i \tilde{i})$ | hatiarĩ $(h a+t i+a+r i \hat{l})$ |
| NC17 | gũtirĩ $(g \tilde{u}+t i+r \tilde{l})$ | $\begin{aligned} & \text { ti } \\ & \text { (FOC.NEG) } \end{aligned}$ | gũtiuma <br> (gũ $+t i+u m a)$ | gũtirarĩ $(g \tilde{u}+t i+r a+r \tilde{i})$ | gũtiarĩ $(g \tilde{u}+t i+a+r \tilde{l})$ |

Negation of the copula follows the same pattern of negation as other verbs in Gîkũyũ, as described in 3.2.3 and 6.3. Table 26 shows the negative-inflected forms of the copula.

It is interesting to note that when the present and past forms are orthographically identical (see Table 1), as in Noun Classes 1, 2, 6, 12, and 16, the pronunciation is not the same, as the first vowel in the past form is a double vowel, and therefore long. This can be seen in the following examples:
(244) kana karĩ nyũmba
ka- ana ka- rĩ N - nyũmba
$\mathrm{NC}_{12}$ - child $\mathrm{SC}_{12}-$ COP $\mathrm{NC}_{9}$ - house
'The small child is in the house.'
(245) kana karĩ nyũmba
ka- ana ka- a- rĩ N - nyũmba
$\mathrm{NC}_{12}-$ child $\mathrm{SC}_{12}$ - PST- COP $\mathrm{NC}_{9}$ - house
'The small child was in the house (before yesterday).'

### 4.2 Predicate Nominals

In predicate nominals, the copula links the subject to the nominal predicate. As mentioned in the introduction, in the case of noun classes in the present tense, the focus particle nĩ is used instead of the copula. In negative predicate nominal clauses, the negative focus particle $t i$ is used instead of a negative copula.

Following are some examples of non-present-tense predicate nominal clauses.
(246) nyuma o mwarimũ

N- uma o mũ- arimũ
1SG- COP.BRP just $\mathrm{NC}_{1}-$ teacher
'I was just a teacher (today).'
(247) ngui yuma o nyamũ

N - gui ĩ- uma o N - nyamũ
$\mathrm{NC}_{9}-\operatorname{dog} \mathrm{SC}_{9}-$ COP.BRP just $\mathrm{NC}_{9}$ - animal
'The dog was just an animal (today).'
(248) mũtirarĩ arimũ
mũ- ti- ra- rĩ a- arimũ
2PL- NEG- NR.PST- COP NC ${ }_{2}$ - teacher
'You (pl.) were not teachers (yesterday).'
(249) ngui ĩrarĩ nyamũ

N - gui ĩ- ra- rĩ N - nyamũ
$\mathrm{NC}_{9}-\operatorname{dog} \mathrm{SC}_{9}-$ NR.PST- COP $\mathrm{NC}_{9}-$ animal
'The dog was an animal (yesterday).'
(250) tũrarĩ arimũ
tũ- ra- rĩ a- arimũ
1PL- NR.PST-COP NC ${ }_{2}$ - teacher
'We were teachers (yesterday).'
(251) mbembe ndĩarĩ nyamũ

N - bembe nd- $\mathrm{I}^{-}$a- rĩ N - nyamũ
$\mathrm{NC}_{10}$ - corn $\quad \mathrm{NEG}-\mathrm{SC}_{9}$ - PST- COP $\mathrm{NC}_{9}$ - animal
'The corn was not an animal (yesterday).'
As the following examples show, the focus particle and the negative focus particle are only used in present predicate nominals in which the subject is a noun belonging to one of the seventeen noun classes.
(252) ndĩ mwarimũ

N - rĩ mũ- arimũ
1SG- COP NC ${ }_{1}-$ teacher
'I am a teacher.'
(253) mũtirĩ arimũ
mũ-ti- rĩ a- arimũ
2PL- NEG- COP NC ${ }_{2}$ - teacher
'You (pl.) are not teachers.'
(254) ngui nĩ nyamũ

N - gui nĩ N - nyamũ
$\mathrm{NC}_{9}-$ dog $\mathrm{FOC} \mathrm{NC}_{9}$ - animal
'A dog is an animal.'
(255) mbembe ti nyamũ

N - bembeti N - nyamũ
$\mathrm{NC}_{10}$ - corn $\quad \mathrm{NEG} \mathrm{NC}_{9}$ - animal
'Corn is not an animal.'
(256) mataha nĩ irio itahagwo na kaihũri
ma-taha nĩ i- rio i- tah -ag -wo na ka- ihũri $\mathrm{NC}_{6}$ - taha $\mathrm{FOC} \mathrm{NC}_{8}$ - food $\mathrm{NC}_{8}$ - fetch -HAB -PV with $\mathrm{NC}_{12}$ - gourd 'Mataha is food scooped with a little half gourd.'

As seen above, in contrast with (252) and (253), which both used forms of the copula rĩ to join the subject and the predicate, (254)-(256) use the focus particle nĩ. The subjects in the predicate nominal clauses of (252) and (253), are 1st or 2nd person while the subjects in the predicate nominal clauses of (254)-(256) fall under noun classes.

The reason ni and ti are analyzed as focus particles instead of copulas is due to differences that result when the subject is focused. Copula rĩ is maintained in clauses where first and second person subjects are focused. Clauses with focused noun class subjectsincluding Noun Classes 1 and 2, which include 3rd person singular and 3rd person pluralhowever, prohibit nĩ between the two noun phrases.
(257) ndĩ mwarimũ

N - rĩ mũ- arimũ
1SG- COP NC ${ }_{1}-$ teacher
'I am a teacher.'
(258) nĩ niĩ ndĩ mwarimũ
nĩ niĩ $\quad \mathrm{N}$ - rĩ mũ- arimũ
FOC 1SG.PRO 1SG- COP NC ${ }_{1}$ - teacher 'It is I who am a teacher.'
(259) Wanjirũ nĩ mwarimũ

Wanjirũ nĩ mũ- arimũ
PROP FOC NC ${ }_{1}$ - teacher 'Wanjirũ is a teacher.'
(260) nĩ Wanjirũ mwarimũ
nĩ Wanjirũ mũ- arimũ
FOC PROP $\quad N_{1}{ }^{-}$- teacher
'It is Wanjirũ who is a teacher.'
(261) *nĩ Wanjirũ nĩ mwarimũ

* nĩ Wanjirũ nĩ mũ- arimũ

FOC PROP FOC NC1- teacher
In example (258) the subject is focused by adding the focus marker nĩ before the subject, and the inflected copula ndĩ remains between the subject and the nominal predicate. In example (260), however, focusing the subject results in elimination of the link between the subject and nominal predicate, so that a clause maintaining ni between the two is ungrammatical, as in (261).

### 4.3 Predicate Attributives

Predicate attributives are formed in the same way as predicate nominals: subject, followed by the copula (or the focus particle for noun class subjects in the present tense), followed by the attributive predicate. Following are some examples of non-present predicate attributives.
(262) uma mũrũaru
ũ- uma mũ- rũaru
2SG- COP.BRP JC $1_{1}$ - sick
'You (sg.) were just sick (today).'
(263) tũtirarĩ arũaru
tũ- ti- ra- rĩ a- rũaru
1PL- NEG- NR.PST- COP JC2- sick
'We were not sick (yesterday).'
(264) mĩaki ndĩrarĩ mĩnene
mĩ- aki nd- $\tilde{1}^{-}$ra- rĩ mĩ- nene
$\mathrm{NC}_{4}-$ fire NEG- $\mathrm{SC}_{4}$ - NR.PST- COP JC $4_{4}-$ big 'The fires were not big (yesterday).'
(265) kĩrĩma kĩarĩ kĩnene
kĩ- rĩma kĩ- a- rĩ kĩ- nene $\mathrm{NC}_{7}$ - mountain $\mathrm{SC}_{7}$ - PST- COP JC $\mathrm{C}_{7}$ - big 'The mountain was big (before yesterday).'

Just as with predicate nominals, in predicate attributives, the focus particle and the negative focus particle are only used in present predicate attributives in which the subject is a noun class and not 1st or 2nd person. This is shown in the following examples.
(266) tũrĩ arũaru
tũ- rĩ a- rũaru
1PL- COP JC ${ }_{2}$ - sick
'We are sick.'
(267) ndũrĩ mũrũaru
nd- ũ- rĩ mũ- rũaru
NEG- 2SG- COP JC $1_{1}$ - sick
'You (sg.) are not sick.'
(268) kĩrĩma nĩ kĩnene
kĩ- rĩma nĩ kĩ- nene
$\mathrm{NC}_{7}-$ mountain $\mathrm{FOC} \mathrm{JC}_{7}$ - big
'The mountain is big.'
(269) mĩaki ti mĩnene
mĩ- akiti mĩ- nene
$\mathrm{NC}_{4}$ - fire FOC . $\mathrm{NEG} \mathrm{JC}_{4}-$ big
'The fires are not big.'

### 4.4 Locative Clauses

When indicating the locational relation between two objects, the two are joined by the copula rĩ, and locative marker -inĩ attaches to the nominal predicate of location.
(270) mbuku ĩrĩ metha-inĩ

N- buku ĩ- rĩ N - metha-inĩ
$\mathrm{NC}_{9}$ - book $\mathrm{SC}_{9}$ - $\mathrm{COP} \mathrm{NC}{ }_{9}$-table -LOC
'The book is on the table.'
(271) ibera rĩrĩ gĩkombe-inĩ
i- bera rĩ- rĩ kĩ- kombe -inĩ $\mathrm{NC}_{5}$ - pear $\mathrm{SC}_{5}$ - $\mathrm{COP} \mathrm{NC}_{7^{-}}$cup - LOC 'The pear is in the cup.'
(272) ndĩ mũrango-inĩ

N- rĩ mũ- rango-inĩ
1SG- COP NC $3^{-}$door -LOC
'I am by the door.'
In (270) the location of the subject NP mbuku 'book' is indicated by the predicate NP metha-ini 'on the table,' and the two are joined by the inflected copula. Similarly, in (271) the subject ibera 'pear' is followed by the copula, which is then followed by the locative predicate gîkombeinĩ 'in the cup.' In (272) rĩ is inflected for the first person singular subject, followed by the predicate mũrango-inĩ 'by the door.' Since the NPs serving as locations are inanimates, locative marker -inĩ is necessary for a locative meaning. Otherwise, a predicate nominal or possessive clause is formed:
(273) ndĩ mũrango

N- rĩ mũ- rango
1SG- COP NC ${ }_{3}$ - door
'I am a door.' 'I have a door.'
When the location of the subject is predicated in relation to a place rather than to an inanimate object, this is expressed without -inĩ.
(274) ararĩ cukuru
a- ra- rĩ N - cukuru
$\mathrm{SC}_{1}$ - PST- COP NC ${ }_{9}$ - school
'He/she was at school (yesterday).'
(275) ũrĩ mũciĩ
ũ- rĩ mũ- ciĩ
$2 \mathrm{SG}-\mathrm{COP} \mathrm{NC} 33^{-}$home
'You are at home.'
(276) ngui ĩrĩ nja

N - gui $\mathrm{I}^{-}$rĩ $\mathrm{N}-\mathrm{ca}$
$\mathrm{NC}_{9}-\operatorname{dog} \mathrm{SC}_{9}-\mathrm{COP} \mathrm{NC}_{9}$ - outside
'The dog is outside.'
Attaching -inĩ to a noun that denotes a place brings more attention to the specific location within the place, resulting in:
(277) ararĩ cukuru-inĩ
a- ra- rĩ N - cukuru -inĩ
SC $_{1}$ - PST- COP NC ${ }_{9}$ - school -LOC
'He/she was around / at / inside the school (yesterday).'
(278) ũrĩ mũciĩ-inĩ
ũ- rĩ mũ- ciĩ -inĩ
2SG- COP NC ${ }_{3}$ - home -LOC
'You are on the homestead (i.e. around / inside / at the property of the home).'
In some cases, the meaning appears to be the same whether or not -inĩ is attached, such as in the following examples.
(279) ĩrĩ ngari
ĩ- rĩ N - kari
$\mathrm{NC}_{9}$ - $\mathrm{COP} \mathrm{NC}_{9}$ - car 'It's in the car.'
(280) ĩrĩ ngari-inĩ

ก̃- rĩ N - kari-inĩ
$\mathrm{NC}_{9}-\mathrm{COP} \mathrm{NC}{ }_{9}$ - Car -LOC
'It's in the car.'

It could be that the presence or absence of -ini does not result in a change in meaning in these two examples because the noun serving as the location, ngari 'car,' is neither a prototypical object nor a prototypical place. More data is needed to understand this alternation and with what nouns it occurs.

### 4.5 Possessive Clauses

Possessive clauses are typically structured in the following way:
Possessor + copula + na (oblique ‘with') + possessed NP
(281) ndĩ na mbuku

N - rĩ na N - buku
1SG- COP OBL NC ${ }_{9}$ - book
'I have a book.' (Lit. ‘I am with book.')
(282) gĩtĩ kĩrĩ na magũrũ mana
kĩ- tĩ kĩ- rĩ na ma-gũrũ ma-na
$\mathrm{NC}_{7}-$ chair $\mathrm{SC}_{7}-\mathrm{COP}$ OBL NC ${ }_{6}-$ leg $\quad \mathrm{NC}_{6}-$ four
'The chair has four legs.' (Lit. ‘The chair is with four legs.')
(283) mũrĩ na benjũ
mũ- rĩ na benjũ
2PL- COP OBL NC ${ }_{9}$.pencil
'You (PL) have pencils.' (Lit. 'You are with pencils.')
However, na is not always necessary in a possessive clause. The presence of na highlights the immediateness of the possession, so that a possessive clause lacking na indicates more permanent possession, as seen in (284)-(287).
(284) nĩtũrĩ na ngari
nĩ- tũ- rĩ na $N$ - kari
FOC- 1PL -COP OBL NC, ${ }_{9}$ - car
'We have a car (at the moment).' (Lit. 'We are with car.')
(285) nĩtũrĩ ngari
nĩ- tũ- rĩ N - kari
FOC- 1PL- COP NC ${ }_{9}$ - car
'We own a car.'
(286) ndĩ na mbuku

N - rĩ na N - buku
1SG- COP OBL NC ${ }_{9}$ - book
'I have a book (in my possession at the moment).' (Lit. 'I am with book.')
(287) ndĩ mbuku

N - rĩ N - buku
1SG- COP NC, ${ }_{9}$ - book
'I own a book.'
In addition, focus particle nĩ can be used in possessive clauses lacking na in order to distinguish them from predicate nominals.
(288) tũrĩ ngari
tũ- rĩ N- kari
1PL- COP NC9- car
'We have a car.' 'We are a car.'
(289) nĩtũrĩ ngari
nĩ- tũ- rĩ N - kari
FOC- 1PL- COP NC ${ }_{9}$ - car 'We have a car.'
(290) ndĩ mbuku

N - rĩ N - buku
1SG- COP NC, ${ }_{9}$ - book
'I have a book.' 'I am a book.'
(291) nĩndĩ mbuku
nĩ- N- rĩ N - buku
FOC- 1PL- COP NC ${ }_{9}$ - book
'I have a book.'
(288) and (290) are ambiguous since they can be possessive clauses or predicate nominals. In order to express an exclusively possessive meaning, the focus particle is prefixed onto the copula, as in (289) and (291).

Possessive clauses, as discussed in section 4.5, can also be used to show attribution. For possessive clauses to show attribution, the subject is described by the object-which is usually not a tangible object-being possessed. This is shown in the following example.
(292) ndimũ ciĩ na goro

N - timũ ci- rĩ na goro
$\mathrm{NC}_{10}$ - lime $\quad \mathrm{SC}_{10}-$ COP with $\mathrm{NC}_{14}$. expense
'The limes are expensive.' (Lit. 'The limes are with expense.')

### 4.6 Existential Clauses

Existential clauses are formed using the same structure as possessive clauses, but the possessor is a place, either definite or indefinite, indicated by noun class prefixes $h a-\left(\mathrm{NC}_{16}\right)$ or $k \tilde{u}-\left(\mathrm{NC}_{17}\right)$, respectively, on the copula.
(293) nĩkũarĩ na mũrĩmi mũbaranja
nĩ- kũ- a- rĩ na mũ- rĩmi mũ-baranja
FOC- SC $_{17}$ - RM.PST- COP OBL NC $1_{1}$ - farmer AC $_{1}$ - Frenchman
'There was a French farmer.' (Lit. 'INDEF.place was with French farmer.')
The clause in (293) predicates the French farmer's existence by prefixing the copula with $k \tilde{u}-$, the noun class marker indicating indefinite place. This, followed by the oblique marker and then the possessed noun phrase, results in a literal meaning of 'definite place is with French farmer,' which ultimately means 'there was a French farmer.'

Kũrĩ is the more general existential predicate since it refers to an indefinite place, while harĩ is used to highlight existence in a known place since it refers to a definite location. Compare the examples in (294)-(297).
(294) kũrĩ na ngoma
kũ- rĩ na N - koma
$\mathrm{SC}_{17}$ - COP OBL NC $\mathrm{NC}_{10}$ - spirit
'There are spirits.' (Lit. 'INDEF:place is with spirits.')
(295) harĩ na ngoma
ha- rĩ na N - koma
$\mathrm{SC}_{16}$ - COP OBL NC $\mathrm{NC}_{10}$ - spirit
'There are spirits in that place.' (Lit. 'DEF:place is with spirits.')
(296) gũtirĩ na kahũa
kũ- ti- rĩ na ka- hũa
$\mathrm{SC}_{17}$ - NEG- COP OBL NC ${ }_{12}$ - coffee
'There is no coffee.' (Lit. 'INDEF:place is not with coffee.')
(297) hatirĩ na kahũa
ha- ti- rĩ na ka- hũa
$\mathrm{SC}_{16}$ - NEG- COP OBL NC ${ }_{12}$ - coffee
'There is no coffee (in this place).' (Lit. 'DEF:place is not with coffee.')
(294) and (296), which use kũrĩ, express the existence of the noun phrase, while (295) and (297), which instead use harĩ, express their existence in relation to a particular location.

The oblique marker na in existential clauses is optional. The examples in (298) and (299) below show that the omission of na does not result in a change in meaning, and all examples in (293)-(297) can also optionally omit na.
(298) harĩ na benjũ metha-inĩ
ha- rĩ na benjũ $N$ - metha -inĩ
$\mathrm{SC}_{16^{-}}$COP OBL NC ${ }_{9}$.pencil $\mathrm{NC}_{9}$ - table -LOC
'There is a pencil on the table.'
(299) harĩ benjũ metha-inĩ
ha- rĩ benjũ $N$ - metha-inĩ
$\mathrm{SC}_{16}$ - $\mathrm{COP} \mathrm{NC}_{9}$. pencil $\mathrm{NC}_{9}$ - table -LOC
'There is a pencil on the table.'

### 4.7 Constructions with Koragwo

Koragwo, the habitual passive form of kora 'find', can be used instead of or in conjunction with the copula for a habitual meaning of each of the five aforementioned clause types. These constructions can be roughly translated as 'be usually found,' and can inflect for tense.
(300) koragwo
kor -ag -wo
find -HAB -PV
'be usually found'
It appears that the reason koragwo is used in these cases is that the copula, rĩ, cannot inflect for aspect. So in order to express habituality in any of the copular clauses, a serial verb construction must be used, where the first verb (koragwo) takes subject, tense, and aspect markers while the second (rî) inflects only for subject agreement.

### 4.7.1 Predicate Nominals and Attributives with koragwo

When koragwo constructions are used in predicate nominals and attributives, the copula is necessary. Some examples of this construction at use in predicate nominals and attributives are as follows.
(301) tũkoragwo tũrĩ arimũ
tũ- kor -ag -wo tũ- rĩ a- arimũ
1PL- find -HAB -PV 1PL- COP NC $\mathrm{C}_{2}$ - teacher
'We are usually teachers.'
(302) twakoragwo tũrĩ arimũ
tũ- a- kor -ag -wo tũ- rĩ a- arimũ
1PL- PST- find -HAB -PV 1PL-COP NC $\mathrm{N}_{2}$ - teacher
'We had been teachers (before yesterday).'
(303) ihũa rîkoragwo rĩrĩ rĩthaka
i- hũa rĩ- kor -ag -wo rĩ- rĩ rĩ- thaka
$\mathrm{NC}_{5}$ - flower $\mathrm{SC}_{5}$ - find -HAB -PV SC $5_{5}$ - COP JC $5^{5}$ - beautiful
'The flower is usually beautiful.'
When forming the negative of the koragwo construction, either the koragwo verb or the copula may be in the negative form. This is shown in the following examples.
(304) ihũa rĩkoragwo rĩtarĩ rĩthaka
i- hũa rĩ- kor -ag -wo rĩ- ta- rĩ rĩ- thaka
$\mathrm{NC}_{5}$ - flower $\mathrm{SC}_{5}$ - find -HAB -PV SC ${ }_{5}$ - NEG - COP JC $5_{5}$ - beautiful
'The flower is not usually beautiful.'
(305) ihũa rĩtikoragwo rĩrĩ rĩthaka
i- hũa rĩ- ti- kor -ag -wo rĩ- rĩ rĩ- thaka
$\mathrm{NC}_{5}{ }^{-}$flower $\mathrm{SC}_{5}$ - NEG - find -HAB -PV SC $5_{5}$ - COP JC $5^{-}$beautiful
'The flower is not usually beautiful.'

### 4.7.2 Locative Clauses with Koragwo

In locative clauses with koragwo, the copula is optional and the meaning is the same with or without it.
(306) nĩngoragwo (ndĩ) cukuru
nĩ- N - kor -ag -wo N - rĩ N - cukuru
FOC- 1SG- find -HAB -PV 1SG- COP NC ${ }_{9}$ - school
'I am usually at school.'
Oblique marker na can also be added for a directional meaning. However, this also results in a possessive clause:
(307) nĩngoragwo (ndĩ) na cukuru
nĩ- N - kor -ag -wo N - rĩ na N - cukuru
FOC- 1SG- find -HAB -PV 1SG- COP OBL NC ${ }_{9}$ - school
'I am usually towards (in the direction of) the school.' 'I have a school.'

### 4.7.3 Possessive Clauses with Koragwo

In possessive constructions with koragwo, both the copula and oblique marker are optional, as seen in (308).
(308) ikoragwo (irĩ) (na) mbembe
i- kor -ag -wo i- rĩ na N - bebe
$\mathrm{SC}_{8}$ - find -HAB -PV SC $8_{8}$ - COP OBL NC ${ }_{10}$ - corn
'It usually has corn.'
When the possessed noun is a place, however, na is mandatory because the clause would instead be specifically locative without it, seen in the comparison between (309) and (310).
(309) nĩngoragwo (ndĩ) na mũciĩ
nĩ- N - kor -ag -wo N - rĩ na mũ- ciĩ
FOC- 1SG- find -HAB -PV 1 SG- COP OBL NC ${ }_{3}-$ home
'I am usually towards (in the direction of) home.' 'I own a home.'
(310) nĩngoragwo (ndĩ) mũciĩ
nĩ- N - kor -ag -wo N - rĩ mũ- ciĩ
FOC- 1SG- find -HAB -PV 1SG- COP NC ${ }_{9}$ - home 'I am usually at home.'

### 4.7.4 Existential Clauses with Koragwo

Since existential clauses are a type of possessive clause, the copula and oblique marker are also optional in existential clauses with koragwo.
(311) nĩgũkoragwo (kũrĩ) (na) kahũa
nĩ- kũ- kor -ag -wo kũ- rĩ na ka- hũa
FOC- $\mathrm{SC}_{17}$ - find -HAB -PV SC $\mathrm{Cl}^{-}$- COP OBL NC $\mathrm{C}_{12}$ - coffee
'There is usually coffee (in general).'
(312) nĩhakoragwo (harĩ) (na) kahũa
nĩ- ha- kor -ag -wo ha- rĩ na ka- hũa
FOC- $\mathrm{SC}_{16}$ - find -HAB -PV SC $1_{16}$ - COP OBL NC $\mathrm{C}_{12}$ - coffee 'There is usually coffee (in this place).'

## Chapter 5

## Grammatical Relations and Argument Structure

## Lisa Jeon

Gĩkũyũ has a nominative-accusative system of grammatical relations. The formal properties that directly identify grammatical relations in the language are participant reference marking on verbs and constituent order. This chapter will describe the system for grouping the three basic semantico-syntactic roles $S, A$, and $P$ in single-argument and multiargument clauses. Definitions for S, A, and P follow Payne (1997: 133-134)):

S: the only nominal argument of a single-argument clause
A: the most AGENT-like argument of a multi-argument clause (or the argument treated morphosyntactically the same as prototypical AGENTS if no argument is a good AGENT)

P: the most PATIENT-like argument of a multi-argument clause (or the argument treated morphosyntactically the same as prototypical PATIENTS if no argument is a good PATIENT)

The chapter will conclude by summarizing the properties of Gĩkũyũ subjects, objects, and obliques.

### 5.1 Grammatical Relations

Gîkũyũ has a nominative-accusative system as illustrated in (313)-(314) below. Gĩkũyũ makes use of participant reference marking on verbs and constituent order to indicate grammatical relations. Gĩkũyũ nouns are not marked for case.
(313) Ciana nĩciraikara thĩ.
(Intransitive)
ci- ana nĩ- ci- ra- ikar-a thĩ.
$\mathrm{NC}_{8}$ - child FOC- $\mathrm{SC}_{8}$ - CR.PRES- sit -FV down
$\mathrm{S} \quad \mathrm{V}$
'The children are sitting down.'
(314) ciana nĩciraringa ngui. (Transitive)
ci- ana nĩ- ci- ra- ring-a $n$ - gui.
$\begin{array}{ccc}\mathrm{NC}_{8}-\text { child } \mathrm{FOC}-\mathrm{SC}_{8}-\text { CR.PRES- hit } & -\mathrm{FV} \mathrm{NC}_{9}-\operatorname{dog} \\ \mathrm{A} & \mathrm{V} & \mathrm{P}\end{array}$
'The children are hitting the dog.'

The verb ikara 'sit' agrees with the S argument ciana 'children' in (313) and the verb ringa 'hit' agrees with the A argument ciana 'children' in (314). This agreement is marked with the Class 8 subject prefix ci- in both (313) and (314) and illustrates that $S$ and A are treated the same morphologically. On the other hand, in (314), there is no participant reference prefix on the verb that indexes the P argument (ngui 'dog'). This shows that when a P argument occurs as a full noun phrase, it is not morphologically marked on the verb unlike the $S$ and A arguments, which are. Thus, S and A are treated as morphologically "the same" by the participant reference marking system of Gĩkũyũ, whereas $P$ is treated as morphologically "different." Further, in terms of constituent order, S, A and P occur in different positions. The full-NP S argument in (313) and the full-NP A argument in (314) both occur in pre-verbal position. By contrast, the full-NP P argument in (314) occurs in post-verbal position.

Sentences in Gîkũyũ do not always contain full-NP subject or object arguments. When they are ellipted, they are indexed on the verb using noun concord markers. This is exemplified in (315)-(316) below.

## (315) nĩciraikara thĩ.

(Intransitive)
nĩ- ci- ra- ikar-a thĩ
FOC- $\mathrm{SC}_{8}$ - CR.PRES- sit -FV down
'They (the children) are sitting down.'
(316) nĩciramĩringa. (Transitive)
nĩ- ci- ra- mĩ- ring -a
FOC- SC ${ }_{8}$ - CR.PROG- OC $9_{9}$ - hit -FV
'They (the children) are hitting it (the dog).'
There are no full-NP arguments in (315) and (316). Rather, both the ellipted $S$ and A are indexed on the verb ikara 'sit' in (315) and ringa 'hit' in (316) by the Class 8 subject prefix ci-. This S and A agreement marking occurs before the tense prefix in the verb template. In (316), there is no full-NP object and the object is indexed on the verb ringa 'hit' by means of the Class 9 object prefix mĩ-. Unlike S and A agreement marking, which occurs in the slot before the tense prefix, P agreement marking occurs after the tense prefix in the verb template. This provides further evidence for a nominative-accusative system in Gĩkũyũ. Subjects are indexed on the verb using noun concord marking that treats S and A alike morphologically. Objects are also indexed on the verb, but with noun concord marking that occurs in a different slot in the verb template.

### 5.1.1 Subjects

The most prominent grammatical relation in Gîkũyũ is the subject. Keenan (1976) presents properties that subjects exhibit cross-linguistically. Gĩkũyũ subjects demonstrate several of the most central of these characteristics: (i) subjects exist independently from the action denoted by the predicate; (ii) the subject typically expresses the agent, if a sentence contains one; and (iii) subjects usually express the topic of a sentence. Gĩkũyũ subjects generally display these properties when they occur in semantically basic (unmarked) clauses and have basic (SV or SVO) word order. Note that these are prototypical characteristics of subjects and therefore not all subjects in Gĩkũyũ will exhibit these properties. In general, however, the NP in a given sentence that exhibits the most subject properties will be the subject.

As exemplified in (317)-(318), subjects are indexed in the subject-marking slot of the verb template, and this is obligatory in all finite verb forms.
(317) kana nĩgaraikaire thĩ.
ka- ana nĩ- ka- ra- ikar-ir -e thĩ
$\mathrm{NC}_{12}$ - child FOC- $\mathrm{SC}_{12}$ - NR.PST- sit -COMPL -FV down
'The little child was sitting down (yesterday).'
(318) ciana nĩciraikaire thĩ.
ci- ana nĩ- ci- ra- ikar -ir -e thĩ.
$\mathrm{NC}_{8}-$ child $\mathrm{FOC}-\mathrm{SC}_{8}$ - NR.PST- sit -COMPL -FV down
'The children were sitting down (yesterday).'
In (317), the full-NP subject argument of the clause, kana 'little child', is indexed in the subjectmarking slot on the verb by means of the Class 12 diminutive subject prefix $k a-$. Similarly, in (318), the full NP subject argument of the clause, ciana 'children', is indexed in the subjectmarking slot on the verb with the Class 8 subject prefix ci-.

In Gĩkũyũ, an active subject can also be demoted to oblique in passive constructions, where it is marked by the preposition nĩ. This is illustrated in the pair of active and passive clauses in (319) and (320).
(319) mũtimia nĩararugire irio.
mũ- timia nĩ- a- ra- rug -ir -e i- rio.
$\mathrm{NC}_{1}-$ woman $\operatorname{FOC}-\mathrm{SC}_{1}$ - NR.PST- cook -COMPL -FV NC $\mathrm{S}_{8}$ - food
s
V
'The woman cooked food (yesterday).'
(320) irio nĩirarugirwo nĩ mũtimia.
i- rio nĩ- i- ra- rug -ir -wo nĩ mũ- timia. $\mathrm{NC}_{8}$ - food FOC- $\mathrm{SC}_{8}$ - NR.PST- cook -COMPL -PV by $\mathrm{NC}_{1}$ - woman S V

OBL
'The food was cooked by the woman.'

In the active transitive clause in (319), the full-NP A argument and active subject is mũtimia 'woman' and the full-NP P argument and object is irio 'food'. In the equivalent passive (intransitive) clause in (320), the former object irio 'food' has been promoted to subject position and is now indexed by the Class 8 subject prefix i- in the subject-marking slot on the verb. And after undergoing passivization in (320), the former subject mũtimia 'woman' is demoted to an oblique, as shown by the prepositional phrase nĩ mũtimia 'by the woman', and is not indexed by participant reference marking on the verb.

### 5.1.2 Transitive Objects

The object typically occurs post-verbally, as in (321), where the object kana 'child' occurs immediately following the verb ona 'see'.
(321) nĩndĩrona kana.
nĩ- N - ra- on -a ka- ana
FOC- 1SG- CR.PRES- see -FV NC 12 - child
'I am seeing the/a child.'

In transitive sentences that do not contain an object NP, i.e. where the full NP object argument is ellipted, objects are required to be marked on the verb using noun concord prefixes that must agree in class with the unexpressed object argument. The object marker refers to members of a particular noun class, and it is up to the hearer to work out which particular noun in the class is intended by the speaker. Typically this is either anaphoric in the discourse or present in the physical context. These noun concord prefixes are fully described in section 2.1.1 and are exemplified in (322)-(324) below.
(322) nĩndĩramwona.
nĩ- N- ra- mũ- on -a
FOC- 1SG- CR.PRES- OC ${ }_{1}$ - see -FV
'I am seeing him/her.'
(323) nĩndĩrakona.
nĩ- N - ra- ka- on -a
FOC- 1SG- CR.PRES- OC ${ }_{12}$ - see -FV
'I am seeing it (child).'
(324) nĩndĩrakĩona.
nĩ- N - ra- kĩ- on -a
FOC- 1SG- CR.PRES- OC $7_{7}$ - see -FV
'I am seeing it (mountain).'
Object marking on transitive verbs is required when there is no full-NP object. This is illustrated in (325)-(326), where the object is not marked with any noun concord prefix on the verb. As a result, (325) is ungrammatical because it does not have a full-NP object and (326) is intransitive and has a habitual meaning.
(325) * nĩndĩrona.

* nĩ- N- ra- on -a

FOC- 1SG- CR.PRES- see -FV
(326) nĩnyonaga.
nĩ- N - $\varnothing$ - on -ag -a
FOC- 1SG- CR- see -HAB -FV
'I see (habitually).'
Objects can also be fronted in left dislocation. When the object is fronted, object marking is obligatory on the verb. This is illustrated in (327)-(330), where the starred examples are ungrammatical because no object prefix occurs on the verb.
(327) kana nĩndĩrakona.
ka- ana nĩ- N - ra- ka- on -a
$\mathrm{NC}_{12}$ - child FOC-1SG- CR.PRES- $\mathrm{OC}_{12}$ - see -FV
'The child, I am seeing him/her.'
(328) *kana nĩndĩrona.

* ka- ana nĩ- N - ra- on -a
$\mathrm{NC}_{12}$ - child FOC- $1 \mathrm{SG}-\mathrm{CR}$.PRES- see -FV
(329) indo nĩndĩraciona.
i- ndo nĩ- N - ra- ci- on -a $\mathrm{NC}_{8}$ - thing FOC- $1 \mathrm{SG}-\mathrm{CR}$.PRES- $\mathrm{OC}_{8}$ - see -FV '(The) things, I am seeing them.'
(330) *indo nĩndĩrona.
* i- ndo nĩ- N - ra- on -a $\mathrm{NC}_{8}$ - thing FOC- 1 SG - CR.PRES- see -FV
(331)-(332) below show the ability of Gĩkũyũ objects to undergo passivization.
(331) mũtimia nĩararugire irio.
mũ- timia nĩ- a- ra- rug -ir -e i- rio $\mathrm{NC}_{1}-$ woman $\mathrm{FOC}-\mathrm{SC}_{1}-$ NR.PST- cook -COMPL -FV NC ${ }_{8}$ - food 'The woman cooked food (yesterday).'
(332) irio nĩirarugirwo nĩ mũtimia.
i- rio nĩ- i- ra- rug -ir -wo nĩ mũ- timia
$\mathrm{NC}_{8}$ - food FOC- $\mathrm{SC}_{8}$ - NR.PST- cook -COMPL -PV by $\mathrm{NC}_{1}$ - woman
'The food was being cooked by the woman.'

In (331), irio 'food' is the object argument in the active (transitive) clause. Because it is a fullNP, it is not indexed by an object prefix on the verb and occurs in post-verbal position. In the passive (intransitive) equivalent of this clause in (332), however, the former object irio 'food' has been promoted to subject position and is now indexed in the subject-marking slot of the verb with the Class 8 subject prefix -i.

### 5.2 Ditransitive Clauses and Double Objects

## Lisa Jeon \& Samantha Mauney

In Gĩkũyũ, the two objects in a ditransitive clause are best characterized as "primary" and "secondary" objects rather than as "direct" and "indirect" objects. This is because, as in many other languages, the two types of objects do not have the same grammatical characteristics associated with direct and indirect objects (cf. Dryer 1986; Bresnan and Moshi 1990; Bearth 2003; and Morrison 2011). Gĩkũyũ is a "symmetric" object language, since both post-verbal noun phrases can display the properties of a primary object. The following sections illustrate this and discuss the properties of Gĩkũyũ objects in ditransitive clauses.

### 5.2.1 Ditransitive Clauses

Ditransitive clauses in Gĩkũyũ have two objects. Example (333) below shows a simple transitive clause and (334) illustrates the addition of an argument to form a ditransitive.
(333) mũtimia nĩararugire irio.
mũ- timia nĩ- a- ra- rug -ir -e i- rio $\mathrm{NC}_{1}-$ woman $\operatorname{FOC}-\mathrm{SC}_{1}$ - NR.PST- cook -COMPL -FV NC $8_{8}$ - food 'The woman cooked food (yesterday).'
(334) mũtimia nĩararuğ̃ire irio kana.
mũ- timia nĩ- a- ra- rug -ĩ -ir -e i- rio ka- ana $\mathrm{NC}_{1}-$ woman $\mathrm{FOC}-\mathrm{SC}_{1}-$ NR.PST- cook -APP -COMPL - $\mathrm{FV} \mathrm{NC}_{8}-$ food $\mathrm{NC}_{12}$ - child 'The woman cooked food on the child's behalf (yesterday).'

Objects can be expressed as full-NP object arguments that occur post-verbally as in (334), where the primary object irio 'food' immediately follows the verb ruga 'cook' and the secondary object kana 'child' follows the primary object.

As mentioned above, Gĩkũyũ is a symmetric object language in which two post-verbal noun phrases can both display the properties of a primary object. With respect to word order, both the primary and secondary object can appear in immediate post-verbal position as shown in (335).
(335) mũtimia nĩararuğiire kana irio.
mũ- timia nĩ- a- ra- rug -ĩ -ir ee ka- ana i- rio $\mathrm{NC}_{1}-$ woman $\mathrm{FOC}-\mathrm{NC}_{1}-$ NR.PST- cook -APP -COMPL - $\mathrm{FV} \mathrm{NC}_{12}$ - child $\mathrm{NC}_{8}$ - food
'The woman cooked food on the child's behalf (yesterday).'
(336) mũtimia nĩararuğ̃ire irio kana.
mũ- timia nĩ- a- ra- rug -ĩ -ir -e i- rio ka- ana
$\mathrm{NC}_{1}-$ woman $\mathrm{FOC}-\mathrm{NC}_{1}-$ NR.PST- cook -APP -COMPL -FV NC ${ }_{8}$ - food $\mathrm{NC}_{12}-$ child 'The woman cooked food on the child's behalf (yesterday).'

Both (335) and (336) are grammatical, supporting the classification of Gĩkũyũ as a symmetric object language. In such instances, speakers must rely on the level of animacy of the objects and the specific context of the utterance to determine which object is primary or secondary. In ditransitive sentences, the primary object is generally the patient theme of the verb and the secondary object generally expresses another semantic role, e.g., benefactive or recipient, of the verb. For example, in the specific context of the utterance in (335)-(336), the patient theme
of the verb ruga 'cook' is irio 'food' and the semantic role of kana 'child' is benefactive. Therefore, irio 'food' is understood as the primary object and kana 'child' is understood as the secondary object regardless of the ordering of the primary and secondary object within the ditransitive clause.

An additional property of objects is their ability to be promoted to subjects in passive constructions. As exemplified in (337)-(339), both objects can undergo passivization.
(337) mũtimia nĩaraitĩrĩirie kana maĩ.
mũ- timia nĩ- a- ra- it -ĩr -ĩ -ir -i $\quad$-e ka- ana ma- aĩ $\mathrm{NC}_{1}-$ woman FOC- SC $1_{1}$ - NR.PST- pour -CONT -APP -COMPL -TRNS -FV NC $\mathrm{C}_{12}$ - child $\mathrm{NC}_{6}$ - water. 'The woman sprayed the child with water (yesterday).'
(338) kana nîkaraitĩrĩirio maĩ nĩ mũtimia.
ka- ana nĩ- ka- ra- it -ĩr -ir -ir -i -o ma- aĩ
$\mathrm{NC}_{12}-$ child FOC- $\mathrm{SC}_{12}$ - NR.PST- pour -CONT -APP -COMPL -TRNS -PV NC ${ }_{6}$ - water
nĩ mũ- timia
by $\mathrm{NC}_{1}-$ woman
'The child was sprayed with water by the woman (yesterday).'
(339) maĩ nĩmaraitĩrĩirio kana nĩ mũtimia.
ma-aĩ nĩ- ma-ra- it -ĩr -ĩ -ir -i -0 ka- ana $\mathrm{NC}_{6}-$ water $\mathrm{FOC}-\mathrm{SC}_{6}-$ NR.PST- pour -CONT -APP -COMPL -TRNS -PV NC ${ }_{12}$ - child nĩ mũ- timia
by $\mathrm{NC}_{1}-$ woman
'The water was sprayed on the child by the woman (yesterday).'

The ability of both objects to undergo passivization provides additional evidence in support of classification of Gĩkũyũ as a symmetric object language.

In ditransitive sentences that do not contain full-NP objects, i.e. where one or both of the full-NP object arguments are ellipted, either the primary or secondary object can be marked on the verb using a concord prefix that must agree in class with the unexpressed object. This is shown in (340), where the secondary object 'me' is indexed in the objectmarking slot of the verb template with the first person singular object prefix $n$-. In this example, the primary object ndumirrĩi 'message' occurs as a full-NP argument immediately following the verb tũma 'send'. In (341), the secondary object 'them' is indexed on the verb irra 'promise' with the Class 2 object prefix ma-. This example also shows that the primary object 'her' can occur as the pronoun we.
(340) nĩũrandũmĩra ndũmĩrĩri.
nĩ- ũ- ra- $\quad$ N- tũm -ĩr -a n- tũmĩrĩri
FOC- 2SG- CR.PRES- 1SG.O- send -APP -FV NC $9_{9}$ - message
'You are sending me a message.'
(341) nĩndĩramerĩra we
nĩ- N - ra- ma-ĩr -ĩr -a we
FOC- 1SG- CR.PRES- OC ${ }_{2}$ - promise -APP -FV NC ${ }_{1}$.PRO 'I am promising her to them.'

As discussed earlier in this section, secondary objects of ditransitive verbs can have semantic roles such as recipient and benefactive. Secondary objects with different types of semantic roles for ditransitive verbs can be expressed as a full-NP object argument immediately following the verb. For instance, (342) shows a simple transitive clause and (343) illustrates the addition of a secondary object that has the semantic role of recipient, kahĩ 'little boy', expressed as a full-NP object argument before the primary object thimũ 'phone' of the verb gũria 'buy'.
(342) nĩndĩragũrire thimũ.
nĩ- N- ra- gũr -ir -e thimũ
FOC- 1SG- NR.PST- buy -COMPL -FV NC, .phone
'I bought a phone (yesterday).'
(343) nĩndĩragũrĩire kahĩĩ thimũ.
nĩ- $\mathrm{N}^{-}$ra- gũr -ĩ -ir -e ka- hĩĩ thimũ.
FOC- 1SG- NR.PST- buy -APP -COMPL -FV NC ${ }_{12}$ - boy NC ${ }_{9}$. phone
'I bought the little boy a phone (yesterday).'
In ditransitive clauses, the presence of a third argument (the applied object) may be marked on the verb after the stem by the applicative suffix -ĩ / -ir (see section 3.4.6). This was already observed immediately above in (342)-(343), where the additional recipient argument co-occurs with the addition of the $-i$ applicative suffix, marking the secondary object as recipient. It is further exemplified in (344)-(345), where (344) shows a simple transitive clause and (345) again illustrates the addition of a recipient through the marking of the applicative suffix -irr on the verb.
(344) nĩndĩratũma ndũmĩrĩri.
nĩ- N - ra- tũm -a n- tũmĩrĩri
FOC- 1SG- CR.PROG- send $-\mathrm{FV}^{-1} \mathrm{NC}_{9}$ - message
'I am sending a message.'
(345) nĩndĩragũtũmĩra ndũmĩrĩri.
nĩ- N - ra- kũ- tũm -ĩr -a n- tũmĩrĩri
FOC- 1SG- CR.PROG- O2SG- send -APP -FV NC $9_{9}$ - message
'I am sending you a message.'
In (345), the applicative suffix -ĩr is marked on the verb tũma 'send' to denote that the recipient 'you' indexed on the verb by the second person singular object prefix kũ-, is in fact an object. The primary object ndumĩrĩri 'message' occurs immediately following the verb.

