Universiteit Leiden
The Netherlands

Tunen syntax and information structure

Kerr, E.J.

Citation

Kerr, E. J. (2024, September 4). *Tunen syntax and information structure*. *LOT dissertation series*. LOT, Amsterdam. Retrieved from https://hdl.handle.net/1887/4054916

Version:	Publisher's Version
License:	Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden
Downloaded from:	https://hdl.handle.net/1887/4054916

Note: To cite this publication please use the final published version (if applicable).

Tunen syntax and information structure

Published by

LOT
Binnengasthuisstraat 9
1012 ZA Amsterdam
The Netherlands

phone: +31 20 525 2461

e-mail: lot@uva.nl
https://www.lotschool.nl

Cover illustration: House in Ndikiniméki painted by Augustine Ongbaboule, photographed in January 2022 by Elisabeth Jane Kerr.

ISBN: 978-94-6093-462-9
DOI: https://dx.medra.org/10.48273/LOT0676
NUR: 616

Copyright © 2024 Elisabeth Jane Kerr. All rights reserved.

Tunen syntax and information structure

Proefschrift

ter verkrijging van
de graad van doctor aan de Universiteit Leiden,
op gezag van rector magnificus prof.dr.ir. H. Bijl,
volgens besluit van het college voor promoties
te verdedigen op woensdag 4 september 2024
klokke 16:00 uur

door

Elisabeth Jane Kerr

geboren te Cambridge, Verenigd Koninkrijk
in 1996

Promotores:	Dr. Jenneke van der Wal Prof. Dr. Maarten Mous
Promotiecommissie:	Prof. Dr. Sjef Barbiers Prof. Dr. Lutz Marten (SOAS, University of London) Prof. Dr. Stavros Skopeteas (University of Göttingen) Dr. Fatima Hamlaoui (University of Toronto)

The research reported here was conducted as part of the VIDI project 'Bantu Syntax and Information Structure' (BaSIS; 276-78-001), funded by the Netherlands Organization for Scientific Research (NWO).

Contents

Acknowledgements . . . xiii

List of abbreviations . . . xvii

1 Introduction **1**

1.1 Introduction . . . 1

1.2 Structure of the thesis . . . 2

1.2.1 Preliminaries . . . 2

1.2.2 Grammatical overview . . . 3

1.2.3 Studies on Tunen syntax and information structure . . . 3

1.2.4 Discussion and conclusion . . . 4

1.2.5 Appendix and archival materials . . . 5

2 Background **7**

2.1 Introduction . . . 7

2.2 Information structure . . . 7

2.2.1 What is information structure? . . . 7

2.2.2 The referent/expression distinction and accessibility . . . 10

2.2.3 Thetics . . . 13

2.2.4 Topic and comment . . . 14

2.2.5 Focus and background . . . 15

2.2.6 On the nature of categories . . . 18

2.3 Generative models of syntax . . . 19

2.3.1 The reverse Y model of the grammar . . . 19

2.3.2 Structure building: Merge and Phase Theory . . . 20

2.3.3 Syntactic features . . . 23

2.3.4 A versus A'-phenomena 25
2.3.5 Variation and uniformity 26
2.3.6 Parametric approaches to linguistic variation 26
2.3.7 Where is information structure in the grammar? 27
2.4 Bantu syntax and information structure 28
2.4.1 Syntactic variation in Bantu 28
2.4.2 Information structure in Bantu 29
2.5 The Tunen language 33
2.5.1 Language context 33
2.5.2 Linguistic classification 35
2.5.3 Prior work on Tunen 37
2.6 Summary 41

3 Methodology **43**
3.1 Introduction 43
3.2 Conceptual framing 43
3.2.1 Positivism, parsimony, and falsifiability 43
3.2.2 The use of grammaticality and felicity judgements 46
3.2.3 The use of natural speech data and corpora 48
3.3 Primary data collection 49
3.3.1 Fieldwork stays 49
3.3.2 Positionality 51
3.3.3 Fieldwork questionnaires 52
3.3.4 Impact of COVID-19 54
3.4 Secondary data 56
3.4.1 Dugast (1975) text corpus 56
3.4.2 Other sources 57
3.5 Analysis 57
3.5.1 Dative/OLD 57
3.5.2 Audacity and Praat 59
3.6 Data organisation and archiving 59
3.6.1 Filenaming and data organisation 59
3.6.2 Archive 60
3.7 Limitations 61
3.8 Summary 62

4 Grammatical overview **63**
4.1 Introduction 63
4.2 Phonology 64
4.2.1 Phoneme inventory 64
4.2.2 ATR harmony 69
4.2.3 Rounding harmony 71
4.2.4 Utterance-final vowel reduction 72
4.2.5 Hiatus resolution 74
4.2.6 Tone 77
4.2.7 Loanword phonology 83
4.2.8 Iconicity and marginalia 83
4.3 The nominal domain 84
4.3.1 The noun stem 84
4.3.2 Nominal derivation and compounding 85
4.3.3 Noun classes and agreement 87
4.3.4 Adjectives/qualification 91
4.3.5 Quantification 92
4.3.6 Demonstratives 93
4.3.7 Order of nominal modifiers 95
4.3.8 Pronominals 97
4.3.9 Possession and the associative 100
4.3.10 Prepositions/expressing location 101
4.3.11 Specificity and definiteness 104
4.4 The verbal domain 106
4.4.1 The verb stem 106
4.4.2 Split predication and argument indexation 106
4.4.3 Verbal derivation 108
4.4.4 Tense, mood, and aspect 109
4.4.5 Adverbials 114
4.5 The clausal domain 117
4.5.1 Canonical word order 117
4.5.2 Ditransitives 118
4.5.3 Copular clauses 119
4.5.4 Relative clauses 120
4.5.5 Coordination and subordination 122
4.5.6 Complementation 124
4.5.7 Imperatives 125
4.5.8 Question formation 127
4.5.9 Information structure 135

4.6 Other word classes 135
4.6.1 The vocative particle 135
4.6.2 Discourse particles and exclamations 137
4.6.3 Ideophones and onomatopoeia 138
4.6.4 Song and drum language 139

5 The expression of information structure in Tunen 141
5.1 Introduction 141
5.2 Canonical word order S-Aux-O-V-X 142
5.2.1 S-Aux-O-V-X as the canonical word order 142
5.2.2 S-Aux-O-V-X for object focus 145
5.2.3 No S-Aux-O-V-X for subject focus 149
5.2.4 S-Aux-O-V-X for non-argument focus 150
5.2.5 S-Aux-O-V-X for predicate-centred focus 152
5.2.6 S-Aux-O-V-X in double object constructions 154
5.2.7 Section summary 157
5.3 Non-canonical word order 158
5.3.1 VO order 158
5.3.2 Discontinuity 167
5.3.3 Fronting 167
5.3.4 The right periphery 170
5.3.5 Section summary 170
5.4 Clefts and the marker *á* 171
5.4.1 Copular clauses in Tunen 171
5.4.2 Relativisation 174
5.4.3 Clefts 175
5.4.4 Section summary 182
5.5 Left-peripheral topics (*ø*, *ɔ*, *aba/áká*) 183
5.5.1 Zero-marking 183
5.5.2 *ɔ* 186
5.5.3 *aba/áká* 187
5.5.4 Multiple topics 189
5.5.5 Contrastive topics 190
5.6 Functional passives (verbal participle *-átɔ*; *bá-* impersonals) 191
5.6.1 Verbal participles *-átɔ* 192
5.6.2 Impersonal *bá-* 193
5.6.3 The middle prefix *bɛ́-* 194
5.7 Referent expression in discourse 195
5.8 Comparison to other Bantu languages 199

5.9 Summary 201

6 OV word order and derivational disharmony 203
6.1 Introduction 203
6.2 Empirical investigation 204
6.2.1 On consistency across TAM contexts 204
6.2.2 On consistency across IS contexts 210
6.2.3 On the nature of the S slot 215
6.2.4 On the nature of the Aux slot 216
6.2.5 On the nature of the O slot 218
6.2.6 On the nature of the V slot 227
6.2.7 On the nature of the X slot 227
6.2.8 Section summary 229
6.3 Derivations of disharmony: Background 230
6.3.1 S-Aux-O-V-X as a disharmonic order 230
6.3.2 Formal models of Aux-O-V disharmony 231
6.3.3 Analysis type 1: Roll-up movement in Germanic 232
6.3.4 Analysis type 2: Base-generation of Aux-O-V in West Africa 234
6.3.5 Analysis type 3: Verbal head movement in Bantu 237
6.4 A basic analysis for Tunen 239
6.4.1 Determining V height 239
6.4.2 Determining headedness 244
6.4.3 Analysis type 1: Tunen Aux-O-V by FOFC-style roll-up . . . 247
6.4.4 Analysis type 2: Tunen Aux-O-V by base-generation 248
6.4.5 Analysis type 3: Tunen Aux-O-V by verbal head movement 249
6.5 Teasing apart the analyses 252
6.5.1 Test 1: Deriving Bantu verbal morphology 252
6.5.2 Test 2: Aux-O-V with O-V-X 257
6.5.3 Test 3: In-situ subjects 260
6.5.4 Test 4: Extension to ditransitives 267
6.5.5 Test 5: Extension to modified DPs 271
6.6 Summary of analyses 274
6.7 Reflections on typology 276
6.7.1 Tunen within Benue-Congo and Africa more broadly . . . 276
6.7.2 Tunen within a structural typology of disharmonic word orders 279
6.8 Reflections on diachrony 279
6.8.1 OV in Niger-Congo: old or innovative? 279
6.8.2 The areal argument 281

6.8.3 Previous accounts of OV in Tunen 283
6.8.4 Generative perspectives on word order change 284
6.8.5 Proposal for Tunen 285
6.9 Conclusion 287

7 Discontinuous DPs 289
7.1 Introduction 289
7.2 Background 294
7.2.1 Defining discontinuity 294
7.2.2 Inventory of discontinuity 296
7.2.3 Discontinuity crosslinguistically 297
7.2.4 Theoretical analyses 298
7.2.5 Prior work on discontinuity in Tunen 304
7.3 Empirical investigation 307
7.3.1 Information-structural restrictions on discontinuity . . . 307
7.3.2 Syntactic restrictions on discontinuity 313
7.3.3 Empirical summary 327
7.4 Formal analysis 328
7.4.1 Apparent discontinuity analyses 328
7.4.2 True discontinuity analyses 333
7.4.3 Proposal for Tunen 342
7.5 Points for further study 345
7.5.1 Extension to different modifiers 345
7.5.2 Extension to multiple modifiers 346
7.5.3 Discontinuous modifiers within the postverbal domain . . 348
7.5.4 Discontinuous subject DPs 348
7.5.5 The comparative Bantu context 350
7.6 Conclusion 351

8 Discussion and conclusion 353
8.1 Summary 353
8.1.1 Preliminaries 353
8.1.2 Grammatical overview 354
8.1.3 The expression of information structure 354
8.1.4 OV word order and derivational disharmony 355
8.1.5 Discontinuous DPs 357
8.2 Implications 359
8.2.1 The strong non-influence of IS hypothesis 359
8.3 Limitations 361

8.4 Topics for further research 362
8.4.1 Features and argument licensing 362
8.4.2 The syntax of subjects 363
8.4.3 The diachrony of word order change in the Mbam languages 365
8.5 Conclusion 366

References 367

Appendix: Sample texts 391
9.1 Text 1: QUIS map task dialogue 392
9.2 Text 2: Dialogue after dancing 407
9.3 Text 3: Cooking *kok* recipe 426
9.4 Text 4: Short story *The chicken and the partridge* 442

Samenvatting in het Nederlands 449

Résumé en français 457

Curriculum Vitae 465

Acknowledgements

First of all, I thank Jenneke van der Wal and Maarten Mous for all their support with this PhD project. Having represented PhDs at local and national level, I can say with full confidence that I was very lucky to have you both as my supervisors. Jenneke, thank you above all for providing many opportunities to grow, many of which are not directly reflected in these pages. Maarten, thank you for your generosity in sharing your knowledge and materials on Tunen and its relatives, and for providing a different perspective on linguistics that I learned a lot from.

Next, I thank the other members of the Bantu Syntax and Information Structure (BaSIS) project. Zhen Li, the project (and our office) was much better with you in it. If I could re-do it, I would just arrange it so we could have overlapped in Leiden more often. Thank you to Allen Asiimwe, Patrick Kanampiu, Amani Lusekelo, Ernest Nshemezimana, and Nelsa Nhantumbo — I learned a lot from you all in our 'BaSIS tea' Skype meetings, email exchanges, and the precious in-person meetings.

The biggest thanks go to everybody who helped me during my field stays in Cameroon. Je remercie alors tout le monde à Ndiki qui m'a accuillé dans le communauté et m'a aidé à apprendre un peu de la langue et culture des banen. Merci aux tous les membres de l'Équipe de Recherche sur la Langue Tunen (ERLT): Patient (JP) Batanoken, Edmond Biloungloung, Emmanuel Enganayat, Alain Georges Essomo, Angel Molel, Pierre Molel, et Jeanne Ong'molaleba. Merci aussi aux autres consultants, surtout Étienne Ondjem et Daniel Mbel, et tous les autres membres du Comité du Dévéloppement de la Langue Tunen (CODELATU). *Mɛ ná biənú hólíə́ ɛmbáta ōō !* Je remercie aussi tout le monde à Ndiki pour l'accueil, surtout papa Daniel, mama Augustine et Esther, mama Aïsha et sa famille, et les membres de l'UEBC. À Yaoundé, je remercie la famille Mbotto-Boyd (Roger, Vivienne, Jonetta, Eleana, Yoel, et Ginger), avec qui je me pouvais sentir toujours à l'aise. Thank you to Ginger Boyd for sharing Mbam data and for facilitating access to the SIL library in

Yaoundé, and to Emmanuel-Moselly Makasso and Emmanuel Ngue Um for helping arrange my research visits to Cameroon.

Thank you to all the syntactician, Africanist, and descriptive linguist colleagues at LUCL for various feedback over the years: Felix Ameka, Azeb Amha, Sjef Barbiers, András Bárány, Kate Bellamy, Yiya Chen, Lisa Cheng, Jenny Doetjes, Marion Elenbaas, Rik van Gijn, Hilde Gunnink, Andrew Harvey, Marian Klamer, Maarten Kossmann, Anikó Lipták, Victoria Nyst, Sara Petrollino, Thilo Schadeberg, and Rint Sybesma. And thank you to my fellow PhDs, especially Astrid van Alem, Chams Bernard, Maarten Bogaards, Hang Cheng, Louise Friis, Timothy Mac Hadjah, Martin Kroon, Ami Okabe, Axel Palmér, Rasmus Puggaard-Rode, Laura Smorenburg, Ahmed Sosal, Menghui Shi, Jiaqi Wang, Andrew Wigman, Jiang Wu, Qing Yang, and last-but-not-least-long-last name Sarah von Grebmer zu Wolfsthurn, who deserves a special mention for being an excellent friend right from day 1. I am also grateful to Jurgen Lingen and Katja Lubina for supporting the PhD programme at LUCL.

Thank you to my fellow PhD/postdoc representatives Niko Kontovas and Jackie Ashkin, and to the other University Council members who collaborated with us to improve PhD/postdoc affairs at Leiden. I would like to acknowledge in particular Janneke Vader for all her unacknowledged work helping with corona policy and PhD welfare, which I know I and many other junior researchers benefitted from.

Three months of the fourth year of this project were spent as a short-term visiting PhD fellow at the Linguistics Department of Potsdam University. Thank you to the late Gisbert Fanselow for providing me with this opportunity to research the verb phrase and discontinuous noun phrases from a more typological perspective, and to the SFB 1287 for financing my stay within subproject C08. Thank you to Nina Adam, Raúl Bendezú Araujo, Doreen Georgi, Andi Hölzl, Andreas Pregla, Wakweya Olani Gobena, and Malte Zimmermann for feedback during my visit and for welcoming me in the department despite Gisbert's untimely passing.

Next, I thank external committee members Lutz Marten, Stavros Skopeteas, and Fatima Hamlaoui for their helpful comments, which have improved the final version of this text. I also received useful feedback from many other people I met at conferences and workshops over the years, whom I unfortunately do not have space to thank here other than as the audiences of ACAL51-52/53/54, Bantu01d, Bantu8/9, the BaSIS project halfway workshop and final conference, CALL49/50/52, the Cambridge University SyntaxLab, CNRS-LLACAN African linguistics seminars, Humboldt-Universität zu Berlin Afrikalinguistiches Kolloquium, LAEA2, the Leiden University ComSyn series, Potsdam University Syntax/Semantik Kolloquium, SLE55, Utrecht University Syntax Interface Lectures, and WOCAL10. Thank you all.

I acknowledge the financial support of the Bantu Syntax and Information Structure (BaSIS) NWO VIDI project (276-78-001) that generously funded my PhD posi-

tion, including the aforementioned fieldwork stays and conference trips. I would also like to acknowledge the SOAS Faculty of Languages and Cultures MA scholarship I received in 2017, which meant that I was able to continue on to graduate education in the first place.

On a personal note, this PhD project involved moving away from home, and then moving away from this second home for research stays. I thank my dojomates in Delft, London, Leiden, Ndikiniméki, and Berlin for providing me with a community away from home and a centre beyond linguistics. I am also grateful to my oldest friends Jordan, Michi, and Sam for their continued friendship over the years, to linguist friends around the world, especially my beloved fellow Kinguist Connor McCabe, to Neige Rochant for help with the French summary, and to Leiden friends outside of linguistics, especially Chiara, Tika, Ed, Tanja, Tycho, Loes, Cas, and Bert.

I thank my family for the support and stoicism — I thank my mum and my brother Andrew, and thank and miss my dad and my brother Alastair. Thank you also to my cousin Martin and Ali and Ryan, and to the Vertegaal family for welcoming me in the Netherlands.

Finally, I thank Xander, not just for all the proofreading, stroopwafel diplomacy, and tolerance of my trial-and-error approach to the acquisition of Dutch discourse particles, but more generally for being a wonderful partner throughout these years.

List of abbreviations

Glosses

1, 2, 3...	Bantu noun class
1SG, 1PL	1st person singular, plural
2SG, 2PL	2nd person singular, plural
3S(G), 3P(L)	3rd person singular, plural
AND	andative/thither
APPL	applicative
ASSOC	associative (= connective)
AUG	augment (pre-prefix)
B	Yucatec Maya person marker B (gloss from Skopeteas et al. 2020)
CAUS	causative
CL	classifier
CL.AN	class animate (gloss from Skopeteas et al. 2020)
CJ	conjoint
CONTR	contrast (gloss from Mous 2003)
COP	copula
DEF	definite
DEM	demonstrative
DEP	dependent
DIM	diminutive
DISC	discourse
DIST	distal
DJ	disjoint
DUR	durative/pluractional

EMPH	emphatic
ERG	ergative
EN	English
EXCL	exclamation
FOC	focus marker
FR	French
FUT	future tense
FV	final vowel
I	agreement prefix of Eton agreement pattern one (gloss from Van de Velde 2008)
IDEO	ideophone
INANIM	inanimate
INF	infinitive
INCMPL	incompletive
INTJ	interjection
IPFO	imperfective "non-passé" (gloss from Stanley 1997)
LOC	locative
MID	middle
NEG	negation
NF	suffix of the non-final form of the Eton hesternal and hodiernal past perfective (gloss from Van de Velde 2008)
NOM	nominal, nominative
NMLZ	nominaliser
NPPR	non-final form of the Eton personal pronominal (gloss from Van de Velde 2008)
OBJ	object
SM	object marker
PASS	passive
PERF	perfect
PFV	perfective
PM	predicative marker (gloss from Creissels 2005)
PO	postposition (gloss from Creissels 2005)
POSS	possessive
POST	postposition (gloss from Sande et al. 2019)
PREP	preposition
PRN	pronoun
PRS	present tense
PROC	procedural tense
PROX	proximal

PRP	perfect of Eton recent past (quasi-auxiliary) (gloss from Van de Velde 2008)
PST	past tense
PST1	first-degree past tense (just now)
PST2	second-degree past tense (hodiernal)
PST3	third-degree past tense (hestiernal)
PST4	fourth-degree past tense (ancient)
PTCL	particle
PTCP	participle
Q	question particle
RECIP	reciprocal
RED	reduplicant
REL	relative
REP	repetitive
RVS	reversive/separative
SBJV	subjunctive
SM	subject marker
TAM	tense/aspect/mood marker
TM	tense/mood marker
V	agreement prefix of Eton agreement pattern five (gloss from Van de Velde 2008)
VEN	venitive/hither
VOC	vocative

In-text abbreviations

Adv	adverb
ATR	advanced tongue root
Aux	auxiliary
BaSIS	Bantu Syntax and Information Structure research project
C	complementiser node (pragmatic domain)
CABTAL	Cameroonian Association for Bible Translation and Literacy
CARP	Causative-Applicative-Reciprocal-Passive
CHAOS	Consequences of Head Argument Order on Syntax research project
CODELATU	Comité de développement de la langue Tunen [Committee for the development of the Tunen language]

Cop	copula
Comp	complement (sister of head)
Compl	complement clause
DEA	Diplôme d'Etudes Approfondies [Diploma of Advanced Studies]
DO	direct object
DP	determiner phrase (maximal nominal projection)
EPP	Extended Projection Principle
ERLT	Équipe de recherche sur la langue Tunen [Research team on the Tunen language]
Gen	genitive
IAV	immediate after verb
IBV	immediate before verb
IO	indirect object
IS	information structure
LF	Logical Form (post-syntactic interface)
Mod	nominal modifier
MSB	Macro-Sudan Belt
mvt	syntactic movement
Neg	negation head
NOM	nominalised
O	object
OLD	Online Linguistic Database
PF	Phonological Form (post-syntactic interface)
PIC	Phase Impenetrability Condition
Pol	polarity head
PP	prepositional phrase
QUD	Question Under Discussion
QUIS	Questionnaire on Information Structure (Skopeteas et al. 2006)
S	subject
SIL	Summer Institute of Linguistics (Christian missionary linguist organisation)
Spec	specifier (sister of XP/X', daughter of XP)
T	tense node (inflectional domain)
TAM	tense/aspect/mood marker
TLA	The Language Archive
TM	tense marker
TP	tense phrase (inflectional domain)
UG	Universal Grammar
V	verb

V-tr	transitive verb
V2	verb-second
*v*P	verbal projection above VP and below VoiceP
VP	verb phrase
VPSH	Verb-Phrase Internal Subject Hypothesis
X	other
XP	phrase of category X

Notation conventions for linguistic examples

↓	tonal downstep
H	floating high tone
L	floating low tone
á	high-toned a
a	low-toned a
	Transcription line (phonetic)
/ /	Underlying representation line
[ ]	Surface pronunciation
< >	Orthographic representation
-	Morpheme break
=	Clitic boundary
*	Ungrammatical
#	Grammatical but infelicitous (not possible within the given discourse context)
?	Dispreferred, or unclear judgement
%	Variable judgements between different consultants
(X)	X is optional or elided
(*X)	Ungrammatical if X is included
*(X)	Ungrammatical if X is omitted
{X} ... {X}	Possible with X in either position
{X|Y}	Possible with X or Y in this position
$[X]_{FOC}$	X is focussed
Intd.	Intended interpretation
Lit.	Literal interpretation

CHAPTER 1

Introduction

1.1 Introduction

The language Tunen (also known as 'Nen' and referred to in Tunen as *tunəni*) is predominantly spoken in the Centre and Littoral regions of Cameroon by somewhere over 35,000 people, likely numbering around 70,000-100,000 people today (Mous 2003; Gordon 2005; Chapter 2 section §2.5). It is a Niger-Congo language classified under the Narrow Bantu subfamily, with code A44 in the Guthrie classification of Bantu languages (Guthrie 1948, 1967-1971; Maho 2003, 2009; Hammarström 2019) and code [tvu] in the ISO 639-3 classification.

Tunen is well-known in the linguistic literature on Bantu languages as being the only Bantu language with consistent object-verb (OV) word order, with all other described Bantu languages having VO basic word order (Bearth 2003; Dugast 1971; Mous 2003, 2014, 2005). Tunen also shares other unusual linguistic features with its neighbouring languages of the Mbam subgroup of A40/A60 Bantu languages, including more analytical morphosyntax than the canonical Bantu language, the loss of final vowels and tone lowering in utterance-final position, and an advanced tongue root (ATR) vowel harmony system (Dugast 1971; Van Leynseele 1977; Van der Hulst et al. 1986; Bancel 1991; Mous 1986, 2003; Boyd 2015). Because of these unusual properties, the proper placement of Tunen as Narrow Bantu versus (non-Bantu) Bantoid is of some debate, and comparative studies of Bantu often mention Tunen as a particularly unusual language or simply exclude it from further consideration.

In this thesis, I build on the foundation of prior descriptive work on Tunen to investigate its unusual syntax in more detail. I look specifically at the extent to which information structure influences Tunen syntax, based on the observation that information structure is core to the syntax of canonical Bantu languages (Downing and Hyman 2016; Downing and Marten 2019; Van der Wal 2015, i.a.). Investigating the relationship between information structure and Tunen syntax therefore fits into the broader question as to how dissimilar Tunen's grammar is from (other) Bantu. The central research question of the thesis is given in (1) below.

(1) **Central research question**
To what extent is Tunen's syntax influenced by information structure?

To answer this research question, I first provide the reader with background information on Tunen and the methodological and theoretical background for this thesis, as well as an overview of Tunen grammar that introduces the necessary background on the language. I then present three studies on the interaction between syntax and information structure in Tunen and a conclusion which ties together the key findings. I briefly describe the contents of each chapter below.

1.2 Structure of the thesis

1.2.1 Preliminaries

This thesis begins with preliminary information. In Chapter 2, I provide background information on both the conceptual basis for the thesis and on the Tunen language. The conceptual background considers key concepts that are necessary in order to answer this thesis' core research question on the relationship between syntax and information structure in Tunen. I thus provide an overview of key concepts in information structure, background on the general syntactic framework adopted in this thesis, and discussion of the importance of Bantu languages in furthering understanding of the interaction between syntax and information structure crosslinguistically. The background on the Tunen language gives a brief description of the language context, situating Tunen in an areal and typological context, and provides an overview of prior work on the Tunen language.

Chapter 3 presents the methodology used in this thesis, beginning with the conceptual framework adopted for the study. I then discuss the methodology for data collection, which is based on the overarching methodology of the NWO Bantu Syntax and Information Structure (BaSIS) research project in which this project was conducted. I therefore introduce the BaSIS project methodology (Van der Wal 2021),

discussing how the information-structural categories introduced in Chapter 2 were investigated in field research. I give some more detailed discussion of my personal approach to field research and I discuss my use of secondary sources. The field data I collected, which form the main empirical basis of this thesis, are available alongside this thesis in the associated archival deposit (Kerr in prep.). The chapter concludes with an overview of the format and analysis of this dataset and details on how these archived materials can be accessed.

1.2.2 Grammatical overview

The thesis continues with Chapter 4, which presents an overview of Tunen's grammar, introducing the phonology and transcription system adopted throughout this thesis and giving an overview of Tunen's morphosyntax. This chapter draws on previous work on Tunen's grammar, especially Dugast's (1971) book-length descriptive grammar, Mous' (2003) grammar sketch, and the (morpho)syntactic studies by Kongne Welaze (2010) and Mous (1997, 2005, 2014). However, it also supplements these main sources with new insights from fieldwork and highlights areas where my data differ from the previous authors'.

The main goal of the chapter is to provide the necessary linguistic overview of the Tunen language in order to prepare the reader for the more detailed linguistic studies that form the subsequent chapters of this thesis. I therefore do not go into the full level of detail required for an independent grammar sketch, instead referring the reader to appropriate sources. An exception is for topics which are not covered explicitly in previous descriptions, such as the relative order of nominal modifiers, for which I provide slightly more detailed explanation.

While the later chapters of this thesis are written within the framework of generative syntax, the grammatical overview in Chapter 4 is intended to be accessible to more general audiences in linguistics and can be read as a stand-alone chapter.

1.2.3 Studies on Tunen syntax and information structure

The next three chapters of this thesis discuss the influence of information structure on Tunen syntax, each serving to address the central research question introduced in (1) above.

Chapter 5 considers how information structure is expressed in Tunen, providing a descriptive overview of the interaction between Tunen syntax and information structure. I consider different types of focus, topic, functional passive constructions, and referent expression over discourse. Finally, I compare the findings for Tunen to other Bantu and Bantoid languages, showing that Tunen has relatively

little influence of information structure, thereby illustrating the diversity found in the interaction between syntax and information structure in the Northwestern Bantu/Bantoid languages.

Chapter 6 considers Tunen's unusual OV word order, which can be more specifically described as the subtype S-Aux-O-V-X (or S-TM-O-V-X). I test previous accounts of Tunen's syntax in more detail, conducting an empirical investigation of the extent to which this OV order is conditioned by information-structural considerations versus other factors such as TAM context, object type, or clause type. I then provide the first formal analysis of OV syntax in Tunen, for which I draw up and evaluate three different possible analyses within a generative syntax framework. Finally, I reflect on the relation between OV in Tunen to OV/VO variation in West/Central Africa and more broadly, and I consider the potential grammaticalisation of OV order from a VO proto-language.

Chapter 7 covers another core feature of Tunen syntax that is unusual both from a Bantuist and a general typological perspective, namely discontinuous noun phrases (DPs) of the form noun-verb-modifier (S-O-V-Mod). I show evidence that these constructions are less influenced by information structure than is expected both from work on discontinuous DPs crosslinguistically and from previous observations of S-O-V-Mod constructions in Tunen. I then propose an analysis in which the presence of the discontinuous DP construction is related to the OV word order discussed in Chapter 6, using these discontinuous DP data as a case study to motivate the choice of formal analysis of Tunen clausal syntax between the options discussed in Chapter 6.

1.2.4 Discussion and conclusion

Chapter 8 concludes the thesis by taking stock of the main findings. I present the first formal model of Tunen syntax in consideration of its relation with information structure, highlighting empirical predictions and the possible extension from this synchronic model to a diachronic model. I then reflect on the implications of this study of Tunen's syntax and information structure both for understanding of syntactic variation in Bantu languages and for the relationship between syntax and information structure more broadly. Specifically, I consider how information structure should be formalised in theoretical models of Tunen's syntax, presenting a strong hypothesis in which information structure is not part of the syntax component of Tunen grammar. Finally, I consider the limitations of this work and highlight areas of interest for further study.

1.2.5 Appendix and archival materials

In order to give a sense of the language, four transcribed, interlinearised and translated texts of natural speech are provided in the Appendix. These texts form part of the audiovisual corpus of field data which is the main empirical base of this thesis. All the data — including transcriptions, original recordings, and metadata — are available open access as part of the archival materials associated with this thesis, archived with *The Language Archive* (Kerr in prep.). Details on how to access these materials are given at the end of Chapter 3 (section §3.6.2).

CHAPTER 2

Background

2.1 Introduction

As this thesis sets out to investigate the relationship between syntax and information structure in Tunen, it is necessary to lay out some conceptual background on syntax, information structure, and the Tunen language. This chapter therefore starts by introducing the conceptualisation of and key terms relating to information structure adopted in thesis (section §2.2). Secondly, I introduce the formal approach to syntax followed (section §2.3), where I provide the necessary background detail for the non-expert reader to be able to understand the studies in the following chapters of the thesis. Next, I discuss the relevance for the Bantu language family for understanding the interaction between syntax and information structure (section §2.4), thereby contextualising the choice of research question introduced in the previous chapter. I then provide background information on the Tunen language and previous work on it (section §2.5). Finally, section §2.6 concludes.

2.2 Information structure

2.2.1 What is information structure?

A basic assumption about language is that conversations involve the exchange of information. We do not however throw around sounds and concepts without re-

strictions — in order for a speaker or signer to make sure the information is properly received by the addressee, it must be structured in such a way that it is understandable. Some of the information conveyed will be new to the addressee (as formulated in pragmatic theories as the requirement to make your contribution relevant; see e.g. Grice 1975, 1989; Sperber and Wilson 1995). This new and noteworthy information must be anchored to the addressee's existing knowledge about the world. For example, the new information conveyed by the predicate IS LATE is anchored to the subject *The teacher* in the English sentence (2).

(2) Context: What's happening with the teacher?
The teacher is late.

A language's grammar provides multiple means to facilitate fitting information together in this kind of way, such as intonational marking or syntactic contiguity—notice that the new information is grouped together at the end of the sentence in the English example just provided in (2). An English speaker would not attempt to convey the same meaning with a sentence (3a), where the information is broken up, and equally, in most contexts it would be odd for the speaker to pronounce the sentence as (3b), because the pitch accent (indicated by the capitals) in English is expected to correspond here with the locus of new information (see e.g. Jackendoff 1972). Similarly, example (3c) is grammatical but would be a confusing answer to the question, as this syntactic construction of clefting is used in English to highlight the new information, which in this context is not the teacher (as that information was already in the context question).[1]

(3) Context: What's happening with the teacher?

a. *Late the is teacher.

b. #The TEACHER is late.

c. #It's the teacher who's late.

By using the right linguistic signals, like using an appropriate syntactic construction and intonation in (2), the speaker/signer can make sure their information is structured in such a way that the information can be properly processed by the addressee at that point in the discourse. This idea is what is known as *information*

[1]Here, I use an asterisk to indicate the ungrammaticality of the example sentence, as it is so badly-formed for English that it would not be licit in any context. For sentences that are grammatical but are not appropriate for the given discourse context, i.e., infelicitous, the # sign is used. An overview of example presentation conventions is given in the Abbreviations list, and further discussion on the use of grammaticality versus infelicity judgements will be provided in Chapter 3 section §3.2.2.

structure. As it relates to how information is put together when forming a sentence, it is also sometimes referred to as *information packaging* (Chafe 1976, 1987).

Information structure — abbreviated to IS — can be marked using different linguistic strategies, such as intonation, stress, word order change, verbal conjugations, and dedicated morphological markers (see Féry and Ishihara 2016b for illustration across different languages). IS often relates to felicity and therefore interacts with pragmatics, but it can also affect the grammaticality of a judgement and therefore affect the semantics (for example, the truth conditions of '*I have eaten the chili*' are different from those of '*I have eaten only the chili*', where having also eaten snacks from the fridge falsifies the second statement but not the first). IS can therefore be visualised as forming a web between the different parts of grammar, as in Fig. 2.1.

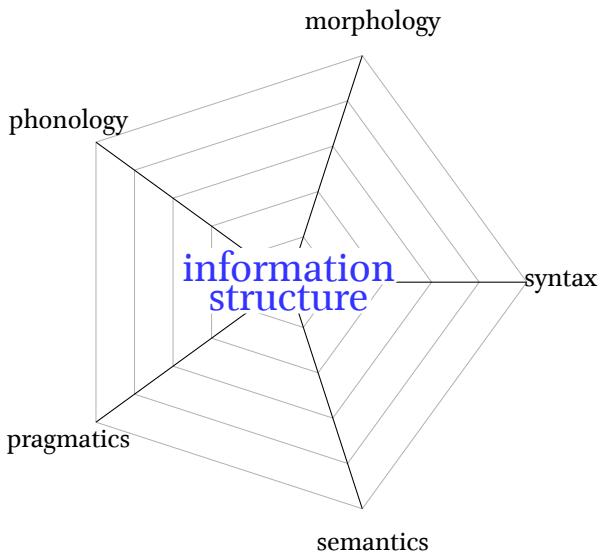


Figure 2.1: Visualisation of information structure as a web between different components of grammar.

While IS can be marked by different parts of the grammar, different languages use different strategies to different extents. This is visualised in Fig. 2.2: some languages may make more use of phonological means (like the use of pitch accent in English), while others may use dedicated morphological markers to convey the same types of information. In this thesis, I investigate the extent to which IS interacts with syntax in Tunen, thus covering only part of the web in Fig 2.1. The choice for studying the syntax/IS relationship is motivated in section §2.4, where we will see that it is a key mapping for many Bantu languages. The hypothesis then is that

Bantu languages mark IS with syntax more so than many other languages do (and so can be thought of looking something more like Fig. 2.2*b* than Fig. 2.2*a*).

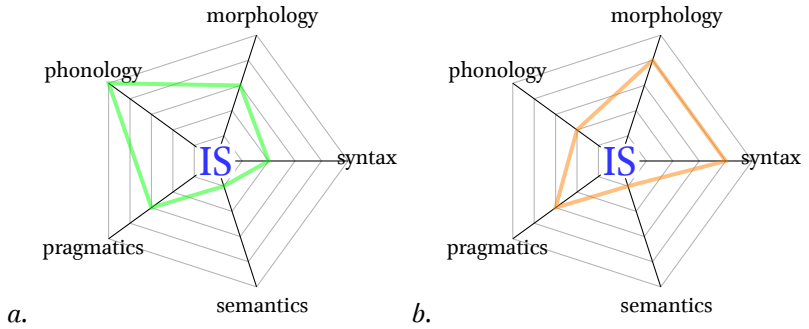


Figure 2.2: Visualisation of how languages can differ in the extent to which different parts of the grammar are used to mark information structure (coloured lines). A type *a* language would primarily mark IS via phonological methods (e.g. intonation), while type *b* would primarily use morphosyntactic strategies.

The goal of this thesis is to study the mapping between syntax and IS in Tunen, as part of a broader research programme into the extent to which IS influences syntax in the world's languages. One challenge in this kind of comparative research on IS is that there are a large number of terms and a variety of definitions of the key concepts in the literature (Féry and Ishihara 2016a:1-2). The next subsections will therefore introduce the concepts and definitions used in this thesis, which follow the conventions of the broader Bantu Syntax and Information Structure (BaSIS) project in which this thesis project was conducted (cf. Van der Wal et al. to appear).

2.2.2 The referent/expression distinction and accessibility

Firstly, it is important to understand the terminological distinction between a *referent* and an *expression*. A referent is something in the real world (or more precisely, in the mental conceptualisation of the world in conversational participants' heads). Referents include not only people, animals, and things, but also events. An expression, on the other hand, is the linguistic material used to refer to a referent. Importantly, referents and expressions do not have a 1-to-1 mapping. For example, the English and French words *spoon* and *cuillère* are two different expressions that (can) map to the same referent (many-to-1 mapping). Within a stretch of discourse, the same referent may be referred to by multiple different means, such as a full noun phrase *the spoon* in contrast to a pronoun *it* (1-to-many mapping).

A referent changes in its *accessibility* (also known as *activation status*) over the course of discourse. This notion of accessibility relates to the cognitive processing of referents in discourse, building on the more general principle in cognition that we cannot pay attention to everything at all times, and rather are constrained by factors such as working memory (Chafe 1976, 1987; Ariel 2001). A key approach by Chafe (1976) classifies referents into three categories: *new*, *semi-active*, and *given*. On first mention of a referent, that referent is new and accorded attention. As the discourse continues, this referent loses activation status, becoming part of the already-known information, i.e., becoming given. A semi-active referent is one that may be more easily retrievable than a fully new referent but is not fully active, which may be due to recent mention or due to being more easily retrievable than other referents (e.g. conversational participants and known objects such as 'the moon').

Work investigating the relationship between the cognitive status of referents and the linguistic strategies used to express them has found a general pattern that more active referents are referred to with less linguistic material. This inverse relationship between degree of accessibility and degree of linguistic encoding has been formalised under the *Givenness Hierarchy* (Gundel et al. 1993) and the *Accessibility Hierarhcy* (Ariel 2001), as given in (4)-(5) below.

(4) **The Givenness Hierarchy**

in focus	> activated	> familiar	> uniquely identifiable	> referential	> type identifiable
{it}	{that/this/this N}	{that N}	{the N}	{indefinite *this* N}	{*a* N}

(Gundel et al. 1993:275)

(5) **The Accessibility Hierarchy**

Full name + modifier > full name > long definite description > short definite description > last name > first name > distal demonstrative + modifier > proximate demonstrative + modifier > distal demonstrative + NP > proximate demonstrative + NP > distal demonstrative (-NP) > proximate demonstrative (-NP) > stressed pronoun + gesture > stressed pronoun > unstressed pronoun > cliticized pronoun > verbal person inflections > zero

(Ariel 2001:31)

For example, pronouns (e.g. *it*) — found towards the end of each hierarchy — may be used when a referent has just been mentioned in the discourse. In contrast, more linguistic material may be used to introduce or re-activate a referent, such as the use of a full noun phrase ('the man') or a definite description ('that man over there that we saw yesterday'), which are found on the other end of the hierarchy.

The choice of expression affects the felicity of a sentence, but not its grammaticality. This can be illustrated by the following two versions of a simple English stretch of a made-up story, where (6a) provides a natural (if boring) example, and (6b) illustrates how the same story could be conveyed using a different means of referent encoding.

(6) a. My colleague Sarah sent an email. She thought it was clear, but when she got a response, the recipient clearly hadn't understood her points. She was pretty frustrated.

b. My colleague Sarah sent an email. My colleague Sarah thought it was clear, but when my colleague Sarah got a response, the recipient clearly hadn't understood my colleague Sarah's points. My colleague Sarah was pretty frustrated.

None of the sentences in (6b) are ungrammatical, but the text stands out as being highly unnatural due to the repetition of the heavily-encoded expression 'my colleague Sarah'. Notice, as well, that heavy encoding leads to more words being used to convey the same basic message, making communication less efficient. At the same time, using less encoding relies on the belief that the addressee will still be able to pick out the referent, showing a trade-off in communicative content and efficiency. Heavier encoding is sometimes needed — it would be risky to have begun the same discourse with (7), for example, as the addressee would likely not know who was being referred to (and possibly have to interrupt to ask for clarification).

(7) She sent an email. [...]

Understanding referent expression therefore relates to observing how speakers/signers find a balance between minimal and heavier encoding. So far, the examples show less encoding being used after the referent has been introduced (notice how in (6), the referent MY COLLEAGUE SARAH is introduced with a modified noun phrase and then referred to in the next sentence with the pronoun 'she', i.e., less encoding). There are however other factors that may influence how heavily encoded a referent, such as the presence of intervening syntactic material; see Ariel (2001) for an overview. I will discuss this for Tunen in Chapter 5 section §5.7, where I show that linguistic distance, temporal distance, grammatical role (subject versus object) and valency of the predicate are relevant factors for the choice of referent expression in Tunen.

Both the Givenness Hierarchy and the Accessibility Hierarchy make similar observations. One weakness of the Givenness Hierarchy is that it was formulated

and illustrated with the pattern found in English, and is therefore less easily transferrable to the patterns found in other languages. In this thesis I therefore adopt the terminology of the Accessibility Hierarchy, which provides a broader set of labels that can be applied to different languages. Note here that a language is not expected to have all of the expressions given in (5); rather, the prediction is that for the expressions that the language has, they will be ordered from longer to shorter expression in inverse correlation to the accessibility of the referent. I will highlight some differences in minimal referent encoding between Tunen and other Bantu languages in Chapter 5. I also provide 4 sample texts in the Appendix to illustrate referent expression in natural Tunen speech.

2.2.3 Thetics

Now we have a means to express referents, how can we combine these expressions in such a way to convey the intended information about the referent at hand? For this, we need terminology for the analysis of sentential structure.

Research in information structure distinguishes between two basic types of sentences: *thetic* statements on the one hand, and *categorical* statements on the other (see e.g. Sasse 1987, 1996; Lambrecht 1994). Thetics are defined as having no division in information structure, which can either be analysed as having no focal content or having sentence-wide focus (also termed 'all-focus'). They can be considered as sentences without a topic expression, although it may also be argued that they have a topic referent of 'the here and now', i.e., a *stage topic* (Gundel 1974; Erteschik-Shir 2007). An example of a thetic is given in (8) below.

(8) Context: You are sitting in a library reading a linguistics book in silence. Someone suddenly shouts out:
'The curtains are on fire!!'

Example (8) illustrates (quite literally) a *hot news thetic*, where the speaker is signalling urgent information in the absence of prior discourse context. Here, the referent 'the curtains' has not been mentioned before,[2] and neither has the predicate 'be on fire'. The function of the sentence is therefore to convey the new information all at once, and the sentence can be classified as a thetic due to this lack of IS divisions.

[2] An argument could be made that the referent 'the curtains' is semi-active due to being contextually available from world knowledge about libraries being rooms which likely have windows and therefore curtains. However, example (8) is also possible with subjects corresponding to referents that are less clearly contextually available, e.g. '*my documents*', '*these cupcakes*'.

What is particularly interesting about thetics is that the subject, which in categorical sentences very often fulfils the pragmatic role of topic (Li and Thompson 1976), is non-topical. Thetics can therefore be used to diagnose whether a certain strategy is best analysed as one related to subjecthood or to topicality. I therefore employ thetics as a diagnostic test for subject versus topichood in Chapter 5's investigation of Tunen's basic word order (section §5.2).

Multiple different subtypes of thetics exist. A common environment in which thetics are found is an all-new or out-of-the-blue context, such as in example (8) or in answer to the question "What happened?". However, a complication is that some referents are inherently given, being always-accessible for example through world knowledge. This applies to referents such as 'the moon', 'the sun', and 'the Prime Minister'. Lexical divisions of thetics include weather expressions ('The sun is shining'), descriptions of physical sensations ('My back hurts'), and existentials ('There are many animals in the Mvog-Beti park'). Functional divisions of thetics include hot news thetics ('There's a crocodile!'), presentatives ('Here is Patience'), and explanations ('(He didn't come to work because) he fell sick'). In this thesis, I use the BaSIS project methodology (Van der Wal 2021; Chapter 3) to investigate different thetic types in Tunen, which I discuss further in Chapter 5.

2.2.4 Topic and comment

The other type of sentence is a *categorical sentence*, where there are divisions related to information structure. The first dimension of division is the *topic-comment* split, also known in work from the Prague school of information structure as the *theme-rheme* split (see e.g. Vallduví and Vilkuna 1998 for an overview).

The function of the *topic* is to serve as the anchor for the information within the comment, thereby aiding the addressee in linking new information to their existing knowledge. The topic is therefore what the sentence is about, and has accordingly been termed an *aboutness topic* (Reinhart 1982; Lambrecht 1994). This definition of topic relates to the sentence, with the broader notion of the topic of discourse termed a *discourse topic*.

(Sentence) topics change over discourse: we don't keep talking about the same thing over the whole conversation.[3] A *continuous topic* is a topic that was a topic in the previous sentence. A *shift topic* refers to a topic that is different from the topic of the previous sentence. A *contrastive topic* is a topic that serves in opposition to

[3]While it could be argued from a Question Under Discussion (QUD) framework (Roberts 1996) that we can in fact have entire discourse stretches about a general QUD, the discourse can be broken down into components about subquestions, and the discussion of *topic* used here crucially relates to sentential rather discourse topics.

another topic. There can also be multiple topics in a sentence.

The notion of topicality is intricately connected to the notion of subjecthood, as grammatical subjects canonically function as topics (Li and Thompson 1976). However, the two notions are distinct, as is seen above for thetics, where a grammatical subject can serve a non-topical role. This terminological distinction will be used in Chapter 5 section §5.2.1 and Chapter 6 in order to consider the extent to which Tunen's canonical word order should be defined in terms of the IS notion of 'topic' versus the grammatical-role notion 'subject'.

Within categorical sentences, topics can be arguments or non-arguments of the sentence. This is exemplified by the English data in (9), where the first topic expression *Parrots* relates to the object of the clause, an argument of the predicate SAW, while the second topic expression *Birds* is a superset of the object of the second example rather than itself being an argument of the clause.

(9) a. Parrots, he saw them.

b. As for birds, he saw parrots.

We see from (9a) that English can have resumption of the topic in the main clause, with the pronoun *them* co-referential with the topic *parrots*. The BaSIS fieldwork questionnaire used for this thesis test for these kinds of syntactic requirements for different topic constructions. In Chapter 5, I present an overview of topic expression in Tunen.

The non-topical component of the topic-comment split, i.e., the *comment*, presents new information that can be linked to the topic. The notion of new information is conceptualised in terms of focus and background, which we will turn to now.

2.2.5 Focus and background

The next important split that can be made in categorical sentences is that of *focus-background*. One way of conceptualising this is that the *background* corresponds to given information and the *focus* corresponds to new information. Another means of conceptualising focus is in terms of the Alternative Semantics framework (Rooth 1985, 1992; Krifka 2008). Here, the idea is that focus relates to the generation and selection of alternatives. For example, the subject content question in (10a) generates the alternative set in (10b), where each item within the set (indicated by the { }) is an alternative for the questioned element. In the answer in (10c), the speaker selects an alternative from this set.[4]

[4]Here, the $[\ ]_{\text{FOC}}$ notation indicates the focal element, i.e., the element for which alternatives were generated (see the Abbreviations list).

(10) a. Who caused a mess in the kitchen?

b. {Suki, Esther, an intruder, ...}

c. [Suki]$_{\text{FOC}}$ caused a mess in the kitchen.

In other words, by asking a content question such as (10a), the speaker/signer opens up a set of alternatives (10b), here regarding the possible subjects of the predicate CAUSE A MESS IN THE KITCHEN (i.e., λx.CAUSE A MESS IN THE KITCHEN(x)). When a speaker/signer provides an answer such as (10c), what they are doing is instructing the addressee to fill in that alternative (i.e., x = SUKI). This relationship between the question word *who* and the focussed term *Suki* in terms of alternatives illustrates *question-answer congruence*, which is a key test used for the investigation of focus (Reich 2002; Van der Wal 2016). Focus is then defined not on the basis of newness but through the generation of alternatives, where what is considered new can be the selection of alternatives (Krifka 2008).

Focus varies by scope (i.e., size) and by type. Firstly, in terms of scope, a basic distinction can be made between *term focus* and *predicate-centred focus* (*PCF*) (the latter sometimes referred to in terms of *predicate focus*) (Dik 1997; Zimmermann 2016; Van der Wal 2021). Term focus refers to focus scoping over arguments and adjuncts. PCF refers to focus on the predicate, including *state of affairs* (*SoA*) *focus* (i.e., focus on the lexical content of the verb), *VP focus*, and *operator focus* (including *TAM focus* and *polarity focus*, the latter also known as *truth focus* and *verum focus*; see Kerr and van der Wal 2023). These types of focus are shown in Fig.2.3.

The second dimension of variation in focus is the semantic type of focus. The most basic type is *information focus*, also called *new information focus*. Information focus simply involves the selection of an alternative, as seen in (10c) in the answer to a neutral content question. A more contrastive type of focus is *exhaustive focus*, which not only selects an alternative but also excludes all other possible alternatives, as in (11b) below. *Mirative focus* involves the selection of an alternative that is considered surprising, as in (12a). Finally, *corrective focus* selects an alternative in opposition to a previously stated alternative in the discourse, as in (13).

(11) a. Even Esther caused a mess in the kitchen.

b. Only Esther caused a mess in the kitchen.

(12) a. Context: Esther is known to be impeccably tidy.
ESTHER caused a mess in the kitchen!!

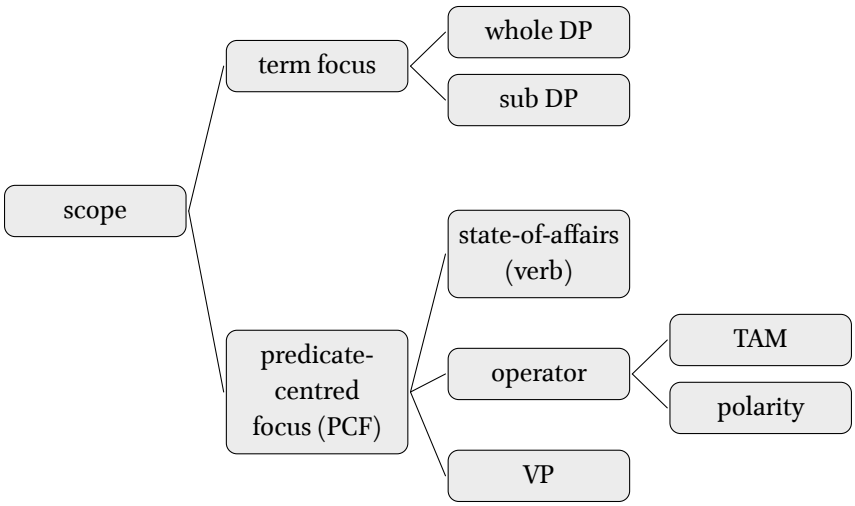


Figure 2.3: Diagram illustrating variation in focus scope, with a basic distinction between term focus and predicate-centred focus (PCF) (adapted from Van der Wal 2021:16, Kerr and van der Wal 2023:444).

(13) a. Suki caused a mess in the kitchen.

b. No, ESTHER caused a mess in the kitchen.

These semantic types can be understood in terms of the scale of contrastiveness in (14), with least contrastive on the left to most contrastive on the right.

(14) **Contrast scale of focus types**
information focus > exhaustive focus > mirative focus > corrective focus
(adapted from Cruschina 2021:2)

Contrast is therefore a notion that can be applied to focus. It has been argued that contrast is an independent notion that can interact both with focus (contrastive focus) and with topic (contrastive topic) (see e.g. Neeleman et al. 2009). In this thesis, I do not adopt such a view, partly on conceptual grounds, but primarily because there is no language-internal evidence for contrast as a unified concept in Tunen, with no overlap in syntactic marking of contrastive foci versus contrastive topics. I discuss the use of the term *contrast* in previous work on Tunen in Chapter 6, where we will see that it was used more specifically to describe contrastive focus.

2.2.6 On the nature of categories

The previous subsections have given an outline of the standard approach to key IS concepts, as followed within the BaSIS project. However, some researchers have taken issue with this standard approach to IS (Matić and Wedgwood 2013; Ozerov 2018, a.o.). They argue that the traditional approach is to pre-define categories such as 'topic' and 'focus', which are considered to be universal cognitive categories. Empirical investigation therefore seeks to see how these universal cognitive categories are expressed in different languages, thereby working in a top-down manner from universal concept to specific language, which Ozerov (2018) terms the "pre-empirical view". A risk of working in such a paradigm is that empirical phenomena are analysed in information-structural terms when they may be more accurately treated as not directly relating to IS, rather categories related to "interactional discourse-structuring and intersubjective domains" (Ozerov 2018:92). In this way, the small inventory of standard notions of IS limit what researchers find about actual linguistic variation and complexity. The authors therefore argue for a bottom-up approach to IS, starting from investigation of the data and then considering which categories participate in information management. The type of variation centred in typological/comparative studies is therefore not the *expression* of information structure, but which categories are expressed in a given language and which effects they trigger (Ozerov 2018:92).

As will be explained further in Chapter 3, this thesis followed standard terminology for investigation of IS, which may be subject to these kinds of critiques. However, the project methodology not only involved tests from function to form (top-down) but also used tests from form to function (bottom-up). While not sufficient to fully address the methodological concerns of Matić and Wedgwood (2013) and Ozerov (2018), the bottom-up tests nevertheless allow for consideration of the broader meaning of a particular form, as considered from the perspective of Tunen. I also present data from recorded natural speech and secondary sources, which provide some confirmation that the patterns described on the base of directed elicitation research reflect actual Tunen language use. As introduced at the end of section §2.2.1, the use of standard IS terms is motivated by the ultimate desire for crosslinguistic comparison. I will however argue in this thesis that some of the terms seen are not needed for descriptions of Tunen, as they appear not to be categories with specific encoding in Tunen grammar. I take the conceptual stance that these terms may be conceptually valid for other languages and may be part of Tunen speakers' cognition, but do not form part of Tunen syntax (see Chapter 3 and Chapter 8 for further reflection). In Chapter 8, I will reflect on which IS notions are required for analyses of Tunen syntax as compared to and differing from other Bantu languages.

2.3 Generative models of syntax

In the later chapters of this thesis, I develop an analysis of Tunen in line with current generative approaches to modelling syntax. In this section I provide a brief summary of this theoretical approach, with the aim of rendering the studies in the later chapters more understandable to non-generative readers. A discussion of the conceptual principles of the generative framework will follow in Chapter 3 section §3.2 after this chapter introduces the basic technical details.

2.3.1 The reverse Y model of the grammar

Traditional generative accounts adopt a *reverse Y model* of the grammar to model the relationship between syntax and the rest of the grammar. Here, sentence formation starts with content from the lexicon – the lexical content that forms the building blocks of sentences. These blocks are combined into phrases and sentences within the syntax component, termed *Narrow Syntax*. The result of this building process is then sent to different interfaces, one for semantics (the *Logical Form*; LF) and one for phonology (the *Phonological Form* form; PF). As LF and PF do not connect, the grammar is therefore structured in an upside-down Y shape. This reverse Y model of the grammar is shown in Fig. 2.4.

The term *Narrow Syntax* thus refers to any operations taking place before LF and PF. Exactly how narrow the so-called *Narrow Syntax* is depends on one's stance on the interaction between syntax and morphology. Under the framework of *Distributed Morphology* (DM; Halle and Marantz 1993 *et seq.*), various morphological operations take place post-Spell-Out, as formulated in terms of *morphological readjustment rules* (Embick and Noyer 2001, 2007). Under *Morphology as Syntax* (MaS) approaches (e.g. Collins and Kayne 2023), morphological processes apply only within the Narrow Syntax component. These approaches are therefore also termed *syntacticocentric*, with morphological phenomena explained as part of the syntax (see e.g. Harley 2015). Assuming one's goal is to be able to model all languages' syntax, the study of different types of languages is key for testing the applicability of a given approach; one's preference between such approaches can therefore depend partly on the applicability to the morphosyntactic profile of the language at hand. In this thesis, I build on previous formal work on Bantu languages which adopts a firmly syntacticocentric viewpoint, as motivated by the complexity of morphosyntax in Bantu languages (Van der Wal 2015), which provide interesting case studies for testing theories of the morphology/syntax interface. I therefore use the term *syntax* instead of *Narrow Syntax*, in rejection of the implication that the syntactic component is minimal. I will discuss the implications of this theoretical

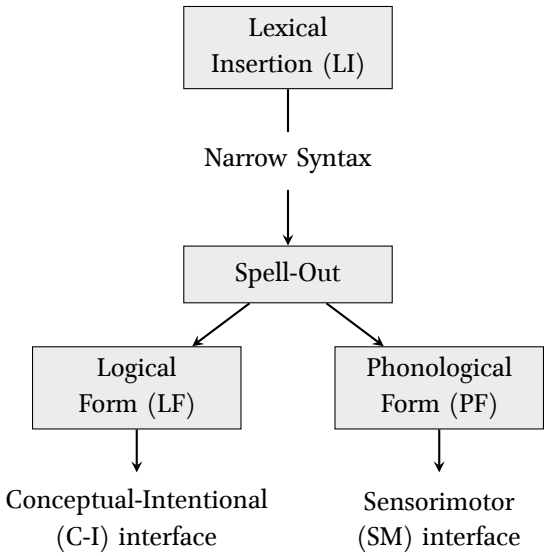


Figure 2.4: Reverse Y model of the grammar.

choice in the modelling of Tunen's verbal morphosyntax in Chapter 6 sections §6.3-6.6, where I present an analysis of Tunen clausal syntax that aims to account for as much as possible without any stipulations about post-syntactic operations (see also Chapter 7 section §7.4.2 on following constituency-based models of ellipsis rather than relying on postsyntactic accounts).

