

# Contents

**Acknowledgments — VII**

**Contents — IX**

**List of figures — XV**

**List of tables — XXVII**

<b>1</b>	<b>Introduction and Background of Kenyan Sign Language</b>	<b>1</b>
1.1	Introduction	1
1.2	Goals of this book	1
1.2.1	A grammar of KSL phonology used in southwestern Kenya	3
1.2.2	Methodological contributions	5
1.2.3	Theoretical contributions	6
1.3	Origins and History of Kenyan Sign Language	7
1.4	Linguistic origins of KSL	12
1.5	Demographic profile of deaf Kenyans	20
1.6	Literature on Kenyan Sign Language	21
1.7	Summary	24
<b>2</b>	<b>Methodology</b>	<b>25</b>
2.1	Introduction	25
2.2	Research site	25
2.3	Participants	28
2.4	Procedure	31
2.4.1	Gathering data	31
2.4.2	Signers in lexical database	34
2.4.3	Filming and processing video	35
2.5	Creating the KSL Lexical Database	35
2.5.1	Criteria for the inclusion of lexical items in the KSL Lexical Database	37
2.5.2	Types of lexical variants in the dataset	40
2.5.3	Types of signs: polysemy and homophony	45
2.6	Basic criteria for signs in the phonological analysis	46
2.7	Coding phonetic information	47
2.8	Representing signs: glossing, notation systems, ID-glosses	51
2.9	Conclusion	54

<b>3</b>	<b>Minimal pairs and the phonological analysis — 55</b>
3.1	Introduction — 55
3.2	What counts as a minimal pair? — 56
3.3	Approach to theoretical models in this book — 62
3.3.1	Evaluating the LML syllable — 64
3.3.2	Relationship between features, segments, and syllables — 67
3.4	Why minimal pairs? — 73
3.5	Methodology for determining minimal pairs — 75
3.5.1	The importance of idiolects in evaluating minimal pairs — 80
3.5.2	Near-minimal pairs — 84
3.5.3	Relevance of iconicity — 89
3.6	Quantitative findings of minimal pairs in (SoNy)KSL — 94
3.7	Is there a paucity of minimal pairs in sign languages? — 98
3.8	Simultaneity and sequentiality in lexical contrast — 101
3.9	Conclusion and future directions — 107
<b>4</b>	<b>Handshape — 108</b>
4.1	Introduction — 108
4.2	What is the smallest phonological unit: whole handshape or feature? — 109
4.2.1	Handshape features — 110
4.2.2	Are handshape features contrastive in KSL? — 114
4.2.3	Minimal contrast for <i>selected fingers</i> — 115
4.2.4	Minimal contrast for joint position/finger configuration — 118
4.2.5	Minimal contrast for finger <i>spreading</i> and <i>crossing</i> — 122
4.2.6	Minimal contrast for thumb features — 124
4.2.7	Handshape features in KSL: summary and future directions — 125
4.3	Phonetic handshapes in KSL — 126
4.4	Phonemic analysis of handshape — 130
4.4.1	Minimal pairs for handshape — 131
4.4.2	Allophonic variation in KSL handshapes — 132
4.4.2.1	Thumb position conditioned by contact with body — 133
4.4.2.2	Finger flexion conditioned by contact with curved body part — 136
4.4.2.3	Aperture variation based on size of phonemic location — 138
4.4.3	Sources of handshapes in the lexicon — 144
4.5	Inventory of KSL handshapes — 148
4.6	Summary and future directions — 150