The applicative is obligatory when the secondary object has the semantic role of benefactive. This is illustrated in (346). In this example, the applicative suffix -irr is marked on the verb ruga 'cook' to explicitly indicate that the secondary object kana 'child' expresses the semantic role of benefactive rather than recipient. The secondary object then occurs following the primary object irio 'food', which immediately follows the verb.
(346) mũtimia nĩararugĩire irio kana.
mũ- timia nĩ- a- ra- rug -ĩ -ir -e i- rio ka- ana $\mathrm{NC}_{1}$ - woman FOC- $\mathrm{SC}_{1}$ - NR.PST- cook -APP -COMPL -FV NC $\mathrm{S}_{8}$ - food $\mathrm{NC}_{12}$ - child 'The woman cooked food on the child’s behalf (yesterday).'

When used with the passive, the applicative can promote a peripheral semantic role like benefactive to the grammatical role of subject. This is exemplified in (347)-(349). In these examples about the construction of a stone fence built around a tree, (347) shows a simple transitive sentence; (348) shows an active ditransitive sentence with the addition of a third argument, marked on the verb after the stem by the applicative suffix -irr; and (349) shows the passive equivalent of (348).
(347) makire rũgĩrĩ rwa ihiga.
ma-ak -ir -e rũ- gĩrĩ rũ- a i- higa
sc $_{2}-$ build -COMPL -FV NC ${ }_{11}$ - fence $\mathrm{AC}_{11}$ - $\mathrm{ASSOC}^{-} \mathrm{NC}_{5}$ - stone
'They built a fence of stone (before yesterday).'
(348) magĩakĩra mũtĩ rũgiri rũũthiũrũrũkĩirie rwa mahiga.
ma-kĩ- ak -ĩr -a mũ- tĩ rũ- giri
$\mathrm{SC}_{2}-$ SEQ- build -APP -FV NC $\mathrm{N}_{3}$ - tree $\mathrm{NC}_{11}$ - fence
rũ- thi -ũrũr -ũk $\quad-i ̃ \quad$-ir $\quad$-i $\quad$-e rũ- a ma-higa
$\mathrm{SC}_{11^{-}}$go INTENS -REVERS.MID -APP -COMPL -TRNS -FV AC $1_{11^{-}}$ASSOC NC $6^{-}$- stone
'Then they built for the tree a fence of stones that surrounds it (before yesterday).'
(349) ũgĩakĩrwo, ũgĩthiũrũrũkĩrio na mahiga.
ũ- kĩ- ak -ĩr -wo ũ- kĩ- thi -ũrũr -ũk $\quad$-ĩr - -i $\quad$-o
$\mathrm{NC}_{3}$ - SEQ- build -APP -PV NC $3^{-}$- SEQ- go -INTENS -REVERS.MID -APP -TRNS -PV
na ma- higa
by $\mathrm{NC}_{6}$ - stone
'The tree was then built for, and encircled with stones.'
In the active ditransitive sentence in (348), the applicative is marked on both verbs (aka 'build' and 'surround') to denote that the NP mũti 'tree' is the secondary object and has the semantic role of benefactive. In the passive equivalent in (349), the benefactive tree itself (indexed on the verb with the Class 3 subject prefix $\tilde{u}-$ ) serves as the grammatical subject due to the use of the applicative and the passive on both verbs.

The examples in (350)-(352) below demonstrate that the applicative can also promote locatives to objects.
(350) mũtimia nĩagũikaire gĩtĩ-inĩ
mũ- timia nĩ- a- kũ- ikar -ir -e gĩtĩ -inĩ
$\mathrm{NC}_{1}$ - woman FOC- SC ${ }_{1}$ - CR.PST- sit -COMPL - $\mathrm{FV} \mathrm{NC}_{7}$. chair -LOC
'The woman was sitting on the chair (today).'
(351) mũtimia nĩagũikarĩire gĩtĩ
mũ- timia nĩ- a- kũ- ikar-ĩ -ir -e gĩtĩ
$\mathrm{NC}_{1}-$ woman $\mathrm{FOC}-\mathrm{SC}_{1}$ - CR.PST- sit -APP -COMPL -FV NC ${ }_{7}$.chair
'The woman was sitting on the chair (today).' (Lit. 'The woman was sitting the chair.')
(352) * mũtimia nĩagũikarĩire gĩtĩ-inĩ

* mũ- timia nĩ- a- kũ- ikar -ĩ -ir ee gĩtĩ -inĩ $\mathrm{NC}_{1}-$ woman FOC- SC $1_{1}$ - CR.PST- sit -APP -COMPL -FV NC7.chair -LOC

In (350), the NP gĩtĩ 'chair' is marked with the locative suffix -inĩ and occurs as an oblique to express a locative relation. By contrast, in (351), the applicative suffix - $\tilde{i}$ is marked on the verb ikara 'sit' to indicate that the NP gĩti 'chair', has been promoted from an oblique to a grammatical object. The ungrammatical example in (352) further shows that when the applicative marker occurs on the verb, the object cannot be marked with the locative suffix -ini at the same time, since the use of the applicative denotes that it can no longer be an oblique.

Thus, the applicative can add an applied object to a transitive clause, which can have non-prototypical semantic roles for object such as recipient, benefactive, and locative.

### 5.2.2 Verbs with Two Object Slots

Most ditransitive verbs in Gĩkũyũ have only one object-marking slot in the verb template. However, for a small subset of verbs, like ikia 'throw!' inyerera 'look after carefully!' ira 'promise!' and twara 'take!' the primary and secondary object can each be expressed on the verb using noun concord markers, thus giving evidence for the possibility of two object slots. In such cases, the object concord for the primary object marker precedes the one for the secondary object. In (353), for instance, the class 2 primary object ma- precedes the class 1 secondary object mũ-. Examples (354) and (355) illustrate the same principle.
(353) nĩndĩramamũtwarĩire.
nĩ- N- ra- ma- mũ-twar -ĩ -ir -e
FOC- 1SG- NR.PST- OC ${ }_{2}-\mathrm{OC}_{1}-$ take -APP -COMPL -FV
'I took them to him/her (yesterday).'
(354) nĩaramũmamenyerera.
nĩ- a- ra- mũ- ma- menyerer -a
FOC- SC ${ }_{1}$ - NR.PST- OC $1_{1}-$ OC $_{2}$ - look.after -FV
'She is looking after him/her carefully for them.'
(355) nĩmaramũmũñriire.
nĩ- ma- ra- mũ- mũ- ĩr -ĩ -ir -e
FOC- SC2- NR.PST- OC1- OC1- promise -APP -COMPL -FV
'They promised her to him (yesterday).'
It is uncommon to our consultant, but not unattested, to mark a third person singular primary object and third person plural secondary object on the verb. Example (356) below, for instance, is very common and acceptable to our consultant, whereas (357) is uncommon but acceptable to her, and (358) is ungrammatical to her.
(356) nĩndĩramũmatwarĩire
nĩ- N - ra- mũ- ma-twar -ĩ -ir -e
FOC- 1SG- NR.PST- OC $1_{1}-$ OC $_{2}-$ take -APP -COMPL -FV
'I took him/her to them.'
(357) nĩndĩramũmaikĩirie.
nĩ- N - ra- mũ- ma-ik -ĩ -ir -i $\quad$-e
FOC- 1SG- NR.PST- OC $1_{1}-O C_{2}$ - threw -APP -COMPL -TRNS -FV
'I threw him/her to them.'
(358) * nĩndĩramũmerira.

* nĩ- N- ra- mũ- ma-ĩr -ir -a

FOC- 1SG- NR.PST- OC1- OC2- promise -COMPL -FV
Ambiguity can arise because ditransitive verbs allow both primary and secondary objects to be expressed on the verb at the same time. In such cases, speakers must rely on context to determine the referent. This is illustrated in (359).
(359) nĩmamũmũĩr̃ire.
nĩ- ma- mũ- mũ- ĩr -ĩ -ir -e
FOC- SC $_{2}-$ OC $_{1}-O C_{1}-$ promise -APP -COMPL -FV
'They promised him/her to him/her (before yesterday).'
In (359), both the primary and secondary object 'him/her' are marked with the third person singular object prefix mũ- in the two object slots on the verb irra 'promise.' Therefore, it is up to the hearer to work out which referent is intended by the speaker as the primary or secondary object. Typically this is either anaphoric in the discourse or determined by the physical context of the utterance.

### 5.3 Obliques

## Lisa Jeon

Obliques are noun phrases that do not bear a grammatical relation to the verb and therefore are not core arguments. In Gĩkũyũ, there may be multiple obliques in a sentence. In unmarked constructions with normal word order, obliques occur following any objects. There are several different types of obliques in Gĩkũyũ. One type of oblique noun phrase occurs immediately following the preposition na 'and/with/by'. These obliques are usually comitatives as in (360) or instruments as in (361) below.
(360) mũtimia nĩaracokire mũciĩ na ciana.
mũ- timia nĩ- a- ra- cok -ir -e mũ- ciĩ na ci- ana $\mathrm{NC}_{1}-$ woman $\mathrm{FOC}-\mathrm{SC}_{1}-$ NR.PST- return -COMPL -FV NC ${ }_{3}-$ home with $\mathrm{NC}_{8^{-}}$- child 'The woman returned home with the children (yesterday).'
(361) kũruga irio ndicĩhiũhagia na mwaki. n
kũ- rug -a i- rio $N$ - cĩ- hiũh -ag -i -a na mũ-aki $\mathrm{NC}_{15}$ - cook - $\mathrm{FV} \mathrm{NC}_{8}$ - food $1 \mathrm{SG}-\mathrm{OC}_{8}$ - warm - HAB -TRNS - FV with $\mathrm{NC}_{3}$ - fire
'To cook the food, I warm it up with fire (habitually).'
Locatives that express spatial relations are another oblique type in Gîkũyu and are marked with the general locative suffix -inĩ 'in/on/at/by', or by associative constructions such as igũrũ 'above/over/on', and rungu 'under/below'. These obliques are exemplified in (362)-(364).
(362) njîkĩrire thitembũ mbahaca-inĩ.

N- $\varnothing$ - $\quad$ îk -ir $\quad$-e thitembũ $m-$ bahaca -inĩ
1SG- CR.PST- put -COMPL -FV NC ${ }_{9}$.stamp $\mathrm{NC}_{9}$ - envelope -LOC
'I put the stamp in/on/at/by the envelope (today).'
(363) njĩkĩrire thitembũ igũrũ rĩa mbahaca.

N- $\varnothing$ - $\quad$ îk -ir -e thitembũ i- gũrũ rĩ- a m- bahaca
1SG- CR.PST- put -COMPL -FV NC ${ }_{9}$.Stamp $\mathrm{NC}_{5}$ - above $\mathrm{AC}_{5}-\mathrm{ASSOC}^{\mathrm{NC}} \mathrm{S}_{9}$ - envelope.
'I put the stamp above/over/on the envelope (today).'
(364) njîkĩrire thitembũ rungu rwa mbahaca.

N- $\varnothing$ - îk -ir -e thitembũ rũ- ungu rũ- a m- bahaca. 1SG- CR.PST- put -COMPL -FV NC ${ }_{9}$.stamp $\mathrm{NC}_{11}$ - below $\mathrm{AC}_{11}$ - $\mathrm{ASSOC}^{\mathrm{NC}} \mathrm{g}_{9}$ - envelope 'I put the stamp under/below the envelope (today).'

### 5.4 Summary

This chapter has discussed the system of marking grammatical relations in Gîkũyũ as well as the grammatical properties of subjects, objects, and obliques.

First, this chapter has demonstrated that Gĩkũyũ has a nominative-accusative system for grammatical relations. It treats S and A as morphologically the same but P as morphologically different. It also treats $S$ and $A$ as syntactically the same but $P$ as syntactically different. This system of grammatical relations is reflected in both the participant reference marking on verbs and in the constituent order of $\mathrm{S}, \mathrm{A}$, and P .

Second, subjects demonstrate some of the most important characteristics of subjects as outlined in Keenan (1976) and can be expressed through a noun phrase or through agreement affixes on the verb. Subject agreement is obligatory in all finite verb forms.

Objects are the other core grammatical relation in Gĩkũyũ. Ditransitive clauses have a primary and secondary object which are generally argument noun phrases that occur post-
verbally. Object marking occurs as a noun concord prefix on the verb when the full-NP argument is not expressed. In double object constructions, arguments with non-prototypical semantic roles for objects (e.g. recipients, benefactives, and locatives) can be expressed through the marking of the applicative suffix on the verb, which denotes that an NP with a non-prototypical semantic role is in fact a grammatical object. Although most ditransitive verbs in Gĩkũyũ have only one object-marking slot in the verb template, for a small subset of verbs the primary and secondary object can be expressed on the verb using noun concord markers that take two object slots. Gĩkũyũ also displays the behavior characteristic of a symmetric object language in that both post-verbal noun phrases can display the properties of a primary object.

Finally, obliques are nominal clause elements that do not bear a grammatical relation to the verb and are not core arguments in Gĩkũyũ. Obliques occur following any objects in a sentence and include many types such as comitatives, instruments, and locatives.

## Chapter 6

## Pragmatically-Marked Clause Types

This chapter deals with common types of non-declarative main clauses: yes/no questions, content questions, negation, imperatives, and monoclausal focus and topicalization constructions.

### 6.1 Yes/No Questions

Anaí Navarro

### 6.1.1 Asking Yes/No Questions

Yes/no questions differ from declarative statements only in intonation. Yes/no questions have clause-final falling intonation but are otherwise the same as their statement equivalents since word order does not change and there is no question particle. This is shown in the contrast between sentences (365) (a declarative) and (366) (an interrogative).
(365) Wanjirũ nĩ mwarimũ.

Wanjirũ nĩ mũ- arimũ
PROP FOC NC $1_{1}$ - teacher
'Wanjirũ is a teacher.'


Figure 6: Sample declarative intonation
(366) Wanjirũ nĩ mwarimũ?

Wanjirũ nĩ mũ- arimũ
PROP FOC NC $1_{1}$ - teacher
'Is Wanjirũ a teacher?'


Figure 7: Sample yes/ no question intonation

In Figure 6, which displays prototypical declarative intonation, the pitch stays relatively constant throughout the end of the clause, while Figure 7 shows the pitch rising slightly before it falls at the end of the sentence.

If a negative response is expected, $t i$ (NEG) can be used as the copula instead of the affirmative focus particle nĩ. (See section 4.2 on the use of focus particles as the copula in present-tense predicate nominals for all noun classes.)
(367) Wanjirũ ti mwarimũ?

Wanjirũti mũ- arimũ
PROP NEG NC ${ }_{1}$ - teacher
'Wanjirũ is not a teacher?'

### 6.1.2 Tag Questions

A secondary way to form yes/no questions is by adding a tag to the declarative statement: kana, nĩguo, or kana tiguo. Kana 'or,' and nĩguo 'is it so', are used to request confirmation of the preceding statement.
(368) Wanjirũ nĩ mwarimũ, kana?

Wanjirũ nĩ mũ- arimũ kana
PROP FOC NC ${ }_{1}$ - teacher or
'Wanjirũ is a teacher, right?'
(369) Wanjirũ nĩ mwarimũ, nĩguo?

Wanjirũ nĩ mũ- arimũ nĩ- guo
PROP FOC NC ${ }_{1}$ - teacher FOC- so
'Wanjirũ is a teacher, right?'
(370) Wanjirũ ti mwarimũ, kana?

Wanjirũ ti mũ- arimũ kana
PRO NEG $\mathrm{NC}_{1}$ - teacher or
'Wanjirũ is not a teacher, right?'
(371) Wanjirũ ti mwarimũ, nĩguo?

Wanjirũti mũ- arimũ nĩ- guo
PROP NEG NC ${ }_{1}$ - teacher FOC- so
'Wanjirũ is not a teacher, right?'

Kana tiguo 'or is it not so,' requests disconfirmation:
(372) Wanjirũ nĩ mwarimũ, kana tiguo?

Wanjirũ nĩ mũ- arimũ kana ti- guo PROP FOC NC ${ }_{1}$ - teacher or NEG- so
'Wanjirũ is a teacher, or is that not right?'
(373) Wanjirũ ti mwarimũ, kana tiguo?

Wanjirũti mũ- arimũ kana ti- guo
PROP NEG NC $1_{1}$ - teacher or NEG- so
'Wanjirũ is not a teacher, or is that not right?'
As seen in examples (368)-(373), tags with both positive and negative polarity can be used following a statement containing either the affirmative or negative copula. This is also true with more prototypical verbs:
(374) nĩmũrugĩte, nĩguo?
nĩ- mũ- rug -ĩt -e nĩ- guo
FOC- 2PL- cook -PERF -FV FOC- so
'You (PL) have cooked, right?'
(375) nĩmũrugĩte, kana tiguo?
nĩ- mũ- rug -ĩt -e kana ti- guo
FOC- 2PL- cook -PERF -FV or NEG- so
'You (PL) have cooked, or is that not right?'
(376) mũtirugĩte, nĩguo?
mũ- ti- rug -ĩt -e nĩ- guo
2PL- NEG- cook -PERF -FV FOC- so
'You (PL) have not cooked, right?'
(377) mũtirugĩte, kana tiguo?
mũ- ti- rug -ĩt -e kanati- guo
2PL- NEG- cook -PERF -FV or NEG- so
'You (PL) have not cooked, or is that not right?'

### 6.1.3 Answering Yes/No Questions

In answering yes/no questions, $\tilde{n}$ is used for an affirmative response, and aca is used for a negative response. In addition, repetition of the interrogative clause in declarative intonation, with the appropriate changes for person and polarity, is optional.
(378) Q: wĩ na benjũ?
ũ- rĩ na benjũ
2SG- COP with $\mathrm{NC}_{9}$.pencil
'Do you have a pencil?'
(379) Q: wĩ na benjũ?
ũ- rĩ na benjũ
2SG- COP with $\mathrm{NC}_{9}$.pencil
‘Do you have a pencil?'

A: ĩĩ, (ndĩ na benjũ)
ก̃ N - rĩ na benjũ
yes 1SG- COP with $\mathrm{NC}_{9}$.pencil
'Yes, (I have a pencil)'
A: aca, (ndirĩ na benjũ)
aca $N$ - ti- rĩ na benjũ
no 1SG- NEG- COP with $\mathrm{NC}_{9}$.pencil
'No, (I don't have a pencil)'

Less definitive answers than $\tilde{\imath} \tilde{1}$ and aca are ndiũ̃, anga, and hihi, the former meaning 'I don't know' and the latter two each meaning 'maybe'.

### 6.2 Content Questions

Jessica Li
Content questions, for question words other than 'why' and 'how', are typically formed by placing a question word in situ in a clause. Questions can also be formed as focus questions, where the question word comes at the beginning of the clause in conjunction with the focus particle nĩ. 'Why' and 'how' seem to be more flexible in terms of where they can be placed than other question words. There are no other morphosyntactic features specific to question-word questions-there is no verb-fronting, interrogative particle, or other indications aside from the question word itself. Table 27 lists the main question-words of Gĩkũyũ.

Table 27: Question words

| QUES. WORD | GLOSS |
| :---: | :---: |
| $\tilde{\mathrm{u}}$ | who |
| kĩı | what |
| rĩ | when |
| kũ | where (indefinite) |
| ha | where (definite) |
| nîkĩ | why |
| atĩa | how |
| igana | how many |
| rîku | which |
| $\tilde{\mathrm{u}}$ | whose |

### 6.2.1 'Who'

The base question word for 'who' is $\tilde{u}$, while a derived form is nũu . Nũu is a combination of the focus particle nĩ and $\tilde{u}$.

The base question word $\tilde{u}$ is used in situ. When the question word occurs in situ at the beginning of a clause, or if a focus question is formed wherein the question word is moved to the front of the clause, the focused variant of the question word nũu is used.

Following are some examples of 'who' questions in which the base question word $\tilde{u}$ is used.
(380) Nĩwe ũ?
nĩ- we $\tilde{u}$
FOC- 2SG.PRO who
'Who are you?'
(381) Wangũi nũũ?

Wangũi nĩ- ũ
PROP FOC-who
'Who is Wangũi?'
(382) Wangũi nĩwe ũ?

Wangũi nĩ- we $\tilde{u}$
PROP FOC- 3SG.PRO who
'Who is Wangũi?'
(383) Mwarimũ waku nũũ?
mũ- arimũ ũ- aku nĩ- ũ
$\mathrm{NC}_{1}$ - teacher $\mathrm{AC}_{1}$ - 2SG.POS FOC- who
'Who is your teacher?'
(384) Mwarimũ waku nĩwe ũ?
mũ- arimũ ũ- aku nĩ- we ũ $\mathrm{NC}_{1}-$ teacher $\mathrm{AC}_{1}-2$ 2SG.POS FOC- 3 SG.PRO who 'Who is your teacher?'
(385) Ũraikĩria mũbira ũ?
ũ- ra- ik -ĩr -i $\quad$-a mũ-bira ũ 2SG.SUBJ- CR.PRES- throw -APP -TRNS -FV NC $3^{-}$- ball who 'Who are you throwing the ball to?'
(386)

Ndĩrahĩmbĩria ũ?
N- ra- hĩmb -ĩr -i -a ũ
1SG.SUBJ- CR.PRES- hug -APP -TRNS -FV who
'Who am I hugging?'
As can be seen in the above examples, the question word occurs in situ, and when it is preceded by a focus particle-which acts in place of a copula, as discussed in 4.2-it becomes nũũ.

The following examples show that when a question word occurs in situ at the beginning of a clause, it becomes nũũ.
(387) Nũũ ũragũikĩria mũbira?
nĩ- $\mathfrak{u}$ ũ- ra- gũ- ik -ĩr -i $\quad$-a mũ-bira
FOC- who RC $1_{1}$ - CR.PRES- 2SG.OBJ- throw -APP -TRNS -FV NC ${ }_{3}-$ ball 'Who is throwing you the ball?'
(388) Nũũ ũraikia mũbira?
nĩ- ũ ũ- ra- ik -i -a mũ- bira
FOC- who $\mathrm{RC}_{1}-$ CR.PRES- throw -TRNS -FV NC ${ }_{3}$ - ball
'Who is throwing the ball?'
(389) Nũũ ũrahĩmbĩria?
nĩ- ũ $\mathfrak{u}-$ ra- hĩmb-ĩr -i -a
FOC- who RC $1_{1}$ - CR.PRES- hug -APP -TRNS -FV
'Who is hugging me?'

As can be seen in the previous examples, the question word, which would occur at the beginning of the clause in situ, is made into a focus question word.

The following examples show focus questions in which the question word does not remain in situ but instead is focused and moved to the beginning of the clause.
(390) Nũũ mwarimũ waku?
nĩ- $\mathfrak{u}$ mũ- arimũ ${ }^{\text {un }}$ aku
FOC- who $\mathrm{NC}_{1}-$ teacher $\mathrm{AC}_{1}-2 \mathrm{SG}$.POS
'Who is it who is your teacher?'
(391) Nũũ ũraikĩria mũbira?
nĩ- $\mathfrak{u}$ ũ- ra- ik -ĩr -i $\quad$-a mũ-bira FOC- who 2SG- CR.PRES- throw -APP -TRNS -FV NC $3^{-}$ball 'Who is it that you're throwing the ball to?'
(392) Nũũ ndĩrahĩmbĩria?
nĩ- $\mathfrak{u}$ N- ra- hĩmb-ĩr -i -a
FOC- who 1SG- PRES- hug -APP -TRNS -FV
'Who is it that I'm hugging?'

### 6.2.2 'What'

'What', like 'who', manifests itself in two question words: kĩ̃ and nîkĩ. The latter is a construction formed from the addition of nĩ, the focus particle, and kin 'what'. kĩ occurs at the end of a clause, while nîkĩ̃ occurs at the beginning.

This follows the same pattern as 'who'. When the question word occurs in situ, it occurs as the base question word kĩ. When the question word occurs at the beginning of a clauseeither in situ or moved as a focus question-it occurs as nîkĩ.

Following are some examples of the base question word in situ.
(393) Gĩkĩ nĩ kĩ?
gĩkĩ nĩ kĩ
PROX.DEM ${ }_{7}$ FOC what
'What is this?'
(394) Wonire kĩ?
ũ- a- on-ir -e kĩi
2SG.SUBJ- CR.PST- see -COMPL-FV what
'What did you see (today)?'
(395) Ũikirie kĩ?
ũ- ik -ir -i $\quad$-e kĩ
2SG.SUBJ- throw -COMPL -TRNS -FV what
'What did you throw (today)?'
The following examples show the question word appearing in situ at the beginning of a clause. Because it occurs at the beginning of the clause, it becomes the focused form nîkĩ̃.
(396) Nĩkĩ̃ kĩragũa?
nĩ- kĩĩ kĩ- ra- gũ -a
FOC- what $\mathrm{SC}_{2}$ - CR.PRES- fall -FV
'What is falling?'
(397) Nĩkĩĩ wonire?
nĩ- kĩ ũ- a- on -ir -e
FOC- what 2SG.SUBJ- CR.PST- see -COMPL-FV
'What is it that you saw?'
(398) Nĩkĩĩ ũikirie?
nĩ- kĩĩ ũ- ik -ir -i
FOC- what 2SG.SUBJ- throw -COMPL -TRNS -FV
'What is it that you threw?'

### 6.2.3 'When'

The question word for 'when'-rĩ-occurs after the verb, where time words usually occur in Gîkũyũ sentences. 'When', like 'who' and 'what', can also be prefixed with focus particle nĩ to form nĩrĩ. Some examples are as follows.
(399) Wathire rĩ?
ũ- a- thi -ir -e rĩ
2SG.SUBJ- RM.PST- go -COMPL -FV when
'When did you go?'
(400) Nĩrĩ wathire?
nĩ- rĩ ũ- a- thi -ir -e
FOC- when 2SG.SUBJ- RM.PST- go -COMPL -FV
'When was it that you went?'
(401) Ũrĩthiĩ rî?
ũ- rĩ- thi $-\tilde{1}$ rĩ
2SG.SUBJ- NR.FUT- go -FV when 'When (today) will you go?'
(402) Nĩrĩ ũrĩthiî?
nĩ- rĩ ũ- rĩ- thi - $\tilde{1}$
FOC- when 2SG.SUBJ- NR.FUT- go -FV
'When (today) is it that you will go?'

### 6.2.4 'Where' (Definite and Indefinite)

There are two question words in Gĩkũyũ for 'where': ha and kũ. Ha refers to a definite location and $k \tilde{u}$ refers to an indefinite location. Ha and $k \tilde{u}$ are also the noun class prefixes for Noun Classes 16 and 17, respectively. The definite location is used when a specific place is known. The indefinite location is used when referring to thereabouts other than a specific place. These question words can also be focused using nîha and nîkũ, in the same way as 'who', 'what', and 'when'.

Definite location and indefinite location are relative. In general, definite location is used when the speaker knows that what they are speaking about is in a specific location. Indefinite location is used when the speaker does not know the specifics about the location of the object. For example, if a speaker knows specifically that the object is on Rice's campus, as opposed to possibly being somewhere in Houston, the definite location is used. As another example, if a speaker knows that the object is specifically in Houston, as opposed to possibly being anywhere in the United States, the definite location is used. The indefinite location is used when a more precise location is not known, but precise and imprecise are relative to each usage.

Following are some examples using indefinite location:
(403) Marĩ kũ?
ma-rĩ kũ
$\mathrm{SC}_{2}-$ COP where.INDEF
'Where (indefinite) are they (people)?'
(404) Mbuku ciĩ kũ?

N - buku i- rĩ kũ
$\mathrm{NC}_{10^{-}}$book $\mathrm{SC}_{10^{-}}$COP where.INDEF
'Where (indefinite) are the books?'
(405) Ciĩ kũ mbuku?
i- rĩ kũ N- buku
$\mathrm{SC}_{10}$ - COP where.INDEF $\mathrm{NC}_{10}$ - book
'Where (indefinite) are the books?'
(406) Nîkũ mbuku cirĩ?
nĩ- kũ $\quad \mathrm{N}$ - buku i- rĩ
FOC- where.INDEF NC ${ }_{10}$ - book ${S C_{10}-\text { COP }}$
'Where (indefinite) is it that the books are?'
(407) Wathiĩ kũ?
ũ- a- thi -ĩ kũ
2SG.SUBJ- IMMED.FUT- go -FV where.INDEF
'Where (indefinite) are you going?'
(408) Nĩkũ wathiĩ
nĩ- kũ $\tilde{u}^{-}$a- thi -ĩ
FOC- where.INDEF 2SG.SUBJ- IMMED.FUT- go -FV
'Where (indefinite) is it that you are going?'
Following are some examples using definite location:
(409) Ciĩ ha?
i- rĩ ha
$\mathrm{SC}_{10}$ - COP where.DEF
'Where (definite) are they (books)?'
(410) Nĩha cirĩ?
nĩ- ha i- rĩ
FOC- where.DEF SC ${ }_{10}$ - COP
'Where (definite) is it that they (books) are?'
(411) Wathiĩ ha?
ũ- a- thi -ĩ ha
2SG.SUBJ- IMMED.FUT- go -FV where.DEF
'Where (definite) are you going?'

### 6.2.5 'Why’

The question word for 'why'-nîkĩ-usually occurs at the end of the clause, but can occur elsewhere as well.
(412) Kĩũra kĩrũgire mai-inĩ nîkĩ?
kĩ- ũra kĩ- rũg -ir -e ma- i- inĩ nîkĩ
$\mathrm{NC}_{7}-$ frog $\mathrm{SC}_{7}-$ jump -COMPL - $\mathrm{FV} \mathrm{NC}_{6}$ - water -LOC why 'Why did the frog jump in the water?'
(413) Kahĩĩ gethire kĩũra nîkĩ?
ka- hĩĩ ka- ĩth -ir -e kĩ- ũra nĩkĩ
$\mathrm{NC}_{12}$ - boy $\mathrm{SC}_{12}$ - search -COMPL - $\mathrm{FV} \mathrm{NC} \mathrm{N}_{7}$ - frog why
'Why did the boy search for the frog?'
(414) Ũkenete nîkĩ?
ũ- ken -et -e nîkĩ
2SG.SUBJ- happy -PERF -FV why
'Why are you happy?'
When forming a why question, the word for why can also occur in other locations, as follows.
(415) Nĩkĩ kĩũra kĩrũgire mai-inĩ?
nîkĩ kĩ- ũra kĩ- rũg -ir -e ma-i -inĩ
why $\mathrm{NC}_{7}$ - frog $\mathrm{SC}_{7}$ - jump -COMPL -FV NC $6_{6}$ - water -LOC 'Why did the frog jump in the water (today)?'
(416) Kĩũra, nîkĩ kĩrũgire mai-inĩ?
kĩ- ũra nîkĩ kĩ- rũg -ir -e ma-i -inĩ
$\mathrm{NC}_{7}-$ frog why $\mathrm{SC}_{7}$ - jump -COMPL -FV NC $6_{6}$ - water -LOC
'Why did the frog jump in the water (today)?'

### 6.2.6 'How'

The question word for how-atĩa-usually occurs at the end of the clause.
(417) Ũnyitaga kĩũra atĩa?
ũ- nyit -ag -a kĩ- ũra atĩa
2SG.SUBJ- catch -HAB -FV NC $7_{7}$ - frog how
'How do you (2SG) catch a frog (habitually)?'
(418) Kĩũra kĩnyitagwo atĩa?
kĩ- ũra kĩ- nyit -ag -wo atĩa
$\mathrm{NC}_{7}$ - frog $\mathrm{SC}_{7}$ - catch - HAB -PV how
'How is a frog caught?'
(419) Kahĩĩ kanyitire kĩũra atĩa?
ka- hĩĩ ka- nyit -ir -e kĩ- ũra atĩa
$\mathrm{NC}_{12}$ - boy $\mathrm{SC}_{12}$ - catch -COMPL - $\mathrm{FV} \mathrm{NC}_{7}$ - frog how
'How did the boy catch the frog (before yesterday)?'
(420) Ũkire cukuru atĩa ũmũthĩ kĩroko?
ũ- ũk -ir -e cukuru atĩa ũ- mũthĩ kĩ- roko
2SG.SUBJ- come -COMPL -FV NC ${ }_{9}$.school how $\mathrm{NC}_{14}$ - today $\mathrm{NC}_{7}$ - morning
'How did you come to school this morning?'
It can also be focused, like other question words, as follows.
(421) Nĩatĩa kĩũra kĩnyitagwo?
nĩ- atĩa kĩ- ũra kĩ- nyit -ag -wo
FOC- how $\mathrm{NC}_{7}$ - frog $\mathrm{SC}_{7}$ - catch -HAB -PV
'How is it that a frog is caught?'

### 6.2.7 'How Many’

The question word for how many-igana-is a bound stem that agrees with the noun class of the noun it modifies, and occurs post-nominally, where quantifiers occur in Gîkũyũ. The concord follows the same noun class patterns as with attributives. Table 28 shows the formation of 'how many' for all noun classes that occur in the plural ( $2,4,6,8,10,13,16,17$ ), which are the only noun classes that can form this construction.

Table 28: Interrogative quantifiers for all plural noun classes

| CLASS | INTERROGATIVE <br> QUANTIFIER |
| :---: | :---: |
| $\mathrm{NC}_{2}$ | aigana |
| $\mathrm{NC}_{4}$ | Ĩigana |
| $\mathrm{NC}_{6}$ | maigana |
| $\mathrm{NC}_{8}$ | cigana |
| $\mathrm{NC}_{10}$ | cigana |
| $\mathrm{NC}_{13}$ | tũigana |
| $\mathrm{NC}_{16}$ | haigana |
| $\mathrm{NC}_{17}$ | kũigana |

(422) Nĩ andũ aigana maikaraga Kenya?
nĩ a- ndũ a- igana ma-ikar -ag -a Kenya FOC $\mathrm{NC}_{2}$ - person $\mathrm{JC}_{2}$ - Q.QUANT $\mathrm{SC}_{2}$ - live - HAB -FV Kenya 'How many people live in Kenya?'

### 6.2.8 'Which'

The question word determiner for 'which'-kũ-is a bound stem that occurs postnominally, where determiners occur. It is formed from a construction of the appropriate noun class copula, plus the indefinite location question word kũ, as shown in Table 29:

Table 29: Question-word determiners for all noun classes

| CLASS | QUESTION WORD <br> DETERMINER |
| :---: | :---: |
| NC1 | urrîkũ |
| NC2 | arîkũ |
| NC3 | ũrĩkũ |
| NC4 | ĩrîkũ |
| NC5 | rĩrîkũ |
| NC6 | marĩkũ |
| NC7 | kĩrîkũ |
| NC8 | irîkũ |
| NC9 | ĩrînũ |
| NC10 | irĩkũ |
| NC11 | rũrîkũ |
| NC12 | karîkũ |
| NC13 | tũrîkũ |
| NC14 | ũrĩkũ |
| NC15 | kũrîkũ |
| NC16 | harîkũ |
| NC17 | kũrîkũ |

(423) Nĩ mbuku ĩrîkũ ũrendia?
nĩ N- buku ĩ- rĩ- kũ ũ- ra- ĩnd -i -a
FOC NC $9_{9}$ - book $\mathrm{AC}_{9}$ - COP- where.INDEF 2 SG.SUBJ- CR.PRES- sell -TRNS -FV
'Which book are you selling?'
(424) Mwarimũ waku nĩ ũrĩkũ?
mũ- arimũ ũ- aku nĩ ũ- rĩ- kũ
$\mathrm{NC}_{1}$ - teacher $\mathrm{AC}_{1}$ - 2SG.POS FOC AC ${ }_{1}$ - COP- where.indef
'Which is your teacher?'

### 6.2.9 'Whose'

The question word for 'whose'- $\tilde{u}$-is a bound stem that occurs post-nominally where possessive pronouns occur. It is formed from a construction of the associative marker agreeing with the noun class, plus the who question word, $\tilde{u}$, as shown in Table 30:

Table 30: Possessive interrogatives for all noun classes

| CLASS | POSSESSIVE <br> INTERROGATIVE |
| :---: | :---: |
| NC1 | waũ |
| NC2 | aũ |
| NC3 | waũ |
| NC4 | yaũ |
| NC5 | rĩaũ |
| NC6 | maũ |
| NC7 | kĩaũ |
| NC8 | ciaũ |
| NC9 | yaũ |
| NC10 | ciaũ |
| NC11 | rũaũ |
| NC12 | kaũ |
| NC13 | tũaũ |
| NC14 | waũ |
| NC15 | kũaũ |
| NC16 | haũ |
| NC17 | kũaũ |

(425) Nĩ mũbira waũ ũyũ?
nĩ mũ- bira ũ- a- ũ ũyũ
FOC $\mathrm{NC}_{3}-$ ball $\mathrm{AC}_{3}$ - ASSOC- who PROX.DEM $_{3}$ 'Whose ball is this?'

### 6.3 Negation

In Gĩkũyũ, negation can be expressed morphologically, or syntactically with a negative copula. Morphologically, negation is expressed with the prefixes ti-, ta-, which is affixed after
the subject concord marker, and nd-, which is affixed before the subject concord marker. (See also section 3.2.3.) The underlying form of the morpheme $n d$ - is $t i-$. The prenasalized allomorph precedes subject markers that consist of a single vowel, while the morphemes ti- and ta- are used elsewhere. In negative constructions, the focus marker prefix nĩ- is always absent. In predicate nominal constructions, $t i$ is used as a negative copula and replaces ni to form the negative (see also section 4.1).

Examples (426)-(434) all illustrate this. In (427), the person agreement prefix is $\tilde{u}$-, which must take $n d-$ as a negative verbal prefix because it is composed of a single vowel. Note also that the focus marker prefix is absent in example (427).

## (426) nĩũgũka

nĩ- ũ- kũ- ũk -a
FOC- 2SG- CR.FUT- come -FV
'You will come (today).'
(427) ndũgũka
nd- ũ- kũ- ũk -a
NEG- 2SG- CR.FUT- come -FV
'You will not come (today).'
The noun class 2 subject concord prefix ma-must take ti- as a negative verbal prefix because it consists of two phonemes. This is shown in examples (428) and (429).
(428) nĩmagũka
nĩ- ma-kũ- ũk -a
FOC- $\mathrm{SC}_{2}-$ CR.FUT- come -FV
'They will come (today).'
(429) matigũka
ma-ti- kũ- ũk -a
$\mathrm{SC}_{2}-$ NEG- CR.FUT- come -FV
'They will not come (today).'
Similarly, the subject concord marker for Class 7 is kĩ-. Because it consists of two phonemes, it requires the negative morpheme ti-.
(430) kĩũra nĩkĩrarũga
kĩ- ũra nĩ- kĩ- ra- rũg -a
$\mathrm{NC}_{7}$ - frog FOC- $\mathrm{SC}_{7}-$ CR.PRES- jump -FV 'A frog is hopping.'
(431) kĩũra gĩtirarũga
kĩ- ũra kĩ- ti- ra- rũg -a
$\mathrm{NC}_{7}$ - frog $\mathrm{SC}_{7}$ - NEG - CR.PRES- jump -FV
'A frog is not hopping.'
The subject concord prefix used in the negative existential clause below in (432) is k $\tilde{u}-$, which is composed of more than one phoneme, and so ti- is used. On the other hand, in the purpose clause in sentence (433), the subject concord marker $\tilde{u}$ - is used. This requires the negative prefix to be $n d-$.
(432) gũtiari mũtĩ ũcio
kũ- ti- a- rĩ mũ- tĩ ũcio
$\mathrm{SC}_{17}-$ NEG- RM.PST- COP NC $3_{3}-$ tree ANA.DEM ${ }_{3}$
'That tree didn't exist (in that place) (before yesterday).'
(433) nĩgetha ndũkagũe
nĩgetha nd- ũ- ka- gũ -e
so.that NEG- $\mathrm{SC}_{3}$ - CR.PRES- fall -SJV
'so that it (the tree) would not fall.'
The following example is interesting because, if observing the surface form in isolation, it appears to contradict the previous generalization. That is, if the underlying form of the subject concord marker were $i$-, then we would expect that the negated form of the verb would be *ndihana instead of the given form. However, the underlying form of the subject concord marker is actually ci-. For more on the distribution of ci-/i- see section 2.1.1.4. Thus, the underlying form is what takes precedence in determining which negative morpheme prefix is applied rather than how the morpheme is realized phonetically.
(434) itahana ta citũ
ci- ta- han -a ta ci- itũ
$\mathrm{SC}_{10}$ - NEG- look.like -FV like $\mathrm{AC}_{10^{-}}$1PL.POS
'(Clothing) that doesn't look like ours.'

Regarding the distribution of ti- versus ta-, Mugane (1997: 148) states that $t i-$ is used in main clauses, while ta- is used in subordinate clauses. Our data generally supports this, although there are a few exceptions to this claim. The following example illustrates one such exception, since ta- (rather than the expected $t i-$ ) is being used within a main clause.
(435) nĩkĩ gũtarĩ arimũ mathũire ciana
nĩkĩ kũ- ta- rĩ a- arimũ ma-thũ -ir -e ci- ana
why $\mathrm{SC}_{17}$ - NEG - COP $\mathrm{NC}_{2}$ - teacher $\mathrm{SC}_{2}$ - hate -COMPL -FV NC $\mathrm{N}_{8}$ - child
'Why do no teachers hate children?' (Lit. 'Why are there no teachers (that) hate children?')
Our consultant asserts that ta- is used "more generally" while ti- is used when the negative circumstance is temporary or bounded in time.

In predicate nominal constructions with noun-class subjects (i.e. subjects that are not $1^{\text {st }}$ or $2^{\text {nd }}$ person), $t i$ is used as the negative copula in the place of the affirmative copula $n \tilde{l}$ (see section 4.1). As an answer to a polar question, the negative response particle aca can be used in a manner similar to 'no' in English. When used in this way, ti is used obligatorily to negate predicates in predicate nominal constructions. They can be observed below in the following predicate nominal constructions.

Example (436) is a simple, affirmative predicate nominal clause, while example (437) shows the negative particle being used in the place of the affirmative copula.
(436) Wambũi nĩ mwarimũ

Wambũi nĩ mũ-arimũ
PROP COP NC ${ }_{1}$ - teacher
'Wambũi is a teacher.'
(437) Wambũi ti mwarimũ

Wambũiti mũ- arimũ
PROP NEG NC ${ }_{1}$ - teacher
'Wambũi is not a teacher.'

Example (438) shows aca 'no' accompanying a negative predicate nominal construction. Example (437) above, which is the same sentence without the negative response particle, is evidence that aca is optional.
(438) Aca, Wambũi ti mwarimũ
aca Wambũiti mũ- arimũ
no PROP NEG NC ${ }_{1}$ - teacher
'No, Wambũi is not a teacher.'

To date, we have found no evidence of negative indefinite pronouns like 'no one', 'nobody', and 'nothing'. Arguments cannot be negated in the language. Instead, negative existential clauses are used as another form of predicate negation. This construction is formed by prefixing the negative morpheme ti- to the copula (see section 4.1).
(439) nĩkũrĩ kahũa
nĩ- kũ- rĩ ka- hũa
FOC- $\mathrm{SC}_{17^{-}}$COP NC $\mathrm{C}_{12}$ - coffee
'There is coffee.'
(440) gũtirĩ na kahũa
kũ- ti- rĩ na ka- hũa
$\mathrm{SC}_{17}$ - NEG- COP with $\mathrm{NC}_{12}$ - coffee
'There is no coffee.'
(441) nĩtũrĩ na ngari
nĩ- tũ- rĩ na N - kari
FOC- 1PL.SUBJ -COP OBL NC ${ }_{9}$ - car
'We have a car.'
(442) tũtirĩ na ngari
tũ- ti- rĩ na $N$ - kari
1PL.SUBJ- NEG- COP OBL NC ${ }_{9}$ - car
'We don't have a car.'