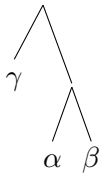
2.3.2 Structure building: Merge and Phase Theory

Generative syntax starts from the core principle that language has hierarchical structure. The question for a linguist, then, is how this structure is built up — and how the structure can be uncovered from the linear speech/sign signal in which it is transmitted. The first key mechanism of the syntactic component is therefore the mechanism of structure building.

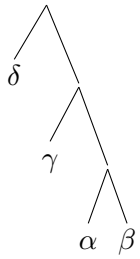
The core structure-building operation in generative accounts is *Merge*, which combines two elements in order to form a constituent. This operation can combine recursively, with the output to the first merge forming the input to further structure building, as represented in the tree diagrams in (15) below.

(15) a.

b.

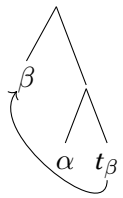


c.



Earlier approaches used *Move* for movement, which referred to moving an element from one position in the hierarchy to some other position. More recent approaches within the Minimalist Program (see Chomsky 1993, 1995 *et seq.*) have reconsidered Move to be a type of Merge (*Internal Merge*, vs *External Merge*), on the basis of movement being analysable as a Merge operation where one element is already present within the structure. I will reflect movement operations using arrows, with t_x reflecting the trace of the moved element left in the base position, as in (16) below.[5]

(16)



So far, I have not given a label to the node dominating the two input components to Merge, in following the narrowest definition of Merge as distinct from labelling. I assume standard labelling algorithms, where the head determines the label of the parent node. For example, if α is the head in (15a) — e.g., if α is a verb and β its object — then the label for the parent node will be αP (i.e., VP, if α = V). If β were the head instead, then the label of the parent node would be βP.

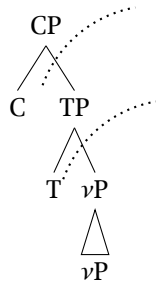
The next question relates to the use of tree diagrams as representations of syntactic hierarchy. Because of their 2D nature, they can be taken to also indicate linearity — for example, that (15a) will be pronounced in the order α-β and not β-α. However, claims about linearity require a separate theoretical component, that of a

[5]For readers familiar with generative linguistics: I come back to traces versus the Copy Theory of Movement in the discussion of the derivation of discontinuous DPs in Chapter 7. Traces are used otherwise for representational convenience (and in keeping with the practice of other authors, for other languages cited).

linearisation algorithm. In this thesis, I follow standard approaches where linearisation requires structural asymmetry and where hierarchical dominance determines linearisation (see e.g. Kayne 1994; Moro 2000). While this can be defined more formally, it is enough for current purposes for the reader to take this to mean that what is higher up in the tree diagram will be pronounced sooner. I discuss specific types of theoretical constraints on headedness and linearisation further in Chapter 6 (for the verbal domain) and Chapter 7 (for the nominal domain).

So far, we have seen that structure is built in the syntactic component bottom-up via recursive application of Merge (in Minimalist frameworks, External and Internal Merge, and in earlier approaches, Merge and Move). When thinking about sentence structure, we can note that different parts of the clausal hierarchy have different functions. This is represented in the *tripartite division of the clause*, where the lowest structures form the verbal domain (*v*P), which then builds up into the inflectional domain (TP), and then the clausal domain (CP). This tripartite model is sketched in (17).

(17)

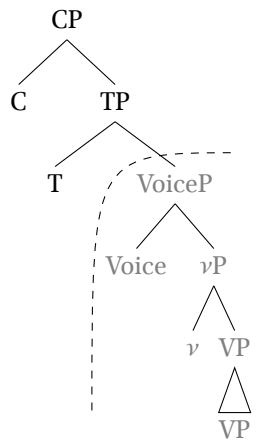


The clausal domain (CP) is therefore the maximal domain for a sentence, which I take here to be the linguistic unit of interest. However, more recent work in the generative framework argues that sentences are built up in smaller chunks, with Spell-Out applying below the CP level. In other words, once a certain chunk is built, it is complete, with no further syntactic operations able to modify it. This theory of structure-building proceeding in chunks is known formally as derivation by phase (Chomsky 2001, 2008), with the term *phase* corresponding to the notion of a chunk.

Exactly how phases divide the structure in (17) (which uses CP, TP, and VP as short-hands for more complicated structures with various intermediate layers) varies between formal accounts (Chomsky 2008:143), and is also considered by some authors to be able to vary between languages (see e.g. Bošković 2014; den Dikken 2007; Wurmbrand 2017). However, it is standard to identify the verbal domain in (17) to be a phase and thus the highest head of that domain to be the phase head, as expressed by Chomsky (2004) as *v**P (where *v** is the highest head within the

verbal domain and so the phase head). In this thesis, I will argue in Chapter 6 that the Tunen verbal domain contains both the projections VoiceP and *v*P. This results in Voice being hypothesised to be the lower phase head in Tunen, as in (18) below.

(18)



The key idea behind phase theory is that what is built in one phase then becomes inaccessible in subsequent phases, with the exception of material at the phase edge. When building one phase, the grammar does not know that there is another phase coming – this is captured in a restriction on *lookahead* phenomena (i.e., a restriction on knowing what will be covered in subsequent phases). The exception to the inaccessibility of phases is material at the edges of phases, which is considered accessible to the subsequent phase. The extent to which phases are penetrable in this way varies between formulations. The *Phase Impenetrability Condition* of Chomsky (2000) (known as *PIC1*) is stricter than the later version of Chomsky (2001) (*PIC2*).

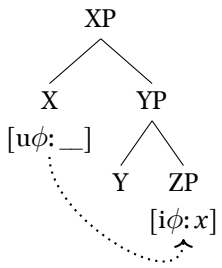
In this thesis, phases are relevant in the extent to which the relative positions of the object and subject arguments in Tunen in the formal model built in Chapters 6-8 affect the accessibility of Tunen arguments for further syntactic operations. While a full formal account of Tunen syntax is beyond the scope of this initial study, I point out some predictions made on the basis of phase theory and speculate on the potential link between Voice as a phase head and the grammaticalisation of Tunen word order (see Chapter 6 and 8).

2.3.3 Syntactic features

In Minimalist approaches, syntactic features are important for syntactic dependencies between elements in the structure. The operation *Agree* is used to create such

dependencies. Syntactic features can be valued or unvalued. The Agree operation involves a *Probe*, which is an element that has an unvalued feature, which must look elsewhere in the structure in order to find an element with matching, valued features. This element is called a *Goal*. Generative approaches assume that features must be valued in order for the structure to be interpretable at the interfaces (Chomsky 2000). A basic schematisation of the Agree process is given in (19), where the Probe has unvalued ϕ-features (where ϕ represents number/case/gender). The Goal is valued for these features, with ϕ-feature value x (e.g. SG if singular). The Probe searches for a Goal to value its features, resulting in an Agree relation.

(19)



There are various different approaches to Probe-Goal relations. While I assume syntactic features and Agree in this thesis, I do not commit to a particular theoretical stance (e.g., on the ability/inability for Probe-Goal relations to apply upwards), in order for my discussion of Tunen syntax to be adaptable in future work to other authors' preferred model of syntactic features.

Agree can be seen to result in the phenomenon of noun class agreement that is found throughout Tunen (see Chapter 4 section §4.3 and Chapter 7). Some authors have also argued that IS notions such as *topic* and *focus* (see section §2.2 above) are syntactic features in some languages' grammar, working in a parallel way to ϕ-features such as gender and number and therefore having significant influence on a language's syntax. For example, focus can be modelled with a [+focus] feature and topic as a [+topic] feature, e.g. via δ-features (Aboh 2010; Miyagawa 2017; Mursell 2021; Van der Wal 2022). I discuss this possibility for Tunen in Chapter 6 and Chapter 8, drawing upon the empirical findings for IS presented in Chapter 5.

Probes may trigger movement (Internal Merge) in the presence of a movement trigger. I discuss this in relation to movement triggered by a formal ^-feature (which can be seen as a diacritic indicating that the complement of the head carrying the ^-feature must move to the specifier position) in Chapter 6 in the context of accounting for Tunen's OV word order. I discuss the relationship between IS features and

other syntactic features in the context of diachronic predictions regarding word order change made by the generative model I propose in Chapters 6-8.

2.3.4 A versus A'-phenomena

So far, we have seen that generative syntax has means to build structural elements and move and modify them through operations targeting their syntactic features. An important distinction standardly drawn within generative linguistics in relation to syntactic operations is the distinction between so-called *A* and *A'-phenomena*, as discussed in terms of *A/A'-movement* and *A/A'-positions* (see also *A/A'-chains*). Traditionally defined, *A-movement* concerns movement into argument positions, whereas *A'-movement* (also written as *A-bar movement*) concerns movement into non-argument positions, where an argument position is a position in which a θ-role[6] is assigned to a nominal (see e.g. Chomsky 1981, 1986; Déprez 1989). More recently, it has been argued that the A/A' difference is not one of position but of the features involved on the head triggering the movement (Van Urk 2015). While the A/A' distinction can and has been formulated in many different ways (Chomsky 1995:57-58), a commonality across the approaches is that A-movement is relevant for argument licensing, while A'-movement is relevant for information structure, in that wh-movement, focalisation, and relativisation are considered A'-movement operations. In terms of argument licensing, there is the assumption that all arguments must be licensed for a derivation to be permissible at the interfaces (see e.g. the Case Filter; Vergnaud 1977[2008]; Chomsky 1981:49). Movement for licensing reasons is sometimes referred to as *L-movement*. The licensing of arguments also restricts the availability of subsequent movement operations, as in the Activity Condition (Chomsky 2000:123, 127; 2001:6), which states that a nominal that has A-moved to receive Case is then unable to participate in another A-movement operation.[7]

A and A'-movement differ in several properties, which can be used to diagnose a movement operation as one or the other type (see e.g. Van Urk 2015 for an overview). Most importantly for the topics covered in this thesis, A-movement is local, does not show reconstruction effects, and is restricted to nominals. A'-movement, on the other hand, applies at long distances, with intermediate movement steps (*cyclicity*/*successive cyclic movement*), and can be identified by reconstruction.

A'-phenomena will be discussed further in Chapter 5 (on information struc-

[6] A θ-role (also written as *theta-role*) reflects the thematic relation between the nominal and the predicate, e.g. AGENT or PATIENT.

[7] While A-movement is thus traditionally discussed in terms of Case assignment, more recent accounts have moved away from the centrality of Case; see e.g. Keine (2018).

ture) and are also covered in descriptive terms in Chapter 4 (specifically, in the description of question formation and relativisation). The distinction between A and A'-phenomena will be important in Chapter 6 for the study of the position of the object in Tunen, which I will argue to be conditioned by A-movement, and in Chapter 7 for the study of discontinuous DPs in Tunen, which I will argue to be formed as a side-effect of A-movement of the object, in contrast to the crosslinguistically more common discontinuous DP construction formed by A'-movement.

2.3.5 Variation and uniformity

Generative approaches vary in their assumptions about the uniformity of syntactic structures across different languages. While generative work is often characterised by non-generativists as positing universal structures that are invariant across languages and part of an innate language component of the brain (*Universal Grammar*; UG), more recent approaches have drastically reduced the size of UG, including positing that only Merge is universal. There is also debate in the extent to which UG is unique to language or part of more general cognitive processes that also apply to structure-building in other domains, such as vision (see for example the distinction made in Hauser et al. 2002 between the *Faculty of Language Narrow* and the *Faculty of Language Broad*).

In this thesis I assume a restricted view of UG whereby only general properties of structure-building (Merge) are innate, and possibly non-specific to language. I assume that syntactic features are emergent, i.e., can be posited as a result of the combination of the linguistic input a language learner receives, together with the restricted innate linguistic capabilities and general cognitive abilities (so-called *third factors*) (Chomsky 2005; Biberauer 2017a, 2018; Roberts 2019:7, 99-102). This means that languages can be expected to vary in which features are present or absent, due to variations in the input. In this sense, I do not adopt the *Strong Minimalist Thesis* (Chomsky 1995) and the *Strong Uniformity Principle* (Miyagawa 2010, 2017), which assume that all languages have the same set of grammatical features. I will return to this discussion when considering how to model the relation between syntax and IS on the basis of the Tunen data and in comparison to models proposed for other Bantu languages (see Chapter 5 section §5.8 for a descriptive comparison and Chapter 8 for discussion of the theoretical implications).

2.3.6 Parametric approaches to linguistic variation

Another relevant strand of research in generative linguistics is the notion of parameters and parameter hierarchies. Parameters are used to model variations in syntac-

tic structure, for example whether a language has a head-initial verb phrase (VO) or head-final (OV). Such parameters vary in scale (Baker 2001), from large-scale parameter settings such as headedness — so-called *macroparameters* — to parameters that only affect a few lexical items (*nanoparameters*/*mesoparameters*/*microparameters*; see Van der Wal 2020 for illustration in relation to Bantu languages). Parameters can be organised in *parameter hierarchies* (Roberts 2019), where the setting of a given parameter is dependent on the setting of dominant parameters. For example, a parameter setting for applicatives could only be set in a language that had applicatives in the first instance.

The notion of parameter is relevant to this thesis as it has been invoked in generative models of word order change (see e.g. Roberts 2019, 2021). I therefore return to this comparative tool in Chapter 6 section §6.7 when considering how Tunen's clausal word order compares to other languages. Here, there is a question as to whether the notion of parameters of a model are only notions relevant to the linguistic analysis, versus reflecting a difference in the grammars of each speaker.

2.3.7 Where is information structure in the grammar?

A core theoretical discussion for this thesis is the nature of IS within the grammar. Some approaches take IS as a separate component that only applies after syntax, with syntax containing no IS (Fanselow 2006). Approaches following the Borer-Chomsky Conjecture (BCC; see e.g. Baker 2008) posit that all variation must be found in the lexicon which is the input to the Narrow Syntax (cf. Fig. 2.4). Other approaches include information-structural projections (as in *Cartography*; see Rizzi 1997 for proposals of an articulated CP domain and Belletti 2004 for discussion of the inflectional domain) or information-structural features (see e.g. Miyagawa 2017; Mursell 2021; Van der Wal 2022; section §2.3.3).

The variation in models of the position of IS in the grammar is relevant to the central research question (1) about the extent to which IS influences the syntax of Tunen. Here, I take a range of answers to be possible. On one hand, it could be the case that IS has absolutely no influence on Tunen syntax, meaning that no word order configurations or morphosyntactic constructions would be found to be sensitive to the IS context in which they occur. If this is the case, then formal models of Tunen syntax do not need to make reference to any IS positions or IS features. On the other extreme, it could be the case that Tunen syntax is heavily influenced by IS. The most extreme possibility would be that the IS context determines the word order or construction used and overrides any other possible factor (such as Case assignment). Less extreme alternatives between these two logical possibilities would be that IS context influences but does not absolutely determine syntactic ex-

pression. In these scenarios, it could be the case that there are dedicated syntactic positions or markers that correspond to particular IS interpretations, as discussed in terms of focus positions in §2.4.2 above and as has been influential in the Cartographic approach to syntax (section §2.3.7), where foci have been taken to appear in left-peripheral FocP projections, topics in TopP projections, and so on. Alternative approaches use linear templates (see e.g. Neeleman et al. 2009; Good 2016) or IS features that may appear in different positions.

This thesis therefore serves to investigate where Tunen lies on this possible continuum of degree of IS expression in syntax. Chapter 5 provides an empirical investigation of the extent to which IS influences syntax in Tunen. Chapters 6 and 7 then consider the formal derivation of Tunen syntax, testing whether an analysis must make recourse to IS positions, templates, or features. I will ultimately argue that Tunen shows less syntactic influence of IS than other Bantu languages do, meaning that a very limited degree of IS is required in formal analyses.

As Bantu languages are an interesting case study for this theoretical debate on the position of IS in the grammar due to the variation they show in the syntactic expression of IS (see e.g. Van der Wal 2015; Downing and Hyman 2016; Downing and Marten 2019), the next section will consider previous approaches of Bantu syntax in general (section §2.4.1) and in relation to IS in particular (section §2.4.2).

2.4 Bantu syntax and information structure

2.4.1 Syntactic variation in Bantu

Within the nominal domain, Bantu languages are known to have noun class systems, a type of gender system that is a hallmark of the family and of Niger-Congo languages more broadly (Heine 1982:190; Katamba 2003:103). Aside from the consistent presence of noun class systems, there is a large amount of variation in the nominal domain in Bantu languages. For example, many orders of the demonstrative, adjective, and numeral relative to the noun are possible. This has made the Bantu languages interesting for comparative linguistics in relation to Greenberg's Universal 20, where Bantu and Bantoid languages have played an important role due to the presence of orders of nominal modifiers that are not found elsewhere in the world's languages (Rijkhoff 1990; Van de Velde 2005, 2019:259-260). While Tunen's order of nominal modifiers (to be seen in Chapter 4 section §4.3.7 and analysed in Chapter 7) is quite strict and typologically common, Tunen does allow for the discontinuous position of nominal modifiers, which I return to in Chapter 7 as a topic of comparative interest.

Bantu languages are typically considered to have a synthetic morphosyntactic profile, with highly agglutinative verb forms a characteristic of the family (Meeussen 1967; Schadeberg 2003a). An extreme example of syntheticity is shown in the Tswana (Bantu, Southern Africa) example (20), where the verb root *kwal* 'write' takes inflection for the subject marker, future tense marker, object markers, and is extended by two applicative extensions and a final vowel suffix (indicative of mood).

(20) Ke-tla-lo-ba-mo-kwal-êl-êl-a.
SM.1SG-FUT-OM.11-OM.2-OM.1-write-APPL-APPL-FV
'I will write it to them for him.' (Tswana; adapted from Cole 1955:432)

However, languages of the North-West region and non-Bantu Niger-Congo languages spoken in West/Central Africa have a more analytic morphosyntactic profile (Nurse 2008). This has led to debate within Bantu studies as to whether the synthetic profile is historic (Hyman 2004, 2011; Nurse 2007) or a development from an earlier analytic profile (Güldemann 2011, 2022). For Tunen, I will discuss the degree of analyticity in Chapter 4 and Chapter 6 (note in particular that my use of whitespace in Tunen examples follows the official orthography rather than being a commitment to an analysis of a particular degree of analyticity).

In terms of clausal word order, Bantu languages are generally stated to have SVO word order (see e.g. Bearth 2003). However, various authors have proposed that Bantu word order is less influenced by grammatical role and more influenced by discourse role relations (Schadeberg 2003b; Morimoto 2000, 2006; Downing and Marten 2019). In this vein, alternative expressions of word order such as Topic-Comment-Focus have been made (see e.g. Morimoto 2000, 2006; Kerr et al. 2023). I consider this topic in Chapter 5 (on the possible interaction with IS) and Chapter 6 (on Tunen's basic word order).

Bantu languages are known to express IS morphosyntactically, for example using word order alternations and morphological verbal paradigms such as the conjoint/disjoint alternation in Eastern Bantu (Van der Wal and Hyman 2017). Understanding this syntactic expression of IS in Bantu was part of the motivation for the BaSIS research project in which this thesis research was conducted. The next section therefore gives a more detailed background on prior work on IS in Bantu that can be used to guide the research questions for investigation of the interaction between syntax and IS in Tunen.

2.4.2 Information structure in Bantu

As stated above, Bantu languages are known to express information structure by morphosyntactic means (Van der Wal 2015; Downing and Hyman 2016; Downing

and Marten 2019; Morimoto 2000, 2006). One type of syntactic construction that is taken to reflect IS and is found in many Bantu language is inversion constructions, where the logical subject appears postverbally and another nominal expression may control the agreement on the verb (Marten 2014; Marten and van der Wal 2014; Hamlaoui 2022). Examples of inversion constructions include *Default Agreement Inversion* and *locative inversion* (see Marten and van der Wal 2014 for a typology across Bantu languages), as in the locative inversion example (21) below.

(21) a. È-rúngá r-á hìtí m-ón-djúwó.
5-thief SM.5-PST enter 18-9-house
'The thief entered the house.'

b. M-òn-djúwó mw-á hìtí é-rùngà.
18-9-house SM.18-PST enter 5-thief
'Into the house entered a/the thief.'
(Otjiherero, Marten and van der Wal 2014:324)

Here in (21a), the canonical SVO word order is used, where the verb takes subject agreement with the class 5 subject *érúngá* 'thief', which functions as a topic. In (21b), the semantic subject *érùngà* is non-topical and appears postverbally, with the agreement on the verb reflecting the locative (class 18) grammatical subject *mòndjúwó* 'in the house'. The difference in word order therefore reflects a difference in information-structural status of the subject, with consequences for the inflectional morphology on the verb (i.e., the ϕ-featural spell-out on the subject marker).

While these inversion constructions are generally widespread within the Bantu family, they are not always found in North-Western Bantu languages in particular, as for example shown by Hamlaoui and Makasso (2015) for the Cameroonian Bantu language Basaá (Guthrie number A43), which does not allow inversion constructions at all. I return to this lack of inversion constructions in Chapter 5 in relation to IS expression in Tunen.

Some Eastern Bantu languages have a morphological alternation in verb forms called the *conjoint/disjoint* (*CJ/DJ*) *alternation* (see Van der Wal 2017; Van der Wal and Hyman 2017 for a comparative overview). The CJ/DJ alternation varies between languages and can be related directly or indirectly to IS.[8] While it can be seen in segmental alternations between verb forms, in some languages it is visible through

[8]Some authors present the alternation in terms of a binary opposition between the CJ/DJ alternation reflecting constituency (*constituency-type languages*) versus reflecting IS (*focus-type languages*). As I argued in Kerr (2018:52), there is in fact gradience between the two, which I represent by using the terms *direct* versus *indirect* reflection of IS.

tonal alternations (e.g. in Tswana; Creissels 2017). An example of the CJ/DJ alternation reflecting constituency is seen from the Zulu present tense data in (22) below, where the presence or absence of a disjoint morpheme before the verb root in the present tense is conditional on whether the verb is final.

(22) a. a-ba-fana ba-**ya**/*∅-cul-a
AUG-2-boy 2.SM-DJ/CJ-sing-FV
'The boys are singing.'

b. a-ba-fana ba-∅/***ya**-cul-a i-ngoma
AUG-2-boy 2.SM-CJ/DJ-sing-FV AUG-9.song
'The boys are singing a song.'
(Zulu (Bantu); Buell 2006:10, as cited in Kerr 2018:7)

An example that shows how the CJ/DJ alternation interacts with IS is given in (23) below. Here, different discourse contexts are set up by context questions targeting different focus scopes (cf. Fig. 2.3). The fact that the DJ versus CJ conjugations are not possible in some of the discourse contexts (as indicated by #) shows that the verbal conjugation is sensitive to IS, with a CJ form required when there is term focus on the object (23b).

(23) a. Q1: 'Are you grilling the fish?' (truth focus)
Q2: 'I don't believe you are grilling the fish.' (verum)
Q3: 'What are you doing with the fish? Frying or grilling?' (SoA focus)
Q4: 'Have you grilled fish already?' (TAM focus)
Q5: #'What are you grilling?' (#term focus on object)
{Ehóp' éela} Kinámwáaneéla {ehópa}.
ehopa ela ki-na-aaneel-a ehopa
9.fish 9.DEM.PROX 1SG.SM-PRS.DJ-grill-FV 9.fish
'(This fish) I'm grilling (it).'

b. Q3: #'What are you doing with the fish? Frying or grilling?' (#SoA focus)
Q5: 'What are you grilling?' (term focus on object)
Kinaánéélá ehopá.
ki-n-aaneel-a ehopa
1SG.SM-PRS.CJ-grill-FV 9.fish
'I'm grilling a fish.' (Makhuwa; Kerr and van der Wal 2023:463)

A similar IS-sensitive morphosyntactic phenomenon is found in Eastern Bantu languages, especially of Eastern Africa, which have a morphological alternation between verb forms marked by the prefix *ni-*, derived historically from the copula verb **nɪ*. Some authors have suggested that this construction parallels the CJ/DJ alternation (e.g. Morimoto 2017 on Kikuyu). Güldemann (2003) argues that the use of a *ni-* conjugation can be understood as relating to IS via an inherent link between present progressive TAM contexts and focus, highlighting how Bantu langauges can employ morphosyntactic means for IS expression (cf. Fig. 2.1-2.2).

Bantu languages have also been analysed as having dedicated focus positions. Here, there is variation in both where the focus position is in the clause and in what material can or must be in it (Downing and Marten 2019; Kerr et al. 2023). Three types found are an immediate-after verb (IAV) focus position, as found for example found in Zulu and Makhuwa (24), an immediate-before verb (IBV) focus position, as found in languages of the B70 group such as Teke-Kukuya (25), and finally a sentence-final position, as found in Kinyarwanda and Kirundi (26).

(24) a. Saárá onthumenlé **páni**, ekolár' íile?
/Sara o-n-thum-el-ale **pani** ekolari ile/
1.Sara SM.1-OM.1-buy-APPL-PFV.CJ 1.who 9.necklace DEM.DIST.9
'Who did Sara buy the necklace for?'

b. *Saárá onthumenlé ekolár' íile **páni**?
/Sara o-n-thum-el-ale ekolari ile **pani**/
1.Sara SM.1-OM.1-buy-APPL-PFV.CJ 9.necklace DEM.DIST.9 1.who
Intd.: 'Who did Sara buy the necklace for?'
(Makhuwa; Kerr et al. 2023:9)

(25) a. N-kaaká ma-désu **ná** **ndé** ká-wî?
1-granny 6-bean who 1.PREP SM.1-give.PST
'To whom did grandmother give the beans?'

b. *N-kaaká á-wî ma-désu **kukí** **ná**?
1-granny SM.1-give.PST 6-bean PREP who
Intd.: 'To whom did grandmother give the beans?'
(Teke-Kukuya; Kerr et al. 2023:9)

(26) a. Uhaye ikijumbe **ndé**?

U-ø-há-ye	i-ki-jumbu	**ndé**?
SM.2SG-PRS.CJ-give-PFV	AUG-7-sweet.potato	who

'Who do you give a sweet potato?'

b. *Uhaye **ndé** ikijumbu?

/U-ø-há-ye	**ndé**	i-ki-jumbu/
SM.2SG-PRS.CJ-give-PFV	who	AUG-7-sweet.potato

Intd.: 'Who do you give a sweet potato?' (Kirundi; Kerr et al. 2023:10)

Looking beyond Narrow Bantu, the Cameroonian Grassfields Bantu (Bantoid) language Aghem has been analysed as having an IAV focus position (see e.g. Watters 1979), and an association between postverbal position and focus interpretation has been stated in Fiedler et al. (2010:255) for language families including West Chadic, Romance, and Bantu. Some authors have interpreted data on Tunen as indication of such a postverbal focus position (Mous 1997, 2003; Bearth 2003:134-135; Downing and Marten 2019:273-274), as I will discuss and argue against in Chapter 6.

In terms of formal analyses of Bantu syntax and IS, some previous authors have used focus positions (FocP) in the clause, following Cartographic approaches to clause structure (see e.g. Rizzi 1997; section §2.3.7). While such approaches are common, other authors have argued against such analyses of Bantu languages; see e.g. Cheng and Downing (2012) for arguments against the existence of a dedicated FocP in Zulu. Language-specific investigation is therefore required in order to present an accurate analysis of a Bantu language; as stated in section §2.3.5, I follow the principle that languages may vary in which projections they have in their clausal syntax.

Finally, it should be noted that there are various correlates of IS that are expressed by non-morphosyntactic means. For example, IS and phonology interact in the form of *tone cases*, as discussed in Downing and Hyman (2016), and prosodic lengthening often indicates phonological phrasing, where the penultimate syllable of a phonological phrase is lengthened (Downing and Hyman 2016; Downing and Marten 2019). To the extent that phonological phrases correlate with syntactic phrases (see e.g. Selkirk 2011), these prosodic cues may indicate syntactic structure.

2.5 The Tunen language

2.5.1 Language context

As introduced in Chapter 1, Tunen is classified as A44 within the Guthrie system and [tvu] within the ISO 639-3 system.[9] The exact number of speakers of Tunen

[9] The ISO 639-3 classification code for Tunen was changed in 2012, with Tunen previously being

is unknown, with prior estimates at 35,000 speakers (Gordon 2005) and 70,000-100,000 (Mbongue 2005). I take the latter estimate to be more accurate given that the former is based off data from 1982. Unfortunately, the most recent Cameroonian census (conducted in 2005) did not collect data on indigenous languages, asking only for each citizen's primary language, meaning that more recent census data on the number of Tunen speakers is unavailable.

In the absence of accurate survey data, one way to estimate speaker numbers is by adjusting the 1982 census numbers in accordance with the population growth rate, as for example applied to Eton (A71, Cameroon) by Van de Velde (2008:2, fn2). Taking Cameroon to have an expanding population with approximately 2.5% annual growth rate, an estimate of 100,000 speakers can be made (on the assumption that the number of Tunen speakers has grown at an equal rate to the population). However, such an estimate does not take into account potential language shift from Tunen to French amongst younger speakers and due to increased urban migration, and so can only serve as an approximation. A more accurate estimation of the number of speakers is therefore only possible with more up-to-date survey information. Relatedly, Tunen is currently classified as *stable* and *developing* (Gordon 2005; Eberhard et al. 2022), although such classifications are based on a comparatively low amount of information. While the language is used in primary education and across different domains (e.g. market trading, day-to-day conversations, worship), the extent to which language shift to French or other languages is occurring remains to be studied.

In terms of geography, Tunen is spoken in the Centre and Littoral provinces of Cameroon within the Mbam-et-Inoubou region (Dugast 1955, 1960, 1971). There is a history of contact with Douala (A24, Cameroon) (Mous 2003; Dugast 1971; Johnson 2012; Kongne Welaze 2010). For example, in the 1950s, many Tunen speakers migrated to the city Douala (Kongne Welaze 2010), meaning that Tunen is also spoken there today, and earlier publication of Christian worship materials (e.g. songbooks; Johnson 2012) in the Douala language have led to the language continuing to be encountered in Tunen-speaking communities' church services. While there is a Tunen language committee based in Douala, my fieldwork was conducted in the Mbam-et-Inoubou region around the town of Ndikiniméki (Chapter 3 section §3.3.1), and so I worked with the Ndikiniméki-based Tunen language committee (CODELATU). The location of Tunen relative to nearby language groups in Cameroon is shown in Fig. 2.5 below.[10,11]

grouped with its neighbour Nyokon (A45, now ISO 639-3 code [nvo]) under the code [baz] (see ISO 639-3 change request number 2011-080).

[10] I thank Matthew Sung for help creating this map using QGIS.

[11] Given that this map was made to focus on Tunen's relative position to nearby languages, we

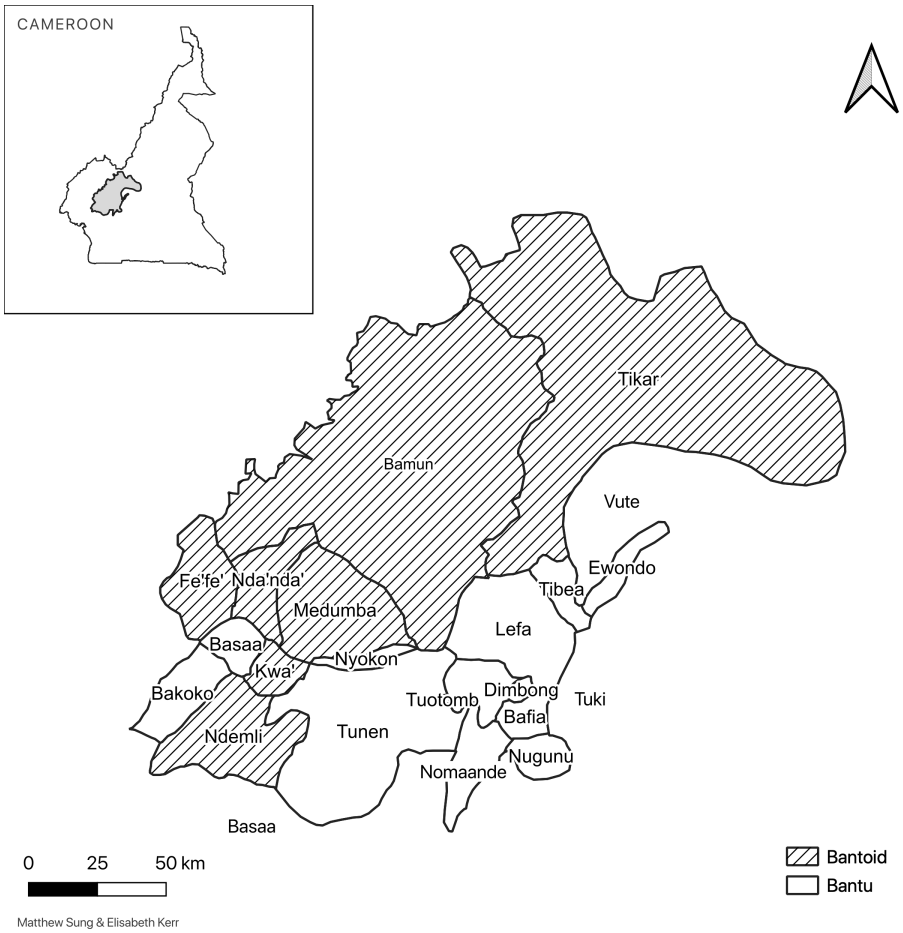


Figure 2.5: Map showing location of Tunen with respect to neighbouring languages in Cameroon, indicating their respective classifications as Narrow Bantu versus non-Bantu Bantoid, as taken from Eberhard et al. (2022).

2.5.2 Linguistic classification

Tunen is classified within Bantu with Guthrie number A44 (Guthrie 1948, 1967-1971; Maho 2003, 2009; Hammarström 2019). The Guthrie classification system was devised by the Bantuist Malcolm Guthrie and is predominantly based on geograph-

used the natural boundary of Lake Bamendjing and the river to the South as the cut-off point for the polygon representing the Bamun territory, not showing any further details to the North-West.

ical features (Guthrie 1948, 1967-1971; Maho 2003, 2009). Relevant for this thesis, Mous (2003) points out that Guthrie's A40 group does not form one genealogical group; Tunen is grouped within the Mbam languages (Guthrie codes A40/A60) while other A40 languages such as Basaá (A43) are more distantly related, falling outside of the Mbam subgroup and differing noticeably in their linguistics properties (Mous 2003:283). Tunen's closest relatives are therefore other Mbam languages of the A40/A60 group, especially the other Western Mbam languages Nyokon (A45), Nomaandé (A46) and Tuotomb (A461) (27).

(27) **Genealogical classification of Tunen**
Niger-Congo > [...] > Benue-Congo > Bantoid > Narrow Bantu > Mbam > Western Mbam > Tunen

The grouping of Tunen within the Mbam languages is supported by large-scale lexicostatic and phylogenetic studies as well as detailed investigation of phonological correspondences (see Grollemund et al. 2015; Pakendorf et al. 2011; Koile et al. 2022 for general classifications and Janssens 1993; Boyd 2015; Philippson 2022a,b and references therein for discussion of Mbam phonological reconstruction). The Mbam languages are consistently found to cluster together within such models, reflecting shared vocabulary and phonological correspondences such as double reflexes of certain consonants reconstructed to Proto-Bantu (Janssens 1993; Philippson 2022a,b). The languages are also similar (although not identical) in their vowel inventories and the presence of ATR harmony systems, which are very unusual for Bantu (see Boyd 2015 for a detailed overview; cf. Chapter 4 section §4.2).

One key question is whether Tunen and its neighbours are more accurately classified within Narrow Bantu or the bordering non-Bantu Bantoid languages of the Grassfields Bantu group. In this thesis, I follow the convention of classifying Tunen as a Narrow Bantu language, as the (re)classification of Tunen and comparison with non-Bantu Bantoid was not the goal of the project. Moreover, as this research was conducted within a project focussed on Narrow Bantu languages, the necessary data from neighbouring non-Bantu Bantoid languages needed in order to make a convincing comparison was not collected. However, I will show that Tunen differs significantly from (other) Bantu languages, meaning that its proper classification as Bantu versus non-Bantu Bantoid is debatable. This classificatory question reflects a broader open question on the use of the terms *Bantoid* and *Bantu*, with no agreed-upon cut-off point between the two (see e.g. Watters 2018; Marten 2020).

The Northwestern Bantu languages and the neighbouring Bantoid languages are known to show a high degree of linguistic variation, with most of the variation within the Bantu language family found there (Bearth 2003; Marten 2020). The

homeland of the Bantu people is generally considered to be located between Nigeria and Cameroon (Bostoen 2018, 2020; Grollemund et al. 2015; Koile et al. 2022; Pakendorf et al. 2011; Idiatov and Van de Velde 2021), meaning that Tunen is spoken close to the homeland. In terms of the classification, classifying Tunen as one of the first branches of Narrow Bantu (e.g. under node 1 of Grollemund et al. 2015) reflects that early Bantu populations migrated Eastwards and Southwards from this homeland in Nigeria/Cameroon region, a migration pattern known as *the Bantu expansion* and responsible for the Bantu languages spoken across central, Eastern, and Southern Africa today (Bostoen 2018, 2020; Koile et al. 2022; Grollemund et al. 2015; Pakendorf et al. 2011).

In terms of the classification of Tunen itself, the speakers I worked with identified four main dialects, namely Tɔbɔ́áŋɛ, Hiliŋ, Fombo, and Ndogtuna. The use of the plural form *tunəni* (cf. singular *hinəni*) refers to this group of dialects, with the people speaking them referred to as *Banen* (*bənəni*, singular *munəni*) (Pierre Molel, p.c.; cf. Dugast 1971:9; Mous 2003:283; Mbongue 2005:55). The Tɔbɔ́áŋɛ dialect is the standard dialect of Ndikiniméki, where I conducted my fieldwork (Chapter 3 section §3.3.1), and therefore the dialect spoken by the majority of my consultants. However, consultant EO spoke Hiling and consultant DM spoke Fombo (with both having lived in the Tɔbɔ́áŋɛ region for a long time). The fieldwork database contains some notes within the `comments` field for variation that was attributed to dialectal differences, e.g. EO's pronunciation of *nɛlala* for 'spider' (form UID [PM 922]) versus Tɔbɔ́áŋɛ *nialala* ([PM 923]). The dialectal variation recorded in the database was only found with respect to minor differences in pronunciation and lexis, matching the observations about dialectal variation stated in Dugast (1971). However, I provide consultant initials alongside all data used in this thesis in order that the reader may know the dialect of the speaker in question (see Chapter 3 for further discussion regarding data selection and presentation), in case any dialectal variation relevant for syntax and IS should be found in further work.

2.5.3 Prior work on Tunen

Part of the motivation for including Tunen within the BaSIS research project was the fact that there has been a reasonable amount of prior work on the language, including a book-length grammar (Dugast 1971). I briefly review the previous work on Tunen here, including work by Idelette Dugast (section §2.5.3.1), subsequent linguistic work (section §2.5.3.2), community language materials (section §2.5.3.3), sociolinguistic and ethnographic studies which touch upon the language (section §2.5.3.4), and treatment of Tunen in comparative studies (section §2.5.3.5).

2.5.3.1 Work by Idelette Dugast

The most extensive work on Tunen language and culture was conducted in the 20th century by the French anthropologist Idelette Dugast, who lived in Ndikiniméki in 1936-1936, 1938-1939, 1940-1941, and 1953-1954 (continuing to discuss Tunen in the period after 1941 through contacts in Douala) (Dugast 1955:VII-VIII). Dugast published a large body of academic works written in French on the Tunen language and culture. Her main work was a large two-volume ethnographic study (Dugast 1955-1960). She also wrote a grammar of Tunen (Dugast 1971), a lexicon (Dugast 1967), and published a book with transcribed and translated folktales, proverbs, and prophecies (Dugast 1975). Anecdotal evidence from modern-day Banen supports the observation that these works are an accurate representation of the Banen language and culture.[12] Dugast notes that her work was aided by earlier vocabulary and basic grammar notes from the German missionary Reverund Sigismund Wilhelm Koelle, who worked with 7 Banen[13] in Sierra Leone as part of his comparative work on West African languages (Dugast 1971:9). As the vast majority (179/210) of Koelle's informants were ex-slaves (Hair 1965), the Banen speakers presumably ended up in Sierra Leone through the 19th-century slave trade (Dugast 1971:9).

While Dugast's work is highly detailed, it has some limitations, especially when evaluated for the purposes of linguistic (rather than anthropological) research. As previously commented on by Mous (2003:283) and Isaac (2007:4, 22-23), Dugast had a tendency to miss linguistic generalisations. Her tonal transcriptions are surface-level without much discussion of underlying processes. While tones are transcribed, a non-standard system is used which also excludes some important features.[14] For example, words are given in citation form in the Dugast (1967) lexicon, where the regular utterance-final tone lowering rule (see section §4.3.5) applies. This use of citation forms has the unfortunate consequence that the underlying tonal pattern of each item is obscured by the regular phonological rule. Within her grammar, examples are not fully glossed, with a rudimentary system used for word-level correspondences. More seriously for this thesis' research question on the interaction between

[12] See for example this post from the Yinindi Banen diaspora organisation, which discusses Banen reactions to the Dugast materials: https://www.yinindi.org/48-article/france-sur-les-traces-de-idelette-dugast-allier-allias-ngwaka-miloni-yi-ndiki (accessed July 2020).

[13] These consultants were referred to with the label *Pénin* in Koelle's work (see *Section XII. E. Unclassified South-African Languages. N° 11*). Dugast (1971:10) interprets *Pénin* as a form of *Banen* and therefore considers these consultants Tunen speakers. In contrast, the database in Koelle (1854[2023]) lists them as Nomaandé (A45). While I leave the correct classification of Pénin to further work, Koelle transcribes *ɛ́lān* for 'five' (Koelle 1854[2023]), showing /l/ as reflex of **t*, which is diagnostic of Tunen rather than another Mbam language (see Philippson 2022a:21).

[14] See also Chapter 4 fn29 regarding Dugast's practice of only noting tone when it changes.

syntax and IS in Tunen, Dugast (1971) provides examples without discourse context, making many points of IS impossible to deduce from the data provided. The natural speech texts transcribed in Dugast (1975) are able to provide a better picture of discourse phenomena such as referent expression — assuming in absence of recordings that Dugast's transcriptions are accurate — but they also suffer from certain limitations. Firstly, the texts in Dugast (1975) are restricted to one specific genre, only illustrating monologic speech in a traditional story-telling context. Secondly, the texts do not provide any negative evidence, i.e. information on what is *not* possible. I therefore collected data for this thesis from dialogic as well as monologic speech, in addition to collecting grammaticality judgements from elicitation controlled by discourse context (see Chapter 3).

2.5.3.2 Subsequent linguistic work

The extensive descriptive work of Dugast laid the foundation for more specific studies on different aspects of Tunen's grammar. Starting with phonology, a recent treatment of Tunen and neighbouring Mbam languages is Boyd (2015), who focuses on vowels and vowel harmony. This builds on earlier work on Tunen ATR harmony by Bancel (1991); Van der Hulst et al. (1986); Mous (1986) and Van Leynseele (1977) and the work on Tunen tone and vowel elision by Wilkinson (1975) and Janssens (1988). I provide an overview of Tunen phonology in Chapter 4 section §4.1.

On the morphosyntax side, there are articles on the object in Tunen and the SOV clausal word order, which contrasts with the SVO order found in almost all other Bantu languages (Mous 1997, 2005, 2014) and the *bɛ́-* prefix (Mous 2008). Kongne Welaze (2010) is a French-language DEA thesis by the native-speaker linguist Jacquis Kongne Welaze, who was a member of the CODELATU team and co-author of the community orthography (Satre et al. 2008). Although unpublished, this is a detailed study of verbal morphology that has been shared with local linguists in Cameroon. I therefore cite it as a valuable source, although I try to also provide citations to publicly-available sources or to provide my own data to illustrate the same points. In terms of morphosyntax in relation to IS, Isaac's (2007) MA thesis focusses on participant reference in Tunen narratives (based on data from Dugast 1975), which I draw upon in Chapter 5 (on referent expression over discourse) and Chapter 7 (on discontinuous DPs).

A short overview of Tunen morphology, phonology and syntax is found in Mous (2003), who draws especially upon his study in Mous (1997), which was based on Dugast's materials as well as his own fieldwork from a short stay in Ndikiniméki, Cameroon and elicitation with an expatriate consultant in Europe. In Chapter 4, I provide a brief overview of Tunen grammar that summarises the most relevant

aspects of Tunen grammar covered in Mous (2003) and Dugast (1971) and highlights some differences between my data and these previous descriptions.

2.5.3.3 Community language materials

Missionary linguists from SIL have published orthographies on the Tunen language together with the Tunen language committee *Comité de développement de la langue Tunen* (Committee for the development of the Tunen language; CODELATU), which is subsumed under the Christian churches in Ndikiniméki (Satre et al. 2008).

A series of books has been published by the Cameroonian Association for Bible Translation (CABTAL), including a translation of the New Testament into Tunen (CABTAL 2019), a primer on reading and writing Tunen, a collection of stories, and a farming instruction manual. These books are printed locally and are available from members of CODELATU in Ndikiniméki.[15] Some of these materials use an earlier verison of the community orthography than the current version, differing particularly in the use of <e> for [ə] (now transcribed as <ə> in an update of the Satre et al. 2008 orthography). I discuss the variation in orthography between the community materials and linguistic work in Chapter 4 section §4.2, highlighting how my transcriptions compare to these other works.

2.5.3.4 Sociolinguistic and ethnographic studies

Aside from work focussed on Tunen's grammatical properties, relevant information about the language is also found from sociolinguistic and ethnographic studies which have a different object of study. Alongside the ethnographic work of Dugast (1955)-(1960), a treatment of slavery practice amongst the Banen is found in Abwa (1995). Johnson's (2012) doctoral thesis gives an ethnobotanic study on flora and fauna in the Ndikiniméki area, also commenting briefly on the current linguistic situation in Ndikiméki. Belika (2015) provides discussion of the notion *mɔnd* 'la personne humaine' (human) among the Banen, which touches upon some linguistic features and attitudes regarding the Tunen language. Finally, Joseph Mbongue's PhD thesis discusses approaches to translation of the Bible in Tunen (Mbongue 2005), including some discussion of Tunen grammar alongside the broader discussion of sociolinguistics and language development.

[15] I thank Daniel Mbel for showing me these materials when I was in Ndikiniméki; I have purchased a copy of the reading primer and story collection and donated them to the Leiden University Library.

2.5.3.5 Treatment of Tunen in comparative studies

In addition to these studies focussed on Tunen and the genealogical studies discussed in section §2.5.2 above, Tunen has been mentioned in various comparative studies within Bantu and Africanist linguistics, often as a sidenote as a language to be excluded on account of its unusual properties or as a language of particular interest in being an outlier. For example, the unusual syntax of Tunen is mentioned in Bearth's (2003) overview of Bantu syntax, and again in Downing and Marten (2019), where Tunen's OV word order is said to reflect IS (based on Mous 1997, 2003). Hyman (2011) discusses Tunen's unusual OV syntax and its relation to object pronouns in Benue-Congo, supporting Mous's (2005) proposal that OV syntax in Tunen is innovative. I come back to these comparative discussions in Chapter 6, where I provide more detail on OV in Tunen and situate it in a comparative context.

In terms of the nominal domain, Van de Velde (2022) highlights in his overview of Bantu noun phrase typology that Tunen is a rare example of a Bantu language with discontinuous noun phrases. In Chapter 7, I compare the Tunen discontinuous noun phrase construction with the constructions found in other Bantu languages, providing further detail and arguing that the Tunen construction has distinct semantic and syntactic properties from the other constructions mentioned in Van de Velde (2022).

Finally, Tunen is also discussed in studies concerning the high degree of linguistic variation within Northwestern Bantu and Bantoid languages, as discussed in section §2.5.2 above.

2.6 Summary

This chapter has provided background information on Tunen syntax and information structure, including the necessary theoretical background on information structure and generative models of syntax, discussion of prior work on information structure and syntax in Bantu languages specifically, and background to the Tunen language. Having now provided this general background, the next chapter turns to the methodology used for the data collection and analysis for this thesis.

CHAPTER 3

Methodology

3.1 Introduction

This chapter presents the methodology chosen for the study of the interaction of syntax and information structure in Tunen. I start by discussing the conceptual framing of the study (section §3.2). I then discuss the data collection methods used for the fieldwork (section §3.3), the use of secondary data (section §3.4), and the analysis tools used (section §3.5). Next, I give information on the data organisation and how the data and metadata have been archived (section §3.6). I also discuss the limitations of the methodology used, including the impact the COVID-19 pandemic had on data collection (section §3.3.4) and the more general limitations of the framework followed (section §3.7).

3.2 Conceptual framing

3.2.1 Positivism, parsimony, and falsifiability

As introduced in Chapter 2, the later chapters of this thesis are written within the formal syntax framework of generative linguistics, specifically the Minimalist framework (Chomsky 1993, 1995, 2000 *et seq.*), which builds on earlier generative theories developed as an alternative to structuralist and behaviourist approaches to language (Chomsky 1957, 1959, 1965, 1981, 1993; see e.g. Kertész 2017; Newmeyer 1980,

1986, 1996, 2022 for historical/historiographical overviews). Minimalism generally assumes a positivist epistemological stance in which language as an internalised cognitive system (*I-language*) is considered to exist in some form that is increasingly uncovered by means of scientific inquiry (Chomsky 1986; Isac and Reiss 2013). In contrast, the externalisation of language (*E-language*) — as mediated by various non-linguistic performance factors such as memory limitations and speech errors — is what we are able to directly encounter. In this way, linguistic research aims to uncover information about the internal rules of language — as understood to be part of cognition — working from E-language to I-language, as in (28) below.[1,2]

(28) **Linguistic research workflow**

E-language	→	I-language
↑		↑
observation		*object of study*

While positivism is a common epistemological stance within generative approaches to linguistics, often followed implicitly, a criticism is that such approaches may neglect the social aspect of language. It is well-known that language varies between speakers, with sociolinguistic variables such as gender, age, social class known to interact with how someone uses a language. Classical generative work is framed in terms of a monolingual speaker, when the reality for most of the world is one of multilingualism, with most speakers speaking multiple languages — as is true for Africa as a whole and the region around Cameroon more specifically (Di Carlo et al. 2016; Heugh 2019; Lüpke 2019). A large part of critique of generative approaches thus relates to the early presentation of Chomsky (1965) of an 'ideal speaker-hearer' within a monolingual speech community as the object of study:

> "Linguistic theory is concerned primarily with an ideal speaker-listener, in a completely homogeneous speech-community, who knows its (the speech community's) language perfectly and is unaffected by such grammatically irrelevant conditions as memory limitations, distractions, shifts of attention and interest, and errors (random or characteristic) in applying his knowledge of this language in actual performance."
>
> Chomsky (1965:3)

[1]This is the type of linguistic research I pursue in this thesis, but study of E-language can also be considered to be linguistic research, under a more encompassing definition of 'linguistic' that includes the study of how language is manifested in society and in relation to cognitive factors.

[2]While I frame this discussion in terms of generative approaches, compare the Saussurean distinction between *langue* and *parole* and the broader scientific context of Cartesian dualism.

However, in the nearly 60 years that have passed since this statement was made, this narrow approach to linguistics has not only been rejected by non-generative theoreticians but has also been shifted within the generative paradigm (see Lohndal 2013; Lohndal et al. 2019; Scontras et al. 2015 for germane discussion). Contemporary work in the generative framework recognises the reality of multilingualism and increasingly embraces naturalistic field data as an important source of empirical foundations for linguistic theory. This thesis fits into this current approach to generative linguistics; in presenting generative analyses, I am not committing to the metatheoretical stance that was adopted in the early years of the framework. In order to give clarity on the combination of generative linguistics with field methods, I will explain in section §3.3 the specific approach to data collection I used in my fieldwork, discussing how I followed the workflow in (28) and weighed up the evidence for and against positing rules as part of Tunen speakers' I-language.

By adopting a Minimalist approach, I follow the logic that the linguist's role is to find the minimal rules that explain the data provided. This relates to the metatheoretical consideration of parsimony of analysis within scientific theory, as commonly formulated under the metatheoretical heuristic of Occam's Razor (29).

(29) **Occam's Razor**
"Entities are not to be multiplied beyond necessity." (Baker 2022:§2)

When applied to linguistics, this heuristic can therefore be expressed as the rule that, if two analyses both account for the data at hand, the one that requires the fewest number of rules is the one that should be chosen. I will use this argumentation thesis when deciding between competing analyses, specifically in terms of how Tunen's basic clausal syntax is built up (Chapter 6) and how discontinuous DPs should be modelled (Chapter 7). As I reflect on in Chapter 8, Occam's Razor crucially depends on the simpler analysis being able to account for the data, meaning that subsequent empirical investigation may lead to the simpler analysis no longer being sufficient on account of changes in the nature of the data to be accounted for (an aspect of theory formation sometimes termed *cyclicity*; see e.g. Kertész 2017). A goal of this thesis is to develop a clear formal model that can be tested in subsequent empirical investigation. I therefore mention potential alternative analyses that may end up being preferable if certain empirical facts do not hold.

One more general question is whether choosing the simplest set of rules commits the linguist to the statement that this set of rules is closest to how speakers/signers actually form and parse sentences. This is a much deeper point than I will go into in this thesis, but a basic argument can be made for the assumption that cognitive processes favour efficiency. In terms of IS, this idea of economy also

links to the idea introduced in Chapter 2 that conversational participants aim for a smooth transfer of information, with economy invoked as the null hypothesis. I also touch on the idea of economy in Chapter 7, in relation to iconicity of syntactic contiguity versus discontinuity.

Generative approaches aim for analyses to make predictions about the data which can be verified or falsified by further empirical investigation; falsifiability is a key metatheoretical criterion. I therefore highlight throughout the thesis which predictions the analysis presented makes, so that future research can test the predictions. If the predictions are accurate, this is evidence in favour of the analysis. If the predictions are inaccurate, then the analysis must be adapted to account for the new data. As this thesis is the first formal analysis of Tunen syntax and information structure, and as relatively little empirical work has been done on the effect of information structure on Tunen syntax, it is to be expected that some (or perhaps most) of the predictions will turn out not to hold. I therefore aim to make clear on exactly what empirical grounds and under which theoretical assumptions a particular analysis was made, so that the reader is free to consider the evidence and alternative approaches.

3.2.2 The use of grammaticality and felicity judgements

For the positivist framework adopted here, grammaticality judgements are crucial, as they are considered to give key insight into a speaker/signer's internal grammar, which is the object of study (28). The predictions of a model can be checked or falsified by grammaticality judgements, and so I present grammaticality judgements as evidence for and against certain rules being part of Tunen's grammar. Because of the focus on information structure, I also use felicity judgements.

There are several methodological advantages to using grammaticality and felicity judgements (Bowern 2015; Vaux et al. 2006). The first methodological advantage is that elicitation enables the researcher to collect data on topics of interest within a limited timeframe available for fieldwork. This contrasts with corpus methods for natural speech data, where relevant examples may not show up simply due to the size of the corpus.

A second methodological advantage of grammaticality/felicity judgements is that they allow for negative evidence, i.e., confirmation of not only what is possible but also what is *not* possible. Such information on what is not possible — i.e., *negative evidence* — is not available from corpus methods, where the absence of evidence of a particular construction may give some indication of its acceptability but could equally be due to limited size of the corpus, as summarised in the aphorism that absence of evidence is not evidence of absence. The usefulness of

elicitation for providing negative evidence is one of the key arguments in favour of it as a methodological choice (Bowern 2015; Vaux et al. 2006).

While grammaticality/felicity judgements are useful, they can vary both within and across speakers, for a variety of external reasons. It is therefore important that judgements are checked multiple times. Firstly, I checked judgements again with the same speaker, either later during the same session or in a different field session. Secondly, I checked judgements with different speakers, primarily in separate sessions but sometimes by having 2-3 consultants present in the same session (as indicated by '+' within the example presentation, e.g. [EE+EB 2228] indicates a form from a session conducted with both speaker EE and EB). In this study, I tested judgements multiple times during the same session with a consultant. I then reviewed the grammaticality judgements after the session and made hypotheses about particular grammatical rules to test in further sessions. For data that went against the hypothesis, I tested with the same speaker in a later session in order to see whether the judgement was stable. If so, I adjusted the hypothesis accordingly. For the key phenomena in this thesis, I tested with at least 3 speakers; for minor points, I tested with 2 speakers. Some points of interest to the reader may only have been tested by 1 speaker due to not being directly relevant to my research question at hand. I therefore used a fairly time-intensive methodology, with the advantage of improving the quality of the data in this thesis and the confidence with which I can make generalisations about Tunen grammar. The disadvantage is that this increased workload means I was not able to cover as many topics or work with as many different consultants as would be possible with a more shallow methodology. The choice to confirm judgements during elicitation sessions also means that elicitation recordings may be quite long for a relatively small number of sentences discussed.

One methodological tool was to purposefully mispronounce a given word or phrase, in order to test whether the consultants would correct me. If I was corrected, this provided evidence for the difference being meaningful in Tunen. For example, mispronunciations of [ɔ] as [o] were corrected by speakers while [p] instead of a speaker's [b] was not corrected. This provides evidence that /ɔ/ and /o/ are separate phonemes while [p] and [b] are allophones of the same phoneme /p/ (see Chapter 4 section §4.2).

The way one asks questions can influence the answer, which in certain epistemologies is interpreted as the answers arising through the research process rather than being part of an innate grammar. These issues affect the validity of the data collected and presented. This potential flaw is particularly important for the investigation of IS, where the judgement of interest may relate to felicity rather than grammaticality, and therefore be highly context-dependent. Because of this risk, I used various strategies designed to improve the reliability of the data. One re-

search methodology for fieldwork was to ask neutral questions rather than leading questions, so as to avoid priming a yes-response from the speaker due to revealing my own bias as the linguist asking the question. While this strategy may occasionally have the downside of making myself appear stupid[3] and may lengthen the explanation, I followed it in order to improve the quality of the data. The idea is that the grammatical sentences are generally considered grammatical within the speech community. I present the examples with metadata of the speaker and the unique form ID in the database such that the interested reader is able to look up the form in the database and check the raw audio/video recording, if desired (for example, in order to check the pronunciation). While giving precise metadata information like this may suggest otherwise, the data selected for consideration are those that are representative of the data more broadly; any cases in which a form was unusual are indicated in the description in the main body of the text.