<b>5</b>	<b>Location — 152</b>
5.1	Introduction — 152
5.2	The Location parameter in the literature and phonological theory — 154
5.3	Theoretical approach to Location in this grammar — 161
5.4	Overview of locations in KSL — 163
5.5	Criteria for determining phonological locations — 168
5.6	Head — 171
5.7	Neck — 180
5.8	Trunk — 181
5.9	Leg — 186
5.10	Non-dominant limb (arm and h2) — 189
5.11	Neutral Space — 200
5.11.1	Are <i>planes</i> phonological locations in neutral space? — 205
5.11.2	Can neutral space be subdivided in KSL? — 210
5.11.3	Neutral space as a phonological location — 213
5.12	Lateral symmetry features (ipsi, contra, center positions) — 216
5.13	Indeterminate and complex locations — 227
5.14	Conclusion — 230
<b>6</b>	<b>Core Articulatory Movements — 232</b>
6.1	Introduction — 232
6.2	Movement in theoretical models — 236
6.3	Approach to Movement in this analysis using the Dependency Model — 244
6.4	Core articulatory movement in KSL: phonetics & phonology — 246
6.5	Minimal pairs in core articulatory movements — 252
6.6	Holds — 257
6.7	Path movement — 263
6.8	Hand-internal movement — 279
6.9	Orientation movement — 292
6.10	Complex movements (primary + secondary movement) — 298
6.11	Inventory of core articulatory movements — 303
6.12	Conclusion — 305
<b>7</b>	<b>Manner of Movement — 306</b>
7.1	Introduction — 306
7.2	Representing manner features and prosodic structure — 312

7.3	Path shape —	<b>317</b>
7.3.1	Straight path shape —	<b>322</b>
7.3.2	Arc path shape —	<b>322</b>
7.3.3	Circle path shape —	<b>326</b>
7.3.4	Zigzag path shape —	<b>327</b>
7.3.5	Circle+straight path shape —	<b>329</b>
7.3.6	90° path: [x-shape], [angle] —	<b>331</b>
7.3.7	Other path shapes —	<b>332</b>
7.4	Path size —	<b>334</b>
7.5	Single, repeated, and trill —	<b>336</b>
7.6	Return (unidirectional vs. bidirectional) —	<b>344</b>
7.7	Simultaneous vs. alternating —	<b>349</b>
7.8	Switch dominance —	<b>353</b>
7.9	Dispersed ('double contact' signs) —	<b>356</b>
7.9.1	'Double contact' signs in the literature —	<b>357</b>
7.9.2	Proposal for new manner feature: [dispersed] —	<b>362</b>
7.9.3	Working out what must be encoded in the phonology —	<b>368</b>
7.9.4	Applying <i>dispersed</i> and <i>axis</i> features to other phenomena —	<b>377</b>
7.9.5	Proposal for representation of dispersed signs —	<b>380</b>
7.9.6	Dispersed signs conclusion —	<b>382</b>
7.10	Other movement types —	<b>382</b>
7.11	Conclusion —	<b>387</b>
<b>8</b>	<b>Other distinctive features and characteristics of KSL signs —</b>	<b>389</b>
8.1	Articulators —	<b>389</b>
8.2	Mouth actions —	<b>392</b>
8.3	One- and two-handed signs —	<b>403</b>
8.3.1	Handedness —	<b>404</b>
8.3.2	Sign types —	<b>406</b>
8.4	Orientation —	<b>408</b>
8.5	Contact —	<b>413</b>
8.6	Unusual or unclear types of contrast —	<b>415</b>
<b>9</b>	<b>Conclusion and future directions —</b>	<b>418</b>
9.1	KSL in context: cross-linguistic overview —	<b>418</b>
9.2	Contributions of the book —	<b>419</b>
9.3	Future directions —	<b>420</b>

**Appendix 2: Representation of phonological structure in three models — 426**

**Appendix 3: Inventory of KSL Handshapes — 429**

**Appendix 4: Chart of Handshape minimal pair contrasts — 484**

**Appendix 5: Fingerspelling Alphabet in KSL (southwestern Kenya) — 485**

**Appendix 6: Motivated handshapes in KSL — 486**

**Appendix 7: Phonetic Locations in KSL Database — 487**

**Appendix 8: Chart of Location minimal pair contrasts — 488**

**Appendix 9: Inventory of KSL Locations — 489**

**References — 589**

**Index — 603**