### 6.4 Imperatives

## Samantha Mauney

The imperative is formed in Gĩkũyũ by taking the verb stem and the final vowel suffix. The plural imperative is formed by adding -i or -ni. According to our consultant, the distribution of these morphemes is in free variation. Because our data comes from one speaker, confirming this is difficult. However, the fact that -ni is rarely used within our data suggests that our consultant has a clear preference for -i. Negative imperatives are discussed later in this section.

In most cases, the final vowel suffix used to form the imperative is $-a$. This can be seen in the following two examples.
(443) ina!
in -a
sing -FV
'Sing!'
(444) ũka!
ũk $\quad-\mathrm{a}$
come -FV
‘Come!’

However, there are words for which the final vowel differs, such as the word for 'go!': thiĩ. Example (445) shows this:
(445) thiin!
thi -ĩ
go -FV
‘Go!'
The following examples illustrate the formation of the plural imperative. Examples (447) and (448) are completely identical in meaning.
(446) hũũra rwimbo rũrũ!
hũũr -a rũ- imbo rũrũ
hit -FV NC ${ }_{11}$ - song PROX.DEM ${ }_{11}$
'Play this song!'
(447) hũũrai rwimbo rũrũ!
hũũr -a -i rũ- imbo rũrũ
hit -FV -PL NC ${ }_{11}$ - song PROX.DEM $_{11}$
'(You all) play this song!'
(448) hũũrani rwimbo rũrũ!
hũũr -a -ni rũ- imbo rũrũ
hit -FV -PL NC ${ }_{11}$ - song PROX.DEM ${ }_{11}$
'(You all) play this song!'
Despite the fact that $-i$ and $-n i$ can both be used to convey the exact same message, our consultant has a clear preference for $-i$ in all circumstances.
(449) thiin!
thi -î!
go -FV
‘Go!’
(450) thiini
thi- -1
go -FV -PL
'You all go!'
Negative commands are expressed by inflecting the verb for person, negation, tense, and subjunctive mode. The person prefixes $\tilde{u}$ - in the singular and mũ- in the plural are marked on the verb, as are negative verbal prefixes nd- and ti-. The distribution of the negative morphemes is discussed in section 6.3.

The following examples show these elements at work. Example (451) shows a singular imperative, while example (452) is a singular negative imperative, and example (453) is a plural negative imperative.
(451) ũka!
ũk $\quad-\mathrm{a}$
come -FV
'Come!'
(452) ndũgoke
nd- ũ- ka- ũk -e
NEG- 2SG.SUBJ- CR.PRES- come -SJV
'Don’t come!'
(453) mũtigoke
mũ- ti- ka- ũk -e
2PL.SUBJ- NEG- CR.PRES- come -SJV
'You all don't come!'

Examples (452) and (453) show the subjunctive suffix added in order to form the negative imperative in lieu of the imperative final vowel suffix. In negative imperatives, number is expressed with the $2 S G$ or 2 PL person prefix markers. Thus, the $-i /-n i$ plural imperative allomorphs introduced above are not used in such contexts.

Sentences (454)-(456) provide another example of this process.
(454) thiî!
thi - 1 !
go -FV
‘Go!'
(455) ndũgathiĩ!
nd- ũ- ka- thi -e
NEG- 2SG.SUBJ- CR.PRES- go -SJV
'Don't go!'
(456) mũtigathiĩ

```
mũ- ti- ka- thi -e
2PL.SUBJ- NEG- CR.PRES- go -SJV
'Y'all don't go!'
```


### 6.5 Focus and Topicalization Constructions

Robert Englebretson
This section addresses two ways in which information in a Gĩkũyũ clause may be marked as particularly prominent or topical. 6.5.1 gives an overview of the use of nĩ to focus a clause constituent, and 6.5.2 illustrates 'as for' topicalization constructions using harĩ. Because the work of our class has been limited to monologic data, our findings likely do not give a full or accurate picture of the range of interactional and discourse-structuring work that these constructions accomplish. But the clause-level observations in this section are a good starting point nonetheless, and suggest areas for future research.

### 6.5.1 Constituent Focus with nĩ

In the vast majority of main clauses that were elicited in sessions or appear in our texts, the verb is prefixed with nĩ-. This prefix does not appear on negative clauses, it is generally absent from irrealis or subjunctive clauses, and it tends not to appear on the verb in relative clauses and object complements. As discussed in 4.2, this morpheme is also the suppletive form of the present-tense copula in predicate nominals for all noun-classes. Our consultant's intuition is that nĩ- means 'affirmative', which is certainly borne out distributionally when contrasted with negative and irrealis clauses where nĩ- does not occur. Because of its ubiquity as a prefix on pragmatically-unmarked main-clause predicates, however, we follow Mugane (1997) and others who have analyzed this morpheme as a general focus particle. The verb, which is the pragmatic center of the clause, is generally "in focus", thus explaining the presence of nĩ- as the initial prefix on the verb in the vast majority of pragmatically-neutral
main clauses. Similarly, in equational clauses, the nominal predicate is the pragmatic center of the clause and thus "in focus", explaining how it may have come about that ni has grammaticalized as the present-tense copula for noun-classes in predicate nominal constructions. Furthermore, when a different constituent (other than the predicate) is marked as the pragmatic center of the clause, nĩ marks it as focused.

One way to assess whether a constituent is in focus is to elicit it as an answer to a content question. To do so, we constructed a scenario for our consultant, and asked her specific questions designed to elicit focused answers. The imagined scenario involved a dog and a goat getting into a school and running amok-eating pencils, eating books, disturbing the teachers, and making the students laugh. We asked our consultant to imagine she had witnessed this, and the school principal is asking her questions about what she had seen. The following examples show focused constituents in answer to the specific questions (for the sake of brevity, we are not including the Gîkũyũ questions here but only the English translations in the example header):
(457) Typical verb focus (answer to 'Did the dog eat the book?')
ngui nĩĩrĩire mbuku
n- gui nĩ- $\tilde{1}^{-} \varnothing$ - rĩ -ir $\quad$-e m-buku
$\mathrm{NC}_{9}-$ dog $\mathrm{FOC}-\mathrm{SC}_{9}$ - CR.PST- eat -COMPL -FV NC ${ }_{9}$ - book
'The dog ate the book (today).'
(458) Subject focus (in answer to 'Did the dog eat the book?')
ĩ̃, nĩ ngui ĩrĩire mbuku
ก̃ĩ nĩ n- gui ĩ- $\emptyset$ - rĩ -ir -e m- buku yes $\mathrm{FOC} \mathrm{NC}_{9}-$ dog $\mathrm{SC}_{9}-$ CR.PST- eat -COMPL-FV NC $9_{9}$ - book 'Yes, it was the dog that ate the book (today).'
(459) Object focus (in answer to 'What did the dog eat?')
nĩ benjũ ngui ĩrĩire
nĩ benjũ $n$ - gui ĩ- $\varnothing$ - rĩ -ir -e
FOC $\mathrm{NC}_{9}$.pencil $\mathrm{NC}_{9}-$ dog $\mathrm{SC}_{9}$ - CR.PST- eat -COMPL -FV
'It was the pencils (that) the dog ate (today).'
(460) Infinitive focus (in answer to 'What were the children doing?')
ciana nĩ gũtheka irathekaga
ci- ana nĩ kũ- thek -a i- ra- thek -ag -a
$\mathrm{NC}_{8}$ - child $\mathrm{FOC}^{2} \mathrm{NC}_{15}$ - laugh -FV SC ${ }_{8}$ - NR.PST- laugh -IMPF -FV
'It was laughing that the children were doing (yesterday).' (Lit. 'It was laughing that the children were laughing.')
(461) Infinitive focus (in answer to 'what were the children doing very well?') nĩ gũthoma ciana cirathomaga wega mũno
nĩ kũ- thom-a ci- ana ci- ra- thom-ag -a wega mũno
FOC $\mathrm{NC}_{15}$ - read -FV NC $8_{8}$ - child $\mathrm{SC}_{8}-$ NR.PST- read -IMPF -FV good very
'As for reading, the children were doing it very well (yesterday).' (Lit. 'As for reading, the children were reading very well.')

Example (457) is a prototypical main clause with focus on the verb, which is prefixed with ni्as usual to show that it is the pragmatic center of the clause. Example (458) shows subject focus by placing nĩ immediately prior to the subject NP. (459) shows that when an object is focused, it occurs at the beginning of the clause and is preceded by nĩ. Examples (460) and (461) illustrate that a verb can be highly focused in answer to a question: the infinitive $\left(\mathrm{NC}_{15}\right)$ form of the verb occurs clause-initially preceded by nĩ, and the regular finite form of the verb occurs in its standard position. This is an interesting construction as it entails verb repetition rather than a pro-verb form for restatement in the clause core.

### 6.5.2 Topicalization

Following are two examples of 'as for' topicalizations. In each case, the topicalized constituent (an object and a verb, respectively, in the following two examples) occurs at the beginning of the clause and is preceded by the topic marker harĩ. This topic marker may be analyzable as the class 16 definite locative prefix ha- plus the copula stem rĩ. Our consultant spontaneously offered the gloss "the way things are" for harĩ (i.e. ha- indexes the known discourse universe, and the copula rĩ gives a locative sense; i.e. "it is in the known discourse universe that such and such thing is this way").

## (462) Object topicalization

harĩ maembe nĩndĩmendete mũno
ha- rĩ ma-embe nĩ- N - ma-end -et -e mũno
$\mathrm{NC}_{16}-\mathrm{COP} \mathrm{NC}_{6}-$ mango FOC- $1 \mathrm{SG} . S U B J-\mathrm{OC}_{6}$ - like -PERF -FV very
'As for mangos, I like them very much.'

In this example, maembe 'mangos' is preceded by hari and topicalized in the first position of the clause. The rest of the clause comments on this topic, namely that the speaker likes them. Unlike in unmarked main clauses where object concord markers are not allowed if there is an object NP in the clause, the object concord marker is in fact present here, to index the identity of the topic. This is considered a form of left dislocation, since the full NP precedes the clause core, and is co-indexed on the verb as a copy. The following example shows that verbs can be topicalized as well.
(463) Infinitive topicalization
harĩ kũruga ndugaga o muthenya
ha- rĩ kũ- rug -a $N$ - rug -ag -a o mu-thenya
$\mathrm{NC}_{16}-$ COP NC $\mathrm{N}_{15}$ - cook -FV 1SG.SUBJ- cook -HAB -FV every $\mathrm{NC}_{3}{ }^{-}$day
'As for cooking, I (do it) every day.' (Lit. 'As for cooking, I cook every day.')
Here, the infinitive $\left(\mathrm{NC}_{15}\right)$ form of the verb is topicalized, occurring clause initially preceded by the topicalizer harĩ. Just as in the infinitive focus construction shown in (460) and (461), the clause core contains a finite form of the verb (i.e. the verb is copied rather than being replaced by a pro-form.)

## Chapter 7

## Clause Combining

This chapter presents an overview of clause combining in Gîkũyũ. 7.1 explores relative clauses, which are clauses that modify noun phrases. 7.2 discusses object complements, clauses which are embedded inside a main clause as an object argument. 7.3 deals with adverbial clauses and related constructions that situate a clause in time, place, manner, etc, or indicate other types of overt rhetorical relations between clauses.

### 7.1 Relative Clauses

Robert Englebretson
A relative clause ( RC ) is a clause that occurs as part of a noun phrase, generally identifying or restricting the referent of the head noun. Consider the following pair of examples. (464) is an elicited main clause based on the RC that occurs in (465) as part of a historical narrative our consultant recounted about Mũgo wa Kĩbirũ (a famous 19th-century Gîkũyũ prophet). Here and throughout this section, the head noun will be underlined and the RC will be enclosed in square brackets.
(464) A Simple Main Clause

Mũthuri nĩarotaga iroto.
mũ- thuri nĩ- a- a- rot -ag -a i- rot -o
$\mathrm{NC}_{1}-$ man $\quad \mathrm{FOC}-\mathrm{SC}_{1}$ - RM.PST- dream -HAB -FV NC $8_{8}$ - dream NMZ
'A man used to dream dreams (before yesterday).'
(465) A Subject RC ("Mũgo wa Kîbirũ" \#002)

Mũgo wa Kîbirũ arĩ mũthuri [warotaga iroto.]
Mũgo wa Kîbirũ a- a- rĩ mũ- thuri [ũ- a- rot $-\mathrm{ag}-\mathrm{a}$ i- rot $\quad$-o] PROP $\quad \mathrm{sc}_{1}$ - RM.PST- COP NC $\mathrm{C}_{1}$ - man $\mathrm{RC}_{1}$ - RM.PST- dream -HAB -FV NC $\mathrm{C}_{8}$ - dream -NMZ 'Mũgo wa Kîbirũ was a man who used to dream dreams (before yesterday).'

Example (464) illustrates a simple transitive main clause consisting of the subject mũthuri 'man', the verb rota 'dream', and the object iroto 'dreams'. The verb is focused with nĩ-, agrees with the subject, and is inflected for tense and aspect. Example (465) consists of a predicate nominal clause with the subject Mũgo wa Kĩbirũ and the predicate noun-phrase headed by mũthuri 'man'. This predicate NP in turn is subsequently modified by a relative clause. This RC structurally forms one large NP with the head, and functionally restricts the head noun's possible referents by identifying a specific (type of) man-one who habitually dreamed dreams.

This example thus illustrates the two defining properties of a relative clause: (1) an RC is a clause embedded within a larger NP; and (2) an RC modifies the head noun in order to restrict or identify the set of referents to which that head noun refers.

Right away we can observe three structural differences between the main clause in (464) and its RC equivalent in (465). First, as is required for Gĩkũyũ main clause predicates that have human subjects, the verb in (464) is prefixed with the third-singular $\left(\mathrm{SC}_{1}\right)$ human subject concord marker $a$-. However, this subject concord marker is not found in the RC in (465). Instead, we see a different subject concord marker on the RC verb, namely the relativizing prefix $\tilde{u}$-. This $\tilde{u}$ - prefix is required for all class 1 nouns that occur as the subject of a relative clause. And in fact it is ungrammatical to attempt to use the $a$ - prefix in this context. Relative subject concord will be taken up further in 7.1.3 below. Second, we see that the focus prefix nĩ-, which appears in the main clause in (464), does not appear in the RC in (465). Thirdly, we observe that the subject argument in the relative clause is gapped, as it is coreferential with the head noun. In other words the relative clause in (465) only consists of a verb and its object; the relativized NP is the subject of the relative clause and is coreferential with the head noun mũthuri 'man', although it is not found inside the clause itself.
(466) provides a second example of a relative clause, excerpted from another spontaneous text proffered by our consultant (a procedural text explaining how to make a traditional Gĩkũyũ food called mataha-a mash stew of beans, potatoes, corn, bananas, and pumpkin greens). This RC differs from the RC shown above in (465) in two ways. First, the RC in (466) is an object relative (not a subject relative), and second, it is introduced by a relative pronoun.
(466) An Object RC with a Relative Pronoun ("Mataha" \#001)

## Irio ciakwa [iria nyendete mũno] ciĩtagwo mataha.

i- rio ci- akwa [i- ria n- end -et -e mũno] ci- ĩt -ag -wo ma-taha $\mathrm{NC}_{8}$ - food $\mathrm{AC}_{8}-1 \mathrm{SG} . \mathrm{POS} \mathrm{AC}_{8}$ - REL 1 SG - like -PERF -FV very $\mathrm{SC}_{8}-$ call -HAB -PV $\mathrm{NC}_{6}$ - taha 'My favorite food (Lit. 'The food that I like very much') is called mataha.'
(Note that the variation between $i$ - and ci- in noun-class 8 prefixes is phonologically conditioned by whether the following phoneme is a consonant or a vowel, respectively, as discussed in section 2.1.1.4.) This example consists of the head noun irio 'food' modified by a possessive pronoun and a post-head relative clause. The relative clause essentially consists of the verb enda 'like/love/want', marked with a 1 SG subject and inflected for aspect, and upgraded by the adverb mũno 'very'. The relativized object NP is gapped and is coreferential with the head irio 'food'. It does not occur inside the RC and is not indexed on the RC's verb. In addition, we also notice that the RC is introduced by the relative pronoun iria, which consists
of the agreement-class prefix $i$ - for the head noun plus the relativizer rĩa (rĩa > ria because of vowel harmony with the prefix). This relative pronoun appears to be grammatically optional when the head of the RC is definite, but generally not allowed when the head of the RC is indefinite. From this point forward, the relative pronoun will be included in each example of a relative clause when allowable, but will be enclosed in parentheses to indicate its grammatical optionality according to our consultant. We will take up the matter of relative pronouns in more depth in 7.1.2 below.

The rest of this section explores relative clauses based on our textual data and in-class elicitation sessions. We will discuss the structure of Gĩkũyũ RCs, the formation and use of relative pronouns, subject concord on RC verbs, negation of the RC predicate, the types of NPs that can be relativized in light of the relative clause accessibility hierarchy, and the status of 'headless' RCs. The section will conclude with a brief overview of pseudoclefts and related focus constructions.

### 7.1.1 Structure of the Relative Clause

All relative clauses in Gĩkũyũ are post-head, occurring after the noun they modify. There are no attested examples of pre-head or internally-headed RCs in our textual or elicited data. ('Headless' RCs, which will be discussed below in 7.1.6 are not truly headless, since a head noun is exophoric, optionally admissible, and always indexed by a concord marker.) There are also no attested examples of a relative clause containing the focus marker nĩ- on the RC verb, and an attempt to make such a clause was rejected by our consultant. When an RC occurs, it always occupies the last place in the NP, occurring after all other modifiers. We have already observed this in (466) above, where the head noun irio 'food' is first modified by the possessive pronoun ciakwa 'my', and then the RC takes the final position in the NP. Following is an example of a complex NP containing numerous modifiers in addition to the RC. Note the nounclass 13 concord across the entire NP, which indicates that the head is being modified by each of these words. Again, the RC occurs at the very end of the NP.
(467) A Complex NP ("Pear" \#053)
tũhĩĩ tũu tũngĩ twĩrĩ [(tũrĩa) twatigĩtwo]
tũ- hĩĩ tũ- u tũ- ngĩ tũ- ĩrĩ [(tũ- rĩa) tũ- a- tig $\begin{aligned} & -i t \\ & -w o]\end{aligned}$ $\mathrm{NC}_{13^{-}}$boy $\mathrm{AC}_{13^{-}}$DIST.DEM $\mathrm{AC}_{13^{-}}$other $\mathrm{AC}_{13^{-}}$two $\mathrm{AC}_{13^{-}}$REL SC $_{13^{-}}$- RM.PST- abandon -PERF -PV 'those other two boys that had been left behind (before yesterday)'

The NP in (467) consists of the head noun tũhĩ 'boys', followed by a distal demonstrative, a general determiner, a numeral, and terminated by a relative clause. The relative pronoun tũrĩa
(consisting of the agreement-class prefix tũ- for class 13 nouns plus the relativizer rĩa) was not present in the original narrative example, although we were readily able to elicit it from our consultant, and it is included in parentheses to indicate that it is grammatically optional.

### 7.1.2 Relative Pronouns

As illustrated in (466) and immediately above in (467), Gĩkũyũ relative clauses may be introduced by a relative pronoun formed by the agreement-class prefix for the head noun plus the relativizer rĩa. Table 10 in section 2.2.1.4 lists the relative pronoun for each of the noun classes. Following are three examples of relative pronouns using the identical noun stem mũcuha 'swing' inflected in three different noun-classes-the diminutive $\left(\mathrm{NC}_{12}\right)$, which is an attested example from a narrative; $\mathrm{NC}_{3}$, which is the typical class for this stem; and $\mathrm{NC}_{7}$, the augmentative class.
(468) $\quad \mathrm{NC}_{12}$ Relative Pronoun
kamũcuha [(karĩa) karĩ kega mũno]
ka- mũ- cuha [(ka- rĩa) ka- a- rĩ ka- ega mũno]
$\mathrm{NC}_{12}-\mathrm{NC}_{3}-$ swing $\mathrm{AC}_{12}-$ REL $\mathrm{SC}_{12}$ - PST- COP $\mathrm{AC}_{12}$ - good very
'the (little) swing that was very good'
(469) $\mathrm{NC}_{3}$ Relative Pronoun
mũcuha [(ũrĩa) warĩ mwega mũno]
mũ- cuha [(ũ- rĩa) ũ- a- rĩ mũ- ega mũno]
$\mathrm{NC}_{3}-$ swing $\mathrm{AC}_{3}-$ REL SC $_{3}$ - PST- COP AC ${ }_{3}-$ good very
'the swing that was very good'
(470) $\quad \mathrm{NC}_{7}$ Relative Pronoun
kĩmũcuha [(kĩrĩa) kĩarĩ kĩega mũno]
kĩ- mũ- cuha [(kĩ- rĩa) kĩ- a- rĩ kĩ- ega mũno]
$\mathrm{NC}_{7}-\mathrm{NC}_{3}-$ swing $\mathrm{AC}_{7^{-}}$REL SC $7^{-}$- PST- COP AC $7_{7^{-}}$good very
'the (big) swing that was very good'
In each of these three examples, the form of the relative pronoun is determined by the classprefix of the head noun and is karĩa, ürĩa, and kirrĩa for classes 12,3 , and 7 , respectively. These three examples contain a definite head noun, implying that the identity of the 'swing' is already known information. When the head of the RC is definite, as in the above examples, then our consultant describes the use or absence of the relative pronoun to be a matter of speaker choice and style. On the other hand, our consultant does not accept the presence of a
relative pronoun in a relative clause whose head is indefinite (e.g. the above examples would not be acceptable if 'a little swing that was very good' were being presented as discourse-new information). We have observed that most of the relative clauses produced during in-class elicitation sessions have relative pronouns, while most of the relative clauses found in the spontaneous textual data do not. It is a matter for future research (preferably employing quantitative methods and using spontaneous data from a variety of spoken and written genres of Gĩkũyũ) to assess what information-structuring, interactional, and stylistic considerations may be motivating or inhibiting the use of relative pronouns.

### 7.1.3 Relative Subject Concord

In examples (464)-(465) we observed that relative clauses with human (noun-class 1) subjects take a different subject concord marker on the verb than do verbs in main clauses. The following set of three examples illustrates this further. In (471), the main-clause verb is marked with $a$ - to agree with the noun-class of its subject mũtimia 'woman'. When used in a relative clause in (472) however, the concord marker is $\tilde{u}$-, not $a$-, and the ungrammatical clause in (473) demonstrates that the prefix $a$ - cannot be used. Thus we again see that $\mathrm{NC}_{1}$ subjects of RC verbs are indexed using a different concord marker than are $\mathrm{NC}_{1}$ subjects of main-clause verbs.
(471) $\quad \mathrm{NC}_{1}$ subject concord $a$ - on a main clause verb
mũtimia aratinirie nyama na kahiũ
mũ- timia a- ra- tin-ir -i $\quad$-e $n$ - yama na ka- hiũ
$\mathrm{NC}_{1}$ - woman $\mathrm{SC}_{1}$ - NR.PST- cut -COMPL -TRNS - $\mathrm{FV} \mathrm{NC}_{9}$ - meat with $\mathrm{NC}_{12}$ - knife
'The woman cut the meat with the knife (yesterday).'
(472) $\quad \mathrm{NC}_{1}$ relative subject concord $\tilde{u}$ - on a relative clause verb
mũtimia [(ũrĩa) ũratinirie nyama na kahiũ] nĩ mũrũngarũ mũno
mũ- timia [(ũ- rĩa) ũ- ra- tin -ir -i $\quad$-e n- yamana ka- hiũ]
$\mathrm{NC}_{1}-$ woman $\mathrm{AC}_{1}$ - REL $\mathrm{RC}_{1}$ - NR.PST- cut -COMPL -TRNS -FV NC ${ }_{9}$ - meat with $\mathrm{NC}_{12}$ - knife
nĩ mũ- rũngarũ mũno
FOC $\mathrm{NC}_{1}$ - beautiful very
'The woman who cut the meat with the knife (yesterday) is very beautiful.'
(473) Ungrammatical use of $\mathrm{NC}_{1}$ subject concord $a$ - on a relative clause verb

* mũtimia [(ũrĩa) aratinirie nyama na kahiũ] ...
mũ- timia [( $\tilde{\text { un }}$-rĩa) a- ra- tin-ir -i $\quad$-e $n-$ yama na ka- hiũ] $\mathrm{NC}_{1}-$ woman $\mathrm{AC}_{1}$ - REL SC $\mathrm{S}_{1}$ - NR.PST- cut -COMPL -TRNS -FV NC $\mathrm{N}_{9}$ - meat with $\mathrm{NC}_{12}$ - knife

The above three examples illustrate that noun-class 1 subject agreement works differently in relative clauses than it does in main clauses: $a$ - is used for human subject concord in main clauses, but $\tilde{u}$ - is used for human subject concord in relative clauses. In our data, $\mathrm{NC}_{1}$ is the only noun-class that does this. In all other Gîkũyũ noun-classes, the subject concord is the same in both types of clauses. The following pair of examples gives one such instance, demonstrating that the identical $\mathrm{NC}_{12}$ subject concord marker ka- is used to index the subject of both a main clause and a relative clause verb.
(474) $\quad \mathrm{NC}_{12}$ subject concord $k a$ - on a main clause verb
kora karagũire rũũũ-inĩ
ka- ũra ka- ra- gũ -ir -e rũ- ũĩ -inĩ
$\mathrm{NC}_{12}$ - frog $\mathrm{SC}_{12}$ - NR.PST- fall -COMPL -FV NC $\mathrm{NC}_{11}$ - river -LOC
'A little frog fell into the river (yesterday).'
(475) $\quad \mathrm{NC}_{12}$ subject concord $k a$ - on a relative clause verb
kora [(karĩa) karagũire rũũũ-inĩ] ...
ka- ũra [(ka- rĩa) ka- ra- gũ -ir -e rũ- ũĩ -inĩ] $\mathrm{NC}_{12}-$ frog $\mathrm{AC}_{12}-$ REL $\mathrm{SC}_{12}$ - NR.PST- fall -COMPL -FV NC $\mathrm{NC}_{11}$ - river -LOC 'the little frog that fell into the river (yesterday)...'

### 7.1.4 Negation of the Relative Clause Predicate

The general strategies for predicate negation have already been discussed in 3.2.3 and 6.3. When the subject concord morpheme consists of only a single vowel, the prefix ndprecedes it; this is true of predicate negation in both main and relative clauses. However, what is notable about negation in relative clauses is that while main clause verbs generally take the negative prefix $t i$ - (when the subject concord prefix consists of anything other than a single vowel), in all of the negated relative clauses in our data, the negative prefix is always ta- and never ti-. This observation is in line with Mugane's claim that "Negative voice constructions in Gîkũyũ are formed by -ti in the main clauses and -ta in subordinate clauses" (Mugane 1997: 148). The following pair of examples is illustrative.
(476) Main clause predicate negated by tiatimia matiratinirie nyama na kahiũ
a- timia ma-ti- ra- tin-ir -i -e n- yamana ka- hiũ $\mathrm{NC}_{2}-$ woman $\mathrm{SC}_{2}-$ NEG- NR.PST- cut -COMPL -TRNS -FV NC $9_{9}$ - meat with $\mathrm{NC}_{12}$ - knife 'The women did not cut meat with the knife (yesterday).'
(477) Relative clause predicate negated by ta-
atimia [(arĩa) mataratinirie nyama na kahiũ ...
a- timia [(a-rĩa) ma-ta- ra- tin-ir -i $-e n-$ yamana ka- hiũ] $\mathrm{NC}_{2}$ - woman $\mathrm{AC}_{2}$ - REL $\mathrm{SC}_{2}-$ NEG- NR.PST- cut -COMPL -TRNS -FV NC $\mathrm{N}_{9}$ - meat with $\mathrm{NC}_{12}$ - knife 'the women who did not cut meat with the knife (yesterday)...'

Notice the negative prefix is ti- in the main clause (476), while in the relative clause (477) it is $t a-$, an observation that holds true for relative clause negation throughout our data.

### 7.1.5 Relativization and the Accessibility Hierarchy

In their well-known typological study of relative clauses from a cross-linguistic perspective, Keenan and Comrie $(1977,1979)$ observe differences in the types of core and oblique grammatical relations that may be relativized in a given language. Some languages only allow subjects to be relativized, others allow the relativization of subjects and objects, while other languages allow for the relativization of some or all types of obliques. Yet even in a language that allows all types of arguments to be relativized, Keenan and Comrie observe that there are different relativization strategies used, and propose an Accessibility Hierarchy of NPtypes that are accessible to relativization. The current subsection of this sketch grammar does not seek to review, critique, or assess Keenan and Comrie's work in light of our Gîkũyũ data, which would be a potentially-interesting topic of its own for future research. Rather, we simply wish to show that all manner of NP-types are relativizable in Gîkũyũ, and there are two main strategies for recovering the relativized NP: the gap strategy, which has already been illustrated above and will be shown in (478)-(483) below, and the use of a resumptive pronoun, which will be shown in examples (484)-(485).

Examples (478)-(485) illustrate that Gĩkũyũ relative clauses may relativize the following types of arguments: subject, object (either theme or recipient), possessor, locative, instrument oblique, and object of comparison.
(478) Relativized subject
rũĩgĩ [(rũrĩa) rũranyitire kora) ...
rũ- ĩgĩ [(rũ- rĩa) rũ- ra- nyit -ir -e ka- ũra]
$\mathrm{NC}_{11}-$ eagle $\mathrm{AC}_{11}-$ REL SC $\mathrm{Cl}_{11}$ - NR.PST- catch -COMPL -FV NC $\mathrm{C}_{12}$ - frog
'the eagle that caught the little frog (yesterday)...'
In this example, we see that the head noun of the RC is rũig̃ 'eagle'. This is the relativized subject of the RC, and there is a 'gap' (the NP does not occur) pre-verbally within the relative clause, where an NP would ordinarily be expected to occur as the subject argument of 'catch'.
(479) Relativized Object
mũbira [(ũrĩa) kahĩĩ karaikĩirie kagui] ...
mũ- bira $[(\tilde{u}-$ rĩa $)$ ka- hĩĩ ka- ra- ik $\quad-\tilde{1} \quad$-ir $\quad$-i $\quad$-e ka- gui] $\mathrm{NC}_{3}-$ ball $\mathrm{AC}_{3}-$ REL $\mathrm{NC}_{12}$ - boy $\mathrm{SC}_{12}$ - NR.PST- throw -APPL -COMPL -TRNS -FV NC $\mathrm{NC}_{12}$ - dog 'the ball that the boy threw to the little dog (yesterday)...'

In this example, the head noun mũbira 'ball' is the relativized object of the RC, and there is a corresponding gap within the RC , where only one of the two objects is present. The next example illustrates the relativization of the other object from this same clause.
(480) Relativized recipient object
kagui [(karĩa) kahĩi karaikĩirie mũbira] ...
ka- gui [(ka- rĩa) ka- hĩĩ ka- ra- ik -ĩ $\quad$-ir $\quad$-i $\quad$-e mũ- bira]
$\mathrm{NC}_{12}-\operatorname{dog} \mathrm{AC}_{12}-$ REL $\mathrm{NC}_{12}$ - boy $\mathrm{SC}_{12}-$ NR.PST- throw -APPL -COMPL -TRNS -FV NC $\mathrm{N}_{3}-$ ball 'the dog that the boy threw the ball to (yesterday)...'

In this example, kagui 'little dog' is the relativized recipient object of the RC, and again there is a gap. The next example shows that possessors are relativized in this same way.
(481) Relativized possessor
kahĩĩ [(karĩa) nyina aratinirie nyama] ...
ka- hĩĩ [(ka- rĩa) nyina a- ra- tin-ir -i $-e$ n- yama] $\mathrm{NC}_{12}-$ boy $\mathrm{AC}_{12}-$ REL $\mathrm{NC}_{1}$.mother SC $_{1}$ - NR.PST- cut -COMPL -TRNS -FV NC $9_{9}$ - meat 'the boy whose mother cut meat (yesterday)...'

Here, kah $\tilde{\imath}$ 'boy' is the head noun and the possessor, and is gapped from what would be the usual post-nominal possessor position where it would have occurred in a main clause after nyina 'mother'. The following pair of examples shows that there are two possible constructions
used for relativizing locative NPs in Gĩkũyũ. Both, however, still use the gap strategy to recover the relativized argument.
(482) Relativized locative (option 1)
metha [(ĩrĩa) mbuku ĩrarĩ] ...
N - metha [(ĩ- rĩa) m- buku ĩ- ra- rĩ]
$\mathrm{NC}_{9}$ - table $\quad \mathrm{AC}_{9}$ - $\mathrm{REL} \mathrm{NC}_{9}$ - book $\mathrm{SC}_{9}$ - NR.PST- COP
'the table where the book was (yesterday)... (Lit. 'the table that book was.')'
(483) Relativized locative (option 2)
metha [(ĩrĩa) ĩrarĩ na mbuku] ...
N- metha [(̃̃- rĩa) $\tilde{1}^{-}$ra- rĩ na m- buku]
$\mathrm{NC}_{9}$ - table $\quad \mathrm{AC}_{9}-$ REL SC $9_{9}$ - NR.PST- COP with $\mathrm{NC}_{9}$ - book
'the table where the book was (yesterday)... (Lit. 'the table that was with book.')
Example (482) consists of a locative clause (see section 4.4 on locative clauses), in which the locative predicate NP metha 'table' has been relativized. It is the head of the relative clause, and is gapped in the RC. Example (483) is essentially an example of an RC with a relativized subject. It consists of a possessive clause (see section 4.5 on possessive clauses) that indicates a locative relationship by means of fictive possession ('The table has a book'). The subject of this possessive clause, metha 'table', is relativized as the locative head of the RC, and it is gapped within the RC. The final two examples in this subsection show the use of resumptive pronouns for recoverability of the relativized NP.
(484) Relativized instrumental oblique
kahiũ [(karĩa) mũtimia aratinirie nyama nako] ...
ka- hiũ [(ka- rĩa) mũ- timia a- ra- tin-ir -i $\quad$-e n- yama nako] $\mathrm{NC}_{12}{ }^{-}$knife $\mathrm{AC}_{12}-$ REL $^{2} \mathrm{NC}_{1}-$ woman $\mathrm{SC}_{1}$ - NR.PST- cut -COMPL -TRNS -FV NC $9_{9}$ - meat DEP.PRO ${ }_{12}$ 'the knife that the woman cut meat with (yesterday)...'

In this example, the head of the RC is kahiũ 'knife'. It has been relativized as an instrument oblique. But rather than a gap occurring in the RC at its expected position, there is instead a resumptive pronoun-the class 12 dependent pronoun nako 'with it', which is anaphoric to, and agrees in noun-class with, the head NP. (see section 2.2.1.2 on dependent pronouns). Thus in RCs with relativized instrument-obliques, we can recover the relativized NP by means of the resumptive pronoun that occurs at the expected position for the NP in the clause, and which indexes the noun class of the relativized NP. The next example illustrates the relativization of
an object of comparison, and also uses a resumptive pronoun for recoverability of the relativized NP .

## (485) Relativized object of comparison

Wambũi mĩcore (ĩrĩa) mũrũthi ũrahanyũkirie makĩria yayo ...
wambũi mĩcore (ĩ- rĩa) mũ- rũthi ũ- ra- hanyũk -ir -i $-e$ makĩria yayo $\mathrm{NC}_{9}$.zebra $\quad \mathrm{AC}_{9}-$ REL $\mathrm{NC}_{3}-$ lion $\quad \mathrm{SC}_{3}-$ NR.PST- run $\quad$-COMPL -TRNS -FV exceeding DEP.PRO, 'the zebra that the lion ran faster than (yesterday)...'

Here wambũi mícore 'zebra' is the head of the RC, and its role within the RC is the object of comparison (i.e. 'the lion ran faster than the zebra.') The relativized argument is recoverable by means of a resumptive pronoun-the class 9 dependent pronoun yayo 'with it', which occurs in the expected position for the object of comparison and indexes it by means of class 9 agreement.

In sum, this subsection has illustrated that all positions on the Accessibility Hierarchy are relativizable in Gîkũyũ. It has also demonstrated the two strategies Gĩkũyũ uses for recovering the relativized NP within the RC: the gap strategy for most NP types, and the resumptive pronoun strategy that is used only for instrumental obliques and objects of comparison.

### 7.1.6 'Headless' Relative Clauses

The following example appears to consist of a relative clause with no head:
(486) A relative clause with no overt head noun
[arĩa mataikaraga London] nĩ athomi ega
[a- rĩa ma-ta- ikar-ag -a London] nĩ a- thomi a- ega
$\mathrm{AC}_{2}-$ REL SC $_{2}-$ NEG- stay -HAB -FV London $\mathrm{FOC} \mathrm{NC}_{2}$ - student $\mathrm{AC}_{2}-$ good
'They who do not live in London are good students.'
The lack of an overt head noun here, however, does not mean this construction is truly headless. First, the fact that there still is concord marking on both the relativizer and the RC verb suggests that the speaker does have a head in mind-and the noun-class of that concord marking gives the hearer a fairly good general idea of what its likely referent is. Furthermore, our consultant is easily able to fill in a head for these types of RCs when asked-in this case the class 2 noun andũ 'people'. Following is another similar example:
(487) Another 'headless' relative clause
[marĩa ndĩrenda kũrĩa] nĩ marigũ
[ma-rĩa $N$ - ra- end -a kũ- rĩ -a] nĩ ma-rigũ
$\mathrm{AC}_{6}-$ REL $1 \mathrm{SG}-\mathrm{CR}$. PRES- like -FV NC ${ }_{15}$ - eat - FV FOC NC $\mathrm{C}_{6}$ - banana
'What I want to eat are bananas.'
As with the previous example, although there is no overt head, the concord prefix on the relative pronoun and the RC verb give a clear indication of a general referent. Our consultant readily stated that if there had been a word before maria (i.e. if the RC had a head), it would be matunda 'fruit (PL)', a class 6 noun.

In sum, this subsection suggests that, although there are relative clauses in Gîkũyũ with no overt heads, there are good reasons to not consider them 'headless'. Namely, a head noun is optionally admissible and readily identifiable, and, there is always a concord marker on the relative pronoun and RC verb that gives the hearer a general idea of what the head is, based on its noun class.

### 7.1.7 Pseudoclefts and Related Constructions

As discussed in 6.5, Gĩkũyũ has at least two types of monoclausal focus constructions: nĩ focus and harĩ topicalization. The current section therefore will only deal with pseudoclefts and inverted pseudoclefts, since they involve clause combining and are essentially based on relative clauses.

The headless relative clauses discussed in the previous section may be understood as forming a pseudocleft construction-the RC serves as the subject of an equational sentence, and the nominal predicate of that equational sentence is information that is being put into focus. Following are two more examples:
(488) Pseudocleft
kĩrĩa ndĩrenda kũrĩa nĩ irigũ
kĩ- rĩa n- ra- end -a kũ- rĩ -a nĩ i- rigũ
$\mathrm{AC}_{7}$ - REL 1SG- CR.PRES- like -FV NC ${ }_{15}$ - eat -FV FOC NC $5_{5}$ - banana
'What I want to eat is a banana.'

According to our consultant, if there were a head noun here it would be kĩndũ 'thing' (a class 7 noun). In this sentence, the information in the initial relative clause sets up the background, thus allowing irigũ 'banana', the NP predicate of the equational sentence, to come into focus and to highlight the thing that the speaker wants to eat. The next example illustrates an inverted pseudocleft version of this same sentence:
(489) Inverted pseudocleft
irigũ nĩrĩo ndĩrenda kũrĩa
i- rigũ nĩ- rĩo $N$ - ra- end -a kũ- rĩ -a
$\mathrm{NC}_{5}$ - banana $\mathrm{FOC}-\mathrm{PRO}_{5} \mathrm{SGG}$ - CR.PRES- like -FV NC $\mathrm{C}_{15}$ - eat -FV
'A banana is what I want to eat.' (Lit. A banana is it (that) I want to eat.)
Unlike in a pseudocleft, in an inverted pseudocleft such as this example, the focused information is presented first (in this case, highlighting the identity of a referent: 'a banana is it'), then the background is given to contextualize why that thing is being highlighted (in this case, it is what the speaker wants to eat). In sum, Gîkũyũ has constructions that appear to do the work of pseudoclefts and inverted pseudoclefts. Other (monoclausal) focus constructions have been addressed in sections 6.5.1-6.5.2.

### 7.1.8 Summary

This section has presented an overview of relative clauses in Gĩkũyũ based on our textual data and in-class elicitation sessions. We have seen that relative clauses occur posthead, after any other modifiers in the NP. Gĩkũyũ RCs are (optionally) introduced by a relativizer that agrees in noun class with the head noun. Aside from a different subject concord prefix for class 1 RC subjects, subject concord is identical to that found in main clauses. The negative prefix on RC verbs is $t a-$, and never $t i$ - as found on many negative mainclause predicates. All core and oblique NP arguments can be relativized. For recoverability of the relativized NP, Gĩkũyũ uses the gap strategy in most instances, and pronoun retention for instrumental obliques and objects of comparison. Because of obligatory agreement marking, Gîkũyũ RCs with no overt heads are not truly headless, as a general referent for the head is always inferable since its noun-class is marked with concord prefixes on the relativizer and the RC verb. Finally, we observed that Gĩkũyũ RCs participate in pseudocleft and inverted pseudocleft focus constructions.

### 7.2 Object Complements

Lisa Jeon
This section follows Noonan's (2007) definition of complementation: "the syntactic situation that arises when a notional sentence or predication is an argument of a predicate" (Noonan 2007: 52). The term 'argument' refers to the subject or object of the predicate in the main clause and the term 'complement' denotes the clause that functions as the subject or object of that clause. When a predicate can take a complement clause as an argument, it is referred to as a 'complement-taking predicate' (CTP). This section will focus on complements
that function as the objects of verbs in Gĩkũyũ. For instance, the proper name Njamba, the object of the verb ririkana 'remember' in (490) is a NP argument, while the object in (491) is a complement clause:
(490) Wambũi nĩararirikanire Njamba.

Wambũi nĩ- a- ra- ririkan -ir -e Njamba
PROP FOC- SC $1_{1}$ - NR.PST- remember -COMPL -FV PROP
'Wambũi remembered Njamba (yesterday).'
This NP can be replaced by a clause, e.g., atĩ Njamba nĩarathire 'that Njamba left', that also functions as the object of the matrix clause. This is illustrated in (491).
(491) Wambũi nĩararirikanire [atĩ Njamba nĩarathire].

Wambũi nĩ- a- ra- ririkan -ir -e [atĩ Njamba nĩ- a- ra- thi -ir -e] PROP FOC- SC ${ }_{1}$ - NR.PST- remember -COMPL -FV COMP PROP FOC- SC ${ }_{1}$ - NR.PST- go -COMPL -FV 'Wambũi remembered (yesterday) that Njamba left (yesterday).'

Noonan (2007) describes three main criteria for identifying complement types crosslinguistically: (i) the morphology of the predicate-whether the verb form is finite and able to stand on its own, or nonfinite (lacking the expected argument and/or TAM-marking for a given language); (ii) types of arguments-whether the subject is the same or different from the predicate in the main clause (i.e., the matrix predicate) and whether co-referential arguments are required or may be omitted; and (iii) external syntactic relation-the grammatical relation of the complement to the main clause predicate. Complements may also co-occur with the presence of a complementizer (Givón 1980; Dixon 1995; Noonan 2007).