3.2.3 The use of natural speech data and corpora

Natural speech data refers to data from free-flowing speech. This allows for study of language as used by speakers and is particularly important for interactional speech and discourse-level phenomena such as referential encoding. Natural speech data can also be considered less corrupt than data obtained from elicitation or received only in transcribed form (Vaux et al. 2006:97-98; cf. Himmelmann 2012).

Natural speech texts can be divided into different genres. A basic distinction to make are between *monologic* and *dialogic* texts, the former referring to speech of a single speaker and the latter to speech of multiple speakers. Monologues are in turn dividable into stories, personal narratives, and instructional speech. Dialogues are dividable into semi-structured dialogues (based on prompts) and free dialogues (unprompted). I aimed for a mixture of these genres; 4 texts from different subgenres are provided in the Appendix as illustration of the natural speech dataset.

When natural speech data is compiled, it creates a corpus of data. This was done for my field recordings and was also done by Idelette Dugast in creation of her Dugast (1975) book, which forms a corpus of traditional folktales ('contes'), proverbs, and prophecies in Tunen. Such data allow for investigation of topics such as the frequency of particular words or constructions. When corpora are available from different time periods, they also allow for diachronic investigation. This is possible to a limited extent for Tunen given that Dugast's speakers were older men at time of recording, meaning that they were born over a century before my field

[3] By the end of the second fieldwork sessions, my ability to convincingly not know the answer to a question of interest was doubted by the consultants I worked with most closely, who sometimes joked that I already knew the answer.

recordings were made. Although this is a shallow time depth, the fact that this covers 3-4 generations allows for some consideration of diachronic change in Tunen. I discuss this in relation to the grammaticalisation of a specific indefinite determiner from the numeral 'one' in Kerr (2020) and in Chapter 4 section §4.3.11 and in terms of subject indexation in Chapter 8.

3.3 Primary data collection

3.3.1 Fieldwork stays

3.3.1.1 Overview

The primary source of data for this thesis was data collected via in-situ fieldwork in Ndikiniméki and Yaoundé, Cameroon. Fieldwork was conducted during two trips, one from March - June 2019 (3.5 months) and one from October 2021 - February 2022 (3.5 months), under research permits awarded by the Cameroonian Ministry for Scientific Research and Innovation (MINRESI; permit no. 90000061/MINRESI/B00/C00/C10/C12 and 000157/MINRESI/B00/C00/C10/C13 respectively). A small amount of data was also collected remotely in 2023. The delay of the second field trip and lack of further in-person field trips were due to the COVID-19 pandemic, which will be discussed further in section §3.3.4 below.

3.3.1.2 Consultants

I worked with approximately 11 consultants for linguistic study,[4] of whom 8 were the principal consultants (i.e., consultants who were consulted in multiple sessions and whose data contributed directly to the topics explored in this thesis). Of these 8 consultants, 2 were women (AM, JO) and 6 were men (DM, EE, EB, EO, PB, PM), with an age range of 30-75 years old at time of recording (PB being born between 1980 and 1989; EE, EB, and JO 1970-1979; AM 1960-1969; PM 1950-1959; and EO and DM 1940-1949). All consultants spoke French as a second language, and some also spoke a neighbouring Bantu language as an L2. The consultants were educated to secondary education level. Many worked as agriculturalists, while JO worked as a secondary school teacher. Most consultants were literate in Tunen due to training from the Tunen literacy programme (*alphabétisation*) and consultant PM had some additional linguistic training through work on Cameroonian languages through the Cameroonian Association for Bible Translation and Literacy (CABTAL). All consultants spoke the Tɔbɔ́áŋɛ dialect (the standard dialect of Ndikiniméki), with the ex-

[4] I also worked with other consultants for recording of culturally-relevant practices such as songs.

ception of EO (who spoke Hiliŋ) and DM (who spoke Fombo), both of whom had lived in the Tɔbɔ́áŋɛ-speaking region for several decades.

3.3.1.3 Session format

Fieldwork sessions were conducted using French as a metalanguage. Translations are therefore provided in both the original French translation as agreed with the consultant and with an English translation later added by me. The French translations may be colloquial speech; they have been lightly edited for grammaticality but kept close to the original. The motivation for giving the French translation as agreed with consultants is to show the consultants' interpretation. For conversion of the examples used in this thesis for examples to be used for other purposes, e.g. language-learning resources, some further edits to the translations may therefore be desired for stylistic reasons.

The sessions were conducted in different environments. Many elicitation sessions were held at the house of consultant DM, either on the veranda outside (which had some background noise but had better light levels) or inside the house (where there was less background noise but lower light levels). Other sessions were held at consultants' houses, at an office space used by the CODELATU Bible translation team, and at the location of specific activities (e.g. in the town square when recording dancing at a funeral, and in JO's kitchen when recording cooking videos). The relevant information about location and presence of other people in a recording session is noted within a 'metadocumentation' file provided for each field session in the archival deposit.

Although this thesis centres on a research question related to syntax and IS, primary data collection was conducted following the principle that the data should be as high-quality as possible, in order to be of use to the broader scientific community and local community members. I therefore made both audio and video recordings. While video format is not key to the research question pursued here, the video format does allow for preservation of information conveyed by consultants via gesture, e.g. for iconic representation of tone height and deixis. The video files also provide an overview of the setting of each recording, and are key for capturing visual aspects of various cultural practices such as cooking and dancing.

During the sessions, I made handwritten notes in a notebook. In elicitation sessions, I made transcriptions by hand during the session, repeating words and sentences to check pronunciation and to ask the meaning. This means that the elicitation files have a relatively long duration for the number of utterances covered (versus an alternative workflow, where many utterances are elicited and transcriptions are only made at a later stage, using the recording). For natural speech data,

a recording was made and this was then played back on a laptop and transcribed with the help of a consultant in a future field session, due to the rapidity of natural speech preventing live transcriptions from being feasible. The natural speech transcriptions were generally made first in the same notebook and then typed up, and in some occasions (during the later fieldwork trips) were typed directly and/or written by the consultant before being checked together during the field session. The advantage of this method of transcribing together with a native-speaker consultant is that the transcriptions are of higher fidelity than transcriptions made without this help. These transcription sessions were also recorded — while not always strictly necessary, these recordings of transcription sessions nevertheless preserve interesting explanations of points of interest encountered in the natural speech data, as well as the elicitation of other relevant forms (e.g. the infinitival form of a verb first encountered in a natural speech context, or a judgement regarding whether a certain tone is obligatory, as will be seen to be key to the argumentation regarding biclausal clefts versus monoclausal focus constructions in Chapter 5).

3.3.2 Positionality

I conducted the research as an outsider to the Tunen-speaking community, being an L1 English speaker from the UK visiting as part of a research project based in the Netherlands. The project goals and methodology were discussed with consultants following procedure regarding informed consent for recordings. While many linguists working in Cameroon are associated with missionary organisations, I clarified my association with Leiden University and status independent of missionary linguists. I was invited to attend occasional meetings held by the Christian Tunen language committee CODELATU during my stay and found consultants through initial contact with CODELATU members, whose help I gratefully acknowledge.

Being an outsider linguist has methodological advantages and disadvantages (Bowern 2015; Vaux et al. 2006). An advantage is the ability to ask many questions about the language without expectation that I knew the answers already, as I discussed in section §3.3 above. The clearest disadvantage is a lack of native-speaker knowledge about the language and culture. I therefore worked closely with consultants and in the second trip focused more time in training consultants, several of whom had already received basic linguistic training through the Tunen alphabétisation project of the Tunen language committee (CODELATU). Videos were made of cultural activities considered interesting, primarily on themes suggested by the consultants themselves. Several of these are currently untranscribed and therefore not covered in this thesis, but are included within the archival deposit in order to provide additional materials for further study.

3.3.3 Fieldwork questionnaires

As this project was conducted as part of a research project with research goals related to the interaction of syntax and IS in Bantu languages, and as the length of fieldwork was limited (a limitation exacerbated by travel restrictions related to the COVID-19 pandemic; section §3.3.4), fieldwork questionnaires were used to guide data collection and investigate the syntactic expression of IS. I explain each of these questionnaires below.

3.3.3.1 BaSIS project methodology

The research in this thesis was conducted as part of the Bantu Syntax and Information Structure (BaSIS) research project at Leiden University (NWO VIDI 276-78-001). As part of this project, a dedicated fieldwork methodology document was created (Van der Wal 2021) which follows the principle that investigation of IS requires contextualised data collection (Van der Wal 2016:259-260; see also Van der Wal et al. to appear). This methodology document was specifically targeted at the investigation of the interaction between syntax and IS in Bantu languages. It draws on previous sources including the Questionnaire on Information Structure (Skopeteas et al. 2006). Differences are that it is specifically tailored to Bantu languages (both in terms of linguistic topics covered and in terms of adaptation of example stimuli to local contexts) and that it includes a set of photos that replace the computationally-generated image stimuli from the QUIS. The latest version of this BaSIS methodology also includes tests for nominal licensing and the influence of Case.

A common task used for this thesis was to test for the felicity of a sentence in the context of a specific question (i.e., question-answer congruence), which was used to test for focus expression. More contrastive focus was tested using tasks relying on correcting someone's incorrect assumption (corrective foucs) or contrasting something with something that was previously mentioned (contrastive focus). The questionnaire also covers topic expression; these are discussed in Chapter 5.

In my 2019 fieldwork, I used an early draft of the BaSIS project methodology that did not include the photo stimuli and lacked some of the tests from the 2021 version, notably the tests for nominal licensing. I therefore created some of my own hand-drawn picture stimuli for use in elicitation sessions and do not provide a full account of Case in Tunen (but see Chapter 6 and Chapter 8 for some initial hypotheses regarding argument licensing).

3.3.3.2 CHAOS/C08 project questionnaire

In addition to the BaSIS project methodology, I collected data using the project questionnaire of the Consequences of Head Argument Order on Syntax (CHAOS) project at Potsdam University (subproject C08 of SFB 1287 Limits of Variability in Language), where I was a short-term visiting PhD research fellow in September - December 2022. This project questionnaire was specifically developed to investigate syntactic correlates of OV versus VO word order. As Tunen is unusual for a Bantu language in having OV and not VO word order, this questionnaire allowed for more detailed investigation in the extent to which Tunen syntax resembles other OV or VO languages. Examples of tasks used for this thesis include investigation of word order in main versus embedded clauses and controlling for different predicate types and adverb types, as will be key to the investigation of Tunen's OV word order presented in Chapter 6.

During my 2021/22 fieldwork trip, I used a draft version of the methodology provided to me by Gisbert Fanselow in late 2021. On returning from Cameroon, I completed a 3-month visiting fellowship at Postdam University as part of the C08 project. I then collected some additional data on Tunen using the updated version of the CHAOS/C08 questionnaire via remote elicitation held over WhatsApp via audio calls (as discussed in section §3.3.4 below). These data are also transcribed and included within the corpus deposit. Data collected using the CHAOS/C08 questionnaire are tagged as `CHAOS` within the Dative database and indicated by "CHAOSQuestionnaire" within the filename.

3.3.3.3 Other stimuli

Finally, a small number of examples were collected using the Max Planck Scope stimuli and by using materials I created myself specifically for my research purposes. The Max Planck Scope stimuli provide pictures that were used to disambiguate interpretations of sentences with multiple quantifiers.[5] Data elicited using the Max Planck stimuli are tagged as `scope` within the Dative database. Within the comments field (part of the metadata), the picture ID number is given, e.g. 3/77 refers to picture number 3 of the set of 77 pictures.

My own materials include prompts for dialogue tasks and hand-drawn picture stimuli shown during sessions. These were presented to consultants with a prompt sentence in French or Tunen in order to record a (relatively) natural response.

[5] See https://www.eva.mpg.de/lingua/tools-at-lingboard/material_scope_fieldwork_project.php [accessed 02-2024].

3.3.3.4 Database coding

I aimed for the data collected in this study to be reusable for future research on the Tunen language. As different research questions require the researcher to be able to control for different variables, I set up the database to record key properties of each form. For example, each form is labelled for elicitation method, with the categories in Table 3.2 in the field `elicitation method`.

Label	*Explanation*
elicitation_standard	Elicitation based on production or judgement of form in verbally-explained discourse context
elicitation_picture	Elicitation based on production or judgement of form in visually-prompted discourse context
elicitation_remote	Elicitation conducted remotely via WhatsApp call
monologue	Natural speech recording of a single participant
dialogue	Natural speech recording of multiple participants

Table 3.2: Encoding of elicitation type within Tunen Dative database.

This coding allows for example for the database to be searched only for natural speech examples (which can be achieved by a conjunction search for `monologue OR dialogue`). The data collection method can be checked for each example in this thesis by referencing the form from the database using the form UID indicated in square brackets by each example (e.g. [DM 166] refers to form id 166 in the database, by consultant DM). I also comment in-text on the nature of the data collection where relevant (for example, in mentioning constructions that occur frequently in dialogue but were not found in elicitation).

I also used the tag function in Dative to facilitate the analysis of the dataset, as I will discuss further in section §3.5.1 below. While I do include tags relevant to different parts of the grammar (e.g. `ATR` for examples of interest for the analysis of Tunen's ATR vowel harmony system), the current tagset prioritises variables related to syntax and IS, and I leave potentially interesting other variables (such as syllable structure) for future work.

3.3.4 Impact of COVID-19

This project was both directly and indirectly impacted by the COVID-19 pandemic. Firstly, data collection was directly impacted by the inability to travel in Spring 2020

as planned. The second field trip for this project was therefore significantly delayed, with travel to Cameroon not possible until October 2021. Because of this delay in the field trip, the second trip was also slightly shorter than planned and a third trip was not possible, meaning that some of the fieldwork stimuli were not covered and a smaller number of natural speech texts were transcribed than desired.

Secondly, the project was impacted indirectly, for example through restrictions on library access and through the delay in fieldwork leading to a more limited time period in which to conduct data analysis and write up the thesis. I acknowledge here the 3 months of additional financial support made available by the National Programma Onderwijs (NPO) COVID-19 funding of the Dutch government, which gave some compensation for these issues.

During the COVID-19 pandemic, a variety of linguists contributed to methodological advice on adapting linguistic fieldwork and language documentation workflows to the pandemic situation, specifically in how primary data collection could continue despite the international travel restrictions (see e.g. Sanker et al. 2021; Williams et al. 2021). For example, Williams et al. (2021) provide recommendations for remote fieldwork, using tools such as WhatsApp and Zoom for fieldwork sessions. Community-led approaches where community members make recordings themselves were also still possible during the pandemic.

Such community-driven initiatives rely on several factors: (i) prior contacts with the community, (ii) infrastructure such as phones, laptops, internet, and electricity, and (iii) technical knowledge. Unfortunately, the lack of infrastructure within the Tunen speech community and the fact that this thesis was not conducted within the context of a language documentation project meant that I could not conduct fieldwork remotely during the pandemic, as consultants did not have laptops or smartphones. When travel was again permitted, I was able to re-arrange my field budget so as to provide equipment to the Tunen speakers. I also re-scheduled my second field trip to have greater emphasis on training community members in transcriptions and technology use. This had the downside that it limited the amount of questionnaire material I could cover, but had the upside of contributing to a more sustainable working practice and allowing for remote communication since leaving Cameroon. By providing speakers with phones, headphones, memory cards, and audio recorders, I was able to keep in contact with the speakers after returning to the Netherlands in 2022. This thesis has been significantly improved by being able to conduct a small number of remote field sessions via WhatsApp checks for grammaticality judgements and WhatsApp audio calls for extra data collection.

In Sanker et al.'s (2021) study of the effect of remote recording set-up for phonetic measurements, three recommendations for best practice of remote recordings are provided: (i) record speakers locally when possible, (ii) keep recording

set-up consistent across recording sessions, and (iii) document the recording set-up (including recording devices, software programs, and settings) (Sanker et al. 2021:e379). Due to the absence of equipment and capacity for local recording management, recommendation 1 could not be followed. However, recommendation 2 and 3 were followed. All remote sessions were conducted via WhatsApp audio call with the speaker based in Cameroon. This audio call was played on speaker via a Samsung Galaxy A51 smartphone and recorded by a Zoom H5 audio recorder (the same recording device used for in-person sessions) at an equivalent recording distance. These decisions are documented in the database, and all remotely elicited material is tagged as `elicitation_remote` in the `elicitation method` metadata field of the Dative database (Table 3.2). As non-locally recorded recordings are non-comparable with locally-recorded recordings even with the same speaker (Sanker et al. 2021), any researcher wishing to control for such small but statistically significant phonetic effects can filter the dataset by means of this tag (or, by identifying recordings made in 2023 as being remote).[6] While the sound quality of the remote recordings is likely too poor to be of use for phonetic study, and no video was recorded for these remote sessions due to the poor quality of the internet connection, the recordings nevertheless help check the pronunciation and discussion of the semantics and pragmatics of each utterance, and were made and included in the archival deposit under the belief that a low-quality recording is preferable to no recording at all.

3.4 Secondary data

In addition to the collection of primary data through fieldwork with Tunen speakers, I was able to benefit from secondary data available on Tunen through previous sources (cf. Chapter 2 section §2.5.3.3).

3.4.1 Dugast (1975) text corpus

The most significant previous dataset available on Tunen is the Dugast (1975) text corpus. This book consists of a set of *contes* (folktales), proverbs, and prophecies. These are provided in Tunen (using Dugast's own transcription), with free translation in French, word-by-word glossing, and a small amount of commentary.

[6] Note that Sanker et al. (2021) did not investigate the effect of unstable internet connection on recording quality, which may further affect some measurements. This was an issue in some of the remote recordings due to unstable internet connection in Cameroon. I attempted to reduce the impact of this issue by asking the consultant to repeat their answers for clarification and to increase the chance of recording an uninterrupted utterance.

As the Dugast (1975) text corpus is not digitised, is presented in a difficult format for automatic digitisation via Optimal Character Recognition (OCR), and is under copyright until 70 years after Dugast's death, I generally limited my study of these texts to the folktales contained in Parts I and II (a total of approximately 60 texts). Parts I and II were chosen as an arbitrary sub-corpus of a great enough size to expect various forms of interest to appear while being small enough in size for manual searches to be feasible. Parts I and II were pre-selected before investigation in order to avoid cherry-picking, i.e., purposefully including or excluding a given text considered more useful for the research question at hand.

3.4.2 Other sources

There are a variety of other published works on Tunen available, as I discussed in Chapter 2 section §2.5. I am grateful to Maarten Mous for providing additional fieldnotes and unpublished material related to his work. I also received data from Ginger Boyd and Scott Isaac at SIL Cameroon, whom I thankfully acknowledge. In Ndikiniméki, Daniel Mbel shared a linguistic primer on Tunen with me and Pierre Molel shared resources developed by him together with members of the Cameroonian Association of Bible Translation and Literacy (CABTAL), including a translation of the New Testament (CABTAL 2019), a Tunen literacy primer, and a book of stories (see Chapter 2 section §2.5).

Where data from secondary sources are used, these are cited accordingly. I have lightly adapted the format of many of the examples in order to allow for easier comparison with the rest of the examples in this thesis, adapting some glosses for consistency. These adaptations are indicated by 'adapted' next to the citation, with optional extra explanation provided in a footnote.

3.5 Analysis

3.5.1 Dative/OLD

Field data were transcribed and annotated using the Dative database software, available at https://www.dative.ca/. Dative is a graphical user interface (GUI) to the Online Linguistic Database (OLD), an open-source piece of software. Dative was used instead of the more widely-used ELAN and FLEx programmes in order for interoperability within the BaSIS project. As Dative was used by other members of the project, using it for Tunen meant that the datasets were more easily compared. An additional practical advantage was that the project members only needed to be trained in the use of one software. This facilitated comparative research within the

BaSIS project that constitutes work outside of this thesis (see e.g. Kerr et al. 2023 for a comparative study on Bantu word order and Kerr and van der Wal 2023 for a study on truth expression in Bantu languages).

The main benefit of using the Dative database for data organisation was the ability to search the entire corpus for the purposes of linguistic analysis, as mentioned in section §3.3.3. One benefit of Dative over other available software options is that it has a highly powerful and user-friendly search interface. The ability to search any level of the data (e.g. transcription, morpheme gloss line, translation, but also metadata fields) facilitated easy access of relevant examples. This was particularly useful for finding important data points, even if they had not originally been commented on as of interest. The tag field of Dative was particularly relevant here. This field allows the user to associate forms with a label, such as `question_polar` for polar questions. By developing a tagset related to the research questions of this thesis, I was able to code and find relevant examples. The ability to use conjunct search facilitated investigation of possibly interacting factors. For example, if looking into how negation is marked in relative clauses, a conjunct search can be made combining the tags `negation` and `relative`. Conjunct searches allowed also for cross-correlating tags with other query lines, e.g. searching for `focus_obj` in the tags line and `PRN` in the morpheme break line allows for investigation of the form of object pronouns in focal contexts.[7] I provide the full tagset as part of the archival material of this thesis.

Finally, each form in Dative has a unique identifier (UID) which is permanent and unchangeable. Once a form was transcribed in Dative and the UID was generated, I noted this in my fieldnotes alongside the original transcription so that the original fieldnotes can be linked to the database. I also present all examples in this thesis with the UID of the corresponding form. By searching this number in the `id` metadata field of the Dative database, the example can be easily retrieved. For example, searching within Dative for '166' within the `id` line provides form [DM 166] as a result. The recording information can be in turn extracted from the metadata associated with the form in Dative (see section §3.6); the form UID is used in this thesis as the minimal information needed to uniquely identify each form, with consultant initials provided to allow the reader to control for any potential variation conditional on dialect or other inter-speaker variables.

[7] Tags in Dative are provided at the level of the form, which corresponds in most cases in my corpus to a clause. Conjunct searches may return results that do not match the research question, for example in having focus on the object but a pronoun elsewhere in the clause. However, the search function still provides a short collection of forms that can easily be scanned manually for relevant examples.

3.5.2 Audacity and Praat

For acoustic analysis and manipulation of audio recordings, the programmes Audacity (Audacity Team 2023) and Praat (Boersma 2001) were used. While phonetics and phonology do not form the main focus of this thesis, and so no full acoustic analysis was conducted, some forms were checked in Praat in order to check the accuracy of transcriptions. The primary use of Praat was to investigate whether there was a prosodic break and to see the absolute realisation of the tones via the Praat pitch trace tool. I used Praat to check the absolute realisation of tonal downstep and the effect of utterance-final tone lowering rules discussed in Chapter 4 section §4.2, as well as checking the acoustic signal of minimal pairs elicited in the fieldwork (tagged `minimal_pair` within Dative), which all confirmed the previous studies regarding which phonemes are contrastive in Tunen (e.g. Mous 2003; Boyd 2015). Audacity was used to check the audio quality of recordings, to remove any unwanted content,[8] and to play back recordings for transcription purposes with the Tunen consultants (as discussed in section §3.3.1).

All the field data collected are archived in audio/video format, meaning that in principle, all of the examples in this text can be traced to the original sound file, should further acoustic analysis be desired.

3.6 Data organisation and archiving

3.6.1 Filenaming and data organisation

All recordings made during this project were named according to filenaming convention agreed upon within the BaSIS project, as given in (30) below. As Tunen has the Guthrie code A44 (Chapter 2 section §2.5.2), the filename of all the recordings associated with this thesis therefore begins with *A44-*.

[8] Removal of audio content was rarely necessary, but sometimes used, for example to remove an off-topic discussion about someone's family members that took place during one field session (removed in the interests of privacy). If something was removed from the middle of the recording in this way, this is noted in the metadocumentation text file for that field session.

(30) **BaSIS filenaming convention**

A44-20190313-EK-AM-SwadeshList-01_bkup.wav

A44		20190313	EK	
Language UID (Guthrie code)		Date (YYYYMMDD)	Transcriber initials	
AM	SwadeshList		01	
Consultant initials	Brief description of subject matter		Part of session	
_bkup		.wav		
(Optional extension to indicate version)		File extension		

Within the archival deposit, the Tunen files are organised in the following way.

(31) Recordings > Consultant ID > Date

For example, the following file path leads to all files recorded on the 15th December 2021 with consultant PM.

(32) Recordings > PM > 20211215

Within each session folder, the audio and video files are provided in addition to a .rtf file named 'Metadocumentation' (e.g. A44-20211215-EK-PM-Metadocumentation.rtf). This metadocumentation file gives metadata information including session number date, time, location, consultant, recorder, and recording and file information, an overview of the contents of the recordings made in that session, and other notes relevant to the documentation. This information was then summarised by the general spreadsheet of metadocumentation for all the recordings, also available as part of the archive.

3.6.2 Archive

All the Dative (i.e. OLD) databases from this study are archived open access within The Language Archive (TLA) of the Max Planck Institute (MPI), as part of a joint collection from the BaSIS project members (see the TLA collection entitled 'Bantu Syntax and Information Structure (BaSIS)'; Table 3.4). These databases contain each form, with transcription line, line with morpheme breaks, glosses, free translation, and associated metadata (e.g. consultant initials, speaker comments, notes about discourse context, and so on).

In addition to the Dative transcriptions and metadata, I provide the raw audio and video files for the Tunen project within the Tunen sub-collection (Kerr in prep.). These recordings are made openly available under informed consent of the Tunen consultants, in order for other researchers and community members to be able to access them. In addition to the speech recordings analysed in this thesis, these recordings include some culturally-relevant materials, such as recordings of *ɛŋganda* dancing (see Appendix Text 2) and some currently untranscribed Tunen songs (recorded at the UEBC church in Ndikiniméki and at Nefanté village).

The archival deposit of the Tunen database, audio/video recordings, and metadata is available from 4th September 2024 at The Language Archive as part of the BaSIS collection. The links to these collections are given in Table 3.4.

Collection:	Recordings and database on Tunen syntax and information structure
URL:	https://hdl.handle.net/1839/8f0f1a65-9a90-42e3-ae39-7bed93009b5a
Parent collection:	Bantu Syntax and Information Structure (BaSIS)
URL:	https://hdl.handle.net/1839/2acf92c5-e5db-445b-bcdb-3b13b7e58f3f

Table 3.4: Links to the Tunen archival TLA collection and parent BaSIS collection.

As discussed in section §3.6.1, The Tunen recordings are sorted by consultant and date. In order to reduce the time needed to locate a file, a document is provided that gives an overview of all the files in the Tunen collection. This document contains information such as the session number (1-76), the consultant(s), the speech type and subtype (e.g. `Natural speech`, `Dialogue`), the filenames associated with this session, and the respective Dative form UIDs. This document can therefore be used to look up the recording files and/or Dative database entries for a given example by using the consultant initials and Dative UID provided in square brackets alongside the examples in this thesis to check for the corresponding filename.

3.7 Limitations

The main limitations of the methodology used for this study is the size of the audiovisual corpus, with the Tunen Dative database containing c. 3300 utterances, the majority of which at the clause level but also containing individual lexical items. I

conducted 76 field sessions with 11 consultants, of whom 8 were the principal consultants, and have 11 fully-transcribed natural speech texts. As I discussed in section §3.3.4 above in the context of limitations caused by the COVID-19 pandemic, the current database contains a more limited set of natural speech examples than planned (although nevertheless contains multiple examples of texts of several genres). Other material that was collected is not yet transcribed and/or translated, and therefore was excluded for the analysis in this thesis, but can serve as useful material to explore in further work.

Another limitation of the methodology employed is that it was focussed primarily on what is and is not possible in Tunen. This means that the data are less well-suited to answering research questions related to frequency and preference. Such research questions are better answered with a larger corpus, especially with a bigger focus on naturalistic speech of different genres. I will come back to this question of frequency in Chapters 5-7 when looking at word order variation, and in Chapter 8 when drawing conclusions about the extent of influence of information structure on Tunen syntax.

3.8 Summary

This chapter has described the methods employed in collecting and analysing the data presented in this thesis, considering the value and limitations of elicitation and natural speech data for answering this thesis' main research questions related to the interaction of syntax and information structure in Tunen, as contextualised within the framework of generative linguistics. All data collected in this project are available open access in *The Language Archive*, together with the Dative database and metadocumentation, as available in Kerr (in prep.).

CHAPTER 4

Grammatical overview

4.1 Introduction

Having introduced the Tunen language and sociolinguistic context in Chapter 2, this chapter provides a short grammatical overview of the language. The grammatical overview in general provides a brief description of Tunen grammar, with references to published sources for more detailed explanation. For aspects of Tunen grammar that are not covered in previous descriptions and are important for this thesis, I provide a slightly larger level of detail.

The grammatical overview is organised as follows: section §4.2 discusses the phonology of the language, including the consonant inventory, vowel inventory, tone, and phonological rules; section §4.3 covers the nominal domain, including nominal morphology and syntax; section §4.4 covers the verbal domain, including verbal morphology, tense/mood/aspect, and auxiliary verb constructions; section §4.5 covers the clausal domain, including constituent order, copular clauses, relative clauses, question formation, complementation, and information structure; and section §4.6 discusses other word classes, including the vocative marker, exclamations and discourse particles, ideophones, and song and drum language.

4.2 Phonology

4.2.1 Phoneme inventory

4.2.1.1 Consonants

Tunen's consonant inventory is given in Table 4.2 below. Tunen has no phonemic voicing contrast in its stop series (Mous 2003:284; Boyd 2015:22); single stops are transcribed as voiceless while prenasalised stops are written as voiced. The exception to this is the bilabial stop /p/, where [p] is found in free variation with [b].[1] In my transcriptions, I follow the official orthography in using <b> for the bilabial stop, although acoustically I hear it closer to the voiceless [p] in most cases.[2]

		labial	alveolar		palatal	velar
stops		p	t	(ʧ)		k
	prenasalised	mb	nd	ɲd͡ʒ		ŋg
fricatives		f	s			h
resonants	**nasal**	m	n		ɲ	ŋ
	oral	w	l		j	

Table 4.2: Tunen consonant phonemes (adapted from Boyd 2015:22).

Some sources include /x/ as a distinct phoneme from /h/; Mous (2003) distinguishes the two and Dugast (1971) includes <x> (as well as <ç>) in her transcriptions of Tunen (Boyd 2015:22). I follow Boyd in taking [x] (and [ç]) as an allophone of /h/, based on its distribution and in accordance with the official orthography (Satre et al. 2008). I therefore transcribe all cases of /h/ as <h>.

I also follow Boyd in taking /j/ to be a phoneme and representing it orthographically by <y>, as is common in orthographies of African languages and as adopted by the Tunen language committee (Satre et al. 2008).

[1] More specifically, Boyd (2015) indicates in her discussion of Tunen phonology that, while [p] and [b] are in free variation, there is also some variation between speakers and some variation dependent on the position in the syllable. Note that [p]∼[b] variation is also found in the neighbouring language Nomaándé (A46) (Wilkendorf 2001); see also Philippson (2022a:14).

[2] Evidence that [p]/[b] is allophonic rather than phonemic comes from the fact that the same speaker accepted my pronounciation regardless of whether I used a [p] or a [b], judging the words to be the same. Furthermore, there are no minimal pairs on the basis of a [p] vs [b] distinction.

Tunen also has the phoneme /ʧ/, which is stated to be very rare but phonemic, found in words borrowed from Nomaándé (Satre et al. 2008:3 fn3). Examples from my field data include *ʧíkíp* 'straight on' [PM 696], *bɛʧáʧɔ́* 'money' [EO 971], and *ʧɔ́bén* [PM 1128] 'peck'. I transcribe <ʧ> in these forms, without committing to /ʧ/ as a phoneme in Tunen, and therefore represent it within brackets in Table 4.2.

My resultant transcription system in comparison to previous sources is given in Table 4.4 below.

Phoneme	**Allophones**	**D1967/71**	**CO2008/ CO2019**	**M2003**	**B2015**	**This thesis**
/p/	[b], [p]	b	B b	b	p	b
/t/	[t]	t	T t	t	t	t
/k/	[k]	k	K k	k	k	k
/mb/	[mb]	mb	Mb mb	mb	^{m}b	mb
/nd/	[nd]	nd	Nd nd	nd	^{n}d	nd
/ŋg/	[ŋg]	ŋg	Ng ng	ŋg	^{ŋ}g	ŋg
/ʧ/	[ʧ]	-	C c	-	-	ʧ
/nd͡ʒ/	[nd͡ʒ]	nj	Nj nj	ɲj	^{ɲ}dʒ	nd͡ʒ
/f/	[f]	f	F f	f	f	f
/s/	[s]	s	S s	s	s	s
/h/	[h], [x]	h, x	H h	h, x	h	h
/m/	[m]	m	M m	m	m	m
/n/	[n]	n	N n	n	n	n
/ɲ/	[ɲ]	ny	Ny ny	ny	ɲ	ny
/ŋ/	[ŋ]	ŋ	Ŋ ŋ	ŋ	ŋ	ŋ
/l/	[l]	l	L l	l	l	l
/w/	[w]	w	W w	w	w	w
/j/	[j]	y	Y y	y	j	y

Table 4.4: Tunen consonant transcription used in this thesis, compared to the community orthography as in the 2008 version and the updated version as used in the 2019 Bible translation (Satre et al. 2008:2-3; *CO2008*/CABTAL 2019; *CO2019*), Dugast's lexicon and grammar (Dugast 1967, *D1967*; Dugast 1971, *D1971*) Mous's 2003 grammar sketch (*M2003*), and the recent phonological overview in Boyd (2015) (*B2015*). - = not included in source.

A point of variation between my data and previous accounts relates to rounding. Boyd (2015:22) concurs with Mous (2003:284) and Janssens (1988:62) in stating that bilabial consonants before schwa are rounded. However, the speakers I worked with did not round these consonants, for example pronouncing /mə-nífə/ 'water' as [mənífə] rather than [m^{w}ənífə]. I therefore do not transcribe rounding in my data. This could be a matter of language change or simply inter-speaker/dialectal variation; I leave this for further research. This difference in transcription is therefore a linguistic difference rather than purely a matter of orthographical convention.

Some early sources (e.g. Koelle's 19th-century wordlist; Koelle 2023[1854]) on Tunen transcribe other phonemes, which may be due to inaccuracy or to processes of sound change that have since taken place, as discussed further in Dugast (1971:11). My data match Dugast's transcriptions on these points and so I do not discuss this further here.

For words from other languages and proper names, I transcribe them as uttered, under the principle that sounds found in these items do not necessarily constitute phonemes in Tunen (section §4.2.7). I also transcribe the glottal stop [ʔ] when used in discourse (e.g. the word *áʔɔ* 'bye'; see section §4.6.2) but do not consider it as a phoneme of Tunen due to its restriction to discourse particles and exclamations.[3]

4.2.1.2 Vowels

Tunen's vowel inventory is given in Fig. 4.1 below. Note that there is no length distinction in the vowels (Mous 2003; Kongne Welaze 2010), although double vowels may appear in two cases. Firstly, double vowels occur in transcriptions when the vowel of a prefix is identical to the vowel of a vowel-initial root (other V_1V_2 sequences follow different hiatus resolution strategies; to be discussed further in section §4.2.5; Boyd 2015:37). Secondly, double vowels are used in my transcription system to represent contour tones (section §4.2.6).

The most recent study of Tunen's vowel inventory is Boyd (2015), who analysed the vowel inventories and vowel harmony systems of 10 Mbam languages, including Tunen. Boyd's (2015) system (and Kongne Welaze's 2010, which was based on work conducted with Ginger Boyd) differs from previous work in identifying 8 contrastive vowels rather than 7. The difference is that Boyd separates /ʊ/ and /ɔ/, although she writes that the distinction between these two is "slight" (Boyd 2015:23). The unclear status of /ʊ/ as a phoneme is indicated by the parentheses

[3]Dugast (1971, 1975) uses <ʔ> in her transcription system to indicate final forms (see section §41 on utterance-final vowel reduction rules). I discuss this in Chapter 8 section §8.4.2 in terms of changes in the syntax of subjects in Tunen visible between my data and Dugast's data. In my transcriptions, I do not use a <ʔ> to indicate reduction.

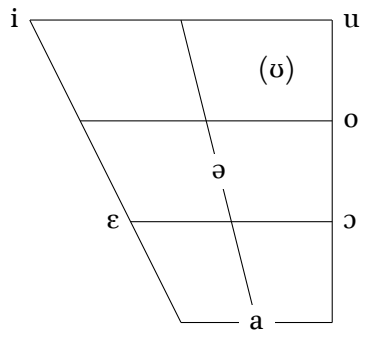


Figure 4.1: Tunen vowel phonemes.

around ʊ in Fig. 4.1. Mous (2003) writes that the distinction between /ʊ/ and /o/ is subject to dialectal variation, with a distinction found in the Douala region but not in Ndikiniméki. In my fieldwork, I did not get reliable judgements from the speakers I worked with (who were all from the Ndikiniméki region) to distinguish these vowels. I therefore transcribe them both as /ɔ/ in my data, although I do not make a firm statement against an analysis in which Tunen's vowel inventory underlyingly has 8 vowels, in the absence of detailed phonological investigation. The official orthography also does not distinguish between these two vowels (Satre et al. 2008), meaning that my consultants trained in the Tunen *alphabétisation* programmes also did not transcribe a distinction between /ɔ/ and /ʊ/ when they made transcriptions.[4] While I remain largely agnostic, the question as to whether /ʊ/ is a separate phoneme has some bearing on the topic of this thesis, notably in Mous's (1997) proposal that homophony between the infinitival prefix and the general preposition /ɔ/ facilitated syntactic reanalysis of nominalised complements of verbs, contributing to Tunen's innovation of OV word order (see Chapter 6 section §6.8 and Kerr 2024).

In my data, I therefore follow the official orthography in using <i ɛ a e u o ɔ> to reflect the vowel phonemes from Fig. 4.1. This transcription given is compared with other sources in Table 4.6 below. Note here that the vowel /ɛ/ should be seen as the recessive [-ATR] counterpart of /i/, which Boyd (2015) writes as /ɪ/ (see section §4.2.2 below on ATR harmony).

Lists of minimal pairs supporting the identification of /i ɛ a ə u o ɔ/ as phonemes in Tunen are provided in Satre et al. (2008), Kongne Welaze (2010), and Boyd (2015); for space reasons, I do not repeat them here. Examples in my Dative database are tagged as `minimal_pair` (with explanation in the comment section of which word

[4]Consultant PM did reflect on the evidence for /ʊ/ and said in later sessions that he could see some motivation for a proposal that /ɔ/ and /ʊ/ are distinct, e.g. regarding the infinitival prefix.

Phoneme	D1967/71	CO2008/ CO2019	M2003	B2015	This thesis
/i/	i	I i	i	i	i
/ɛ/	ɛ, e	Ɛ ɛ	ɛ, e	ɪ	ɛ
/a/	a	A a	a	a	a
/ə/	ə	E e / Ə ə	ə	ə	ə
/u/	u	U u	u	u, ʊ	u
/o/	o	O o	o	o	o
/ɔ/	ɔ	Ɔ ɔ	ɔ	ɔ	ɔ
/ʊ/	-	-	-	ʊ	-

Table 4.6: Tunen vowel transcription used in this thesis, compared to the community orthography (*CO2008*; Satre et al. 2008:2-3) with updated version as used in the 2019 Bible translation (*CO2019*; CABTAL 2019), Dugast's lexicon and grammar (Dugast 1967, *D1967*; Dugast 1971, *D1971*) Mous's 2003 grammar sketch (*M2003*), and the recent phonological overview in Boyd (2015) (*B2015*).

is a minimal pair of another). Note that while Boyd (2015:26) writes that the Tunen vowel system can be characterised by means of the features high and non-high, there are minimal pairs between the mid vowels, as in the minimal pair in (33).

(33) a. moló
/ma-ló/
6-oil
'huile raffinée'
'refined oil' [JO 602]

b. mɔlɔ́
/mɔ-lɔ́/
3-head
'tête'
'head' [JO 603]

Mous (2003) notes that [e] may alternate with [ɛ], in certain contexts, but he argues that it is only a phonetic difference (Mous 2003:286). I use <e> only in limited cases, such as the (optional) polar question particle *eé*, shown in (34) below, as well as certain exclamatives (sections §4.6.2).

(34) ɔ́ ndɔ tunəni ɔ́k(ɔ) (**eé**) ?
/ɔ ᴴndɔ tɔ-nəni ɔ́kɔ́ (eé)/
SM.2SG PRS 13-Nen understand (Q)
'Comprends-tu le tunen ?'
'Do you understand Tunen?' [PM 87]

A near-minimal pair with the question particle is the word for 'yes', which is realised with [ɛ]. However, the tonal contours are different: the polar question particle has a rising contour, and the word for 'yes' has a falling contour (35).

(35) **ɛ́ɛ**, n(a) aŋɔ́á (eé)?
/ɛ́ɛ na aŋɔ́á eé/
yes with PRN.2SG (Q)
'Oui, et toi?'
'Yes, and you?' [PM 41]

I also have one instance of a nasalised [ɛ̀ɛ̃́] in natural discourse (36). While this nasalisation is transcribed in the field corpus, I do not take it as evidence of something phonemic, and rather assume it is extra-linguistic (or possibly the French interjection *hein*).

(36) Context: 'Now, with regards to food, if I were to invite you round, what would you like, plantains or rice?'
bikim ɛ̀ɛ̃́, ɛbáka mi hikəkiə bikim -
/bɛ́-kimə ɛ̀ɛ̃́ ɛ-bá-aka mɛ hikəkiə bɛ́-kimə/
8-all eh SM.7-be-DUR SM.1SG like 8-all
'Tous eh, j'aime normalement tous (ça) -'
'Everything eh, I generally like everything - ' [PM 967]

Other cases of marginalia are discussed further in sections §4.2.8 and §4.6.

4.2.2 ATR harmony

As has been studied quite extensively, Tunen has a vowel height harmony system of the advanced tongue root (ATR) type, specifically a bidirectional mid-height harmony system. While vowel height harmony is found across Bantu (Odden 2015), such a mid-height ATR harmony system is fairly rare for Benue-Congo languages but is found in other Mbam languages, as discussed in detail in Boyd (2015); Mous (1986); Van der Hulst et al. (1986) for the Mbam languages and investigated in Rolle et al. (2017, 2020) for languages of West/Central Africa more broadly.

The Tunen vowel system can be split up into two sets, one with dominant [+ATR] vowels and one with recessive [-ATR] ones. The ATR sets I use in this thesis are given in Table 4.8 with comparison to the transcription used in previous sources. The key difference between sources is the use of <o>, <ʊ>, or <ɔ> for the recessive counterpart of the [+ATR] vowel /u/ (cf. discussion of /ʊ/ in section §4.2.1 above).

Source	*Transcription*				
Van der Hulst et al. (1986)	**Dominant (+ATR)**	i	A	o	u
	Recessive (-ATR)	E	a	O	o
Mous (2003)	**Dominant (+ATR)**	i	ə	o	u
	Recessive (-ATR)	e, ɛ	a	ɔ	o
Boyd (2015)	**Dominant (+ATR)**	i	ə	o	u
	Recessive (-ATR)	ɛ	a	ɔ	ʊ
This thesis	**Dominant (+ATR)**	i	ə	o	u
	Recessive (-ATR)	ɛ	a	ɔ	ɔ

Table 4.8: Transcriptions of Tunen ATR sets across sources.

Within the domain of a word, vowels must be from the same set; a word cannot have both a [-ATR] and a [+ATR] vowel (Mous 2003:284, Boyd 2015:25). The recessive set change to the dominant set if dominant vowels are present in the same word. For example, when the class 6 (collective) prefix with a recessive vowel *ma-* is added to a root with recessive vowels, the prefix is realised with [a], but if it attaches to a root with dominant vowels, it is realised in its [+ATR] counterpart [ə] (with additional rounding harmony in some speakers' speech, as discussed in section §4.2.1 above) (37)-(38).

(37) /ma-ndɔmbɔ/ → mandɔmbɔ
6-sheep
'sheep'

(38) /ma-mbu/ → m^{w}əmbu
6-grass
'grass'
(Mous 2003:285, adapted)

ATR harmony can apply across word boundaries, extending to verbal pre-stem elements such as the subject marker and tense marker, but this is optional (Boyd 2015:31). An example from my field data showing the spread of ATR harmony to the

TAM complex is given in (39), where ATR harmony applies from the root leftwards up until the subject marker.

(39) Context: 'When they arrived, he burst out laughing and said "I'm the panther!"'
bəkúləkulə **bə́ nə́ tilə́ liŋə́tɔ.**
/ba-kúləkulə **bá** **ná** **tilə́** **liŋə́**-átɔ/
2-neighbour SM.2 PST2 return anger-PTCP
'Les voisins sont rentrés étant fâchés.'
'The neighbours went back, angry.' [JO 2034]

This example also illustrates an interesting property of the *-átɔ* participle ending, namely that vowel harmony from the root only applies to the first vowel; the last vowel never undergoes vowel harmony, always being realised as [ɔ].

In my transcriptions, I indicate the form after ATR harmony in the phonetic line and the underlying ATR value of the morphemes in the second line. For conversion into the official orthography, the version without ATR harmony should be used.

4.2.3 Rounding harmony

Tunen has a rounding harmony system which is more restricted in application than the ATR harmony process but is similarly bidirectional. Rounding harmony is triggered by the non-high round vowels and may be blocked by a high vowel, which are opaque to rounding harmony (Boyd 2015:34-35).

The effect of rounding harmony is visible on verbal extensions in Tunen, which often assimilate from underlying /a/, as in the examples below.

(40) a. ʊ=/=lɔ́ŋ-ɔ́
INF=/=whistle-FV
'to whistle'

b. u=/=húl-ə́k-ə́
INF=/=come-DUR-FV
'to come' (Boyd 2015:35, adapted)

The rounding harmony system is described in detail in Boyd (2015); one point of difference in my presentation is that I do not analyse the final vowel (FV) of the verb as a separate morpheme in Tunen. I would therefore transcribe 'to whistle' in (40a) as <ɔ-lɔ́ŋɔ́> rather than <ɔ-lɔ́ŋ-ɔ́>. Unlike in many other Bantu languages, the Tunen FV does not have paradigmatic variation for the expression of TAM. I

come back to this point in Chapter 6 where I discuss a possible link between the lack of aspectual encoding on the FV and the development of Tunen's clausal syntax. While this transcription choice is therefore linguistically motivated, it has the practical consequence that the underlying form in my transcriptions reflects the form after rounding harmony has applied. Although this means that the form is not strictly speaking underlying, I follow this notation for simplicity of notation. Likewise, when the verb has an extension, I only indicate the final vowel of the verb at the end of whichever extension is the final one, leading to variation in underlying representation of the extensions. For example, the durative extension glossed DUR is represented as /-aka/ when final but as /-ak/ when followed by another affix. This transcription choice should not be taken as a proposal that the extension truly has a final vowel, nor a claim that there are two different underlying lexical entries for each verbal extension.

4.2.4 Utterance-final vowel reduction

An important phonological rule visible throughout my field data is utterance-final vowel reduction. This rule refers to the phenomenon where all vowels are reduced at the end of a declarative utterance, either in the form of devoicing (Boyd 2015), whispered voice (Mous 2003), or full deletion (Boyd 2015; Mous 2003).[5] A closely related rule is utterance-final tone lowering (to be covered further in section §4.2.6). The vowel reduction rules are shown in (41) below.

(41) **Utterance-final vowel reduction and tone lowering in noun roots**

a. CV̀CV̀ → CV̀C

b. CV́CV́ → CV̀C

c. CV́CV̀ → CV́C

d. CV̀CV́ → CV̀CV̀ (Boyd 2015:24; Mous 2003:287; Janssens 1988)

I use the term 'utterance-final' here in keeping with previous sources, although note that the reduction rules apply more accurately in pre-pausal position, at clause boundaries and after clause-external materials (e.g. after clause-external topics). The term 'utterance' should therefore be taken to include these different contexts. Note here that utterance-final vowel reduction is not found in questions, as will be seen in section §4.2.6.

[5] My impression from the field corpus is that full deletion is the most common strategy amongst the speakers I worked with.

The reduction rules in (41) are generally found in my data, although there are some exceptions indicating that the tone lowering component in particular is optional. For example, the underlyingly LLH-toned word *miɔkɔ́* 'chicken', 'chickens' is predicted to surface as [miɔkɔ] in final position (rule (41d)), but is sometimes found in my data with the final H tone preserved [miɔkɔ́]. The same variation is found for HH items, such as the verb /ɔ́ndɔ́/ 'buy', which surfaces both as the expected [ɔnd] in final position (rule (41b)) and with the H tone preserved [ɔ́nd]. Further examples of this variation are visible in the Appendix texts. I have chosen to represent the underlying tone consistently and transcribe the surface tone as it was uttered. While some cases of variation may be due to consultants providing the underlying form when working word-by-word in elicitation sessions, the variation visible in the natural speech texts in the Appendix suggests that the rules in (41) are indeed optional in Tunen grammar rather than simply being inaccuracies of transcription. A degree of variability in the application of utterance-final reduction rules was also noted in Janssens (1988), who wrote that there are some lexical exceptions to the rules (see also Mous 2003:287).

An example of the regular reduction of a vowel in final position is given in (42a) below, where the verb *manya* 'know' [maɲa] is utterance-final (i.e., pre-pausal) and so realised as [maɲ]. In contrast, (42b) shows the realisation of the final vowel of the verb in non-final position.

(42) a. mɛ lɛ́ ndɔ **many**, [...]
/mɛ lɛ ᴴndɔ **manya**/
SM.1SG NEG PRS know
'Je ne sais pas, [...]'
'I don't know, [...]' [JO 2663]

b. Context: 'Ahh. But did somebody die?'
mɛ lɛ́ ndɔ **manya** ɔbaŋá ɔhɔyɛ.
/mɛ lɛ́ ᴴndɔ **manya** ɔbaŋá ɔhɔ́yɛ́/
SM.1SG NEG PRS know alone DEM.DIST.LOC
'Je ne sais pas dans ce cas.'
'That I don't know.' [PM 584]

Note that utterance-final vowel reduction does not apply to vowels of monosyllabic roots; instead, the vowel may be lengthened (alternatively analysed as the insertion of an epenthetic vowel; e.g. Mous 2003:287). This is visible in the fieldwork corpus for the root *náá* 'be sick', which my consultants often said should be written as <náá>. I have followed my consultants' preferences in transcribing such forms with two vowels on both the transcription and underlying lines.

As verbs are often utterance-final, they are generally pronounced with a CVC syllable shape. This has led to different interpretations of the underlying form of the verb as being CVC (with vowel epenthesis in non-final position) or CVCV (with vowel reduction in final position). Dugast (1971:50) proposes that non-final forms have epenthetic vowels ("voyelles de liaison"). However, most authors adopt the vowel reduction account, in which a final vowel is assumed to be present in the underlying form and elided in final position following the rules given in (41) above (Janssens 1988; Mous 2003; Boyd 2015:63). I adopt the vowel reduction account both on the basis of its ability to capture the synchronic pattern in Tunen and on the basis that it better reflects the diachronic scenario, with North-Western Bantu languages known to have lost final syllables on account of maximality restrictions on stems (see e.g. Hyman 2004, 2011; Van de Velde 2009). The official orthography also follows this approach, always writing the final vowel even when it is not pronounced. The orthographic system used in Kongne Welaze (2010) is to indicate vowel reduction with a diactric below the vowel as follows: màɲa̰ '*connaître*' ('to know'), where <a̰> indicates a low-toned reduced [a] vowel; <many> in my transcription of (42a) is notationally equivalent to Kongne Welaze's (2010) <màɲa̰>.

While final vowels should always be written in texts in the official orthography, in this thesis I present Tunen examples with two levels of notation in order to capture this kind of linguistic detail. The first transcription line notates the forms as they were uttered, thus taking into account vowel reduction and other phonological rules such as utterance-final tone lowering, hiatus resolution, ATR harmony, and tonal changes. However, in the underlying transcription (/ /) I provide the full form, from which the final vowel can be seen. All data in the database can therefore be reworked into the official orthography by merging information from the two transcription lines. The motivation for making a distinction between the surface and underlying transcription lines in this thesis is to make the data clear for linguistic analysis, where phonological processes such as vowel reduction are important for a proper understanding of the language. For example, the application of utterance-final reduction rules could provide evidence for syntactic structure, specifically indicating what postverbal material is part of the same sentence (assuming isomorphy in the syntax-phonology mapping; Selkirk 2011).

4.2.5 Hiatus resolution

Tunen does not allow $V_\alpha V_\beta$ sequences, i.e., sequences of two non-identical vowels (Kongne Welaze 2010:46, Boyd 2015:36-7). Three different hiatus strategies are available to avoid such a sequence of two non-identical vowels: (i) vowel elision, (ii) glide formation, and (iii) vowel coalescence. I note here how these changes are

reflected in my transcriptions.

4.2.5.1 Vowel elision

Vowel elision, i.e., not pronouncing one vocalic segment, is common in fast speech. If a word begins with a vowel, the final vowel of the previous word is frequently elided by this process. This vowel elision process applies to segmental content only, with any H tone preserved,[6] as shown in the vowel elision rules in (43) below.

(43) **Tunen vowel elision rules**

a. $/V_1\ V_2/ \rightarrow [V_2]$

b. $/V_1\ \acute{V}_2/ \rightarrow [\acute{V}_2]$

c. $/\acute{V}_1\ V_2/ \rightarrow [\acute{V}_2]$

d. $/\acute{V}_1\ \acute{V}_2/ \rightarrow [\acute{V}_2]$

To illustrate the preservation of V_1's H tone in a type (43c) context, consider the examples in (44). Here, (44a) shows how the utterance is pronounced in slow speech, with a H-toned vocalic morpheme *ɔ́* COP.INANIM preceding a L-toned vowel-initial word *ɛŋgandɔ* 'crocodile'. In fast speech, the segmental content of the identificational copula is elided, while its H tone spreads to the first tone-bearing unit of the following noun, leading to a H-tone realisation of the class 7 prefix (44b).

(44) Context: You see a crocodile in the schoolyard, which nobody else seems to have noticed, so you alert their attention.

a. hé ! ɔ́ ɛŋgandɔ yɛ́ɛyɛ́ !
/hé ɔ́ ɛ-ŋgandɔ yɛ́ɛyɛ́/
EXCL COP.INANIM 7-crocodile DEM.PROX.7
'Hey ! Voici un crocodile !'
'Hey! There's a crocodile!' [PM 457]

b. hé ! ɛ́ŋgandɔ yɛ́ɛyɛ́ !
/hé ɔ́ ɛ-ŋgandɔ yɛ́ɛyɛ́/
EXCL COP.INANIM 7-crocodile DEM.PROX.7
'Hey ! Voici un crocodile !'
'Hey! There's a crocodile!' [PM 458]

[6] I do not note any L tones in the vowel elision rules, having not investigated whether they are significant. Floating L tones will be seen to play more relevant roles in Tunen with respect to diagnosing cleft structures.

In my transcription, brackets <( )> on the surface transcription line are used around segments for which elision is optional, for instance when the speaker pronounced an elicited utterance first with and then without elision when it was repeated (as often happened in elicitation sessions). Brackets are similarly used for optional words. For example, in (45) below, the first set of brackets show that the vowel of the first-degree past tense marker *nɔ́* is elided before the verb *ákána* 'to leave' (in order to avoid a V_1V_2 sequence), and the second set of brackets shows that the question particle *eé* is optional (i.e., the sentence was pronounced both with and without this morpheme). On the underlying transcription line, brackets are only used for optional morphemes, as elided vowels are analysed as always underlyingly present.[7,8]

(45) ɔ n(ɔ́) ákána (eé) ?
/ɔ nɔ́ ákána (eé)/
SM.2SG PST1 leave Q
'Tu pars ?'
'Are you leaving?' [PM 42]

Again, examples can be converted to the official orthography by updating the first transcription line with the information from the underlying line (here, the unelided vowel).

4.2.5.2 Glide formation

The second hiatus avoidance strategy is glide formation, often found between a noun class prefix and a vowel-initial noun root (46a). This process involves inserting an epenthetic consonant between two vowels when the first vowel is a high vowel. This consonant is of form [j] or [w] dependent on the vowel quality. Another key example is the infinitival form of vowel-initial verb roots, as in (46b).

(46) a. /hi-óli/ → [hʲǒli]
19-hawk
'hawk' (Boyd 2015:36, adapted)

[7] If the question particle is pronounced in (45), then the final vowel of *ákána* is also elided; I choose not to indicate this in order to avoid over-complicating the transcription.

[8] The tense marker in (45) is the first-degree past tense marker *nɔ́* PST1, but as indicated by the translation, it can be used to express present tense. Tense/mood/aspect will be covered further in section §4.4.

b. /u-ɔ́nɔ/ → [uwɔ́n]
INF-kill
'to kill' (Boyd 2015:37, adapted)

Glides are transcribed in my data on the surface transcription line but not on the underlying line. This is seen for example in data testing for the specificity and definiteness of the prenominal article *-mɔté*, which in class 1 takes a *ɔ́-* agreement prefix that is realised as [wɔ́] on the surface when this determiner follows the present tense marker ^{H}*ndɔ*.

4.2.5.3 Vowel assimilation

The final strategy for hiatus avoidance is vowel assimilation. Here, a sequence $V_\alpha V_\beta$ can be modified to $V_\alpha V_\alpha$ (when the root begins with a H tone underlyingly, e.g. (48)) or else $V_\beta V_\beta$ (when the first vowel of the root is round, e.g. (47b)).

(47) a. /ma-ísə/ → [məə́sə]
6-eye
'eyes'

b. /ma-oní/ → [mooní]
6-market
'markets' (Boyd 2015:37, adapted)

If the vowel of the prefix is already identical to the first vowel of a vowel-initial root, the sequence of two vowels can be maintained without any hiatus avoidance strategy, as discussed further in Boyd (2015:37).

(48) /ni-ísə/ → [niísə]
5-eye
'eye' (Boyd 2015:37, adapted)

This process results in the use of double vowels in my transcription system, despite there being no phonemic contrast in vowel length (section §4.1).