Complement clauses in Gĩkũyũ can contain verbs that are fully finite, less finite, or nonfinite. Gĩkũyũ thus has three types of complement clauses: finite indicative complements, less finite subjunctive complements, and non-finite infinitival complements. Finite complements are the least integrated grammatically and are the most sentence-like (hereafter, S-like) complement type, i.e., they have the same syntactic form as a main clause (Noonan 2007: 59) and they can stand alone as an independent main clause. Thus, finite complement verbs can have a subject, tense, and aspect that is independent of the matrix verb. Verbs in complement clauses are inflected for the indicative mood for situations that are taken to be fact and inflected for the subjunctive mood for situations that are not yet realized. Different from their indicative counterparts, subjunctive complement clauses are less grammatically integrated and take less fully finite verbs that are inflected for the subjunctive mood with the suffix $-e$. Subjunctive complement clauses cannot stand on their own as independent main clauses and are less finite; they can have a subject, tense, and aspect independent of the matrix verb but
may be dependent on the CTP in terms of time reference. On the other hand, infinitival complements are the most tightly integrated grammatically. In contrast with the two other complement types, infinitival complement verbs are marked with the Class 15 noun class prefix $k \tilde{u}$ - and are non-finite. Non-finite complement clauses cannot stand on their own as independent main clauses, must have the same subject as the matrix verb, and are not marked for TAM and therefore are dependent on the matrix verb for both tense and aspect.

The subsequent three subsections provide a discussion of the three types of complement clauses in Gîkũyũ. A description of finite (indicative) complement clauses is first presented and is followed by a description of less finite (subjunctive) and non-finite (infinitival) complement clauses. The final subsection describes different CTPs in Gĩkũyũ, their semantic verb classes, and the complement types that each can take.

### 7.2.1 Finite Indicative (S-like) Complement Clauses

The first type of complement clause in Gîkũyũ that will be described here is the fully finite indicative complement. These complements are the least grammatically integrated with the matrix verb. Since they are fully finite, they can be independent of the matrix verb in terms of both tense and aspect and have subjects that are different from the subject of the matrix verb.

Finite complement clauses can optionally be preceded by the complementizer atĩ. Both (492) and (493) are grammatical, because the presence as in (492) or absence as in (493) of this complementizer is not grammatically determined. Further research is needed to determine what factors (e.g., the pragmatic status of the information contained in the complement) correlate with the use or non-use of this complementizer.
(492) mũtimia agwĩtîkĩtie [atĩ mũthuri nĩayire ngũkũ].
$m u ̃-$ timia a- kũ- îtîk -ĩt -i $\quad$-e [atĩ mũ- thuri
$\mathrm{NC}_{1}-$ woman SC $_{1}-$ CR.PST- believe -PERF -TRNS -FV COMP NC ${ }_{1}-$ man
nĩ- a- $\varnothing$ - iy -ir -e $N$ - gũkũ]
FOC- SC ${ }_{1}$ - CR.PST- steal -COMPL -FV NC ${ }_{9}$ - chicken.
'The woman believed (today) that the man stole the chicken.'
(493) mũtimia agwĩtîkĩtie [mũthuri nĩayire ngũkũ].
mũ- timia a- kũ- ĩtîk -ĩt -i -e [mũ- thuri
$\mathrm{NC}_{1}-$ woman $\mathrm{SC}_{1}$ - CR.PST- believe -PRF -TRNS -FV NC $\mathrm{C}_{1}$ - man
nĩ- a- $\varnothing$ - iy -ir -e N- gũkũ]
FOC- SC $_{1}$ - CR.PST- steal -IMPF -FV NC $9_{9}$ - chicken
'The woman believed (today) the man stole the chicken.'

The types of verbs that can serve as the matrix verb for finite complement clauses primarily include verbs of utterance, perception, and cognition. Finite complement clauses are exemplified in (494) and (495) below, and examples (496)-(497) show that these complement clauses can stand on their own and are thus S-like, since they are fully-fledged independent main clauses on their own terms.
(494) mũtimia aiguire [atĩ mũthuri nĩakũiya ngũkũ].
mũ- timia a- $\varnothing$ - igu -ir -e [atĩ mũ- thuri nĩ- a- kũ- iy -a $N$ - gũkũ] $\mathrm{NC}_{1}$ - woman $\mathrm{SC}_{1}$ - CR.PST- hear -IMPF -FV COMP NC $\mathrm{C}_{1}$ - man $\quad$ FOC- $\mathrm{SC}_{1}$ - CR.FUT- steal -FV NC ${ }_{9}$ - chicken 'The woman heard that the man will steal the chicken.'
(495) mũtimia agwĩcirĩtie [atĩ kagui kaiyire ngũkũ].
mũ- timia a- kũ- ĩcir -ĩt -i e atĩ [ka- gui
$\mathrm{NC}_{1}-$ woman $\mathrm{SC}_{1}-$ CR.PST- think -PERF -TRNS -FV COMP NC $\mathrm{N}_{12}$ - dog
nĩ- ka- Ø- iy -ir -e N- gũkũ]
FOC- $\mathrm{SC}_{12}$ - CR.PST- steal -COMPL -FV NC ${ }_{9}$ - chicken
'The woman had thought the little dog stole a chicken (today). (But it wasn't true.)'
(496) mũthuri nĩakũiya ngũkũ.
mũ- thuri nĩ- a- kũ- iy -a $\mathrm{N}-$ gũkũ
$\mathrm{NC}_{1}$ - man $\mathrm{FOC}-\mathrm{SC}_{1}$ - CR.FUT- steal - $\mathrm{FV} \mathrm{NC}_{9}$ - chicken
'The man will steal a chicken (today).'
(497) kagui kaiyire ngũkũ.
ka- gui nĩ- ka- $\varnothing$ - iy -ir -e N - gũkũ
$\mathrm{NC}_{12}$ - dog FOC- $\mathrm{SC}_{12}$ - CR.PST- steal -COMPL -FV NC $9_{9}$ - chicken
'The little dog stole a chicken (today).'
As examples (494) and (495) demonstrate, the predicate of finite indicative complements can be independent of the matrix verb in both tense and aspect and have subjects that are different from the subject of the matrix verb. In (494), the matrix verb igua 'hear' is unmarked for tense (and thus is in the current past) and is marked for the completive aspect with the suffix -ir. This TAM marking on the matrix verb is different from that of the complement verb, iya 'steal', which is marked for current future tense with the prefix k $\tilde{u}-$ and has no aspect marking. The subject of the matrix verb mũtimia 'woman' is also different from the subject of the complement verb mũthuri 'man'. Similarly, in (495), the matrix verb gwĩcira 'think' is unmarked for tense (and thus is in the current past) and is marked for the perfect aspect with the suffix - $\tilde{t}$. In this case, the complement verb iya 'steal' has the same tense as the matrix verb; however, it is marked for a different aspect with the completive suffix -ir. The subject of
the matrix verb mũtimia 'woman' also differs from the subject of the complement verb kagui 'little dog.'

Direct quotation is accomplished by using a quotative verb, e.g. uga 'say', followed by a finite complement clause (the utterance) with no complementizer. This is exemplified in (498) and (499).
(498) mũtimia augire, ["nĩnjiyire ngũkũ."]
mũ- timia a- $\varnothing$ - ug -ir -e
$\mathrm{NC}_{1}-$ woman $\mathrm{SC}_{1}$ - CR.PST- say -COMPL -FV
nĩ- N- $\quad$ - iy -ir -e N- gũkũ
FOC- 1SG.SUBJ- CR.PST- steal -COMPL -FV NC ${ }_{9}$ - chicken
'The woman said (today), "I stole the chicken (today)."
(499) mũtimia augire, ["iya ngũkũ!"]
mũ- timia a- Ø- ug -ir -e iy -a $N$ - gũkũ
$\mathrm{NC}_{1}-$ woman $\mathrm{SC}_{1}-\mathrm{CR}$.PST- say -COMPL -FV steal -FV NC ${ }_{9}$ - chicken
'The woman said, "Steal the chicken!"'

Indirect quotation is accomplished by using a finite complement clause as in (500)-(501) and may be optionally preceded by a complementizer as in (501).
(500) Lisa anjĩra [nyuma na kĩrathi nake thaa inyanya].

Lisa a- $\varnothing$ - N - in -a N - uma na kĩ- rathi nake
PROP SC $1_{1}$ - CR.PST- 1SG.OBJ- tell -FV 1SG.SUBJ- COP.BRP with NC ${ }_{7}-$ class $\mathrm{NC}_{1}$.POS
thaa i- nyanya
$\mathrm{NC}_{9}$.hour $\mathrm{AC}_{9}$ - eight
'Lisa then told me I had a class with her at $2^{2}$.'
(501) cibũ anjĩra [atĩ nĩakũndũmĩra dokiumeniti ya mũcemanio wa ikotuarithimu].
cibũ a- $\varnothing$ - $\quad \mathrm{N}-\quad$ ĩr -a atĩ nĩ- a- kũ- $\quad \mathrm{N}$ - dũm-ĩr -a $\mathrm{NC}_{1}$.chief SC $_{1}-$ CR.PST- 1SG.OBJ- tell -FV COMP FOC- SC $1_{1}$ - CR.FUT- 1SG.OBJ- send -APP -FV dokiumeniti ĩ- a mũ- cemanio ũ- a ikotuarithimu
$\mathrm{NC}_{9}$.document $\mathrm{AC}_{9}-\mathrm{ASSOCNC}_{3}-$ meeting $\mathrm{AC}_{3}-\mathrm{ASSOC}^{\mathrm{NC}}{ }_{9}$.ecotourism 'The chief told me that he would send me the document of the ecotourism meeting.'

Complements may be embedded within other complements as illustrated in (502).

[^1](502) augire ["ndaugire [atĩ ndona [atĩ mwarĩ wakwa nĩaratuĩkire mũtimia."]]]
a- $\varnothing$ - ug -ir -e N - a- ug -ir -e atĩ N - $\varnothing$ - on -a
SC $_{1}$ - CR.PST- say -COMPL -FV 1SG- PST- say -COMPL -FV COMP 1SG- CR.PST- see -FV
atĩ mũ-arĩ ũ- akwa nĩ- a- ra- tuîk -ir -e mũ- timia
COMP NC $1_{1}$ - daughter AC $_{1}-1$ SG.POS FOC- SC $_{1}$ - NR.PST- become -COMPL -FV NC ${ }_{1}-$ woman 'She said, "I said that I saw that my daughter had become a woman."'

### 7.2.2 Less Finite Subjunctive Complements

The second type of complement clause is the subjunctive. Similar to finite indicative complements, subjunctive complement clauses may contain finite verbs and have a subject, tense, and aspect different from that of the matrix verb. However, subjunctive complement clauses are considered less finite because they contain verbs that are marked with the subjunctive suffix $-e$, they cannot stand on their own as independent clauses, and they may also be dependent on the CTP in the matrix clause in terms of time reference. The types of verbs that can serve as CTPs for subjunctive complement clauses primarily include verbs of desire, manipulation, and modality. This is demonstrated in (503)-(506), where examples (504) and (506) show that subjunctive complement clauses cannot be fully-fledged independent clauses on their own.
(503) nĩngwendete [Wangware athambĩre].
nĩ- N - kũ- end -et -e Wangware a- $\varnothing$ - thambĩr -e FOC- 1SG.SUBJ- CR.PST- want -PERF -FV PROP SC ${ }_{1}$ - CR.PST- swim -SJV 'I had wanted Wangware to swim (today).'
(504) *Wangware athambĩre.

* Wangware a- Ø- thambĩr-e PROP SC 1 - CR.PST- swim -SJV
(505) mũthuri nãararingĩrĩirie [Mũturi ahinge mũrango].
mũ- thuri nĩ- a- ra- ringĩr - -
$\mathrm{NC}_{1}-$ man $\quad$ FOC- $\mathrm{SC}_{1}$ - NR.PST- persuade -APP -COMPL -TRNS -FV
Mũturi a- $\varnothing$ - hing -e mũ- rango
PROP $\quad \mathrm{SC}_{1}$ - CR.PST- close -SJV NC ${ }_{3}$ - door 'The man persuaded Mũturi to close the door.'
(506) ${ }^{*}$ Mũturi ahinge mũrango.
* Mũturi a- Ø- hing -e mũ- rango.

PROP $\quad \mathrm{SC}_{1}$ - CR.PST- close -SJV NC ${ }_{3}$ - door

In (503), the matrix verb enda 'want' is marked for the perfect aspect with the suffix -et. This contrasts with the TAM marking of the complement verb, thambira 'swim', which has no aspect marking, and is inflected for the subjunctive mood with the suffix $-e$. The subject indexed on the matrix verb 'I' with the first person singular subject prefix $N$ - also differs from the subject of the complement verb Wangware. (503) also shows that the matrix verb ringira 'persuade' is marked for the near past tense with the prefix $r a$ - and for the completive aspect with the suffix -ir. The complement verb, by contrast, is unmarked for tense and thus is in the current past, has no aspect marking, and is inflected for the subjunctive mood with suffix $-e$. The subject of the matrix verb (mũthuri 'man') also differs from the subject of the complement verb (Mũturi).

### 7.2.3 Non-Finite Complements

The final type of complement clause is the infinitival complement, the most structurally reduced type of complement. Different from the two other complement types, infinitival complement verbs are marked with the Class 15 noun class prefix $k \tilde{u}$ - and are nonfinite; they may be considered nominalizations, since they are marked with a noun-class prefix. In non-finite complement clauses, the identity of the subject of the complement clause must be identical to that of the matrix verb. In addition, non-finite complement verbs are not marked for TAM and are therefore dependent on the matrix verb in terms of both tense and aspect. The types of verbs that can serve as the matrix verb for non-finite complement clauses include aspectual verbs and verbs of desire and manipulation. This is exemplified in (507)-(512) below, where the ungrammatical examples ((508), (510), and (512)) demonstrate that nonfinite infinitival complements cannot stand on their own as independent main clauses.
(507) nĩndĩrambĩrĩrie [kũrĩa].
nĩ- N - ra- amb-ĩrĩr -i $\quad$-e [kũ- rĩ -a]
FOC- 1SG.SUBJ- NR.PST- start -INTENS -TRNS -FV NC $\mathrm{C}_{15}$ - eat -FV 'I began to eat (yesterday).'
(508) *kũrĩa.

* kũ- rĩ -a
$\mathrm{NC}_{15^{-}}$eat -FV
(509) Wangware nĩerĩgĩriire [gũthoma mbuku].

Wangware nĩ- a- $\varnothing$ - inrĩgĩr -ĩ -ir -e [kũ- thom -a $N$ - buku] PROP FOC- SC ${ }_{1}$ - RM.PST- intend -APP -COMPL -FV NC $1_{15}$ - read - $\mathrm{FV} \mathrm{NC}_{9}$ - book 'Wangware intended to read the book (before yesterday).'
(510) *gũthoma mbuku.

* kũ- thom -a N - buku
$\mathrm{NC}_{15}-$ read $-\mathrm{FV} \mathrm{NC}_{9}$ - book
(511) Wambũi nĩaretîkĩririe [Mũturi kwĩruta rũrĩmĩ rũngĩ].

Wambũi nĩ- a- ra- ĩtîkĩr -ir -i -e
PROP FOC- SC $1_{1}$ - NR.PST- allow -COMPL -TRNS -FV
[Mũturi kũ- ${ }^{-}$rut -a rũ- rĩmĩ rũ- ngĩ]
PROP $\quad \mathrm{NC}_{15}$ - REFL- learn - $\mathrm{FV} \mathrm{NC}_{11}$ - tongue $\mathrm{AC}_{11^{1}}$ another
'Wambũi allowed Mũturi to learn another tongue (yesterday).'
(512) *Mũturi kwĩruta rũrĩmĩ rũngĩ.

* Mũturi kũ- $\tilde{1}^{-}$rut -a rũ- rĩmĩ rũ- ngĩ

PROP $\quad \mathrm{NC}_{15}$ - REFL- learn -FV NC $\mathrm{N}_{11}$ - tongue $\mathrm{AC}_{11^{-}}$another
In (509), the matrix verb ĩrigira 'intend' is in the remote past tense whereas the complement verb thoma 'read' is marked with the Class 15 infinitival prefix $k \tilde{u}$ - and receives no TAM marking. Wangware, The subject indexed on the matrix verb with the noun class 1 subject prefix $a$-, has the same identity as the subject of the complement verb. Further, in (511), the matrix verb îtikizra 'allow' is marked for the near past tense with the prefix ra- and for the completive aspect with the suffix -ir. However, the complement verb ruta 'learn' is marked instead with the Class 15 infinitival prefix $k \tilde{u}-$ and has no TAM marking. The subject of the matrix verb Wambũi, differs from the subject of the complement verb Mũturi.

### 7.2.4 CTPs and Their Complements

This section briefly discusses different complement-taking predicates (CTPs) in Gîkũyũ and their complements. A given CTP can only take certain types of complements, and this depends to a large extent on the general semantic class of verbs the particular CTP is a member of. Data were elicited for 31 CTPs to see which types of complements each predicate
could take. The results are listed in Table 31, which shows the semantic verb class of each CTP, and which of the three syntactic complement type(s) it can take (denoted by a check mark).

Table 31: Gĩkũyũ CTPs and their complement types

| CTP Type | CTP | Complement Types |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Finite (Indicative) | Less finite (Subjunctive) | Non-finite (Infinitival) |
| utterance | uga 'say' | $\checkmark$ |  |  |
|  | ĩra 'tell' | $\checkmark$ |  |  |
|  | riboti 'report' | $\checkmark$ |  |  |
|  | anîrĩra 'announce' | $\checkmark$ |  |  |
| perception | igua 'hear' | $\checkmark$ |  |  |
|  | ona 'see' | $\checkmark$ |  |  |
| cognition | gwîtîkia 'believe' | $\checkmark$ |  |  |
|  | ririkana 'remember' | $\checkmark$ |  |  |
|  | İcirie 'think' | $\checkmark$ |  |  |
|  | ĩtue 'pretend' | $\checkmark$ |  |  |
|  | rota 'dream' | $\checkmark$ |  |  |
|  | irrire 'regret' | $\checkmark$ |  |  |
|  | kena 'be happy' | $\checkmark$ |  |  |
|  | rakara 'be angry' | $\checkmark$ |  |  |
| desiderative | îhoke 'hope' | $\checkmark$ | $\checkmark$ | $\checkmark$ |
|  | enda 'want/wish/like' | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| modality | no 'can/must' |  | $\checkmark$ |  |
|  | hota 'might' |  |  | $\checkmark$ |
| manipulation | tũma 'force' |  | $\checkmark$ |  |
|  | ringĩrĩria 'persuade' |  | $\checkmark$ |  |
|  | îtîkira 'allow' |  |  | $\checkmark$ |
|  | atha 'order' |  |  | $\checkmark$ |
|  | rega 'refuse' |  |  | $\checkmark$ |
|  | geria 'try' |  |  | $\checkmark$ |
|  | ĩrĩgĩrĩra 'expect/intend' |  |  | $\checkmark$ |
|  | banga 'plan' |  |  | $\checkmark$ |
| aspectual | amba 'begin' |  |  | $\checkmark$ |
|  | rîka 'finish' |  |  | $\checkmark$ |

At the top of Table 31 are finite (indicative) complements, where the matrix clause and complement clause undergo no structural integration, and the verb in the complement clause can have its own independent TAM marking. Unlike some of the complement types further
down on the table, this complement type occurs with finite verb forms. As the table shows, the types of CTPs that finite complements can take include verbs of utterance, perception, and cognition.

The CTPs in the middle of Table 31 show more variation in the types of complements they can take and include desiderative and modality verbs. Desiderative CTPs such as îhoka 'hope' and enda 'want/wish/like' can take all three types of complements - finite, less finite, and non-finite. By contrast, modality verbs show a split in the types of complements they can take; the CTP no 'can/must' may take only less finite (subjunctive) complements whereas the CTP hota 'might' may take only non-finite (infinitival) complements. The other CTPs in the middle of Table 31 are verbs of manipulation that Givón (1980) terms other manipulation success (implicative) CTPs, e.g., tũma 'force' and rĩgĩra 'persuade'. Different from other verbs of manipulation that occur at the bottom of the table, these CTPs take subjunctive complements, which undergo more structural integration and are marked as less finite with the subjunctive suffix $-e$.

Lastly, we see that at the bottom of Table 31, non-finite (infinitival) complements primarily occur with CTPs that include aspectual verbs and verbs of manipulation. Non-finite complements do not occur at all at the top of the chart, occur with hota 'might' in the middle of the chart, and appear alone towards the bottom of the table. Thus, we see that different CTPs pattern similarly in terms of the complement types they can take depending on their semantic verb class.

Table 31 also illustrates that Gĩkũyũ generally conforms to Givón's (1980) Binding Hierarchy, a full discussion of which lies outside the scope of this sketch grammar (see Givón 1980, Givón 2001).

### 7.2.5 Summary

This section has demonstrated that Gĩkũyũ has three types of object complement clauses: finite indicative complements, less finite subjunctive complements, and non-finite infinitival complements. Finite complements are the least integrated grammatically and are most S-like in that they can stand on their own as fully-fledged independent main clauses; the complement verb can have a subject, tense, and aspect independent of the matrix verb. By contrast, subjunctive complement clauses take less fully finite verbs than their indicative counterparts. They are also inflected for the subjunctive mood with the suffix $-e$, which marks them as less finite than main clause verbs. These less finite complement clauses can have a subject, tense, and aspect independent of the matrix verb but may be dependent on the CTP in terms of time reference. On the other hand, infinitival complements are the most tightly integrated grammatically and are the least S-like. Unlike the two other complement types,
infinitival complement verbs are marked with the Class 15 noun class prefix $k \tilde{u}-$ and are nonfinite. These non-finite complements cannot stand alone as independent main clauses and must have subjects identical to that of the matrix verb. Further, non-finite complement verbs are not marked for TAM and are therefore dependent on the matrix verb for both tense and aspect. Finally, this section has also demonstrated that CTPs in Gĩkũyũ can only take certain types of complements, and this depends mainly on the general semantic class of verb the particular CTP is a member of. Finite complements primarily take verbs of utterance, perception, and cognition; less finite (subjunctive) complements primarily take verbs of desire, manipulation, and modality; and non-finite (infinitival) complements primarily take modality and aspectual verbs.

### 7.3 Adverbial Clauses and Converbs

## Samantha Mauney

In the broadest sense, an adverbial clause is one that modifies another clause or verb phrase, functioning adverbially (Longacre and Thompson 1985, as referenced in Payne 1997). An adverbial clause is a dependent clause that is often, but not always, formed with a subordinating morpheme or conjunction. Adverbial clauses are not arguments of the main verb and are therefore not complement clauses (Payne 1997). Unfortunately, determining whether or not a clause is subordinate can be difficult because the difference between subordinate clauses and main clauses is best described as a continuum, instead of in terms of clear-cut boundaries between discrete categories (Thompson et al., 2007). In Gîkũyũ, verbs are subordinate if they are not marked for tense. A clause can be called dependent if it depends on another clause for at least some of its grammatical information (Payne, 2007). Despite the fact that subordinate verbs may carry some other grammatical information (such as noun class concord, person agreement, or even aspect), the lack of a tense morpheme is a sign that a particular verb cannot stand alone as its own sentence. In the case of null-marked tenses, the temporal meaning of the verb is gathered from the final vowel of the verb as well as other elements within the clause (ex. Is the verb the nucleus of a main clause? Can it stand alone?). Thus, the verbs ona 'she/he sees' and the ona of the time constructions found in the next section are not the same. The latter cannot stand on its own and bear the same meaning, and thus must rely on the accompanying clause to help impart that meaning.

Converbs are essentially "non-finite verb forms whose main function is to mark adverbial subordination." Converbs are not necessarily subordinate, and can also be used to mark coordination (Haspelmath \& König 1995, as cited in Ramat 1996). Many of the adverbial phrases in this section are subordinate, meaning that they derive some of their grammatical information from other elements in the sentence, and therefore cannot be complete sentences in their own right. However, some of the adverbial examples listed here contain finite verbs
that can, alone, form simple sentences. Thus the term converb is a better term for the conjunctions and verbs that introduce these phrases, as it would not be appropriate to call these adverbial clauses.

The semantic categories of adverbial constructions discussed in this section are time, manner, location, conditional, substitutive, additive, and concessive. All are adapted from Thompson et al., 2007.

### 7.3.1 Time

### 7.3.1.1 'Before’

Time adverbials modify the main clause by temporally situating it. In Gĩkũyũ, events that post-date the main clause event (i.e. events that the main clause event comes 'before', temporally) are expressed with the posterior-clause morpheme ta- or tana-. Further research needs to be conducted on the distribution of these allomorphs. Verbs in these constructions are subordinate, as they cannot stand alone.
(513) atanona ngũkũ ĩyo nĩtũrarĩrire
a- tana- on -a N- gũkũ ĩyo nĩ- tũ- ra rĩr -ir -e
$\mathrm{SC}_{1}-$ POST- $^{3}$ find -FV NC ${ }_{9}$ - chicken ANA.DEM ${ }_{9}$ FOC- 1PL.SUBJ- NR.PST- cry -COMPL -FV
'Before he found the chicken, we cried (yesterday).'
Example (514) below simply shows that the order of the clauses can vary.
(514) nĩtũrarĩrire atanona ngũkũ
nĩ- tũ- ra rĩr -ir -e a- tana- on -a N - gũkũ
FOC- 1PL.SUBJ- NR.PST- cry -COMPL -FV SC ${ }_{1}$ - POST- find -FV NC ${ }_{9}$ - chicken
'We cried (yesterday) before he found the chicken.'

Below is a more complex example of this construction. Note that the ta- allomorph is being used.

[^2](515) akona maũndũ ma mbere matekîkĩte
a- ka- on -a ma-ũndũ ma-a mbere ma-ta- îk -îk -ĩt -e
$\mathrm{SC}_{1}$ - SEQ- see -FV NC ${ }_{6}$ - thing $\mathrm{AC}_{6}$ - ASSOC ahead $\mathrm{SC}_{6}$ - POST- do -MID -PERF -FV
'So he sees events of the future before they have happened.'

### 7.3.1.2 'After'

Events that take place prior to the main clause event (i.e. events which the main-clause event occurs 'after') are expressed modifying the verb uninflected for tense. This applies regardless of the tense of the verb within the main clause. Examples (517) and (518) illustrate how the adverbial clause remains unchanged regardless of the tense of the verb in the main clause. As with before constructions, these after constructions can be described as adverbial clauses because they are dependent. Ona ngũkũ is not an acceptable independent clause in Gĩkũyũ except as an imperative 'see/find the chicken!'.
(516) nĩonire ngũkũ
nĩ- a- on -ir -e N- gũkũ
FOC- $\mathrm{SC}_{1}$ - find -COMPL -FV NC ${ }_{9}$ - chicken
'He found the chicken (yesterday).'
(517) ona ngũkũ ĩyo nĩtũrarĩire
a- on -a N - gũkũ ĩyo nĩ- tũ- ra- rĩ -ir -e
$\mathrm{SC}_{1}$ - find -FV NC 9 - chicken ANA.DEM ${ }_{9}$ FOC-1PL.SUBJ- NR.PST- eat -COMPL -FV
'After he found that chicken, we ate (yesterday).'
(518) ona ngũkũ Ĩyo nĩtũkũria
a- on -a N- gũkũ ĩyo nĩ- tũ- kũ- rĩ -a
$\mathrm{SC}_{1}$ - find -FV NC ${ }_{9}$ - chicken ANA.DEM ${ }_{9}$ FOC-1 1PL.SUBJ- CR.FUT- eat -FV
'After he finds that chicken, we will eat (today).'
Finally, the 'after' construction is contrasted with the 'before' construction in the following two sentences. Sentences (519) and (520) are identical except for the addition of the posteriorclause prefix tana- in (520) and kuma 'from' in (519). Kuma is required in (519) in order to express the temporal distance of 'three hours later'. The stem of this word is uma 'come from', and generally indicates distance in time or place.
(519) mathaa matatũ kuma ona ngũkũ ĩyo nĩtũrarĩire
ma- thaa ma-tatũ kuma a- on -a $N$ - gũkũ ĩyo nĩ- tũ- ra- rĩ -ir -e $\mathrm{NC}_{6}-$ hour $\mathrm{AC}_{6}$ - three from $\mathrm{SC}_{1}$ - find -FV NC ${ }_{9}$ - chicken ANA.DEM ${ }_{9}$ FOC-1 1PL.SUBJ- NR.PST- eat -COMPL -FV 'Three hours after he found that chicken, we ate (yesterday).'
(520) mathaa matatũ atanona ngũkũ ĩyo nĩturariire
ma- thaa ma-tatũ a- ta- on -a N - gũkũ ĩyo nĩ- tũ- ra- rĩ -ir -e $\mathrm{NC}_{6}-$ hour $\mathrm{AC}_{6}$ - three $\mathrm{SC}_{1}$ - POST- find -FV NC ${ }_{9}$ - chicken ANA.DEM ${ }_{9}$ FOC- 1PL.SUBJ- NR.PST- eat -COMPL -FV 'Three hours before he found that chicken we ate (yesterday).'

### 7.3.1.3 Simultaneity

To express simultaneous events, Gĩkũyũ uses the morpheme kĩ-. Unlike previous time adverbial clauses, there are constraints on word order, illustrated in examples (523)-(526). As above, these constructions are also subordinate clauses, meaning that they cannot stand alone as complete sentences. In sentence (521), for example, ũkĩrĩa is not a complete sentence, while the main clause nĩethire ngũkũ is perfectly acceptable on its own.
(521) ũkĩrĩa nĩethire ngũkũ
ũ- kĩ- rĩ -a nĩ- a- eth -ir -e N- gũkũ
2SG.SUBJ- SIM- eat -FV FOC- SC ${ }_{1}$ - search -COMPL -FV NC ${ }_{9}$ - chicken
'As you ate, he looked for the chicken (today).'
In the sentence below, the verb in the adverbial clause remains the same, despite the fact that the tense in the main clause has changed.
(522) ũkĩrĩa nĩagwetha ngũkũ
ũ- kĩ- rĩ -a nĩ- a- kũ- eth -a $N$ - gũkũ
2SG.SUBJ- SIM- eat -FV FOC- SC $1_{1}$ - CR.FUT- search -FV NC ${ }_{9}$ - chicken
'While you eat, he will look for the chicken (today).'
When the subject of the subordinate clause is the object of the main clause, the referent cannot precede the main clauses verb. For instance, in the sentence (523), the adverbial clause is preceded by the main clause. The referent is introduced before it is (otherwise ambiguously) marked on the verb with a noun concord marker. That is, without the explicit ngũkũ, the subject referenced by the subject marker $\tilde{\tilde{q}^{-}}$could refer to anything belonging to that noun class.
(523) onire ngũkũ ĩkiũra
a- on -ir -e N- gũkũ $\tilde{1}^{-}$kĩ- ũr -a
$\mathrm{SC}_{1}$ - find -COMPL -FV NC ${ }_{9}$ - chicken $\mathrm{SC}_{9}$ - SIM- run.away -FV
'He found the chicken (yesterday) as it was running away.'
The next sentence illustrates that if the subordinate clause is to precede the main clause, the subject of the subordinate clause must be expressed with a full noun phrase.
(524) ngũkũ îkĩũra nĩamĩonire

N- gũkũ ĩ- kĩ- ũr -a nĩ- a- mĩ- on -ir -e
$\mathrm{NC}_{9}$ - chicken $\mathrm{SC}_{9}$ - SIM- run.away -FV FOC- $\mathrm{SC}_{1}$ - OC ${ }_{9}$ - see -COMPL -FV
'As the chicken was running away, he found it (yesterday).'
Furthermore, the next sentence is unacceptable to our consultant because even though the adverbial clause precedes the main clause, the shared referent is not expressed first.
(525) *îkĩũra nĩonire ngũkũ

* ¹- $^{-}$kĩ- ũr -a nĩ- a- on -ir -e N- gũkũ $\mathrm{NC}_{9}$ - SIM- run.away -FV FOC- $\mathrm{SC}_{1}$ - find -COMPL -FV NC ${ }_{9}$ - chicken

When the simultaneous adverbial clause occurs first, the referent also cannot be repeated within the main clause. This is illustrated in the following example, which is ungrammatical for that reason.
(526) ${ }^{*}$ ngũkũ îkiũura nĩaonire ngũkũ

```
* N- gũkũ \(\tilde{1}^{-}\)kĩ- ũr \(\quad\)-a nĩ- a- on -ir \(\quad\)-e \(N\) - gũkũ
    \(\mathrm{NC}_{9}\) - chicken \(\mathrm{SC}_{9}\) - SIM- run.away -FV FOC- \(\mathrm{SC}_{1}\) - find -COMPL -FV NC \({ }_{9}\) - chicken
```

The sequential tense is also kĩ-. It is used when discussing events in a narrative sequence. In stories, it is used to signify that the marked event follows an element introduced earlier in discourse. If simply observed in the Gĩkũyũ orthography, the construction for expressing sequential events appears identical to the construction that signals that an event is simultaneous. However, there is a tonal difference that distinguishes the two.

In (527), sequentiality is expressed with the tonal sequence LHL (low high low), while in (528), simultaneity is expressed with LLL (three low tones).
(527) Kenya yagĩire na wĩyathi mũtĩ ũkĩgũa

Kenya ĩ- agĩ -ir -e na wĩyathi mũ̃tĩ ũ- kĩ- gũ -a
L H L
Kenya $\quad \mathrm{SC}_{9}$ - acquire -COMPL -FV with $\mathrm{NC}_{9}$.freedom $\mathrm{NC}_{3}$ - tree $\mathrm{SC}_{3}$ - SEQ - fall - FV 'Kenya acquired freedom (before yesterday) and then the tree fell.'
(528) Kenya yagĩire na wĩyathi mũtĩ ù̀kĩgũa

Kenya ĩ- agĩ -ir -e na wĩyathi mũ̃tĩ ũ- kĩ- gũ -a L L L
Kenya $\quad \mathrm{SC}_{9}-$ acquire -COMPL -FV with $\mathrm{NC}_{9}$.freedom $\mathrm{NC}_{3}$ - tree $\mathrm{SC}_{3}$ - SIM - fall - FV 'Kenya acquired freedom (before yesterday) as the tree fell.'

### 7.3.2 Location

Location adverbials are actually locative relative clauses (see section 7.1.5).
(529) ndĩ wa hau ũrĩ
$N$ - rĩ w- a hau ũ- rĩ
1SG- COP AC ${ }_{1}$ - ASSOC ANA.DEM ${ }_{16}$ 2SG- COP
'I belong where you are.' (Lit. 'I am of the place that you are.')
(530) Wangware na Wambũgũ maracemanirie harĩa mũgũmo ũkũraga

Wangware na Wambũgũ ma- ra- cem -an -ir -i $\quad$-e ha- rĩa PROP and PROP $\quad \mathrm{SC}_{2}-$ NR.PST- meet -RECIP -COMPL -TRNS -FV RC ${ }_{16}$ - REL
mũgũmo ũ- kũr -ag -a
$\mathrm{NC}_{3}$.mũgũmo $\mathrm{SC}_{3}$ - grow - $\mathrm{HAB}-\mathrm{FV}$
'Wangware and Wambũgũ met (yesterday) where the Mũgũmo tree grows.' (Lit. '...the place that the Mũgũmo tree grows.')
(531) Wangware na Wambũgũ maracemanirie handũ hothe mũgũmo ũkũraga

Wangware na Wambũgũ ma- ra- cem -an -ir -i $\quad$-e ha- ndũ ha- othe PROP and PROP $\quad \mathrm{SC}_{2}-$ NR.PST- meet-RECIP -COMPL -TRNS -FV NC ${ }_{16}-$ place $\mathrm{AC}_{16}$ - all mũgũmo ũ- kũr -ag -a $\mathrm{NC}_{3}$.mũgũmo $\mathrm{SC}_{3}-$ grow - $\mathrm{HAB}-\mathrm{FV}$ 'Wangware and Wambũgũ met (yesterday) wherever the Mũgũmo tree grows.' (Lit. '...met at all the places that the Mũgũmo tree grows.')

### 7.3.3 Manner

The current data suggests that in Gîkũyũ, manner is not expressed with an adverbial clause. Instead, it is expressed with the preposition ta which simply means 'like' or with the verb tara 'be counted as.' A relative clause can be constructed to convey a similar meaning, as shown in examples (534) and (535).

In examples (532) and (533), the preposition ta is used to reflect manner.
(532) mũndũ aratariĩ ta mwana
mũ- ndũ a- ra- tari $-\tilde{i}$ ta mũ- ana
$\mathrm{NC}_{1}-$ man $\mathrm{SC}_{1}-$ NR.PST- count.as -FV like $\mathrm{NC}_{1}-$ child
'The man behaved like a child (yesterday).'
The following example shows an interesting serial verb construction that lends itself to further research:
(533) akwenda akorwo atariĩ ta mwana
a- kũ- end -a a- kor -wo a- tari -ĩ ta mũ- ana
$\mathrm{SC}_{1}$ - CR.FUT- want -FV SC ${ }_{1}$ - find -PV SC $1_{1}$ - count.as - FV like $\mathrm{NC}_{1}$ - child
'He wants to be counted as a child (today).'
When tara is used with a verb instead of a noun, it must be followed by a relative clause.
(534) mwana arekire ũrĩa ndĩramwĩrire
mũ- ana a- rek -ir -e ũ- rĩa N- ra- mũ- ĩr -ir -e $\mathrm{NC}_{1}$ - child SC $_{1}$ - behave -COMPL -FV AC $1_{1}$ - REL 1 SG.SUBJ- NR.PST- OC $1_{1}-$ tell -COMPL -FV 'The child behaved like I told her to (yesterday).'
(535) mwana aratariĩ ũrĩa ndĩramwĩrire
mũ- ana a- ra- tari -î un- rĩa $N$ - ra- mũ- ĩr -ir -e $\mathrm{NC}_{1}$ - child $\mathrm{SC}_{1}$ - NR.PST- count.as -FV AC ${ }_{1}$ - REL 1 SG. SUBJ- NR.PST- $\mathrm{OC}_{1}-$ tell -COMPL -FV 'The child was as I asked/told him to be (yesterday).'

### 7.3.4 Purpose/Reason

Gĩkũyũ uses a conjunction such as tondũ 'because,' as well as nĩguo and nĩgetha 'that' to express purpose or reason. The latter two conjunctions are completely interchangeable and both mean 'so that.' It is cross-linguistically common for the infinitive to be used if the subject within the purpose clause is the same as the subject of the main clause (Haspelmath 1989, as
cited in Thompson et al. 2007). Gîkũyũ follows this pattern, but the infinitive can also be used with nĩũndũ for purpose clauses with different subjects than their main clause.

Examples (536) and (537) illustrate same-subject purpose clauses.
(536) ũgĩakĩrwo ũgĩthiũrũrũkio na mahiga nigetha atĩ ndũkagwe,
ũ- kĩ- ak -ĩr -wo ũ- kĩ- thi -ũrũr -ũr -ĩk -i - -o na ma-higa
$\mathrm{SC}_{3}-$ SEQ- build -APP -PV SC $3^{-}$- SEQ- go -INTENS -REVERS MID -TRNS -PV with $\mathrm{NC}_{6}-$ stone
nĩgetha atĩ nd- ũ- ka- gũ -e
so.that COMP NEG- $\mathrm{SC}_{3}$ - CR.PRES- fall -SJV
'The tree was built for and encircled with stones so that it apparently would not fall.'
(537) ndugire irio nĩguo mwana arĩe

N- rug -ir -e i- rio nĩguo mũ- ana a- rĩ -e
1SG.SUBJ- cook -COMPL -FV NC ${ }_{8}$ - food so.that $\mathrm{NC}_{1^{-}}$child $\mathrm{SC}_{1}$ - eat -SJV
'I cooked food so that the child could eat.'
The following three sentences contrast the different strategies of constructing purpose clauses. In (538), the different subject clause is introduced with nĩgetha and is followed by the verb in the subjunctive. Sentence (539), which contains a same-subject purpose clause, uses the infinitive. The last example also contains the infinitive, but it must be preceded by nĩũndu, which generally means 'because' but literally means 'business/thing of,' followed by a possessive pronoun.
(538) tũrathire Nyairobi nĩgetha wone Wangware
tũ- ra- thi -ir -e Nyairobi nĩgetha ũ- on -e Wangware
1PL.SUBJ- NR.PST- go -COMPL -FV Nairobi so.that 2SG.SUBJ- see -SJV PROP 'We went to Nairobi (yesterday) so that you might see Wangware.'
(539) tũrathire Nyairobi kũona Wangware
tũ- ra- thi -ir -e Nyairobi kũ- on -a Wangware
1PL.SUBJ- NR.PST- go -COMPL -FV Nairobi $\mathrm{NC}_{15}$ - see -FV PROP
'We went to Nairobi (yesterday) to see Wangware.'
As mentioned above, the following sentence shows the conjunction niũndu used with the possessive pronoun wakũ. This is followed by the infinitive.
(540) tũrathire Nyairobi nĩũndũ waku kũona Wangware
tũ- ra- thi-ir -e Nairobi nĩũndũ waku kũ- on -a Wangware
1PL.SUBJ- NR.PST- go -COMPL -FV Nairobi because 2 SG.POS $\mathrm{NC}_{15}$ - see -FV PROP
'We went to Nairobi (yesterday) for you to see Wangware.'
Here, reason is expressed with the conjunction nĩund $\tilde{u}$ 'because.' Like in English, the verb morphology in Gĩkũyũ remains unchanged when the adverbial clause is formed.

Sentences (542)-(544) show that conjunctions like tondũ can be used to coordinate two independent clauses. Ndirarĩ mwega can form a complete sentence (541), or it can be used with a coordinating conjunction to form an optional adjunct, as in (542).
(541) ndirarĩ mwega

N - ti- ra- rĩ mwega
1SG- NEG- NR.PST- COP well
'I wasn't well (yesterday).'
(542) ndĩrathire kũrĩ ndagĩtarĩ tondũ ndirarĩ mwega

N- ra- thi -ir -e kũ- rĩ N - dagĩtarĩ tondũ N - ti- ra- rĩ mwega 1SG- NR.PST- go -COMPL -FV NC ${ }_{17}{ }^{-}$COP NC $9_{9}$ - doctor because 1SG- NEG- NR.PST- COP well 'I went to the doctor (yesterday) because I wasn't well.'

Examples (543) and (544) further illustrate that the adjunct does not change when derived from a simple sentence, even when the subjects within the main clause and the adverbial clause differ.
(543) mwarĩ wakwa ndaraiguaga wega
mũ- arĩ ũ- akwa nd- a- ra- aigu-ag -a wega
$\mathrm{NC}_{1}-$ daughter $\mathrm{AC}_{1}-1$ SG.POS NEG- SC ${ }_{1}$ - NR.PST- feel -IMPF -FV well
'My daughter wasn't feeling well (yesterday).'
(544) ndĩrathire kũri ndagĩtarĩ tondũ mwarĩ wakwa ndaraiguaga wega

N - ra- thi -ir -e kũ- rĩ N - dagĩtarĩ tondũ
1SG- NR.PST- go -COMPL-FV NC 17 - COP NC ${ }_{9}$ - doctor because
mũ- arĩ ũ- akwa nd- a- ra- aigu-ag -a wega $\mathrm{NC}_{1}-$ daughter $\mathrm{AC}_{1}-1$ SG.POS NEG- SC $1_{1}$ - NR.PST- feel -IMPF -FV well 'I went to the doctor (yesterday) because my daughter wasn't feeling well.'

The phrase mwarĩ wakwa ndaraiguaga wega remains the same in both sentences even though the subjects of the two clauses are different.

### 7.3.5 Concessive

Clauses that signal a concession made by the speaker are expressed with the conjunction onakorwo which can mean 'even' or 'although.' Further research needs to be conducted to determine whether or not this word is a compound that has been lexicalized.
(545) onakorwo kwĩna keki ndikũmĩrĩa
onakorwo kwĩna keki N - ti- kũ- mĩ- rĩ -a
even.if when $\mathrm{NC}_{9}$.cake 1 SG - NEG- CR.FUT- OC ${ }_{9}$ - eat -FV
'Even if there is cake, I will not eat it (today).'
The following sentence shows that the order of the clauses is interchangeable.
(546) ndikũmiria, onakorwo kwĩna keki

N- ti- kũ- mĩ- rĩ -a onakorwo kwĩna keki
1SG- NEG- CR.FUT- OC ${ }_{9}$-eat-FV even.if when $\mathrm{NC}_{,}$.cake
'I will not eat it (today), even if there is cake.'
To form a concessive construction whose meaning can be translated as 'although....' onakorwo is still used, but the verb within the main clause must be in the subjunctive. In lieu of the focus marker nĩ, the morpheme no- is used. Further research needs to be done to determine if this prefix is simply a type of focus marker that always accompanies the subjunctive or something else entirely.

Example (547) below is composed of a clause without the concessive construction. Example (548) illustrates the addition of the concessive construction, which is introduced by a conjunction and requires that the verb within the main clause take the subjunctive suffix.
(547) nĩnjurire
nĩ- N- ur -ir -e
FOC- 1SG- get.lost -COMPL -FV
'I got lost.'
(548) onakorwo nyuma na mabu nonjũrire
onakorwo N - uma na mabu no- N - un -ir -e although 1SG- COP.BRP with $N C_{,}$,map FOC- 1 SG - get.lost -COMPL -SJV 'Although I had a map, I still got lost.'

Thompson 2007 makes a distinction between definite and indefinite concessive clauses. The previous sentences in this section have all been definite. Whereas definite clauses signify that
the adverbial clause event is specific or bounded in time, indefinite concessive clauses refer to events that are non-specific. An example is given below.
(549) ona uuge atĩa ndikuma
ona ũ- ug -e atĩa N- ti- kũ- um -a
even 2SG.SUBJ- say -SJV how 1SG- NEG- CR.FUT- leave -FV
'Whatever you say, I won't leave (today).'

### 7.3.6 Conditionals

Conditional statements in Gĩkũyũ are composed of two clauses, one of which takes the subjunctive and another that does not. The conditional prefix ngĩ- is marked on the verb that refers semantically to the condition. The main clause takes the subjunctive exactly like in the concessive constructions discussed in the previous section.
(550) ũngĩenda, noũkene
ũ- ngĩ- end -a no- ũ- ken -e
2SG.SUBJ- COND- love -FV FOC- 2SG.SUBJ- happy -SJV
'If you love, you will be happy.'
(551) ndingĩrĩ na thimũ nongũhũrĩre

N - ngĩ- rĩ na thimũ no- N- kũ- hũr -ĩr -e
1SG.SUBJ- COND- COP with NC ${ }_{9}$.phone FOC- 1SG.SUBJ- 2SG.OBJ- call -APP -SJV
'If I had a phone, I would call you.'

### 7.3.7 Substitutive

Substitutive clauses-clauses in which the subordinate action was not performed in favor of the main clause action-are expressed with the phrase handũ ha, meaning 'in place of'. The verb in the subordinate clause takes the infinitive form.

Example (552) shows a simple main clause.
(552) nĩethire ngũkũ
nĩ- a- eth -ir -e N- gũkũ
FOC- $\mathrm{SC}_{1}$ - search -COMPL - $\mathrm{FV} \mathrm{NC}_{9}$ - chicken
'He looked for the chicken (today).'

The following two examples show the substitutive construction. Example (554) illustrates that the adverbial construction does not change when the verb differs. In both cases, the infinitive must be used.
(553) handũ ha gwetha ngũkũ nĩarĩire
ha- ndũ ha- a kũ- eth -a N- gũkũ nĩ- a- rĩ -ir -e $\mathrm{NC}_{16^{-}}$place $\mathrm{AC}_{16^{-}} \mathrm{ASSOC}^{2} \mathrm{NC}_{15}$ search - $\mathrm{FV} \mathrm{NC}_{9}$ - chicken FOC- $\mathrm{SC}_{1}$ - eat -COMPL -FV 'Instead of looking for the chicken, he ate (today).'
(554) handũ ha kũrĩa angĩethire ngũkũ
ha- ndũ ha- a kũ- rĩ -a a- kĩ -eth -ir -e N- gũkũ
$\mathrm{NC}_{16}-$ place $\mathrm{AC}_{16}$ - $\mathrm{ASSOCNC}_{15^{-}}$eat -FV SC ${ }_{1}$ - SEQ- search -COMPL -FV NC $9_{9}$ - chicken
'Instead of eating, he should have looked for the chicken (today).'

### 7.3.8 Additive

Additive clauses are used to discuss "one state of affairs in addition to another" (Thompson et al., 2007). In Gîkũyũ, the verb tiga 'leave alone' is used in the imperative to form this construction, and is translated as 'besides.' Hamwe 'together' is also used to convey a similar meaning, which can be seen in example (556).

Example (555) shows tiga in the imperative taking Wambũi as its argument.
(555) Tiga Wambũi, Wambũgũ o nake nĩ mũrutwo mwega
tig -a Wambũi, Wambũgũ o nake nĩ mũ- rutwo mũ- ega leave.alone -FV PROP PROP also $\mathrm{NC}_{1}$.POS FOC NC $\mathrm{NC}_{1}$ - student $\mathrm{AC}_{1}$ - good 'Besides Wambũi, Wambũgũ is also a good student.'

The following sentence shows hamwe 'together' being used in a phrase that functions additively:
(556) ohamwe na Wambũi, Wambũgũ nĩ marutwo mwega
o- ha- mwe na Wambũi Wambũgũ nĩ mũ- rutwo mũ- ega
also- $\mathrm{NC}_{16}$ - one and PROP PROP FOC NC $\mathrm{C}_{1}$ - student $\mathrm{AC}_{1}$ - good
'In addition to Wambũi, Wambũgũ is a good student.'

### 7.3.9 Absolutive

According to Thompson et al., 2007, absolutive clauses can be identified by the following characteristics: the clause is subordinate, meaning that it is not marked to show a
relationship to the main clause, and the interpretation is inferred from the pragmatic and linguistic context. Absolutive clauses in Gĩkũyũ are constructed by not inflecting the verb in the adverbial clause for tense, as examples (557)-(558) show. Thus, the resultant verbs are subordinate. Neither anyona nor akũona can be used on their own to form a complete sentence.
(557) Wangware anyona, nĩarehithire

> Wangware a- $\quad$ N- on -a nĩ- a- ra- $\quad \tilde{1}^{-} \quad$ hith -ir $\quad$-e PROP $\quad$ SC $_{1}$ -
> PRG- see -FV FOC- SC
(558) Wangware akuona nĩarehithire

Wangware a- ku- on -a nĩ- a- ra- $\tilde{1}^{-}$hith -ir -e PROP $\quad \mathrm{SC}_{1}-2$ 2SG.SUBJ- see -FV FOC- SC $_{1}$ - NR.PST- REFL- hide -COMPL -FV 'Having seen you, Wangware hid himself (yesterday).'

### 7.3.10 Summary

This subsection has presented a preliminary overview of adverbial clauses in Gĩkũyũ. Thus far we have discussed time, manner, location, purpose/reason, conditional, concessive, substitutive, and absolutive adverbials. There is much more research to be done on the use of the subjunctive in forming conditional and concessive constructions. Many more examples exist in the present data, and this section has only covered a portion, especially in reference to time adverbials. Furthermore, additive clauses are also a category that needs to be analyzed more closely. Speech act adverbials also occur in certain texts, and such constructions must be explored if we are to understand how Gĩkũyũ is used in interaction.

## Chapter 8

## Miscellaneous Constructions and Observations

This chapter consists of material that we believe will be of interest and relevance to linguists and other readers who wish to learn about Gĩkũyũ, but which does not easily fit within other parts of this sketch grammar. Material in this chapter includes: ideophones, color terms, personified animals, and body metaphors for landscape topography.

### 8.1 Ideophones

Robert Englebretson
Onomatopoeia iconically represents sound in language. Our consultant observes that, in her experience, Gîkũyũ speakers generally do not use words for animal vocalizations or other common sounds-at least not to the same extent that she has observed English speakers doing so. In our two class sessions devoted to onomatopoeia, ideophones, and proverbs, we were not able to elicit anything equivalent to 'bow wow' for a dog vocalization, no sounds for 'cluck' or 'quack' for a chicken or duck vocalization, no sounds to represent rushing water, falling rain, or crackling fire, etc. The one onomatopoeic form our consultant was able to offer us is [me:] for the sound of a goat bleating. Yet, despite the paucity of onomatopoeic words, Gîkũyũ does appear to have numerous ideophones. Ideophones tend not to be onomatopoeic, but rather are single words that represent characteristics like color, position, or manner of state or motion. Childs (1994) points out that ideophones are typically not phonologically transparent, do not have meaning on their own as a word, and are syntactically tightly collocated with particular verbs. All of these are true of Gĩkũyũ ideophones. In our data, ideophones always occur at the end of the clause, and our consultant prefers that when these clauses are written, they should end with an exclamation point.

In his overview of African ideophones, Childs writes: "Although they constitute a robust word category in African languages, ideophones are relatively neglected and are rarely integrated into linguistic descriptions" (Childs 1994: 178). To our knowledge, there are no published sources that document or describe Gĩkũyũ ideophones. The current subsection seeks to remedy this by offering a list of ideophones our consultant was able to come up with during elicitation. This is no doubt only a partial listing, and the origins and use of Gîkũyũ ideophones would be a fruitful topic for future research. As a starting point, we offer a table of ideophones, the verbs with which they collocate, and their general meaning, followed by several examples, the first of which comes from our elicited procedural text on how to make mataha (a traditional Gĩkũyũ food-see Appendix C).

Table 32: List of Gĩkũyũ ideophones

| Ideophone | Verb Collocate | Meaning |
| :---: | :---: | :---: |
| ka | kũma 'to dry' | (intensifier) bone dry |
| ki | gũkira 'to be quiet' | (intensifier) very quiet |
| ku | gũkua 'to die' | (intensifier) stone dead |
| mi | kũminja 'to spit' | forcefully spit a liquid |
| mi | kũmira 'to blow' | blow the nose |
| mu | kũgũa 'to fall' | fall flat |
| mu | kũrumia 'to hit hard' | hit hard |
| nwee [nwe:] | gũthiî 'to slide' | sliding manner of motion |
| ng'o [ท๐] | kũringa 'to hit' | sound of hitting |
| ng'ũ [ po ] | accompanied by gesture plucking a tooth with the finger | 'nothing' |
| pa | kũma 'dry' | dry completely |
| piũ / biũ | gũcamũka 'to boil' | boil completely |
| tobo [to ${ }_{\text {on }}$ ] | gũtoboka 'to submerge oneself' | fall completely in water |
| tũrũ | gũtũrîka 'to burst' | sound of popping |

Following are six examples, the first of which appears in the "Mataha" procedural text (see Appendix C), and the remaining five of which were elicited in class:
(559) ũgacamũkia mbembe kinya igacamũka biũ
ũ- ka- camũk-i -a N- bembe kinya i- ka- camũk -a biũ
2SG- SEQ- boil -TRNS -FV NC $10^{-}$corn until $\mathrm{SC}_{10}$ - SEQ- boil -FV ID
'(What you do is) you boil corn until it is completely boiled.'
(560) Ndatobokire tobo!

N - a- tobok -ir -e tobo!
1SG- RM.PST- submerge -COMPL -FV ID
'I fell completely in water (before yesterday)!'
(561) Ndagũa thĩ mu!
n- a- gũ -a thĩ mu!
1SG- RM.PST- fall -FV down ID
'I fell down flat (today)!’
(562) Yakua ku!
ĩ- a- $\quad \mathrm{ku}-\mathrm{a} k u$ !
$S_{9}$ - RM.PST- die -FV ID
'It (the chicken) died stone dead (today)!'
(563) Kira ki!
kir -a ki!
be.quiet -FV ID
‘Shut up!’
(564) Mira mi!
mir -a mi!
blow -fv ID
'Blow your nose!'

### 8.2 Color Terms

Jonas Wittke \& Jessica LI
In the adjective class, Gĩkũyũ has three colors: tune 'red', erũ 'white', and irũ 'black'. Traditionally (i.e. for speakers in generations older than our consultant), all colors were referred to using these three terms. Our consultant recalled a time when her grandmother requested her brown hat; because only three terms for color were available to her, she requested her ngũbia njirũ 'black hat'.

According to Berlin and Kay (1969: 2):
"If a language encodes fewer than eleven basic color categories, then there are strict limitations on which categories it may encode. The distributional restrictions of color terms across languages are: 1 . All languages contain terms for white and black. 2. If a language contains three terms, then it contains a term for red. 3. If a language contains four terms, then it contains a term for either green or yellow (but not both)."

In their discussion, the authors say that basic color terms should ideally be monolexemic. As mentioned above, Gîkũyũ has three basic, monolexemic color terms; the three terms are for the colors red, white, and black, just as predicted by Berlin and Kay.

When these colors are referred to on their own, without modifying a noun, the adjective marker for Noun Class 14 (mũ-) is used, to agree with rangi 'color':
(565) rangi mũtune
rangi mũ- tune
$\mathrm{NC}_{14} \cdot$ color $\mathrm{NC}_{14}-$ red
'red color'
(566) rangi mwerũ
rangi mũ- erũ
$\mathrm{NC}_{14}$ color $\mathrm{NC}_{14}$ - white
'white color'
(567) rangi mũirũ
rangi mũ- irũ
$\mathrm{NC}_{14}$.color $\mathrm{NC}_{14}$ - black
'black color'
More recently, other colors have come to be expressed in Gĩkũyũ, but these color terms are formed using the associative construction. The following table shows how to form various color terms.

Table 33: Associative constructions of colors in Gîkũyũ

| COLOR | CONSTRUCTION |
| :--- | :--- |
| Orange | ASSOC. + macungwa ('orange (fruits)') <br> ASSOC. + orĩnji |
| Yellow | ASSOC. + itumbĩ ('eggs') <br> ASSOC. + yero |
| Green | ASSOC. + mahuti ('leaves') <br> ASSOC. + ngirini |
| Blue | ASSOC. + mburuu <br> Gray <br> Brown |
| ASSOC. + mũhu ('ashes') |  |
| ASSOC. + tĩri ('soil') |  |

As can be seen in the above table, some speakers use English borrowings for color names (e.g. orenji 'orange', mburuu 'blue'), versions which are becoming more prevalent in modern-day Gîkũyũ. Speakers with less exposure to English more commonly use names of objects to describe colors, as in the following constructions:
(568) rangi wa macungwa
rangi $\tilde{u}^{-}$a ma-cungwa
$\mathrm{NC}_{14}$.color $\mathrm{AC}_{14}-$ ASSOC $\mathrm{NC}_{6}$ - orange
'orange' (Lit. 'color of oranges')
(569) rangi wa itumbĩ
rangi $\tilde{\mathrm{u}}-\mathrm{a}$ i- tumbĩ
$\mathrm{NC}_{14}$ color $\mathrm{AC}_{14}-$ ASSOC NC $_{5}-$ egg
'yellow' (Lit. 'color of eggs')
(570) rangi wa mahuti
rangi $\tilde{u}^{-}$a ma-huti
$\mathrm{NC}_{14} \cdot$ color $\mathrm{AC}_{14}-\mathrm{ASSOC}^{2} \mathrm{NC}_{6}$ - leaf
'green' (Lit. 'color of leaves')
(571) rangi wa mũhu
rangi $\tilde{u}^{-}$a mũ-hu
$\mathrm{NC}_{14}$ color $\mathrm{AC}_{14}-\mathrm{ASSOC}_{\mathrm{NC}_{3}-}$ ash
'gray' (Lit. 'color of ashes')
(572) rangi wa tĩri
rangi ũ- a tĩri
$\mathrm{NC}_{14}$.color $\mathrm{AC}_{14}$ - $\mathrm{ASSOC}^{\mathrm{NC}}{ }_{14}$. soil
'brown' (Lit. 'color of soil')
The following examples show colors modifying nouns in noun phrases using the associative construction.
(573) mbuku ya ngirini

N- buku ĩ- a N - kirini
$\mathrm{NC}_{9}$ - book $\mathrm{AC}_{9}$ - $\mathrm{ASSOC}^{\mathrm{NC}} \mathrm{g}_{9}$ - green
'green book'
(574) kahũa ga tĩri
ka- hũa ka- a tĩri
$\mathrm{NC}_{12}$ - coffee $\mathrm{AC}_{12}$ - $\mathrm{ASSOCNC}_{14}$ soil
'brown coffee'
The associative construction is not used, however, when the color modifying the noun phrase is one of the three monolexemic, basic color terms in Gĩkũyũ (black, white, or red). For those three colors, the color term modifies the noun directly, which provides strong evidence that these three basic color terms belong to the adjective word-class. For example, while 'brown coffee' in example (574) above requires the associative construction, 'red meat' in example (575) below does not:
(575) nyama ndune

N - yama N - tune
$\mathrm{NC}_{9}$-meat $\mathrm{NC}_{9}$ - red
'red meat'

When distinguishing between two or more shades of the same color, speakers refer to the degree to which the color is 'saturated' or 'held'. Compare examples (576), (577), and (578), which show expressions for 'light blue', 'medium blue', and 'dark blue', respectively:
(576) rangi wa mburuu ĩtarĩ ngwatu
rangi ũ- a mburuu ĩ- ta- rĩ N- gwat -u
$\mathrm{NC}_{14}$.color $\mathrm{AC}_{14}$ - ASSOC blue $\quad \mathrm{NC}_{10}$ - NEG - COP $\mathrm{NC}_{10}$ - held -NMZ
'light blue' (Lit. 'color of blue that is not held')
(577) rangi wa mburuu ngwatagwatu
rangi $\tilde{u}^{-}$a mburuu $N$ - gwata -gwat -u
$\mathrm{NC}_{14}$.color $\mathrm{AC}_{14}$ - ASSOC blue $\mathrm{NC}_{10}$ - REDUP- held -NMZ
'medium blue' (Lit. 'color of blue that is held a little')
(578) rangi wa mburuu ngwatu
rangi $\tilde{u}^{-}$a mburuu $N$ - gwat -u
$\mathrm{NC}_{14}$ color $\mathrm{AC}_{14}$ - ASSOC blue $\quad \mathrm{NC}_{10}$ - held -NMZ 'dark blue' (Lit. 'color of blue that is held')

The 'light blue' color in (576) is thought of as being a "blue that has not held". In other words, the blue is less saturated ('held') than the other blues in comparison. A reduplicated form (see section 3.3.1 on reduplication) is used in (577) to refer to a 'medium blue', one that "has held a little". Dark blue, then, is saturated (ngwatu) compared to the other two shades, as shown in example (578).

In summary, Gĩkũyũ has three basic, monolexemic color terms, which are consistent with those predicted by Berlin and Kay (1969). Several other colors can be expressed using an associative construction (e.g. 'color of eggs', 'color of leaves'), and some names for colors are English borrowings (e.g. mburuu for 'blue'). Factors such as age, education, and exposure to English all appear to influence the range of color terms available to a given speaker.

### 8.3 Personified Animals

Animals, like any other Gîkũyũ noun, belong to a noun class and are referenced through grammatical noun class concord. Personified animals, however, can be expressed by means of
two additional strategies in Gĩkũyũ: (i) through the use of human agreement marking on the verb instead of marking that agrees grammatically with the class of the personified subject or object; and (ii) by using the first strategy as well as prefixing the personified animal subject or object with the personifying prefix wama- instead of using the noun prefix that is typically used for its class. Both strategies demonstrate that it is possible for grammatical agreement to be overridden by semantics when expressing personified animals.

### 8.3.1 Class 1 / 2 (Human) Agreement Marking

An interesting phenomenon in Gĩkũyũ is that when animals are personified, grammatical noun class marking can be overridden by semantic factors. One strategy for expressing personified animals is to use human agreement marking for the personified subject or object rather than the noun concord marking that agrees with its grammatical class. This is exemplified in (579)-(580).
(579) nyau nĩyonire ngũkũ.

N- nyau nĩ- $\tilde{1}^{-} \varnothing$ - on -ir $\quad$-e $N$ - gũkũ.
$\mathrm{NC}_{9}$ - cat $\mathrm{FOC}^{2}-\mathrm{SC}_{9}$ - CR.PST- see -COMPL-FV NC $9_{9}$ - chicken
'The cat saw the chicken (today).' (non-personified)
(580) nyau nĩonire ngũkũ.

N- nyau nĩ- a- $\varnothing$ - on -ir -e $N$ - gũkũ.
$\mathrm{NC}_{9}$ - cat $\mathrm{FOC}^{-} \mathrm{SC}_{1}-$ CR.PST- see -COMPL -FV NC ${ }_{9}$ - chicken
'The (personified) cat saw the chicken (today).'
In (579), we see that animals receive noun concord agreement marking according to the grammatical class that they belong to. Thus, the verb ona 'see' in (579) agrees with the grammatical class of the animal subject nyau 'cat'. This agreement is indexed on the verb with the Class 9 subject prefix $\tilde{i}-$.

However, when an animal is personified as in (580), human agreement marking can be used for the personified subject or object rather than the concord marking that agrees with its grammatical class. We see this in (580), where subject agreement is marked on the verb ona 'see' using Class 1 human marking with the subject prefix $a$ - rather than with the expected Class 9 subject prefix $\tilde{\imath}$-. Therefore, the verb can take agreement morphology used for humans to accomplish semantic agreement, despite the fact that the subject is, grammatically, a nonhuman noun of a different class.

In addition, both full-NP subject and object arguments that are personified can be ellipted and indexed on the verb using human agreement marking instead of agreeing with the grammatical class of the subject or object. This is illustrated in (581)-(582) below.
(581) nĩonire ngũkũ.
nĩ- a- $\varnothing$ - on -ir -e $N$ - gũkũ.
FOC- SC ${ }_{1}$ - CR.PST- see -COMPL-FV NC ${ }_{9}$ - chicken
'S/he saw the chicken (today).'
(582) nĩamwonire.
nĩ- a- $\varnothing$ - mũ-on -ir -e
FOC- SC $1_{1}$ - CR.PST- OC ${ }_{1}$ - see -COMPL -FV
'S/he saw her/him (today).'
In (581), we see that when the full-NP subject nyau 'cat' is personified and ellipted, it is indexed on the verb ona 'see' using Class 1 human agreement marking with the subject prefix $a$ - instead of the expected Class 9 subject prefix $\tilde{\imath}$-. Similarly, in (582), when the full-NP object ngũkũ 'chicken' is personified and ellipted, it is indexed on the verb ona 'see' using Class 1 human agreement marking with the object prefix mũ- rather than with the expected Class 9 object prefix mĩ-.

Thus, when human agreement marking is used to index personified animals in Gĩkũyũ, grammatical noun class marking is overridden by semantics.

### 8.3.2 The wama-Prefix

Another strategy in Gĩkũyũ for expressing personified animals is to prefix the personified subject or object with the personifying prefix wama-. It is possible that wama-could be related to the associative construction, i.e., the human associative prefix wa- used together with the Class 6 associative prefix $m a$-. However, the precise nature of the morphology of this prefix is a topic that requires further investigation using additional historical and comparative data. This strategy with the prefix wama- is commonly used in storytelling and makes it very clear that the noun it precedes is a personified animal. This is demonstrated in (583)-(585).
(583) nyau nĩyonire ngũkũ.

N - nyau nĩ- $\tilde{1}^{-} \varnothing$ - on -ir $\quad$-e N - gũkũ.
$\mathrm{NC}_{9}-$ cat $\mathrm{FOC}-\mathrm{SC}_{9}-$ CR.PST- see -COMPL-FV NC ${ }_{9}$ - chicken
'The cat saw the chicken (today).' (non-personified)
(584) wamanyau nĩonire ngũkũ.
wama- nyau nĩ- a- $\varnothing$ - on -ir -e N- gũkũ.
PERSF- cat FOC- SC ${ }_{1}$ - CR.PST- see -COMPL - $\mathrm{FV} \mathrm{NC}_{9}$ - chicken
'The (personified) cat saw the chicken (today).'
(585) wamanyau nĩonire wamagũkũ.

```
wama- nyau nĩ- a- \varnothing- on -ir -e wama- gũkũ.
```

PERSF- cat FOC- SC $1_{1}$ - CR.PST- see -COMPL -FV PERSF- chicken
'The (personified) cat saw the (personified) chicken (today).'
In (583), repeated here from (579), we again see that non-personified animals receive normal noun concord agreement marking according to the grammatical class that they belong to. The verb ona 'see' in (583) agrees with the grammatical class of the animal subject nyau 'cat'. This agreement is indexed on the verb with the Class 9 subject prefix $\tilde{i}$-.

By contrast, when prefixed with wama- as in (584) and (585), the personified animal subject nyau 'cat' and personified animal object ngũkũ 'chicken' no longer have their grammatical noun class marking (the Class 9 noun prefix $N$-). Yet, despite the fact that wama- is not the human noun class prefix, the verb still acts as if the subject is a human noun by indexing the personified animal subject or object on the verb with human agreement concord marking. This is exemplified in (584)-(585), where subject agreement is overridden by semantic factors and is indexed on the verb ona 'see' using human agreement marking with the subject prefix $a$ - instead of the expected Class 9 subject prefix $\tilde{\imath}$-. Thus, the prefix wama-is used to mark personified animals in Gĩkũyũ, and human agreement marking is used on the verb, resulting in semantic agreement that overrides grammatical agreement.

### 8.4 Landscape Topography and Body Metaphors

Jonas Wittke
In describing spatial orientation related to certain topographical features, Gĩkũyũ speakers employ body part metaphors, projecting them onto the landscape. Our data elicitations revealed two such mappings: the 'back' representing what English speakers would commonly refer to as 'up' (i.e., 'higher' on a mountain or an 'upstream' area of a river), and the stomach representing 'down' or 'below' (i.e., 'downstream' or at the bottom of a mountain). This is illustrated in the following examples:
(586) ndĩrarorire kĩanda kĩa rũũũ

N- ra- ror -ir -e kĩ- a- nda kĩ- a rũ- ũi
1SG- NR.PST- look -COMPL -FV AC $7^{-}$- ASSOC stomach AC ${ }_{7}-$ ASSOC $^{\text {NC }}{ }_{11}$ - river
'I looked down (downstream) the river.' (Lit. ‘I looked of the stomach of the river.')
(587) kĩanda gĩa kĩrĩma
nkĩ- a- nda kĩ- a kĩ- rĩma
$\mathrm{AC}_{7}-\mathrm{ASSOC}$ stomach $\mathrm{AC}_{7}-\mathrm{ASSOC}^{\mathrm{NC}_{7}-\text { hill }}$
'below the mountain' (Lit. 'of the belly of the mountain')
In (586), the stomach (or 'belly') is mapped onto the area of the river toward which water is flowing; in (587), the belly is mapped onto the area below or at the bottom of a mountain.

Conversely, examples (588) and (589) illustrate 'upstream' and 'up the mountain', respectively:
(588) ndĩrarorire rũgongo rwa rũũũ

N- ra- ror -ir -e rũ- gongo rũ- a rũ- ũi
1SG- NR.PST- look -COMPL -FV NC ${ }_{11}$ - back $\mathrm{AC}_{11}-\mathrm{ASSOC}^{2} \mathrm{NC}_{11}$ - river
'I looked up the river.' (Lit. 'I looked the back of the river.')
(589) rũgongo rwa kĩrĩma
rũ- gongo rũ- a kĩ- rĩma
$\mathrm{NC}_{11}$ - back $\mathrm{AC}_{11}$ - ASSOC $\mathrm{NC}_{7}$ - hill
'up the mountain' (Lit. 'the back of the mountain')
Just as a body has a 'stomach' and a 'back, so can rivers and mountains in Gĩkũyũ. Further, such metaphorical mappings are not unique to Gĩkũyũ-consider English 'mouth of the river' or 'foot of the mountain', for example. English and Gĩkũyũ both use the body as the source domain for topographic metaphors, but the two languages map it on different axes. While English maps topography on the vertical axis (head/foot) as with a human standing up, Gĩkũyũ uses the dorsal/ventral axis ('back/belly'), as with a human or other animal on all fours.

## Appendices: Glossed Sample Texts

## Appendix A

## Picture-Book Narrative: "Frog Story"

Class

A narration of A Boy, a Dog and a Frog by Mercer Mayer (Dial Books, 2003 (1967))
MP3 audio available at http://www.ruf.rice.edu/~reng/kik/01-frog.mp3

1. nĩngũmũganĩra karũgano ${ }^{4}$.
nĩ- ${ }^{-}$- kũ- mũ- gan -ĩr -a ka- rũ- gan -o
FOC- 1SG.SUBJ- CR.FUT- 2PL.OBJ- narrate -APP -FV NC $\mathrm{C}_{12}-\mathrm{NC}_{11}$ - narrate -NMZ
'I'm going to tell you a little story.'
2. (ALL:) Gana ${ }^{5}$ !
gan -a
narrate -FV
‘Tell!' (Lit. 'Praise!')
3. karũgano gaka nĩ ga kahĩi,
ka- rũ- gan -o ka- ka nĩ ka- a ka- hĩĩ
$\mathrm{NC}_{12}-\mathrm{NC}_{11}$ - narrate -NMZ AC 12 - PROX.DEM FOC AC $\mathrm{Al}_{12}-$ ASSOC $^{2} \mathrm{NC}_{12}$ - boy
'This little story is about a little boy,'
4. na kagui,
na ka- gui
and $\mathrm{NC}_{12}-$ dog
'and a little dog,'

[^3]5. na,
na
and
'and,'
6. mathiaga rũũĩ.
ma-thi -ag -a rũ- ũũ
$\mathrm{SC}_{2}-$ go -IMPF -FV NC $\mathrm{Na}_{11}$ - river
'they were going to the river.'
7. mũthenya ũmwe kahĩĩ nĩgathiire na kagui rũũĩ, mũ- thenya ũ- mwe ka- hĩĩ nĩ- ka- thi -ir -e na ka- gui rũ- ũũ $\mathrm{NC}_{3}$ - day $\mathrm{AC}_{3}$ - one $\mathrm{NC}_{12}$ - boy FOC- $\mathrm{SC}_{12}$ - go -COMPL - FV with $\mathrm{NC}_{12}$ - dog $\mathrm{NC}_{11}$ - river 'One day the little boy went with the little dog to the river,'
8. gũtega ciũra.
kũ- tega ci- ũra
$\mathrm{NC}_{15}$ - trap $\mathrm{NC}_{8}$ - frog
'to trap frogs.'
9. gakinya rũũĩ-inĩ nĩkahaicire mũtĩ,
ka- kĩ- iny -a rũ- ũĩ -inĩ nĩ- ka- haic -ir e mũ- tĩ
$\mathrm{SC}_{12}$ - SIM- arrive -FV NC $1_{11}$ - river -LOC FOC- $\mathrm{SC}_{12}$ - climb -COMPL -FV NC $3^{-}$- tree
'When he arrived at the river, he climbed a tree,'
10. gakĩona kĩũra gĩikaire maĩ-inĩ.
ka- kĩ- on -a kĩ- ũra kĩ- ika -ir -e ma- aĩ -inĩ
$\mathrm{SC}_{12}$ - SEQ- see -FV NC $7_{7}$ - frog $\mathrm{SC}_{7}$ - sit -COMPL -FV NC 6 - water -LOC
'He then saw a frog sitting by the water.'
11. kĩũra gĩaikarĩire ithagu rĩa mũtĩ.
kĩ- ũra kĩ- a- ikar -ĩ -ir $\quad$-e i- thagu rĩ- a mũ- tĩ $\mathrm{NC}_{7}$ - frog $\mathrm{SC}_{7}$ - RM.PST- sit -APP -COMPL -FV NC $5_{5}$ - feather $\mathrm{AC}_{5}$ - ASSOC $^{2} \mathrm{NC}_{3}$ - tree 'The frog was sitting on the feather of a tree.'
12. kana ithangũ rĩa mũtĩ.
kana i- thangũ rĩ- a mũ-tĩ
or $\quad \mathrm{NC}_{5}$ - leaf $\quad \mathrm{AC}_{5}-$ ASSOC $\mathrm{NC}_{3}$ - tree
'Or, (I mean) a leaf of the tree.'
13. gaikaikara, kahĩĩ nĩkarorire rũũũ,
ka- ika- ikar-a ka- hĩĩ nĩ- ka- ror -ir -e rũ- ũĩ
$\mathrm{SC}_{12}$ - REDUP- sit $-\mathrm{FV} \mathrm{NC}_{12}$ - boy FOC- $\mathrm{SC}_{12}$ - look.at -COMPL - $\mathrm{FV} \mathrm{NC}_{11}$ - river
'After he stayed for a little while, the little boy looked at the river,'
14. gagĩthiĩ harĩ kĩũra.
ka- kĩ- thi-ĩ ha- rĩ kĩ- ũra
$\mathrm{SC}_{12}$ - SEQ- go -FV SC $\mathrm{C}_{16}$ - $\mathrm{COP} \mathrm{NC}_{1}$ - frog
'and went where the frog was.'
15. gathiĩ kuona kĩũra,
ka- thi -ĩ kũ- on -a kĩ- ũra
$\mathrm{SC}_{12}-$ go -FV NC 15 - see -FV NC ${ }_{7}$ - frog
'When he went to see the frog,'
16. gakĩgwa rũũũ-inĩ.
ka- kĩ- gu -a rũ- ũũ -inĩ
$\mathrm{SC}_{12}$ - SEQ- fall -FV NC $\mathrm{Cl}_{11}$ - river -LOC
'He then fell into the river.'
17. kĩũra nîkĩamakire mũno kuona kahĩĩ na ngui ikĩgwa.
kĩ- ũra nĩ- kĩ- a- mak -ir -e mũno
$\mathrm{NC}_{8}-$ frog $\mathrm{FOC}-\mathrm{SC}_{8}-$ RM.PST- surprise -COMPL -FV very
kũ- on -a ka- hĩĩ na $N$ - gui i- kĩ- gũ -a
$\mathrm{NC}_{15}-$ see -FV NC ${ }_{12}$ - boy and $\mathrm{NC}_{9}$ - dog $\mathrm{SC}_{8}-$ SIM- fall -FV
'The frog was very surprised to see the little boy and the dog as they fell.'
18. a,
'Oh,'
19. kahĩĩ nĩkagũire rũũũ,
ka- hĩĩ nĩ- ka- gũ -ir -e rũ- ũũ
$\mathrm{NC}_{12}$ - boy FOC- $\mathrm{SC}_{12}$ - fall -COMPL - $\mathrm{FV} \mathrm{NC}_{11}$ - river
'The little boy fell into the river,'
20. kĩongo gîkĩgĩ-- gĩgĩthiĩ maĩ-inĩ.
kĩ- ongo gîkĩgĩ kĩ- kĩ- thi -ĩ ma- aĩ -inĩ
$\mathrm{NC}_{7}$ - head TRUNC SC ${ }_{7}$ - SEQ- go - $\mathrm{FV} \mathrm{NC}_{6}$ - water -LOC
'(His) head then went into the water.'
21. na kagui nako gakĩgwa rũũũ-inĩ.
na ka- gui na- ka- o ka- kĩ- gũ -a rũ- ũũ -inĩ and $\mathrm{NC}_{12^{-}}$dog and- $\mathrm{AC}_{12^{-}}$- PRO $\mathrm{SC}_{12^{-}}$SEQ- fall - $\mathrm{FV} \mathrm{NC}_{11^{-}}$- river -LOC 'and the little dog also fell into the river.'
22. na kĩongo gĩgĩthiĩ maĩ-inĩ.
na kĩ- ongo kĩ- kĩ- thi -ĩ ma- aĩ -inĩ
and $\mathrm{NC}_{7}$ head $\mathrm{SC}_{7}-$ SEQ- go $-\mathrm{FV} \mathrm{NC}_{6}-$ water -LOC
'And (his) head went into the water.'
23. kagui @@@ --
ka- gui
$\mathrm{NC}_{12}-\operatorname{dog}$
'the little dog (laughter) --'
24. kagui nĩgacokire gagĩthambĩra.
ka- gui nĩ- ka- cok -ir -e ka- kĩ- thambĩr -a
$\mathrm{NC}_{12}{ }^{-}$dog FOC- $\mathrm{SC}_{12}$ - return -COMPL -FV SC ${ }_{12}$ - SEQ- swim -FV
'The little dog then swam.'
25. gakĩuma maĩ-inĩ.
ka- kĩ- um -a ma-aĩ -inĩ
$\mathrm{SC}_{12}-$ SEQ- come.out -FV NC $\mathrm{C}_{6}$ - water -LOC
'It came out of the water.'
26. na kahĩĩ nako gakiuma maĩ-inĩ.
na ka- hĩĩ na- ka- o ka- ki- um -a ma-aĩ -inĩ and $\mathrm{NC}_{12}$ - boy and- $\mathrm{AC}_{12}-$ PRO SC ${ }_{12}$ - SEQ - come.out - $\mathrm{FV} \mathrm{NC}_{6}-$ water -LOC 'and the little boy also came out of the water.'
27. gakî̃humbĩra kĩongo na ndoo.
ka- kĩ- ĩ- humb-ĩr -a kĩ- ongo na N - doo $\mathrm{SC}_{12}$ - SEQ- REFL- cover -APP $\mathrm{FV} \mathrm{NC}_{7}$ - head with $\mathrm{NC}_{9}$ - bucket 'He covered his head with a bucket.'
28. gagĩũka gakĩrora kora.
ka- kĩ- ũk -a ka- kĩ- ror -a ka- ũra
$\mathrm{SC}_{12}$ - SEQ- come -FV SC $\mathrm{C}_{12}$ - SEQ- look.at -FV NC $\mathrm{C}_{12}$ - frog
'Then he came and looked at the little frog.'
29. Kahĩĩ,
ka- hĩĩ
$\mathrm{NC}_{12}$ - boy
'The little boy,'
30. gakĩhumbĩra maitho gakĩaga kuona kĩũra.
ka- kĩ- $\tilde{1}^{-}$humb-ĩr -a ma-itho ka- kĩ- ag -a kũ- on -a kĩ- ũra $\mathrm{SC}_{12}$ - SEQ- REFL- cover -APP -FV NC ${ }_{6}$ - eye $\mathrm{SC}_{12}$ - SEQ- fail -FV NC $\mathrm{NE}_{15}$ see -FV NC $7^{-}$- frog 'he covered his eyes and failed to see the frog.'
31. no kĩũra nakĩo nîkĩarũgire,
no kĩ- ũra na- kĩ- o nĩ- kĩ- a- rũg -ir -e
but $\mathrm{NC}_{7}$ - frog and- $\mathrm{AC}_{7}$ - PRO FOC- $\mathrm{SC}_{7}$ - RM.PST- jump -COMPL -FV
'But the frog also jumped,'
32. gĩgĩtiga kahĩĩ,
kĩ- kĩ- tig -a ka- hĩi
$\mathrm{SC}_{7}-$ SEQ- abandon $-\mathrm{FV} \mathrm{NC}_{12}$ - boy
'and left the little boy,'
33. na kagui maĩ-inĩ.
na ka- gui ma- aĩ -inĩ
and $\mathrm{NC}_{12}-\operatorname{dog} \mathrm{NC}_{6}-$ water -LOC
'and the little dog at the water.'
34. kahĩĩ gatigwo maĩ-inĩ,
ka- hĩĩ ka- tig -wo ma- aĩ -inĩ
$\mathrm{NC}_{12}$ - boy $\mathrm{SC}_{12}$ - abandon -PV $\mathrm{NC}_{6}$ - water -LOC
'when the little boy was left at the river'
35. nĩgacokire gakĩrora harĩa kora gathiire.
nĩ- ka- cok -ir -e ka- kĩ- ror -a ha- rĩa ka- ũra ka- thi -ir -e FOC- $\mathrm{SC}_{12}$ - return -COMPL -FV SC ${ }_{12}$ - SEQ- look.at -FV AC $\mathrm{C}_{16}$ - REL NC $_{12}$ - frog $\mathrm{SC}_{12}$ - go -COMPL -FV 'He then looked at where the little frog went.'
36. kora gathiire gagĩikarĩra mũtĩ.
ka- ũra ka- thi -ir -e ka- kĩ- ikar -ĩr a mũ-tĩ $\mathrm{NC}_{12}-$ frog $\mathrm{SC}_{12}$ - go -COMPL -FV NC $\mathrm{Cl}_{12}$ - SEQ- sit $\quad$-APP -FV NC $3^{-}$- tree 'The little frog went and sat on a tree.'
37. nako kagui gakĩambĩrĩria gũthambĩra.
na- ka- o ka- gui ka- kĩ amb-ĩrĩr -i -a kũ- thambĩr -a
and- $\mathrm{AC}_{12}-$ PRO NC $_{12^{-}}$dog $\mathrm{SC}_{12^{2}}$ - SEQ- start -INTENS -TRNS -FV NC ${ }_{15^{-}}$swim -FV
'And the little dog also started to swim.'
38. hakuhĩ na kahĩĩ.
ha- kuhĩ na ka- hĩĩ
$\mathrm{AC}_{16^{-}}$short with $\mathrm{NC}_{12}$ - boy
'near the little boy.'
39. kahĩĩ nako gakĩrũgama gakĩirorera,
ka- hĩĩ na- ka- o ka- kĩ- rũgam-a ka- kĩ- $\tilde{1}^{-}$ror -ĩr -a
$\mathrm{NC}_{12}$ - boy and- $\mathrm{AC}_{12}-$ PRO SC $\mathrm{Sa}^{-}$- SEQ- stand -FV SC ${ }_{12}$ - SEQ- REFL- look.at -APP -FV 'the little boy also stood and observed for himself,'
40. gakĩirorera kora.
ka- kĩ- $\mathfrak{1}-\quad$ ror -ĩr -a ka- ũra
$\mathrm{SC}_{12}$ - SEQ- REFL- look.at -APP -FV NC 12 - frog
'observed for himself the little frog.'
41. kagui na kahĩĩ nĩciaikarire-- nĩmaikarire maĩ-inĩ,
ka- gui na ka- hĩĩ nĩ- ci- a- ikar -ir -e --
$\mathrm{nC}_{12}$ - dog and $\mathrm{NC}_{12}$ - boy FOC- $\mathrm{SC}_{8}$ - RM.PST- sit -COMPL-FV TRUNC
nĩ- ma-a- ikar-ir -e ma-aĩ -inĩ
FOC- $\mathrm{SC}_{2}-$ RM.PST- sit -COMPL -FV NC ${ }_{6}$ - water -LOC
'The little dog and little boy stayed in the water,'
42. meroreire kora.
ma- ĩ- ror -ĩ -ir -e ka- ũra
$\mathrm{SC}_{2}-$ SIM- look.at -APP -COMPL -FV NC $\mathrm{N}_{12}$ - frog 'while they looked at the little frog.'
43. nako kora gagĩikara mũtĩ-inĩ keroreire kahĩĩ na kagui.
na- ka- o ka ũra ka- kĩ- ikar -a mũ-tĩ -inĩ
and- $\mathrm{AC}_{12}-\mathrm{PRO}_{\mathrm{NC}_{12}}$ - frog $\mathrm{SC}_{12}-$ SEQ- stand $-\mathrm{FV} \mathrm{NC}_{3}-$ tree -LOC
ka- ĩ- ror -ĩ -ir -e ka- hĩĩ na ka- gui
$\mathrm{SC}_{12}$ - SIM- look.at -APP -COMPL FV NC $\mathrm{Na}_{12}$ - boy and $\mathrm{NC}_{12^{-}}$dog
'And also the little frog stayed in the tree while observing the little boy and the little dog.'
44. kagui gakĩhaica harĩa kora karĩ,
ka- gui ka- kĩ- haic -a ha- rĩa ka- ũra ka- rĩ,
$\mathrm{NC}_{12}$ - dog $\mathrm{SC}_{12}$ - SEQ- climb -FV AC $\mathrm{C}_{16}$ - REL NC $\mathrm{NC}_{12}$ - frog $\mathrm{SC}_{12}$ - COP
'The little dog climbed to the place where the little frog was,'
45. nako kahĩĩ gakĩhaica harĩa kora karĩ,
na- ka- o ka- hĩĩ ka- kĩ- haic -a ha- rĩa ka- ũra ka -rĩ
and- $\mathrm{AC}_{12}-$ PRO NC $_{12}$ - boy $\mathrm{SC}_{12}$ - SEQ- climb -FV AC $\mathrm{C}_{16}$ - REL NC $\mathrm{N}_{12}$ - frog $\mathrm{SC}_{12}$ - COP
'The little boy also climbed to the place where the frog was,'
46. ciothe igĩikarĩra kamũtĩ.
ci- othe i- kĩ- ikar -ĩr -a ka- mũtĩ
$\mathrm{AC}_{8}$ - all $\mathrm{SC}_{8^{-}}$SEQ- sit -APP -FV NC ${ }_{12}$ - tree
'they all then sat on the little tree.'
47. ciaikaikara rĩ,
ci- a- ika- ikar -a rĩ
$\mathrm{SC}_{8}$ - RM.PST- REDUP- sit -FV COP
'After they sat a while, then (guess what happened!),'
48. kagui nîkambĩrĩrie gũthaka na kora.
ka- gui nĩ- ka- amb-ĩrĩr -i -e kũ- thak -a na ka- ũra $\mathrm{NC}_{12}$ - dog FOC- $\mathrm{SC}_{12^{-}}$start -INTENS- -TRNS -FV NC $\mathrm{N}_{15}$ - play -FV with $\mathrm{NC}_{12}$ - frog 'the dog began to play with the frog.'
49. nako kahĩĩ gakĩhumbĩra kora na neti,
na- ka- o ka- hĩi ka- kĩ- humb-ĩr -a ka- ũra na neti and- $\mathrm{AC}_{12}-$ PRO NC $_{12}$ - boy $\mathrm{SC}_{12}$ - SEQ- cover -APP - $\mathrm{FV} \mathrm{NC} 11_{12}$ - frog with $\mathrm{NC}_{9}$.net 'Then the little boy covered the little frog with a net,'
50. na mũtego.
na mũ-teg -o
with $\mathrm{NC}_{3}-$ trap - NMZ
'with a trap.'
51. kahĩĩ gakĩhumbĩra kagui na mũtego.
ka- hĩĩ ka- kĩ- humb-ĩr -a ka- gui na mũ- teg -o
$\mathrm{NC}_{12}$ - boy $\mathrm{SC}_{12}$ - SEQ- cover -APP - $\mathrm{FV} \mathrm{NC}_{12}$ - dog with $\mathrm{NC}_{3}-$ trap - NMZ
'Then the little boy covered the little dog with the trap.'
52. kora nako gakĩgũa maĩ-inĩ gagĩcoka maĩ-inĩ.
ka- ũra na- ka- o ka- kĩ- gũ -a ma- aĩ -inĩ
$\mathrm{NC}_{12}$ - frog and- $\mathrm{AC}_{12}$ - $\operatorname{PRO} \mathrm{SC}_{12}$ - SEQ- fall -FV NC $6_{6}$ - water -LOC
ka- kĩ- cok -a ma- aĩ -inĩ
$\mathrm{SC}_{12}-$ SEQ- return - $\mathrm{FV} \mathrm{NC}_{6}$ - water -LOC
'And then the frog fell into the water, went back to the water.'
53. kahĩĩ nĩgacokire gagĩtega,
ka- hĩĩ nĩ- ka- cok -ir -e ka- kĩ- teg -a
$\mathrm{NC}_{12}$ - boy FOC- $\mathrm{SC}_{12}$ - return -COMPL -FV SC ${ }_{12}$ - SEQ- trap -FV
'Then the boy trapped,'
54. gagĩ-- gakĩoya kagui na mũtego,
ka- kĩ- -- ka- kĩ- oy -a ka- gui na mũ-teg -o
$\mathrm{SC}_{12}-$ SEQ- TRUNC SC ${ }_{12}-$ SEQ- take -FV NC ${ }_{12}-$ dog with $\mathrm{NC}_{3}-$ trap -NMZ
'took the little dog with the trap,'
55. kora karĩ maĩ-inĩ keroreire ũrĩa kahĩĩ kareka,
ka- ũra ka- rĩ ma- aĩ -inĩ ka- ĩ- ror -ĩ -ir -e
$\mathrm{NC}_{12}$ - frog $\mathrm{SC}_{12}-$ COP NC ${ }_{6}$ - water -LOC SC ${ }_{12}$ - REFL- look.at -APP -COMPL -FV
ũ- rĩa ka- hĩĩ ka- rek -a
$\mathrm{AC}_{14}-\mathrm{REL} \mathrm{NC}_{12}-$ boy $\mathrm{SC}_{12}$ - do -FV
'while the frog was at the water, observing what the little boy was doing,'
56. naũrĩa kora kareka e--
na- ũ- rĩa ka- ũra ka- rek -a e--
and- $\mathrm{AC}_{14}-\mathrm{REL} \mathrm{NC}_{12}-$ frog $\mathrm{SC}_{12}$ - do -FV TRUNC
'and what the frog was doing --'
57. kũrĩa ka-- ũrĩa kagui kareka na ũrĩa kahĩĩ kareka.
kũ- rĩa ka- -- $\tilde{u}^{-}$rĩa ka- gui ka- rek -a
$\mathrm{AC}_{15}-$ REL NC $_{12}-$ TRUNC AC $_{14}-$ REL NC $_{12}-\operatorname{dog} \mathrm{SC}_{12}-$ do -FV
na ũ- rĩa ka- hĩĩ ka- rek-a
and $\mathrm{AC}_{14}-$ REL NC $_{12}$ - boy $\mathrm{SC}_{12}-$ do -FV 'what the dog was doing and what the boy was doing.'
58. kagui kagui nĩga-- nĩkahumbĩrire-- nĩkahumbĩrirwo nĩ kahîĩ.
ka- gui ka- gui nĩ- ka- -- nĩ- ka- humb-ĩr -ir -e --$\mathrm{NC}_{12}-\operatorname{dog} \mathrm{NC}_{12}$ - dog FOC- SC $\mathrm{S}_{12}$ - TRUNC FOC- $\mathrm{SC}_{12}$ - cover -APP -COMPL -FV TRUNC
nĩ- ka- humb -ĩr -ir -wo nĩ ka- hĩĩ
FOC- $\mathrm{SC}_{12}$ - cover -APP -COMPL -PV by $\mathrm{NC}_{12}$ - boy
'The little dog was covered by the little boy.'
59. gagĩikara karĩ kahumbĩre na mũtego.
ka- kĩ- ikar -a ka- rĩ ka- humb-ĩr -e na mũ- teg -o
$\mathrm{SC}_{12}-\mathrm{SEQ}-$ sit $-\mathrm{FV} \mathrm{SC}_{12}-\mathrm{COP} \mathrm{SC}_{12}$ - cover -APP -FV with $\mathrm{NC}_{3}-$ trap -NMZ
'He stayed covered by the trap.'
60. gatiahotire kuuma hau.
ka- ti- a- hot-ir -e kũ- um -a ha- u
$\mathrm{SC}_{12}$ - NEG- RM.PST- able -COMPL -FV NC $\mathrm{C}_{15}$ - come.out - $\mathrm{FV} \mathrm{AC}_{16}$ - ANA
'He was unable to get out of there.'
61. kahĩĩ gakĩambĩrĩria kwaria na-- na kora.
ka- hĩĩ ka- kĩ- amb-ĩrĩr -i $\quad$-a kũ- ari -a na-- na ka- ũra $\mathrm{NC}_{12}-$ boy $\mathrm{SC}_{12}$ - SEQ- start -INTENS -TRNS -FV NC $\mathrm{Na}_{15}$ - speak -FV with with $\mathrm{NC}_{12}$ - frog 'Then the little boy started to speak to the little frog.'
62. gagĩcoka gakĩhumbũria kagui,
ka- kĩ- cok -a ka- kĩ- humb-ũr -i $\quad-a$ ka- gui
$\mathrm{SC}_{12}$ - SEQ- return -FV SC $\mathrm{C}_{12}$ - SEQ- cover -REVERS -COMPL -FV NC ${ }_{12}$ - dog
'Then the little boy uncovered the little dog,'
63. makĩinũka,
ma-kĩ- in -ũk -a
$\mathrm{SC}_{2}-$ SEQ- sing -REVERS.MID -a
'They went home ${ }^{6}$,'
64. kora gagĩtigwo gaikarĩire ihiga rũũũ-inĩ.
ka- ũra ka- kĩ- tig -wo ka- ikar -ĩ -ir -e i- higa rũ- ũĩ -inĩ $\mathrm{NC}_{12}$ - frog $\mathrm{SC}_{12^{-}}$- SEQ- abandon -PV SC $1_{12}$ - sit -APP -COMPL -FV NC $5^{-}$- stone $\mathrm{NC}_{11}$ - river -LOC 'The frog was left sitting on a stone by the river.'
65. kahĩĩ nĩgai-- nĩgathiire mũciĩ.
ka- hĩĩ nĩ- ka- i-- nĩ- ka- thi -ir -e mũ- ciĩ
$\mathrm{NC}_{12}$ - boy FOC- $\mathrm{SC}_{12}$ - TRUNC FOC- $\mathrm{SC}_{12}$ - go -COMPL -FV NC ${ }_{3}-$ home
'and then the boy went home.'