4.2.6 Tone

4.2.6.1 Tone inventory

Tunen is a tonal language and tones play an important role in marking both lexical and grammatical contrasts. There are three tone levels on the surface: H, L, and

downstepped H ($^{\downarrow}$H, realised phonetically at a mid height). The tonal system is best analysed as having two tones underlyingly, H (high) and L (low). I analyse downstepped Hs (i.e. cases of *non-automatic downstep*; Downing & Rialland 2016) as the result of an underlying /^{L}-H/ sequence, therefore supporting an analysis with underlying L tone rather than a privative system with only H tone.[9] Following previous analyses (Janssens 1988; Mous 2003), I take the tone-bearing unit (TBU) to be the syllable, and nasal consonants are not taken as bearing tone, meaning that I mark tone of the syllabe on its vocalic nucleus.

Tone makes both lexical and grammatical distinctions in Tunen. Examples of lexical distinctions between H and L tones are demonstrated by the following tonal minimal pairs (tagged in the database as `minimal_pair`).

(49) a. nioní
/nɛ-oní/
5-market
'marché'
'market'

b. nióni
/nɛ-óni/
5-voice
'voix'
'voice' [JO 809, 811]

(50) a. miɔkɔ
/mi-ɔkɔ/
3-pebble
'cailloux'
'pebble'

b. miɔkɔ́
/mi-ɔkɔ́/
9-chicken
'poule'
'chicken' [JO 1387-8]

(51) a. mɛ́ ndɔ **ɛŋɔ́ŋɔ** kóyi
/mɛ ^{H}ndɔ ɛ-ŋɔ́ŋɔ kóyi/
SM.1SG PRE 7-praying_mantis hate
'Je déteste la mante religieuse.'
'I hate the praying mantis.'

[9] For consistency of representation, I also transcribe a floating L tone within the underlying representation of words that show word-internal downstep (i.e., downstep not conditioned by syntactic environment), choosing to represent the floating L tone directly before the first syllable realised at a lower pitch height, without committing to this as a segmentation of the word. For example, I transcribe the class 7 emphatic discourse demonstrative *yɛ́$^{\downarrow}$ táyɛ́* as /yɛ́^{L}táyɛ́/ DEM.DISC.EMPH.7. (I choose not to break down agreement morphology on demonstratives and possessives in order to avoid having to commit to a particular segmentation and underlying tone pattern; see section §4.3.6, §4.3.8.)

b. mɛ́ ndɔ **ɛŋɔŋɔ** kóyi
/mɛ ^{H}ndɔ ɛ-ŋɔŋɔ kóyi/
SM.1SG PRS 7-politics hate
'Je déteste la politique.'
'I hate politics.' [JO 818-9]

Minimal pairs are also found between H and ↓H, where lexical items are distinguished solely by (non-)downstep of the second H tone. The examples in (52) and (53) illustrate this for noun-noun distinctions and noun-adjective distinctions repectively.

(52) a. ilóló**ló**
/i-lóló/
7-herring
'hareng'
'herring'

b. iló↓**ló**[10]
/i-ló^{L}ló/
7-island
'île'
'island' [PM 68-69]

(53) hɛtétɛ́**tɛ́** hɛté↓**tɛ́**
/hɛ-tétɛ́ hɛ-té^{L}tɛ́á/
19-calabash 19-small
'une petite calabasse'
'a small calabash' [PM 67]

Downstep is also used for grammatical distinctions. A key example within the TAM system is that the main clause PST2 tense marker *ná* is distinguished from the dependent clause PST3 marker ↓*ná* solely by downstep of the H tone (see section §4.4.4). In cases where the subject marker is underlyingly high-toned and therefore identical in main and dependent clause environments, such a tonal distinction on the TAM marker carries the full functional load of distinguishing between a main versus relative clause environment, as will be important in the analysis of the biclausality of Tunen clefts in Chapter 5.

Due to the importance of downstep for lexical and grammatical distinctions in Tunen, I depart from the official orthography of Satre et al. (2008) in transcribing

[10] As mentioned in the previous footnote, I represent the downstep on the underlying line with a floating L tone before the downstepped syllable, without committing to a particular decomposition of the rest of the word. Here, an alternative analytical choice could be to decompose *-lóló* into a root and its reduplicant, in which case the floating L tone would not be root-internal.

downstep in the database. This decision reflects my more general choice to preserve information about meaningful linguistic contrasts in the example transcription. Note that I follow the convention of indicating the onset of downstep without indicating its scope, i.e., marking the point of tonal reset to a H tone. I leave an analysis of tonal reset to more detailed study.

4.2.6.2 Contour tones

As stated in section §4.2.1 above, vowel length in Tunen is not contrastive (Mous 2003; Kongne Welaze 2010). However, vowels are often phonetically lengthened when pronounced with contour tones (LH or HL). Following Kongne Welaze (2010), I transcribe such vowels with two graphs, without proposing that such a distinction is phonemic. However, I differ from his notation in using a double vowel rather than the IPA convention of a vowel length diacritic <:>; <aá> in my transcription is thus notationally equivalent to <ǎ:> in Kongne Welaze's orthography (2010). I therefore transcribe the word 'yesterday' as *naánɛkɔla*, with <aá> indicating a LH tonal contour on an [a] syllable nucleus.

Other cases of rising (LH) contour include the question particle *eé*, the word *məásə* 'eyes' (which has vowel coalescence between the class 6 prefix *ma-* and the root *ásə* 'eye'; section §4.2.4), and the word *miímə* 'house'. Examples of falling (HL) contour include the particle *ɛ́ɛ* 'yes', and the proximal demonstrative series, such as *wɛ́ɛyɛ* DEM.PROX.1 'this' and *máama* DEM.PROX.6 'these' (see section §4.3.6).

4.2.6.3 H tone spread

Tunen has a rule of tone spreading. Only H tones spread and the direction of spread is rightward. This high tone spread (HTS) rule applies to 1 tone-bearing unit (i.e., to 1 syllable).

An example of HTS from the field data is given in (54). Here, the H tone of the class 2 subject marker *bá* spreads onto the PST3 tense marker *ka*, which is realised as [ká]. The spread is 1-step, not continuing from the tense marker to the verb.

(54) náánɛkɔl **bá ká** satak.

/naánɛkɔla	bá	ka	sata-aka/
yesterday	SM.2	PST3	swim-DUR

'Ils/elles ont nagé hier.'
'They swam yesterday.' [EO 438]

As seen above in the section on vowel hiatus (section §4.2.5), H tones that were associated with segments that are deleted due to the vowel elision rules survive and associate rightwards.

Mous (2003) writes that HTS is restricted in certain syntactic environments, although he does not provide a full description. My impression from the field data is that HTS (e.g. between H-toned associative markers and the following noun) is not obligatory and may vary dependent on speech rate. In absence of a detailed phonological study, I choose to transcribe the surface tones as heard and have not standardised the transcriptions to match predictions from the HTS rule.[11]

A key test relevant for this thesis is that Mous argues that the lack of HTS from a H-toned verb to a following noun phrase shows that that noun phrase is not part of the verb phrase (Mous 2003). Again, I question the reliability of this diagnostic. I discuss this point further in Chapter 7 in discussion of the syntactic position of postverbal modifiers.

One important note regarding HTS that I will draw upon in the discussions in the later chapters of this thesis is that Tunen does not distinguish between /H/ and /H-H/ in the output, as represented in (55) below.

(55) **Realisation of underlying H tones**

a. /H/ → H

b. /H-H/ → H

In other words, a surface tone realisation H is opaque: there is no difference visible on the surface between this surface H tone deriving from one or two H tones underlyingly.[12] For example, this means that any subject marker immediately preceding the present tense marker ^{H}*ndɔ* — which begins with a floating H tone as part of its lexical entry — will be realised with an H tone, regardless of whether that subject marker is underlyingly L or H-toned. I have chosen to transcribe the H tones that are consistent with my analysis of the given construction, as can often be motivated via paradigmatic opposition (e.g. whether a SM is followed by a floating H tone is not visible for underlyingly H-toned SMs as this construction would instantiate situation (55b), but if an underlyingly L-toned SM takes a high tone in

[11] For data from elicitation sessions, there is a possibility that I did not hear HTS when consultants repeated back the utterance more slowly in a 'mot-à-mot' ('word-by-word') fashion, in which case cross-word phonological processes such as HTS may not have applied.

[12] I have not studied the acoustic signal in detail in order to test whether there is any phonetic difference between H tones derived from /H/ and those derived from /H-H/; if such differences are found in future acoustic studies, they would help decide between different analyses.

the same environment, I then consider this evidence that there are in face two underlying H tones in the first case).

The H+H→H rule (55b) will be important in discussion of clefts in Tunen in Chapter 5, and is discussed in terms of the notation of subject markers in relation to TAM paradigms in section §4.4.

4.2.6.4 Utterance-final tone lowering

In addition to vowels being reduced/unrealised in the utterance-final position of declaratives (seen in section §4.2.4 above), tones are lowered in utterance-final position (Mous 2003; Boyd 2015). An example of this is shown in (56) below, taken from a natural dialogue between speaker PM and EO (the full text is provided in the Appendix; see Text 1).

(56) a. ɔ ná **bɔ́ŋɔ́** ?
/ɔ ná **bɔ́ŋɔ́**/
SM.2SG PST2 find
'Tu l'as trouvé ?'
'Have you found it?' [PM 683]

b. mɛ ná ... mɛ ná ... mɛ ná **bɔŋ**.
/mɛ ná mɛ ná mɛ ná **bɔ́ŋɔ́**/
SM.1SG PST2 SM.1SG PST2 SM.1SG PST2 find
'Je ... Je ... Je l'ai trouvé.'
'I ... I ... I've found it.' [EO 684]

This example shows that the verb *bɔ́ŋɔ́* 'find' is realised by the first speaker with a HH contour in a question context (in which utterance-final reduction rules do not apply), and is then realised by the second speaker with a L tone in the declarative context that answers their question (where utterance-final reduction rules apply).

4.2.6.5 Downdrift

Downdrift refers to the change in pitch of a H tone over discourse. Pitch reset refers to resetting the H tone to the standard pitch height. To my knowledge, this has not been explicitly researched in Tunen, but it is expected that pitch reset occurs at common boundaries such as the end of a clause. The tonal transcriptions I use in this thesis reflect the relative status of H vs L tone, rather than reflecting an absolute pitch realisation, as matches common orthographical practice and the Tunen

community othography (Satre et al. 2008). As stated above with regards to downstep, I follow standard transcription practice in only marking where the onset of downstep, not explicitly noting the point at which the tone resets.

4.2.7 Loanword phonology

Tunen has a variety of loanwords, many of which come from French, Duala, and English (via Cameroonian Pidgin English) (Dugast 1971).

Loanwords from languages with stress seem to be adopted in Tunen with H tone on the stressed syllable and low tone elsewhere, e.g. *simíti* 'cement', *hɛbanána* 'banana', *ikísin* 'kitchen'. This was found across speakers in my fieldwork. We can also see from these examples that loanwords are often in class 7/8 or 9/8, not taking a segmental class prefix (*simíti* 'cement', *kalɔ́tɔ*'carrot'), but may also take a prefix (*hɛbanána*, 'banana', *ikísin* 'kitchen'). Sorting loanwords into class 7/8 fits with a general pattern of using class 7/8 for default agreement, as will be discussed in the section on noun class morphology.[13]

For proper names, there is some inter- and intra-speaker variation in tone pattern and adaptation to Tunen's vowel system, as illustrated in the variation within the field corpus regarding the pronunciation of my name 'Elisabeth' (e.g. *Ɛlísabɛt* by DM [DM 137], *Ilísabɛt* by PM, and *Ɛlísa* by EO [EO 1008]) and the name 'Pierre' (e.g. *Píɛl* [PM 1084], *Píɛlə* [EO 270], *Biə́lə* [EO 1412], *Píɛr* [DM 24]). I have not standardised the underlying forms of proper names in the database, choosing instead to provide a closer phonetic transcription that may contain sounds not considered part of Tunen's phoneme inventory, for example using <P> instead of <B> for the name 'Pierre'. This choice is motivated by the fact that the status of proper names as being part of Tunen grammar (versus e.g. French) is of some debate.

4.2.8 Iconicity and marginalia

Pitch can vary for iconicity reasons. H tones can be produced at a higher pitch for emphasis and vowel length can similarly be increased. An example is given from the EO dialogue after dancing (see Appendix Text 2), talking about Papa Daniel belonging *háaha* 'here', and in example (57) from an animal story, where the quantifier *miə́ŋ* 'much' is pronounced with lengthened H-toned vowel for emphatic reasons.

[13]Note that the distinction between class 7 and class 9 is often unclear in the Tunen data, as the agreement paradigms for the two classes are synchronically almost identical (a distinction being the tone of the associative marker); section §4.3 Table 4.10.

(57) Context: Nobody believed the shepherd when he cried out that a panther had come.
mɛkɔ a n(á) ákan, a ná ɛndɔ́mbá ↓níáká **miə́ə́ə́ŋ**.
/mɛ-kɔ a ná ákáná a ná ɛ-ndɔ́mbá nɛ́á-aka miə́ŋə/
9-panther SM.1 PST2 leave SM.1 PST2 10-sheep eat-DUR much
'La panthère est partie, elle a mangé BEAUCOUP de moutons.'
'The panther left, having eaten a LOT of sheep.' [JO 2037]

There is also iconic indication of deixis marking by prosodic lengthening and H tone, as used in the distal demonstrative (section §4.3.6). As mentioned in Chapter 3, this iconic deixis was also often pronounced with a pointing gesture, visible from the video recording but not represented in the transcriptions within the database.[14]

We also saw in (36) above that the interjection 'eh' had a nasalised open ɛ, which is not phonemic. While such sounds are transcribed in the data line of the Tunen Dative database, this should not be taken as a proposal that they are part of Tunen's phoneme inventory.

Ideophones, exclamations, and sound-symbolism used in verbal arts are discussed further in section §4.6. I turn now to discussion of nominal morphosyntax.

4.3 The nominal domain

4.3.1 The noun stem

Tunen nouns are formed by a nominal root and a noun class prefix. The root is typically of CVCV shape and can be either [-ATR] or [+ATR] (Boyd 2015). If the root is [+ATR], ATR harmony applies to the vowel of the noun class prefix following the ATR harmony rules introduced in section §4.2.2 above. I analyse the noun class prefixes as underlyingly [-ATR] and so represent their underlying form with the [-ATR] vowel series, e.g. *tunoní* 'birds' is represented as /tɔ-noní/ '13-bird' underlyingly.

In terms of tone pattern, CVCV noun roots can have all four logically-possible tone melodies (namely LL, LH, HL, and LH) (Boyd 2015:38). I transcribe the tone pattern of the underlying form based on available evidence from different contexts, using the surface tone pattern if no other evidence is available. Note here that Dugast's (1967) lexicon provides the tone of the noun as pronounced in isolation form, which leads to tonal neutralisation due to the utterance-final reduction

[14] An example is the distal demonstrative *hə́ní* '(over) there' from the last utterance of the cooking *kok* recipe text provided in the Appendix (Text 3), where speaker JO also used a hand gesture indicating the distance between Europe and Cameroon.

rules seen in section §4.2 above. This means that the transcriptions in Dugast (1967) do not give sufficient information to determine underlying tone patterns.

4.3.2 Nominal derivation and compounding

4.3.2.1 Nominal derivation by class prefix

Tunen can derive nouns by changing the noun class of the source noun. Semantic effects of deriving nouns via the class 6 prefix for quantities is discussed briefly in Mous (2003:299-300). Deverbal nouns are formed by adding a noun class prefix to a verb. This can be done across different classes, e.g. class 1, class 5, class 6 (Boyd 2015:34). According to Mous (2003:303), this process is not productive, and I did not encounter it much during my fieldwork. In general, I always represent the noun class that controls the agreement and the base of the noun in the gloss, but I do not always commit to a particular decomposition of complex bases, under the reasoning that it is generally not relevant for the point at hand.

4.3.2.2 Derivation via reduplication

One method of word formation in Tunen is reduplication. Examples include *tɔ-támátámá* 'fruit', *bɛ-tɔbɔtɔ́bɔ́* 'fields', 'farm'. These are instances of full reduplication, where all segmental and tonal content is repeated. In other examples such as *ɛ-kɔlakɔ́lá* 'evening', the segmental content is identical but the tonal contour differs. The most common pattern seems to be for for the reduplicant to have the inverse tonal pattern of the first part. I transcribe the full form underlyingly, rather than committing to a particular analysis of root and reduplicant (cf. fn10 above).

Reduplication of the noun root can be used to form a diminutive, as in example (58) below, where *bánan* 'grandchildren' is the reduplicated form of *ban* 'children'; in this case, I do transcribe the diminutive in the gloss line (but comparable cases may appear in the database as 'children', i.e., with the non-decomposed gloss).

(58) ɔ lúmə́k uwəs, ɔ bíə́súə́ bisə́, uwəsú bɛ́muɛt, bə́súə́ ban, bə́súə́ **bánan**, bá ndɔ wɛ́ɛya many.

/ɔ	lúmə́-aka	uwəsú	ɔ	bíə́súə́	bɛ-isə	uwəsú	bɛ́muɛtɛ	
PREP	begin-DUR	PRN.1PL	PREP	PRN.POSS.1PL.8	8-father	PRN.1PL	self	
bə́súə́	ba-ná	bə́súə́	**ba-nana**	bá	^{H}ndɔ	wɛ́ɛya		
PRN.POSS.1PL.2	2-child	PRN.POSS.1PL.2	2-child.DIM	SM.2	PRS	PRN.1		
manya/								
know								

"En commençant par nous, nos parents, nous mêmes, nos enfants, nos petits enfants, on le connait."
"Starting with us, our parents, ourselves, our children, our grandchildren, everyone knows him." [PM 1044]

Reduplicated verbal roots are common in derived nouns, but reduplication is also found in other word classes, as will be discussed for adverbs in section §4.4.5. In terms of the extent to which reduplication is used for diminutives, note that Mous (2003:300) reports that putting a noun into class 19/13 can render it diminutive, a process that is often accompanied by reduplication of the noun root.

4.3.2.3 Noun-noun compounds

Nominal compounds can be formed using the structure N-N or N-^{H}-N, as in (59).

(59) a. muití ɛ́mbɔ́ma.
/mɔ-iti ^{H}=ɛ-mbɔ́ma/
1-owner ASSOC=7-field
'propriétaire du champ'
'owner of the field' [JO 1855]

b. bəmuití bɛ́hɔ́sɛ.
/ba-mɔ-iti ^{H}=bɛ-hɔ́sɛ/
2-1-owner ASSOC=8-horse
'propriétaires des chevaux'
'owners of the horses" [JO 1858]

This construction is reminiscent of the associative construction (section §4.3.9), but the compounds are fixed and the associative equivalent is rejected by my consultants (regardless of whether the prefix on the second noun is realised with a H tone) (60).

(60) a. *muití (w)ɔ́ ɛmbɔ́ma.
/mɔ-iti wɔ́ ɛ-mbɔ́ma/
1-owner ASSOC.1 7-field
Intd.: 'propriétaire du champ'
Intd.: 'owner of the field' [JO 1854]

b. *bəmuití bá bɛ́hɔ́sɛ.
/mɔ-iti bá ^{H}=bɛ-hɔ́sɛ/
1-owner ASSOC.2 ASSOC-7-field
Intd: 'propriétaires des chevaux'
Intd.: 'owners of the horses' [JO 1859]

For current purposes, I gloss the H tone on the second noun in such noun-noun compounds as ASSOC with no noun class, reflecting the lack of segmental content amd the difference from the full associative construction.

Other more grammaticalised N-N compounds include various expressions for family members and children, e.g. *mɔná muəndú* 'girl' (lit. 'child woman') and *mɔná mɛléméndɔ* 'boy' (lit. 'child boy'). Frozen N-Poss expressions are found for names of relatives, e.g. *aná↓má* 'my brother' and *anába* 'my brother', contractions of *á-mɔ-ná-wa-mámá* 'child of mother' (vocative) and *á-mɔ-ná-wa-babá* 'child of father' respectively. These frozen N-Poss expressions will be relevant in evaluating theories of word order change in Tunen, specifically in terms of the origin of Tunen's OV word order (see Chapter 6 section §6.8 and Chapter 8).

4.3.3 Noun classes and agreement

4.3.3.1 Noun class inventory

Tunen has a typical Niger-Congo noun class system whereby nouns are sorted into classes, which can be taken as genders (Grinevald 2000; Bearth 2003; Van de Velde 2019). These noun classes are referred to following the Bantuist convention of a numbered system. Synchronically, Tunen has classes 1, 2, 3, 5, 7, 9, 10, 13, 14, and 19 (Dugast 1971; Mous 2003; Boyd 2015); I do not number the locative classes as only traces of their presence are visible synchronically (see section §4.3.10), instead glossing them as LOC for *locative*. An overview of the singular/plural pairs is given in Boyd (2015:28); the most important one for the reader to be aware of is the class 19/13 pairing, where class 13 is the plural (in contrast to Bantuist expectations for odd-numbered classes to be singular).

4.3.3.2 Overview of agreement patterns

Various elements agree in noun class with the head noun, such as adjectives, numerals, quantifiers, and the subject marker on the verb, as is common for a Bantu language (Katamba 2003; Schadeberg 2003b). The form of agreement markers in Tunen is given in Table 4.10. For numerals, agreement morphology is seen up until 8, with 9 and up invariant (e.g. ***tɔbanána tɔ́námanɛ*** 'eight bananas' [PB 1967] vs. ***tɔbanána ibo*** 'nine bananas' [PB 1968], ***tɔbanána níómo*** 'ten bananas' [PB 1969]). For infinitives (which I gloss simply as INF), class 3 agreement morphology is used (see e.g. (81)-(82)).

One small deviation from previous sources was that the numeral prefix for class 1 appeared variably in my data as L- or H-toned, in contrast to Mous (2003:300) who states that it is always L-toned. Note also that I use numbers for all classes that are synchronically distinct, and only use LOC for the locative due to the defective paradigm (as stated in the previous section).

4.3.3.3 Agreement with conjoined noun phrases

In cases with coordinated noun phrases of different noun classes, speakers have to make a decision as to which subject agreement marker to use on the verb. In this section I report an investigation into this phenomenon, conducted in order to fill in the gaps from previous work on Tunen and in order to see which noun class is used for default agreement (which will be relevant in Chapter 7 for evaluating whether discontinuously-positioned modifiers agree with the head noun or simply take default agreement morphology).

As is common, there are multiple possible resolution strategies in Tunen, with speakers finding the task difficult in an elicitation context and no clear prescriptive standard.[15] Although there is variation in the data, some general patterns can be found which match patterns found for other Bantu languages (see e.g. Marten et al. 2007), namely the use of class 2 *bá* for humans and personified animates (61)-(63) and using class 8 *bɛ́* as the default for inanimates and non-personified non-human animates (63). Partial agreement (first conjunct or last conjunct agreement) was considered ungrammatical (63), as was a plural form of two singulars of the same noun class (e.g. 19+19 → *13) (64). One speaker also used an avoidance strategy (65).

[15]This description is based on asking 3 consultants for judgements for translations of sentences from French in which the Tunen nouns were controlled for class and animacy, and then asking for judgements of variants of the first response using a different strategy.

Noun class	Noun class prefix	Example	Subject marker	Associative	Numeral prefix	Pronominal prefix	Relative marker
1	(m)ɔ-	*mɔndɔ* 'person'	a	wɔ	ɔ / ɔ́	wɔ	ɔwá
2	ba-	*bɛndɔ* 'people'	bá	bá	bá	bá	ɔbá
3	(m)ɔ-	*ɔmbéla* 'house'	wɔ́	wɔ́	ɔ́	wɔ́	ɔwá
4	(m)ɛ-	*mɛɔkɔ* 'pebbles'	yɛ	yɛ́	ɛ́	yɛ́	ɔyɛ́á
5	nɛ-	*nɛhánɛna* 'present'	nɛ	nɛ́	nɛ́	nɛ́	ɔnɛ́á
6	(m)a-	*mahánɛna* 'presents'	má	má	má	má	ɔmá
7	ɛ-	*ɛnɔ́mɛ* 'road'	yɛ́	yɛ́	ɛ́	yɛ́	ɔyɛ́á
8	bɛ-	*bɛnɔ́mɛ* 'roads'	bɛ́	bɛ́	bɛ́	bɛ́	ɔbɛ́á
9	(m)ɛ-	*mɛnyama* 'animal'	yɛ	yɛ	ɛ́	yɛ	ɔyɛ́á
10	(m)ɛ-	*mɛnyama* 'animals'	yɛ́	yɛ́	ɛ́	yɛ́	ɔyɛ́á
13	tɔ-	*tunoní* 'birds'	tɔ́	tɔ́	tɔ́	tɔ́	ɔtɔ́á
14	bɔ-	*bɔnɔŋɔ* 'country'	bɔ́	bɔ́	bɔ́	bɔ́	ɔbɔ́á
19	hɛ-	*hinoní* 'bird'	hɛ́	hɛ́	hɛ́	hɛ́	ɔhíá
LOC	N/A	N/A	N/A	N/A	N/A	N/A	ɔhá

Table 4.10: Tunen noun classes and agreement (cf. Dugast 1967:XII-XVII; Dugast 1971:143, 127, 334; Mous 2003:300)

(61) na yami(a) ibə́ na yamia mɔ́ná **bá** báka na ɛmany.
/na yamíá ibə́ na yamíá mɔ-ná **bá**
with PRN.POSS.1SG.1.9 9.husband with PRN.POSS.1SG.1 1-child SM.2
bá-aka na ɛ-manya/
be-DUR with 7-intelligence
'Mon mari et mon enfant sont intelligents.'
'My husband and my child are intelligent.' [EO 1454]

(62) hinoní na miɔkɔ́ **bá** lɛ ɔné.
/hɛ-noní na mi-ɔkɔ́ **bá** lɛa ɔ-néá/
19-bird with 9-chicken SM.2 be INF-eat
'L'oiseau et la poule sont en train de manger.'
'The bird and the chicken are eating.' [JO 1133]

(63) niŋgolo na hɛnyɔtɔ {**#bá**|**bɛ́**|***né**|***hɛ́**} lɛa ɔ́nɔ́kɛ́nátɔ
/nɛ-oŋgolo na hɛ-nyɔtɔ {**bá**|**bɛ́**|***né**|***hɛ́**} lɛa ɔ́nɔ́kɛ́ná-átɔ/
5-mango with 19-banana {SM.2|SM.8|SM.5|SM.19} be be_ripe-PTCP
'La mangue et la banane sont mûres.'
'The mango and the banana are ripe.' [PM 1220-1223]

(64) na hinoní na himuísimuísi {**#bá**|***tɔ́**} ndɔ kɛnd.
/na hɛ-noní na hɛ-muísimuísi {**#bá**|***tɔ**} ᴴndɔ kɛnda/
with 19-bird with 19-cat {SM.2|SM.13} PRS walk
Intd.: 'L'oiseau et le chat sont en train de marcher'
Intd.: 'The bird and the cat are walking' [PM 1232, 1235]

(65) na miɔkɔ́ na hinoní ndɔ ʧɔ́bɛ́n.
/na mi-ɔkɔ́ na hɛ-noní ᴴndɔ ʧɔ́bɛ́na/
with 9-chicken with 19-bird PRS peck
'La poule et l'oiseau sont en train de manger.'
'The chicken and the bird are eating.' [PM 1231]

The lack of a subject marker in (65) is an exception to the generalisation that subjects are minimally referred to by a subject marker in Tunen (Chapter 5 section §5.7). However, this is the only example in the dataset without a SM and was produced in this artificial judgement context, so I do not consider it strong evidence

for zero-expression of subjects being possible in Tunen. In Chapter 8, I compare this finding to data in Dugast (1971), where SMs could be dropped when there were clause-internal topics, suggesting true morphosyntactic change.

4.3.4 Adjectives/qualification

Bantu languages typically have few adjectives (Van de Velde 2019:258), as is typical of Niger-Congo languages more broadly (Creissels 2000:249), with qualification often expressed by other word categories. For Tunen, Dugast (1971:153) identifies 14 qualificative adjectives, namely *-kìm* 'all', 'entire' *-tɛ́↓tɛ́* 'small' *-ɛ́ŋɛ́ŋ* 'big' *-tàtán* 'long' *-kítíkìt* 'short' *-ɔ́s* 'raw', 'fresh' *-tɔ́tɔ́* 'new', 'weak', 'tender' *-ɔ́mɔm* 'new' *-nàŋànàŋ* 'white', 'clean' *-nə́...nə̀* 'different' *-ŋ* 'numerous' *-bɛ́* 'bad', 'ugly' *-ɛ̀s* 'beautiful', 'tasty' and *-mbány* 'beautiful'. Some of these so-called adjectives are in fact better understood as quantifiers, given their quantificational rather than qualificational function. This applies to the universal quantifier *-kimə* and *-ŋ* 'many, numerous'. Examples of other qualitatives include qualificatives that are be derived from verbs, as in the following example with *-fítitiə* 'black' and *-təbə́kə́nú* 'black' (68).

Other qualificative meaning can be conveyed by the associative construction (see section §4.3.9), as in the examples below, where 'palm oil' is conveyed by oil + ASSOC + palm tree, and 'dirty peanuts' by peanuts + ASSOC + dirt (note that the head, i.e., the noun controlling agreement on the associative marker, is on the left).

(66) moló má níbílə
/molo má nɛ-bílə/
6.oil ASSOC.6 5-palm_tree
'l'huile de palme'
'palm oil' [JO 1391]

(67) miɔkɔ, les cailloux, na tɔmbaŋa tɔ́ məhilə, les arachides sales, túítə á mɛ́ ndɔ tɛfa mba mɛ́ ombóko.
/mɛ-ɔkɔ les cailloux na tɔ-mbaŋa tɔ́ ma-hilə les
4-pebble the.FR pebbles.FR and 13-peanut ASSOC.13 6-dirt the.FR
arachides sales túítə á mɛ ᴴndɔ tɛ́fa mba
peanuts.FR dirty.FR PRN.OBJ.13 COP SM.1SG PRS sort so
mɛ́ ombóko-aka/
SM.1SG.SBJV throw-DUR
'Ce sont les cailloux et les arachides sales que je trie pour jeter.'
'I'm sorting the pebbles and the spoiled peanuts to throw them out.' [JO 1334]

(68) tɔ́éyɛ tɔbanána tɔfítitiə tɔté↓té tɔ́fandɛ
/tɔ́éyɛ tɔ-banána tɔ-fítitiə tɔ-té^{L}téá **tɔ́-fandɛ́**/
DEM.PROX.13 13-banana 13-black 13-small 13-two
'ces deux petites bananes noires'
'these two small black bananas'

(69) Context: QUIS picture stimulus.
(bɛ́ báka) na yitəbə́kə́nú na yɛnaŋananaŋa.
/bɛ́ bá-aka na yɛ-təbə́kə́nú na yɛ-naŋananaŋa/
SM.8 be-DUR with 7-black with 7-white
'(Il y a) une pelle noire et une pelle blanche.'
'(There is) a black spade and a white spade.' [EO 1444]

As we can see from these examples, qualicatives come after the noun, agreeing in gender on the prefix.

Metathesis is also found in Tunen qualificatives. For example, I found *-bə́kə́tɔ* for 'black', which I analyse as a verbal participle (and therefore cover under verbal syntax), while Mous (2003) gives the form *təbə́kə́tɔ* 'black', showing metathesis.

4.3.5 Quantification

Universal quantification is expressed with the quantifiers *-kimə* 'all' and *-tɛ́á*/*-tíá* 'every', as in the example below. Other quantifiers include *-əŋí* 'many', with quantificational meanings arguably also expressed by numerals (as will be discussed in Chapter 7 regarding the question as to whether quantifiers and numerals are distinct in Tunen syntax).

(70) Context: Max Planck scope picture stimulus 2/77.
maléá má báka mə́nis. bɔléá **tíá** bɔ́ báka na hinoní hímoti.
/ma-léá má bá-aka mə́-nisə bɔ-léá **tíá** bɔ́ bá-aka na
6-tree SM.6 be-DUR 6-four 14-tree each SM.14 be-DUR with
hɛ-noní hɛ́-mɔté/
19-bird 19-one
'Il y a quatre arbres. Chaque arbre a un oiseau.'
'There are four trees. Each tree has one bird.' [JO 1149]

In terms of interaction with negation, for the NEG > ALL scope reading, the negative copula *tátá* can appear as first element, but for subjects, NEG > ALL can be expressed with the quantifier surfacing before negation. Examples showing this

(based on elicitation from the Max Planck scope picture stimuli; Chapter 3 section §3.3.3) are tagged as `scope` in the Dative database; I do not show them in detail here as they are tangential to the matter at hand.

Quantifiers follow the nouns they modify, but may also be discontinuously-positioned, as will be discussed in Chapter 7. I also discuss in Chapter 7 the question as to whether numerals are distinct from quantifiers in Tunen.

4.3.6 Demonstratives

Tunen has a 3-way demonstrative system: proximal, distal, and referential, the latter also termed a discourse demonstrative (Table 4.12). I gloss these as DEM.PROX, DEM.DIST, and DEM.DISC respectively. The proximal demonstrative can appear in a full or monosyllabic form, as indicated by parentheses in the table.[16]

Noun class	DEM.PROX	DEM.DIST	DEM.DISC
1	wɔ́(ɔwɔ)	wə́ni	wɛ́yɛ
2	bá(aba)	b$^{(w)}$ə́ni	báyɛ
3	wú(uwu)	wíni	wíyi
4	yí(iyi)	yíni	yíyi
5	nɛ́ɛ(nɛ)	níni	nɛ́yɛ
6	má(ama)	m$^{(w)}$ə́ni	máyɛ
7	yɛ́(ɛyɛ́)	yíni	yɛ́yɛ
8	bɛ́(ɛbɛ)	bíni	bɛ́yɛ
9	yɛ́(ɛyɛ)	yíni	yɛ́yɛ
10	yí(iyi)	yíni	yíyi
13	tɔ́(ɔtɔ́)	túini	tɔ́ɛyɛ
14	bɔ́(ɔbɔ)	búini	búɛyɛ
19	hí(ihi)	híni	híyi
LOC	há(aha)	hə́ni	hɔ́yɛ

Table 4.12: Tunen's 3-way demonstrative series (adapted from Dugast 1971:138-140).

Tunen also has a so-called emphatic demonstratives series. Emphatic demonstratives are said to translate to French *ce/cette/ces ... même(s* (Dugast 1971:140), although, like with the pronominal system, the exact nature of the emphasis is un-

[16] An alternative analysis would be to treat the bisyllabic form of the proximal demonstrative as a reduplicated form, e.g. *yɛ́ɛyɛ* 'this' DEM.PROX.7 can appear as *yɛ́*. In my database, I assume that the full form is the underlying form, without using REDUP in the glossing (e.g. /yɛ́ɛyɛ/ for [yɛ́ɛyɛ]).

clear (Dugast writes: "Ils marquent une insistance à désigner telle ou telle personne, ou tel ou tel [sic.] objet." Dugast 1971:140). In absence of a better term than 'emphasis', I gloss these forms as DEM.{PROX|DIST|DISC}.EMPH. Like the standard demonstratives, these agree in noun class with the head noun; I give the roots in Table 4.14 (examples are class 6 *má↓táyɛ* DEM.DISC.EMPH.6, class 7 *yɛ́↓táyɛ* DEM.DISC.EMPH.7).

DEM.PROX.EMPH	DEM.DIST.EMPH	DEM.DISC.EMPH
-↓tána	-↓tə́ni	-↓táyɛ́

Table 4.14: Roots for Tunen's emphatic demonstrative series (adapted from Dugast 1971:140-141).

These emphatic demonstratives can also follow the noun, which according to Dugast (1971:141) changes their interpretation. Dugast provides examples are given from *contes*, such as (71). Isaac (2007:54) writes that he only found 2 examples of emphatic demonstratives in his corpus of 6 Dugast (1975) texts. Both were used as discourse demonstratives (versus exophoric demonstratives), making the interpretation of these forms hard to properly evaluate.

(71) bá nə́tìlə́ nà wàyá món ísə **mútày**, nà wàyá
SM.2 return with POSS.1.1 1.child 1.FATHER DEM.REF.EMPH with POSS.1.1
múəndu tónà n'ìbuŋ ó tòna
1.woman also with.7.spirit PREP 13.stomach
'Ils s'en retournèrent avec son frère-même (le frère en question), et aussi avec sa femme avec (qui avait) un esprit maléfique dans le ventre."
(Dugast 1971:141)

As seen in (71) and (72), (73), demonstratives agree in noun class with the noun they modify, showing the pronominal prefix form from Table 4.10.

(72) a. **yɛ́ɛyɛ** ɛŋgandɔ́
/**yɛ́ɛyɛ** ɛ-ŋgandɔ́/
DEM.PROX.7 7-crocodile
'ce crocodile'
'this crocodile' [PM 741]

b. **yííní** ɛŋgandɔ́
/**yíini** ɛ-ŋgandɔ́/
DEM.DIST.7 7-crocodile
'ce crocodile'
'that crocodile' [PM 743]

(73) Context: PM has just told EO about a road with a car on it.
ɔ lɛ **yɛ́**↓**tayɛ́ ɛ**nɔ́mɛ ɔŋgɔ !
/ɔ lɛ **yɛ́**ᴸ**táyɛ́** **ɛ**-nɔ́mɛ ɔŋgɔ́/
SM.2SG NEG DEM.DISC.EMPH.7 7-road follow
'Ne suis pas cette route-là !'
'Don't take that road!' [PM 673]

Demonstratives can be doubled, in the form Dem-N-Dem (74). I do not take this as evidence for N-Dem order in Tunen, as it relies on the presence of the prenominal Dem and so is not basic.

(74) a. **yɛ́ɛyɛ ɛ**ŋgandɔ́ **yɛ́ɛyɛ**
/**yɛ́ɛyɛ** **ɛ**-ŋgandɔ́ **yɛ́ɛyɛ**/
DEM.PROX.7 7-crocodile DEM.PROX.7
'ce crocodile-ci'
'this crocodile here' [PM 744]

b. **yííní ɛ**ŋgandɔ́ **yíín**.
/**yíini** **ɛ**-ŋgandɔ́ **yíini**/
DEM.DIST.7 7-crocodile DEM.DIST.7
'ce crocodile-là'
'that crocodile there' [PM 742]

Dugast (1971:138-40) draws a distinction between modified demonstratives and independent demonstratives. However, this difference can be explained in terms of regular application of the utterance-final tone lowering and vowel reduction rule seen in section §4.2 above, as all of Dugast's examples of independent demonstratives are in utterance-final position. The two forms of the demonstrative should therefore be taken to be underlyingly the same form.

4.3.7 Order of nominal modifiers

4.3.7.1 Order in contiguous noun phrases

Having now seen different types of nominal modifiers, a relevant question – and one not covered explicitly in Dugast's (1971) grammar – is how they may be combined. The order of nominal modifiers in Tunen is therefore given in Table 4.16 and illustrated in (75) (to be further discussed in Chapter 7; see also Kerr 2020, 2024).

D			
Dem			Num
Poss	Noun	Adj	Q
wh			

Table 4.16: Linear order of Tunen nominal modifiers (wh indicates a wh-question word e.g. 'which'; Q indicates quantifiers) (adapted from Kerr 2020:242).

(75) tɔ́ɛ́yɛ tɔbanána tɔfítitiə tɔté↓té tɔ́fandɛ
/tɔ́ɛ́yɛ tɔ-banána tɔ-fítitiə tɔ-té↓téá tɔ́-fandɛ́/
DEM.PROX.13 13-banana 13-black 13-small 13-two
'ces deux petites bananes noires'
'these two small black bananas' [JO 844]

This Dem-N-Adj-Num order is a predicted order from Greenberg's Universal 20 (Greenberg 1963; Cinque 2005; Rijkhoff 1990, 2002) and the Final Over Final Condition (FOFC, Sheehan et al. 2017); adjectives are closer to the noun than numerals/quantifiers, and both the DP and NP are head-initial. While other Bantu languages are reported to have many different possible orders (Van de Velde 2005, 2019, 2022), in Tunen, this order is invariant. An apparent exception is the availability of N-Dem, but this is crucially only in a doubling construction of form Dem-N-Dem (74) or in the presentational Cop-N-Dem construction (77).[17]

(77) ɔ́ yáméá éŋgɛlásɛ **yɛ́ɛ́yɛ**
/ɔ́ yáméá ɛ-ŋgɛlásɛ **yɛ́ɛ́yɛ**/
COP.INANIM PRN.POSS.1SG.7 7-glass DEM.PROX.7
'(Ça,) c'est mon verre.', 'Voici mon verre.'
'That (there)'s my glass.' [JO 855]

[17] Another (apparent) exception to the Dem-N restriction is the following example (76) (from Appendix Text 2), possibly due to the discourse context.

(76) mɛ ka ámɛ siəkinə na má↓méá **məə́sə** máfandɛ́ **máam**!
/mɛ ka ámɛ siəkinə na má↓méá **ma-ə́sə** má-fandɛ́ **máama**/
SM.1SG PST3 PRN.1SG see.DUR with PRN.POSS.1SG.6 6-eye 6-two DEM.PROX.6
'Moi j'ai vu avec mes propres yeux !',
'I saw (it) with my own two eyes!' [PM 1050]

One question is whether nouns in a sentence form constituents with other material. Dugast (1971) does not explicitly address questions of nominal constituency, but the notion is invoked when she discusses how adjectives and numerals modify a noun ("qualifie un substantif"). She does not provide any syntactic tests for constituency (e.g. fragment answers to content questions) and the grammar lays out examples of modified noun phrases without sentential content. The constituency of noun phrases is evidenced in my field data by question-answer congruence, fragments, fronting, and clefting, as will be used in Chapter 7 section §7.4.1 to build up a formal model of the Tunen noun phrase.

4.3.7.2 Order in discontinuous noun phrases

Tunen has a surprisingly frequent construction whereby a nominal modifier (e.g. numeral, quantifier) is split from the head noun by intervening material, resulting in a construction of form S-TAM-O-V-Mod, as exemplified in (78).

(78) Context: 'What do you see?'
mɛ́ ndɔ **tunoní** sinə **tɔ́lál.**
/mɛ ʰndɔ **tɔ-noní** sinə **tɔ́-lálɔ́**/
SM.1SG PRS 13-bird see 13-three
'I see three birds.' [EO 225]

Such discontinuous noun phrases will be covered in detail as the focus of Chapter 7, in which I show different results to Mous (1997, 2003) regarding the correlation between the postverbal modifier placement and contrastive focus interpretation on the modifier. Note that the order of nominal modifiers is the same in these discontinuous noun phrases as it is in contiguous noun phrases (section §4.3.7.1); Tunen therefore only has *pull splits*, with *inverted splits* (namely discontinuous noun phrases in which the order of modifier and head noun is swapped) impossible (see Chapter 7 for illustration).

4.3.8 Pronominals

Tunen has a complicated system of pronominals, with multiple different personal pronoun series (Table 4.18). Pronouns agree for the conversational participants and for all noun classes; for space reasons, I do not give the entire paradigms.

Dugast (1971:128-131) describes the distinction between personal pronouns in terms of being varying degrees of *emphatique* 'emphatic', with basic, 'lightly emphatic' ("des pronoms [...] de légère emphase"), and 'strongly emphatic' ("les emphatiques forts") personal pronouns. Strongly emphatic pronouns are decomposed

Person	Subject	Poss. Stem	Independent	Possessive/Emphatic
1G	mɛ	mɛ	mianɲɔ́á	waámɛ́á
2SG	ɔ	–	aŋgɔ́á	waáwɔ́á
1	a	yɛ	wɛ́ɛya	waáyɛ́á
1PL	tɔ	sú	b$^{(w)}$əsú	wəsúə́
2PL	nɔ	nú	b$^{(w)}$ənú	wənúə́
2	bá	bu	b$^{(w)}$əbú/bab	wəə́buə

Table 4.18: Tunen personal pronouns as classified by Isaac (2007:48) (transcriptions and noun classes adapted).

by Dugast (1971:130) as the subject marker (*mɛ, o, a, tu, nu, ba*) + the lightly emphatic pronouns (*am, aŋ, ay, əs, ən, ab*). Isaac (2007:37) glosses the class 1 personal pronoun *áye* simply as 3S.EMP and refers to it as an 'emphatic pronoun'. In classes other than 1st/2nd person and class 1/2, the emphatic series is formed by the verbal prefix + the emphatic *ay* ("l'emphatique"), and Dugast writes that they are always preceded by the particle *ò*. Because Dugast does not provide examples in sentential context, it is difficult to see exactly what the notion of 'emphasis' refers to, a frustration visible in Isaac (2007):

> "The distinction between the various types of pronouns in Tunen is not clear from Dugast. She distinguishes them by 'emphasis'. She calls the use of the oblique as subject 'very lightly emphatic'. The normal use of the emphatic pronouns is called 'lightly emphatic', and the use as subject placed after the auxiliary 'strongly emphatic' (1971:128-130)."
>
> (Isaac 2007:51)

Isaac (2007:49-50) writes that the independent pronouns are for non-subject roles. He writes that the possessive pronouns can be used for emphasis and therefore presents them as the same forms (Table 4.18), raising an issue for glossing decisions. He writes that the possessive/emphatic pronouns can co-occur with a subject clitic pronoun "also adding emphasis"; *míamɛ̀* is taken as subject pronoun fusing with possessive *amɛ̀*. In Chapter 5 I discuss how the appearance of a pronoun may be conditioned by syntactic requirements in addition to referential status (i.e., how emphatic the expression is intended to be).

For current purposes, I use EMPH for 'emphasis' in the glossing, although there is inconsistency in the database due to the status of these forms as emphatic and

the distinction between lightly and strongly emphatic pronouns being unclear.

A further complication to the pronominal system is that a subject pronoun for a conversational participant may appear after the auxiliary cluster alongside a co-referential subject marker, an unusual construction reported only in the neighbouring language Nomaandé (A46; Wilkendorf 2001; Taylor 1984) (79). I come back to this split subject construction in the discussion of in-situ subjects in Chapter 6 section §6.5.3 as evidence for building up a model of Tunen argument structure.

(79) **mɛ** ka **ámɛ** siəkinə.
/**mɛ** ka **ámɛ** siəkinə/
SM.1SG PST3 PRN.1SG see.DUR
"Moi, j'ai vu."
"I (also) saw it." [EO 1046]

Also of relevance for understanding Tunen referent expression over discourse, Tunen also has a dedicated object pronoun series for 3rd-person objects, which is formed by verbal prefix + -(*ɛ*)*t* (which may be pronounced as *it* as a result of vowel harmony/elision, e.g. *túít* for a class 13 object). An example is given in (80) below, where the object pronoun agrees in class 3 (cf. *ɔ-mbɛ́la* /3-house/ 'house').

(80) Context: You are talking about a house.
mɔndɔ a ná **mɛ́ɛta** katák.
/mɔ-ndɔ a ná **mɛ́ɛta** katá-aka/
1-person SM.1 PST2 PRN.OBJ.3 destroy-DUR
'Quelqu'un l'a détruit (la maison).', 'L'homme l'a détruit.'
'Somebody destroyed it (the house).', 'The man destroyed it.' [EB+JO 2691]

Dugast does not indicate tone on the subject prefix in her compositional breakdown of these object pronouns, but she notes that the pronouns are always H-toned. Hamlaoui (2022:517 fn4) notes the availability of dedicated pronominal paradigms for particular grammatical roles in Tunen (based on personal communication with Maarten Mous), speculating that this may lead Tunen to have more flexible word order than languages without such a pronoun series. However, I show in Chapter 5 and 6 that Tunen's word order is still strict. The object pronouns were not widely found in my fieldwork corpus, as given objects may be dropped (i.e., zero expression) (see Chapter 5 section §5.7). In all examples with an object pronoun, it appeared in the canonical preverbal object position (see Chapter 6 section §6.2.5).

Possessive pronouns appear before the noun they modify (PRN.POSS-N) and agree with it in noun class. They also inflect for the gender of the possessee. I indicate both noun classes in the gloss line, in the order Possessee-Possessum, e.g.

wámíá 'my' PRN.POSS.1SG.3 (cf. *wə́yíə́* 'his', 'hers' PRN.POSS.1.3, *bíámíá* PRN.POSS.1SG.8, *bíáyéá* PRN.POSS.1.8). As a note on enclisis, some expressions for close familial relations have shorted forms involving a possessive pronoun, e.g. *mùkinâm* (= **wámìa** múkìnə) '**my** relative (on wife's side)', *òŋwâm* (= **wám** òŋgwáyè) '**your** friend' (Dugast 1971:137). These frozen constructions are relevant for the potential grammaticalisation of Tunen word order in terms of headedness (Chapter 6; cf. Kerr 2024; Mous 2003, 2005).

Note finally that verbal subject prefixes are also considered by Dugast (1971); Isaac (2007); Kongne Welaze (2010) to be pronouns. I treat them in discussion of the verbal domain in section §4.4.

4.3.9 Possession and the associative

Possessive pronouns have already been seen in the previous section; note that Tunen has Poss-N order (section §4.3.7). Possession is otherwise indicated using the associative construction, which takes the form $N_{Possessum}$-ASSOC-$N_{Possessee}$, with the associative marker a vowel that takes the numeral agreement prefix (see Table 4.10), e.g. *má* ASSOC.6, as illustrated in (81). The Tunen associative therefore matches the canonical associative construction in Bantu, otherwise known as the *connective construction* or the *genitive* (Van de Velde 2013). The associative marker is identical in form to the verbal prefix. All associative markers are high-toned except class 1 *wa* and class 9 *yɛ*. Infinitives take the class 3 associative (81)-(82).

(81) nɛɔfɛ́nɛ ɛŋganda **yɛ** ɔbíbíə́nə **wɔ́** Alɛkɛsándɛlɛ.
/nɛɔfɛ́nɛ ɛ-ŋganda **yɛ** ɔ-bíbíə́nə **wɔ́** Alɛkɛsándɛlɛ/
today 9-holiday ASSOC.9 INF-MID.birth ASSOC.3 1.Alexander
'Aujourd'hui, c'est l'anniversaire d'Alexandre.'
'Today is Alexander's birthday.' [JO 523]

(82) ɔtalɛa **wɔ́** hɛkɔk(ɛ) wɔ́ báka wɔ́ mianɔ́á hikəki.
/ɔ-talɛa **wɔ́** hɛ-kɔkɛ wɔ́ bá-aka wɔ́ mianɔ́á hikəkiə/
INF-cook ASSOC.3 19-kok SM.3 be-DUR SM.3 PRN.EMPH.1SG like
'Cuisiner le kok me plaît.'
'I like cooking kok.' (lit. 'Cooking kok pleases me.') [JO 1321]

As is common for a Bantu language (Gibson et al. 2019:225), Tunen uses the construction 'be with' to express 'have'. This construction is also used to indicate someone's age (lit. 'I am with years X') (84) and can express qualities (85).

(83) a. mɛ **lɛ na** hɛndɔ́m.
/mɛ lɛ na hɛ-ndɔ́mɔ/
SM.1SG be with 19-cat
'J'ai un chat.'
'I have a cat.' [PN 359]

b. mɛ lɛ **bá na** hɛndɔ́m.
/mɛ lɛ **bá na** hɛ-ndɔ́mɔ/
SM.1SG NEG be with 19-cat
'Je n'ai pas de chat.'
'I don't have a cat.' [PN 360]

(84) a. ɔ **báka na** tuɔ́ŋɔ́ tɔ́nɛ́ ?
/ɔ bá-aka na tɔ-ɔ́ŋɔ́ tɔ́-nɛ́á/
SM.2SG be-DUR with 13-year 13-how_many
'Quel âge as-tu ?', 'Tu as quel âge ?'
'How old are you?' [JO 2905]

b. mɛ **báka na** tuɔ́ŋɔ́ mómo fándɛ na tɔ́lɛ́ndɔ́lɔ́mɔn.
/mɛ **bá-aka na** tɔ-ɔ́ŋɔ́ mómo fándɛ na tɔ́-lɛ́ndɔ́lɔ́mɔnɔ/
SM.1SG be-DUR with 13-year 6.ten two with 13-seven
'J'ai 27 ans.'
'I am 27 years old.' [JO 2904]

(85) wɔ́wɔ́ mulúti **a báka na** ɛ́many(a) yáyɛ́ná wən.
/wɔ́ɔwɔ mɔ-lúti **a** **bá-aka** na ɛ-manya yáyɛ́ná
DEM.PROX.1 1-student SM.1 be-DUR with 7-intelligence surpass
wə́ni/
DEM.DIST.1
'Cette élève est plus intelligent que l'autre.'
'This student is more intelligent than the other one.' [DM 155]

4.3.10 Prepositions/expressing location

Tunen has a general preposition *ɔ* PREP, which fulfils the functions translatable as 'in', 'to', 'at', and 'by' in English (e.g. (86)). The form *ɔ* is also found before infinitival verb forms, which I gloss with the distinct gloss INF (87)-(88). I discuss this homophony further in Chapter 6 regarding Mous's (2005) proposal of word order change in infinitival constructions in Tunen (see also Kerr 2024:317-320).

(86) Context: 'Where are you?'
mɛ lɛ ɔ nioní.
/mɛ lɛa ɔ nɛ-oní/
SM.1SG be PREP 5-market
'Je suis au marché.'
'I am at the market.' [PM 102]

(87) mɔná á báka ɔ ɔnɔ́f.
/mɔ-ná a bá-aka ɔ ɔ-nɔ́fɔ/
1-child SM.1 be-DUR PREP INF-fish
'L'enfant est à la pêche.'
'The child is fishing.' [EO 1479]

(88) mɛ n(á) ákáná ɔ bɛkálatɔ ɔ ɔwɔ́nd.
/mɛ ná ákáná ɔ bɛ-kálɔtɔ ɔ ɔ-ɔ́ndɔ́/
SM.1SG PST2 leave PREP 8-carrot PREP INF-buy
'Je suis allé (pour) acheter des carottes.'
'I went to buy carrots.' [EO 1427]

The preposition *na* is also found, often as a comitative 'with' and to mark instruments ('by'). *na* also combines clauses ('and'; section §4.5.5) and can be found preceding both elements to give the sense *'both ... and'*. Some cases were found with *a*/*á* used as a preposition (see Chapter 5 section §5.2.6). Tunen also has the preposition *ɛlɔ́áyɛ́* 'for', e.g. (89), which can also express 'why' when combined with *yátɛ́* 'what' (lit. 'for what') ((90); section §4.5.8). 'without' is expressed by *ɛngan*.

(89) muləliə a ka baná lɛ́na ásɛ bá ↓ndá sákɔ́ná na tutilínə **ɛlɔ́áyɛ́** nɛ́kɔsɔna nɛɔfɛ́n.

/mɔ-ləliə a ka ba-ná lɛ́na a-sɛ́á bá nda sákɔ́ná
1-teacher SM.1 PST3 2-child say.APPL SM.1-say SM.2.SBJV VEN come
na tɔ-tilínə **ɛlɔ́áyɛ́** nɛ-kɔsɔna nɛɔfɛ́nɛ/
with 13-pen for 5-exam today
'L'enseignant a dit aux enfants de venir avec les bics pour l'examen aujourd'hui.'
'The teacher told the children to come with pens for the exam today.'
[JO 2634]

(90) **ɛlɔ́áyɛ́ yátɛ́** Ɛlísabɛtɛ a ná mɔŋáká ɛmbát (eé) ?
/**ɛlɔ́áyɛ́ yatɛ́** ɛlísabɛtɛ a ná mɔŋá-aka ɛmbáta eé/
for what 1.Elisabeth SM.1 PST2 last-DUR a_lot Q
'Pourquoi a Elisabeth trop duré ?', 'Pourquoi a Elisabeth mis long ?'
'Why did Elisabeth take such a long time?' [EE+GE+PB 2729]

Other words expressing location[18] include *ubusíə́* 'in front', *əlimə* 'behind', *ɔmbáŋá*, 'on top' etc. These may look like postpositions due to their ability to occur postnominally, but are better analysed as locative nouns. Dugast (1971:218-9) analyses *òbusì* 'in front' as dervied from *bùsí* 'face'; *ə̀lim* 'behind', 'after' as dervied from *ə̀lim* 'back'; *òmatá* 'under' from *mata* 'underneath', 'the back of something'; *òmbaŋ* 'on' from *òmbaŋ* 'mountain', 'height'. I do not reflect the decomposition in the glossing, unless it is relevant for understanding agreement on another element.

(92) Context: QUIS picture stimulus. EK asks the Tunen question "*yatɛ́ yɛ́ ná bɛ́tɔ́mbáká eé ?*" ("What happened?")
bá ná mɔná lúmə́ na mɔk **əlim(ə).**
/bá ná mɔ-ná lúmə́ na mɔkɔ əlimə/
SM.2 PST2 1-child throw with 3.stone behind
'On a lancé une pierre à l'enfant par derrière'
'Someone threw a stone at the child from behind' [EO 439]

(93) Context: Max Planck scope picture stimulus 1/77.
mɛ́ ndɔ sinə bɔlɛ́á na tunoní **ɔmbaŋa** ɔ mɔlɛ́áfɛ tɛ́.
/mɛ ᴴndɔ sinə bɔ-lɛ́á na tɔ-noní **ɔmbáŋá** ɔ mɔ-lɛ́áfɛ tɛ́á/
SM.1SG PRS see 14-tree with 13-bird on_top PREP 3-branch each
'Je vois une arbre avec des oiseaux sur chaque branche.'
'I see a tree with birds on each branch.' [EO 1470]

[18]These words may be extended to express time, e.g. in the recipe instruction below:

(91) **ubusíə́** ɔbɔ́á mɛ́ tɔmbaŋa ha, mɛ́ bulə́lə,
/ɔ-busíə́ ɔbɔ́á mɛ =ᴴ tɔ-mbaŋa ha mɛ =ᴴ bulə́lə/
PREP-14.front REL.14 SM.1SG PROC 13-peanut put SM.1SG PROC turn
'Avant de mettre les arachides, je tourne,'
'Before putting the peanuts in, I stir," [JO 1364]

As seen in Table 4.10, the synchronic noun class system has no locative subject marker or agreement prefix, with the only trace of the noun class system visible in the locative relative marker *ɔhá* REL.LOC and the locative demonstratives *háaha* 'here' DEM.PROX.LOC, *hə́ní* 'there' DEM.DIST.LOC, and *hɔ́yɛ́* 'there' DEM.DISC.LOC (94).

(94) ɔ́ ndɔ sinə **hɔ́yɛ́ ɔhá** ɔmbɔ́áŋɛ́ wɔ́ lɛ́á lutá↓tɔ́ ?

/ɔ	ᴴndɔ	sinə	**hɔ́yɛ́**	**ɔhá**	ɔ-mbɔ́áŋɛ́	wɔ́	lɛ́á
SM.2SG	PRS	see	DEM.DISC.LOC	REL.LOC	3-arrow	SM.3	be

lutə́-átɔ/
draw-PTCP

'Vois-tu là où la flèche est dessinée ?'
'Do you see there where the arrow is drawn?' [PM 659]

4.3.11 Specificity and definiteness

Like other Bantu languages, Tunen nouns (i.e., the root + class prefix) are compatible with specific, non-specific, definite, and indefinite readings. There are no articles; there is no obligatory marking of specificity or definiteness of a nominal. Specificity and definiteness can however be disambiguated by discourse and syntactic context, as I show in Chapter 6 section §6.2.

The numeral *-mɔté* has grammaticalised into a specific indefinite determiner, which appears prenominally (as reflected by D-Noun in Table 4.16).[19]

(95) mɛ́ ndɔ **wɔmɔté** mɔndɔ si. nɛayá nínyə á Təniɛl.

/mɛ	ᴴndɔ	**ɔ́-mɔté**	mɔ-ndɔ	siə	nɛayá	nɛ-nyə	á	Təniɛ́lɛ/
SM.1SG	PRS	1-one	1-person	search	PRN.POSS.1.5	5-name	COP	1.Daniel

'Je cherche une certaine personne. Son nom est Daniel.'
'I'm looking for someone. His name is Daniel.' [EO 400; JO 891]

While the change in semantics from NUMERAL ONE > (SPECIFIC) INDEFINITE MARKER is crosslinguistically common and found in neighbouring zone A Bantu languages (e.g. Nomaande A46; Wilkendorf 2001), what is different in Tunen is that there is an accompanying change from postnominal to prenominal position (i.e., N-Num versus D-N). The use and origin of the specific indefinite determiner is discussed further in Kerr (2020). For this thesis, it is relevant for the disscussion

[19] As discussed in Kerr (2020), *-mɔté* also appears postnominally in the Dugast (1975) text corpus when used as a specific indefinite marker, compatible with a change in progress in which the semantic change preceded the change in syntactic position.

of head-initiality versus head-finality (Chapter 6) and for the structure of the noun phrase (Chapter 7).

Continuing the overview of specificity and indefiniteness, note that in Tunen, equivalents of negative polarity items (NPIs) are formed with a negative marker in combination with the word *mɔndɔ* 'person' or *bɔla* 'thing', as in (319) below.

(96) a. Context: Max Planck Scope picture stimulus 41/77.
ɔ háa a **sá bɔla** halɛn.
/ɔ háaha a **sá** **bɔ-la** halɛna/
PREP DEM.PROX.LOC SM.1 NEG 14-thing catch
'Ici il n'a rien attrapé.'
'Here he hasn't caught anything.' [EO 1483]

b. a sá **mɔndɔ** sin.
/a **sá** **mɔ-ndɔ** sinə/
SM.1 NEG 1-person see
'Il n'a vu personne.'
'He hasn't seen anybody.' [EO 1485]

c. a **sá** sinə **mɔndɔ** atá amɔtɛ.
/a **sá** sinə **mɔ-ndɔ** atá ɔ́-mɔté/
SM.1 NEG see 1-person even 1-one
'Il n'a vu aucune personne.'
'He hasn't seen a single person.' [EO 1486]

The word *bɔ́la* 'thing' can also be used in questions and affirmatives to mean 'something' (97), meaning that words such as *bɔ́la*, *mɔndɔ* etc. are not themselves NPIs in Tunen.

(97) ɔ ná mɔná **bɔ́la** indiə eé?
/ɔ ná mɔ-ná **bɔ-la** índíə́ eé/
SM.2SG PST2 1-child 14-thing give Q
'Est-ce que tu as donné quelque chose à l'enfant ?'
'Did you give the child something?' [EO 1488]

These tests are used in Chapter 6 to investigate possible factors conditioning Tunen's preverbal object placement, showing that the preverbal object position is not restricted by specificity or definiteness (see especially section §6.2).

4.4 The verbal domain

4.4.1 The verb stem

Verb roots in Tunen are typically CVC; CV roots are also found, e.g. *wə́* 'die' (Mous 2003; Boyd 2015). Boyd also identifies VC roots (Boyd 2015:38) and Mous discusses polysllabic roots that have arisen through frozen extensions (Mous 2003:288). In my data, I do not reflect frozen extensions in glosses, e.g. *sinə* is glossed as 'see' although historically derived from *siə* 'want' with the applicative extension *-in/-ɛn* ('want.APPL'). Similarly, I do not always indicate extensions in the glossing of examples in the database if the English lexical gloss conveys the same meaning, unless the extension is a point of interest.

Boyd identifies L, H, and LHL tone melodies on verb roots (Boyd 2015:38-9). The tone of the verb is different in certain TAM forms (Mous 2003; Boyd 2015); in my data, this is not indicated in the glossing; I indicate the tone as it appears in non-final position as the underlying form.

As discussed in section §4.2.4 above, I analyse Tunen verbs as underlyingly ending in a vowel, but I do not transcribe this on the surface line if unpronounced due to application of the regular utterance-final vowel reduction rule. The vowel at the end of the verb is not a final vowel (FV) in the sense found in other Bantu languages in which it has a paradigmatic opposition in terms of mood (Mous 2003:288). I return to this point in Chapter 6.

Note finally that the infinitive prefix is /ɔ-/ (or /ʊ-/ in Boyd's (2015) analysis; see section §4.2.1), which undergoes ATR harmony with the root and may appear with glide formation as per the phonological rules discussed in section §4.2 above.

4.4.2 Split predication and argument indexation

Tunen has a split in predication between the verb (and extensions) and the TAM complex (termed Aux for 'auxiliary'); the two can be separated by an object (98), leading to the canonical S-Aux-O-V-X word order (section §4.5; Chapters 5, 6).

(98) Context: 'I understand French,'
mba **mɛ lɛ́ ndɔ** tunəni **ɔ́k.**
/mba **mɛ** **lɛ** **ᴴndɔ** tɔ-nəni **ɔ́kɔ**/
but SM.1SG NEG PRS 13-Nen understand
'mais je ne comprends pas le tunen.'
'but I do not understand Tunen.' [PM 98]

Tunen verb forms obligatorily index subjects via the subject marker (SM). Unlike many Bantu languages but fitting the areal profile of a Northwestern Bantu language (Polak 1986; Van der Wal 2022), Tunen does not have an object marker on the verb, and therefore only indexes the subject (i.e., the external argument).

The subject markers for third person across noun classes were given in Table 4.10. The subject markers for conversational participants (1st and 2nd person) are given in Table 4.20. Note here that the 1st/2nd person subject prefixes are low-toned, as is class 1, with only the class 2 prefix *bá-* high-toned, in contrast to non-human animate/inanimate third person subject markers, which are underlyingly high-toned (Table 4.10). In certain TAM contexts, the underlyingly L-toned SMs surface with a H tone, which I comment on in Chapter 5 and 6 in relation to identifying relative clause environments within cleft constructions.

Person	Subject marker
1SG	mɛ
2SG	ɔ
1PL	tɔ
2PL	nɔ
1	a
2	bá

Table 4.20: Verbal subject markers for conversational participants and human animate 3rd person (class 1/2; see Table 4.10 for other 3rd person classes).

Sources vary in whether the subject marker is written separately or together with the TAM marker. When there is no object, the subject marker and TAM markers may be phrased together with the verb, although I follow the official orthography in separating each component with whitespace. Dugast (1971, 1975) writes the subject prefix as a separate word from the following TAM marker, with the TAM marker as part of the same word as the verb (when no object intervenes), while Mous (1997, 2003, 2005, 2014) writes the two together. Within the neighbouring languages, there is a lot of variation between authors on this point, influenced largely by writing tradition (Nurse 2008:169-170), making it hard to know the actual degree of analyticity of the language. I choose to follow the community orthography in writing the elements separately; this should not necessarily be taken as a claim that Tunen is in fact this analytic. In Chapter 6, I show however that the ability for

multiple objects to intervene between the auxiliary cluster and verb does provide evidence for analyticity in Tunen.

Tunen's split predication is discussed further in section §4.5 and will be analysed in Chapter 6, where I compare the structure of the Tunen verb to the more synthetic pattern found in other Bantu languages.

4.4.3 Verbal derivation

4.4.3.1 Verbal extensions

As discussed in Mous (2003) and Kongne Welaze (2010), Tunen has an array of verbal derivational suffixes (termed 'extensions' in the Bantuist literature; Bearth 2003; Schadeberg and Bostoen 2019). Tunen's verbal extensions are given in Table 4.22.

Middle	*bɛ́-*	Reciprocal	*-an/ən*
Applicative	*-ɛn/in*	Short causative	*-i*
Diminutive	*-ɛl/il, -al/əl*	Long causative	*-əsi*
Positional	*-ɛm/im*	Neuter	*-ɛ/i*
Intensive	*-ɛn/in*	(Impositive	*-ɛ/i*)
Separative	*-on/un*	(Durative/Pluractional	*-ak/ək*)

Table 4.22: Tunen verbal extensions (adapted from Mous 2003:289).

These verbal extensions will play an important role in building a formal analysis of Tunen clausal syntax in Chapter 6. Note that there is no passive extension in Tunen, which is unusual for Bantu in general but the same as other Northwestern Bantu languages (see e.g. Stappers 1967; Schadeberg 2003a; Guérois to appear). A second unusual point is the presence of a prefixal extension, namely the middle prefix *bɛ́-*, discussed in detail in Mous (2008).[20] The inventory of verbal extensions in Tunen will be discussed in detail in Chapter 6; the functional equivalents of passives are discussed in Chapter 5 (cf. Kerr to appear).

[20] Such a prefix is also found in other Mbam languages, described as a reflexive/middle prefix of form *bá-* or *bí-* (Boyd 2015:18-19).

4.4.3.2 The *-átɔ* participle

Another relevant verbal element is the participle *-átɔ* (transcribed as *-atɔ* by other authors, but consistently found with a H tone), as in (99).[21]

(99) Context: '*Yaté ɔ́ ndɔ sinə ?*' ('What do you see?') + Max Planck Scope picture stimulus 73/77.
mɛ́ ndɔ sinə baná bə́nisə́ tálɛ́má**átɔ** ɔ bɛhɔ́sɛ bínis.
/mɛ ʰndɔ sinə ba-ná bá-nisə́ tálɛ́má-**átɔ** ɔ bɛ-hɔ́sɛ bɛ́-nisə/
SM.1SG PRS see 2-child 2-four mount-PTCP PREP 8-horse 8-four
'Je vois quatre enfants montés sur quatre chevaux.'
'I see four children mounted on four horses.' [EO 1474]

As noted already in section §4.2.2, only the first vowel of the *-átɔ* suffix undergoes ATR harmony with the root. I discuss the syntax of the *-átɔ* participle further in Chapter 5 section §5.6 (on functional equivalents of the passive) and in Chapter 7 section §7.3.2 (on secondary predication).

4.4.4 Tense, mood, and aspect

4.4.4.1 Tense markers

Tense markers in Tunen appear to be cliticised to the subject marker as separate phonological words from the verb stem. The verb and the auxiliary cluster (subject marker+tense) can be separated by the object, as introduced in section §4.4.2 and to be discussed in detail in Chapter 6.

As is common for languages of the area (Nurse 2008), Tunen has many tense gradations, with 4 degrees of past tense, a present tense, and a future tense. In dependent clause environments (relative clauses, negation, questions), the tense markers are largely the same as in affirmative main clauses, although there is variation in the form of the PST3 marker, as shown in Table 4.24.

The present tense marker has a floating high tone which attaches to the preceding tone-bearing unit, e.g. /mɛ ʰndɔ/ → [mɛ́ ndɔ] (SM.1SG PRS). I discuss this in relation to diagnosing cleft structures in Chapter 5 section §5.4.

Note also that *ná* (and to a lesser extent *nɔ*) may also be used as a general tense marker, as noted for unspecified past tense in narratives in Boyd (2015:32fn43) and Mous (2003) and found in certain common expressions for present tense interpretations (e.g. *me n*(*á*) *ákán* 'I'm off' (said when leaving the house)).

[21] Example (99) is unusual in being VO; I discuss the availability of VO patterns with heavy objects containing a modifier (V-O-Mod) in Chapter 7.

Gloss	Time point	Main clause	Dependent clause
FUT	future from tomorrow onwards	ŋɔ	ŋɔ
PRS	present, immediate future	ᴴndɔ	ᴴndɔ
PST1	recent past, just an instant ago	nɔ	nɔ
PST2	a few hours ago (same day)	ná	ná
PST3	yesterday and before	ka	↓ná
PST4	far past; many years ago, before birth	lɛ	lɛ

Table 4.24: Tunen affirmative tense markers in main versus dependent clauses.

4.4.4.2 Negative markers

Tunen uses the markers *lɛ*, *sa*, *saá*, and *ɔ́* in negative TAM contexts (Dugast 1971; Mous 2003:294-299). For current purposes, I gloss all negative markers simply as NEG. An example illustrating negation is given in (100), where the main clause affirmative PST3 tense marker *ka* is used in the affirmative clause, while the dependent clause negation marker *sa* is used in the negative clause.

(100) mɛ ka ka húlə́kə́ ɔ Kríbi mba mɛ́ sa bá ɔ Límbɛ.
/mɛ ka ka húlə́-aka ɔ Kríbi mba mɛ sa bá ɔ
SM.1SG PST3 AND visit-DUR PREP Kribi but SM.1SG NEG be PREP
Límbɛ/
Limbe
'J'avais visité Kribi mais je n'étais pas à Limbé.'
'I've visited Kribi but I haven't been to Limbe.' [JO 1127]

The main clause negative marker *lɛ* NEG should not be confused with the homophonous PST4 marker *lɛ*, nor with the copula *lɛa* (realisable as *lɛ* due to vowel reduction), which appears after the subject marker.

4.4.4.3 The 'not yet' construction

Tunen also has a TAM form that expresses the sense 'not yet'. This is briefly mentioned in Dugast (1971:199), who lists *nàna* together with *nà* as 'adverbes de négation' ("adverb of negation"), translated as "pas encore" ("not yet"). Her examples have L tone on the subject marker, whereas mine consistently show an initial H

tone. In the absence of further analysis of these TAM forms and knowledge of their origin, I gloss them simply as 'not_yet' in the field corpus and do not provide morphological segmentation, as in example (101) below.

(101) mɔná ánana nɛ.
/mɔ-na ánana néá/
1-child SM.1.not_yet eat
'L'enfant n'a pas encore mangé.'
'The child hasn't eaten yet.' [JO 798]

4.4.4.4 Procedural

A H tone on the subject marker appears without any segmental TAM material in a procedural context, as visible in narrative speech (102).

(102) ɛsɛ́áŋáka mɛ́ hɛkɔkɛ sɔ́áka.
/ɛsɛ́áŋáka mɛ =H hɛ-kɔkɛ sɔ́á-aka/
now SM.1SG PROC 19-kok wash-DUR
"Maintenant, je lave le kok."
"Now, I wash the kok." [JO 1343]

I differ from previous sources in glossing this H tone as PROC and analysing it as filling the TAM slot, therefore attaching from the right. This analysis differs from that of Mous (2003:295), who indicates that the H tone associates from the left (before the subject marker), glossing it as part of the subject marker (e.g. SM.1SG:H). However, this is on the basis of data from subjunctive TAM contexts in which there is material in the TAM slot that shows evidence of tonal downstep, which does not apply to the procedural TAM context in which there is no segmental content in the TAM slot. On the basis of the different semantics and tonal behaviour, I therefore analyse the H tone in procedural contexts as associating to a L-toned SM. This analysis has the consequence that the TAM slot is always filled in Tunen, which is relevant for formal analyses of OV/VO word order alternations as conditioned by the presence of material in the TAM/Aux slot (to be discussed in Chapter 6).

Further examples are found in the natural speech corpus (see especially instructional videos, as exemplified in Appendix Text 3).

4.4.4.5 Subjunctive mood

An H tone appears on underlyingly L-toned subject markers in the subjunctive or conditional TAM context (termed *subjectif* by Dugast 1971; cf. Mous 2003:297 on the

optative). I represent the underlying form with the H tone and indicate in the gloss that this is the subjunctive form of the subject marker, as in (103)-(104).

(103) **nɔ́** ɔŋgɔ
/**nɔ́** ɔŋgɔ́/
SM.2PL.SBJV follow
'si vous suivez'
'if you (pl.) follow' [PM 931]

(104) Nɔ́a, niálá bɔlábɔ́nɛ́(á) mba ɔ́ bá muɛs.
/Nɔ́a nɛ́á-ila bɔ-lábɔ́nɛ́á mbaá ɔ́ bá muɛ́sɛ/
1.Noah eat-DIM 14-food so SM.2SG.SBJV be well
'Noah, mange un peu de la nourriture pour que tu sois bien.'
'Noah, eat a bit of food and you'll recover.' [JO 1325]

4.4.4.6 Complex tenses

Complex tenses are those where a(n auxiliary) verb is used in addition to the tense marker and main verb. For example, the habitual is expressed with *báka* 'be' together with the main lexical verb. Both *báka* and the lexical verb take a subject marker, as illustrated in (105).

(105) a. **mɛ báka mɛ ákaka** ɔ nioní yiilə tɛ́.
/mɛ bá-aka mɛ ákaka ɔ nɛ-oní yiilə tɛ́á/
SM.1SG be-DUR SM.1SG leave PREP 5-market Wednesday every
'Je vais au marché chaque mercredi.'
'I go to the market every Wednesday.' [PM 192]

b. Malíá **a báka a** bɛlama bɛtɔ́tɔ́ **ɔ́ndɔ́k(ɔ)**.
/Malíá **a bá-aka a** bɛ-lama bɛ-tɔ́tɔ́ **ɔ́ndɔ́-aka**/
1.Maria SM.1 be-DUR SM.1 8-vegetable 8-young buy-DUR
'Maria achète des légumes fraiches (habituellement).'
'Maria (regularly) buys fresh vegetables.' [JO 2462]

The class 7 default form of the habitual (*ɛbáka*) is commonly used, giving the sense 'it is so that...', as in (106).[22] I transcribe this as one word because it has somewhat grammaticalised into an adverbial 'normally' (although I retain segmentation in the glosses).

[22]The default form for human animates *abáka* is also found (cf. Mous 2003:295).

(106) **ɛbáka** mɛ ákána ɔ makɔ́lɔ́.
/**ɛ-bá-aka** mɛ ákána ɔ ma-kɔ́lɔ́/
SM.7-be-DUR SM.1SG leave PREP 6-foot
'Normalement, je vais au pied.'
'I normally go by foot.' [JO 1143]

The grammaticalisation of *ɛbáka* is similar to the use of the form *étasɛ*, which is of unclear etymological origin but likely also grammaticalised from a default class 7 form of a verb to a sentence-initial adverb meaning something like 'very soon', 'about to'.[23] This form appears in sentence-initial position, as exemplified in (107) (cf. Dugast 1971; Mous 2003:295).

(107) Context: You go to visit Pascal, but he is not there. His brother is home, and tells you:
Pasakálɛ a n(á) ákan. **étasɛ** á ndá híáná ikúílí tɛ́↓tɛ́.
/Pasakálɛ a ná ákána **étasɛ** a nda híáná ɛ-kúílí tɛ́ᴸtɛ́á/
1.Pascal SM.1 PST2 leave very_soon SM.1 VEN return 7-time little
'Pascale est parti. Il reviens dans peu de temps.'
'Pascal left. He'll come back soon.' [JO 833]

Auxiliary verbs appear before the main verb, e.g. *tíkə́* 'stay'. I analyse these as verbs, meaning there is a S-Aux-V-V order (where Aux refers to the TAM complex).

(108) tɔ ná **tíkə́** sáá.
/tɔ ná tíkə́ sáá/
SM.1PL PST2 stay come
'Nous arriverons.'
'We will follow.' [PM 1058]

Note for comparative purposes that Tunen does not have any serial verb constructions of the kind commonly used in many West African languages (see Zeller 2020:75-77 and references therein for an overview) and does not appear to make much use of light verb constructions. I return to this in Chapter 6 section §6.8's discussion of theories of the grammaticalisation of OV word order (see also Kerr 2024:312-313).

[23] See also section §4.5.6 on the grammaticalisation of the copula *Xsɛ́á* 'that', which I gloss as SM.X-say without whitespace between the subject marker and the root.

4.4.5 Adverbials

Adverbs in Tunen are invariant for noun class, meaning that there is no noun class agreement visible. Adverbs can be derived from adjectives by reduplication, e.g. *muɛsɛmuɛsɛ* 'well' from *muɛsɛ* 'good'. There appears to be some semantic contribution of the reduplication, e.g. intensification; Dugast (1971:206) translates *muɛsɛmuɛsɛ* as 'especially'. For other adverbs like *biabia* 'slowly', which are clearly reduplicated, the non-reduplicated source is unknown. Adverbs may be reduplicated for intensification, as in (109) below.

(109) abáka ikó tukənəkə **tɔfá(tɔfá)** !
/a-bá-aka ɛ-kó tukənə-aka **tɔfá(tɔfá)**/
SM.1-be-DUR 7-drum play-DUR quickly(.REDUP)
'Il joue les tamtams (très) rapidement !'
'He plays the drums (very) quickly!' [EE+EB 2228]

As seen in (109) above and (110) below, adverbs in Tunen canonically appear in the postverbal X position (S-Aux-O-V-**Adv**) (see Chapter 5 section §6.2.4).

(110) a. mɛ́ ndɔ tunəni ɔ́kɔ **muɛs**. nɔ lɛ hɔ́ na fɛlɛndʒɛ.
/mɛ ᴴndɔ tu-nəni ɔ́kɔ **muɛ́sɛ**. nɔ lɛ hɔ́ na fɛlɛ́ndʒɛ/
SM.1SG PRS 13-Nen understand well SM.2PL NEG speak with French
'Je comprends bien la langue tunen. Ne parlez pas en français.'
'I understand Tunen well. Don't speak in French.' [JO 801]

b. mɛ́ ndɔ tunəni ɔ́kɔ **tɛ́↓tɛ́**.
/mɛ ᴴndɔ tu-nəni ɔ́kɔ **tɛ́ᴸtɛ́á**/
SM.1SG PRS 13-Nen understand little
'Je comprends un peu du tunen.'
'I understand a little Tunen.' [JO 805]

Time (but not manner) adverbials may appear in a non-dislocated sentence-initial position.[24] Manner adverbials may in limited cases appear between a noun phrase subject and the TAM complex. Manner adverbials may also be in sentence-initial position if there is prosodic dislocation from the main clause. When there

[24]Sentence-initial position was also accepted for *ɔtɔ́ŋɔ* 'deliberately' ([JO 2571]).

are other postverbal elements, the manner adverb appears first (111a-111b); time adverbials are more flexible (111c).[25]

(111) a. Malɛ́á a ná hiwə́ tíə́ **tɔfá** ɔ ikísin.
/Malɛ́á a ná hiwə́ tíə́ **tɔfá** ɔ ɛ-kísinə/
1.Maria SM.1 PST2 19.fire light quickly PREP 7-kitchen
'Maria a rapidement allumé un feu dans la cuisine.'
'Maria lit a fire quickly in the kitchen.' [EO 2864]

b. *Malɛ́á a ná hiwə́ tíə́ ɔ ikísin **tɔfá**.
/Malɛ́á a ná hiwə́ tíə́ ɔ ɛ-kísinə **tɔfá**/
1.Maria SM.1 PST2 19.fire light PREP 7-kitchen quickly
Intd.: 'Maria a rapidement allumé un feu dans la cuisine.'
Intd.: 'Maria lit a fire quickly in the kitchen.' [EO 2864]

c. {**naánɛkɔl,**} Malɛ́á a ka hiwə́ tíə́ **(?naánɛkɔl)** tɔfá {**naánɛkɔl**} ɔ ikísin {**naánɛkɔl**}.
/**naánɛkɔla** Malɛ́á a ka hiwə́ tíə́ **naánɛkɔla** tɔfá
yesterday 1.Maria SM.1 PST3 19.fire light yesterday quickly
naánɛkɔla ɔ ɛ-kísinə **naánɛkɔla**/
yesterday PREP 7-kitchen yesterday
'Maria a rapidement allumé un feu dans la cuisine hier.'
'Maria lit a fire quickly in the kitchen yesterday.' [EO 2866-9]

(112) bə́ə́ní bɛndɔ bə́ə́ní bá ndɔ ɛŋganda bíínə **tɔfa ɛmbát**.
/bə́ə́ní ba-ndɔ bə́ə́ní ba ᴴndɔ ɛ-ŋganda bínə **tɔfa**
DEM.DIST.2 2-person DEM.DIST.2 SM.2 PRS 7-enganda dance quickly
ɛmbáta/
too_much
'Les gens-là dansent l'ɛŋganda trop rapidement.'
'Those people over there dance the ɛŋganda too quickly.' [EE+EB 1836]

Adverbs are generally not permitted between the TAM complex and the verb (113). However, some adverbs are reported in other work to be allowed in this position, e.g. *ɛmbáta* 'much' (Dugast 1971).

[25]This section reports initial results from remote elicitation based on the CHAOS/C08 questionnaire (see Chapter 3 section §3.3.3).

(113) mɛ́ ndɔ {***biabia**} mɔná {***biabia**} sɔ́á {**biabia**}.
/mɛ ᴴndɔ biabia mɔ-ná biabia sɔ́á biabia/
SM.1SG PRS slowly 1-child slowly wash slowly
(Intd.:) 'Je lave l'enfant doucement.'
(Intd.:) 'I wash the child carefully.' [JO 820-2]

It is unclear whether Tunen has clause-level adverbs as a distinct class; relevant concepts such as 'clearly' were expressed with *taká taká* 'truly' (lit. 'truth truth') in clause-initial position (114), while 'apparently' was expressed periphrastically as 'it is like' (lit. 'it does as') (115).

(114) Context: You see someone playing in a tree and then they fall. You go over with a friend and see that their leg is at an unpleasant angle. You remark to your friend...
taká taká mɔkɔlɔ́ wɔ́ báka nɔkɛ́átɔ.
/**taká taká** mɔ-kɔlɔ́ wɔ́ bá-ka nɔkɛ́á-átɔ/
truth truth 3-leg SM.3 be-DUR break-PTCP
'Evidemment sa jambe est cassé.'
'Clearly, his leg is broken.' [JO 829]

(115) Context: There is a rumour that the chief of the village is dead. You recently saw the chief and he wasn't ill, so you do not know for sure whether the rumour is true, but you are explaining to someone else what has happened.

yɛ́ ndɔ kɛa ésɛ kíŋə a ná wə.
/**yɛ́ ᴴndɔ kɛ́á** ésɛa kiŋə a ná wə́/
SM.7 PRS do like 1.chief SM.1 PST2 die
'Apparement, le chef est mort.'
'Apparently, the chief is dead.' [JO 825]

Note that example (114) also shows use of a verbal participle form with the *-átɔ* PTCP suffix. Such forms are analysed by Mous (2003) as adverbs; I cover them in section §4.4 as part of discussion of verbal derivation.

Adverbs will be discussed further in Chapter 6 in terms of the diganosis of the syntactic structure of the Tunen verb phrase. Diagnostics of adverbial-hood are also discussed in Chapter 7 in the context of arguments against an adverbial analysis of Tunen quantifiers.

4.5 The clausal domain

This subsection will consider the clausal domain, beginning with information about clause structure (the canonical word order, ditransitives, copular clauses; sections §4.5.1-4.5.3), then clause combining (relative clauses, coordination and subordination, complementation; sections §4.5.4-4.5.6), clause typing (imperatives, question formation; sections §4.5.7-4.5.8) and information structure (section §4.5.9).

4.5.1 Canonical word order

As will be shown in Chapters 5 and 6, Tunen's canonical word order is SOV, specifically the subtype S-Aux-O-V-X, where Aux indicates an auxiliary element (not necessarily of verbal origin) and X indicates other elements such as locative adjuncts. This canonical S-Aux-O-V-X word order is illustrated for a thetic in (116) and for VP focus in (117); Chapter 5 provides further detail on consistency across IS contexts and Chapter 6 section §6.2 provides details on consistency across TAM/clause types and object types, showing that this word order applies to all affirmative tenses, in main clauses and embedded clauses, and to both full DP objects and pronominal objects.

(116) Context: You are at the riverside outside the village and see an elephant, which very rarely occurs, so run to tell the others.
mɛ nɔ́ misəku siəkin(ə) !
/mɛ nɔ́ misəku siəkinə/
SM.1SG PST1 3.elephant see.DUR
'Je viens de voir un éléphant!'
'I just saw an elephant!' [PM 316]

(117) Context: 'What did Maria do?'
Malíá a ná biláliə fɔfɔ́kíə ɔmbambala na makat.
/Malíá a ná bɛ-láliə fɔfɔ́kíə ɔ-mbambala na ma-kátá/
1.Maria SM.1 PST2 8-varnish anoint.DUR 3-wall with 6-hand
'Maria a [oint le vernis sur le mur avec la main]$_{\text{FOC}}$.'
'Maria [applied the varnish to the wall by hand]$_{\text{FOC}}$.' [JO 2516]

The robustness of SOV word order in Tunen is interesting from a comparative perspective, as Bantu languages and Niger-Congo languages more broadly are typically VO (Heine 1976; Bearth 2003; Good 2017; Kerr 2024; Chapter 6). Tunen's OV word order also differs from the VO patterns found in the other languages of the

Mbam subgroup, such as Nomaándé (A46), Yambeta (A46), Tuki (A61), Gunu (A62), Elip (A62), Mmala (A62), Nuasúɛ/Yangben (A62), Mbure, and Baca (Boyd 2015:31) and also differs from the mixed VO/OV pattern found in the neighbouring Mbam language Nyokon (Mous 1997, 2005, 2014, 2022; Kerr 2024; Chapter 6). I will discuss in Chapter 6 how Tunen's word order compares to OV word order patterns found elsewhere in West/Central Africa and reflect on its diachronic origin.

4.5.2 Ditransitives

Tunen has two types of ditransitive constructions, i.e., constructions when a verb takes two objects. The first is the S-Aux-O-O-V-X double object construction, where the goal (recipient/beneficiary) object must precede the theme object (118). The second is the prepositional object construction, where the theme object is preverbal and the goal is a postverbal oblique introduced by a preposition (S-Aux-O-V-Prep-O). These patterns are illustrated in Chapter 5 section and Chapter 6 section §6.2.5, §6.5.4; I do not repeat them here for space reasons. In imperatives, ditransitives are formed with V-O_{GOAL}-O_{THEME} or V-O_{THEME}-Prep-O_{GOAL} order (section §4.5.7).

(118) Context: QUIS picture stimulus.
mǝndú á ndɔ mɛlɛ́mɛndɔ́ hiindʒukǝ lúm(ǝ).
/mɔ-ǝndú a ᴴndɔ mɛlɛ́mɛndɔ́ hɛ-indʒukǝ lúmǝ́/
1-woman SM.1 PRS 1.man 19-punch throw
'Une femme donne un coup de poing à l'homme.'
'A woman is punching the man.' [PM 298]

Where the theme or recipient/beneficiary object is contrastively focussed or questionned, it can be ex-situ (see Chapter 5 section §5.2.6 and Kerr to appear).

(119) Q. ɛ́yáné á ná hí himuísimuísí hícfɔ́ indi ?
/ɛ́yáné á ná híihi hɛ-muísimuísi hɛ-ɔfɔ́ índíǝ́/
who SM.1.REL PST2 DEM.PROX.19 19-cat 19-fish give
'Qui a donné le poisson à ce chat ?'
'Who gave fish to this cat?' [EO 280]

A. A: á mɔná wa Malɛ́ á ná hí himuísimuísí híɔfɔ́ indi.

/á	mɔ-ná	wa	Malɛ́á	á	ná	híihi
COP	1-child	ASSOC.1	1.Marie	SM.1.REL	PST2	DEM.PROX.19

hɛ-muísimuísi	hɛ-ɔfɔ́	índíə́/
19-cat	19-fish	give

'C'est [l'enfant de Marie]$_{\text{FOC}}$ qui a donné le poisson à ce chat.'
'[Marie's child]$_{\text{FOC}}$ gave fish to this cat.' [EO 281]

4.5.3 Copular clauses

Four types of copular clauses are distinguished in the descriptive literature (Higgins 1979; Mikkelsen 2011), namely (i) identificational, (ii) specificational, (iii) predicational, and (iv) equative copular clauses. Bantu languages typically have multiple different copula forms, although show variation in form, restrictions in interpretation, and the material they may combine with (Gibson et al. 2019). The table below shows that identificational, specificational (and equative) copular clauses are marked by the invariant copula *á* in Tunen, while predicational copulars are marked by the copula verbs *-lɛa* and *-bá*(*ka*) 'to be'. The copula *á* is invariant, while the verb forms take a subject marker, and *-bá*(*ka*) can also be negated with a negative marker. Each of the copular clause types is illustrated in Chapter 5 section §5.4.1; for space reasons, I do not repeat the examples here.

Copular clause type	Copula form
Identificational	*á*
Specificational	*á*
Predicational	*-lɛa* / *-bá*(*ka*) 'to be'
Equative	*á*

Table 4.26: Copula form by copular clause type

For predicational copular constructions, Dugast (1971) reports that the copulas *-lɛa* and *-bá*(*ka*) are interchangeable, and my consultants also stated this when asked. While I leave a more complete study to further research, both forms can be for example used for locative predication, and they can each combine with nominals, adjectives, and prepositional phrases. The form *-lɛa* (appearing as *-lɛ́á* in some TAM contexts) takes a subject marker but is otherwise invariant, while the form

-bá(*ka*) behaves as a true copula verb and can be negated and used across TAM contexts. The data available suggest that copula choice in Tunen is not restricted by interpretation, which fits with the tentative suggestion of Gibson et al. (2019:238) that the copula systems of Northwestern Bantu languages show fewer interpretational restrictions than Eastern Bantu languages do.

One point of interest is that the identificational/specificational copula is the invariable copula *á*, which has a negative counterpart *tátá* 'is not' (120), and also has a variant used for inanimates, of form *ɔ́* and glossed as COP.INANIM (121).

(120) (bɔ́ɔ,) bɛ́fandɛ́ kɔndá bɛ́lálɔ́ **tátá** bɛ́lɛ́ndálɔ.
/(bɔ́ɔ) bɛ́-fandɛ́ kɔndá bɛ́-lálɔ́ tátá bɛ́-lɛ́ndálɔ/
(no) 8-two add 8-three COP.NEG 8-six
'Non, deux plus trois ne font pas six.'
'No, two plus three doesn't equal six.' [PM 784]

(121) **(ɔ́)** ɛ́nɔ́mɛ yɛ́ɛyɛ.
/**ɔ́** ɛ-nɔ́mɛ yɛ́ɛyɛ/
COP.INANIM 7-route DEM.DISC.7
'Voilà la route.'
'That's the route.' [PM 720]

As I note in Chapter 5 (cf. Kerr to appear), the data with the inanimate *ɔ́* copula raise the question as to whether the distinction between basic clefts and reverse pseudoclefts is sensitive to grammatical role (subject/non-subject) or to animacy (human/non-human). I take the distinction to be based on grammatical roles due to Tunen's general sensitivity to grammatical role status (cf. Kerr et al. 2023), but leave a more complete analysis to further study of the distribution of the *ɔ́* copula in comparison with the standard *á* form.

4.5.4 Relative clauses

Relative clauses in Tunen are formed with the relative marker *ɔXá* REL.X (where X indicates noun class agreement; see Table 4.10) and relative clause marking on the verbal complex (visible through the tone of the subject marker and the form of the TAM marker).

Relative clauses modifying subjects take the form XP_{Subj}-REL-SM-TAM-V, as in (122). This order matches the vast majority of North-Western Bantu languages of Guthrie zone A and nearby Cameroonian Bantoid languages in that there is strict

Subject-Verb (S-V) order, with Verb-Subject (V-S) order not found (Atindogbé and Grollemund 2017; Hamlaoui 2022); Tunen therefore differs from other Bantu languages in which V-S order is found (on which basis Meeussen 1967:120 and Nsuka-Nkutsi 1982 reconstructed V-S to Proto-Bantu; see Hamlaoui 2022 for arguments that V-S order in fact developed later). In Tunen relative clauses modifying subjects, the relative marker REL and subject marker SM agree in noun class with the subject (122).

(122) tɔmbaŋa **ɔtɔ́á tɔ́** ná bɛ́mák, tuítə á mɛ́ ndɔ tɛsa háaha.

/tɔ-mbaŋa	**ɔtɔ́á**	**tɔ́**	ná	bɛ́-máka	tuítə	á	
13-peanut	REL.13	SM.13	PST2	MID-form_clumps	PRN.OBJ.13	COP	
mɛ́	^{H}ndɔ	tɛsa	háaha/				
SM.1SG.REL	PRS	separate	DEM.PROX.LOC				

'Les arachides qui ont formé les boules, c'est elles que je suis en train d'écraser ici.'
'The peanuts that have clumped up, it's them that I'm separating here.'
[JO 1371]

Relative clauses modifying non-subjects may be formed as (i) Subj-SM-TAM-XP_{Obj}-REL-V, (ii) Subj-SM-TAM-XP_{Obj}-V-REL, or (iii) Subj-SM-TAM-V-XP_{Obj}-REL. In other words, they are always S-V constructions, with variation in the position of the object. The verb agrees in noun class with the subject. Examples are given in (123)-(124) (note that the latter shows semantic agreement, with the class 1 subject marker used with a class 9 noun referring to a human).

(123) a lɛa fanáká↓tɔ́ tuəfulə tukimə ɔtwá muláliə á ↓ná tilək.

/a	lɛa	fanáká-átɔ	tɔ-əfulə	tɔ́-kimə	**ɔtɔ́á**	mu-láliə	**á**	
SM.1	be	read.DUR-PTCP	13-book	13-all	REL.13	1-teacher	SM.1.REL	
^{L}**ná**	tilə-aka/							
PST3.REL	write-DUR/							

'Il a lu tous les livres que le professeur a écrit.'
'He has read every book that the teacher wrote.' [PM 492]

(124) nɛɔfénɛ Mətinə a ná bɛlábɔ́néá bikimə ɔbɛ́á yamíá inyə́ **a** ↓ná táléáká naánɛkɔla ɔkɔlɔkɛn.

/nɛɔfénɛ Mətinə a ná bɛ-lábɔ́néá bɛ́-kimə **ɔbɛ́á** yamíá
today Martin SM.1 PST2 8-food 8-all REL.8 PRN.POSS.1SG.9
inyə́ **a** ˡná taléá-aka naánɛkɔla ɔkɔlɔkɛna/
9.mother SM.1 PST3.REL cook-DUR yesterday taste
'Martin a goûté aujourd'hui toute la nourriture que ma mère a cuisiné hier.'
'Today, Martin has tasted all the food that my mother cooked yesterday.'
[PM 498]

In natural dialogue, relative clauses modifying objects were sometimes produced in the discontinuous configuration, where the noun is preverbal and the relative clause is postverbal. This occurred both in the QUIS map task (125) (Appendix Text 1) and in a free dialogue (126) (Appendix Text 2). I will return to such discontinuous modification of objects in Chapter 6 section §6.5.4 Chapter 7.

(125) Ɔ lɛ ɛnɔ́mɛ ɛtá **ɔyɛ́á** yɛ́ ndɔ́ ákána ɔ miɔkɔ́.

/ɔ lɛ ɛ-nɔ́mɛ ɛtá **ɔyɛ́á** yɛ́ ʰndɔ ákána ɔ mi-ɔkɔ́/
SM.2SG NEG 7-route take REL.7 SM.7 PRS leave PREP 10-chicken
"Ne prends pas la route qui mène aux poules."
"Don't take the road which leads to chickens." [PM 692]

(126) Mɛ ka ámɛ yáyɛ́á ibəŋuluəkə yí búsíə́ siəkinə **ɔyɛ́á** á ↓ná ɔnd, á Ínyasɛ á ↓ná bá á ndɔ kindi -

/mɛ ka ámɛ yáyɛ́á ɛ-bəŋuluəkə yɛ́ búsíə́ siəkinə
SM.1SG PST3 PRN.1SG PRN.POSS.1.7 7-car ASSOC.7 front see.DUR
ɔyɛ́á á ˡná ɔ́ndɔ́ á Inyasɛ á ˡná bá
REL.7 SM.1.REL PST3.REL buy COP 1.Inyas SM.1.REL PST3.REL be
a ʰndɔ kindiə/
SM.1 PRS drive
'Moi j'avais vu le premier véhicule qu'il a acheté, c'est Inyas qui conduisait- '
'I myself saw the first vehicle he bought, it was Inyas who drove (it) -'
[PM 1045]

4.5.5 Coordination and subordination

The form *na* 'and, with' can be used for constituent and clausal conjunction; *mba* 'but' conjoins clauses. The word *bɔkwasíá* 'because' is used to join two clauses, gen-

erally with Result-Cause order (127) (but also possible with Cause-Result; cf. (128)).

(127) mɛ lɛ na nɛhɔ́nɔ **bɔkwasíá** baná bəkimə bá ná tɔ́mbá ɔ nɛkɔsɔna !
/mɛ lɛa na nɛ-hɔ́nɔ **bɔkwasíá** ba-ná bá-kimə bá ná
SM.1SG be with 5-joy because 2-child 2-all SM.2 PST2
tɔ́mba ɔ nɛ-kɔsɔna/
succeed PREP 6-exam
'Je suis content(e) parce que tous les enfants ont réussi à l'examen !'
'I am happy because all of the students passed the exam!' [JO 529]

(128) [...] mɛsɛ́á nɛɔfɛ́nɛ á wəyíə umiimə wɔ́ ↓ndɔ́ nda famak **bɔkasɛ́á** a ka kə wínə ɔ ɔwayɛ́ bɔnɔŋ, bá ná ká umiimə ɛta.
/mɛ-sɛ́á nɛɔfɛ́nɛ á wəyíə umiimə wɔ́ ᴴndɔ nda
SM.1SG-say today COP PRN.POSS.1.3 3.corpse SM.3 PRS VEN
fámá-aka **bɔkasɛ́á** a ka ka wínə ɔ ɔwayɛ́á
arrive.DUR because SM.1 PST3 AND die.APPL PREP PRN.POSS.1.14
bɔ-nɔŋɔ bá ná ka umiimə ɛ́ta/
14-village SM.2 PST2 AND 3.corpse take
'[comme je savais] que c'est aujourd'hui que son corps arrive, parce qu'il est allé mourir dans son village, on est allé chercher le corps.'
'[as I knew] that his body was arriving today, because he went to die in his home village, they went there to get the body.' [PM 1012]

'Whether' is expressed by *káasɛ* 'whether' or *ábá* 'if' (129).

(129) mɛ́ ndɔ bɛ́bata {káasɛ|ábá} a n(á) akan.
/mɛ ᴴndɔ bɛ́-báta {káasɛ|ábá} a ná ákána/
SM.1SG PRS MID-ask {whether|if} SM.1 PST2 leave
'Je me demande si il est parti.'
'I ask myself whether he has left.' [JO 1771-2]

In natural speech, clauses can be chained without any extra marking. The tense marker (together with the subject marker) is repeated each time (130). Further examples are visible in Appendix Text 3.

(130) Mɛ **ka** ákán(a) (ɔ) ɛmbɔ́m, mɛ **ná** hɛkɔkɛ kɛ́ták, mɛ **ná** nda híáná ɔ ɔmbɛ́l, mɛ **ná** tábɔ́náka, tɔ́ándʒɛ tɔbíá mɛ ombokok. mɛ **ná** tábɔ́nák, mɛ **ná** ɔ́lɔ́kɔ́k, mɛ **ná** sɛ́lák, ɔ́wa hɛ́ lɛ́á nána ... voilà.

/mɛ	**ka**	ákáná	ɔ	ɛ-mbɔ́ma	mɛ	**ná**	hɛ-kɔkɛ	kɛ́tá-aka	
SM.1SG	PST3	leave	PREP	7-bush	SM.1SG	PST2	19-kok	gather-DUR	
mɛ	**ná**	nda	híáná	ɔ	ɔ-mbɛ́la	mɛ	**ná**	tábɔ́ná-aka	
SM.1SG	PST2	VEN	enter	PREP	3-house	SM.1SG	PST2	arrange-DUR	
tɔ-ándʒɛ	tɔ-bíá	mɛ	ombokoko	mɛ	**ná**	tábɔ́ná-aka	mɛ		
13-leaf	13-bad	SM.1SG	throw.REP	SM.1SG	PST2	arrange-DUR	SM.1SG		
ná	ɔ́lɔ́kɔ́kɔ́	mɛ	**ná**	sɛ́lá-aka	ɔ́wa	hɛ́	lɛ́á	nána	
PST2	attach.REP	SM.1SG	PST2	cut-DUR	REL.3	SM.19	be	like_that	
voilà/									
voilà.FR									

"Je suis partie en brousse, j'ai cueilli le kok, je suis revenue à la maison, j'ai arrangé les mauvaises feuilles, je les ai jétées, j'ai attaché, j'ai coupé, c'est devenu comme tu vois ... voilà."

"I went to the bush, I gathered kok, I returned home, I arranged the bad leaves, I threw them out, I attached the leaves, I cut (them), as you can see ... voilà." [JO 1339]

Conjunctions are discussed further in Dugast (1971:2019-216) and clausal coordination and subordination is covered in Dugast (1971:311).

4.5.6 Complementation

There are two complementisers in Tunen. The first is *-sɛ́á* 'that', which agrees in noun class with the matrix (i.e., main clause) subject and derives from the verb 'to say'. Although *sɛ́á* still functions synchronically as a main verb 'say' (alongisde *la* 'say'), I take the complementiser to be grammaticalised. In the glossing, I still segment the subject marker from the *sɛ́á* root, but I do not separate the two by whitespace, in order to reflect their more grammaticalised status. For example, the complementiser *mɛsɛ́á* 'that' (agreeing with a 1st person singular main clause subject) is segmented as /mɛ-sɛ́á/ and glossed as SM.1SG-say. The second complementiser is *ɔwá* 'that', which is the relative marker of class 1/3 (Table 4.10; section §4.5.4). The two complementisers appear to be interchangeable (131), although one consultant reported a prescriptive difference between them, preferring *ɔwá* to *mɛsɛ́á* (although *-sɛ́á* is found frequently across consultants in both elicited and natural speech).

(131) mɛ́ ndɔ fɛka {mɛsɛ́á|ɔwá} wə́ə́ní mɔ́námɛlɛ́mɛndɔ á ndɔ kóni hiki.

/mɛ	ᴴndɔ	fɛka	{mɛ-sɛ́á|ɔwá}	wə́ni	mɔ-ná	mɛlɛ́mɛndɔ
SM.1SG	PRS	think	{SM.1SG-say|REL.1}	DEM.DIST.1	1-child	1.boy
a	ᴴndɔ	kóni	hikiə/			
SM.1	PRS	9.rice	like			

'Je pense que ce garçon aime le riz.'
'I think that that boy likes rice.' [JO 1883-4]

Note in terms of characterising Tunen's clausal word order that example (131) illustrates that clausal complements follow the verb, meaning that the OV word order only applies with nominal/pronominal objects (see Chapter 6 section §6.2).

4.5.7 Imperatives

4.5.7.1 Affirmative imperatives

Affirmative imperatives are formed using the verb stem. In contrast to the OV order seen in full clauses, objects appear after the verb in imperatives (VO), regardless of whether they are full noun phrases or pronouns (Kerr 2024); OV order is not possible (132). Non-arguments also appear postverbally (133).

(132) a. nɛ́ásɛ wɛ́ɛya !

/nɛ́ásɛ	wɛ́ɛya/
leave	PRN.EMPH.1

'Laisse-le !'
'Leave him!' [EE+GE+PB 2746]

b. *wɛ́ɛya nɛ́ás !

/*wɛ́ɛya	nɛ́ásɛ/
PRN.EMPH.1	leave

(Intd.) 'Laisse-le !'
(Intd.) 'Leave him!' [EE+GE+PB 2747]

(133) káka ɔ nioní!

/káka	ɔ	nɛ-oní/
go	PREP	5-market

'Va au marché!'
'Go to the market!' [JO 615]

When there are two verbs, only the first one precedes the object (134).

(134) káka mənífə tɔ́ka !
/káka ma-nífə tɔ́ka/
go 6-water draw
'Va puiser l'eau !'
'Go draw water!', 'Go fetch water!' [JO 613]

For ditransitive verbs, either V-O_{GOAL}-O_{THEME} order (135a) or V-O_{THEME}-Prep-O_{GOAL} order (135b) is found. V-O_{THEME}-O_{GOAL} order is not grammatical (135c). Strict O_{GOAL}-O_{THEME} order is a more general property of Tunen double object constructions, as seen in section §4.5.2, and corresponds with the order found in other Niger-Congo languages with OV patterns, as will be discussed in Chapter 6 section §6.2.5.

(135) a. índíə́ Piə́lə məníf !
/índíə́ Piə́lə ma-nífə/
give 1.Pierre 6-water
'Donne l'eau à Pierre !'
'Give Pierre water!' [EO 2846]

b. índíə́ mənífə na Piə́l !
/índíə́ ma-nífə na Piə́lə/
give 6-water PREP 1.Pierre
'Donne l'eau à Pierre !'
'Give Pierre water!' [EO 2848]

c. *índíə́ mənífə Piə́lə !
/índíə́ ma-nífə Piə́lə/
give 6-water 1.Pierre
Intd.: 'Donne l'eau à Pierre !'
Intd.: 'Give Pierre water!' [EO 2847]

For plural addresses, the second person plural subject marker must be used, in which case the canonical word order is used.[26] The subject marker can optionally be used in the singular to formulate an order or wish.

4.5.7.2 Negative imperatives

Negative imperatives are formed using the canonical word order (section §4.5.1) with the *lɛ* negation marker in the Aux slot and a subject marker.

[26] Mous (2003:294) reports a different strategy for a plural imperative without a subject marker and with a reciprocal extension on the verb; I did not find this in my data.

(136) ɔ lɛ máyɛ́ mə́nífə́ nya !

/ɔ	lɛ	máyɛ	ma-nífə́	nya/
SM.2SG	NEG	DEM.DISC.6	6-water	drink

'Ne bois pas cette eau !'
'Don't drink this water!' [JO 617]

(137) Context: Imagine that EK is about to offer water to PM.
ɔ lɛ mə́nífə́ índí ! índíə́ wɛ́ɛya bí !

/ɔ	lɛ	ma-nífə́	índíə́	índíə́	wɛ́ɛya	bíə/
SM.2SG	NEG	6-water	give	give	PRN.EMPH.1	7.beer

'Ne donne pas l'eau, donne lui une bière !'
'Don't give (him) water, give him a beer!' [EO 2850]

Negative imperatives can therefore be understood as instantiations of the canonical S-Aux-O-V-X word order.

4.5.8 Question formation

4.5.8.1 Content questions

For content questions (also termed *wh-questions*), Tunen uses the interrogative words given in Table 4.28, with optional use of the sentence-final question particle *eé* Q (e.g. (90); section §4.5.8).

Interrogative word	Translation
ɛ́(↓)yáné	'who?', 'which?'
ɔwané?	'to whom?'
yatɛ́?	'what?', 'which?'
hə́níə́?	'where?'
nə́níə́?	'how?'
ɛlɔ́áyɛ́ yatɛ́?	'why?' (lit. 'for what?')
-nɛ́á?	'how many?'
-(h)ə́níə́?	'which?'
ɔ yə́níə́ ikúílí?	'when?' (lit. 'at which time?')

Table 4.28: Interrogative words in Tunen.

For space reasons, I do not illustrate all types of interrogative here. Two things are worth pointing out with respect to previous descriptions of Tunen. Firstly, the subject interrogative word *é*(↓)*yáné* is generally realised with an HHH tone pattern (*éyáné*) but also appears with H↓HH (*é*↓*yáné*). Dugast refers to it as *eyan* but transcribes it as *éyáné* in examples (Dugast 1971:325). *é*(↓)*yáné* is in the default class 7; Dugast mentions *bé*(↓)*yáné* (*béyanɛ* in her transcription) as the regular plural form (Dugast 1971:325). In my field data, the form *báné* was found with a class 2 subject. Secondly, the form used for 'which?' depends on the animacy of the referent; for humans, *é*(↓)*yáné N?* is used ('which N?'), for inanimates, *yaté N?* 'which N?' is permissible. The form *-ə́níə́?* (sometimes formed as -(*h*)*ə́níə́?*) is used for both humans and non-humans.

Tunen forms content questions ex-situ, i.e., with the question word in sentence-initial position rather than in the canonical word order. Three nuances are to be mentioned here, to be discussed further in Chapter 5. The first is that it is not clear that subject wh-questions are formed ex-situ, as there is no linear difference between a subject in its canonical position and in sentence-initial position. However, I consider subject questions to be formed ex-situ due to evidence of cleft environment visible from the TAM and subject marker forms, as I will discuss further in Chapter 5.[27] The second nuance is that some speakers allow both in- and ex-situ wh-questions for questioned non-arguments (although only the ex-situ strategy was found in the natural speech data) (138). Note however that ex-situ questions are still more common for non-arguments. In Dugast (1971:200-201), only ex-situ examples are shown for 'where' and 'how', supporting this observation.

(138) a. hə́ní(ə́) ɔ́ lɛa ?
/hə́níə́ ɔ lɛa/
where SM.2G be
'Où es-tu ?'
'Where are you?' [PM 96, JO 549]

b. %ɔ lɛ hə́ní(ə́) ?
/ɔ lɛa hə́níə́/
SM.2SG be where
'Tu es où ?'
'Where are you?' [PM 99, JO 550]

[27] This is also discussed in the appendix to Kerr et al. (2023) in relation to the coding of Tunen as realising focus in- versus ex-situ.

The third and final nuance regarding in- versus ex-situ question formation is that in-situ wh-questions are possible as echo questions, to be seen in section §4.5.8.

The use of ex-situ question formation in Tunen means that there is a syntactic asymmetry between questions and answers: while the question is formed ex-situ, the answer can be in-situ. This will be illustrated in Chapter 5 section §5.2. Note here that alongside questioning by fronting the wh-word, questions can also be formed as clefts, to be seen in Chapter 5 section §5.4.

When questioning the number of something, the noun is pied-piped along with the wh-word (139).

(139) **tunoní tɔ́nɛ́á** ɔ́ ndɔ sin?
/tɔ-noní tɔ́-nɛ́á ɔ ᴴndɔ sinə/
13-bird 13-how_many SM.2SG PRS see
'Combien d'oiseaux vois-tu?'
'How many birds do you see?' [EO 226]

This requirement for the noun to be pied-piped will be discussed further in Chapter 7 with respect to restrictions on discontinuous modification of nouns.

4.5.8.2 Polar questions

Polar questions (i.e., yes/no questions) can be marked by the question particle *eé* which appears at the end of the clause.[28] However, this particle is not obligatory (140). When it appears, the final vowel of the previous word frequently elides due to the regular process of vowel elision. The community orthography recommends always adding the question particle to make it clear that there is a question; in my transcriptions, I only indicate the particle when it was pronounced.

(140) mɛ́ ndɔ tunəni ɔ́kɔ́na **(eé)**?
/mɛ ᴴndɔ tɔ-nəni ɔ́kɔ́na **(eé)**/
SM.1SG PRS 13-Nen learn Q
'Est-ce que j'apprends le tunen ?'
'Am I learning Tunen?' [PM 73]

[28] In the most recent Tunen community orthography, as adopted in the 2019 Bible translation (CABTAL 2019), the question particle is transcribed as <əə́>. This reflects the transcription choice to use <ə> because there is no <e> in the orthography due to /e/ not being identified as a phoneme (see section §4.2.1), rather than reflecting a difference in how the question particle is pronounced.

Another means of marking a polar question is beginning with *bánɛ*, which my consultants translate as 'est-ce que' ('is it'). This can occur by itself (141) or in combination with the question particle *eé* (142).

(141) **bánɛ** tɔ ka Shánia na Amída mahánɛna índiə?
/**bánɛ** tɔ ka Shánia na Amída ma-hánɛna índíə̌/
is.it SM.1PL PST3 1.Shania with 1.Hamida 6-present give
'Est-ce que nous avons donné les cadeaux à Shania et Hamida ?'
'Did we give the presents to Shania and Hamida?' [JO 569]

(142) **bánɛ** kíŋgə a ka nyɔkɔ naánɛkɔl(a) **eé**?
/**bánɛ** kíŋgə a ka nyɔ-aka naánɛkɔla **eé**/
is.it 1.chief SM.1 PST3 work-DUR yesterday Q
'Est-ce que le chef a travaillé hier ?'
'Did the chief work yesterday?' [JO 2631]

Tunen polar questions can be responded to with the particles *ɛ́ɛ* 'yes' and *bɔ́ɔ* 'no' (section §4.6) as a complete answer, or with a full clause. As discussed in Kerr and van der Wal (2023) and Chapter 5 section §5.2.5, there is no required marking of polarity in the full clause answer to a polar question, which simply uses the canonical word order (143).

(143) Context: 'Are you going to the market?'
bɔ́ɔ, mɛ lɛ́ ndɔ ákán(a) ɔ nioní.
/bɔ́ɔ, mɛ lɛ ᴴndɔ ákán(á) ɔ nɛ-oni/
no, SM.1SG NEG PRS leave PREP 5-market
'Non, je ne pars pas au marché.'
'No, I'm not leaving for the market.' [PM 49]

4.5.8.3 Alternative questions

Alternative questions are formed by the conjunction *aléá* 'ou bien' ('or rather'), literally the verb *léá* with default class 1 agreement. This is illustrated below for a nominal (144a), oblique (144b), and clausal (144c) alternative question.