[^4]66. Nĩkaambĩrĩrie kuuma rũũi-inĩ na kahĩĩ.
nĩ- ka- amb-ĩrĩr -i -e kũ- um -a rũ- ũi -inĩ na ka- hĩĩ FOC- SC $_{12}$ - start -INTENS -TRNS -FV NC ${ }_{15}$ - come.out -FV NC ${ }_{11}$ - river -LOC with $\mathrm{NC}_{12}$ - boy 'It started to come out of the river with the boy.'
67. magĩthiĩ na magũrũ,
ma-kĩ- thi- -1 na ma-gũrũ
$\mathrm{SC}_{2}-$ SEQ- go -FV with $\mathrm{NC}_{6}-$ leg
'And then they went on foot,'
68. kahĩĩ gakururĩtie mũtego.
ka- hĩĩ ka- kurur -ĩt -i -e mũ- teg -o
$\mathrm{NC}_{12}-$ boy $\mathrm{SC}_{12}$ - drag PERF -TRNS -FV NC $\mathrm{N}_{3}-$ trap -NMZ
'while the little boy dragged the trap.'
69. ka-- kora nĩgatigirwo rũũũ karĩ o gaiki.
ka-- ka- ũra nĩ- ka- tig -ir -wo rũ- ũĩ ka- rĩ o ka- iki TRUNC $\mathrm{NC}_{12}$ - frog FOC- $\mathrm{SC}_{12}$ - abandon -COMPL -PV $\mathrm{NC}_{11}$ - river $\mathrm{SC}_{12}$ - COP just $\mathrm{AC}_{12}$ - alone 'The frog was left at the river all alone.'
70. mĩtĩ-inĩ.
mĩ- tĩ -inĩ
$\mathrm{NC}_{4}$ - tree -LOC
'in the trees.'
71. kwarĩ na mĩtĩ mĩingĩ na mahuti m-- maingĩ.
kũ- arĩ na mĩ- tĩ mĩ- ingĩ na ma-huti m-- ma-ingĩ $\mathrm{SC}_{17}-$ COP with $\mathrm{NC}_{4}-$ tree $\mathrm{JC}_{4}-$ many and $\mathrm{NC}_{6}$ - leaf TRUNC JC $6_{6}-$ many 'There were a lot of trees and a lot of leaves.'
72. no kora gaikarĩte karĩ o gaiki ihiga-inĩ.
no ka- ũra ka- ikar -ĩt -e ka- rĩ o ka- iki i- higa -inĩ but $\mathrm{SC}_{12}$ - frog $\mathrm{SC}_{12}$ - sit -PERF -FV SC $\mathrm{Si}_{12}$ - COP just $\mathrm{AC}_{12}$ - alone $\mathrm{NC}_{5}$ - stone -LOC 'But the frog was sitting, being all alone on the stone.'
73. kora gagĩcoka gakĩambĩrĩria kũrũmĩrĩra makinya ma kahĩĩ na kagui.
ka- ũra ka- kĩ- cok -a ka- kĩ- amb-ĩrĩr -i $\quad$-a $\mathrm{NC}_{12}$ - frog $\mathrm{SC}_{12}$ - SEQ- return -FV SC ${ }_{12}$ - SEQ- start -INTENS -TRNS -FV
kũ- rũm -ĩrĩr -a ma-kinya ma-a ka- hĩĩ na ka- gui
$\mathrm{NC}_{15}$ - follow -INTENS -FV NC $6_{6}$ - footstep $\mathrm{AC}_{6}-$ ASSOC $^{2} \mathrm{NC}_{12}$ - boy and $\mathrm{NC}_{12}$ - dog
'Then the frog started following the footsteps of the little boy and the little dog.'
74. gagĩũka kinya rũ-- kinya mũciĩ.
ka- kĩ- ũk -a kinya rũ- -- kinya mũ- ciĩ
$\mathrm{SC}_{12}$ - SEQ- come -FV until $\mathrm{NC}_{11}$ - TRUNC until $\mathrm{NC}_{3}{ }^{-}$home
'He came all the way home.'
75. gakiuma o rũũũ-inĩ gagĩũka kinya mũciĩ.
ka- kĩ- um -a o rũ- ũĩ -inĩ ka- kĩ- ũk -a kinya mũ- ciĩ
$\mathrm{SC}_{12^{-}}$SEQ- come.out -FV all $\mathrm{NC}_{11^{-}}$river -LOC SC $\mathrm{Cl}^{-}$- SEQ- come -FV until $\mathrm{NC}_{3}$ - home
'He came all the way from the river and came (up to the) home.'
76. gagîkora kahĩĩ na kagui me-- maĩ-inĩ magĩithamba.
ka- kĩ- kor -a ka- hĩĩ na ka- gui ma-e ma-aĩ -inĩ ma-kĩ- ${ }^{1}-\quad$ thamb-a
$\mathrm{SC}_{12}-\mathrm{SEQ}$ - find $-\mathrm{FV} \mathrm{NC} 12^{-}$- boy and $\mathrm{NC}_{12}-$ dog $\mathrm{AC}_{2}-$ at $\mathrm{NC}_{6}-$ water -LOC SC $2^{-}-$SIM- REFL- wash -FV
'Then he found the boy and the dog in the water washing themselves.'
77. gakĩmarũthĩrĩria.
ka- kĩ- ma-rũth -ĩrĩr -i -a
$\mathrm{SC}_{12}-$ SEQ- $\mathrm{OC}_{2}-$ peek -INTENS -TRNS -FV
'He peeked at them.'
78. kahĩĩ na kagui makĩona kora gakĩrũga.
ka- hĩĩ na ka- gui ma-kĩ- on -a ka- ũra ka- kĩ- rũg -a
$\mathrm{NC}_{12}{ }^{-}$boy and $\mathrm{NC}_{12}-$ dog $\mathrm{SC}_{2}-$ SEQ- see -FV NC $\mathrm{NC}_{12}$ - frog $\mathrm{SC}_{12}$ - SIM- jump -FV
'Then the little boy and the little dog saw the little frog jumping.'
79. gakĩrũga gagĩũka maĩ-inĩ harĩa maarĩ magĩ̃thamba.
ka- kĩ- rũg -a ka- kĩ- ũk -a ma-aĩ -inĩ
$\mathrm{SC}_{12}-$ SEQ- jump -FV SC ${ }_{12}-$ SEQ- come -FV NC ${ }_{6}$ - water -LOC
ha- rĩa ma-a- rĩ ma-kĩ- ĩ- thamb-a
$\mathrm{AC}_{16}-$ REL SC $_{2}-$ RM.PST- COP SC $2_{2}-$ SIM- REFL- wash -FV
'It jumped and came into the water where they were while washing themselves.'
80. gakĩmakinyĩra.
ka- kĩ- ma-kiny -ĩr -a
$\mathrm{SC}_{12}-$ SEQ- $\mathrm{OC}_{2}-$ arrive -APP -FV
'He caught up with them.'
81. na magĩikara mbabu-inĩ marĩ atatũ kahĩĩ kagui na kora.
na ma-kĩ- ikar -a mbabu -inĩ ma- rĩ a- tatũ ka- hĩĩ ka- gui na ka- ũra and $\mathrm{SC}_{2}-$ SEQ- sit $-\mathrm{FV} \mathrm{NC}_{9}$.bath -LOC $\mathrm{SC}_{2}-$ COP AC $2_{2}$ - three $\mathrm{NC}_{12}{ }^{-}$boy $\mathrm{NC}_{12}-$ dog and $\mathrm{NC}_{12}$ - frog 'Then they sat in the bathtub the three of them, the boy, the dog, and the frog.'
82. rũgano rwakwa rwathirĩra hau ${ }^{7}$.
rũ- gan -o rũ- akwa rũ- a- thir -ĩr -a ha- u
$\mathrm{NC}_{11}-$ narrate -NMZ SC ${ }_{11}-1$ SG.POS SC ${ }_{11}-$ CR.PRES end -APP -FV AC $16^{-}$- ANA.DEM
'My story ends there.'

[^5]
## Appendix B

A narration of the Pear Film (see Chafe 1980, and http://www.pearstories.org/).
MP3 audio available at http://www.ruf.rice.edu/~reng/kik/02-pears.mp3

1. nĩkũarĩ na mũrĩmi mũbaranja
nĩ- kũ- a- rĩ na mũ- rĩmi mũ- baranja
FOC- $\mathrm{SC}_{17}$ - RM.PST- COP with $\mathrm{NC}_{1}-$ farmer $\mathrm{AC}_{1}-$ French 'there was a French farmer'
2. arĩmaga matunda ma pears
a- rĩm -ag -a ma-tunda m- a pears
$\mathrm{SC}_{1}-$ cultivate - $\mathrm{HAB}-\mathrm{FV} \mathrm{NC}_{6}$ - fruit $\mathrm{AC}_{6}-\mathrm{ASSOC}^{2} \mathrm{NC}_{9}$.pears
'he grew pears'
3. na mũthenya ũmwe nĩathire gũtua matunda na mũ- thenya ũ- mwe nĩ- a- th -ir -e kũ- tu -a ma-tunda and $\mathrm{NC}_{3}{ }^{-}$day $\quad \mathrm{AC}_{3}$ - one $\quad \mathrm{FOC}-\mathrm{SC}_{1^{-}}$- go -COMPL - $\mathrm{FV} \mathrm{NC}_{15}$ - pick - $\mathrm{FV} \mathrm{NC}_{6}$ - fruit 'and one day he went to pick fruit'
4. akîhaica ngathĩ
a- kĩ- haic -a ngathĩ
$\mathrm{SC}_{1}$ - SEQ- mount - $\mathrm{FV} \mathrm{NC}_{9}$.ladder
'and (then) he climbed up a ladder'
5. akîhai-- agĩ--
akîhai-- agĩ--
TRUNC TRUNC
6. agĩtua matunda maigana ũna
a- kĩ- tu -a ma-tunda ma-igana ũna
$\mathrm{SC}_{1}-$ SEQ- pick - $\mathrm{FV} \mathrm{NC}_{6}$ - fruit $\mathrm{JC}_{6}-$ quantity known.amount 'and then he picked a number of fruits'
7. ikabu cigana ũna
i- kabu ci- igana ũna
$\mathrm{NC}_{8}$ - basket $\mathrm{JC}_{8}-$ quantity known.amount
'a number of baskets (of fruit)'
8. ta ithatũ kana inya
ta i- thatũ kana i- nya
like $\mathrm{AC}_{8}$ - three or $\mathrm{AC}_{8}$ - four 'about three or four'
9. agĩthiĩ gũtua mangĩ-rĩ
a- kĩ- thi -ĩ kũ- tu -a ma-ngĩ -rĩ
$\mathrm{SC}_{1^{-}}$SEQ- go - $\mathrm{FV} \mathrm{NC}_{15}$ - pick - $\mathrm{FV} \mathrm{JC}_{6}{ }^{-}$other MKR
'and when he went to pick some more,'
10. nĩhokire kahĩĩ
nĩ- ha- ũk -ir -e ka- hĩĩ
FOC- $\mathrm{SC}_{16}$ - come -COMPL -FV NC $\mathrm{N}_{12}$ - boy
'there came a little boy'
11. arĩ ngathĩ igũrũ kahĩĩ gagĩũka
a- rĩ ngathĩ igũrũ ka- hĩĩ ka- kĩ- ũk -a
$\mathrm{SC}_{1}$ - COP $\mathrm{NC}_{9}$. ladder up $\mathrm{NC}_{12}$ - boy $\mathrm{SC}_{12}$ - SEQ- come -FV
'while he was up the ladder, a little boy came'
12. ga
ga
TRUNC
13. ke-na mũithikiri
ka- rĩ- na mũ- ithikiri
$\mathrm{SC}_{12}-\mathrm{COP}$ with $\mathrm{NC}_{3}-$ bicycle
'with a bicycle’
14. gakĩiga mũithikiri thĩ
ka- kĩ- ig -a mũ- ithikiri thĩ
$\mathrm{SC}_{12}$ - SEQ-put-FV NC $\mathrm{N}^{-}$bicycle down
'and then the little boy put the bicycle down'
15. gagĩcũthĩrĩria
ka- kĩ- cũth -ĩrĩr -i $\quad-\mathrm{a}$
$\mathrm{SC}_{12}-$ SEQ- hit -INTENS -TRNS -FV
'he peeked (as you would from behind a tree)'
16. gagĩcũthĩrĩria kana mũndũ nĩarakona
ka- kĩ- cũth -ĩrĩr -i $\quad$-a kana mũ- ndũ nĩ- a- ra- ka- on -a $\mathrm{SC}_{12}-$ SEQ- hit -INTENS -TRNS -FV if $\quad \mathrm{NC}_{1}-$ person FOC- $\mathrm{SC}_{1}$ - CR.PRES- $\mathrm{OC}_{12}$ - see -FV 'he peeked (to learn) whether the man could (at that time) see him'
17. gakĩona ndarakona
ka- kĩ- on -a nd-a- ra- ka- on -a
$\mathrm{SC}_{12}$ - SEQ- see -FV NEG SC $1_{1}$ - CR.PRES- OC ${ }_{12}$ - see -FV
'he saw that the man could not (at that time) see him'
18. gakĩinamĩrĩra gakĩoya gĩkabu kĩmwe
ka- kĩ- inam-ĩrĩr -a ka- kĩ- oy -a kĩ- kabu ki- mwe
$\mathrm{SC}_{12^{-}}$SEQ- bend -INTENS -FV SC ${ }_{12}$ - SEQ- take - $\mathrm{FV} \mathrm{NC}_{7}$ - basket $\mathrm{AC}_{7}$ - one 'and then he bent over and took one basket'
19. gakĩiga ha-kuhĩ na mũithikiri
ka- kĩ- ig -a ha- kuhĩ na mũ- ithikiri
$\mathrm{SC}_{12}-$ SEQ- put -FV NC $\mathrm{NC}_{16}$ - short with $\mathrm{NC}_{3}-$ bicycle
'and then he put it near the bicycle'
20. gagĩcoka gakĩhaica mũithikiri
ka- kĩ- cok -a ka- kĩ- haic -a mũ- ithikiri
 'and then he got on the bicycle'
21. gakĩoya gĩkabu kĩa matunda
ka- kĩ- oy -a kĩ- kabu kĩ- a ma-tunda
$\mathrm{SC}_{12}$ - SEQ- take -FV NC ${ }_{7}$ - basket $\mathrm{AC}_{7^{-}}$- $\mathrm{ASSOC}^{-1} \mathrm{NC}_{6^{-}}$fruit
'and then he took the basket of fruit'
22. gakĩigĩrĩra mũithikiri-inĩ na gagĩthiĩ
ka- kĩ- ig -ĩrĩr -a mũ- ithikiri -inĩ na ka- kĩ- thi -ĩ
$\mathrm{SC}_{12}-$ SEQ- put -INTENS -FV NC $3^{-}$- bicycle -LOC and $\mathrm{SC}_{12}$ - SEQ- go -FV
'and then he put it on the bicycle and left'
23. gagĩikũrũka handũ harĩ karĩma
ka- kĩ- igũrũ -ũr -ik -a ha- ndũ ha- rĩ ka- rĩma
$\mathrm{SC}_{12}$ - SEQ- above -REVERS -MID -FV NC $\mathrm{N}_{16}$ - place $\mathrm{SC}_{16^{-}}$- COP $\mathrm{NC}_{12^{-}}$- hill 'and then he went down this little hill'
24. gaikũrũka
ka- igũrũ -ũr -ik -a
$\mathrm{SC}_{12}$ - above -REVERS -MID -FV
'when he descended'
25. gaikũrũka
ka- igũrũ-ũr -ik -a
$\mathrm{SC}_{12}$ - above -REVERS -MID -FV
'he descended'
26. gagĩcemania na tũhĩĩ tũngĩ tũtatũ
ka- kĩ- cem -an -i $\quad$-a na tũ- hĩĩ tũ- ngĩ tũ- tatũ $\mathrm{SC}_{12^{-}}$- SEQ- cross.paths -RECIP -TRNS -FV with $\mathrm{NC}_{13}-$ boy $\mathrm{AC}_{13}$ - other $\mathrm{AC}_{13}$ - three 'he crossed paths with three other little boys'
27. tũhĩĩ tũu
tũ- hĩĩ tũ- u
$\mathrm{NC}_{13}$ - boy $\mathrm{AC}_{13^{-}}$ANA.DEM
'those little boys'
28. nĩgwa-- nĩtwahĩ--
nĩgwa-- nĩtwahĩ--
TRUNC TRUNC
29. nĩtũahĩtũkire kahĩ̃ kau
nĩ- tũ- a- hĩt -ũr -ik -ir -e ka- hĩĩ ka- u
FOC- $\mathrm{SC}_{13}$ - RM.PST- hunt -REVERS -MID -COMPL -FV NC ${ }_{12}$ - boy $\mathrm{AC}_{12}$ - ANA.DEM 'they passed that little boy'
30. gagĩkũrũka
ka- kĩ- igũrũ -ũr -ik -a
$\mathrm{SC}_{12}$ - SEQ- above -REVERS -MID -FV
'as he went down the hill'
31. na tũo tũkĩambata tũgĩthakaga
na tũ- o tũ- kĩ- ambat-a tũ- kĩ- thak -ag -a
and $\mathrm{AC}_{13^{-}}$- ANA.DEM $\mathrm{SC}_{13}$ - SEQ- ascend -FV SC ${ }_{13}$ - SEQ- play -IMPF -FV
'and they went uphill as they played'
32. makĩhĩtũkana na kahĩĩ gakĩmageithia
ma-kĩ- hĩt -ũr -ik -an -a na ka- hĩi ka- kĩ- ma-ge -ith -i -a $\mathrm{SC}_{6^{-}}$SEQ- hunt -REVERS -MID -RECIP -FV and $\mathrm{NC}_{12}-$ boy $\mathrm{SC}_{12}$ - SEQ- $^{-} \mathrm{OC}_{6}$ - have -CAUS -TRNS -FV 'they (and the boy) then passed each other and the boy greeted them'
33. ndiũĩ kana nĩ ngũbia gathire kũruta

N- ti- ũĩ kana nĩ ngũbia ka- thi -ir -e kũ- rut -a
1SG- NEG- know if $\mathrm{FOC} \mathrm{NC}_{9}$.hat $\mathrm{SC}_{12}$ - go -COMPL - $\mathrm{FV} \mathrm{NC}_{15}$ - remove - FV
'I don't know, he went to remove his hat'
34. kamageithie
ka- ma-ge -ith -i -e
$\mathrm{SC}_{12}-\mathrm{OC}_{6}$ - have -CAUS -TRNS -FV
'so as to greet them'
35. kageithie tũhĩì tũu tũngĩ tũtatũ
ka- ge -ith -i $-e$ tũ- hĩĩ tũ- $u$ tũ- ngĩ tũ- tatũ
$\mathrm{SC}_{12}$ - have CAUS -TRNS -FV NC ${ }_{13}$ - boy $\mathrm{AC}_{13}$ - ANA AC $_{13^{-}}$other $\mathrm{AC}_{13}$ - three 'so as to greet those other three boys'
36. kana nĩ atĩa gakĩgũithia mũithikiri na gakĩgwa
kana nĩ atĩa ka- kĩ- gũ -ith -i $-a$ mũ- ithikiri na ka- kĩ- gũ -a
or FOC what $\mathrm{SC}_{12}-$ SEQ- fall CAUS -TRNS -FV NC ${ }_{3}-$ bicycle and $\mathrm{SC}_{12}$ - SEQ - fall -FV
'or, whatever it is - he dropped the bicycle and then he fell'
37. kagwa matunda mothe makĩgwa
ka- gũ -a ma-tunda ma- othe ma-kĩ- gũ -a
$\mathrm{SC}_{12}-$ fall -FV NC $6^{-}$- fruit $\mathrm{JC}_{6^{-}}$all $\mathrm{SC}_{6^{-}}$SEQ- fall -FV
'(when) he fell, all the fruit then fell'
38. magwa nĩguo tũhĩĩ twacokire
ma-gũ -a nĩ- guo tũ- hĩĩ tũ- a- cok -ir -e
$\mathrm{SC}_{6}$ - fall -FV FOC- when $\mathrm{NC}_{13}$ - boy $\mathrm{SC}_{13}$ - RM.PST- return -COMPL -FV 'after the fruit fell - that is when the boys returned'
39. gũcoka kuona nĩkagwa
kũ- cok -a kũ on -a nĩ- ka- gũ -a
$\mathrm{NC}_{15}$ - return - $\mathrm{FV} \mathrm{NC}_{15}$ - see -FV FOC- $\mathrm{SC}_{12}$ - fall -FV
'returned, and saw that the boy fell'
40. tũgĩcoka gũkane gũgateithia
tũ- kĩ- cok -a kũ- ka- ne kũ- ka- te -ith -i -a
$\mathrm{SC}_{13^{-}}$SEQ- return -FV NC $\mathrm{Na}^{-}-\mathrm{OC}_{12^{-}}$give.by.hand $\mathrm{NC}_{15^{-}} \mathrm{OC}_{12^{-}}$help CAUS -TRNS -FV 'then they returned to give him... to help him'
41. twagateithia
tũ- a- ga- te -ith -i -a
$\mathrm{SC}_{13}$ - RM.PST- $\mathrm{OC}_{12}$ - help CAUS -TRNS -FV
'after they helped him'
42. gac gacoka ningĩ
gac ka- cok -a ningĩ
TRUNC SC $_{12}$ - return -FV also
'when he went back, also'
43. kahaica mũithikiri-rĩ
ka- haic -a mũ- ithikiri -rĩ
$\mathrm{SC}_{12}-$ mount -FV NC $3_{3}$ - bicycle MKR
'when he got on the bicycle,'
44. nĩguo
nĩ- guo
FOC- when
'that is when'
45. nĩkambire gakĩmahe ma matunda matatũ
nĩ- ka- amb-ir -e ka- kĩ- ma-he ma- ma-tunda ma- tatũ FOC- SC $_{12}-$ start -COMPL -FV SC $12_{12}-$ SEQ- $\mathrm{OC}_{6}-$ give TRUNC NC $6^{-}$- fruit $\mathrm{AC}_{6}$ - three 'he started by giving them three fruits'
46. gagĩcoka gakîhaica mũithikiri gagĩthiĩ
ka- kĩ- cok -a ka- kĩ- haic -a mũ- ithikiri ka- kĩ- thi -ĩ $\mathrm{SC}_{12}-$ SEQ- return -FV SC ${ }_{12}-$ SEQ- mount - $\mathrm{FV} \mathrm{NC}_{3}-$ bicycle $\mathrm{SC}_{12}-$ SEQ- go -FV 'and then he got on the bicycle and left'
47. nĩguo tũhĩĩ twacokire tũkĩona ngũbia
nĩ- guo tũ- hĩĩ tũ- a- cok -ir ee tũ- kĩ- on -a ngũbia FOC- when $\mathrm{NC}_{13}$ - boy $\mathrm{SC}_{13}$ - RM.PST- return -COMPL -FV SC $1_{13}$ - SEQ- see - $\mathrm{FV} \mathrm{NC}_{9}$. hat 'that is when the boys then found the hat'
48. kahĩĩ kamwe gakĩoya ngũbia
ka- hĩĩ ka- mwe ka- kĩ- oy -a ngũbia $\mathrm{NC}_{12}$ - boy $\mathrm{AC}_{12}$ - one $\mathrm{SC}_{12}$ - SEQ - take - $\mathrm{FV} \mathrm{NC}_{9}$.hat 'one boy then took the hat'
49. gagĩcokeria kahĩĩ gaka gatete ngũbia
ka- kĩ- cok -ĩr -i -a ka- hĩĩ ka- ka ka- ta -ĩt -e ngũbia $\mathrm{SC}_{12}$ - SEQ- return -APP -TRNS -FV NC $1_{12}-$ boy $\mathrm{AC}_{12}$ - PROX.DEM $\mathrm{SC}_{12}$ - lose -PERF -FV NC ${ }_{9}$, hat 'he then returned it to this boy who had lost a hat'
50. aaaa-- gagĩcoka ĩĩ îhĩ
aaaa-- ka- kĩ- cok -a ĩ î îhĩ
TRUNC SC ${ }_{12}$ - SEQ- return -FV yes no
'ummm... and then the boy went back... yes... no...'
51. gacokia ngũbia
ka- cok -i -a ngũbia
$\mathrm{SC}_{12}-$ return -TRNS -FV NC ${ }_{9}$.hat
'when he returned the hat'
52. nĩguo kaheirwo matunda matatũ
nĩ- guo ka- he -ir -wo ma- tunda ma- tatũ
FOC- when $\mathrm{SC}_{12}$ - give -COMPL -PV $\mathrm{NC}_{6}$ - fruit $\mathrm{AC}_{6}$ - three
'that is when he was given three fruits'
53. kahe tũhĩĩ tũu tũngĩ twĩri twatigĩtwo
ka- he tũ- hĩĩ tũ- u tũ- ngĩ tũ- ĩri tũ- a- tig -ĩt -wo $\mathrm{SC}_{12^{-}}$give $\mathrm{NC}_{13}$ - boy $\mathrm{AC}_{13^{-}}$- ANA.DEM $\mathrm{AC}_{13^{-}}$other $\mathrm{AC}_{13^{-}}$two $\mathrm{SC}_{13}$ - RM.PST- abandon -PERF -PV 'to give to those other two boys that had been left behind'
54. aaaa-- twaheo matunda macio matatũ
aaaa-- tũ- a- he -o ma-tunda ma-cio ma-tatũ TRUNC $\mathrm{SC}_{13}$ - RM.PST- give -PV NC ${ }_{6}$ - fruit $\mathrm{AC}_{6}$ - ANA.DEM $\mathrm{AC}_{6}$ - three 'ummm... when they were given those three fruits'
55. no gũthiĩ twathire tũkĩambĩrĩria
no kũ- thi -ĩ tũ- a- thi -ir -e tũ- kĩ- amb-ĩrĩr -i $-a$
just $\mathrm{NC}_{15}$ - go -FV SC ${ }_{13}$ - RM.PST- go -COMPL -FV SC ${ }_{13}$ - SEQ- start -INTENS -TRNS -FV 'they just left, then they started'
56. gũthiĩ nakũrĩa twathiaga
kũ- thi -ĩ na- kũ- rĩa tũ- a- thi -ag -a
$\mathrm{NC}_{15^{-}}$go -FV with $\mathrm{AC}_{17^{-}}$DIST.DEM $\mathrm{SC}_{13^{-}}$- RM.PST- go -IMPF -FV
'to go to the place that they were going'
57. nako kahĩĩ gagĩthiĩra
na- ka- o ka- hĩĩ ka- kĩ- ĩ- thi -ĩr -a
and $\mathrm{AC}_{12}$ - ANA.DEM NC ${ }_{12}$ - boy $\mathrm{SC}_{12}$ - SEQ- REFL- go -PROC -FV
'and the little boy went on his way'
58. kũrĩa gathiaga
kũ- rĩa ka thi-ag -a
$\mathrm{AC}_{17}-$ REL SC $_{12}$ - go IMPF -FV
'to the place that he was going'
59. rũgano rwakwa rũgĩthirĩra hau!
rũ- gan -o rũ akwa rũ- kĩ- thir -ĩr -a ha- u
$\mathrm{NC}_{11}$ - narrate -NMZ AC $\mathrm{H}_{11}-1 \mathrm{SG}$. POS $\mathrm{SC}_{11}$ - SEQ- end -APP -FV AC $\mathrm{Cl}^{-}$- ANA.DEM
'and then my story ended there!'

## Appendix C

MP3 audio available at http://www.ruf.rice.edu/~reng/kik/03-mataha.mp3

1. irio ciakwa iria nyendete mũno ciĩtagwo mataha
i- rio i- akwa i- ria $N$ - end -et -e mũno i- ĩt -ag -wo ma-taha $\mathrm{NC}_{8}$ - food $\mathrm{NC}_{8}-1$ 1SG.POS NC $\mathrm{S}_{8}$ - REL 1 SG. SUBJ- like -PERF -FV very $\mathrm{SC}_{8}$ - call -IMPF -PV $\mathrm{NC}_{6}$ - mataha 'my favorite food is called mataha'
2. mataha nĩ irio itahagwo na kaihũri
ma-taha nĩ i- rio i- tah -ag -wo na ka- ihũri
$\mathrm{NC}_{6}-$ mataha $\mathrm{FOC} \mathrm{NC}_{8}$ - food $\mathrm{SC}_{8^{-}}$fetch -IMPF -PV with $\mathrm{NC}_{12}-$ gourd
'mataha is food scooped with a little half gourd'
3. na ikoragwo na mbembe
na i- kor -ag -wo na N - bembe and $\mathrm{SC}_{8}$ - find -IMPF -PV with $\mathrm{NC}_{10}$ - corn
'and it has corn'
4. icamũkagio mbembe
i- camũk -ag -i -wo N- bembe
$\mathrm{SC}_{10}$ - boil -IMPF -TRNS -PV $\quad \mathrm{NC}_{10}$ - corn
'corn is boiled'
5. ũgacamũkia mbembe kinya igacamũka biũ
ũ- ka- camũk -i $\quad$-a $N$ - bembe kinya i- ka- camũk-a biũ 2SG.SUBJ- CR.PRES- boil -TRNS -FV NC $1_{10}$ corn until $\mathrm{SC}_{10}$ - CR.PRES- boil -FV completely 'you boil corn until it is completely boiled'
6. ũgacoka ũgacamũkia mboco
ũ- ka- cok -a ũ- ka- camũk -i $\quad$-a $\begin{array}{lllll} & \mathrm{N}-\quad \text { boco }\end{array}$
2SG.SUBJ- CR.PRES- resume -FV 2SG.SUBJ- CR.PRES- boil -TRNS -FV NC $10^{-}$- beans 'then you boil beans'
7. kinya igacamũka biũ
kinya i- ka- camũk -a biũ
until $\mathrm{SC}_{10}$ - CR.PRES- boil -FV completely
'until they are completely boiled'
8. kana ũgacamũkanĩria ciothe hamwe
kana ũ- ka- camũk -an -ĩr -i $\quad$-a i- othe ha- mwe
or 2SG.SUBJ- CR.PRES- boil -RECIP -PROC -TRNS -FV NC ${ }_{10}$ - together $\mathrm{NC}_{16}$ - one
'or you could boil them all together in one place'
9. icio nĩcio nyendete cia mbembe na mboco nyũmũ
i- cio nĩ- ci- o N - end -et -e i- a N - bembe na N - boco $\mathrm{N}^{-}$ũmũ $\mathrm{NC}_{8}$ - DEM FOC- $\mathrm{NC}_{8}$ - PRO 1SG.SUBJ- like -PERF -FV AC ${ }_{8}$ - ASSOC $\mathrm{NC}_{10}$ - corn and $\mathrm{NC}_{10}$ - beans $\mathrm{AC}_{10}$ - dry 'that is the way I like it, made of dry corn and beans'
10. kana mboco na mbembe njũa
kana N - boco na N - bembe N - cũa
or $\quad \mathrm{NC}_{10}$ - beans and $\mathrm{NC}_{10}$ - corn $\quad \mathrm{NC}_{10^{-}}$green
'or green beans and corn'
11. ũgacamũkia na maĩ
ũ- ka- camũk-i -a na ma- aĩ
2SG.SUBJ- CR.PRES- boil -TRNS -FV with $\mathrm{NC}_{6}$ - water
'you boil them with water'
12. cikahĩa kinya maĩ, ma--
i- ka- hĩ -a kinya ma- aĩ ma--
$\mathrm{SC}_{10}-$ CR.PRES- cook -FV until $\mathrm{NC}_{6}-$ water TRUNC
'they cook until the water'
13. kinya igatuîka, ikahĩa biũ biũ biũ
kinya i- ka- tuîk -a i- ka- hĩ -a biũ biũ biũ
until $\mathrm{SC}_{10}-$ CR.PRES- become -FV SC ${ }_{10}$ - CR.PRES- cook -FV completely completely completely 'until they become, they are completely cooked'
14. kinya igatuîka njororo
kinya i- ka- tuîk -a N- cororo
until $\mathrm{SC}_{10}$ - CR.PRES- become -FV AC $10^{-}$soft
'until they become soft'
15. ũgaita maĩ
ũ- ka- it -a ma-aĩ
2SG.SUBJ- CR.PRES- pour.out -FV NC ${ }_{6}$ - water
'you then pour out the water'
16. ũgekĩra
ũ- ka- îkĩr -a
2SG.SUBJ- CR.PRES- put -FV
'then you put'
17. aca, ũgekĩra
aca ũ- ka- îkĩr -a
no 2SG.SUBJ- CR.PRES- put -FV
'no, then you put'
18. ũtanaita maĩ ũgekĩra
ũ- tana-it -a ma- aĩ ũ- ka- îkĩr -a
2SG.SUBJ- POST- pour.out -FV NC ${ }_{6}$ - water 2SG.SUBJ- CR.PRES- put -FV
'before you pour out the water, you put'
19. marigũ methĩ na nyeni
ma-rigũ ma- ĩthĩ na $N$ - nyeni
$\mathrm{NC}_{6}$ - banana $\mathrm{AC}_{6}$ - unripe and $\mathrm{NC}_{10^{-}}$greens
'unripe bananas and greens'
20. kana marigũ merĩ na-- methĩ na waru na nyeni kana ma-rigũ ma-ĩrĩ na ma- ĩthĩ na waru na N- nyeni or $\quad \mathrm{NC}_{6}-$ banana $\mathrm{AC}_{6}-$ two and $\mathrm{AC}_{6^{-}}$unripe and $\mathrm{NC}_{10}$.potato and $\mathrm{NC}_{10}$ - greens 'or unripe bananas and potatoes and greens'
21. igacamũka kinya ikahĩa
i- ka- camũk -a kinya i- ka- hĩ -a
$\mathrm{SC}_{10}$ - CR.PRES- boil -FV until $\mathrm{SC}_{10}$ - CR.PRES- cook -FV 'they boil until they're cooked'
22. ikahĩanĩria hamwe na mboco
i- ka- hĩ -an -ĩr -i -a ha- mwe na N - boco $\mathrm{SC}_{10}$ - CR.PRES- cook -RECIP -PROC -TRNS -FV NC $\mathrm{NC}_{16}$ - one with $\mathrm{NC}_{10}$ - beans 'they cook together with the beans'
23. hamwe na mbembe
ha- mwe na N - bembe
$\mathrm{NC}_{16}$ - one with $\mathrm{NC}_{10}$ - corn
'together with the corn'
24. na nĩtuge
na nĩ- tũ- ug -e
and FOC- 1PL.SUBJ- say -FV
'and let's say'
25. ũcamũkĩtie ikombe inya cia mbembe
ũ- camũk -ĩt -i $\quad$-e i- kombe i- nya i- a $\quad \mathrm{N}$ - bembe 2SG.SUBJ- boil -PERF -TRNS -FV NC $8_{8}$ - cup $\mathrm{AC}_{8^{-}}$four $\mathrm{AC}_{8^{-}} \mathrm{ASSOCNC}_{10}$ - corn 'you've boiled four cups of corn'
26. ũgwĩkĩra gĩkombe kĩmwe kĩa
ũ- kũ- îkĩr -a kĩ- kombe kĩ- mwe kĩ- a
2SG.SUBJ- CR.FUT- put -FV NC $7^{-}$- cup $\mathrm{AC}_{7}$ - one $\mathrm{AC}_{7}$ - $\mathrm{ASSOC}^{-}$
'you're going to put one cup of'
27. aca ikombe ithatũ cia mbembe
aca i- kombe i- thatũ i- a N - bembe
no $\mathrm{NC}_{8}$ - cup $\mathrm{AC}_{8}$ - three $\mathrm{AC}_{8}$ - $\mathrm{ASSOCNC}_{10}$ - corn
'no, three cups of corn'
28. ikombe ithatũ cia mboco
i- kombe i- thatũ i- a N - boco
$\mathrm{NC}_{8}$ - cup $\mathrm{AC}_{8}$ - three $\mathrm{AC}_{8}-\mathrm{ASSOCNC}_{10}$ - beans
'three cups of beans'
29. gĩkombe kĩmũe kĩa mbembe
kĩ- kombe kĩ- mũe kĩ- a N- bembe
$\mathrm{NC}_{7}$ - cup $\quad \mathrm{AC}_{7}$ - one $\quad \mathrm{AC}_{7}$ - $\mathrm{ASSOC}^{2} \mathrm{NC}_{10}$ - corn
'one cup of corn'
30. icio nacio rĩu ũgwîkĩra marigũ
i- cio na- ci- o rĩu ũ- kũ- îkĩr -a ma- rigũ $\mathrm{AC}_{8}$ - ANA.DEM and- $\mathrm{AC}_{8}$ - PRO now 2SG.SUBJ- CR.FUT- put -FV NC ${ }_{6}$ - banana 'and into that you will now put bananas'
31. ta mana kana matano
ta ma- na kana ma- tano
like $A C_{6}$ - four or $\quad A C_{6}$ - five 'like four or five’
32. na waru inya kana ithano
na waru i- nya kana i- thano
and $\mathrm{NC}_{10}$ potato $\mathrm{AC}_{10}$ - four or $\mathrm{AC}_{10}$ - five
'and four or five potatoes'
33. na nyeni mahuti ta ikũmi kana mĩrongo ĩrĩ
na N - nyeni ma-huti ta ikũmi kana mĩ- rongo $\tilde{1}^{-}$ĩrĩ and $\mathrm{NC}_{10}$ - greens $\mathrm{NC}_{6}-$ leaf like ten or $\mathrm{NC}_{4}$ - set.of.ten $\mathrm{AC}_{4}$ - two 'and greens, like ten or twenty leaves'
34. o, o iria ũngĩenda gũĩkĩra