(144) Context: 'Now, with regards to food, if I were to invite you round,'

a. [...] yaté ɛbáka ɔ aŋɔ́á hikəki(ə), **makɔndʒɛ alɛ́(á) kón(i)**?
/yaté ɛ-bá-aka ɔ aŋɔ́á hikəkiə **ma-kɔndʒɛ**
what SM.7-be-DUR PREP PRN.EMPH.2SG like 6-plantain
alɛ́á **kóni**/
or_rather 9.rice
'[...] qu'est-ce que tu aimes, les plantains ou bien le riz ?'
''[...] what would you like, plantains or rice?' [EO 966]

b. isiŋíáka, ú ndu hikiə, ɔ bɔ́á↓wɔ́á buɔm(ɔ́), ɔnyɔɔ, (ɔ) ɛbɔ́ka yɛ́ bɛtʃátʃɔ́ ɔfana **alɛ́**, ɔ nyɔɔkɔ ɔ ɛbɔ́ka - ɔ bɛtɔbɔtɔb(ɔ)?
/isiŋíáka ɔ ᴴndɔ hikiə ɔ bɔáᴸwɔ́á bɔ-ɔmɔɔ
now SM.2SG PRS like PREP PRN.POSS.2SG.14 14-life
ɔ-nyɔ ɔ ɛ-bɔ́ka yɛ́ bɛ-tʃátʃɔ́ ɔfana **alɛ́á**
INF-work PREP 7-place ASSOC.7 8-money count or_rather
ɔ nyɔ-aka ɔ ɛ-bɔ́ka ɔ bɛ-tɔbɔtɔ́bɔ́/
SM.2SG work-DUR PREP 7-place PREP 8-field
'Maintenant, dans ta vie, aimerais-tu travailler à la banque ou bien à - aux champs ?'
'Now, in your life, would you rather work in a bank or work in a - on the fields?' [EO 971]

c. ɔ ɔwákaka ɔ nioní, ɛbáka ɔ kɛndaka ɔ makɔlɔ́ **alɛ́(á)** ɛbák(a) ɔ ibuŋuluəkə ɛt?
/ɔ ɔ-ákaka ɔ nɛ-oní ɛ-bá-aka ɔ kɛnda-aka
PREP INF-go PREP 5-market SM.7-be-DUR SM.2SG go-DUR
ɔ ma-kɔlɔ́ **alɛ́á** ɛ-bá-aka ɔ ɛ-buŋuluəkə ɛ́ta/
PREP 6-foot or_rather 7-be-DUR SM.2SG 7-car take
'En allant au marché, est-ce que tu vas habituellement à pied ou bien est-ce que tu prends un véhicule ?'
'When you're going to the market, do you normally go by foot, or do you go by car?' [EO 964]

Alternative questions can additionally be marked by *bánɛ* 'is it' (145).

(145) **bánɛ** ɛkálatɛ á tɔ́ na índíə **alɛ́** tɔtámátámá?
/**bánɛ** ɛ-kálatɛ á tɔ́ ná índíə́ **alɛ́á** tɔ-támátámá/
is_it 7-book COP SM.1PL.REL PST2 give or_rather 19-fruit
'Est-ce que nous avons donné un livre ou bien les fruits ?'
'Did we give a book or was it fruits?' [JO 573]

Alternative questions are used to investigate selective focus, where the addressee must select one of the provided alternatives (see Chapter 5).

4.5.8.4 Echo questions

An exception to the pattern of ex-situ question words seen above is echo questions, where the speaker asks for repetition of a constituent. As is common in other languages, such questions allow for the in-situ word order that matches the order in a declarative context. This phenomenon is illustrated in (146) below.

(146) Elísabɛ́tɛ á ndɔ laa ásɛ a ná **yatɛ́** ɔ́ndɔ́kɔ eé?
/Elísabɛtɛ a ᴴndɔ láá a-sɛ́á a ná **yatɛ́** ɔ́ndɔ́-aka eé/
1.Elisabeth SM.1 PRS say SM.1-say SM.1 PST2 what buy-DUR Q
'Elisabeth dit qu'elle a acheté quoi ?'
'Elisabeth said that she bought what?' [EB+JO 2782]

Note however that a clefted ex-situ question was provided as the first answer here ([EB+JO 2780]), and short movement of the question word to the left periphery of the embedded clause is also possible ([EB+JO 2783]).

4.5.8.5 Biased and rhetorical questions

Biased questions are found with *taka* 'truth' or *tátá* NEG.COP at the beginning of the question, as in the natural speech examples (147)-(148) below.

(147) Context: 'Do you see a butterfly?'
ták(a) á nɛ́lal?
/**taka** á nɛ-lala/
true COP 5-spider
'N'est-ce pas une araignée ?'
'Isn't it a spider?' [EO 700]

(148) **Tátá** mɛ sɛ ésɛ́á tɔ́əsú lɛ́á na bɛtɔbɔtɔ́bɔ́ ɔ əsú máhɔ́ma, ...
/**tátá** mɛ sɛ́á ésɛ́á tɔ́əsú lɛa na bɛ-tɔbɔtɔ́bɔ́ ɔ
not SM.1SG say like PRN.EMPH.1PL be with 8-field PREP
əsú ma-hɔ́ma, .../
PRN.POSS.1PL 6-bush ...
'N'est-ce pas que, comme nous avons des champs dans nos brousses,'
'Isn't it that, as we have fields in our bush,' [EB 1693]

Rhetorical questions are those that are not intended to ask for information. These have no special marking in Tunen besides use of emphatic forms (149).

(149) Context: PM went to the funeral of a Bamileke man. EO asks PM which funeral he went to. PM asks EO why he needs to ask.
mɛaŋɔ́á, mɛaŋɔ́á wa mukóto ?
/mɛaŋɔ́á mɛaŋɔ́á wa mɔ-kóto/
PRN.EMPH.1SG PRN.EMPH.1SG ASSOC.1 1-Bamileke
'Est-ce que moi je suis Bamileke ?!'
'Am I a Bamileke?!' [EO 1005]

4.5.8.6 Fragment questions

Fragment questions are possible, which do not require any special marking (150) but can appear with the question particle *eé* (151).

(150) Context: 'It seems that somebody fell from the tree.'
ɔ bɔlɛ́á?
/ɔ bɔ-lɛ́á/
PREP 14-tree
'De l'arbre ?'
'From the tree?' [EO 579]

(151) Context: 'I generally go for our ones.'
ɔ məəsu(ə́) **eé**?
/ɔ məəsuə́ **eé**/
PREP PRN.POSS.1PL.6 Q
'Les notres ?'
'Our ones?' [PM 952]

Such fragments provide evidence for constituency (e.g. (150)-(151) show evidence for a PP constituent). I use fragment questions and answers in Chapter 7 as constituency tests motivating a formal analysis of the Tunen noun phrase.

4.5.8.7 Embedded questions and extraction

Embedded questions use the same interrogative word as in standard questions, as in (152) below.

(152) Q. **banɛ́** bá ndɔ təkunə ɔ nuíyi eé?
/**banɛ́** bá ᴴndɔ təkunə ɔ nɛ-íyi eé/
2.who SM.2 PRS play PREP 5-river Q
'Qui jouent à la rivière ?'
'Who is playing at the river?' [PM 2171]

A. tɔ lɛ́ ndɔ manya **banɛ́** (á) bá ndɔ tukənə ɔ nuíyi.
tɔ lɛ ᴴndɔ manya **banɛ́** á bá ᴴndɔ tukənə ɔ
SM.1PL NEG PRS know 2.who COP SM.2 PRS play PREP
nɛ-íyi
5-river
'Nous ne connaissons pas les gens qui jouent à la rivière.'
'We don't know which people are playing at the river.' [PM 2175]

Questioning a subject or object in the embedded clause can be realised with the question word in the left periphery of either the main or the embedded clause, as shown in (153).

(153) a. Elísabɛtɛ á ndɔ laa asɛ **ɛ́↓yáné** á ↓ná hiəfulə ɔnd ?
/Elísabɛtɛ a ᴴndɔ láá a-sɛ́á **ɛ́ᴸyáné** á ᴸná
1.Elisabeth SM.1 PRS say SM.1-say who SM.1.REL PST3.REL
hɛ-əfulə ɔ́ndɔ́/
19-book buy
'Elisabeth dit que qui avait acheté le livre ?'
'Who did Elisabeth say had bought the book?' [EB+JO 2789]

b. **é$^{\downarrow}$yáné** á Elísabɛtɛ á ndɔ laa asɛ a ka hiəfulə ɔnd ?
/**é^{L}yáné** á Elísabɛtɛ a ^{H}ndɔ láá a-sɛ́á a ka
who COP 1.Elisabeth SM.1 PRS say SM.1-say SM.1 PST3
hɛ-əfulə ɔ́ndɔ́/
19-book buy
'Elisabeth dit que qui avait acheté le livre ?'
'Who did Elisabeth say had bought the book?' [EB+JO 2790]

In terms of a generative formal analysis, such data provides evidence that the question word in (153) has moved cyclically through the left periphery of the lower clause, as I come back to in Chapter 8 in terms of developing a formal model of A vs A'-movement operations (cf. Chapter 2 section §2.3.4).

4.5.9 Information structure

Having now seen an overview of Tunen phonology, the nominal domain, the verbal domain, and the clausal domain, the remaining topic to be covered is information structure, i.e., the interaction between the clausal domain and discourse. As this topic is the main focus of this thesis, this brings us to the main chapters of this thesis, which will begin with a thorough descriptive overview of the expression of information structure in Tunen (Chapter 5). In that chapter, some key differences from previous work are highlighted, notably in the analysis of the marker *á* (termed a contrast marker in Mous 1997, 2003 as part of a monoclausal focus construction and analysed and therefore glossed in this thesis as a copula as part of a biclausal cleft construction). Chapters 6 and 7 then go on to consider two topics thought to relate to information structure in more detail, namely Tunen's OV word order and the availability of discontinuous noun phrase constructions. I therefore leave the description of Tunen information structure to the next chapters, which I will turn to after providing information about other word classes in Tunen.

4.6 Other word classes

4.6.1 The vocative particle

A form with segmental content *a* is used for vocatives, which may be realised as *ə* due to ATR harmony (154)-(155). The tone pattern in the vocative is variable both in my field data and Dugast's (1975) examples.

(154) Context: Start of QUIS picture-based dialogue task.
ə Píɛl, yatɛ́ yɛ́ ná bɛtɔmbak ?
/**á** **Piɛ́lə** yatɛ́ yɛ́ ná bɛ́-tɔ́mba-aka/
VOC 1.Pierre what SM.7 PST2 MID-happen-DUR
'Pierre, qu'est-ce que s'est passé ?'
'Pierre, what happened?' [EO 577]

(155) hiséli a sɛ$^{?}$, « **a mísəku**, tú bɛfia timək. »
/hiséli a-sɛa **a** **mísəku** tú bɛ-fia timəkə/
19.antelope SM.1-say VOC 3.elephant SM.1PL.SBJV 8-hole dig.DUR
'[L]'antilope dit : « Éléphant, creusons les trous ».'
'The antelope said: "Elephant, let's dig the holes."'
(Dugast 1975:326-7, adapted)

An example of variation in tonal pattern is that the elephant (*misəku*) is addressed with *« **a mísəku,**»* as in (155) twice in the story and once with *« **aá mísəku,** »*. When the antelope is addressed, the vocative marker is H-toned and there is HTS to the first syllable of the word for antelope (*á híséli*; Dugast 1975:329).[29]

The *á* vocative marker can combine with modified nouns, as in (156).

(156) « o lɛ kolóm, **a yám oŋgwáyɛ** ».
/ɔ lɛ kolómo **á** **yamíá** **ɔŋgwáyɛ**/
SM.2SG NEG be_afraid VOC PRN.POSS.1SG.? ?.friend
'« Ne crains rien, mon ami. »'
"'Don't be afraid, my friend.'" (Dugast 1975:398-399, adapted)

Note that the *á* vocative marker is not obligatory in vocatives, as shown in example (157) from a story about a goat and a leopard. Here, vocative marking on the noun *imwínyi* 'goat' is visible by the contour tone on the first TBU and the indication of separate prosodic phrasing is shown by Dugast's transcription of <$^{?}$> followed by a comma.

[29] Dugast uses a tone transcription system where she only marks tone when it changes: thus *á híséli* is written in her system as *á hiselì*. I change the tones when quoting Dugast's examples in this thesis so as to avoid confusion between transcription systems.

(157) o yítéy íkuliʔ a nál' ↓a sɛʔ: « **ǐmw̌ínyiʔ**, metaná ndo miaŋó noɛn.»

/o	yítéy	íkuliʔ	a	nál'	ᴸa	sɛʔ	**ǐmwiínyi**	
PREP	DEM.DISC.EMPH.7	7.time	SM.1	PST2.say	SM.1	say	9.goat	
metaná	ndo	miaŋó	noɛn./					
SM.1SG.?	PRS	PRN.EMPH.1SG	?					

'Alors il dit : « Chèvre, j'ai grand' [sic.] faim. »
'And so he said then: "Goat, I'm starving."'

(Dugast 1975:284-5, glosses added)

In general, there is some variation as to whether or not the *a* VOC particle and/or the first TBU of a noun used in a vocative context surfaces with a H, LH, or L tone. For current purposes, I transcribe the vocative particle as /á/ underlyingly. Although there may be overlap with the identificational copula *á*, the preposition *á*/*a*, and the use of *á* in lists (as assumed in the presentation of Dugast 1971), for current purposes I gloss the vocative particle with the dedicated gloss VOC.

4.6.2 Discourse particles and exclamations

Tunen makes frequent use of discourse particles, which appear utterance-finally. For example, the discourse particle *ōō* PTCL.DISC (translated by Dugast 1975:333, 341, 403 as 'bien' for 'good') is commonly used in speech. The natural response to a sentence ending in *ōō* is *ōʔō*, where ʔ indicates a glottal stop. While not taken as part of Tunen's phoneme inventory (section §4.2.1), a glottal stop also appears in the word for '(good)bye', *áʔo* (said when leaving a room or ending a phone call).

The word for 'yes' is *ɛ́ɛ* and the word for 'no' is *bɔ́ɔ*. These can both be used as complete answers to polar questions (although for the purposes of this thesis' investigation into IS, I generally asked consultants for the full sentence response).

Various exclamative particles are found, which may or may not be considered their own words in Tunen. An example is the exclamative particle *kə́ə́kə*, which is used to indicate surprise or incredulity, as in example (158) below from a natural speech dialogue (Appendix Text 2).[30]

[30] Here, EO and PM decided to record a dialogue about a funeral we had all been to in town. When the dialogue began, EO asked PM who died, pretending not to know the answer for the purposes of the dialogue recording. PM's use of the exclamation *kə́ə́kə !* expresses his surprise that EO would act as if he didn't know whose funeral he had just attended.

(158) **kə́ə́kə!** nɛɔfénɛ mianɔ́á mba mɛ́ anɔ́á lɛɛ́na mɛsɛ́á babá Daníɛ́lɛ a ka wə́ eé?

/**kə́ə́kə**	nɛɔfénɛ	mianɔ́á	mba	mɛ́	anɔ́á
EXCL	today	PRN.EMPH.1SG	but	SM.1SG.SBJV	PRN.EMPH.2SG

lɛɛ́na	mɛ-sɛ́á	babá	Daníɛ́lɛ	a	ka	wə́	eé/
say.APPL	SM.1SG-say	1.father	1.Daniel	SM.1	PST3	die	Q

'Bah ! Est-ce que c'est moi qui va aujourd'hui te dire que papa Daniel était mort ?'

'Bah! Am I really the one to tell you today that Papa Daniel died?' [PM 1002]

Further discussion of exclamative expressions is found in Dugast (1971:328-331). Examples of exclamations from the Dugast (1975) texts include (but are not limited to) *ái!* (Dugast 1975:185), *wə́əy!* (Dugast 1975:355, 377), *wɛ́ɛ!* (Dugast 1975:187, 389, 393), *yə́!* (Dugast 1975:292), *á* 'ah' (Dugast 1975:311), *bánɛ!*[31] (Dugast 1975:359, 363), *éey!* (Dugast 1975:389, 393). Dugast does not translate these exclamations; in my data, I use the gloss EXCL for 'exclamation' and use a translation equivalent in the French and English free translation lines. While I elsewhere use the glossing convention X.FR or X.EN to indicate where a word X is taken from French or English, for exclamations I do not commit to an analysis of them as words of Tunen, French, or some other language, and just gloss them as EXCL (even if they are exclamations also used in Cameroonian French).

4.6.3 Ideophones and onomatopoeia

Ideophones refer to words that iconically reflect sound, smell, texture, or another sense. An example in Tunen from the field corpus is in the dialogue in Appendix Text 2, where EO uses *bíŋ bɔŋ bíŋ* 'ping pong ping' to mimic the sounds of car horns in a funeral procession. Ideophones are discussed extensively in Dugast (1971:293-305). Examples of ideophones found in the Dugast (1975) text corpus, e.g. in the expression of sorrow in (159) below and the sound of someone sleeping in (160).

(159) Context: 'they were all dancing and crying,'

a sɛ : « **úku, úlúkútu; úku, úlútúku; úku, úlútúku !** »

/a-sɛ́á	**úku**	**úlúkútu**	**úku**	**úlútúku**	**úku**	**úlútúku**/
SM.1-say	IDEO	IDEO	IDEO	IDEO	IDEO	IDEO

'going "úku,́ ulúkútu; úku, úlútúku; úku, úlútúku!" '

(Dugast 1975:86-7, adapted)

[31] In my field data, *bánɛ* is found in polar questions and translated by my consultants as 'est-ce-que' ('is it'); in Dugast's examples, *bánɛ!* functions as an exclamation of surprise (but does not indicate questioning).

(160) Context: 'When I go to sleep,'
ó ↓ŋɔ́kɔ ésɛ « **féléléfɛt féléléfɛt** ». ɔ sía mɛ nákán ó hi↓nó.

/ɔ́	ŋɔ́kɔ	ɛ-sɛ́á	**féléléfɛt**	**féléléfɛt**	ɔ-sɛ́á	mɛ
SM.2SG.SBJV	hear.DUR	SM.7-say	IDEO	IDEO	SM.2SG-say	SM.1SG

ná	ákáná	ɔ	hinó/
PST2	leave	PREP	19.sleep

'tu endends comme « féléléfɛt féléléfɛt ». Alors tu sais que je suis endormie.'
'you'll hear « féléléfɛt féléléfɛt », and so you'll know I've fallen asleep.'
(Dugast 1975:342-3, adapted)

Other examples from the Dugast (1975) corpus include the sequence *ŋgulu ŋgulu ŋgulu ŋgulu* [...] *tɔ́tɔ́tɔ́tɔ́tɔ́*, described by Dugast as imitation of the sound of a wooden drum first struck with two sticks and then with a single one as a closing ('Imitation de la frappe sur le tambour de bois, la première fois avec les deux baguettes ; la deuxième avec une seule, comme point final'; Dugast 1975:204-5), *bɔ́ɔ́ bɔ́ɔ́ bɔ́ɔ́ bɔ́ɔ́* for the sound of despair (Dugast 1975:238-9), and *kɔkɔɔkɔ* for the sound of a rooster (Dugast 1975:262-3).

These ideophones show examples of sound symbolism, i.e., onomatopoeia, e.g. the iconic use of high tone for *bíŋ* to express a high-pitched sound, and the use of the rounded vowel /u/ for the expression of sorrow in (159) (cf. English *ululuate*).

In terms of linguistic status, these examples show that ideophones in Tunen are introduced as direct speech (or said within a separate prosodic phrase, as with *tɔ́tɔ́tɔ́tɔ́tɔ́* in Dugast 1975:204-5), rather than being fully integrated in the grammar (e.g. as nouns or verbs).

4.6.4 Song and drum language

Tunen verbal arts can involve repetition of certain refrains, i.e., the integration of aspects of song. This is not covered in the transcribed data for this thesis, but is discussed in some detail in Dugast (1955). Examples of chants used in *contes* can be found in Dugast (1975:166-173) ('L'homme et son fils'), in which the refrain *ndelindelíndelindelíndeli* repeats throughout the story, and in Dugast (1975:314-319) ('L'athérure et la tortue') in which there is a recurrent phrase *Njá, njá↓loŋ, njáloŋ*. To show examples of continual songs, three short untranscribed Tunen songs recorded in 2021/22 in Nefanté village are included as part of the audiovisual corpus archived with this thesis (see Chapter 3). Tunen is also used alongside French and Douala for songs sung in church (as recorded in the UEBC church in Ndikiniméki).

Tunen has a drum language, which is discussed briefly in Mous (2003:287) (based on prior description by Dugast 1955, Dugast 1959) as being of linguistic interest

due to the fact that the drummer drums the underlying rather than surface tone. As part of the deposit accompanying this thesis, I archive some audio/video recordings of the Tunen drum language as performed with *ɛŋganda* dancing during a funeral and a brief French/Tunen interview with the lead drummer (see Chapter 3 section §3.6.2 for access). The interview with the leader of the group includes some explanation of the function of the large elongated drum ('tam-tam grand et allongé') in relaying information about the nature of the event, as well as the structure of the *ɛŋganda* dance as performed in a (semi)circle with members taking turns (arranged spontaneously) to dance in the centre, co-ordinated by a whistle. A dialogue recorded after an *ɛŋganda* performance and photos of the dancing and drumming are provided in the Appendix (see Text 2).

CHAPTER 5

The expression of information structure in Tunen

5.1 Introduction

Having seen a general grammatical overview of Tunen in the previous chapter, this chapter investigates the expression of information structure (IS) in particular. The chapter focuses on the question as to whether and how IS notions are expressed in Tunen, providing a descriptive overview of IS expression in Tunen that will be built upon in the subsequent chapters.[1]

The chapter is structured as follows. Section §5.2 presents evidence for S-Aux-O-V-X as the canonical word order and shows the different information-structural contexts in which this word order can appear. Section §5.3 discusses departures from this canonical word order, including the VO word order patterns discussed in Mous (1997, 2003). Section §5.4 looks at how clefts and the marker *á* are used for focus expression, section §5.5 covers left-peripheral topic expression and contrastive topics, section §5.6 considers how expression of the agent can be avoided using the *-átɔ* participle and *bá-* functional passive constructions, section §5.7 considers how referent expression varies over discourse, section §5.8 compares Tunen

[1]This chapter has been accepted for publication as Kerr (to appear), as below. The version in this thesis has minor modifications for the purpose of coherence with the other chapters in this thesis.

Kerr, Elisabeth J. (to appear). The expression of information structure in Tunen. In: Van der Wal, Jenneke (ed.) *The expression of information structure in Bantu*. Berlin: Language Science Press.

to other Bantu languages, and section §5.9 concludes. The terminology used for IS is explained in Chapter 2 and Van der Wal et al. (to appear), which also provide an introduction to the conceptual background of information structure and the methodology used in the BaSIS project.

5.2 Canonical word order S-Aux-O-V-X

5.2.1 S-Aux-O-V-X as the canonical word order

As seen in Chapter 4 and to be discussed in more depth in Chapter 6, Tunen is widely known to have SOV as its canonical word order (Dugast 1971; Bearth 2003; Mous 2003), specifically the subtype S-Aux-O-V-X, where Aux refers to an auxiliary element (in Tunen, the TAM complex) and X to other elements, such as locative adjuncts. This word order is highly unusual for a Bantu language, where SVO is the expected word order (Bearth 2003). Moreover, S-Aux-O-V-X is unusual in Niger-Congo and is also rare cross-linguistically, found in some languages of West and Central Africa (see e.g. Dryer and Gensler 2005; Gensler and Güldemann 2003; Güldemann 2008). S-Aux-O-V(-X) surface word order (at least in some TAM contexts) is reported for example for Mande languages (Claudi 1993; Creissels 2005; Nikitina 2011; Sande et al. 2019), Kru languages (Gensler 1994; Sande et al. 2019), and the Senufo branch of Gur (Gensler 1994), with only Tunen and its close neighbours Nyokon (Guthrie no. A45) and nearby Ewondo/Eton (A72) as Benue-Congo languages reported to show (a degree of) OV word order (Mous 2005; Kerr 2024).

One question is the extent to which a language's basic word order varies dependent on information structure. In this vein, it has been claimed that the word order of some Bantu languages is better captured by making reference to discourse roles than using grammatical role-oriented labels like 'SVO' (see e.g. Morimoto 2000, 2006; Good 2010; Yoneda 2011; Kerr et al. 2023). This means that a more appropriate characterisation of a language's word order may be in terms of discourse roles like topic and focus. In this section I show that Tunen's word order is largely influenced by grammatical role (i.e., subject vs objecthood; see Kerr et al. 2023 for more discussion on the nature of grammatical role-oriented versus discourse role-oriented word order in Bantu). I show that S-Aux-O-V-X is a pragmatically neutral word order in Tunen that is compatible with various information-structural interpretations. Tunen therefore contrasts with the other Bantu languages in Van der Wal (to appear), which show SVO canonical word order that is conditioned more strongly by information-structural considerations than by grammatical role.

5.2.1.1 Thetics

One typical diagnostic for a language's canonical word order is the word order found in thetic sentences. Thetics are defined as being all-new and thus differ from categorical sentences which show a topic-comment distinction (Sasse 1987, 1996; Lambrecht 1994; Chapter 2 section §2.2). In Tunen, S-Aux-O-V-X word order is used for thetics, as illustrated in (161)-(163) below.

(161) Context: You are at the riverside outside the village and see an elephant, which very rarely occurs, so run to tell the others.
mɛ nɔ́ misəku siəkin!
/mɛ nɔ́ misəku siəkinə/
SM.1SG PST1 3.elephant see.DUR
'Je viens de voir un éléphant !'
'I just saw an elephant!' [PM 316]

(162) Context: Your friend asks what happened at church.
mɔtát a ná imbə́nu yɛ fəkin nɛ́ Yə́səs ɔ Yɛrúsalɛm nɔŋɔnak.
/mɔ-táta a ná ɛ-mbə́nu yɛ fəkinə nɛ́ Yə́səsu ɔ
1-pastor SM.1 PST2 9-news ASSOC.9 5.entrance 5.ASSOC Jesus PREP
Yɛrúsalɛmɛ nɔŋɔnɔ-aka/
Jerusalem tell-DUR
'Le pasteur a raconté des nouvelles de l'entrée de Jésus à Jerusalem'.
'The pastor told the news of Jesus' entrance into Jerusalem.' [DM 166]

(163) Context: Imagine someone came in the room right now during our field session, and you are explaining to someone else later what happened.9
tɔ́ ndɔ bá u miímə́ yi isukúlú, mutʃə́ŋə́ a nɔ́ nda bəsú kasɔn!
/tɔ ᴴndɔ bá ɔ miímə́ yɛ ɛ-sukúlú mɔ-tʃə́ŋə́ a nɔ́
SM.1PL PRS be PREP 3.room ASSOC.7 7-school 1-criminal SM.1 PST1
nda bəsúə kasɔna/
PROX PRN.1PL attack
Nous étions dans la salle de classe, un bandit est venu nous agresser !'
'We were in the classroom, a criminal came in to attack us!' [EE+EB 1847]

The consistent S-Aux-O-V(-X) word order across different types of thetics shows that this word order is compatible with an all-new context where no element is topical or in focus. One point of complexity here, however, is that conversational participants can be argued to be always retrievable topics via world knowledge (see e.g.

Givón 1983; Erteschik-Shir 2007 for relevant discussion). However, examples like (162) with third-person subjects provide evidence that non-topical subjects can also be in the initial position, and example (163) further shows that OV order is found even when the object is the first person. In any case, regardless of the position of the subject, the word order for Tunen thetics is markedly different from the other Bantu languages in Van der Wal (to appear) in that the object precedes the verb in Tunen (**SOV**). Versions with VO order were judged as ungrammatical (164).

(164) *tɔ́ ndɔ bá u miímə́ yi isukúlú, mutʃə́ŋə́ a nɔ́ nda **kasɔn bəəsu** !
/tɔ ᴴndɔ bá ɔ miímə́ yɛ ɛ-sukúlú mɔ-tʃə́ŋə́ a nɔ́
SM.1PL PRS be PREP 3.ROOM ASSOC.7 7-school 1-criminal SM.1 PST1
nda **kasɔna bəəsú**/
PROX attack PRN.1PL
Intd.: 'Nous étions dans la salle de classe, un bandit est venu nous agresser!'
Intd.: 'We were in the classroom, a criminal came in to attack us!'
[EE+EB 2239]

Note also that while subject inversion constructions have been reported as a means of detopicalising subjects in a thetic context in Bantu languages (Marten and van der Wal 2014; Chapter 2 section §2.4) and indeed are found to express thetics in all other languages in Van der Wal (to appear) except Teke-Kukuya, such inversion constructions are completely ungrammatical in Tunen (regardless of the position of temporal and locative adjuncts), as shown in (165) and (166).[2]

(165) *{naánɛkɔla} a ka nyɔkɔ {naánɛkɔla} **kíŋgə**.
/{naánɛkɔla} a ka nyɔ-aka {naánɛkɔla} **kíŋgə**/
yesterday SM.1 PST3 work-DUR yesterday 1.chief
Intd.: 'Le chef a travaillé hier.'
Intd.: 'The chief worked yesterday.' [JO 2629-30]

(166) *bɛ́ ká fámáka **bɛfɔŋɔ** naánɛkɔla ɔ ɛtɔbɔtɔ́bɔ́.
/bɛ́ ka fámá-aka **bɛ-fɔŋɔ** naánɛkɔla ɔ ɛ-tɔbɔtɔ́bɔ́/
SM.8 PST3 arrive-DUR 8-COW yesterday PREP 7-field
Intd.: 'Les vaches sont apparues dans le champ hier.'
Intd.: 'The cows appeared in the field yesterday.' [JO 2608]

[2]See the Abbreviations list at the beginning of this thesis for explanation of the *(X) and {X} notation within linguistic examples.

This unavailability of subject inversion matches other languages in the area such as Basaá (Guthrie no. A43), which is shown by Hamlaoui and Makasso (2015) to not allow inversion constructions (see also Hamlaoui 2022). The unavailability inversion constructions in Tunen means that the canonical word order S-Aux-O-V-X is the only means of expressing theticity in Tunen.

5.2.1.2 VP focus

Word order when the entire verb phrase is in focus (VP focus) is a second criterion that can be invoked to determine a language's canonical word order. In Tunen, VP focus questions can felicitously be answered with S-Aux-O-V-X word order patterns (167), providing further evidence for S-Aux-O-V-X as the canonical word order.[3]

(167) Context: 'What did Maria do?'
Malíá a ná biləliə fɔfɔ́kíə ɔmbambala na makat.
/Malíá a ná bɛ-ləliə fɔfɔ́kíə ɔ-mbambala na ma-kátá/
1.Maria SM.1 PST2 8-varnish anoint.DUR 3-wall with 6-hand
'Maria a [oint le vernis sur le mur avec la main]$_{\text{FOC}}$.'
'Maria [applied the varnish to the wall by hand]$_{\text{FOC}}$.' [JO 2516]

Now we have seen evidence from thetics and VP focus for S-Aux-O-V-X as the canonical word order, we can investigate the other information-structural contexts in which it occurs.

5.2.2 S-Aux-O-V-X for object focus

S-Aux-O-V-X word order is compatible with term focus on the theme object, as seen in the answers to the object question in (168) below, illustrated for two different consultants.

(168) Context: 'What is the man holding?' (+ hand-drawn picture stimulus)

a. mɔndɔ a ná **kalɔ́tɔ** ití.
/mɔ-ndɔ a ná **kalɔ́tɔ** itíə/
1-person SM.1 PST2 7.carrot hold
'L'homme tient [une carotte]$_{\text{FOC}}$.'
'The man is holding [a carrot]$_{\text{FOC}}$.' [JO 1107]

[3]Here and throughout, the scope of focus is indicated in the translation lines by square brackets with subscript FOC for 'focus'.

b. mɔndɔ a ná **kalɔ́tɔ** itíə́ ɔ mɔkat.
/mɔ-ndɔ a ná **kalɔ́tɔ** itíə́ ɔ mɔ-kátá/
1-person SM.1 PST2 7.carrot hold PREP 3-hand
'L'homme tient [une carotte]$_{\text{FOC}}$ à la main.'
'The man is holding [a carrot]$_{\text{FOC}}$ in his hand.' [PM 1264]

Both SVOX and SVXO orders were judged as ungrammatical (169a, 169b).

(169) Context: 'What is the man holding?' (+ hand-drawn picture stimulus)

a. *a ná itíə́ **kalɔ́tɔ** ɔ mɔkata.
/a ná itíə́ **kalɔ́tɔ** ɔ mɔ-kátá/
SM.1 PST2 hold 7.carrot PREP 3-hand
Intd.: 'Il tient [une carotte]$_{\text{FOC}}$ à la main.'
Intd.: 'He is holding [a carrot]$_{\text{FOC}}$ in his hand.' [JO 1626]

b. *a ná itíə́ ɔ mɔkata **kalɔ́tɔ**.
/a ná itíə́ ɔ mɔ-kátá **kalɔ́tɔ**/
SM.1 PST2 hold PREP 3-hand 7.carrot
Intd.: 'Il tient [une carotte]$_{\text{FOC}}$ à la main.'
Intd.: He is holding [a carrot]$_{\text{FOC}}$ in his hand.' [JO 1625]

These examples provide evidence for two things. Firstly, when taken together with what we have seen for other discourse contexts, we see that S-Aux-O-V-X is a pragmatically neutral word order in Tunen: it is possible for an all-new thetic context, VP focus, and narrow information focus on the theme object. Secondly, the examples show that information focus does not need to be morphosyntactically marked in Tunen, at least for theme objects, as the object in (168) is left in-situ without any special marking.

The Q-A pairs seen above show that S-Aux-O-V-X word order is found for information focus on the theme object. This word order is not possible in a different focus context where the object is marked by the focus-sensitive particles *ata* 'even' (170a) or *ə́maná* 'only' (171a). In such exclusive and exhaustive focus cases, the object must be ex-situ, typically fronted (170b) or clefted (171b), and marginally postposed (170c).[4]

[4]Note that the preference for fronted over postposed differs from the previous description in Mous (1997), who only reports the postposed strategy.

(170) a. *a ná néáká mɔŋéŋ, a ná **ata bɛŋgwɛtɛ** nɛak.
/a ná néá-aka mɔŋéŋa a ná **ata bɛ-ŋgwɛtɛ** néá-aka/
SM.1 PST2 eat-DUR much SM.1 PST2 even 8-potato eat-DUR
Intd.: 'Il a beaucoup mangé, il a même mangé [des patates]$_{FOC}$.'
Intd.: 'He ate a lot, he even ate [potatoes]$_{FOC}$.' [PM (+DM) 2265]

b. a ná néáká mɔŋéŋ, **ata bɛŋgwɛtɛ** a ná nɛak.
/a ná néá-aka mɔŋéŋa **ata bɛ-ŋgwɛtɛ** a ná néá-aka/
SM.1 PST2 eat-DUR much even 8-potato SM.1 PST2 eat-DUR
'Il a beaucoup mangé, il a même mangé [des patates]$_{FOC}$.'
'He ate a lot, he even ate [potatoes]$_{FOC}$.' [PM (+DM) 2264]

c. ?a ná néáká mɔŋéŋ, aná néáká **ata bɛŋgwɛtɛ**.
/a ná néá-aka mɔŋéŋa a ná néá-aka **ata bɛ-ŋgwɛtɛ**/
SM.1 PST2 eat-DUR much SM.1 PST2 eat-DUR even 8-potato
Intd.: 'Il a beaucoup mangé, il a même mangé [des patates]$_{FOC}$.'
Intd.: 'He ate a lot, he even ate [potatoes]$_{FOC}$.' [PM (+DM) 2263]

(171) a. *a ná mɔná **ɔ́maná imítə́** túmbi.
/a ná mɔ-ná **ɔ́maná ɛ-mítə́** túmbiə/
SM.1 PST2 1-child only 9-calabash return
Intd.: 'C'est seulement [la calebasse]$_{FOC}$ qu'elle a donné à l'enfant.'
Intd.: 'She only gave [the calabash]$_{FOC}$ to the child.' [JO 1593]

b. **ɔ́maná imítə́** á a ná mɔná túmbi.
/**ɔ́maná ɛ-mítə́** á a ná mɔ-ná túmbiə/
only 9-calabash COP SM.1 PST2 1-child return
'C'est seulement [la calebasse]$_{FOC}$ qu'elle a donné à l'enfant.'
'She only gave [the calabash]$_{FOC}$ to the child.' [JO 1592]

Note also that there is a distinction between questions and declaratives, with questions formed ex-situ rather than in the S-Aux-O-V-X order. This is illustrated in (172) below, where *yaté* 'what' is fronted in the question, while the answer is provided with the canonical S-Aux-O-V-X order.[5]

[5] As will be seen in Chapter 7, the numeral modifier of the object appears in a discontinuous position after the verb, despite also falling within the scope of focus. I will come back to the interpretation of such discontinuous modifiers in section §5.3.2.

(172) Q. **yatɛ́** ɔ́ ndɔ́ sin?
/**yatɛ́** ɔ ʰndɔ sinə/
what SM.2SG PRS see
'Qu'est-ce que tu vois?'
'What do you see?' [EO 396]

A. mɛ́ ndɔ **tunoní** sinə tɔ́lál.
/mɛ ʰndɔ **tɔ-noní** sinə tɔ́-lálɔ́/
SM.1SG PRS 13-bird see 13-three
'Je vois [trois oiseaux]$_{\text{FOC}}$.'
'I see [three birds]$_{\text{FOC}}$.' [EO 397]

Example (173a) shows that an in-situ object question is not possible.[6].

(173) a. *ɔ́ ndɔ **yatɛ́** talɛ́áka nɛɔfénɛ eé?
/ɔ ʰndɔ **yatɛ́** talɛ́á-aka nɛɔfénɛ eé/
SM.2SG PRS what cook-DUR today Q
Intd.: 'Qu'est-ce que tu vas cuisiner aujourd'hui ?'
Intd.: 'What will you cook today?' [JO 1600]

b. **yatɛ́** ɔ́ ndɔ talɛ́áka nɛɔfénɛ eé?
/yatɛ́ ɔ ʰndɔ talɛ́á-aka nɛɔfénɛ eé/
what SM.2SG PRS cook-DUR today Q
'Qu'est-ce que tu vas cuisiner aujourd'hui ?'
'What will you cook today?' [JO 1601]

We therefore see that S-Aux-O-V-X is compatible with information focus on the object in declarative sentences, while exclusive and exhaustive focus on the object — as evidenced by association with the focus-sensitive particles *ata* 'even' and *ɔ́maná* 'only' — require an ex-situ word order, and foci in questions are ex-situ. Section §5.4 will discuss the use of reverse pseudoclefts as a means of expressing more contrastive term focus on the object. I turn now to testing for other discourse contexts in which the canonical word order S-Aux-O-V-X can be used.

[6] An exception to the ban on in-situ object questions is an echo question context, in which case the object question word can be left in-situ, as discussed in Chapter 4 section §4.5.8.

5.2.3 No S-Aux-O-V-X for subject focus

In contrast to focussed declarative objects, focussed declarative subjects cannot be left in-situ and must be focussed via a cleft (174); the *á* COP cannote be omitted.[7]

(174) Context: 'Which politician died?'
#**(á)** Píɛlə á ná wə.
/á Piɛlə á ná wə̀/
COP 1.Pierre SM.1.REL PST2 die
'C'est [Pierre]$_{FOC}$ qui est mort.'
'[Pierre]$_{FOC}$ died.' [EO 271]

In other words, the canonical S-Aux-O-V-X word order cannot be used to express subject focus, even in a non-contrastive information focus context. This matches subject/non-subject focus asymmetries reported in other language families, where subject focus is obligatorily marked while non-subject focus may be expressed using the canonical word order (see e.g. Fiedler et al. 2010 for an overview).

For subject foci associated with the focus-sensitive particles *ata* 'even' and *ɔ́maná* 'only', evidence for the subject being ex-situ is given by the obligatory presence of the copula *á*, which will be discussed further in section §5.4.

(175) a. **ata *(á) Bitə** a ná bɛŋgɛtɛ nɛak.
/ata á Bitə a ná bɛ-ŋgɛtɛ nɛ́á-aka/
even COP 1.Peter SM.1 PST2 8-potato eat-DUR
'Même [Peter]$_{FOC}$ a mangé des patates.'
'Even [Peter]$_{FOC}$ ate potatoes.' [PM 2260]

b. Context: You are a school teacher marking the exams for a class, and are shocked by how badly the students did.
ɔ́maná Ɛmánúwɛlɛ na Natanayɛ́lɛ á bá ná tɔ́mbá ɔ nɛkɔsɔna !
/**ɔ́maná Ɛmánúɛlɛ na Natanayɛ́lɛ á** bá ná tɔ́mba ɔ
only 1.Emmanuel and 1.Nathaniel COP SM.2 PST2 pass PREP
nɛ-kɔsɔna/
5-exam
'Seulement [Emmanuel et Nathaniel]$_{FOC}$ ont réussi à l'examen !'
'Only [Emmanuel and Nathaniel]$_{FOC}$ passed the exam!' [JO 527]

[7] The infelicity judgement of example (174) without the *á* COP also holds when the subject marker is expressed in the non-relative form (with a low tone).

For subject questions, it is harder to tell whether the canonical word order is used, as fronting of the subject question word results in the same linear order S-Aux-O-V-X and is therefore string-vacuous. As will be discussed further in section §5.4, there is some evidence that subject questions are formed as clefts, as suggested for example by the relative form (visible from the high tone) of the subject marker in example (176) below.

(176) **ɛ́yáné á** lɛa na hioso ?
/ɛ́yáné á lɛ́á na hɛ-ɔ́sɔ/
who SM.1.REL be with 19-spoon
'Qui a une cuillère ?'
'Who has a spoon?' [EO 1433]

We will come back to the expression of subject focus via clefting in section §5.4. Note that the inability for subjects to be focussed in a non-clefted construction illustrates that Tunen does not have a dedicated focus position in which different grammatical roles can be focussed, unlike the languages in Van der Wal (to appear) which have an immediate before verb (IBV; Teke-Kukuya Li to appear *a*, *b*), immediate after verb (IAV; e.g. Makhuwa; Van der Wal to appear and Rukiga; Asiimwe and van der Wal to appear) and sentence-final focus position (Kirundi; Nshemezimana and van der Wal to appear) in which subjects and non-subjects alike may be focussed. This difference in availability of focus positions is discussed further in Kerr et al. (2023) (cf. Chapter 2 section §2.4.2).

5.2.4 S-Aux-O-V-X for non-argument focus

Non-arguments in Tunen pattern with objects in being able to be focussed in-situ in the canonical S-Aux-O-V-X order (177). They may also be focussed via a cleft, and time adverbials are generally more flexible in their position than other adverbials/adjuncts. Like with what we saw above for objects, non-argument questions are generally formed by fronting/clefting rather than having the question word in the canonical position (177Q1), although the in-situ options are accepted more so than for objects (177Q2).

Note that example (177A) also shows that a given object (here, an object already mentioned in the question) may be preverbal, providing further evidence for S-Aux-O-V-X as a pragmatically neutral word order, as the object position can be filled by focussed or given objects alike.

(177) Q1. **hə́níə́** á ↓ná yayɛ́á miímə lúmə́kə́ eé?
/**hə́níə́** á ˪ná yayɛ́á miímə lúmə́-aka eé/
where SM.1.REL PST3.REL PRN.POSS.1.3 3.house build-DUR Q
'Où est-qu'il a construit sa maison ?'
'Where did he build his house?' [JO 1115]

Q2. a ka yáyɛ́á miímə lúmə́kə́ **hə́ní(ə́)** eé?
/a ka yáyɛ́á miímə lúmə́-aka **hə́níə́** eé/
SM.1 PST3 PRN.POSS.1.3 3.house build-DUR where Q
'Où est-qu'il a construit sa maison ?'
'Where did he build his house?' [JO 1118]

A. a ka yayɛ́á miímə lúmə́kə́ **ɔ iNdíki**.
/a ka yayɛ́á miímə lúmə́-aka **ɔ** **iNdíki**/
SM.1 PST3 PRN.POSS.1.3 3.house build-DUR PREP Ndiki
'Il a construit sa maison [à Ndiki]$_{\text{FOC}}$.'
'He built his house [in Ndiki]$_{\text{FOC}}$.' [JO 1121]

Like we saw above for objects, non-arguments modified by the focus-sensitive particle *ɔ́maná* 'only' are commonly fronted (178a). However, it is also possible to have what appears to be the S-Aux-O-V-X word order with the X element modified by *ɔ́maná* 'only', although note that this is linearly equivalent to an alternative analysis in which the focussed phrase is postposed (178b).

(178) Context: Someone incorrectly says you have been to both Yaoundé and Kribi.

a. bɔ́ɔ, **ɔ́maná ɔ Yəhənd** á mɛ́ ná ká hul.
/bɔ́ɔ **ɔ́maná** **ɔ** **Yəhəndə** á mɛ́ ná ka húlə́/
no only PREP Yaounde COP SM.1SG.REL PST2 AND return
'Non, ce n'est que à [Yaoundé]$_{\text{FOC}}$ que je suis parti(e).'
'No, I only went to [Yaoundé]$_{\text{FOC}}$.', 'No, it's only to [Yaoundé]$_{\text{FOC}}$ that I went.' [JO 1607]

b. bɔ́ɔ, mɛ ná ↓ká hulə **ɔ́maná ɔ Yəhənd**.
/bɔ́ɔ mɛ ná ka húlə́ **ɔ́maná** **ɔ** **Yəhəndə**/
no SM.1SG PST2 AND return only PREP Yaounde
'Non, ce n'est que à [Yaoundé]$_{\text{FOC}}$ que je suis parti(e).'
'No, I only went to [Yaoundé]$_{\text{FOC}}$.' [JO 1608]

In section §5.4.3 below, we will see that non-arguments also pattern with objects with respect to cleft formation and fragment answers.

5.2.5 S-Aux-O-V-X for predicate-centred focus

Finally, the canonical word order S-Aux-O-V-X can be used for predicate-centred focus (PCF), as seen already for VP focus in (167) above and as further illustrated below for truth focus (179) and state-of-affairs (verb) focus (180), (181).

(179) Context: 'Do you see the sheep?' (truth focus)
mɛ́ nd(ɔ) ɛndɔ́mbá sin.
/mɛ ᴴndɔ ɛ-ndɔ́mbá sinə/
SM.1SG PRS 4-sheep see
'Je vois les moutons.'
'I see the sheep.' [EO 695]

(180) Context: 'What did he do with the beans and the plantains?' (SoA focus)
Context: 'What happened?' (thetic)
a ka makɔndʒ͡ɛ nɛ́áka. a ná bilikó lu.
/a ka ma-kɔndʒ͡ɛ nɛ́á-aka a ná bɛ-likó luə/
SM.1 PST3 6-plantain eat-DUR SM.1 PST2 8-bean sell
'Il a [mangé]$_{\text{FOC}}$ les plantains. Il a [vendu]$_{\text{FOC}}$ les haricots.'
'He [ate]$_{\text{FOC}}$ the plantains. He [sold]$_{\text{FOC}}$ the beans.' [JO 908]

(181) Context: Johannes dislikes the taste of cassava so normally cooks it but does not eat it. This time, he buys it, he cooks it, and he even eats it (which is surprising). (SoA focus)
Yɔhánɛsɛ a ná ɛsasɔma nɛ́áká sɛ́ɛb.
/Yɔhánɛsɛ a ná ɛ-sasɔma nɛ́á-aka sɛ́ɛbɛ/
1.Johannes SM.1 PST2 7-cassava eat-DUR even
'Johannes a même [mangé]$_{\text{FOC}}$ du manioc.'
'Johannes even [ate]$_{\text{FOC}}$ the cassava.' [PM 2282]

We see in (181) that the canonical word order can be used for PCF for exclusive focus as well as information focus, as the exclusive focus-sensitive particle *sɛ́ɛbɛ* 'only' may modify the predicate. Note here that the exclusive focus-sensitive particle *ata* 'even' seen previously is only found for term focus and cannot be used in a PCF construction (183),[8] with *sɛ́ɛbɛ* (literally translatable as 'self') used instead.

[8] Although a possible example of *ata* 'even' with PCF was found in the following example from a story, where *ata* modifies a clause after a left-dislocated topic (182).

Unlike with *ata*, *séɛbɛ* follows the focussed constituent and does not require it to be ex-situ.

(183) a. *Yɔhánɛsɛ a ná ɛsasɔma **ata nɛ́áká**.
/Yɔhánɛsɛ a ná ɛ-sasɔma ata nɛ́á-aka/
1.Johannes SM.1 PST2 7-cassava even eat-DUR
Intd.: 'Johannes a même [mangé]$_{FOC}$ du manioc.'
Intd.: 'Johannes even [ate]$_{FOC}$ the cassava.' [PM 2284]

b. ***ata nɛ́áká** Yɔhánɛsɛ a ná ɛsasɔma.
/ata nɛ́á-aka Yɔhánɛsɛ a ná ɛ-sasɔma/
even eat-DUR 1.Johannes SM.1 PST2 7-cassava
Intd.: 'Johannes a même [mangé]$_{FOC}$ du manioc.'
Intd.: 'Johannes even [ate]$_{FOC}$ the cassava.' [PM 2285]

Note also that, unlike the other Bantu languages in Van der Wal (to appear), Tunen does not have a predicate doubling construction for the expression of PCF (i.e., a construction in which an infinitival/nominal form of the verb appears together with a finite verb form; see e.g. Güldemann 2015 and references therein).

So far then, we have seen that S-Aux-O-V-X is the pragmatically neutral word order in Tunen, and therefore can be taken as the canonical word order. This canonical word order is found for thetics, VP focus, information focus on the theme object, non-argument focus, and predicate-centred focus (PCF). It is not possible to use S-Aux-O-V-X word order for focus on the subject, which must instead be expressed by a cleft. More contrastive term focus is generally expressed ex-situ, as shown by association with the focus-sensitive particles *ata* 'even' and *ɔ́maná* 'only' (while more contrastive PCF can be left in-situ).

---

(182) Context: Moral concluding the story *The lying shepherd*.
« mɔkandʒakandʒ **ata** á ndɔ hɔ́ taka a báka bá lɛ́ wɛ́ɛya ɔkɛ́n. »
/mɔ-kandʒakandʒa **ata** a ʰndɔ hɔ́ taka a bá-aka bá lɛ́ wɛ́ɛya
1-liar even SM.1 PRS talk truth SM.1 be-DUR SM.2 NEG PRN.EMPH.1
ɔ-kɛ́na/
INF-believe
'« Un menteur, même quand il dit la vérité, on ne le croit pas. »'
'"Even if a liar is telling the truth, nobody believes them."' [JO 2039]

5.2.6 S-Aux-O-V-X in double object constructions

Having seen that the canonical word order for Tunen transitives is S-Aux-O-V-X, let us now consider ditransitives. Here, the O slot of S-Aux-O-V-X can be filled by multiple objects, specifically in S-O_{GOAL}-O_{THEME}-V order, as previously noted by Mous (1997, 2003). I show in this section that this S-O_{GOAL}-O_{THEME}-V order is consistent across different information-structural contexts, meaning that the order of objects is not conditioned by information structure. In other words, when both objects are preverbal, the goal (i.e., recipient/beneficiary) object always precedes the theme object (184a, 185A). The reverse order S-O_{THEME}-O_{GOAL}-V is not grammatical (184b).

(184) Context: 'Who is the woman giving a gourd to?' (+ photo from BaSIS stimuli)

a. a nɔ́ **ɔsɔ́kɔ́ hɛtɛ́tɛ́** indi.
/a nɔ́ **ɔsɔ́kɔ́ hɛ-tɛ́tɛ́** índíə́/
SM.1 PST1 1.other 19-gourd give
'Elle donne une gourde à [l'autre]$_{FOC}$.'
'She gives a gourd to [the other (woman)]$_{FOC}$.' [PM 1541]

b. *a nɔ́ **hɛtɛ́tɛ́ ɔsɔ́kɔ́** indi.
/a nɔ́ **hɛ-tɛ́tɛ́ ɔsɔ́kɔ́** índíə́/
SM.1 PST1 19-gourd 1.other give
Intd.: 'Elle donne une gourde à [l'autre]$_{FOC}$.'
Intd.: 'She gives a gourd to [the other (woman)]$_{FOC}$.' [PM 1542]

(185) Q. yatɛ́ (á) muəndú á ndɔ mɔná túmbi ?
/yatɛ́ á mɔ-əndú a ᴴndɔ mɔ-ná túmbiə/
what COP 1-woman SM.1 PRS 1-child return
'Qu'est-ce que la femme remet à l'enfant ?'
'What is the woman returning to the child?' [JO 1588]

A. muəndú á ndɔ **mɔná imítə́** túmbi.
/mɔ-əndú a ᴴndɔ **mɔ-ná ɛ-mítə́** túmbiə/
1-woman SM.1 PRS 1-child 9-calabash return
'La femme remet [le calebasse]$_{FOC}$ à l'enfant.'
'The woman returns [the calabash]$_{FOC}$ to the child.' [JO 1587]

As seen in Chapter 4 section §4.3, the same O_{GOAL}-O_{THEME} order is also found in questions (186) and imperatives (187).

(186) éyáné á ná **himuísimuísí híɔfɔ́** indi?
éyáné á ná **hɛ-muísimuísi hɛ-ɔfɔ́** índíə́?
who SM.1.REL PST2 19-cat 19-fish give
'Qui a donné du poisson au chat ?'
'Who gave fish to the cat?' [EO 278]

(187) índíə́ **mɔná imit** !
/índíə́ **mɔ-ná ɛ-mítə́**/
give 1-child 9-calabash
'Donne la calebasse à l'enfant !'
'Give the calabash to the child!' [JO 1594]

These data provide evidence for the S-O_{GOAL}-O_{THEME}-V-X as the canonical word order in Tunen, meaning that the 'O' of S-Aux-O-V-X covers both the theme and the goal (i.e., recipient/beneficiary) object (to be seen further in Chapter 6 section §6.2.5). Note that this is in contrast to certain West African languages described as having S-Aux-O-V-X basic word order that only permit a single preverbal object (Gensler and Güldemann 2003; Creissels 2005; see Chapter 6 for further discussion).

Note also that this canonical order is not the only word order found for double object constructions. Firstly, (185Q) above and (189Q) below show that an ex-situ strategy is standard for questioning an object. Additionally, recipient objects marked by the focus-sensitive particle *ɔ́maná* 'only' must be moved out of their canonical position, typically to the left (188a) but sometimes also to the right (188b), with the canonical word order not possible (188c).[9]

(188) a. **ɔ́maná á mɔná** á ndɔ imítə́ túmbi.
ɔ́maná á mɔ-ná a ^{H}ndɔ ɛ-mítə́ túmbiə
only COP/PREP 1-child SM.1 PRS 9-calabash return
'C'est seulement [à l'enfant]$_{FOC}$ qu'elle a donné la calebasse.'
'She only gave a calabash [to the child]$_{FOC}$.' [JO 1590]

b. a nɔ́ hɛtétɛ́ indi **ɔ́maná á Ilísabɛt**.
/a nɔ́ hɛ-tétɛ́ índíə́ **ɔ́maná á Ilisabɛtɛ**/
SM.1 PST1 19-gourd give only COP/PREP 1.Elisabeth
'C'est uniquement [à Elisabeth]$_{FOC}$ qu'elle a donné la gourde.'
'She only gave a gourd [to Elisabeth]$_{FOC}$.' (and nobody else) [PM 1559]

[9] I gloss *á* as COP/PREP here due to uncertainty as to how many *á*s are present underlyingly and the nature of *á* as a preposition; see the end of this section for further discussion.

c. *muəndú á ndɔ **ɔ́maná á mɔná** imítə́ túmbi.
/mɔ-əndú a ᴴndɔ **ɔ́maná á mɔ-ná** ɛ-mítə́ túmbiə/
1-woman SM.1 PRS only COP/PREP 1-child 9-calabash return
Intd.: 'C'est seulement [à l'enfant]$_{FOC}$ que la femme a donné la calebasse.'
Intd.: 'The woman only gave a calabash [to the child]$_{FOC}$.' [JO 1591]

This pattern matches what we saw already for theme objects in (171) above. These data taken together support a general observation that exhaustively-focussed elements in Tunen must be ex-situ, while information focus (for non-subjects) is typically unmarked and left in-situ in the S-Aux-O-V-X word order.

As is common cross-linguistically (see e.g. Malchukov et al. 2010), in addition to the double object construction, an alternative ditransitive construction is available in which the recipient object is introduced by a preposition. In this case, the word order is S-O$_{THEME}$-V-Prep-O$_{GOAL}$, with the goal object an oblique in the postverbal position (S-Aux-O-V-**X**). The examples below illustrate this construction in a new information focus context (189A) and in an imperative (190).

(189) Q. Context: BaSIS photo stimulus of woman giving another woman a gourd.
ɔwanɛ́ á múə́ndú á ndɔ imítə́ túmbi ?
/ɔ-anɛ́ á mɔ-əndú á ᴴndɔ ɛ-mítə́ túmbiə/
PREP-who COP 1-woman SM.1.REL PRS 9-calabash return
'À qui la femme remet la calebasse ?'
'Who is the woman returning the calabash to?' [JO 1583]

A. muəndú á ndɔ imítə́ túmbiə **ɔ mɔn**.
/mɔ-əndú a ᴴndɔ ɛ-mítə́ túmbiə **ɔ mɔ-ná**/
1-woman SM.1 PRS 9-calabash return PREP 1-child
'La femme remet la calebasse [à l'enfant]$_{FOC}$.'
'The woman returns the calabsh [to the child]$_{FOC}$.' [JO 1586]

(190) índíə́ imítə́ **á mɔná** !
/indíə́ ɛ-mítə́ a mɔ-ná/
give 9-calabash PREP 1-child
'Donne la calebasse à l'enfant !'
'Give the calabash to the child!' [JO 1595]

Initial analysis suggests that S-O$_{THEME}$-V-Prep-O$_{GOAL}$ is a lower-frequency pattern than S-O$_{THEME}$-O$_{GOAL}$-V, although both strategies are found across speakers.

The preposition used in the prepositional variant is generally the general preposition *ɔ*, but sometimes surfaces as *á* or *a*. Whether *á* is underlying low or high-toned and whether it is an allomorph, separate preposition (cf. the *á* preposition found in nearby Bantoid languages), or a borrowing from French *à* 'to, at' is a topic for further research. In any case, its status as a preposition means that these constructions can be understood as instances of the canonical S-Aux-O-V-X word order, where X here is a prepositional phrase. The generalisation is therefore that prepositional objects are postverbal, while non-prepositional objects are preverbal (with fixed O_{GOAL}-O_{THEME} order).

5.2.7 Section summary

This section presented evidence that S-Aux-O-V-X is a pragmatically neutral word order compatible with different information-structural contexts, and so should be taken as the canonical word order in Tunen. The order of objects in double object constructions is determined by grammatical role rather than IS, with S-O_{GOAL}-O_{THEME}-V word order or a prepositional construction S-O_{THEME}-V-Prep-O_{GOAL}. While the S-Aux-O-V-X order is compatible with thetics, information focus on an object, non-argument focus, and predicate-centred focus, subjects cannot be focussed in-situ, and content questions are formed ex-situ. It was noted that subject inversion of the type found in Eastern and Southern Bantu languages is ungrammatical in Tunen and predicate doubling constructions are likewise not found. This unavailability of inversion constructions matches what was found for the Cameroonian Bantu language Basaá (Guthrie no. A43) by Hamlaoui and Makasso (2015), which they argue to be a feature of Northwestern Bantu more generally. The pragmatically neutral preverbal position of the object in Tunen is a further peculiarity compared to most other Bantu languages (Bearth 2003; Mous 1997, 2003). The neighbouring Cameroonian Bantu language Nyokon (A45) also has OV patterns, although only in a subset of TAM contexts; Ewondo (A72, Cameroon) and Tikar (Bantoid, Cameroon) also have partial OV patterns, but Tunen is the only known language with robust S-Aux-O-V-X basic word order, as discussed further in Mous (1997, 2005, 2014); Kerr (2024); Chapter 6. Finally, we saw that foci modified by the focus-sensitive particles *ata* 'even' or *ɔ́maná* 'only' cannot be expressed in-situ, showing that the preverbal object position is specific to information focus, and we saw that questions are generally formed ex-situ rather than using the S-Aux-O-V-X word order (with in-situ question formation most accepted for non-argument focus).

5.3 Non-canonical word order

Having seen that S-Aux-O-V-X is the canonical word order in Tunen, we can look at the use of alternative word orders in different information-structural contexts. This section considers VO orders found, both with and without the *á* marker, as well as argument fronting and discontinuous noun phrases.

5.3.1 VO order

Some Niger-Congo languages in Central and West Africa are known to have alternations between OV and VO word order, including Tunen's close neighbour, Nyokon (Bantu A45; Mous 2005). This raises the question as to whether VO is found alongside OV in Tunen. In Chapter 6 and Kerr (2024) I show that Tunen OV is consistent across tense/aspect contexts, corroborating earlier work by Mous (1997, 2005). This means that there is no tense/aspect-conditioned OV/VO alternation in Tunen as reported for Nyokon and for other Niger-Congo languages, such as those of the Kwa branch (Heine 1976; Creissels 2005, 2018; Sande et al. 2019).

While OV is thus consistent across tenses in Tunen, Mous (1997, 2003) has argued that Tunen does have a VO strategy, which is used for contrastive focus on the theme object and formed with a marker *á* preceding the object (termed a "contrast" marker by Mous 2003, although intended specifically for contrastive focus; Mous p.c.). Mous (1997) also notes that VO is found for objects modified by the focus-sensitive particle *ha* 'only'. This relates to the data reported above of rightwardly-postposed contrastive objects, which I argue to be ex-situ cases rather than in-situ (and with fronting a more common strategy). Such a description of OV vs VO variation dependent on IS has been picked up in summaries of Tunen word order, such as Downing and Marten (2019:273-4).

The alternation in position of the object dependent on contrastiveness has been discussed by Güldemann (2007) as an example of a more general pattern of preverbal objects in Benue-Congo being extrafocal while postverbal objects are more contrastive. Under such an account, the prediction is therefore that OV order in Tunen is found with extrafocal objects, existing in alternation with a VO pattern used for contrastive foci.

In this section I discuss the V*á*O construction presented by Mous (1997). While the V*á*O construction is found in my field data, it is infrequent and was only seen in elicitation contexts. I show that this construction shows evidence of becoming monoclausal, but argue against *á* as a general contrast or focus marker, instead treating it as the identificational/specificational copula as part of a bicalusal cleft construction (cf. Chapter 4 section §4.5.3). Next, I argue that objects modified by

'only' must be ex-situ, which can result in VO order on the surface but should not be taken as a basic VO order of the kind found in some West African languages. Finally, I show that some VO constructions are possible without *á*, although these are rare in the data and the extent to which such patterns depend on IS rather than independent factors such as prosodic weight or predicate type needs further testing.

5.3.1.1 V*á*O

In Mous' (1997; 2003) analysis of Tunen syntax, he identifies an SVO construction in Tunen where the postverbal object is preceded by what he calls a "contrast marker", *á*, marking contrastive focus, as illustrated in (191) below from Mous' own elicitation data.[10]

(191) mɛ́-ndò ní **á** bónìàk.
SM.1SG-PRS eat CONTR 14.yam
'What I eat is yams.' (Mous 2003:304, adapted)

A key question is whether this *á* marker is best treated as a contrast marker (CONTR), focus marker (FOC), or copula (COP). If *á* were a general focus marker, we may expect it to be able to appear on focussed objects in other positions. However, it is not possible to have *á* precede the object in the canonical preverbal position (192), despite S-Aux-O-V-X being compatible with information focus on the object (as we saw in (168) above).

(192) Context: 'What did the woman give to the other woman?' (+ BaSIS photo stimulus)
a nɔ́ ɔsɔ́kɔ́ (*__á__) **hɛtétɛ́** indiə.
/a nɔ́ ɔsɔ́kɔ́ á hɛ-tétɛ́ índíə́/
SM.1 PST1 1.other COP 19-gourd give
Intd.: 'Elle a donné à l'autre [une gourde]$_{FOC}$.'
Intd.: 'She gave the woman [a gourd]$_{FOC}$.' [PM 1541, 1549]

We should therefore not take *á* to be a general focus marker. This observation matches the data from exhaustive focus marked by the focus-sensitive particle *ɔ́-maná* 'only', which requires that the object is moved from its base position (171), (188). These data therefore are compatible with Mous' (1997; 2003) analysis of *á* as a contrastive focus marker, but not as a general focus marker.

[10] Glosses for the subject marker, tense marker, and noun have been adapted for consistency with the rest of the examples in this thesis; the CONTR gloss and data line are left unchanged.

One key difference in my data compared to Mous' (2003) presentation is that SVáO was a low frequency strategy in my corpus. In Isaac's (2007) study of 6 of the longer Tunen texts transcribed in Dugast (1975), he also reports that there were no clear examples of this construction (Isaac 2007:61). Furthermore, the construction was even judged ungrammatical in the following elicitation session, regardless of the position of the object with respect to the postverbal adjunct (193).

(193) Context: 'What is the man holding?'
*a ná itíə {ɔ mɔkata} **á kalɔ́tɔ** {ɔ mɔkata}.
/a ná itíə {ɔ mɔ-kátá} **á** **kalɔ́tɔ** {ɔ mɔ-kátá}/
SM.1 PST2 hold PREP 3-hand COP 7.carrot PREP 3-hand
Intd.: 'Ce qu'il tient à la main c'est [une carotte]$_{\text{FOC}}$.'
Intd.: 'He is holding [a carrot]$_{\text{FOC}}$ in his hand.' [JO 1627-8]

Instead, the focussed object can be left in-situ unmarked by *á* (S-Aux-O-V-X), the typical expression of information focus, or be focussed via a reverse pseudocleft cleft with *á*, as used for contrastive and exhaustive focus (see section §5.4). The SV*á*O word order is therefore a less frequent pattern than it may seem from Mous' description. We will see in section §5.4 that a reverse pseudocleft of the form OáSVX is a more common strategy for contrastive focus than the pseudocleft type here; recall as well from (170) above that fronting was preferred to postposing when an object is modified by a focus-sensitive particle. In my natural speech recordings, the VáO construction did not appear.

In earlier presentation of this work, I argued that the SVáO construction is a pseudocleft, on the basis of evidence of constructions with *á* showing properties of relative clauses and therefore a biclausal cleft structure (to be seen for other cleft types in section §5.4). However, remotely elicited data explicitly testing this hypothesis for this low-frequency SVáO construction found that this construction does not allow relative tense morphology or the relative form of the subject marker, thus providing evidence for monoclausality rather than biclausality. The dataset in (194) illustrate this point.[11]

(194) a. **nɛlala á** babá **á** ↓**ná** húánána ɔwɔ́n.
/**nɛ-lala** **á** babá **á** ^{L}**ná** húánána ɔ-ɔ́nɔ/
5-spider COP 1.father SM.1.REL PST3.REL must INF-kill
'C'est [l'araignée]$_{\text{FOC}}$ que papa devait tuer.'
'It's [the spider]$_{\text{FOC}}$ that dad had to kill.' [PM 70.61]

[11]For these remotely-elicited data, the form ID in square brackets refers to the session number followed by the example number in this session.

b. babá **a ka** húánána ɔwɔ́nɔ **á nɛ́lal**.
/babá **a** **ka** húánána ɔ-ɔ́nɔ **á** **nɛ-lala**/
1.father SM.1 PST3 must INF-kill CONTR 5-spider
'Ce que papa devait tuer n'est que [l'araignée]$_{\text{FOC}}$.'
'Dad had to kill (only) the [spider]$_{\text{FOC}}$.' [PM 70.57]

c. *babá **á ↓na** húánána ɔwɔ́nɔ **á nɛ́lal**.
/babá **a** **ˡna** húánána ɔ-ɔ́nɔ **á** **nɛ-lala**/
1.father SM.1.REL PST3.REL must INF-kill COP 5-spider
Intd.: 'Ce que papa devait tuer n'est que [l'araignée]$_{\text{FOC}}$.'
Intd.: 'Dad had to kill (only) [the spider]$_{\text{FOC}}$.' [PM 70.62]

Here in (194a) we see a reverse pseudocleft construction, in which the focussed object *nɛlala* 'spider' is followed by the *á* copula and then a reduced relative (see (225). As we will see in section §5.4, the reduced relative environment is evidenced by the H tone on the class 1 subject marker *a*—which is *a* in non-dependent clause contexts (Chapter 4 Table 4.10)—in addition to the dependent clause form of the third-degree past tense marker *↓ná* (which is *ka* in main clause contexts; Dugast 1971; Mous 2003; Chapter 4 section §4.4.5). We therefore expect to see these indicators in the relative subject marker and TAM contexts for the SVáO construction, if it is a pseudocleft (i.e., the inverse of the reverse pseudocleft construction, where a reduced relative is followed by a copula and focussed object). However, when the SVáO construction is used, the subject marker and tense marker are in the main clause form (194b) and cannot be in the dependent clause form (194c). These data therefore suggest that the SVáO construction is not a biclausal pseudocleft and instead is grammaticalising into a monoclausal construction marking contrastive focus. Note also that the translations indicate that the SVáO construction gives a sense of exhaustivity. A similar idea of contrast was provided by another speaker, and so I gloss the *á* in the SVáO construction as CONTR for contrast (following Mous 1997, 2003), while *á* is elsewhere glossed as COP for copula.[12]

In summary then, we see that the VáO strategy discussed by Mous (1997, 2003) exists, with elicitation data providing evidence that it is at least in the process of becoming monoclausal and not simply a pseudocleft, as evidenced by the lack of relative SM and TAM forms. However, it is a low-frequency pattern that was not always judged as grammatical by consultants (193) and did not appear in the natural speech data at all, with a reverse pseudocleft a much more common construction for expression of contrastive focus on the object.

[12] In follow-up discussion of these examples, JO confirmed that both (194a) and (194b) can be felicitously continued with *, tátá á ɔnd͡ʒɛlé* ', not the lizard', supporting this idea of exhaustivity.

5.3.1.2 VO without *á*

While OV order is by far the most common word order pattern in Tunen, a few instances in my own and Dugast's (1971; 1975) data show VO order, with no *á* marker and no indication of biclausality. These instances are rare; VO was generally judged ungrammatical in elicitation, with only a few cases in which it was accepted. When checking a set of 10 natural speech texts containing approximately 400 utterances, only 4 potential VO constructions were found, but all of these can be excluded from being actual instances of VO syntax. 1 can be excluded due to being a case of secondary predication rather than a true DP object (195), 1 can be excluded due to being a case of hesitation (196), and 1 shows switching from Tunen to French (197).

(195) Context: EO and PM are discussing the funeral of a local figure called Papa Daniel.
bá sɛ .. mukót ... mba a ka **híána** munɛn.
/bá sɛ́á .. mɔ-kóto ... mba a ka **híána** mɔ-nəni/
SM.2 say .. 1-Bamileke ... but SM.1 PST3 become 1-Nen
'On dit que c'est un Bamileke, mais il est devenu un Munen.'
'They say he's a Bamileke, but he became a Munen.' [EO 1037]

(196) Context: PM is giving EO instructions for the QUIS map task.
PM: 'There is an intersection with three roads. On the first road-'
mɛ́ ndɔ **sinə** ... mɛnyama ɛ-káhɔ.
/mɛ ᴴndɔ **sinə** ... mɛ-nyama ɛ-kahɔ/
SM.1SG PRS see ... 9-animal 9-beef
'Je vois ... une vache.'
'I see ... a cow.' [EO 664]

(197) PM: 'I myself saw the first vehicle he bought, it was Inyas who drove (it) -'
EO: 'I (also) saw (it)'.
- a ka **tiləkə** « Dieu haït les méchants ».
/a ka **tilə-aka** Dieu hait les méchants/
SM.1 PST3 write-DUR God.FR hates.FR the.FR wicked_people.FR
'- Il avait écrit « Dieu haït les méchants ».'
'- He wrote "God hates the wicked".' [PM 1047]

The final example, given in (198), illustrates the occasional ambiguity in classifying a construction as VO. Here, the objet *tɔ́ándʒ͡ɛ* 'leaves' can be either taken to

be the complement of the verb in the first clause or a fronted topic in the second clause (with zero expression of the object in the first clause due to givennes, for which see section §5.3.3 and section §5.7). Although originally transcribed as VO, when asking JO remotely in follow-up work, she interpreted the object as a fronted topic, meaning that this utterance would also be OV.

(198) Context: JO is explaining how to make the dish *kok* [*hɛkɔkɛ* leaves boiled with smoked fish and ground peanuts].
Mɛ ka ákán(a) (ɔ) ɛmbɔ́m, mɛ ná hɛkɔkɛ kɛ́ták, mɛ ná nda híáná ɔ ɔmbɛ́l, mɛ ná **tábɔ́náka** tɔ́ándʒɛ tɔbíá mɛ **ombokok.** [...]

/mɛ	ka	ákáná	ɔ	ɛ-mbɔ́ma	mɛ	ná	hɛ-kɔkɛ	kɛ́táka		
SM.1SG	PST3	leave	PREP	7-bush	SM.1SG	PST2	19-kok	gather-DUR		
mɛ	ná	nda	híáná	ɔ	ɔ-mbɛ́la	mɛ	ná	**tábɔ́ná-aka**		
SM.1SG	PST2	VEN	enter	PREP	3-house	SM.1SG	PST2	arrange		
tɔ-ándʒɛ	tɔ-bíá	mɛ	**ombokoko**/							
13-leaf	13-bad	SM.1SG	throw.REP							

"Je suis partie en brousse, j'ai cueilli le *kok*, je suis revenue à la maison, j'ai arrangé les mauvaises feuilles, je les ai jété, [...]"
"I went to the bush, I gathered *kok*, I returned home, I arranged the bad leaves, I threw them out, [...]" [JO 1339]

However, VO constructions do sometimes show up, given that some examples are found in the Dugast texts. Mous (2003) notes that objects in such VO constructions are prosodically phrased with the verb, as evidenced by H tone spread. This is illustrated in (199), where I have added an underlying representation line and adapted the glosses to show that the H tone of *kemá* 'tap' spreads rightwards onto the underlyingly L-toned class 6 prefix *ma-*.[13]

(199) à-ná kèmáká m^{w}ə́lùk.

/a-ná	kemá-aka	ma-lukə/
SM.1-PST2	tap-DUR	6-palm.wine

'He tapped palm wine!' (Dugast 1971:58, Mous 2003:304, adapted)

At this stage, it is not clear whether there is a generalisation accounting for when these VO examples can appear and the extent to which this depends on IS.

[13] While such examples appear in Dugast's work, JO considered this sentence ungrammatical when asked in follow-up work.

Multiple other factors could play a role, including prosodic weight, predicates requiring extraposition, and postverbal modifier placement. Prosodic weight alone would not account for example (199) above, and we saw already in (162) above that prosodically heavy preverbal objects are possible. However, prosodic weight is a factor that could explain the discontinuous relative clauses modiyfing objects that we will see in section §5.3.2 below and in Chapter 7.

A second context in which VO order is found without *á* is with objects modified by certain modifiers, most commonly numerals. As will be seen in Chapter 7, the default order (i.e., the most common order, found across different information-structural contexts) for such objects is S-O-V-Mod, i.e., a discontinuous noun phrase. However, the object can also appear adjacent to the modifier, leading to the VO order S-V-O-Mod. The order S-O-Mod-V is dispreferred. For example, in the sub-DP focus context in (200) below in which the focus falls on the numeral modifier of the theme object, V-O-Num was allowed (200a) as well as the discontinuous order O-V-Num (200b), while the preverbal order S-O-Num-V was considered marginal (despite SOV being generally allowed and numerals always following the noun they modify (Dugast 1971; Mous 2003; Kerr 2020; Chapters 4-6). The availability of S-V-O-Num for narrow focus on the numeral is illustrated for another consultant in (201).

(200) Context: 'How many people do you see?' (+ picture)

a. mɛ́ ndɔ sinə **bɛndɔ báfandɛ.**
/mɛ ᴴndɔ sinə **bɛndɔ** **bá-fandɛ́**/
SM.1SG PRS see 2.person 2-two
'J'en vois [deux]$_{\text{FOC}}$.'
'I see [two]$_{\text{FOC}}$ people.' [JO 541]

b. mɛ́ ndɔ **bɛndɔ** sinə **báfandɛ.** [JO 542]

c. ?mɛ́ ndɔ **bɛndɔ** **báfandɛ́** sinə. [JO 543]

(201) Context: 'How many animals did he kill?'
a ná ɔnɔkɔ mɛnyama ímoti.
/a ná ɔnɔkɔ **mɛ-nyama** **ɛ́-mɔtɛ́**
SM.1 PST2 kill 3-animal 3-one
'Il en a tué [un]$_{\text{FOC}}$ (seul).'
'He killed [one]$_{\text{FOC}}$ animal.' [EO 1416]

The S-V-O-Num pattern was also provided for contexts other than narrow focus on the modifier, for example with term focus on the entire object (202) and as an

answer to a polar question (truth focus) (203b). While this VO order was judged grammatical, it is worthwhile noting that the discontinuous S-O-V-Num order was the first response (203a).

(202) Context: Max Planck scope image 1/77 + ex-situ object question '*yaté ɔ́ndɔ sin ?*' ('What do you see?')
mɛ́ ndɔ sinə **bɔlɛ́á bɔmɔ́tɛ**. bɔ́ báka na tunoní tuəŋ.
/mɛ ᴴndɔ sinə **bɔ-lɛ́á bɔ́-mɔté** bɔ́ bá-aka na tɔ-noní tɔ-əŋí/
SM.1SG PRS see 14-tree 14-one 14 be-DUR with 13-bird 13-many
'Je vois [un arbre]$_{\text{FOC}}$. Il a beaucoup d'oiseaux.'
'I see [a tree]$_{\text{FOC}}$. It has many birds.' [JO 1151]

(203) Context: 'Do you see two birds?' (+ hand-drawn picture stimulus)

a. ɛ́ɛ, mɛ́ ndɔ **tunoní** sinə **tɔ́fandɛ**.
/ɛ́ɛ mɛ ᴴndɔ **tɔ-noní** sinə **tɔ́-fandɛ́**/
yes SM.1SG PRS 13-bird see 13-two
'Oui, je vois deux oiseaux.'
'Yes, I see two birds.' [EO 1408]

b. ɛ́ɛ, mɛ́ ndɔ sinə **tunoní tɔ́fandɛ**.
/ɛ́ɛ mɛ ᴴndɔ sinə **tɔ-noní tɔ-fandɛ́** /
yes SM.1SG PRS see 13-bird 13-two
'Oui, je vois deux oiseaux.'
'Yes, I see two birds.' [EO 1409]

In general, V-O-Num examples are less common than a discontinuous order in which the object is preverbal while its modifier is postverbal, which I will discuss more in section §5.3.2 below. I suggest that the S-V-O-Num order is related to the postverbal position being the preferred position for certain quantifiers like numerals, together with the desire to preserve the contiguity of the noun phrase constituent, rather than being related to the information-structural status of the noun and/or modifier. The following example shows that the universal quantifier *-kimə* 'all' can also appear in this slot when in focus.

(204) Context: Someone mistakenly says that not all the children did their homework (knowing that some are more studious than others).

bɔ́ɔ, bá ná masɔ́ma kiak **bə́kim**.
/bɔ́ɔ bá ná ma-sɔ́ma kɛa-aka **bá-kimə**/
no SM.2 PST2 6-homework do-DUR 2-all
'Non, c'est [tous]$_{FOC}$ qui ont fait les devoirs.'
'No, [all]$_{FOC}$ of them did the homework.' [EE+EB 1824]

We therefore see that this VO order may be explained by the appearance of a quantifier element, rather than being conditioned by information-structural considerations. section §5.3.2 will cover such discontinuous nominals in further detail, reflecting the finding from Chapter 7 that the discontinuous modifier placement is, somewhat surprisingly, the pragmatically neutral word order.

A final context where VO is found without *á* is with focus-sensitive particles, as in the example below from Mous (1997) and as already seen in section §5.2 for objects modified by *ata* 'even' and *ə́maná* 'only.[14,15]

(205) mɛna nya ha m^{w}ənif.
SM.1SG.PST2 drink only 6.water
'I drank only water.' Mous (1997:125)

This VO order arises due to exhaustively focussed objects needing to move from the canonical position. Recall from section §5.2 that while such movement to the right is possible, movement to the left is a more common strategy. The availability of VO order here is expressed by Mous as needing to "mak[e] a statement about the relation of a particular object against other possible objects" (Mous 1997:127); he claims that the relation is not one of focus or new information but of contrast. I follow Chapter 2 and the other authors in Van der Wal (to appear) in calling such objects focussed objects of a more contrastive type than information focus (see e.g. Bianchi et al. 2015; Cruschina 2021). This requirement to be ex-situ extends across all contrastively focussed terms and is not specific to objects.

Finally, it is worth noting that in elicitation contexts, most speakers reject VO examples; VO examples are therefore quite low-frequency in my corpus. These constructions could therefore be better investigated through a larger-scale corpus study with more natural speech examples and controlling for independent factors such as prosodic weight. Given the prevalence of VO orders in Benue-Congo and the variation between OV and VO in other languages with OV word order, the lack of VO in Tunen is particularly interesting from a comparative and historical perspective.

[14] Glosses have been standardised; the transcription line is unaltered.

[15] This example was checked with JO; she accepts it, but rejects it if the focus-sensitive particle is omitted.

5.3.2 Discontinuity

As noted by Mous (1997, 2003), modifiers of theme objects — including numerals, quantifiers, and relative clauses — may appear in Tunen in a discontinuous position, separated from the object by the verb, resulting in the discontinuous S-O-V-Mod order. Crosslinguistically, discontinuity is a low frequency word order strategy that relates directly to IS: discontinuous noun phrases are used for focus on the modifier (see e.g. Louagie and Verstraete 2016), with a common pattern involving scrambling to a left-peripheral topic or focus phrase (Fanselow and Ćavar 2002). In Bantu, discontinuous noun phrases are very rare (Van de Velde 2022:909). In Tunen, however, discontinuous modifiers are found frequently, the modifier and object do not move to the left periphery, and they do not require narrow focus on the modifier. Instead, this word order appears to be pragmatically neutral: as I show in Chapter 7, it is possible with narrow focus on the postverbal modifier, with focus on the whole object, or even to introduce new discourse referents (as already observed in Isaac 2007). Note that this analysis of discontinuity as a pragmatically neutral order runs against the analysis of Mous (1997:133), who argues that discontinuous modifiers have "contrastive force" in Tunen, likening them to postverbal objects preceded by *á* or a focus-sensitive particle 'only'.[16]

Chapter 7 also reports that relative clauses modifying objects may be discontinuous from the object noun, appearing after the verb. I suggest that the variability in attachment of the relative clause may be related to independent factors such as prosodic weight and processing ease. As I am not aware of any influence of IS on this variation, I leave the topic aside for now (cf. Chapters 6-7).

5.3.3 Fronting

As noted in Mous (1997), another means in which Tunen word order may vary for information-structural reasons is by fronting a constituent, i.e., placing it at the beginning of the sentence. This will be discussed as a type of topic expression strategy in section §5.5. In focus contexts, most apparently fronted constituents are in fact clefted, although some examples are found without a copula or relative marking, as in (206) below. Recall as well that we saw in section §5.2 above that questions are formed by fronting or clefting.

[16]To be precise, Mous identifies the discontinuous position as the standard position for Tunen numerals and argues that numerals are inherently contrastive in that they are "selective" (Mous 1997).

(206) Context: 'How many children do you see?'
mɔná ɔmɔtɛ mɛ́ ndɔ sin.
/**mɔ-ná ɔ́-mɔtɛ́** mɛ ʰndɔ sinə/
1-child 1-one SM.1SG PRS see
'Je vois [un]$_{\text{FOC}}$ seul enfant.'
'I see [one]$_{\text{FOC}}$ child.' [DM 147]

In some cases, a focussed object may appear to be simply fronted, but further analysis shows evidence of an underlying cleft structure — specifically a reverse pseudocleft — which may be obscured by vowel elision or be ambiguous due to the noun class and tense marker. An example is in the object focus example in (207) below, where the H tone on the subject marker shows a dependent clause environment, with the copula *á* analysable as elided due to vowel elision (see section §5.4 on clefts for more detail).

(207) Context: 'What is the man holding in his hand?'
kalɔ́tɔ **á** ná itíə́ ɔ mɔkat.
/kalɔ́tɔ á-á ná itíə́ ɔ mɔ-kata/
9.carrot COP-SM.1.REL PST2 hold PREP 3-hand
'C'est [une carotte]$_{\text{FOC}}$ qu'il tient à la main.'
'He is holding [a carrot]$_{\text{FOC}}$ in his hand.' [JO 1630]

Such ex-situ focus constructions will be covered in more detail in section §5.4 below. Fronted topic phrases are covered in more detail in section §5.5 on topic expression.

While contrast at the sub-DP level (i.e., on a modifier of the noun) does not require any special marking and can be left in-situ, it can also be expressed by fronting. Example (208) shows unmarked contrast between adjectival modifiers, while (209) shows that contrastive focus at the sub-DP level can alternatively be expressed by fronting the modifier together with the non-contrasted noun. Such fronting is optional, as the noun phrase can be left in the canonical position, an instance of the canonical S-Aux-O-V-X word order (209b), or be discontinuous (209c).

(208) ɔ iNdíkiə **nioní nɛté↓té** nɛ-bɔkɔyiilə té, **nioní nɛŋɛ́ŋa** ɔ ninúmbə́ (té).

/ɔ iNdíkiə **nɛ-oní** **nɛ-té^{L}téá** nɛ-bɔkɔyiilə té **nɛ-oní**
PREP Ndiki 5-market 5-small 5-Wednesday every, 5-market
nɛ-ŋɛ́ŋa ɔ nɛ-númbə́ (té)/
5-big PREP 5-Saturday (every)

'À Ndiki il y a un petit marché chaque mercredi et un grand marché (chaque) samedi.'

'In Ndiki, there is a small market every Wednesday and a large market every Saturday.' [PM 193]

(209) a. bɔ́ɔ, **imítə́ mɛŋɛ́ŋa** mɛ ná índíə ɔ hɛlɔ́bat, tátá ɔ mɛ́té↓té.

/bɔ́ɔ **ɛ-mítə́** **mɛŋɛ́ŋa** mɛ ná índíə́ ɔ hɛ-lɔ́bátɔ
no 9-calabash 9.big SM.1SG PST2 give PREP 19-child
tátá ɔ mɛté^{L}téa/
NEG.COP PREP 9.small

'Non, c'est la [grande]$_{FOC}$ calebasse que j'ai donnée à l'enfant, pas la petite.'

'No, I gave the [big]$_{FOC}$ calabash to the child, not the small one.' [EE+EB 1832]

b. bɔ́ɔ, mɛ ná **imítə́ mɛŋɛ́ŋ** indiə ɔ hɛlɔ́bátɔ, (tátá ɔ mɛ́↓tétɛ́).

/bɔ́ɔ mɛ ná **ɛ-mítə́** **mɛŋɛ́ŋa** índíə́ ɔ hɛ-lɔ́bátɔ
no SM.1SG PST2 9-calabash 9.big give PREP 19-child
tátá ɔ mɛté$_{L}$téa/
NEG.COP PREP 9.small

'Non, j'ai donné la [grande]$_{FOC}$ calebasse à l'enfant, (pas la petite).'

'No, I gave the [big]$_{FOC}$ calabash to the child, (not the small one).' [EE+EB 1834]

c. bɔ́ɔ, mɛ ná **imítə́** indiə **mɛŋɛ́ŋ** ɔ hɛlɔ́bátɔ, (tátá ɔ mɛ́↓tétɛ́).

/bɔ́ɔ mɛ ná **ɛ-mítə́** índíə́ **mɛŋɛ́ŋa** ɔ hɛ-lɔ́bátɔ
no SM.1SG PST2 9-calabash give 9.big PREP 19-child
tátá ɔ mɛté^{L}téa/
NEG.COP PREP 9.small

'Non, j'ai donné la [grande]$_{FOC}$ calebasse à l'enfant, (pas la petite).'

'No, I gave the [big]$_{FOC}$ calabash to the child, (not the small one).' [EE+EB 1833]

Note here that the adjective cannot be fronted without the noun; the noun must be pied-piped. This means that term focus on the sub-DP level is marked in the same way as term focus scoping over the entire DP (cf. Chapter 2 Fig. 2.3).

5.3.4 The right periphery

As is common crosslinguistically, the right periphery is used for afterthoughts or repairs, as in the natural speech example in (210) below, where an alternative noun is added as a suggestion for the subject.

(210) Context: PM and EO perform the QUIS map task, where PM must give EO directions using a map with various objects drawn on it.
hɛkɔlɛ hɛ́ ka báká hə́ní u busí **káasɛ himondokóloŋ**.

/hɛ-kɔlɛ	hɛ́	ka	bá-aka	hə́ní	ɔ	busíə́	**káasɛ**
19-squirrel	SM.19	AND	be-DUR	DEM.DIST.LOC	PREP	front	maybe
hɛ-mondokóloŋo/							
19-mole							

'Là-bas il y a un écureuil, ou peut-être une taupe.'
'There's a squirrel there, or maybe a mole.' [PM 707]

Further investigation of fronting and the right periphery could be done on the basis of a larger text corpus; in my field data, neither strategy was very commonly found. Instead of fronting, focus is typically expressed by the canonical word order (for non-subjects; section §5.2, 5.3) or else by clefting (section §5.4 below).

5.3.5 Section summary

Although S-Aux-O-V-X is the canonical word order, we saw in this section that other word order patterns are found in Tunen. Objects may appear postverbally in certain contexts, often with a modifier or relative (although discontinuous structures are more common). In contrast to the presentation in Mous (1997, 2003), I argued that postverbal objects preceded by the marker *á* are uncommon, although they show evidence for monoclausality. Aside from clefts, fronting is another possible strategy for focus expression, although this strategy is less commonly used for foci. Fronting for topics will be covered further in section §5.5. Some modifiers are frequently discontinuous in Tunen; this is a pragmatically neutral word order pattern rather than a particular strategy for focussing the modifier, unlike what is found for other languages with (apparent) discontinuity in the nominal domain, and unusu-

ally for a Bantu language. Finally, the right periphery can be used for afterthoughts, as is common crosslinguistically.

5.4 Clefts and the marker *á*

We have seen already that Tunen can use clefts to express focus, which is a common strategy for question formation and found also with declaratives. This section discusses these cleft constructions and their interpretation. As clefts are composed of a copula, focussed NP, and a relative clause component (Harris and Campbell 1995), I begin by describing the form of copular clauses in Tunen, before looking into clefts specifically.

5.4.1 Copular clauses in Tunen

As discussed in Chapter 4 section §4.5.3, a common typology of copular clauses is to split them into four types: *identificational*, *predicational*, *specificational*, and *equative* copular clauses (see e.g. Higgins 1979; Mikkelsen 2011; Heycock 2012). In this section I show that Tunen does not differentiate between identificational and specificational copular clauses, and shows no evidence for equative copular clauses as a distinct class, and so the typology can be simplified as *predicational* vs *identificational/specificational* copular clauses.[17]

Firstly, consider predicational copular clauses, where a property is assigned to a referent. Predicational copular clauses in Tunen are formed with the copula *lɛa* 'be' or copula verb *bá*(*ka*) 'be' – which are generally interchangeable (Dugast 1971:347-50); Chapter 4 section §4.5.3 – as illustrated in (211) and (212) below for a non-locative (211) and locative use respectively.

(211) Context: 'Is the water clean for drinking?'
bɔ́ɔ, má lɛ́ **bá** mas.
/bɔ́ɔ má lɛ **bá** ma-ɛsɛ/
no SM.6 NEG **be** 6-good
'Non, ce n'est pas pure.'
'No, it isn't potable.', 'No, it isn't clean.' [JO 612]

[17] I refer to the second type as 'identificational/specificational' in order to remain agnostic as to whether the identificational or the specificational copular clause is the most basic or general type.

(212) Context: 'Where are you?'
mɛ **lɛ** ɔ nioní.
/mɛ **lɛa** ɔ nɛ-oní/
SM.1SG **be** PREP 5-market
'Je suis au marché.'
'I am at the market.' [PM 102]

Identificational copular clauses, on the other hand, are marked by *á* COP in Tunen. Example (213) below shows the use of *á* as the copula in a clause which identifies a referent.

(213) wɛ́ɛyɛ mɔndɔ wɛ́ɛyɛ ɔwá tɔ́ ↓ná siəkinə, **á** mutíkə wa bɔnɔŋɔ bɔ́ iNdikiníḿɛki(ə).
/wɛ́ɛyɛ mɔ-ndɔ wɛ́ɛyɛ ɔwá tɔ́ ˡná siəkinə **á** mɔ-tíkə
DEM.1 1-person DEM.1 REL.1 SM.1PL PST3.REL see.DUR COP 1-mayor
wa bɔ-nɔŋɔ bɔ́ iNdikiníḿɛkiə/
ASSOC.1 14-country ASSOC.14 Ndikiniméki
'Cet homme là que nous avons vu (hier), c'est le maire du Ndikiniméki.'
That man there that we saw (yesterday) is the mayor of Ndikiniméki.'
[PM 780]

Specificational copular clauses are defined as having the structure *A is B*, where A is typically non-referential and B is referential, and A is definite (Heycock 2012). These are also marked by *á* COP in Tunen (214).

(214) mɔná ɔwá á lɛ́á na ɛmanya tɔ́mbálánátɔ **á** Patiáns.
/mɔ-ná ɔwá á lɛ́á na ɛ-manya tɔ́mbálánátɔ **á**
1-child REL.1 SM.1.REL be with 7-knowledge be_more.PTCP COP
Patiánsɛ/
1.Patience
'L'enfant qui est le plus intelligent, c'est Patience.'
'The smartest child is Patience.' [JO 854]

The final type of copular clause proposed in the literature on copular clauses is equatives, where A is said to be identical to B (e.g. "The morning star is the evening star" in English). Whether or not equatives are truly a distinct class is subject to some debate (see e.g. Heycock 2012). When eliciting such examples in Tunen, consultants either rephrased the construction by using lexical verb (e.g. "A gives B") or

used a specificational copula with *á* COP. The only possible example of a true equative is in the story below, which can either be analysed as a fragment or an instance of *á* COP (if the personal pronoun *miaŋɔ́á* 'me' is taken to include *á*; cf. citealpdugast1971grammaire). There is therefore no convincing evidence to identify a separate equatives subclass of copulars in Tunen.

(215) Context: A shepherd lied/cried wolf that there was a panther. His concerned neighbours ran over...
bá ↓ná ka fam, a ná sanɛ́á ɔ tuɔn, asɛ́á : « **miaŋɔ́á mɛkɔ** ! ».
/bá ˡná ka fámá a ná sanɛ́á ɔ tɔ-ɔnɔ
SM.2 PST3.DEP AND arrive SM.1 PST2 burst.out PREP 13-laughter
a-sɛ́á **miaŋɔ́á** **mɛ-kɔ**/
SM.1-say PRN.EMPH.1SG 9-panther
'Quand ils sont arrivés, il a éclaté de rire, il a dit, « c'est moi la panthère ! »'
'When they arrived, he burst out laughing and said 'I'm the panther!'"
[JO 2033]

In summary, Tunen forms identificational/specificational clauses differently from predicational clauses, as shown in Table 5.2 below: predicational copulars use the copula verbs *lɛa* and *bá*(*ka*) 'to be', while identificational and specificational clauses use *á*.

Copular clause type	Copula element
Predicational	*-lɛa* / *-bá*(*ka*) 'to be'
Identificational/specificational	*á*

Table 5.2: Copular clauses in Tunen

The predicational copula *lɛa* and *bá*(*ka*) take a subject marker and are negated by a negative marker (as seen in (211)). In contrast to these copula forms, the identificational/specificational copula *á* is invariant[18] and has a negative form *tátá*, which is glossed as COP.NEG (216).

[18]There is some indication of a human/non-human distinction with a *ɔ́* variant used for non-personified non-human animates and inanimates; see Chapter 4 section §4.5.3.

(216) (bɔ́ɔ,) bɛ́fandɛ́ kɔndá bɛ́lálɔ́ **tátá** bɛ́lɛndálɔ.
/(bɔ́ɔ) bɛ́-fandɛ́ kɔndá bɛ́-lálɔ́ **tátá** bɛ́-lɛ́ndálɔ/
(no) 8-two add 8-three COP.NEG 8-six
'Non, deux plus trois ne font pas six.'
'No, two plus three doesn't equal six.' [PM 784]

Now we have seen that *á* COP is used for identificational/specificational copulars in Tunen, we can consider clefts, which I show contain *á* as a copular component, matching the common crosslinguistic pattern of identificational/specificational copular elements in clefts.

5.4.2 Relativisation

The next component of a cleft is a relative clause. Relative clauses are identified in Tunen by (i) a relativiser of form *ɔXá*, where the shape of X depends on the noun class of the head noun, (ii) H-tone on normally L-toned subject markers, and (iii) dependent-clause tense marking, as visible in the third-degree past tense (PST3) and in negative clauses. For example, the object relative example in (217) below shows the main clause third-degree past tense marker *ka* followed by the dependent third-degree past tense marker ↓*ná* in the relative clause, as well as high tone on the class 1 subject marker *á* in the relative clause, contrasting with the low-toned main clause first person singular subject marker *mɛ*.

(217) mɛ **ka** ámɛ yáyɛ́á ibəŋuluəkə yɛ́ búsíə́ siəkinə **ɔyɛ́á á** ↓**ná** ɔnd, [...]
/mɛ **ka** ámɛ yáyɛ́á ɛ-bəŋuluəkə yɛ́ búsíə́
SM.1SG PST3 PRN.1SG PRN.POSS.1.7 7-car ASSOC.7 14.front
siəkinə **ɔyɛ́á á** L**ná** ɔ́ndɔ/
see.DUR REL.7 SM.1.REL PST3.REL buy
'Moi j'avais vu le premier véhicule qu'il a acheté, [...]'
'I myself saw the first vehicle he bought,' [...] [PM 1045]

In Tunen clefts, relatives are reduced in the sense of lacking the *ɔXá* relativiser. While there is no overt relativiser and while non-human noun classes and many TAM contexts have identical marking to main clauses, marking of a relative clause can still be seen by H-tone on underlyingly L-toned subject markers and the use of dependent TAM markers in third-degree past tense and negative contexts. For example, the following example provides evidence for there being a reduced relative in a Tunen cleft, as the third-degree past tense marker must be the dependent

clause form ↓*ná* instead of the main clause affirmative form *ka*. This provides evidence for a relative clause environment despite the lack of an overt relativiser.

(218) ɔ́ yə́níə́ ikúílí á ɛmɔ́á yɛ́ {↓**ná**|***ka**} bɔmɔkɔ mɔŋɛŋa eé?

/ɔ	yə́níə́	ɛ-kúílí	á	ɛ-mɔ́á	yɛ́	{ˡná|*ka}	bɔmɔ-aka
PREP	which	7-time	COP	7-dog	SM.7	{PST3.REL|*PST3}	bark-DUR

mɔŋɛ́ŋa eé/
much Q

'A quel moment le chien a-t-il beaucoup aboyé ?'
'When did the dog bark a lot?' [PM, 1255-6]

As non-human noun classes have H-toned subject markers in both dependent and main clauses, and as there is only a visible difference in tense marking in affirmatives in the third-degree past tense, many examples of clefts with *á* are in fact ambiguous between the biclausal or monoclausal analysis. There is likely a change in progress between the biclausal and monoclausal structures, as discussed for different languages in Harris and Campbell (1995). As the Tunen *á* marker is likely in the process of grammaticalising to being a focus marker in a monoclausal construction, the most accurate gloss is debatable. While the presence of *á* may be obscured due to vowel elision, my consultants indicated that there was a *á* underlying even if it was elided on the surface, and therefore I maintain the copular analysis of *á* in the glossing in this chapter and gloss it as COP. I turn now to the different cleft constructions found in Tunen.

5.4.3 Clefts

Clefts are obligatory in Tunen for subject focus (which cannot be focussed in-situ) and are used across all grammatical roles for exhaustive focus. In this section we will see that there are two main forms of cleft in Tunen, a basic cleft (used for subject focus) and a reverse pseudocleft (used for non-subject focus). I argued in section §5.3.1 above that the V*á*O construction that resembles a pseudocleft instead shows monoclausal properties, and therefore do not include it here.

5.4.3.1 Basic cleft

Human animate subjects must be focused with a basic cleft construction, as shown in the schematisation in (219) below.[19]

[19] At this point, it is unclear whether the primary conditioning factor for the use of a basic cleft is subjecthood or humanness, given that most examples in the data of subjects are either human or

(219) **Basic cleft:**
á + NP_{FOC} + reduced relative

Example (220) below shows the use of the basic cleft to express subject focus. The identificational/specificational copula *á* is used, followed by the focussed noun phrase *Píél* 'Pierre' and then a reduced relative. The reduced relative clause environment is recognisable due to the high tone on the class 1 subject marker *á*, which is low in main clause environments. Clefting the subject is obligatory in this context; leaving the subject in situ is not felicitous (though would be grammatical in a thetic context)[20] (220b).

(220) Context: 'Who shut the door?'

a. **á** Píél **á** ná nikí kwiyí.
/**á** Píélɛ **á** ná nɛ-kí kwiyíə/
COP 1.Pierre SM.1.REL PST2 5-door shut
'C'est [Pierre]$_{FOC}$ qui a fermé la porte.'
'[Pierre]$_{FOC}$ shut the door.' [EO 273]

b. #Píél a ná nikí kwiyí.
/Píélɛ a ná nɛ-kí kwiyíə/
1.Pierre SM.1 PST2 5-door shut
Intd.: '[Pierre]$_{FOC}$ a fermé la porte.'
Intd.: '[Pierre]$_{FOC}$ shut the door.' [EO 277]

Note that fragment answers also require the *á* for subject focus (221), suggesting that they are elided from an underlying cleft structure.

(221) Context: 'Which politician died?'
***(á)** Píɛlə (á ná wə).
á Piɛlə á ná wə́.
COP Pierre SM.1.REL PST2 die
'C'était [Pierre]$_{FOC}$ (qui est mort).'
'It was [Pierre]$_{FOC}$ (who died).' [EO 270-1]

---

personified animals. The discussion in this chapter should therefore be taken to apply to the prototypical human subject, with the potential role of animacy on cleft structure a question for further research.

[20] The original fieldnotes for this form kept the H tone on the class 1 subject marker; based on other examples, I report the judgement with the subject marker appearing as in a thetic context.

As we will see for other arguments below, focussed XPs in clefts are typically said to have an exhaustive interpretation. This is illustrated for subject focus below with the continuation 'not another' in (222) and the confirmation from the speakers of (223) that nobody else could have eaten the rice.[21]

(222) miaŋɔ́á á mɛ ná nikí kwiyí, tátá mɔnə́munə́.
/miaŋɔ́á á mɛ́ ná nɛ-ki kwiyí, tátá
PRN.EMPH.1SG COP SM.1SG.REL PST2 5-door shut NEG.COP
mɔ-nə́munə́/
1-another
'C'est [moi]$_{FOC}$ qui a fermé la porte, ce n'est pas un autre.'
'It was [me]$_{FOC}$ who shut the door, not someone else.' [EO 274]

(223) á Samuɛ́lɛ a ná ɔlɛ́sa nɛak.
/á Samuɛ́lɛ á ná ɔ-lɛ́sa nɛ́á-aka/
COP 1.Samuel SM.1.REL PST2 3-rice eat-DUR
'C'est [Samuel]$_{FOC}$ qui a mangé du riz.' (pas quelqu'un d'autre)
'[Samuel]$_{FOC}$ ate rice.' (it wasn't somebody else) [EE + EB 1661]

That being said, the question arises as to how non-exhaustive focus is expressed for subjects in Tunen. One piece of data suggesting that clefted subjects are not neccesarily exhaustive is (224), where the marker *á* appears after the exclusive particle *ata* 'even' modifying Nancy, in a context where Mary also has a bottle of water.

(224) Context: 'Does Maria have a bottle of water?' (+ BaSIS photo stimulus)
ɛ́ɛ Maliá a báka na məndíŋgə wɔ́ mə́nif, **ata *(á)** Nansí {**tɔ́na**} abáka {**tɔ́na**} na məndíŋgə wɔ́ mə́nif.
/ɛ́ɛ Maliá a bá-aka na mu-ndíŋgə wɔ́ ma-nífə́ **atá** **á**
yes 1.Maria SM.1 be-DUR with 3-bottle ASSOC.3 6-water even FOC
Nansí **tɔ́na** a-bá-aka **tɔ́na** na mu-ndíŋgə wɔ́ ma-nífə́/
1.Nancy also SM.1-be-DUR also with 3-bottle ASSOC.3 6-water
'Oui, Maria a une bouteille d'eau, Nancy a une bouteille d'eau aussi.'
'Yes, Maria has a bottle of water, Nancy also has a bottle of water.' [JO 2347]

[21]Note that the subject marker in (223) and in a few other examples in this chapter is low-toned, while we would expect a high tone in a relative clause environment. Such low tones could either be indication of the development from a biclausal to a monoclausal structure, or be related to a methodological issue of repeating transcriptions word-for-word, in which case consultants may have simply used the low-toned citation form of the subject marker when repeating the utterance, despite pronouncing it as a high in this context in fluent speech.

It therefore seems that exhaustivity is compatible with a cleft structure and is often understood pragmatically, but strictly speaking the basic cleft is not exhaustive, as it can be used in non-exhaustive contexts such as (224).

5.4.3.2 Reverse pseudo-clefts

Non-subjects can be focused with a reverse pseudo-cleft construction, which takes the form schematised in (225).

(225) **Reverse pseudo-cleft**
NP_{FOC} + *á* + reduced relative

This is illustrated below for information focus (226), (227) and corrective focus (228) on the theme object.

(226) Context: 'What is the man holding in his hand?'
kalɔtɔ á mɔndɔ a ná itíə́ ɔ mɔkata
/**kalɔtɔ á** mɔ-ndɔ a ná itíə́ ɔ mɔ-kata/
9.carrot COP 1-person hold SM.1 PST2 PREP 3-hand
'C'est [une carotte]$_{FOC}$ que l'homme tient dans sa main.'
'The man is holding [a carrot]$_{FOC}$ in his hand.', '[A carrot]$_{FOC}$ is what the man is holding.' [JO 1624]

(227) Context: 'What will you cook today?'
mɔkɔndʒ͡ɛ na mɛkɔnɛ́fɛ́ á mɛ́ ndɔ talɛak.
/**mɔkɔndʒ͡ɛ na mɛkɔnɛ́fɛ́ á** mɛ́ ᴴndɔ talɛa-aka/
6.plantain with 6.pork COP SM.1SG.REL PRS cook-DUR
'C'est [des plantains et du porc]$_{FOC}$ que je vais cuisiner (aujourd'hui).'
'I will cook [plantains and pork]$_{FOC}$ today.', 'Plantains and pork are what I will cook today.' [PM 1512 (+ JO 1602)]

(228) bɔ́ɔ, **mɔkɔndʒ͡ɛ na mɛkɔnéfɛ á** mé ndɔ talɛaka nɛɔfén.
/bɔɔ **mɔkɔndʒ͡ɛ na mɛkɔnéfɛ́ á** mɛ ᴴndɔ talɛa-aka nɛɔfénɛ/
no 6.plantain with 6.pork COP SM.1SG PRS cook-DUR today
'Non, c'est [les plantains et le porc]$_{\text{FOC}}$ que je vais préparer aujourd'hui.' (pas d'autres choses)
'No, I will cook [plantains and pork]$_{\text{FOC}}$ today.', 'No, plantains and pork are what I will cook today'. (and nothing else) [PM 1516]

As the translation of (228) indicates, using a cleft construction suggests an exhaustive interpretation of the nominal, and is therefore more contrastive than the in-situ focus strategy. At this point, we may ask whether the same pattern is found as for subject clefts above, where compatibility with *ata* 'even' indicates that the cleft is not inherently exhaustive. We find that human objects modified by *ata* 'even' can appear in a cleft, although of a basic cleft structure (229a), while non-human objects modified by *ata* do not take *á* (229b), possibly due to difference in animacy.

(229) a. **ata** *(**á**) Natanyɛ́lɛ mɛ ná siəkin.
/**ata á** Natanyɛ́lɛ mɛ ná siəkinə/
even COP 1.Nathaniel SM.1SG PST2 see.APPL
J'ai vu même [Nathaniel]$_{\text{FOC}}$.'
'I even saw [Nathaniel]$_{\text{FOC}}$.' [PM 2276]

b. **ata (*á)** bɛtafɛna Lídia a ná sɔ́ák.
/**ata (*á)** bɛ-tafɛna Lídia a ná sɔ́á-aka/
even COP 8-shoe 1.Lydia SM.1 PST2 wash-DUR
'Lydia a lavé même [des chaussures]$_{\text{FOC}}$.'
'Lydia even washed [the shoes]$_{\text{FOC}}$.' [PM 2268]

Again then, it seems that the cleft constructions are not inherently exhaustive, although consultants generally interpret them as exhaustive and they are compatible with the exhaustive focus-sensitive particle *ɔ́maná* 'only', as seen already in (171), (188).

Reverse pseudo-clefts are not possible for subject focus, showing a subject/non-subject asymmetry (although recall the point made in fn18-19 above about animacy or humanness as a potential alternative factor):

(230) Context: 'Who shut the door?'
*Píɛ́l á á ná nikí kwiyí.
/Piɛlə á á ná nɛ-kí kwiyí/
Pierre COP SM.1.REL PST2 5-door shut
Intd.: 'C'est [Pierre]$_{FOC}$ qui a fermé la porte.'
Intd.: 'It was Pierre who shut the door.' [EO 276]

However, a reverse pseudocleft rather was found for sub-DP focus on the modifier of a subject (231).

(231) Q. bɛndɔ bá↓nɛ́á á ↓bá ná binək?
/bɛndɔ bá-nɛ́á á bá ná binə-aka/
2.person 2-how.many COP SM.2 PST2 dance-DUR
'Combien de personnes ont dansé ?'
'How many people danced?' [PM 1211]

A. bɛndɔ bálálɔ́ á bá ná binək.
/bɛndɔ bá-lálɔ́ á bá ná binə-aka/
2.person 2-three COP SM.2 PST2 dance-DUR
'[Trois]$_{FOC}$ personnes ont dansé.'
'[Three]$_{FOC}$ people danced.' [PM 1214]

Non-arguments pattern with objects in being found without *á* preceding the focused XP in fragments, with the full version in the form of a reverse pseudocleft (232) (see also (234)).

(232) Context: 'Because he went to die in his home village, they went there to get the body;'
nɛɔfɛ́nɛ á bá ná nda faman.
/**nɛɔfɛ́nɛ á** bá ná nda famana/
today COP SM.2 PST2 PROX arrive.APPL
'C'est [aujourd'hui]$_{FOC}$ qu'on est arrivé avec.'
'It's [today]$_{FOC}$ that they arrived with it.' [PM 1012]

Non-subject fragments are found without *á* (233), (234), thus differing from subject fragments. The focussed noun phrase cannot be preceded by *á* (233b), contrasting with what we saw for subject fragments. The marker *á* also cannot follow the focussed XP (233c). This suggests that the *á* is the copula part of what in non-elided form is a cleft (rather than acting as a grammaticalised focus marker).

(233) Context: 'What is the man holding?'

a. kalɔ́t.
/kalɔ́tɔ/
9.carrot
'[Une carotte]$_{\text{FOC}}$.'
'[A carrot]$_{\text{FOC}}$.' [PM 1266]

b. *á kalɔ́t.
/á kalɔ́tɔ/
COP 9.carrot
Intd.: 'Une carotte.'
Intd.: 'A carrot.' [PM 1267]

c. *kalɔ́t á.
/kalɔ́tɔ á/
9.carrot COP
Intd.: '[Une carotte]$_{\text{FOC}}$.'
Intd.: '[A carrot]$_{\text{FOC}}$.' [PM 1268]

(234) Context: 'Where are the beans?'
ɔ hisíní núúmə (**á** bilikó bɛ́ lɛ́á)
/ɔ hɛ-síni núumə (**á** bɛ-liko bɛ́ lɛ́á)/
PREP 19-casserole inside COP 8-bean SM.8 be
'C'est [dans la cassérole]$_{\text{FOC}}$ qu'il y a des haricots.'
'The beans are [in the pot]$_{\text{FOC}}$ (and nowhere else).' [PM 477]

Again, the translation of example (234) suggests that reverse pseudoclefted non-arguments are typically interpreted as exhaustive.

Finally, in corrective focus contexts, which are argued to be more contrastive types of foci (see e.g. Cruschina 2021; Chapter 2), ex-situ clefting can be used, as seen already in (222) and as further illustrated in (235).

(235) Context: Someone says incorrectly that you speak Tunen.
bɔ́ɔ, fɛlɛ́ndʒ **á** mɛ́ nd(ɔ) ɔ́k.
/bɔ́ɔ, fɛlɛ́ndʒɛ **á** mɛ́ ᴴndɔ ɔ́kɔ/
no French COP SM.1SG.REL PRS understand
'Non, c'est [le français]$_{\text{FOC}}$ que je comprends.'
'No, it's [French]$_{\text{FOC}}$ that I understand.' [PM 93, 94]

We therefore see that clefts can be used for more contrastive focus contexts than information focus, but the canonical word order is still possible for the expression of corrective/contrastive non-subject focus.

Alternatives can be marked explicitly by means of the particle *ɔbanɔ* 'rather' and/or by directly naming the incorrect argument.

(236) bɔ́ɔ, tátá mɔndɔ ɔwá ɛŋɔŋɔ á ná wə, á Acteur {**ɔban**} a ná wə {**ɔban**}.
/bɔ́ɔ tátá mɔ-ndɔ ɔwá ɛ-ŋɔŋɔ á ná wə́ á
no NEG.COP 1-person REL.1 7-politics SM.1.REL PST2 die COP
Acteur {**ɔbanɔ**} á ná wə́ {**ɔbanɔ**}/
1.Acteur rather SM.1.REL PST2 die rather
'Non, ce n'est pas le politicien qui est mort, c'est plutôt Acteur.'
'No, it wasn't a politician who died, it was actually Acteur.' [EE+GE+PB 2716]

(237) mɛ́ ndɔ Fɛlɛ́ndʒ(ɛ) ɔ́k, **mba tátá *(á)** Túnən.
/mɛ ᴴndɔ fɛlɛ́ndʒɛ ɔ́kɔ, **mba tátá *(á)** tunəni/
SM.1SG PRS French understand, but NEG.COP *(FOC) Tunen
'Je comprends le français, mais pas le tunen.'
'I understand French, but not Tunen.' [PM 92]

(238) Context: 'Lots of animals passed on the bridge.'
bɔ́ɔ, **tátá** mɛnyama, á yɛ́ ná tɔmbak, (**mba**) bibəŋuluəkə.
/bɔɔ tata mɛnyama á yɛ́ na tɔmba-aka mba
no NEG.COP animal COP SM.7.REL PST2 pass-DUR but
bɛ-bəŋuluəkə/
8-vehicle
'Non, ce n'est pas des animaux qui sont passés, ce sont des véhicules.'
'No, it wasn't animals that passed, it was vehicles.' [PM 1579]

5.4.4 Section summary

In summary, there are two types of cleft construction available for focus expression in Tunen, the basic cleft (*á* NP Rel) and the reverse pseudocleft (NP *á* Rel). Both constructions show indications of biclausality through the presence of a focussed phrase, a copula, and a reduced relative clause, the latter being identifiable through relative clause subject marker and TAM forms. These cleft constructions

are used for more contrastive foci types and are generally interpreted as exhaustive, but appear to not be inherently exhaustive, as they are compatible with the exclusive focus marker *ata* 'even'. Interestingly, no pseudocleft strategy was found, with the V*á*O construction shown in section 3.1.1 above to have monoclausal properties, likely due to grammaticalisation from an earlier biclausal cleft construction. Complexities related to identification of clefts are the ambiguity of many subject marker and TAM contexts with respect to main clause versus relative clause marking and the regular vowel elision rule in Tunen, which may lead to elision of the *á* copula.

5.5 Left-peripheral topics (ø, ɔ, *aba/áká*)

As is common crosslinguistically (see e.g. Gundel 1988), Tunen topical constituents can appear in a left-peripheral position. In these cases, there are three strategies for topic expression: (i) zero-marking (i.e., fronting the topic without morphological marking), (ii) marking by the preposition ɔ, and (iii) marking by *aba*/*áká*, which elsewhere function as the conditional marker 'if'. This section will go through each strategy in turn. Note that while left-peripheral topics is one common strategy for expressing topics, topics may also be left in-situ and do not need to be fronted. These in-situ topics do not appear with any topic marking.

5.5.1 Zero-marking

A topical constituent can be fronted without any marking, as shown in (239) and (240) below for an aboutness topic.