0 o i- ria ũ- ngĩ- end -a kũ- îkĩr -a
just just $\mathrm{AC}_{10}$ - REL 2 SG.SUBJ- COND- like - FV NC $\mathrm{C}_{15}$ - put -FV
'just however many you would like to put'
35. cia marenge
i- a ma-renge
$\mathrm{AC}_{10}-\mathrm{ASSOC}^{-} \mathrm{NC}_{6}-$ pumpkin
'of pumpkin plant'
36. nyeni cia marenge nĩ njega mũno na gĩtheri, na mataha

N- nyeni i- a ma-renge nĩ $N$ - ega mũno na kĩ- theri na ma-taha $\mathrm{NC}_{10^{-}}$- greens $\mathrm{AC}_{10^{-}}$- ASSOC $\mathrm{NC}_{6}-$ pumpkin FOC $\mathrm{SC}_{10^{-}}$- good very with $\mathrm{NC}_{7^{-}}$githeri and $\mathrm{NC}_{6}$ - mataha 'pumpkin leaves are very good with gĩtheri ${ }^{8}$ and mataha'
37. ha-- ciacamũka ciahĩa-rĩ ũgakimakima
ha-- i- a- camũk -a i- a- hĩ -a -rĩ ũ- ka- kima- kim -a TRUNC SC ${ }_{10}$ - CR.PST- boil -FV SC ${ }_{8}-$ CR.PST- cook -FV -MKR 2SG.SUBJ- CR.PRES- REDUP- mash -FV 'once they boil and it is cooked, you continuously mash it'
38. ũgakima kinya ikahĩa biũ
ũ- ka- kim -a kinya i- ka- hĩ -a biũ
2SG.SUBJ- CR.PRES- mash -FV until $\mathrm{SC}_{10}$ - CR.PRES- cook -FV completely 'you mash it until it's completely cooked'
39. iga-- igatuîka, rĩu igatukana ciothe
iga-- i- ka- tuĩk -a rĩu i- ka- tukan -a i- othe
TRUNC SC ${ }_{8}$ - CR.PRES- become -FV now $\mathrm{SC}_{8}-$ CR.PRES- mix $-\mathrm{FV} \mathrm{AC}_{8}-$ all
'it gets-- now it all gets mixed together'
40. igatuĩka, ikahana o nyeni
i- ka- tuĩk -a i- ka- han -a o N- nyeni $\mathrm{SC}_{8}-$ CR.PRES- become -FV SC ${ }_{8}$ - CR.PRES- look -FV just $\mathrm{NC}_{10}$ - greens 'it becomes, it looks like just greens'

[^6]41. ikagĩa na rangi wa nyeni
i- ka- gĩ -a na rangi un -a $N$ - nyeni
$\mathrm{SC}_{8}-$ CR.PRES- acquire -FV with $\mathrm{NC}_{14}$.color $\mathrm{AC}_{14}-\mathrm{ASSOC}^{2} \mathrm{NC}_{10^{-}}$greens
'it acquires the color of the greens'
42. na Gîkũyũ nîkiugaga
na kĩ- kũyũ nĩ- kĩ- ug -ag -a
and $\mathrm{NC}_{7}$ - Gîkũyũ $\mathrm{FOC}-\mathrm{SC}_{7}$ - say - $\mathrm{HAB}-\mathrm{FV}$
'and Gîkũyũ people say'
43. rĩrĩa kĩndũ kĩ hakuhĩ gwĩkĩka maugaga
rĩ- rĩa kĩ- ndũ kĩ- rĩ ha- kuhĩ kũ- îk -îk -a ma- ug -ag -a
$\mathrm{AC}_{5}$ - DIST.DEM $\mathrm{NC}_{7}$ - thing $\mathrm{SC}_{7^{-}}$- $\mathrm{COP} \mathrm{AC}_{16^{-}}$short $\mathrm{NC}_{15^{-}}$do -MID - $\mathrm{FV} \mathrm{SC}_{2}-$ say -HAB -FV
'when something is about to happen, they say'
44. "itigairie o hanini ta nyeni ta wa--
i- tiga -ir -i -e o ha- nini ta N - nyenita wa-$\mathrm{SC}_{8}$ - remain -COMPL -TRNS -FV just $\mathrm{AC}_{16^{-}}$- small like $\mathrm{NC}_{10^{-}}$greens like TRUNC '"only a short time is remaining, like greens, like""
45. itigairie o handũ hanini ta ha waru na nyeni"
i- tiga -ir -i -e o ha- ndũ ha- nini ta ha- a waru na $N$ - nyeni $\mathrm{SC}_{8^{-}}$- remain -COMPL -TRNS -FV just $\mathrm{NC}_{16^{-}}$place $\mathrm{NC}_{16^{-}}$small like $\mathrm{AC}_{16^{-}}$ASSOC $\mathrm{NC}_{10}$. potato and $\mathrm{NC}_{10^{-}}$greens '"a short time remains, like that of potatoes and greens""
46. nĩ ta kuga itihĩaga kahinda karaihu
nĩ ta kũ- ug -a i- ti- hĩ -ag -a ka- hinda ka- raihu
FOC like $\mathrm{NC}_{15}$ - say -FV SC $\mathrm{C}_{10}$ - NEG - cook -IMPF -FV NC ${ }_{12}$ - time $\quad \mathrm{AC}_{12}$ - long
'it's like saying they don't cook for a long time'
47. rĩu ihĩte, wekĩra waru na nyeni
rĩu i- hĩ -ĩt -e ũ- a- îkĩr -a waru na N- nyeni now $\mathrm{SC}_{8}$ - cook -PERF -FV 2SG.SUBJ- PRES- put -FV NC $\mathrm{NC}_{10}$. potato and $\mathrm{NC}_{10^{-}}$greens 'now when it's cooked, once you put potatoes and greens'
48. ciahĩa ũgakima
i- a- hĩ -a ũ- ka- kim -a
SC $_{8}$ - PRES- cook -FV 2SG.SUBJ- CR.PRES- mash -FV
'when it's cooked, you mash it'
49. nĩ kahinda ta ga ithaa
nĩ ka- hindata ka- a i- thaa FOC NC $C_{12}$ - time like $\mathrm{AC}_{12}$ - $\mathrm{ASSOCNC}_{5}$ - hour 'it's a duration of about an hour'
50. Ĩ̃ nuthu ithaa

กii nuthu i- thaa
yes half $\quad \mathrm{NC}_{5}$ - hour
'yes, half an hour'
51. wakima ũgacoka rĩu ũgacitaha na kaihũri
ũ- a- kim -a ũ- ka- cok -a rĩu ũ- ka- i- tah -a 2SG.SUBJ- CR.PST- mash -FV 2SG.SUBJ- CR.PRES- resume -FV now 2SG.SUBJ- CR.PRES- NC ${ }_{8}$ - fetch -FV
na ka- ihũri
with $\mathrm{NC}_{12}$ - gourd
'once you mash it, now you scoop it with a little half gourd'
52. ũkĩigaga gĩtarũrũ-inĩ
ũ- kĩ- ig -ag -a kĩ- tarũrũ -inĩ
2SG.SUBJ- SIM- put -IMPF -FV NC ${ }^{2}$ - tray $\quad$-LOC
'while putting it on the tray'
53. ũgataha na kaihũri ũkĩigaga gatarũrũ-inĩ
ũ- ka- tah -a na ka- ihũri ũ- kĩ- ig -a ka- tarũrũ -inĩ
2SG.SUBJ- CR.PRES- fetch -FV with $\mathrm{NC}_{12}-$ gourd 2 SG.SUBJ- SIM- put -FV NC ${ }_{12}$ - tray -LOC
'you scoop it with half a gourd, putting it on the tray'
54. irio icio cia-- no irĩo irĩ hiũ
i- rio i- cio cia-- no i- rĩ -wo i- rĩ N - hiũ $\mathrm{NC}_{8}$ - food $\mathrm{AC}_{8}$ - ANA.DEM TRUNC can $\mathrm{SC}_{8}$ - eat -PV SC $\mathrm{SC}_{8}$ - $\operatorname{COP~AC} 8_{8}$ - hot 'that food of-- it can be eaten when it is hot'
55. no ciahora
no i- ahor -a
but $\mathrm{SC}_{8}$ - be.cold -FV
'but when it gets cold'
56. no irĩo ningĩ irĩ hehu
no i- rĩ -wo ningĩ i- rĩ $N$ - hehu
can $\mathrm{SC}_{8}$ - eat -PV also $\mathrm{SC}_{8}-\mathrm{COP} \mathrm{AC}_{8}$ - cold
'it can be eaten also when it's cold'
57. na no irĩo kinya m-- kium-- kĩmw--
na no i- rĩ -wo kinya m-- kĩ- umia kĩ- mwe
and can $\mathrm{SC}_{8}$ - eat -PV until TRUNC $\mathrm{NC}_{7}$ - week $\mathrm{AC}_{7}$ - one
'and it can be eaten for up to one week'
58. hau ciikaire o ũguo
ha- u i- ika-ir -e o ũguo
$\mathrm{AC}_{16}-$ ANA.DEM $\mathrm{SC}_{8}-$ sit -COMPL -FV just thus
'while it just sits there like that (it doesn't go bad)'
59. nĩ irio njega mũno tondũ ikoragwo na, na protein
nĩ i- rio N - ega mũno tondũ i- kor -ag -wo na na protein FOC $\mathrm{NC}_{8}$ - food $\mathrm{JC}_{8}$ - good very because $\mathrm{SC}_{8}$ - find -IMPF -PV with with protein it is very good food because it has protein'
60. na ikoragwo na, na s-- carbohydrates
na i- kor -ag -wo na na s-- carbohydrates
and $\mathrm{SC}_{8}$ - find -IMPF -PV with with TRUNC carbohydrates 'and it has carbohydrates'
61. na ikoragwo na green vegetables
na i- kor -ag -wo na green vegetables
and $\mathrm{SC}_{8}$ - find -IMPF -PV with green vegetables
'and it has green vegetables'
62. nĩũndũ wa roughage
nĩũndũ ũ- a roughage
because $\mathrm{AC}_{14}-\mathrm{ASSOC}$ roughage
because of the roughage'
63. na ikoragwo na marigũ
na i- kor -ag -wo na ma- rigũ
and $\mathrm{SC}_{8}$ - find -IMPF -PV with $\mathrm{NC}_{6}$ - banana
'and it has bananas'
64. hinya wa marigũ ũngĩ ta maũndũ ta $m-$ - ta
hinya ũ- a ma-rigũ ũ- ngĩ ta ma-ũndũta m-- ta
$\mathrm{NC}_{14}$. energy $\mathrm{AC}_{14}-$ ASSOC $\mathrm{NC}_{6}$ - banana $\mathrm{AC}_{14}$ - other like $\mathrm{NC}_{6}$ - thing like TRUNC like 'the energy of bananas and other things like...'
65. mangĩ itangĩririkana, na waru
ma-ngĩ i- ta- $N$ - ririkan -a na waru $\mathrm{NC}_{6}-$ other $\mathrm{SC}_{8}$ - $\mathrm{NEG}-1$ 1SG.OBJ- remember -FV and $\mathrm{NC}_{10}$.potato 'other things I can't remember, and potatoes'
66. na nĩicamaga wega mũno na no wîkĩre cumbĩ
na nĩ- i- cam-ag -a ũ- ega mũno na no ũ- $\mathfrak{\text { inkĩr -e cumbĩ }}$ and $\mathrm{FOC}-\mathrm{SC}_{8}$ - taste $-\mathrm{HAB}-\mathrm{FV} \mathrm{NC}_{14}$ - good very and can 2 SG.SUBJ- put $-\mathrm{FV} \mathrm{NC}_{14}$ salt 'and it tastes very good and you can put salt'
67. na andũ angĩ nĩmendaga gũcoka ningĩ magacikaranga
na a- ndũ a- ngĩ nĩ- ma-end -ag -a
and $\mathrm{NC}_{2}$ - people $\mathrm{AC}_{2}$ - other $\mathrm{FOC}-\mathrm{SC}_{2}$ - like - $\mathrm{HAB}-\mathrm{FV}$
kũ- cok -a ningĩ ma-ka- i- karang-a
$\mathrm{NC}_{15}-$ resume -FV also $\quad \mathrm{SC}_{2}-$ CR.PRES- $\mathrm{OC}_{8}$ - fry $\quad-\mathrm{FV}$
'and other people like after that to also fry it'
68. ihana o ũguo igakarangwo
i- han -a o ũguo i- ka- karang-wo
$\mathrm{SC}_{8^{-}}$look -FV just thus $\mathrm{SC}_{8^{-}}$CR.PRES- fry $\quad-\mathrm{PV}$
'just as it is it is fried'
69. na nyanya na biribiri na korogoco
na $N$ - nyanya na biribiri na korogoco
with $\mathrm{NC}_{10}$ - tomato and $\mathrm{NC}_{10}$.chili.pepper and other.things
'with tomatoes and chili peppers and other things'
70. niĩ ndiendete, nyendaga ihana o ũguo irĩ
niĩ N - ti- end -et -e N - end -ag -a i- han -a o ũguo i- rĩ 1SG 1SG.SUBJ- NEG- like -PERF -FV 1SG.SUBJ- like -HAB -FV SC ${ }_{8}$ - look -FV just thus SC $_{8}$ - COP 'I don't like that, I like it being just like it is'
71. ngacoka rĩu

N- ka- cok -a rĩu
1SG.SUBJ- CR.PRES- resume -FV now
'what I do now'
72. no ũrĩe na nyama ngarange ciĩ mwanya
no ũ- rĩ -e na $N$ - nyama $\mathrm{N}^{-}$karange i- rĩ mwanya can 2 SG.SUBJ- eat -FV with $\mathrm{NC}_{10}$ - meat $\quad \mathrm{AC}_{10}$ - fried $\quad \mathrm{SC}_{10^{-}}$- COP separate 'you can eat it with separate fried meat'
73. kana nyeni ingĩ mwanya irĩ ngarange
kana $\mathrm{N}^{-}$nyeni i- ngĩ mwanya i- rĩ N - karange
or $\mathrm{NC}_{10}$ - greens $\mathrm{AC}_{10^{-}}$other separate $\mathrm{SC}_{10}$ - $\mathrm{COPAC} \mathrm{Cl}_{10}$ - fried
'or any other separate fried vegetables'
74. nĩ irio njega mũno
nĩ i- rio $N$ - ega mũno
FOC $\mathrm{NC}_{8}$ - food $\mathrm{JC}_{8}$ - good very
'it is very good food'

## Appendix D

## Childhood Narrative \#1: "Swing"

## MP3 audio available at http://www.ruf.rice.edu/~reng/kik/04-swing.mp3

1. Tene mũno no ti tene mũno.
tene mũno no ti tene mũno
past very but NEG past very
'A long time ago, but not so long ago.'
2. Ndĩ--, ndĩwa mĩaka kenda nĩndarîkanĩire na mwarĩ wa maitũ tũcuhe.

N- rĩ -- $N$ - $\tilde{u}^{-}$a mĩ- aka ka- enda
1SG.SUBJ- COP TRUNC 1SG.SUBJ- AC1- ASSOC NC4- year NC12- nine
nĩ- N- a- rîk -an -ĩ -ir -e na mũ- arĩ ũ- a maitũ FOC- 1SG.SUBJ- RM.PST- agree -RECIP -APP -COMPL -FV with $N_{1}-$ daughter $\mathrm{AC}_{1}$ - ASSOC NC ${ }_{1}$. mother tũ- cuh -e
1PL.SUBJ- swing -FV
'When I was nine years old I agreed with my sister that we swing.'
3. Tũgĩthondeka kamũcuha karĩ kega mũno o hau haitũ nja, tũkĩambĩrĩria gũikania.
tũ- kĩ- thondek-a ka- mũ- cuha ka- rĩ ka- ega mũnoo ha- u
1PL.SUBJ- SEQ- make -FV NC ${ }_{12}$ - $\mathrm{NC}_{3}$ - swing $\mathrm{RC}_{12}-$ COP JC $\mathrm{Cl}_{12}$ - good very just $\mathrm{AC}_{16}$ - $\mathrm{ANA}^{2}$.DEM ha- itũ nja tũ- kĩ- amb -ĩrĩr - -i $\quad$-a kũ- ik $\begin{array}{lllll}\text {-an } & \text {-i } & \text {-a }\end{array}$ AC $_{15^{-}}$1PL.POS outside 1PL.SUBJ.SUBJ SEQ- start -INTENS -TRNS -FV NC ${ }_{15}$ - push -RECIP -TRNS -FV 'Then we made a nice little swing that was very good, right there outside (of our home), then we started to push each other.'
4. Tũkǐrǐkanĩra tũikanie maita ikũmi tũcoke tũikanie maita mĩrongo ĩrĩ.
tũ- kĩ- rîk -an -ĩr -a tũ- ik -an -i $\quad$-e ma-ita i- kũmi
1PL.SUBJ- SEQ- agree -RECIP -APP -FV 1PL.SUBJ- push -RECIP -TRNS -FV NC ${ }_{6}$ - time $\mathrm{AC}_{5}$ - ten
tũ- cok -e tũ- ik -an -i -e ma-ita mĩ- rongo $\tilde{1}^{-}$in inĩ 1PL.SUBJ- return -FV 1PL.SUBJ- push -RECIP -TRNS -FV NC $6_{6}$ - time $\mathrm{NC}_{4}$ - set.of.ten $\mathrm{AC}_{4}$ - two 'We then agreed to push each other ten times, then to push each other twenty times.'
5. Mũndũ agaikia ũyũ-- ũmwe maita ikũmi ũyũ ũngĩ agaikia ũyũ ũngĩ maita ikũmi mũndũ agaikia ũyũ ũngĩ maita ikũmi nake agaikio maita ikũmi.
mũ-ndũ a- ka- ik -i $\quad$-a ũyũ-- ũ- mwe ma- ita i- kũmi ũyũ $\mathrm{NC}_{1}-$ person $\mathrm{SC}_{1}$ - CR.PRES- push -TRNS -FV TRUNC NC $\mathrm{C}_{1}$ - one $\mathrm{NC}_{6}$ - time $\mathrm{NC}_{5}$ - ten $\mathrm{AC}_{1}$.PROX.DEM
ũ- ngĩ a- ka- ik -i -a ũyũ $\tilde{u}^{-}$ngĩ ma-ita i- kũmi
$\mathrm{NC}_{1}$ - other $\mathrm{SC}_{1}$ - CR.PRES- push -TRNS -FV AC 1 .PROX.DEM $\mathrm{NC}_{1}$ - other $\mathrm{NC}_{6}$ - time $\mathrm{NC}_{5}$ - ten mũ-ndũ a- ka- ik -i -a ũyũ ũ- ngĩ ma-ita i- kũmi $\mathrm{NC}_{1}-$ person $\mathrm{SC}_{1}-$ CR.PRES- push -TRNS -FV AC ${ }_{1}$.PROX.DEM $\mathrm{NC}_{1}-$ other $\mathrm{NC}_{6}-$ time $\mathrm{NC}_{5}$ - ten nake a- ka- ik -i -o ma-ita i- kũmi $\mathrm{NC}_{1}$.DEP.PRO $\mathrm{SC}_{1}$ - CR.PRES- push -TRNS -PV NC $6_{6}$ - time $\mathrm{AC}_{5}$ - ten
'Someone then pushes the other person ten times, this other person pushes the other person ten times, then someone pushes the other person ten times, and gets pushed ten times.'
6. Tũgĩthiĩ tũkĩongagĩrĩra tũkĩongarĩrĩra.
tũ- kĩ- thi -ĩ tũ- kĩ- ong -ag -ĩrĩr $\quad$-a tũ- $\quad$ kĩ- ong -ag $\begin{array}{llllll}\text {-ĩrĩr } & -a\end{array}$ 1PL.SUBJ- SEQ- go -FV 1PL.SUBJ- SEQ- add -IMPF -INTENS -FV 1PL.SUBJ- SEQ- add -IMPF -INTENS -FV 'Then we went on adding and adding.'
7. Rĩrĩa twakinyirie maita igana,
rĩ- rĩa tũ- a- kiny -ir -i -e ma- ita i- gana $\mathrm{AC}_{5}$ - DIST.DEM 1PL.SUBJ- RM.PST- arrive -COMPL -TRNS -FV NC $6^{-}$- time $\mathrm{AC}_{5}$ - hundred 'When we got to a hundred times,'
8. Mwarĩ wa maitũ akĩnjĩra rĩu tũkuongerera tũkinyie maita magana merĩ.
mũ-arĩ $\tilde{u}^{-}$a maitũ a- kĩ- N- ĩr -a
$\mathrm{NC}_{1}$ - daughter $\mathrm{AC}_{1}$ - ASSOC $\mathrm{NC}_{1}$. mother $\mathrm{NC}_{1}$ - SEQ- 1 SG .OBJ- tell -FV
rĩu tũ- kũ- ong-ĩrĩr -a tũ- kiny -i -e ma-ita ma-gana ma- ĩrĩ now 1PL.SUBJ- CR.FUT- add -INTENS -FV 1PL.SUBJ- arrive -TRNS -FV NC ${ }_{6}$ - time $\mathrm{AC}_{6}$ - hundred $\mathrm{AC}_{6}-$ two 'My sister told me now we will add and get to two hundred times.'
9. Akĩambĩrĩria kũnjikia, akĩnjikia, akĩnjikia, rĩakinya ndiũĩ kana nĩ rita rĩa ikũmi kana nĩ mĩrongo ĩrĩ, akĩnjikia mũno mũno mũno mũno.
a- kĩ- amb-ĩrĩr -i $\quad-\mathrm{a}$ kũ- N - $\quad$ ik $\quad$-i $\quad-\mathrm{a}$
SC $_{1}$ - SEQ- start -INTENS -TRNS -FV NC ${ }_{15}$ - 1SG.OBJ- push -TRNS -FV
a- kĩ- N - ik -i $\quad$-a $\quad$ a- kĩ- N - ik $\quad$-i $\quad-\mathrm{a}$
SC $_{1}$ - SEQ- 1SG.OBJ- push -TRNS -FV SC ${ }_{1}$ - SEQ- 1SG.OBJ- push -TRNS -FV
rĩ- a- kiny -a N - ti- $\tilde{\mathrm{u}}$ - $\mathrm{I}^{2}$ kana nĩ ri- ta rĩ- a i- kũmi
SC $_{5}$ - RM.PST- arrive -FV 1SG.SUBJ- NEG- know -FV whether FOC NC $5_{5}$ - time $\mathrm{AC}_{5}$ - ASSOC $^{-1} \mathrm{NC}_{5}$ - ten
kana nĩ mĩ- rongo $\tilde{1}^{-}$rĩ
or $\quad$ FOC NC $4_{4}-$ set.of.ten $\mathrm{AC}_{4}$ - two
a- kĩ- N - $\quad$ ik $\quad$-i $\quad$-a mũno mũno mũno mũno
SC ${ }_{1}$ - SEQ- 1SG.OBJ- push -TRNS -FV very very very very
'She then started to push me, she then pushed me, and pushed me, when it got to I don't
know whether it was ten times or twenty times, she then pushed me so far, so far, so far, so far.'
10. Ngĩthiĩ ngĩcuhũka!

N - kĩ- thi -ĩ N - kĩ- cuh -ũk -a
1SG.SUBJ- SEQ- go -FV 1SG.SUBJ- SEQ- swing -REVERS.MID -FV
'I then went falling off the swing!'
11. Ngĩgwa thĩ!

N- kĩ- gũ -a thĩ
1SG.SUBJ- SEQ- fall -FV down
'I then fell down on the ground!'
12. Ngĩrĩra!

N - kĩ- rĩr -a
1SG.SUBJ- SEQ- cry -FV
'Then I cried!'
13. Ngĩrĩra mũno mũno mũno mũno.

N - kĩ- rĩr -a mũno mũno mũno mũno
1SG.SUBJ- SEQ- cry -FV very very very very
'I cried a lot, a lot, a lot, a lot.'
14. No kinya ũmũthĩ ngĩririkana nĩgũtheka thekaga.
no kinya ũmũthĩ N - kĩ- ririkan -a nĩ- kũ- theka- thek -ag a but until $\mathrm{NC}_{14}$.today 1 SG.SUBJ- SIM- remember -FV FOC- $\mathrm{NC}_{15}$ - REDUP- laugh -HAB -FV 'But up until this day, as I remember, I always laugh a little.'
15. Ndiũũ nĩkĩ gĩtũmaga theke.

N- ti- $\quad$ un - ĩ nĩ- kĩ kĩ- tũm -ag -a thek -e
1SG.SUBJ- NEG- know -FV FOC- what $\mathrm{SC}_{8}$ - make -HAB -FV laugh -SJV
'I don't know what it is that makes me laugh.'
16. Ndiũĩ kana nĩ ũndũ nĩ kũgũa ndagũire na gũtirĩ ũndũ wahanire tiga ndĩna kĩrema haha ritho-inĩ rĩakwa gĩa kuonania ũrĩa ndagũire.
N- ti- $\mathfrak{u}$ - -1. kana nĩ ũndũ nĩ kũ- gũ -a $N$ - a- gũ -ir $\quad$-e na 1SG.SUBJ- NEG- know -FV whether FOC because FOC $\mathrm{NC}_{15}$ - fall -FV 1SG.SUBJ- RM.PST- fall -COMPL -FV and kũ- ti- rĩ ũndũ ũ- a- han -ir -e tiga $N$ - rĩ -na $\mathrm{SC}_{17}$ - NEG- COP because $\mathrm{SC}_{14}$ - RM.PST- look.like -COMPL -FV except 1SG.SUBJ- COP -with
kĩ- remahaha rĩ- itho -inĩ rĩ- akwa kĩ- a
$\mathrm{NC}_{8}$ - scar $\quad \mathrm{AC}_{16}$.PROX.DEM NC $5_{5}$ - eye -LOC NC $5^{-}$- 1 SG .POS NC ${ }_{8}$ - ASSOC
kũ- on -an -i $\quad$-a ũrĩa $N$ - $\quad$ a- gũ -ir $\quad$-e $\mathrm{NC}_{15}$ - see -RECIP -TRNS -FV how 1SG.SUBJ- RM.PST- fall -COMPL -FV
'I don't know whether it is because I fell and nothing happened except for the fact that I have a scar here on my eye to show how I fell.'
17. Nĩndatwarirwo thibitarĩ na ngĩtumwo ritho.
nĩ- N - a- twar -ir -wo thibitarĩ na N - kĩ- tum -wo rĩ- itho FOC- 1SG.SUBJ- RM.PST- take -COMPL -PV NC ${ }_{9}$.hospital and 1 SG.SUBJ- SEQ- sew -PV NC ${ }_{5}$ - eye 'I was taken to the hospital and I was stitched above my eye.'
18. No kinya hĩndĩ Ĩyo-kuma mũthenya ũcio ndiacokire gũgacuha rĩngĩ na mwarĩ wa maitũ. no kinya hĩndĩ ĩyo -kuma mũ- thenya ũ- cio
but from $\quad \mathrm{NC}_{9}$.time $\mathrm{AC}_{9}$.PROX.DEM -from $\mathrm{NC}_{3}$ - day $\mathrm{AC}_{3}$ - ANA.DEM
N- ti- a- cok -ir -e kũ- ka- cuh -a rĩ- ngĩ
1SG.SUBJ- NEG- RM.PST- return -COMPL -FV NC ${ }_{15}$ - RM.FUT- swing -FV AC $5^{-}$other
na mũ-arĩ $\tilde{u}^{-}$a maitũ
with $\mathrm{NC}_{1}$ - daughter $\mathrm{AC}_{1}$ - $\operatorname{ASSOC} \mathrm{NC}_{1}$. mother
'But from that day on, I didn't go swinging again with my sister.'
19. Na ingĩona mũcuha wa ciana ũmũthĩ no nginya ngaririkana.
na i- N- kĩ- on -a mũ- cuha ũ- a ci- ana ũmũthĩ and if- 1 SG.SUBJ- SIM- see -FV NC ${ }_{3}-$ swing $\mathrm{AC}_{3}-\mathrm{ASSOCNC}_{8^{-}}$child $\mathrm{NC}_{14}$.today
no N - kiny -a N - ka- ririkan -a
must 1SG.SUBJ- arrive -FV 1SG.SUBJ- SEQ- remember -FV
'And whenever I see a kid's swing today it is an absolute must that I remember,'
20. Magĩcuha mũtĩinĩ... ũrĩa ndagũire.
ma- kĩ- cuh -a mũ- tĩ -inĩ ũrĩa N- a- gũ -ir -e $\mathrm{SC}_{2}-$ SIM- swing -FV NC ${ }_{3}-$ tree -LOC how 1 SG.SUBJ- RM.PST- fall -COMPL -FV 'when I see kids swinging on a tree... how I fell.'

## Appendix E

Childhood Narrative \#2: "Christmas"

MP3 audio available at http://www.ruf.rice.edu/~reng/kik/05-christmas.mp3

1. Mũthenya wakwa ũrĩa warĩ mwega piũ warĩ mũthenya wa thigũkũ ya Christmas. mũ- thenya ũ- akwa ũ- rĩa ũ- a- rĩ mũ-ega piũ
$\mathrm{NC}_{3}-$ day $\quad \mathrm{AC}_{3}-1 \mathrm{SG}$. POS AC $3_{3}-$ REL $^{2} \mathrm{SC}_{3}-$ RM.PST- COP JC ${ }_{3}-$ good completely
ũ- a- rĩ mũ-thenya $\tilde{u}^{-}$a thigũkũ $\tilde{1}^{-}$a Christmas
$\mathrm{SC}_{3}$ - RM.PST- $\mathrm{COP}^{2 \mathrm{NC}_{3}}$ - day $\quad \mathrm{AC}_{3}-\mathrm{ASSOC}^{\mathrm{NC}}{ }_{9}$,holiday $\mathrm{AC}_{9}$ - $\mathrm{ASSOC}^{2}$ Christmas 'My favorite day (Lit. my day that was the best) was Christmas.'
2. Na baba nĩa... nĩetaga... tondũ arĩ mũborithi.
na baba nĩa-- nĩ- a- a- ĩ -ag -a tondũ a- a- rĩ mũ- borithi and $\mathrm{NC}_{1}$.father TRUNC FOC- SC $\mathrm{SC}_{1}$ - RM.PST- call -HAB -FV because $\mathrm{SC}_{1}$ - RM.PST- COP $\mathrm{NC}_{10}-$ police 'And father would call because he was a police officer.'
3. Arĩ chief inspector of police nĩetaga ciana mũthenya wa thigũkũ agacihe mathako na theremende na mĩthiguiti na tũindo tũingĩ twa gũthaka natuo na twa kũrĩa.
a- a- rĩ chief inspector of police
SC $_{1}$ - RM.PST- COP chief inspector of police
nĩ- a- a- $\tilde{i} t$-ag -a ci- ana mũ-thenya
FOC- SC ${ }_{1}$ - RM.PST- call -HAB - $\mathrm{FV} \mathrm{NC}_{3}$ - child $\mathrm{NC}_{3}$ - day
ũ- a thigũkũ a- ka- ci- he ma- thako na theremende na
$\mathrm{AC}_{3}-$ ASSOC $^{-1} \mathrm{NC}_{9}$.holiday $\mathrm{SC}_{1}-$ CR.PRES- $\mathrm{OC}_{s^{-}}$give $\mathrm{NC}_{6}-$ games and $\mathrm{NC}_{14}$ sweets and
mĩ- thiguiti na tũ- indo tũ- ingĩ tũ- a kũ- thak -a natuo
$\mathrm{NC}_{4}$ - biscuit and $\mathrm{NC}_{13}$ - thing $\mathrm{AC}_{13}$ - many $\mathrm{AC}_{13}$ - ASSOC $^{2} \mathrm{NC}_{15}$ - play $-\mathrm{FV} \mathrm{NC} \mathrm{C}_{13}$ DEP.PRO
na tũ- a kũ- rĩ -a
and $\mathrm{AC}_{13}-\mathrm{ASSOC}^{2} \mathrm{NC}_{15}$ eat -FV
'He was chief inspector of police, he used to call children on Christmas day and give them games and sweets and biscuits and a lot of little things to play with and to eat.'
4. Tũindo ta balloons na mĩbira na nĩtwakenaga mũno.

Tũ- indo ta balloons na mĩ- bira na nĩ- tũ- a- ken -ag -a mũno $\mathrm{NC}_{13}$ - thing like balloons and $\mathrm{NC}_{4}$ - ball and FOC-1PL.SUBJ- RM.PST- happy -HAB -FV very 'Little things like balloons and balls, and we used to be very happy.'
5. Rĩu kwogwo, mũthenya wa thigũkũ ndoragia gũgakĩa rĩ?
rĩ- u kwa- ũ- guo mũ- thenya ũ- a thigũkũ
$\mathrm{AC}_{5}$ - ANA.DEM for- $\mathrm{NC}_{14}-$ PRO NC ${ }_{3}-$ day $\mathrm{AC}_{3}-\mathrm{ASSOC}^{2} \mathrm{NC}_{9}$,holiday
N- a- ũr -ag -i $\quad$-a kũ- ka- kĩ $\quad$-a rĩ
1SG.SUBJ- RM.PST- ask -HAB -TRNS -FV SC ${ }_{17}$ - RM.FUT- dawn -FV when
'Now because of that, I would be asking, when will Christmas day dawn?'
6. Na nĩtwaheagwo kinya iratũ na nguo nj-erũ
na nĩ- tũ- a- he -ag -wo kinyai- ratũ na $N$ - kuo $N$ - erũ and FOC- 1PL.SUBJ- RM.PST- give -HAB -PV also $\quad \mathrm{NC}_{8}$ - shoes and $\mathrm{NC}_{10}$ - clothes $\mathrm{JC}_{10}$ - new 'We would also be given shoes and new clothes.'
7. Na indo njerũ ciaheanagwo mũthenya ũcio wa Christmas.
na i- ndo N - erũ ci- a- he -an -ag -wo
and $\mathrm{NC}_{8}$ - thing $\mathrm{JC}_{8}$ - new $\mathrm{SC}_{8}$ - RM.PST- give -RECIP -HAB -PV
mũ- thenya ũ- cio ũ- a Christmas
$\mathrm{NC}_{3}$ - day $\quad \mathrm{AC}_{3}$ - ANA.DEM AC $3_{3}$ - ASSOC Christmas
'And new things would be given out on that day of Christmas.'
8. Ũcio nĩguo warĩ mũthenya wakwa ũrĩa wa bata mũno.
ũ- cio nĩ- guo ũ- a- a-rĩ mũ- thenya ũ- akwa
$\mathrm{AC}_{3}$ - ANA.DEM FOC- so $\mathrm{SC}_{3}-$ RM.PST- COP NC $3_{3}$ - day $\mathrm{AC}_{3}-1$ - ${ }^{-1 S G}$.POS
ũ- rĩa ũ- a bata mũno
$\mathrm{AC}_{3}-$ REL AC $_{3}-\mathrm{ASSOC}_{\mathrm{NC}_{14} \text {. }}$ importance very
'That used to be my most important day.'
9. Ningĩ kĩroko twokĩra twokagĩra tũkaheo irio njega tũkanyua cai mwega kana tũkanyua indo ta soda tũtanyuaga mĩthenya ĩno ĩngĩ.
ningĩ kĩ- roko tũ- ok -ĩr -a tũ- ok -ag -ĩr -a
also $\quad \mathrm{NC}_{7}$ - in.morning 1PL.SUBJ- rise -PROC -FV 1PL.SUBJ- rise -HAB -PROC -FV
tũ- ka- he -o
1PL.SUBJ- CR.PRES- give -PV
i- rio N- ega tũ- ka- nyu -a cai mũ- ega kana
$\mathrm{NC}_{8^{-}}$food JC $\mathrm{s}_{8^{-}}$good 1PL.SUBJ- CR.PRES- drink -FV NC $\mathrm{Na}_{14}$.tea JC $\mathrm{I}_{14}{ }^{-}$good or
tũ- ka- nyu -a i- ndo ta sodatũ- ti a- nyu -ag -a mĩ- thenya 1PL.SUBJ- CR.PRES- drink -FV NC $8_{8}$ - thing like soda 1 PL.SUBJ- NEG- RM.PST- drink -HAB -FV NC ${ }_{4}$ - day
ĩno $\tilde{1}^{-}$ngĩ
AC $_{4}$.PROX.DEM AC $4_{4}$ - other
'Also in the morning we would get up and be given nice food and drink, nice tea or things to drink like soda, which we didn't drink on other days.'
10. Na kwarĩo irio, gũkarĩo irio itarĩagwo hingo ĩyo ĩngĩ.
na kũ- a- rĩ -o i- rio kũ- ka- rĩ -o i- rio and $\mathrm{NC}_{15^{-}}$- RM.PST- eat -PV NC $8^{-}$- food $\mathrm{NC}_{15^{-}}$CR.PRES- eat -PV NC $8^{-}$- food
i- ti- a- rĩ -ag -wo N- hingo ĩyo $\tilde{1}^{-}$ngĩ
$\mathrm{SC}_{8}$ - NEG- RM.PST- eat -HAB -PV NC $\mathrm{N}_{9}$ - time $\mathrm{AC}_{9}$.PROX.DEM AC $9_{9}$ - other
'And when food is eaten at that time, it is food that is not eaten any other time.'
11. Ikarĩo irio ta mĩcere, nyama... mũthenya mwega mũno.
i- ka- rĩ -o i- rio ta mĩ- cere $N$ - nyama mũ- thenya mũ- ega mũno $\mathrm{SC}_{8^{-}}$CR.PRES- eat -PV NC $8^{-}$- food like $\mathrm{NC}_{4}$ - rice $\mathrm{NC}_{10}$ - meat $\mathrm{NC}_{3}{ }^{-}$day $\mathrm{JC}_{3}-$ good very 'Food that is eaten is food like rice, meat... a very good day.'
12. Twarĩaga tũkarĩa tũkarĩa kinya tũkahũhita.
tũ- a- rĩ -ag -a tũ- ka- rĩ -a tũ- ka- rĩ- a 1PL.SUBJ- RM.PST- eat -HAB -FV 1PL.SUBJ- CR.PRES- eat -FV 1PL.SUBJ- CR.PRES- eat -FV
kinya tũ- ka- hũhit -a
until 1PL.SUBJ- CR.PRES- get.indigestion -FV
'We used to eat and eat and eat until we got indigestion.'

## Appendix F

MP3 audio available at http://www.ruf.rice.edu/~reng/kik/06-day.mp3
mũthenya ũmwe wa Wambũi
mũ- thenya ũ- mwe ũ- a Wambũi
$\mathrm{NC}_{3}$ - day $\quad \mathrm{AC}_{3}$ - one $\mathrm{AC}_{1}$ - ASSOC PROP
'A Day in the Life of Wambũi'

1. ũmũthĩ njũkĩrire thaa ithatũ kĩroko.
ũ- mũthĩN- $\varnothing$ - ũkĩr -ir ee thaa i- thatũ kĩ- roko.
$\mathrm{NC}_{14}$ - today 1 SG.SUBJ- CR.PST- wake.up -COMPL -FV NC ${ }_{10}$ hour ${ }^{9} \mathrm{AC}_{10}$ - three $\mathrm{NC}_{7}$ - morning
'Today I woke up at 9 in the morning ${ }^{10}$.'
2. ndethikĩriria nuthu ithaa ndethamba.

N- a- ${ }^{\text {in- }}$ thik -ĩrĩr -i $-a$ nuthu i- thaa
1SG.SUBJ- CR.PST- REFL- listen -INTENS -TRNS -FV NC ${ }_{10}$.half $\mathrm{NC}_{10}$ - hour
N - $\quad$ a- $\tilde{1}_{-}$thamb -a
1SG.SUBJ- CR.PST- REFL- wash -FV
'I then meditated for half an hour and showered.'
3. ndacoka ndanyua ũcũrũ.

N- a- cok -a N- a- nyu -a ũ- cũrũ
1SG.SUBJ- CR.PST- return -FV 1SG.SUBJ- CR.PST- drink -FV NC ${ }_{14}$ - porridge 'I then drank porridge.'

[^7]4. ndaharĩria indo cia gym.

N - a- har -ĩ -i $\quad$-a i- ndo ci- a gym
1SG.SUBJ- CR.PST- prepare -APP -TRNS -FV NC $8_{8}$ - thing $\mathrm{AC}_{8}-$ ASSOC gym 'I then prepared things for the gym.'
5. hĩndĩ ĩyo kuma kĩndũ thaa inya.
hĩndĩ ĩyo kũ- uma kĩ- ndũ thaa i- nya. $\mathrm{NC}_{9}$.time $\mathrm{AC}_{9}$.ANA.DEM $\mathrm{NC}_{15^{-}}$COP.BRP $\mathrm{NC}_{7}$ - thing $\mathrm{NC}_{10}$. hour $\mathrm{AC}_{10}$ - four 'That time was something like 10. '
6. ndahaica mbathi.

N - a- haic -a N - bathi
1SG.SUBJ- CR.PST- climb -FV NC ${ }_{9}$ - bus
'I then got on the bus.'
7. o kuma kĩndũ thaa inya itigairie ndagĩka mĩrongo ĩrĩ.
o kũ- uma kĩ- ndũ thaa i- nya
oh $\mathrm{NC}_{15}$ - COP.BRP $\mathrm{NC}_{7}$ - thing $\mathrm{NC}_{10}$. hour $\mathrm{AC}_{10}$ - four
ñ- tiga -ir -i $\quad$-e $\mathrm{N}-$ dagĩka mĩ- rongo $\tilde{1}^{-}$rĩ
$\mathrm{AC}_{9}$ - remain -COMPL -TRNS - $\mathrm{FV} \mathrm{NC}_{10}$ - minute $\mathrm{NC}_{4}$ - set.of.ten $\mathrm{AC}_{4}$ - two 'Oh, it was something like 20 minutes to 10 .'
8. ndahaica mbathi thaa inya.

N - a- haic -a N - bathi thaa $\quad$ i- nya 1SG.SUBJ- CR.PST- climb -FV NC ${ }_{9}$ - bus $\mathrm{NC}_{10}$.hour $\mathrm{AC}_{10}$ - four 'I then got on the 10 o' clock bus.'
9. mbathi namba mĩrongo mũgwanja na ithatũ kuma West University Place gũka Rice University.
N- bathi namba mĩ- rongo mũgwanja na i- tatũ
$\mathrm{NC}_{9}$ - bus $\quad \mathrm{NC}_{9}$.number $\mathrm{NC}_{4}$ - set.of.ten seven and $\mathrm{AC}_{10}$ - three
kũ- um -a West University Place kũ- ũk -a Rice University
$\mathrm{NC}_{15}$ - come.out -FV PROP $\mathrm{NC}_{15}$ come -FV PROP
'Bus number 73 from West University Place to Rice University.'
10. ndoka Herring Hall ndona Rita Riley.

N- a- ũk -a Herring Hall N- a- on -a Rita Riley
1SG.SUBJ- CR.PST- come -FV PROP 1SG.SUBJ- CR.PST- see -FV PROP
'I then came to Herring Hall and saw Rita Riley.'
11. ahingũrĩra rumu ya computer.
a- hing-ũr -ĩr -a rumu i- a computer
$\mathrm{SC}_{1}$ - close -REVERS -APP -FV NC ${ }_{9}$.room AC ${ }_{9}$ - ASSOC computer
'She opened the computer room for me.'
12. ndacaba marwa ma tax.

N- a- cab -a ma-rwa ma-a tax
1SG.SUBJ- CR.PST- print -FV NC 6 - letter $\mathrm{AC}_{6}-$ ASSOC tax
'I then printed the tax letter.'
13. ndacoka ndona Jessica thaa ithano.

N - a- cok -a N - a- on -a Jessica thaa i- thano
1SG.SUBJ- CR.PST- return -FV 1SG.SUBJ- CR.PST- see -FV PROP $\mathrm{NC}_{10}$.hour $\mathrm{AC}_{10}$ - five
'I then saw Jessica at 11.'
14. ndamũona kinya thaa thita ĩtigairie ndagĩka ikũmi

N- a- mũ- on -a kinya thaa thita ${ }^{11} \tilde{1}^{-}$tiga -ir $-i \quad$-e
1SG.SUBJ- CR.PST- OC ${ }_{1}-$ see -FV until $\mathrm{NC}_{10}$.hour $\mathrm{NC}_{10} \cdot$ six $\mathrm{AC}_{9}-$ remain -COMPL -TRNS -FV
N- dagĩka i- kũmi
$\mathrm{NC}_{10}-$ minute $\mathrm{AC}_{10}$ - ten
'I saw her until 10 minutes to 12 .'
15. ndathiĩ gym ndeka total athletic conditioning ithaa rĩmwe.

N - a- thi - i gym N - a- $\quad$ îk -a total athletic conditioning
1SG.SUBJ- CR.PST- go -FV gym 1SG.SUBJ- CR.PST- do -FV PROP
i- thaa rĩ- mwe
$\mathrm{NC}_{5}$ - hour $\mathrm{AC}_{5}$ - one
'I then went to the gym and did total athletic conditioning for one hour.'

[^8]16. ndathiĩ nja --

N- a- thi - $\tilde{i}$ nja
1SG.SUBJ- CR.PST- go -FV outside
'I then went outside'
17. ndarĩkia na gym ndathiĩ nja ndarĩa ranji kuma thaa mũgwanja kinya thaa inyanya.

N - a- rĩk -i $\quad$-a na gym N - a- thi -í nja
1SG.SUBJ- CR.PST- finish -TRNS -FV with gym 1SG.SUBJ- CR.PST- go -FV outside
N- a- rĩ -a ranji kuma thaa mũgwanja
1SG.SUBJ- CR.PST- eat -FV NC ${ }_{9}$.lunch from $\mathrm{NC}_{10}$. hour seven
kinya thaa i- nyanya
until $\mathrm{NC}_{10}$.hour $\mathrm{AC}_{10}$ - eight
'I then finished with the gym, went outside, and ate lunch from 1 until 2.'
18. thaa inyanya ndambĩrĩria o guota rĩũa.
thaa i- nyanya N- a- amb-ĩrĩr -i $\quad$-a o kũ- ot -a rĩ- ũa $\mathrm{NC}_{10}$.hour $\mathrm{AC}_{10}$ - eight 1 SG.SUBJ- CR.PST- start -INTENS -TRNS -FV just $\mathrm{NC}_{15}$ - bask -FV NC ${ }_{5}$ - sun 'At 2 I started to just bask in the sun.'
19. thaa inyanya na na -- na robo,
thaa i- nyanya na na na robo
$\mathrm{NC}_{10}$.hour $\mathrm{AC}_{10}$ - eight and and and quarter
'At a quarter past 2,'
20. kana thaa inyanya na kuota,
kana thaa i- nyanya na kuota
or $\mathrm{NC}_{10}$.hour $\mathrm{AC}_{10}$ - eight and quarter
'Or quarter past 2,'
21. kana thaa inyanya ĩhĩtũkĩtie ndagĩka ikũmi na ithano.
kana thaa i- nyanya ĩ- hĩtũk -ĩt -i $\quad$-e $\mathrm{N}^{-}$dagĩka i- kũmi na i- thano. or $\mathrm{NC}_{10}$.hour $\mathrm{AC}_{10}$ - eight $\mathrm{SC}_{9}$ - pass -PERF -TRNS - $\mathrm{FV} \mathrm{NC} 10^{-}$- minute $\mathrm{AC}_{10}$ - ten and $\mathrm{AC}_{10}$ - five 'Or 15 minutes past two.'
22. ndathiĩ raiburarĩ.

N- a- thi -ĩ raiburarĩ
1SG.SUBJ- CR.PST- go -FV NC,.library
'I then went to the library.'
23. raiburarĩ, ndaikara ndagĩka mĩrongo ĩna na ithano.
raiburarĩ N- a- ikar -a N - dagîka mĩ- rongo $\tilde{1}^{-}$na na i- thano $\mathrm{NC}_{9}$.library 1 SG.SUBJ- CR.PST- sit $-\mathrm{FV} \mathrm{NC} 10^{-}$minute $\mathrm{NC}_{4}$ - set.of.ten $\mathrm{NC}_{4}$ - four and $\mathrm{AC}_{10}$ - five 'At the library, I then stayed for 45 minutes.'
24. ndacoka ndoka Herring Hall rĩngĩ.

N - a- cok -a N - a- ũk -a Herring Hall rĩ- ngĩ
1SG.SUBJ- CR.PST- return -FV 1SG.SUBJ- CR.PST- come -FV PROP $\mathrm{NC}_{5}$ - other
'I then came back to Herring Hall again.'
25. ndoka kĩrathi kĩa Robert na arutwo atano.

N- a- ũk -a kĩ- rathi kĩ- a Robert na a- rutwo a- tano
1SG.SUBJ- CR.PST- come -FV NC $7^{-}$- class $\mathrm{AC}_{7}$ - ASSOC PROP and $\mathrm{NC}_{2}$ - student $\mathrm{AC}_{2}$ - five
'I then came to the class of Robert and five students.'
26. ndarîkia thaa kenda na ndagĩka mĩrongo ĩtano.

N - a- rîk -i $\quad$-a thaa kenda na N - dagîka mĩ- rongo $\tilde{1}^{-}$tano 1SG.SUBJ- CR.PST- finish -TRNS -FV NC ${ }_{10}$.hour nine and $\mathrm{NC}_{10}$ - minute $\mathrm{NC}_{4}$ - set.of.ten $\mathrm{AC}_{4}$ - five 'I finished at 3:50.'
27. ndauma ndathiĩ.

N- a- um -a N- a- thi -ĩ
1SG.SUBJ- CR.PST- come.out -FV 1SG.SUBJ- CR.PST- go -FV
'I got out and left.'
28. nĩguo Lisa anjĩra nyuma na kĩrathi nake thaa igĩrĩ-- thaa inyanya.
nĩ- guo Lisa a- a- N - ĩr -a N - uma na kĩ- rathi nake
FOC- so PROP SC ${ }_{1}$ - CR.PST- 1SG.OBJ- tell -FV 1SG.SUBJ- COP.BRP with $\mathrm{NC}_{7}-$ class $\mathrm{NC}_{1}$.DEP.PRO
thaa i-gĩrĩ-- thaa i- nyanya
$\mathrm{NC}_{10}$.hour $\mathrm{AC}_{10}$-two-- $\mathrm{NC}_{10}$.hour $\mathrm{AC}_{10}$ - eight
'That is when Lisa told me I had a class with her at 2.'
29. ndacokoroka-- ndacokoroka tweka kĩrathi kĩmwe nake gĩa ithaa rĩmwe.

N - a- cok -or -ok -a N - a- cok -or -ok -a 1SG.SUBJ- CR.PST- return -REVERS -MID -FV 1SG.SUBJ- CR.PST- return -REVERS -MID FV
tũ- a- îk -a kĩ- rathi kĩ- mwe nake kĩ- a i- thaa rĩ- mwe
1PL.SUBJ- CR.PST- do -FV NC $7^{-}$- class $\mathrm{AC}_{7^{-}}$one $\mathrm{NC}_{1}$.DEP.PRO $\mathrm{AC}_{7}$ - $\mathrm{ASSOC}^{2} \mathrm{NC}_{5}$ - hour $\mathrm{AC}_{5}$ - one 'I then unexpectedly had to go right back, and we did an hour's class with her..'
30. na rĩu twĩ hakuhĩ kũrĩkia.
na rĩu tũ- rĩ ha- kuhĩ kũ- rîk -i $\quad-\mathrm{a}$
and now 1PL.SUBJ- COP $\mathrm{NC}_{16}$ - short $\mathrm{NC}_{15}$ - finish -TRNS -FV
'And now we are about to finish.'
31. njoke thiĩ Zumba.

N- cok -e thi-ĩ Zumba
1SG.SUBJ- return -FV go -FV PROP
'then I will go to Zumba.'
32. kuma thaa-- kuma thinacara kinya thaa ĩmwe.
kuma thaa kuma thinacara ${ }^{12}$ kinya thaa i- mwe
from $\mathrm{NC}_{10}$.hour from $\mathrm{NC}_{10}$.twelve until $\mathrm{NC}_{10}$.hour $\mathrm{AC}_{10}$ one
'From 6 until 7.'
33. no ndiũĩ kana nĩngũthiĩ Zumba.
no N- ti- un -ĩ kana nĩ- N - kũ- thi $-\tilde{i} \quad$ Zumba
but 1SG.SUBJ- NEG- know -FV if FOC- 1SG.SUBJ- CR.FUT- go -FV PROP
‘But I don’t know if I will go to Zumba.'
34. tondũ ndĩ-- ndĩ na wĩra mũingĩ mũno ndĩrenda gũĩka-- ndĩrenda kũruta.
tondũ $N$ - rĩ $N$ - rĩ na wĩra mũ- ingĩ mũno $N$ - end -a
because 1SG.SUBJ- COP 1SG.SUBJ- COP with work JC $3^{-}$- many very 1 SG.SUBJ- want -FV
kũ- îk -a $N$ - end -a kũ- rut -a
$\mathrm{NC}_{15}$ - do -FV 1SG.SUBJ- want -FV NC ${ }_{15}$ remove -FV
'Because I have a lot of work I want to do-- I want to take care of.'

[^9]
## Appendix G

## MP3 audio available at http://www.ruf.rice.edu/~reng/kik/07-mugo.mp3

1. Nĩkwarĩ mũthuri wetagwo Mũgo wa Kîbirũ.
nĩ- kũ- a- rĩ mũ- thuri ũ- ĩt -ag -wo Mũgo wa Kîbirũ
FOC- SC $_{17}$ - RM.PST- COP NC $1_{1}$ - man RC $_{1}$ - call -IMPF -PV PROP
'There was a man called Mũgo wa Kîbirũ.'
2. Mũgo wa Kĩbirũ arĩ mũthuri warotaga iroto ikauma.

Mũgo wa Kĩbirũ a- a- rĩ mũ- thuri u- a- rot -ag -a i- rot -o
PROP $\quad \mathrm{SC}_{1}$ - RM.PST- COP NC $1_{1}-$ man RC $_{1}$ - RM.PST- dream -HAB -FV NC ${ }_{8}$ - dream -NMZ
i- ka- um -a
$\mathrm{RC}_{8}$ - CR.PRES- come.out -FV
'Mũgo wa Kĩbirũ was a man who used to dream dreams that came true.'
3. Kana akona maũndũ ma mbere magĩîkîka, matekîkĩte.
kana a- ka- on -a ma- ũndũ ma-a mbere ma-kĩ- îk -îk -a
or $\quad \mathrm{SC}_{1}-$ CR.PRES- see -FV NC ${ }_{6}$ - thing $\mathrm{AC}_{6}$ - $\mathrm{ASSOC}^{2}$ ahead $\mathrm{SC}_{6}$ - $\operatorname{SIM}$ - do -MID -FV
ma-ta- îk -îk -ĩt -e
$\mathrm{SC}_{6}$ - POST- do -MID -PERF -FV
'Or, he saw events of the future happening, before they had actually happened.'
4. Aa Mũgo wa Kĩbirũ nĩarotire rĩmwe atĩ nĩgũgoka andũ mahana kĩengere ngothi-inĩ yao.

Aa Mũgo wa Kîbirũ nĩ- a- rot -ir -e rĩ- mwe atĩ
ah PROP FOC- $\mathrm{SC}_{1}$ - dream -COMPL-FV NC ${ }_{5}$ - one COMP
nĩ- kũ- ka -ũk -a a- ndũ ma-han -a kĩ- engere
FOC- $\mathrm{SC}_{17}$ - RM.FUT- come -FV NC $2_{2}$ - person $\mathrm{RC}_{2}$ - look.like - $\mathrm{FV} \mathrm{NC} \mathrm{T}^{-}$- white.frog

N- ngothi -inĩ 1 - ao
$\mathrm{NC}_{9}$ - skin $\quad-\mathrm{LOC} \mathrm{AC}_{9}-\mathrm{NC}_{2} \cdot \mathrm{POS}$
'Ah, Mũgo wa Kîbirũ once dreamt that there would come people who looked like kĩengere ${ }^{13}$ on their skin.'
5. Na andũ acio nĩmagakorwo na na nguo ihana...

Na a- ndũ a- cio nĩ- ma-ka- kor -wo and $\mathrm{NC}_{2}$ - person $\mathrm{AC}_{2}$ - ANA.DEM FOC- $\mathrm{SC}_{2}-$ RM.FUT- find -PV
na na $N$ - nguo i- han -a
with with $\mathrm{NC}_{10}$ - clothes $\mathrm{SC}_{10}$ - look. like - FV
'And those people will have clothes that look like...'
6. ... The word for butterfly just left me!
7. ... ya ihana ciĩhuruta, nguo ihana ciĩhuruta,
ya i- han -a ci- ĩhuruta
ya $\mathrm{RC}_{10}$ - look. like - $\mathrm{FV} \mathrm{NC}_{8}$ - butterfly
N- nguo i- han -a ci- ĩhuruta
$\mathrm{NC}_{10}$ - clothes $\mathrm{RC}_{8}$ - look. like - $\mathrm{FV} \mathrm{NC}_{8}$ - butterfly
'um that look like butterflies, clothes that look like butterflies,'
8. na andũ acio nĩmagakorwo na mĩtĩ kana njũgũma irĩ na mwaki.
na a- ndũ a- cio nĩ- ma-ka- kor -wo na mĩ- tĩ kana and $\mathrm{NC}_{2}-$ person $\mathrm{AC}_{2}$ - ANA.DEM FOC- $\mathrm{SC}_{2}-$ RM.FUT- find -PV with $\mathrm{NC}_{4}-$ stick or
N- njũgũma i- rĩ na mũ-aki
$\mathrm{NC}_{10}$ - club $\quad \mathrm{SC}_{10}$ - COP with $\mathrm{NC}_{3}$ - fire
'and those people will have sticks or clubs with fire.'
9. Rĩu mũthenya ũmwe rĩ nĩgwokire andũ ta acio.

Rĩu mũ- thenya ũ- mwe rĩ nĩ- kũ- ũk -ir -e a- ndũ ta a- cio now $\mathrm{NC}_{3}$ - day $\quad \mathrm{AC}_{3}$ - one now FOC- $\mathrm{SC}_{17}$ - come -COMPL-FV NC $2_{2}$ - person like $\mathrm{AC}_{2}$ - ANA.DEM 'Now, one day, what happened is, there came people like those.'

[^10]10. Gũgĩũka Athũngũ mena- matatũhana, - mena ngothi njerũ.
kũ- kĩ- ũk -a athũngũ mena
$\mathrm{SC}_{17}$ - SIM- come -FV foreigners with
ma-ta- tũ- han -a mena $\mathrm{N}^{-}$ngothi $\mathrm{N}^{-}$erũ
$\mathrm{SC}_{2}-$ NEG- 1PL.OBJ- look.like -FV with $\mathrm{NC}_{10}$ - skin $\quad \mathrm{JC}_{10}-$ white
'There came foreigners with-who don't look like us, with white skin.'
11. Na mekagĩra nguo itahana ta citũ tondũ citũ itirĩ marangi maingĩ.

Na ma-îk -ĩr -ag -a $N$ - nguo i- ta- han -a ta ci- itũ tondũ and $\mathrm{SC}_{2}-$ wear -APP -HAB -FV NC ${ }_{10}$ - clothes $\mathrm{RC}_{10}$ - NEG- look.like -FV like $\mathrm{AC}_{10}$ - 1 PL.POS because
ci- itũ i- ti- rĩ ma- rangi ma- ingĩ
$\mathrm{AC}_{10}-1$ PL.POS $\mathrm{SC}_{10}{ }^{-}$NEG- COP NC $6^{-}$- color $\mathrm{AC}_{6}-$ many
'And they wore clothes that don't look like ours because ours do not have many colors ${ }^{14}$.'
12. ikoragwo ihana cia tĩrri-- nĩ cia gĩtĩri kana njirũ.
i- kor -ag -wo i- han -a ci- a tĩri nĩ
$\mathrm{SC}_{10}$ - find -HAB -PV SC $\mathrm{SO}_{10}$ - look.like -FV AC ${ }_{10}$ - ASSOC soil FOC
ci- a kĩ- tĩri kana N- ĩrũ
$\mathrm{AC}_{10^{-}}$ASSOC NC $\mathrm{N}_{7}$ - brown or $\quad \mathrm{NC}_{10}$ - black
'They usually look like... of brown or black color.'
13. Magĩcoka magĩũka na mĩcinga.

Ma-kĩ- cok -a ma-kĩ- ũk -a na mĩ- cinga
$\mathrm{SC}_{2}-$ SEQ- return -FV SC $1_{1}-$ SEQ- come -FV with $\mathrm{NC}_{4}-$ gun
'They then came with guns.'
14. Mĩcinga ĩyo nĩyo Cege... nĩyo Cege... nĩyo Mũgo wa Kĩbirũ kana Cege wa Kĩbirũ etaga njũgũma cia na mwaki.
mĩ- cinga $\tilde{1}^{-}$yo nĩ- $\tilde{1}^{-}$yo Cege-- nĩ- $\tilde{1}^{-}$yo Cege nĩ- $\tilde{1}^{-}$yo $\mathrm{NC}_{4}-$ gun $\quad \mathrm{AC}_{4}$ - ANA.DEM FOC- $\mathrm{AC}_{4}$ - ANA.DEM PROP FOC- $\mathrm{AC}_{4}-$ ANA.DEM PROP FOC- $\mathrm{AC}_{4}$ - ANA.DEM Mũgo wa Kĩbirũ kana Cege wa Kîbirũ a- ĩt -ag -a
PROP or PROP $\quad \mathrm{SC}_{1}$ - call -IMPF -FV

[^11]N- njũgũma ci- a na mũ- aki
$\mathrm{NC}_{10}$ - club $\quad \mathrm{AC}_{10}$ - ASSOC with $\mathrm{NC}_{3}$ - fire
'Those guns those are the ones Cege ${ }^{15}$, are those that Cege, are those that Mũgo wa Kîbirũ or Cege wa Kĩbirũ referred to as clubs with fire.'
15. Aa ningĩ nĩ harĩ o ũndũ ũmwe arotete akauga nĩgũgoka, aa n- ingĩ nĩ ha- a- rĩ o ũ- ndũ ũ- mwe
ah $\mathrm{JC}_{8}$ - other FOC SC $\mathrm{C}_{16}$ - RM.PST- COP just $\mathrm{NC}_{14}$ - thing $\mathrm{AC}_{14}{ }^{-}$one
a- rot -it -e a- ka- ug -a nĩ- kũ- ka- ũk -a
$\mathrm{SC}_{1}$ - dream -PERF -FV SC ${ }_{1}$ - CR.PRES- say -FV FOC- $\mathrm{SC}_{17}$ - RM.FUT- come -FV
'Ah, also there was one other thing he had dreamt saying there will come,'
16. nyoka îkoragwo ĩrĩ ya... ya cuma na nĩ ĩgakorwo na magũrũ.

N - nyoka ĩ- kor -ag -wo ĩ- rĩa y- a y - $\mathrm{a} \quad \mathrm{N}$ - cuma na

nĩ $\tilde{1}-\quad$ ka- $\quad$ kor -wo na ma-gũrũ
FOC $\mathrm{NC}_{9}$ - RM.FUT- find -PV and $\mathrm{NC}_{6}$ - leg
'A snake will be of.. of metal and it will have legs.'
17. na ikoima mwena wa Mombatha ithiĩ kinya kĩrĩma gĩa Kenya na, na i- ka- um -a mũ- ena w- a Mombatha i- thi -ĩ and $\mathrm{SC}_{9}$ - RM.FUT- come.out - $\mathrm{FV} \mathrm{NC}_{3}-$ side $\mathrm{AC}_{3}-$ ASSOC Mombasa $\mathrm{SC}_{9}-$ go -FV
kinya kĩ- rĩma kĩ- a Kenya na
until $\quad \mathrm{NC}_{7}-$ mountain $\mathrm{AC}_{7}$ - $\mathrm{ASSOC}^{2}$ Kenya and
'It will come from the side of Mombasa going up to Mt. Kenya and,'
18. îhĩtũke na ĩhĩtũke ĩkĩ-- na kũu.
ĩ- hĩtũk -e na 1 ĩ- hĩtũk -e îkĩ-- na kũ- u
$\mathrm{SC}_{9}$ - pass -SJV and $\mathrm{SC}_{9}$ - pass -SJV TRUNC and $\mathrm{SC}_{17}$ - ANA.DEM
'It would pass, and pass through, going over there.'
19. Rĩu yacokire ĩgĩcoka ĩgĩtuika ũcio nĩ mũgithi.

Rĩu ĩ- a- cok -ir -e $\tilde{1}^{-}$kĩ- cok -a $\tilde{1}^{-}$kĩ tuik -a


[^12]ũ- cio nĩ mũ- githi.
$\mathrm{AC}_{3}$ - ANA.DEM COP $\mathrm{NC}_{3}$ - train
'Now, it then came to pass that that was a train.'
20. Na nĩwokire mwaka wa naitini ĩite wanu kinya naintini teni.. Ĩitini naite siks. teni.. Ĩitini naite siks.
Na nĩ- ũ- a- ũk -ir -e mũ- aka w- a naitini îte wanu kinya naintini

teni.. îtini naite siks.

$\begin{array}{llll}10 & 18 & 90 & 6\end{array}$
'And It came the year of 1981 until 1986...101910... 1896...10. 1896 ${ }^{16}$ '
21. Mũgo wa Kĩbirũ. Nĩgũo gwakirwo mũgithi ũgĩthiĩ kinya Gĩthumo.

Mũgo wa Kĩbirũ nĩ- gũo kũ- ak -ir -wo mũ- githi ũ- kĩ- thi -ĩ
PROP FOC- thus $\mathrm{SC}_{17}$ - build -COMPL -PV NC $3_{3}$ - train $\mathrm{RC}_{3}$ - SEQ- go -FV
kinya Gĩthumo
until Kisumu
'Mũgo wa Kĩbirũ. Thus there was built a train that then went up to Kisumu.'
22. mwaka wa naintini teni.
mũ- aka ũ- a naintini teni
$\mathrm{NC}_{3}-$ year $\mathrm{AC}_{3}-\mathrm{ASSOC}^{2} 1910$
'In the year of 1910.'
23. Ha! Nĩacokire akĩrota nĩgũkagũa mũtĩ wa Mũgũmo handũ, hetagwo Mũkũrwe wa Nyagathanga, wona Kenya yagĩa na wĩyathi.
Ha nĩ- a- cok -ir -e a- kĩ- rot -a nĩ- kũ- ka- gũ -a hmm FOC- SC $1_{1}$ - return -COMPL -FV SC ${ }_{1}$ - SEQ- dream -FV FOC- SC $_{17}$ - RM.FUT- fall -FV
mũ-tĩ ũ- a Mũ- gũmo ha- ndũ $\mathrm{NC}_{3}-$ tree $\mathrm{AC}_{3}-\mathrm{ASSOC}_{\mathrm{NC}_{3}-}$ Mũgũmo $\mathrm{NC}_{16}$ - place
ha- ĩt -ag -wo Mũkũrwe wa Nyagathanga
$\mathrm{SC}_{16}$ - call -IMPF -PV PROP

[^13]ũ- on -a Kenya ĩ- agĩ -a na wĩyathi
2SG.SUBJ- see -FV Kenya SC $_{9}$ - acquire FV with $\mathrm{NC}_{9}$.freedom
'Hmm! He then dreamt that there would fall a Mũgũmo tree ${ }^{17}$ at a place called Mũkũrwe wa Nyagathanga, when Kenya gets its freedom.'
24. Na mũtĩ ũcio atĩ nĩwacokire ũkĩgwa, o ihinda-inĩ rĩu rĩa wĩyathi.

Na mũ-tĩ ũ- cio atĩ nĩ- $\tilde{u}^{-}$a- cok $\begin{aligned} & \text {-ir } \quad \text {-e } \tilde{u}^{-} \text {kĩ- gũ }-\mathrm{a}\end{aligned}$ and $\mathrm{NC}_{3}-$ tree $\mathrm{AC}_{3}-$ ANA.DEM COMP FOC- $\mathrm{SC}_{3}$ - RM.PST- return -COMPL -FV SC ${ }_{3}$ - SEQ- fall -FV
0 i- hinda -inĩ rĩ- u rĩ- a wĩyathi
just $\mathrm{NC}_{5}$ - time -LOC AC $5_{5}$ - ANA.DEM $\mathrm{AC}_{5}-\mathrm{ASSOC}^{2} \mathrm{NC}_{9}$.freedom
'and that tree apparently then fell down, just then during that period of independence.'
25. Na Athũngũ merwo nĩmamakire mũno.

Na a- thũngũ ma-ĩr -wo nĩ- ma-mak -ir -e mũno and $\mathrm{NC}_{2}$ - European $\mathrm{SC}_{2}-$ tell -PV FOC- $\mathrm{SC}_{2}-$ be.shocked -COMPL -FV very 'And the Europeans, when they were told, they were very shocked.'
26. makĩ-- makiuga mũtĩ ũcio wa Mũgũmo nĩmakũwakĩra, makĩ-- ma-kĩ- ug -a mũ-tĩ ũ- cio w -a Mũgũmo

nĩ- ma-kũ- $\tilde{u}^{-}$ak -ĩr -a
FOC- SC $_{2}-$ CR.FUT- $\mathrm{OC}_{3}$ - build -APP -FV
'They then said, that Mũgũmo tree, they would build for it,'
27. na magĩaka; ũgĩakĩrwo ũgĩthiũrũrũkio na mahiga nigetha atĩ ndũkagwe.
na ma-kĩ- ak -a ũ- kĩ- ak -ĩr -wo
and $\mathrm{SC}_{2}-$ SEQ- build -FV SC ${ }_{3}$ - SEQ- build -APP -PV
ũ- kĩ- thi -ũrũr -ũk -ĩr -i -o na ma-higa
$\mathrm{NC}_{3}$ - SEQ- go -INTENS -REVERS.MID -APP -TRNS -PV with $\mathrm{NC}_{6}$ - stone
nĩgetha atĩ nd- ũ- ka- gũ -e
so.that COMP NEG- $\mathrm{SC}_{3}$ - CR.PRES- fall -SJV
'And they built; The tree was built for and encircled with stones so that it apparently would not fall.'

[^14]28. na nĩwacokire ũkĩringwo nĩ... nĩ.. nĩ rũheni na ũkĩgwa na ũgĩkua na ũkĩũma.
na nĩ- ũ- a- cok -ir -e ũ- kĩ- ring -wo nĩ nĩ nĩ rũ- heni and FOC- SC $_{3}$ - RM.PST- return -COMPL -FV SC $3^{-}$- SEQ- hit -PV by by by $\mathrm{NC}_{11}$ - lightning na ũ- kĩ- gũ -a na ũ- kĩ- ku -a na ũ- kĩ- ũm -a and $\mathrm{SC}_{3}-$ SEQ- fall -FV and $\mathrm{SC}_{3}-$ SEQ- die -FV and $\mathrm{SC}_{3}$ - SEQ- dry -FV 'And it then was hit by lightening and it fell and it died and it dried up totally.'
29. Kwoguo tũkĩheyo wĩyathi Kenya naintini sigiste thirii gũtiari mũtĩ ũcio.
kwoguo tũ- kĩ- he -o wĩyathi Kenya naintini sigiste thirii
therefore 1PL.SUBJ- SIM- give -PV NC g freedom Kenya $^{19} \quad 60 \quad 3$
kũ- ti- a- rĩ mũ-tĩ ũ- cio
$\mathrm{SC}_{17}{ }^{-}$NEG- RM.PST- COP NC ${ }_{3}-$ tree $\mathrm{AC}_{3}$ - ANA.DEM
‘Therefore as we received independence in Kenya in 1963 that tree wasn't there.'
30. nĩwomĩte na ũkoma pa.
nĩ- ũ- a- ũm -ĩt -e na ũ- kĩ- ũm -a pa
FOC- $\mathrm{SC}_{3}$ - RM.PST- dry -PERF -FV and $\mathrm{SC}_{3}-$ SEQ- dry -FV ID
'It had dried and was all dried up.'
31. Right... kwoguo nĩkĩo mũndũ ũgwĩtwo Mũgo wa Kĩbirũ nĩahetwo,

Right kwoguo nĩ- kĩo mũ- ndũ ũ- gwĩt -wo Mũgo wa Kabirũ nĩ- a- he -ĩt -wo Right therefore FOC- why $\mathrm{NC}_{1}-$ person $\mathrm{RC}_{1}$ - call -PV PROP FOC- $\mathrm{SC}_{1}$ - give -PERF -PV 'Right... Therefore that is why the distinguished person called Mũgo wa Kĩbirũ is given,'
32. gĩtĩyo mũno mwena wa Gîkũyũ nîkũratha, - arĩ mũndũ mũrathi.
gĩtĩyo mũno mũ-ena ũ- a kĩ- kũyũ nĩ- kũ- rath -a
respect very $\mathrm{NC}_{3}-$ side $\mathrm{AC}_{3}-\mathrm{ASSOC}^{-1} \mathrm{NC}_{7}$ - Gîkũyũ $\mathrm{FOC}-\mathrm{NC}_{15}-$ predict -FV
a- a- rĩ mũ-ndũ mũ- rath -i
$S C_{1}-$ RM.PST- COP $\mathrm{NC}_{1}-$ person $\mathrm{NC}_{1}-$ predict -NMZ
'much respect on the side of the Gĩkũyũ people because of prediction-the man was a prophet.'
33. Na arĩ mũndũ mũrathi mũno.
na a- a- rĩ mũ- ndũ mũ-rath -i mũno
and $\mathrm{SC}_{1}-$ RM.PST- COP $\mathrm{NC}_{1}-$ person $\mathrm{NC}_{1}-$ predict -NMZ very
'And the person was a great predictor.'
34. Na andũ nĩmamwĩtîkagia.
na a- ndũ nĩ- ma-mũ- ̃̃tîk. -ag -i -a and $\mathrm{NC}_{2}{ }^{-}$person $\mathrm{FOC}-\mathrm{SC}_{2^{-}} \mathrm{OC}_{1^{-}}$believe -HAB -TRNS -FV
'And the people believed him.'
35. No kũrĩ andũ maracoka makauga aca.
no kũ- rĩ a- ndũ ma-ra- cok -a ma-ka- ug -a aca
but $\mathrm{SC}_{17^{-}}$COP NC $2_{2}-$ person $\mathrm{RC}_{2}-$ CR.PRES- return -FV RC ${ }_{2}-$ CR.PRES- say -FV no
'But there are people who are now saying "no." (saying no in retrospect)'
36. ndarĩ mũndũ mũrathi tondũ nonginya akorwo nĩerĩtwo nĩ andũ.
nd- a- a- rĩ mũ- ndũ mũ- rath -i tondũ no- nginya
NEG- SC $1_{1}$ - RM.PST- COP $\mathrm{NC}_{1}-$ person $\mathrm{NC}_{1}-$ predict -NMZ because SJV- up.to
a- kor -wo nĩ- er -ĩt -wo nĩ a- ndũ
$\mathrm{SC}_{1}$ - find -PV FOC- tell -PERF -PV by $\mathrm{NC}_{2}$ - person
'He wasn't a prophet because he must have been told by people.'
37. ũhoro wa mũthũngũ rĩrĩa agũthiĩ mwena wa Mombatha.
ũ- horo ũ- a mũ- thũngũ rĩrĩa a- gũ- thi -ĩ mũ- ena ũ- a Mombatha $\mathrm{NC}_{3}$ - information $\mathrm{AC}_{3}-\mathrm{ASSOC}^{N C_{1}-}$ foreigner when $\mathrm{SC}_{1}-$ CR.PST- go -FV NC ${ }_{3}-$ side $\mathrm{AC}_{3}-\mathrm{ASSOC}^{2}$ Mombasa 'The information about the European when he traveled to the Mombasa area.'
38. Na angĩ magakiuga atĩrí1 ${ }^{18}$ ũhoro wa mũgithi akĩonete kũ?
na a- ngĩ ma-ka- kĩ- ug -a atĩ- rĩrĩ
and $\mathrm{NC}_{2}-$ other $\mathrm{SC}_{2}-$ CR.PRES- SEQ- say -FV COMP- $\mathrm{NC}_{5}$.PROX.DEM
ũ- horo ũ- a mũ- githi a- kĩ- on -et -e kũ
$\mathrm{nc}_{3}$ - information $\mathrm{AC}_{3}$ - $\mathrm{ASSOCNC}_{3}$ - train $\mathrm{SC}_{1}$ - SEQ- see -PERF - FV where
'And others then (as a consequence) say: how could he have known about the train?'
39. (Na da...) na Mombatha (gutirĩ ha-) gũtiarĩ mũgithi.
na da na Mombatha kũ- ti- rĩ ha kũ- ti a- rĩ mũ- githi and TRUNC and Mombasa $\mathrm{SC}_{17}-$ NEG- COP TRUNC SC ${ }_{17}-$ NEG- RM.PST- COP NC $3^{-}$- train 'and... he had not... and in Mombasa - there was no train.'

[^15]40. Rũgano rwakwa rwathirĩra hau.

Rũ- gan -o rũ- akwa rũ- a- thir -ĩr -a ha- u
$\mathrm{NC}_{11}-$ narrate - $\mathrm{NMZ} \mathrm{SC} 11_{11}-1 \mathrm{SG} . \mathrm{POS} \mathrm{SC}_{11}$ - CR.PRES- end -APP -FV AC $1_{16}$ - ANA.DEM 'My story ends there.'

## References

Bearth, Thomas. 2003. "Syntax". In Derek Nurse and Gérard Philippson, (eds.), The Bantu Languages, 121-142. New York: Routledge.
Bennett, Patrick R. 1985. Gîkũyũ nũ Kĩoigire: A First Course in Kikuyu. Madison: African Studies Program of the University of Wisconsin-Madison.
Berlin, Brent and Paul Kay. 1969. Basic Color Terms: Their Universality and Evolution. Berkeley: University of California Press.
Bowern, Claire. 2015. Linguistic Fieldwork: A Practical Guide, 2nd ed. New York: Palgrave Macmillan.
Bresnan, Joan and Lioba Moshi. 1990. "Object asymmetries in comparative Bantu syntax". Linguistic Inquiry 21.2: 147-185.
Chafe, Wallace L. (ed.). 1980. The Pear Stories: Cognitive, Cultural, and Linguistic Aspects of Narrative Production. Norwood: Ablex.
Childs, G. Tucker. 1994. "African ideophones". In Leanne Hinton, Johanna Nichols, and John J. Ohala, (eds.), Sound Symbolism, 178-204. New York: Cambridge University Press.
Clements, George N. 1984. "Principles of tone assignment in Kikuyu". In George N. Clements and John Goldsmith, (eds.), Autosegmental Studies in Bantu, 281-339. Dordrecht: Foris.
Dixon, Robert M.W. 1995. "Complement clauses and complementation strategies". In Frank R. Palmer, (ed.), Grammar and Meaning: Essays in Honour of Sir John Lyons, 175-220. New York: Cambridge University Press.
Dryer, Matthew S. 1986. "Primary objects, secondary objects, and antidative". Language 62.4: 808-845.
Givón, Talmy. 1980. "The binding hierarchy and the typology of complements". Studies in Language 4.3: 33-77.
Givón, Talmy. 2001. Syntax: An Introduction, Revised Ed. 2 vols. Amsterdam: John Benjamins.
Guthrie, Malcolm. 1971. Comparative Bantu: An introduction to the Comparative Linguistics and Prehistory of the Bantu Languages, 4 vols. London: Gregg International.
Keenan, Edward L. and Bernard Comrie. 1977. "Noun phrase accessibility and universal grammar". Linguistic Inquiry 8.1: 63-99.
Keenan, Edward L. and Bernard Comrie. 1979. "Data on the noun phrase accessibility hierarchy". Language 55.2: 333-351.
Lewis, M. Paul, Gary F. Simons, and Charles D. Fennig, (eds.). 2015. Ethnologue: Languages of the World, Eighteenth edition. Dallas, Texas: SIL International.
http://www.ethnologue.com.

Matthews, Peter H. 2014. The Concise Oxford Dictionary of Linguistics. Oxford: Oxford University Press.
Mayer, Mercer. 2003 (1967). A Boy, a Dog and a Frog. New York: Dial Books.
Morrison, Michelle E. 2011. A Reference Grammar of Bena. Doctoral dissertation, Rice University. http://hdl.handle.net/1911/70359.
Mugane, John. 1997. A Paradigmatic Grammar of Gîkũyũ. Stanford: CSLI Publications.
Muriungi, Peter Kinyua. 2009. "The union spell-out mechanism". In Tromsø Working Papers on Language and Linguistics, 36.1: 191-205. http://hum.uit.no/mra/papers/nano/8muriungi.pdf.
Noonan, Michael. 2007. "Complementation". In Timothy Shopen, (ed.), Language Typology and Syntactic Description, Second Ed, Vol. 2, 52-150. New York: Cambridge University Press.
Payne, Thomas E. 1997. Describing Morphosyntax: A Guide for Field Linguists. New York: Cambridge University Press.
Ramat, Paolo. 1996. "Review Article: Converbs in Cross-Linguistic Perspective". Linguistics 34.4: 841-855.

Thompson, Sandra A., Robert E. Longacre, and Shin Ja Hwang. 2007. "Adverbial clauses". In Timothy Shopen, (ed.), Language Typology and Syntactic Description, Second Ed, Vol. 2, 237-300. New York: Cambridge University Press.


[^0]:    ${ }^{1}$ This could also simply be analyzed as a class 3 noun with the expected mũ- prefix for that class.

[^1]:    ${ }^{2}$ In the Gĩkũyũ manner of telling time, the 'zero' hour of the day is (English) 6am. Thus the eighth hour in this example corresponds to $2: 00 \mathrm{pm}$.

[^2]:    ${ }^{3}$ This is not the negative morpheme ta-. If it were, the verb form here would be ndanona 'he did not see', since the subject prefix is $a$ - and would therefore take the nd-negative allomorph as the negative prefix. This is strong evidence that the negative prefix $t i-/ t a-$ and the posterior-clause prefix tana-/ta- are in fact distinct morphemes in both form and meaning.

[^3]:    ${ }^{4}$ This is a formulaic story opening, and projects the response given in 2.
    ${ }^{5}$ This is the expected response to the story announcement in the previous line. IN this case, it was said in chorus by the entire class.

[^4]:    ${ }^{6}$ See section 3.4.4 on the reversive suffix for an analysis of this expression, presented there as example (212).

[^5]:    ${ }^{7}$ This is a formulaic story closing and is found in two related forms in the other narratives in this appendix as well.

[^6]:    ${ }^{8}$ Githeri is plain beans and corn with nothing added to it.

[^7]:    ${ }^{9}$ Thaa can be glossed in a variety of ways related to time: 'time', 'hour', 'clock' and 'wristwatch'.
    ${ }^{10}$ In the Gikũyũ manner of telling time, the 'zero' hour of the day is (English) 6am.

[^8]:    ${ }^{11}$ Thita (likely based on a borrowing of the Arabic word for 'six') refers to the 6 th hour in the Gikũyũ manner of telling time, i.e. either noon or midnight.

[^9]:    ${ }^{12}$ Thinacara (likely based on a borrowing of the Arabic word for 'twelve') refers to the zero hour in the gîkũyũ manner of telling time, i.e. both 6 am and 6 pm .

[^10]:    ${ }^{13}$ Kĩengere: a certain species of white frog.

[^11]:    ${ }^{14}$ Gĩkũyũ dress at the time was brown treated soft leather usually from goat skin.

[^12]:    ${ }^{15}$ Cege is another name for Mũgo wa Kîbirũ.

[^13]:    ${ }^{16}$ This final date is a repair of the first.

[^14]:    ${ }^{17}$ The Mũgũmo tree is a type of fig tree sacred to the Gĩkũyũ people who pray and do important rituals under it. It is considered a bad omen to cut it , and if it falls on its own it is also considered a bad omen.

[^15]:    ${ }^{18}$ Shortened form of atĩirirĩ, which literally means 'that' (complementizer atî) plus 'this' (class 5 proximal demonstrative rirî).' It is frequently used as a discourse marker.