(239) **kíŋgə,** a ka nyɔkɔ naánɛkɔl.
/**kíŋgə** a ka nyɔ-aka naánɛkɔla/
1.chief SM.1 PST3 work-DUR yesterday
'Le chef, il a travaillé hier.'
'The chief, he worked yesterday.' [JO 2625]

(240) **Nɔ́a,** yɛ́ ndɔ kɛa ɔwá á ndɔ náá.
/**Nɔa** yɛ́ ʰndɔ kɛ́á ɔwá a ʰndɔ náá/
Noah SM.7 PRES do REL.1 SM.1 PRS be_sick
'Quant à Noah, il semble qu'il est malade.'
'As for Noah, it seems that he is sick.' [JO 1306]

When objects are topicalised and prosodically separated from the main clause by a pause, resumption in the main clause is not required, as shown by the lack of object indexation in (241). The ability for zero indexation of objects will be covered in more detail in section §5.7 below.

(241) **miímə,** mɔndɔ á ˩ná katák.
/**miímə** mɔ-ndɔ á ˩ná katá-aka/
3.house 1-person SM.1.REL PST3.REL destroy-DUR
'La maison, c'est quelqu'un qui l'a détruite.'
'The house, it's somebody who destroyed it.' [EB+JO 2692]

It is often unclear as to whether a topical subject is fronted or left in-situ, as the canonical position of subjects is sentence-initial (S-Aux-O-V-X), which is linearly equivalent to the position they appear in if fronted to a left-peripheral position. For example, in (242) below, the referent of peanuts is a topic in that it is visibly present and has been previously mentioned in the discourse, and serves as the topic to which the comment of having cooled applies, but the word order is the same as what we saw for thetics in (162) above.

(242) Context: JO has shown how to dry peanuts in order to prepare the *kok* dish.
tɔmbaŋa tú nú huhək.
/**tɔ-mbaŋa** tɔ́ ná huhə-aka/
13-peanut SM.13 PST2 cool-DUR
'Les arachides se sont refroidies.'
'The peanuts have cooled.' [JO 1358]

When studying the Dugast (1975) texts, it can be seen that topical subjects are frequently transcribed as ending with a glottal stop ʔ, which reflects a prosodic break and therefore can be taken as evidence for a left-dislocated topic (as pointed out in Isaac 2007:59). An example is given in (243) below (I have adapted glosses for consistency). The Dugast data differ systematically from my own field data in not having subject indexation of non-dislocated topics, i.e., in lacking a subject marker when the topic is not dislocated.[22]

[22] As no recordings are available for Dugast's data, dislocation is only evidenced by her ʔ notation, and commas, when they are used. Isaac (2007) considers the lack of subject marker to be evidence for a non-dislocated topic, but this argument is used somewhat circularly in the absence of any indication of prosody in Dugast's transcriptions. As all my consultants consistently use subject markers

(243) **wəbúə** **mon** **òwá** **ba** **na-ba** **ba** **ndò-hikiəʔ**, à nə̄-wə
PRN.POSS.2.1 1.child REL.1 SM.2 PST2-be SM.2 PRS-like SM.1 PST2-die
ton.
also
'et leur enfant, celui qu'ils aimaient, mourut aussi.'
'Their child that they liked, he died also.'
(Dugast 1975:394-395; Isaac 2007:165)

Turning now to obliques, while the neutral word order in Tunen is S-Aux-O-V-X, where X stands for other elements, including time adverbials and prepositional phrases, such items can also be fronted when they function as scene-setting topics, where the topical constituent is thus not an argument of the verb (Lambrecht 1994). This is often found for time adverbials in natural speech. Compare the elicited example with S-Aux-O-V-X order in (244) below and the natural speech example with a fronted time adverbial in (245).

(244) mɛ́ ndɔ Biɛ́lə sin **isiŋak**.
/mɛ ᴴndɔ Biɛ́lɛ sinə **ɛsɛ́áŋáka**/
SM.1SG PRS 1.Pierre see now
'Je vois Pierre maintenant.'
'I see Pierre now.' [EO 1412]

(245) Context: Instructional video where JO is demonstrating how to cook the dish *kok* [*hɛkɔkɛ* leaves boiled with smoked fish and ground peanuts].
ɛsɛ́áŋáka mɛ́ hɛkɔkɛ sɔ́áka.
/**ɛsɛ́áŋáka** mɛ =ᴴ hɛ-kɔkɛ sɔ́á-aka/
now SM.1SG PROC 19-kok wash-DUR
'Maintenant, je lave le *kok*.'
'Now, I wash the *kok*.' [JO 1343]

The following examples show fronted time adverbials or PPs indicating a switch between events (246) and to set the scene at the beginning of a story (247).

regardless of whether the topic is dislocated, there appears to have been a syntactic change in the time since Dugast with regards to the relation of clause-external topics and subject indexation. I will come back to this in Chapter 8 section §8.4.2 in the context of drawing up an analysis of Tunen subjects.

(246) Context: 'The hawk waited and waited and waited, but he didn't see the cockroach, and his child died.'
hilóbi hɛ́ ná wɛ́ɛya iti, **isíŋáka** ɔndʒ͡ɛlɛ́ a n(á) ákan asɛ : [...]
/hɛ-lóbi hɛ́ ná wɛ́ɛya itíə́ **ɛsɛ́áŋáka** ɔ-ndʒ͡ɛlɛ́ a ná
19-anger SM.19 PST2 PRN.EMPH.1 hold **now** 3-lizard SM.1 PST2
akána a-sɛ́á [...]/
leave SM.1-say [...]
'Il s'est mis en colère, maintenant le lézard est parti, il dit : [...]'
'He became enraged, and now the lizard came by, and said: [...]' [JO 2063]

(247) Context: Start of the story *The Chicken and the Partridge*.
ɔ hítɛ́↓yí hiɔŋɔ, məhuə má sa bá mas.
/ɔ **hítɛ́ˡyí** **hɛ-ɔŋɔ** ma-huə ma sa bá ma-ɛsɛ/
PREP DEM.DISC.EMPH.19 19-year 6-harvest SM.6 NEG be 6-good
'Cette année, la récolte n'était pas bonne.'
'This year, the harvest wasn't good.' [JO 1744]

Example (247) is zero-marking in the sense of having no additional morphological/phonological marking compared to the form in the canonical word order, although it shares the property of being introduced by the preposition ɔ as the examples to be discussed in the next subsection.

5.5.2 ɔ

Fronted topics are often marked by the general preposition ɔ PREP (Chapter 4 section §4.3.10). The following example comes from a dialogue task based on asking each other questions about their preferences. EO first fronts the time adverbial *isiŋíáka* 'now' to shift the topic from the previous question and then introduces the topic of food by using the preposition ɔ (248).

For the next example (249), the speaker said the ɔ preposition was good in the discourse context in which the food has already been mentioned and that omitting it would mean that it has not been mentioned, suggesting that the preposition marks an aboutness topic.

(248) isiŋíáka, **ɔ bɛlábɔ́néá ɔné**, áká mɛsɛa mɛ́ aŋɔ́á élɛ́ákén, yaté ɛbáka ɔ aŋɔ́á hikəki, makɔndʒ̍ɛ alɛ́(á) kón ?

/ɛsɛ́áŋáka,	**ɔ**	**bɛ-lábɔ́néá**	**ɔ-né**	áká	mɛ-sɛ́á	mɛ́	
now	PREP	8-food	INF-eat	if	SM.1SG-say	SM.1SG.COND	
aŋɔ́á	élɛ́ákɛ́na	yaté	ɛ-bá-aka	ɔ	aŋɔ́á	hikəkiə	
PRN.2SG	invite	what	SM.7-be-DUR	SM.2SG	PRN.2SG	like	
ma-kɔndʒ̍ɛ	alɛ́á	kóni/					
6-plantain	or_rather	rice					

'Maintenant, à propos de la nourriture, si je veux t'inviter, qu'est-ce que tu aimerais, les plantains ou bien le riz ?'
'Now, with regards to food, if I were to invite you round, what would you like, plantains or rice?' [EO 966]

(249) Context: 'Why did they cook this food here?'
#(ɔ) bɛ́ɛ(bɛ) bɛlábɔ́néá bɛ́ɛbɛ, bá ná talɛ́áká ɛlɔ́áyɛ́ ɛŋganda yɛ Básɛka.

/#(ɔ)	**bɛ́ɛ(bɛ)**	**bɛ-lábɔ́néá**	**bɛ́ɛbɛ**	bá	ná	talɛ́á-aka	ɛlɔ́áyɛ́	
PREP	DEM.PROX.8	8-food	DEM.PROX.8	SM.2	PST2	cook-DUR	for	
ɛ-ŋganda	yɛ	básɛka/						
9-holiday	ASSOC.9	Easter						

'(Quant à cette nourriture-ci,) ils l'ont préparée pour la fête de Pâcques.'
'(As for this food here,) they cooked it for Easter.' [PM 508]

5.5.3 *aba/áká*

A limited number of examples had *ábá* or *áka* as a marker preceding a left-peripheral aboutness/shift topic, which function elsewhere as the conditional marker 'if' and the related temporal marker 'when' (Dugast 1971:211-2).[23] In the elicited example below, JO first gave the answer with *ábá*, and then rejected the same sentence with ɔ in place of *ábá*.

(250) {**ábá**|***ɔ**} ɛŋganda yɛ buwə́, yɛ́ sá bá yɛs.

/{ábá|*ɔ}	ɛ-ŋganda	yɛ	bu-wə́	yɛ	sá	bá	yɛ-ɛsɛ/
{if|*PREP}	9-celebration	ASSOC.9	14-death	SM.9	NEG	be	9-good

'Quant à la fête de deuil, elle n'était pas bonne.'
'As for the funeral, it was not good.' [JO 1648-9]

[23]Note also *ébɛ* 'si, dans le cas où' ['if, in the case where'], which Dugast (1971:213) lists as an alternative for *ába* (although she does not discuss whether it can be used in the same topic-marking function).

Directly after the above elicitation in the same session, JO first accepted the following sentence with *ɔ* alone and then suggested it with *ábá* preceding *ɔ*, thus combining the two strategies (251). At this point, the data are insufficient to be able to account for why both variants were accepted for (251) but not for (250).

(251) {ɔ|**ábá**} béɛbɛ bɛlabɛ́né bá ná talɛ́áká ɛlɔ́áyɛ́ ɛŋganda yɛ básɛk.
/{ɔ|**ábá**} béɛbɛ bɛ-labɛ́néá bá ná talɛ́á-aka ɛlɔ́áyɛ́
PREP DEM.PROX.8 8-food SM.2 PST2 cook-DUR for
ɛ-ŋganda yɛ Básɛka/
9-celebration ASSOC.9 Easter
'Quant à cette nourriture, on l'a preparée pour la fête de Pâques.' / 'Si c'est pour cette nourriture, on l'a preparé pour la fête de Pâques.'
'As for this food, they cooked it for Easter.' [JO 1650-1]

The use of a conditional marker for topics was also found in natural dialogue by other speakers. In the first example below, the marker *áká*, another form for 'if' (Dugast 1971:212),[24] is first used before the speaker restarts using the prepositional strategy. In the second example, the speaker uses *ábá* 'if' with a prosodic break before the nominal (resulting in lowering of the final H tone via the utterance-final tone reduction; Chapter 4 section §4.2.7).

(252) Context: EE describes how the harvests differed between crops cultivated by women and crops cultivated by men.
Ák(á) ɛlɔ́áyɛ́ ɔ … ɔ … ɔtɔ́mbákɛna ɔ bɛ … bɛlɔŋɔté bé balémɛndɔ́, bé sá áyɛ́ wúu(wu) ɔyáá háá;
/áká ɛlɔ́áyɛ́ ɔ ɔ ɔ-tɔ́mbá-aka-ɛna ɔ bɛ bɛ-lɔŋɔté
if for PREP PREP INF-pass-DUR-REP PREP 8 8-production
bé ba-lémɛndɔ́ bé sá áyɛ́ wúuwu ɔyáá
ASSOC.8 2-man SM.8 NEG PRN.1 DEM.PROX.? ?
háaha/
DEM.PROX.LOC
'Si on parle des… des… des cultures des hommes, il n'y a pas eu de la production cette fois-ci.'
'If it's for... for... as for the... the mens' crops, there wasn't the production this time round.' [EE 1700]

[24] Dugast (1971:212, 318) transcribes what appears to be the same marker as *ékɛ*, translated as 'si, quand' ['if, when'].

(253) Context: PB and PM are discussing how they were impacted by the heavy rains that morning.
ába, ɔwámɛ yɛ́ ná ká sɔ́álátákɛn.
/ábá ɔ-ámɛ yɛ́ ná ka sɔ́álátákɛna/
if PREP-PRN.1 SM.7 PST2 AND whip.DUR.REP
'C'est moi que ça a fouetté.'
'It's me who got whipped by it.' [PM 1784]

Compare these topical examples to the conditional example in (254) below, where *ábá* marks the conditional protasis.

(254) **ábá** Yɔhánasɛ a ná ɛsasɔma nɛ́ák, á ndɔ náák.
/**ábá** Yɔhánɛsɛ a ná ɛ-sasɔma nɛ́á-aka a ᴴndɔ náá-aka/
if 1.Johannes SM.1 PST2 7-cassava eat-DUR SM.1 PRS be_sick-DUR
'Si Johannes va manger du manioc, il va tomber malade.'
'If Johannes eats cassava, he will get sick.' [PM 2288]

This use of the same strategy to mark conditionals and topics has been found in many signed and spoken languages (Haiman 1978; Traugott 1985; Janzen 1999, i.a.) with Haiman (1978) arguing that there is an inherent link between conditionality and topicality. Traugott (1985:292) notes that markers of givenness are one of five sources of conditional markers crosslinguistically, with examples including Sanskrit *yád* 'topic, conditional' and Indonesian *kalua* 'if, as for'. This analysis would suggest that the topic marker use in Tunen predates the use as a conditional marker. I leave this for further research and retain the gloss 'if' in this chapter without committing to 'if' as the basic or original meaning.

5.5.4 Multiple topics

Multiple topic expressions can appear in the left periphery. We already saw in (248) that a frame-setting time adverbial can co-occur with a nominal topic. Another type of multiple topic expression is illustrated in the natural speech example from (255) below.

(255) **á móŋgolo matéˬtɛ́, ɔ máama mə́sʊ́ə́ moŋgolo má háaha ɔ bɔŋɔŋɔ, ɔmá abáka tɔ siəkinə háaha (ɔ) uwəsú bɔnɔŋɔ bɔ́ Kəmə̀lʊ́n**, ɛbáka ɔ maáta hikəkiə?

/á	**ma-óŋgolo**	**ma-téˡtɛ́á**	**ɔ**	**máama**	**mə́sʊ́ə́**	
PREP	6-mango	6-small	PREP	DEM.PROX.6	PRN.POSS.1PL.6	
ma-óŋgolo	**má**	**háaha**	**ɔ**	**bɔ-ŋɔŋɔ,**	**ɔmá**	**a-bá-aka**
6-mango	ASSOC.6	here	PREP	14-country	REL.6	SM.1-be-DUR
tɔ	**siəkinə**	**háaha**	**ɔ**	**uwəsú**	**bɔ-nɔŋɔ**	**bɔ́**
SM.1PL	see	here	PREP	PRN.POSS.1PL.14	14.country	ASSOC.14
kəmə̀lʊ́nə	ɛ-bá-aka	ɔ	maáta	hikəkiə/		
Cameroon	SM.7-be-DUR	SM.2SG	PRN.OBJ.6	like		

'Les petites mangues, nos petites mangues-ci du pays ici au Cameroun, tu les aimes ?'
'As for small mangoes, the small mangoes we get here in Cameroon, do you like them?' [PM 950]

Here, we see multiple nominal topic expressions stacked in the clausal left periphery. Matching the pattern found in other languages (see e.g. Paul and Whitman 2017; Van der Wal et al. to appear; Van der Wal to appear), the first topic phrase (small mangoes) is a superset of the second phrase (the small mangoes we get here in Cameroon), showing a progressive narrowing down of the topic to which the comment relates.

5.5.5 Contrastive topics

Unlike other Bantu languages like Rukiga (Asiimwe and van der Wal to appear), contrastive topics generally have no special marking in Tunen, neither for subjects nor objects. While the second topic may be optionally fronted, as indicated by the comma notation in (256), we see in (257) and (258) that no marking is required, with the same S-Aux-O-V(-X) canonical word order used as in an all-new thetic context.

(256) mɛ́ ndɔ manya ɔwá Matéŋɛ a ka hiəfulə fanak, mba(,) **Sɛsília**(,) mɛ lɛ́ ndɔ many.

/mɛ ᴴndɔ manya ɔwá **Matéŋɛ** a ka hɛ-əfulə fana-aka mba
SM.1SG PRS know REL.1 **Martin** SM.1 PST3 19-book read-DUR but
Sɛsília mɛ lɛ ᴴndɔ manya/
Cecile SM.1SG NEG PRS know

'Je sais que Martin a lu le livre, mais quant à Cecile, je ne sais pas.'
'I know that Martin has read the book, but I don't know about Cecile.'
[JO 907]

(257) Context: You are a teacher explaining to the parents of the students Emanuel and David how each child did in their exams.
Ɛmánúɛ́lɛ a ná tɔ́mbá, **Tə́witi** a ná kɔ.
/1.**Ɛmanuɛ́lɛ** a ná tɔ́mbá 1.**Tə́witi** a ná kɔa/
Emmanuel SM.1 PST2 pass David SM.1 PST2 fail
'Emmanuel a réussi, David a échoué.'
'Emmanuel passed, David failed.' [JO 533]

(258) 'What did the woman hold? What did the man hold?' (+ QUIS picture stimulus)
'What happened?' (+ QUIS picture stimulus)
mɔndɔ́ a ná hiɔ́sɔ itíə́. **muəndú** a ná ɔmbána itíə́.
/**mɔ-ndɔ** a ná hɛ-ɔ́sɔ itíə́ **mɔ-əndú** a ná ɔ-mbána itíə́/
1-person SM.1 PST2 19-spoon hold 1-woman SM.1 PST2 3-knife hold
'L'homme tient une cuillière. La femme tient un couteau.'
'The man held a spoon. The woman held a knife.' [JO 629]

These data can be taken to evidence the lack of morphosyntactic marking sensitive to a feature [+contrast] that covers both topic and focus (cf. Chapter 2 section 2.2.5).

5.6 Functional passives (verbal participle *-átɔ*; *bá-* impersonals)

Passives are a common cross-linguistic strategy used to restructure the information in a way that demotes the agent. While many Bantu languages have a passive morpheme cognate with Proto-Bantu **-ʊ/ɪbʊ* (Stappers 1967; Schadeberg 2003a:78-79;

Guérois to appear), Tunen does not have any verbal marker of the passive, a property it shares with other North-Western Bantu languages (see also Li to appear *a*, *b* for the lack of a passive morpheme in Teke-Kukuya [B77]). Sentences that may be passivised in other languages are often given as active sentences in Tunen. In active sentences, the agent must be expressed as the syntactic subject. However, if the speaker does not want to express the agent or the agent is unknown, there are two options which perform as functional equivalents of a passive construction: (i) the use of the verbal participle *-átɔ* in combination with the copular verb, and (ii) an impersonal construction with the class 2 subject marker *bá-*.

5.6.1 Verbal participles *-átɔ*

A copular construction with a verbal participle marked by the ending *-átɔ* can be used in order to avoid expressing the agent. The *-átɔ* form is analysed by Dugast (1971:362) as a verbal adjective and by Mous (2003) as an adverb used as the complement of a copula to describe a resultant state, quality, or capacity. In my data, I gloss *-átɔ* as PTCP for 'participle', as discussed in Chapter 4 section §4.4.3. The participle follows either the *lɛ* or *bá* copula (Dugast 1971:362), as illustrated in (259).

(259) a. hinyí hɛ́ lɛ sɔ́mb**átɔ**.
/hɛ-nyí hɛ́ lɛ́á sɔ́mba-**átɔ**/
19-firewood SM.19 be cut-PTCP
'Le bois de chauffage est coupé.'
'The firewood is cut.' [EE+EB 1671]

b. botɛ báka titə́k**áto**.
/bɔ-tɛ bá-aka titə́-aka-**átɔ**/
14-savannah be-DUR burn-DUR-PTCP
'La savanne est brûlée.'
'The savannah is burned.' (Dugast 1971:362, adapted)

An agent cannot be expressed using the comitative marker *na* 'with' in this construction, in contrast to other Bantu languages that allow agent expression with *na* in passives, such as Rukiga (Asiimwe and van der Wal to appear), Makhuwa (Van der Wal to appear) and Swahili and Shona (Fleisch 2005). When a *na*-phrase was added to (259a), it was interpreted as a discontinuous continuation of the theme object rather than as the agent (260).

(260) #hinyí hɛ́ lɛ sɔ́mbátɔ **na Susan**.

hɛ-nyi	hɛ	lɛa	sɔ́mba-átɔ	**na**	**Susána**	
19-firewood	SM.19	be	cut-PTCP	with	1.Susan	

Intd.: 'Le bois de chauffage était coupé par Susanne.'
'Le bois de chauffage et Susanne étaient coupés.'
Intd.: 'The firewood was cut by Susanne.'
'The firewood and Susanne were cut.' [EE+EB 1673]

(261) Context: 'What wounded the hunter?'
*a lɛ tanákátɔ **na mɔndɔ**.

/a	lɛa	tanáká-átɔ	**na**	**mɔ-ndɔ**/	
SM.1	be	wound.DUR-PTCP	with	1-person	

Intd.: 'Il était blessé par l'homme.'
Intd.: He was wounded by a man.' [JO 1615]

The participle *-átɔ* construction is therefore used when the agent is not expressed, and so constitutes a functional equivalent to the passive.

5.6.2 Impersonal *bá-*

If the agent is not known, an impersonal construction can also be used (Mous 2008). This construction is formed with the class 2 subject marker *bá*, which does not agree with any referent in the discourse. Such *bá*-impersonals are found in many other Bantu languages and are commonly referred to in the Bantu literature as *ba*-passives (see e.g. Fleisch 2005, Asiimwe and van der Wal to appear, Li to appear *a*; and Taylor 1999, the latter of whom shows *bá*-passives in the neighbouring Bantu language Nomaande (A46)).

(262) Context: QUIS picture stimulus. EK asks the Tunen question "*yaté yɛ́ ná bɛ́tɔ́mbáká eé ?*" ("What happened?")
bá ná mɔná lúmə́ na mɔk əlim.

/**bá**	ná	mɔ-ná	lúmə́	na	mɔkɔ	əlimə/
SM.2	PST2	1-child	throw	with	3.stone	behind

'On a lancé une pierre à l'enfant par derrière.'
'Someone threw a stone at the child from behind.' [EO 439]

(263) Context: EO is reporting a conversation he had with PM on the phone, telling PM that he is standing in front of the shop where car oil is sold so that PM can find him. 'I'm here, where they sell crude oil,'
... ɔhá bá ndɔ moló má mátɔ́á sɛm.
/[...] ɔhá **bá** ᴴndɔ moló má ma-tɔ́á sɛma/
... REL.LOC SM.2 PRS 6.oil ASSOC.6 6-car sell
'...où on vend les carburants pour les voitures.'
'...where they sell oil for cars.' [EO 1029]

(264) bá ná hinyí sɔmb.
/**bá** ná hɛ-nyi sɔ́mba/
SM.2 PST2 19-firewood cut
'On a coupé le bois de chauffage.'
'The firewood has been cut.' [EE+EB 1672]

As with the participle construction, expression of the agent with *na* 'with' is not allowed in the *bá-* construction in Tunen (again a point of crosslinguistic variation; Fleisch 2005).

(265) *bá ná hinyí sɔmb na Susan.
/**bá** ná hɛ-nyi sɔ́mba na Susána/
SM.2 PST2 19-firewood cut with 1.Susan
Intd.: 'Le bois du chauffage était coupé par Susanne.'
Intd.: 'The firewood was cut by Susanne.' [EE+EB 1674]

We therefore see that Tunen has two constructions that can be used for the demotion of the agent: the *-átɔ* participle form and the *bá-* impersonal construction. Bantu languages are known to vary as to whether and how the agent is expressed in a passive construction (Fleisch 2005). In Tunen, agent expression is not possible.

5.6.3 The middle prefix *bɛ́-*

Finally, note that Tunen has a prefix *bɛ́-* which Dugast (1971) treats as a passive and reflexive marker. Mous (2008) gives a detailed discussion of this marker, arguing that it is in fact a middle prefix, suggesting an etymology of a first person plural pronoun and noting a cognate form in other A40/A60 languages of Cameroon. In Chapter 6, I will analyse it as the spell-out of a Voice head within the clausal spine.

This middle prefix shows some functional overlap with the *bá-* impersonal construction, as seen in (266) below.[25]

(266) a. a-ná **bé**-tóŋona mɛkɔ.
SM.1-PST2 MID-transform 9.leopard
'He transformed into a leopard.'

b. **bá**-ná mondo tóŋóná mɛkɔ
SM.2-PST2 1.man transform 9.leopard
'They transformed the man into a leopard. (Mous 2008:310, adapted)

The overlap between these construction is to be expected considering the cross-linguistic overlap in middle/neutro-passives and passives (Guérois to appear). The interested reader can find more detail about the specific contexts of use of the *bé-* prefix in Mous (2008).

5.7 Referent expression in discourse

This section will show how the form of nominals in Tunen varies dependent on its information-structural status in the discourse. Referent expression across languages varies dependent on givenness/activation status, i.e., the cognitive notion of how accessible the referent is at a particular point of discourse, as affected by factors such as recency of mention and number of intervening referent expressions (Gundel et al. 1993; Ariel 2001; Chapter 2 section §2.2). As discussed in Chapter 2, the general pattern is that more accessible referents are referred to with less linguistic encoding. As noted in previous work by Isaac (2007), Tunen follows this general pattern, with full noun phrases (DPs) typically used to introduce new discourse referents, after which less material is used. The full scale of options for referent expression in discourse in Tunen is shown in (267) below, ordered from least to most linguistic encoding.

(267) **Tunen referent expression hierarchy**

Zero/null > verbal marker > modifier only > non-emphatic pronoun > emphatic pronoun > demonstrative > full DP > compound DP > modified DP

[25]Note that the *bé-* prefix is transcribed as *bé-* in Mous's (2003) orthography (cf. Chapter 4 section §4.2 on orthographical differences between sources).

The following extract from a story shows how after a subject is referred to with a compound DP (*muití émbɔ́ma* 'owner of the field'), it can then be referred to using the verbal subject marker only, that is the same noun class (class 1 SM *a-*).

(268) a. **muit(í) émbɔ́ma a** ná wɛ́ɛya halɛ́n.
/**mɔ-ití** [H]**=ɛ-mbɔ́ma** **a** ná wɛ́ɛya halɛ́na/
1-owner ASSOC=7-field SM.1 PST2 PRN.1 catch
'Le propriétaire du champ l'a arreté.'
'The owner of the field caught her.' [JO 1765]

b. **a** ná wɛ́ɛya ákanána ɔ wáayɛ́ ɔmbɛ́l.
/**a** ná wɛ́ɛya ákánána ɔ wáayɛ́ ɔmbɛ́la/
SM.1 PST2 PRN.1 leave.APPL PREP PRN.POSS.1.3 3.house
'Il l'a amené dans sa maison.'
'He took her into his house.' [JO 1766]

While subjects are always expressed by a verbal subject marker (SM) in Tunen, objects can be zero-expressed, i.e., dropped. Unlike most Bantu languages, Tunen does not have any object marker (OM) slot on the verb (Chapter 4 section §4.4.2), so there is no available object marker strategy. Again, this is a property common to North-Western Bantu languages that sets Tunen apart from Eastern and Southern Bantu languages (Polak 1986, Van der Wal 2022:69-70) and shows overlap with Grassfields Bantu (Bantoid) languages.

Object expression in Tunen varies dependent on givenness. When an object is first mentioned, a full/compound/modified DP is used. When the object is given (i.e., retrievable from the discourse context), it is often null, as in the example below where the object *bɛɔnɔ́* 'eggs' is first introduced with a DP and then dropped in the next clause, as indicated by '∅'.[26]

(269) a **bɛɔnɔ́** nɛakak, bɛ́ndɔ bá nɛak.
/a **bɛ-ɔnɔ́** nɛaka-aka ba-ndɔ bá ∅ nɛ́á-aka/
SM.1 8-egg make-DUR 2-person SM.2 8.OBJ eat-DUR
'Elle pond des œufs; les hommes les mangent.'
'She lays eggs; people eat them.' [JO 1769]

[26]The ability for objects to be unexpressed in Tunen raises questions about the transitivity of verbs like *nɛ́á* 'eat' in Tunen. An alternative analysis would be to say that these verbs have homophonous intransitive forms, in which case the object would not properly be considered to be "dropped" as it is not required in the verb's lexical entry. In this chapter, I use "zero expression" and "dropped" to mean

Dropping given objects like this is very common. An example is provided in the dialogue below, where speaker PM introduces the referent *ibuŋuluəkə* 'car' and speaker EO uses zero-expression (270). The example set in (271) from a monologue instructional video shows the same zero-expression of an object when it is given, with the full DP being used at the end again (271e), where the need for re-activation can be considered in terms of both linguistic and temporal distance from the last explicit mention (the latter indicated by the timestamp next to each example). Note that the highly-accessible first-person singular subject is consistently referred to with a subject marker, which is the minimal means to express Tunen subjects.

(270) Context: PM and EO perform the QUIS map task (PM describes the route marked on a map to EO).

a. mɔkátá wɔ́ bɛ́nɔ́mɛ wúbúsíə́ **ibuŋuluəkə** yɛ́ nda báká háha ɔ matá.
/mɔ-kátá wɔ́ bɛ́nɔ́mɛ wɔ́ busíə́ ɛ-buŋuluəkə yɛ́ nda
3-hand ASSOC.3 8.right ASSOC.3 front 7-car SM.7 VEN
bá-aka háaha ɔ matá/
be-DUR DEM.PROX.LOC PREP bottom
'Il y a un véhicule en bas au premier embranchement à droite.'
'There's a car at the bottom of the first road on the right.' [PM 671]

b. ɛ́ɛ, mɛ́ ndɔ sin.
/ɛ́ɛ mɛ ᴴndɔ ∅ sinə/
yes SM.1SG PRS OBJ.7 see
'Oui, je le vois.'
'Yes, I see it.' [EO 672]

(271) Context: JO demonstrates how to prepare the dish *kɔk* [*hɛkɔkɛ* leaves boiled with smoked fish and ground peanuts].

a. ɛsɛ́áŋáka mɛ́ hɛkɔkɛ sɔ́áka
/ɛsɛ́áŋáka mɛ =ᴴ **hɛ-kɔkɛ** sɔ́á-aka/
now SM.1SG PROC 19-kok wash-DUR
'Maintenant, je lave le kok.'
'Now, I wash the kok.' [JO 1343]; 00:00:38

that there is no object expression with a predicate that in non-given contexts takes an object.

b. mɛ́ hɛkɔkɛ sɔ́áka
/mɛ =^{H} **hɛ-kɔkɛ** sɔ́á-aka/
SM.1SG PROC 19-kok wash-DUR
'Je lave le kok.'
'I wash the kok.' [JO 1344]; 00:00:58

c. mɛ ná hɔ́á ɔ ɔsɔa
/mɛ ná hɔ́á ɔ ɔ-sɔ́á/
SM.1SG PST2 finish PREP INF-wash
'J'ai fini de laver.'
'I've finished washing (it).' [JO 1345]; 00:01:34

d. mɛ́ əmbə́kínə ɔ mol
/mɛ =^{H} əmbə́kínə ɔ moló/
SM.1SG PROC throw.REP PREP 6.oil
'Je (le) lance dans l'huile.'
'I'm throwing (it) into the oil.' [JO 1346]; 00:01:38

e. mɛ ná hɛkɔkɛ əmbínə ɔ moló
/mɛ ná **hɛ-kɔkɛ** əmbínə ɔ moló/
SM.1SG PST2 19-kok throw PREP 6.oil
'J'ai lancé le kok dans l'huile.'
'I've thrown the kok into the oil.' [JO 1347]; 00:03:19

While this strategy of zero-expression of given objects is common, it is not possible when the verb has an applicative extension, in which case overt expression of the object (by DP or pronoun) is syntactically required. Example (272) below shows that it is not grammatical to have an unexpressed recipient object with an applicativised verb form.

(272) yatɛ́ Malíá á ná {**láá**|***lɛná**} eé?
/yatɛ́ Malíá á ná {**lá**|***lɛ́ná**} eé/
what 1.Maria SM.1 PST2 {say|say.APPL} Q
Intd.: 'Qu'est-ce que Maria a dit ?'
Intd.: 'What did Maria say?' [JO 2448-9]

The consequence of the applicative's valency requirement means that pronominal expression is fairly frequent for recipient objects in the corpus, as the standard way of reporting speech in a story uses an applicative form of the verb 'say' (followed by the complementiser formed from *-séá* 'say'), which requires either a pronoun or lexical DP subject.

(273) ɔndʒɛlé a ná **wɛ́ɛya lɛ́ná** asɛ : ...
/ɔ-ndʒɛlé a ná **wɛ́ɛya** **lɛ́ná** a-sɛ́á [...]/
3-lizard SM.1 PST2 PRN.1 say.APPL SM.1-say [...]
'Le lézard lui a dit : [...]'
'The lizard told him: [...]' [JO 2068]

(274) Yəsusu a ná **bəəbu lɛ́na** a sɛ́á : [...]
/Yəsusu a ná **bəəbuə** **lɛ́ná** a-sɛ́á [...] /
1.Jesus SM.1 PST2 PRN.2 say.APPL SM.1-say [...]
'Jésus leur a dit : [...]'
'Jesus said to them: [...]' (Luke 9.52; CABTAL 2019:159)

This finding is significant as it challenges the previous classifications of Tunen's pronominal system, in which different pronominal forms are analysed as varying in degree of a loosely-defined notion of 'emphasis' (Dugast 1971:128-30, Isaac 2007:49-51; Chapter 4 section §4.3.8). The possible confound of the applicative verb form on pronoun use is a topic worth more detailed investigation, in order to better understand the extent to which pronoun form and frequency reflects referent accessibility rather than confounding factors such as valency requirements of the verb.

In summary then, Tunen referent expression follows crosslinguistic tendencies to use less material to refer to given/accessible referents (Gundel et al. 1993; Ariel 2001), with full noun phrases used to introduce discourse referents (Isaac 2007). Compared to other Bantu languages, Tunen is typical in its use of verbal subject markers without a lexical DP for given subjects, but unusual in lacking object markers and therefore having frequent zero-reference for objects. Pronouns can be used and are often found to meet valency requirements when the verb has an applicative extension, suggesting a confound that could be investigated further. For our current purposes, we see that Tunen referent expression follows crosslinguistic tendencies to use more linguistic material to encode less accessible discourse referents.

5.8 Comparison to other Bantu languages

Before concluding, I will reflect briefly on how Tunen compares to other Bantu languages in its expression of IS, as a first reflection on how the empirical findings seen in this chapter relate to the central research question of this thesis (to be further discussed in Chapter 8).

We have seen in this chapter that Tunen is unusual for a Bantu language in the following respects: (i) grammatical roles are more important for word order

than discourse roles; (ii) S-Aux-O-V-X (and not SVO) is the canonical word order; (iii) there is no morphological passive, (iv) there is no dedicated focus position, and (v) no object marking is permissible to refer to given objects. Furthermore, (vi) no inversion constructions are found, and (vii) there is no predicate doubling (unlike other Bantu languages in Van der Wal to appear; see also Güldemann and Fiedler 2022). These properties have been suggested before as areal features related to Tunen's position in the Northwest of the Bantu-speaking area. For example, Hamlaoui and Makasso (2015) report the same lack of inversion constructions and object marking for Basaá, another Cameroonian Bantu language of the A40 group, and Güldemann (2008) has proposed O-V-X as an areal syntactic property of the Macro-Sudan Belt (a proposed linguistic area in which Tunen is spoken), as I will come back to in the next chapter (section §6.8). Finally, in our own work on the BaSIS project we have shown that Tunen has no dedicated focus position and have argued that grammatical roles are less important than information-structural roles for determining Tunen's word order, which we have suggested is linked to its position in the Northwest (Kerr et al. 2023). We note that this reliance on grammatical role differs from the Cameroonian/Nigerian Bantoid language Naki studied by Good (2010), which was argued to show evidence for IS as the principal determiner of word order, and is also distinct from Teke-Kukuya and other languages in the Northwestern Bantu area, which Li (to appear *a*, *b*) shows has innovated a dedicated focus position (see also De Kind 2014 on Kisikongo (H16a), Bostoen and Mundeke 2012 on Mbuun (B87), and Koni Muluwa and Bostoen 2014 on Nsong (B85d)). This highlights the fact that there is variation in Northwestern Bantu and Bantoid languages in the expression of IS, meaning that detailed studies of individual languages are required.

This is not to say however that Tunen has no similarities with other Bantu languages in its expression of IS. Like other Bantu languages in Van der Wal (to appear), and as matches crosslinguistic patterns for focus marking, different cleft strategies are available to express focus (see e.g. Fiedler et al. 2010; Féry and Ishihara 2016b), in which case there is typically an exhaustivity reading. Information focus can be left unmarked (for non-subjects). Also like the other Bantu languages and the crosslinguistically common pattern (Gundel 1988), topics can be left-peripheral, in which case they may be marked or unmarked. We also see overlap between Tunen and the zone B77 Bantu language Teke-Kukuya described in Li (to appear *a*, *b*), which similarly lacks a morphological passive and has no inversion constructions. Finally, subject markers are the minimal means of subject expression.

Further areas for research on the expression of IS in Tunen would be to conduct a more detailed corpus-based approach to frequencies of different word-order patterns, taking into account other potential factors such as prosodic weight; a

prosodic analysis of potential correlates of IS; a more detailed investigation of the use of conditional marking for introducing topics; and a more detailed study of fine-grained distinctions in referent expression, such as the use between basic and 'emphatic' pronouns. A more detailed comparative study of languages of the Northwest as compared to Eastern and Southern Bantu languages would also be valuable, as well as a comparison of Northwestern Bantu and the Southern Bantoid languages of the Grassfields Bantu group.

5.9 Summary

This chapter has shown that Tunen's canonical word order is S-Aux-O-V-X, which is compatible with various different information-structural contexts. Alternatives to the S-Aux-O-V-X word order are possible for the expression of information-structural notions, with clefting a common strategy for expressing focus, and fronting a means of marking topics, which may additionally be marked by the preposition *ɔ* or the marker *ábá/aka* 'if'. Finally, a short comparison between Tunen and other Bantu languages in terms of the expression of IS was provided; I will reflect on this comparative picture in more detail and the consequences for formal models of Tunen syntax in Chapter 8, after first discussing Tunen's OV word order and discontinuous noun phrase construction in the next chapters.

CHAPTER 6

OV word order and derivational disharmony

6.1 Introduction

A well-known property of Tunen syntax is SOV word order (Dugast 1971; Bearth 2003; Mous 1997, 2003, 2005, 2014). More precisely, the word order can be described as S-Aux-O-V-X (where X refers to other elements besides S and O). While this surface order is robust within Tunen, it is a typologically-rare pattern that is found only in some languages of West/Central Africa (Gensler and Güldemann 2003; Creissels 2005; Güldemann 2008). Bantu languages and Niger-Congo languages more generally have a canonical VO profile (Heine 1976; Bearth 2003; Good 2017:476), making Tunen's OV order interesting from a comparative perspective. The presence of OV order is also interesting from a diachronic perspective as a possible instance of VO→OV word order change, which is generally considered rarer than the inverse OV→VO pattern (see e.g Givón 1977:242; Kiparsky 1996:140; Roberts 2021:482).

Previous work on OV word order in Tunen has described it as an information structure (IS)-conditioned variant of an unmarked VO order (e.g. Güldemann 2007, based on data from Mous 1997, 2003, 2005). In this chapter I investigate the influence of IS on the order of the object and verb in more detail by using controlled elicitation and natural speech data (cf. Chapter 3). On the basis of this empirical investigation, I argue that the influence of IS on Tunen word order has been previously overstated, and argue instead for an analysis with S-Aux-O-V-X as the pragmatically-neutral word order that should therefore be considered unmarked.

I then turn to providing the first formal analysis of OV word order in Tunen. By drawing upon comparable analyses for other languages, I present a model that accounts for the disharmonic S-Aux-O-V-X word order as deriving from a harmonic base structure. I therefore argue that disharmony arises during the derivation, as caused by movement operations. While the main focus of this chapter is this empirical and theoretical investigation into Tunen's synchronic syntax, I finish with some reflections on typology and diachrony, situating OV in Tunen within the broader context of word order variation in West/Central Africa and crosslinguistically.

This chapter is structured as follows. In section §6.2 I show how S-Aux-O-V-X word order in Tunen is consistent across TAM and IS contexts, and then show in more detail which material can fall in each of the slots. In section §6.3 I introduce S-Aux-O-V-X as a disharmonic word order, i.e., a case of mixed headedness, and illustrate three formal models of this pattern. Section §6.4 shows how these analyses can be adapted for Tunen, and sections §6.5-§6.6 evaluate the analyses based on different empirical diagnostics. Section §6.7 discusses how the analysis of Tunen fits into a broader structural typology of languages with disharmonic word order and section §6.8 reflects on the likely diachronic origin of Tunen's unusual word order, considering the implications of the formal model proposed for debates within the Africanist literature on the origins of OV in Niger-Congo and mechanisms of word order change more generally. Finally, section §6.9 concludes.

6.2 Empirical investigation

This section will show that OV is the basic word order in Tunen, consistent across TAM contexts (section §6.2.1) and found with a variety of different IS contexts (section §6.2.2). I show more specifically that Tunen has S-Aux-O-V-X basic word order, where the O slot can be filled by multiple objects and both pronominal and DP objects (section §6.2.5). In so doing, I draw comparison with other languages of West/Central African languages that have S-Aux-O-V-X word order patterns.[1]

6.2.1 On consistency across TAM contexts

There are many aspects of variation within languages of West/Central Africa with so-called *S-Aux-O-V-X* word order, meaning that it is better to consider them as different word order patterns. One aspect of variation is the extent to which this order

[1]Note that I am not committing to an analysis whereby Tunen's word order is related to the word order patterns in these languages. We will see in sections §6.7 and §6.8 that there is good reason to think that these word order patterns derive from different structural configurations and have grammaticalised independently.

is dependent on TAM context. In some languages, S-Aux-O-V-X is found robustly across TAM contexts, while in other languages, S-Aux-O-V-X exists in alternation with S-V-O order. This is discussed for West African languages by Creissels (2005):

> "[Unlike Mande,] the constituent order patterns of [Gur/Kru/Atlantic] languages are not uniform. They have in common that the variation [...] is conditioned by TAM or polarity: the use of a constituent pattern other than S-V-O-X is commonly restricted to clause types characterized by the presence of overt predicative markers immediately after the subject [with variation between languages as to which TAM/polarity values trigger an alternative constituent order]."
>
> (Creissels 2005:§4.1)

An example of a TAM-based SVO/S-Aux-O-V alternation is given in the Guébie (Kru) dataset in (275) below, where the future tense has an auxiliary *ji*^{3} and OV order, while the perfective has no overt auxiliary and VO order.[2]

(275) a. e^{4} ji^{3} <u>ɲa^{31}</u> **li^{3}**
1SG.NOM FUT coconuts eat
'I will eat coconuts.' (Guébie (Kru); Sande et al. 2019:668)

b. e^{4} **li^{3}** <u>ɲa^{31}</u>
1SG.NOM eat.PFV coconuts
'I ate coconuts.' (Guébie (Kru); Sande et al. 2019:672)

By contrast, Mande languages have S-(Aux)-O-V(-X) word order consistently across TAM contexts; Creissels (2018:783) describes the Mande type of S-O-V-X order as "rigid and invariable" and Nikitina (2011:251) similarly writes that it is "a typologically unusual rigid S-O-V-X word order pattern". The consistency of S-Aux-O-V-X order across TAM contexts is illustrated for Bambara in (276) below.[3]

[2]Here and throughout this chapter, I indicate the object(s) by underlining and indicate the main verb by bold font. Sources are otherwise unchanged, unless indicated otherwise. Note that the superscript numbers in the Guébie examples indicate tones.

[3]The source does not provide glosses or segmentation; I add a gloss line 'Subject Aux O V-tr' (where 'V-tr' indicates a transitive verb) following Nikitina (2011:261). Note that the 'Aux' component is referred to as a 'predicative marker' (PM) in Creissels (2005), following Mandeist tradition. I will come back to the definition of 'Aux' in section §6.2.4.

(276) a. mùsó ↓bɛ́ jɛ́gɛ́ **sàn.**
Subject Aux O V-tr
'The woman is buying fish.'

b. mùsó ↓té jɛ́gɛ́ **sàn.**
Subject Aux O V-tr
'The woman is not buying fish.'

c. mùsó ↓yé jɛ́gɛ́ **sàn.**
Subject Aux O V-tr
'The woman bought/has bought fish.'

d. mùsó ↓má jɛ́gɛ́ **sàn.**
Subject Aux O V-tr
'The woman did not buy fish.'

e. mùsó ↓bɛ́nà∼↓ná jɛ́gɛ́ **sàn.**
Subject Aux O V-tr
'The woman will buy fish.'

f. mùsó ↓ténà jɛ́gɛ́ **sàn.**
Subject Aux O V-tr
'The woman will not buy fish.'

g. mùsó ↓ká jɛ́gɛ́ **sàn.**
Subject Aux O V-tr
'The woman should buy fish.'

h. mùsó kàná jɛ́gɛ́ **sàn**
Subject Aux O V-tr
'The woman should not buy fish.'

(Bambara (Mande); Creissels 2005:§1.3)

Turning now to Tunen, we see that the basic pattern matches the Mande pattern rather than the West African languages with a TAM-conditioned word order alternation, in that S-Aux-O-V-X word order in Tunen is robust across TAM contexts, as previously shown in Mous (1997, 2005) and exemplified in (277) below.[4]

[4]Glosses are adapted for consistency, tones added to transcription line, and a translation line is added.

(277) a. bá-ŋɔ bɛ-kana **tála** ɔ yɔkɔ.
SM.2-FUT 8-basket put PREP 7.chair
'They will put baskets on the chair.'

b. bá-ná bɛ-kana **tála** ɔ yɔkɔ.
SM.2-PST2 8-basket put PREP 7.chair
'They put baskets on the chair.'

c. bá-ka bɛ-kana **tála** ɔ yɔkɔ.
SM.2-PST3 8-basket put PREP 7.chair
'They put baskets on the chair.'

d. abáka mɛ bɛ-kana **tál** ɔ yɔkɔ.
SM.1.be.DUR SM.1SG 8-basket put PREP 7.chair
'I (habitually) put baskets on the chair.'

Tunen (Mous 1997:125, adapted)

These examples show S-Aux-O-V-X word order in affirmative matrix clauses in Tunen. Note that this word order is found equally in negative clauses, as shown previously by Mous (1997) (278) and confirmed in my field data (279)-(280).

(278) a. bá-lɛ́-ndɔ bɛ-kana **tál** ɔ yɔkɔ.
SM.2-NEG-PRS 8-basket put PREP 7.chair
'They do not put baskets on the chair.'

b. bá-sa bɛ-kana **tál** ɔ yɔkɔ.
SM.2-NEG.PST 8-basket put PREP 7.chair
'They did not put baskets on the chair.'

c. bá-soŋo bɛ-kana **tál** ɔ yɔkɔ.
SM.2-NEG.FUT 8-basket put PREP 7.chair
'They will not put baskets on the chair.'

Tunen (Mous 1997:125, adapted)

(279) mɛ lɛ aŋɔ́á **nimb**.
/mɛ **lɛ** aŋɔ́á nimbə/
SM.1SG **NEG** PRN.EMPH.2SG deceive
'Je ne te trompe pas.'
'I'm not lying to you.' [PM 1038]

(280) a sá <u>bɔla</u> **ɔ́k**
/a sá bɔ-la ɔ́kɔ/
SM.1 NEG 14-thing understand
'Il n'a rien compris.'
'He hasn't understood anything.' [EO 1484]

While some languages such as certain Germanic varieties have OV order only in embedded clause environments (to be seen in section §6.3), S-Aux-O-V-X word order is found for Tunen in both main clause and embedded clauses (281)-(282), with VO order in the embedded clause ungrammatical (282b).

(281) mɛ́ ndɔ **manya** ɔwá Matɛ́ŋɛ a ka <u>hiəfulə</u> **fanak**.
/mɛ ᴴndɔ **manya** ɔwá Matɛ́ŋɛ a ka <u>hɛ-əfulə</u> **fana-aka**/
SM.1SG PRS know REL.1 1.Martin SM.1 PST3 19-book read-DUR
'Je sais que Martin a lu le livre.'
'I know that Martin has read the book.' [JO 905]

(282) a. Malíá a ná láá ásɛa Jɔhánɛs(ɛ) á ndɔ <u>bilíbílíbí</u> **nyɔ** ɔ wayɛ́á ɔ́mbɛ́l.
/Malíá a ná láá a-sɛ́á Jɔhánɛsɛ a ᴴndɔ
1.Maria SM.1 PST2 say SM.1-say 1.Johannes SM.1 PRS
<u>bɛ-líbílíbí</u> **nyɔ** ɔ wayɛ́á ɔ-mbɛ́la/
8-chilli.pepper cultivate PREP PRN.POSS.1.3 3-house
'Maria a dit que Johannes cultive des pilipilis chez lui.'
Maria said that John grows chillies at home.' [JO 2450]

b. *Malíá a ná láá ásɛa Jɔhánɛs á ndɔ **nyɔ** <u>bilíbílíbí</u>.
/Malíá a ná láá a-sɛ́á Jɔhánɛsɛ a ᴴndɔ **nyɔ**
1.Maria SM.1 PST2 say SM.1-say 1.Johannes SM.1 PRS cultivate
<u>bɛ-líbílíbí</u>/
8-chilli.pepper
Intd.: 'Maria a dit que Johannes cultive des pilipilis.'
Intd.: 'Maria said that John grows chillies.' [JO 2451]

Finally, examples (283) show that S-Aux-O-V(-X) word order is found in irrealis as well as realis clauses, showing its robustness across clause types in Tunen.

(283) a. bá bɛ-kana **tálaka** ɔ yɔkɔ
SM.2.SBJV 8-basket put.DUR PREP 7.chair
'May they put baskets on the chair.' Tunen (Mous 1997:125, adapted)

b. bá mɛkɔndɔ́ **sanak**.
/bá mɛ-kɔndɔ́ sána-aka/
SM.2.SBJV 4-pistachio break-DUR
'Qu'elles cassent les pistaches.'
'May they break the pistachios.' [EE 1709]

c. ábá bá sɔ́ ŋɔ bəsú **lúkə**, bá tuə́n.
/ábá bá sɔ́ ŋɔ bəsú lúkə bá tuə́nə/
if SM.2.SBJV NEG FUT PRN.EMPH.1PL feed SM.2 stay
'Si elles ne vont pas nous nourrir, qu'elles restent.'
'If they don't feed us, then that's on them/so be it.' [EE 1701]

Interestingly, Tunen's direct neighbour Nyokon (Bantu A45, Cameroon) and near neighbour Tikar (Bantoid, Cameroon) (cf. Chapter 2 Fig. 2.5) have a TAM-dependent S-Aux-O-V-X/S-V-O alternation. This difference in TAM dependency was shown in previous work by Mous (1997, 2005), as in the difference between (277) and (284a) below, with further discussion in Mous (2022) and Kerr (to appear).

(284) a. mù nəə́: **yìl** wóó nìtān
SM.1SG COP take small stone
'I take a small stone.'

b. ù kìfá ús **yíl**
SM.1 stick short take
'He took a short stick.' (Nyokon (Bantu); Mous 2005:5)

As I note in Kerr (2024:320-322), the Cameroonian Bantoid language Tikar, spoken 50-150km to the Northeast of Tunen and Nyokon, has a similar syntactic profile to Nyokon, also showing a TAM-dependent S-Aux-O-V-X/S-V-O alternation.

(285) a. à tǎ nye **yìli**.
he IPFO house sweep
'Il balaie la maison.' ('He is sweeping the house.')

b. mùn **kònnd-â** kwìn.
I add-PERF salt
'J'ai ajouté du sel.' ('I have added salt.')
(Tikar (Bantoid); Stanley 1997:103, 139, adapted)

We therefore see that Tunen is unusual for a Benue-Congo language in having S-Aux-O-V-X robustly across all TAM contexts. In this sense, Tunen patterns with Mande languages of West Africa, which have S-Aux-O-V-X across all TAM contexts. However, that is not to say Tunen syntax is identical to that of Mande languages, as there are various other syntactic properties important to distinguish between the two types (Creissels 2005; Nikitina 2011). I will return to the relationship between Tunen and other African languages with OV word order in sections §6.7-§6.8.

Having seen that S-Aux-O-V-X is consistent across TAM contexts and clause types, we can turn now to investigate the potential effect of IS on OV vs VO order.

6.2.2 On consistency across IS contexts

OV word order in Benue-Congo languages has been observed for a subset of objects that fulfil an information-structural property such as being given or extrafocal (Güldemann 2007). For example, the Cameroonian Bantu language Ewondo synchronically has an alternation between pronominal objects being preverbal (OV) while full DP objects are postverbal (VO) (286), as also found in the neighbouring variety Eton (287). As pronominal objects are typically used for given referents (cf. Chapter 2 section §2.2), this alternation can be treated as driven by IS.

(286) a-kad mə dzɔ **və́**.
he-do.usually me it give
'He usually gives it to me.'
(Ewondo (Bantu); Redden 1980 via Gensler 1994:6)

(287) a. **àvé** mâ múŋá í↓págâ.
|à-H-vé-H mà N-úŋá ì-págà|
I-PST-give-NF 1SG.NPRR 1-child 7-present
'He gave my child a present.'

b. mèèy ɲí dɔ̂ **vé**
|mə̀-è:j ɲ́í dɔ̂ **L-vɛ́**|
1SG-FUT I.PPR V.PPR INF-give
'I will give it to him.' (Eton (Bantu); Van de Velde 2008:300, 302)

While no full account of the interaction between syntax and IS exists for a Mbam language, in Wilkendorf's (2001) unpublished work on the Nomaándé language (a Western Mbam language bordering Tunen to the South-East; Guthrie no. A46), there is similarly a phenomenon where full noun phrase objects are postverbal while pronominal objects are preverbal, as in (288a) vs. (288b)-(288c).[5]

(288) a. Ɛ ŋa mɛ́ **mua** me-nyífé.
SM.1SG PRS PRN.1SG drink 6a-water
'I drink water.'

b. U ŋeé wuúci **súbé-ke.**
SM.1 PST3 PRN.1 hit-DUR
'He hit him.'

c. U ŋe mí wuúci **tóŋie.**
SM.1 PST3 PRN.1SG PRN.1 show
'He showed it to me.' (Nomaándé (Bantu); Wilkendorf 2001:8-9)

In Aghem, a Southern Bantoid language of Cameroon, both OV and VO orders are possible for full noun phrase objects due to the immediate-after verb (IAV) position being a focus position in the language (Hyman 2003a; Watters 1979; Chapter 2 section §2.4.2). In this case, OV order is used when the object is given and focus is on a different constituent, while VO is used in order to focus the object. The OV/VO difference is therefore also considered to be driven by information structure.

(289) a. fíl á mɔ̀ á'zɔ́ɔ **zí** kí-bɛ́.
friends 3P PST yesterday eat CL-fufu
'The friends ate FUFU (not yams) yesterday.'

b. fíl á mɔ̀ bɛ́-'kí **zí** á'zɔ́ɔ.
friends 3P PST fufu-CL eat yesterday
'The friends ate fufu YESTERDAY (not two days ago).'

c. fíl á máà bɛ́-'kí á'zɔ́ɔ **zí.**
friends 3P PST.PF fufu-CL yesterday eat
'The friends DID TOO eat fufu yesterday.'
(Aghem (Bantoid); Watters 1979:148-50, Güldemann 2007:94)

[5] I have adapted the glosses for the subject marker, tense marker, and pronouns for consistency with the conventions used for other Bantu languages in this chapter.

Tunen has previously been argued to have a comparable IS-conditioned alternation between OV and VO order, where VO is considered to be the unmarked pattern and OV a marked strategy for extrafocal objects (Güldemann 2007, based on Mous 1997, 2003, 2005). However, Güldemann notes that the IS-determination is less clear in Tunen than for other Benue-Congo languages such as Aghem (Güldemann 2007:96, 98). Furthermore, while work by Mous (1997, 2014) covers the position of the object in some detail, most examples available are provided without discourse context, making it hard to fully evaluate the possible effect of IS on Tunen. In this subsection I therefore test the extent to which such an IS-driven account applies synchronically to Tunen using new field data, starting by testing the discourse contexts compatible with OV word order.

If OV order is pragmatically-neutral, it should be compatible with a variety of IS contexts. If OV order is conditioned by an IS factor e.g. extrafocality, on the other hand, it should be restricted to those IS contexts. I therefore tested for OV versus VO order in a variety of IS contexts, following the BaSIS methodology (as discussed in Chapter 3). As seen in Chapter 5, the results can be summarised as showing that OV order is compatible with a variety of IS contexts and therefore should be considered pragmatically-neutral. For example, the Tunen example in (290) below shows SOV for term focus on the direct object (with the recipient object preceding the theme object), while the next examples show SOV in an out-of-the-blue discourse context, where there is no focus on the object (291)-(292), and SOV with VP focus (293).

(290) Context: 'What did the woman give to the other woman?'
a nɔ́ <u>ɔsɔ́kɔ́</u> <u>hɛtétɛ́</u> **indi**.
/a nɔ́ <u>ɔsɔ́kɔ́</u> <u>hɛ-tétɛ́</u> **índíə́**/
SM.1 PST1 1.other 19-gourd give
'Elle a donné [une gourde]$_{\text{FOC}}$ à l'autre.'
'She gave [a gourd]$_{\text{FOC}}$ to the other.' [PM 1541]

(291) Context: You enter the room and see a broken window. Someone announces...
Biə́lɛ a ná <u>itúbə́</u> **san**.
/Biə́lɛ a ná <u>ɛ-túbə́</u> **sána**/
1.Pierre SM.1 PST2 7-window break
'Pierre a cassé la fenêtre.'
'Pierre broke the window.' [EE+EB 1669]

(292) Context: You are at the riverside outside the village and see an elephant, which very rarely occurs, so run to tell the others.
mɛ nɔ́ misəku **siəkin** !
/mɛ nɔ́ misəku **siəkinə**/
SM.1SG PST1 3.elephant see.DUR
'Je viens de voir un éléphant !'
'I just saw an elephant!' [PM 316]

(293) Context 1: What did Maria do? (VP focus)
Context 2: What did Maria apply? (term focus on object)
Malíá a ná biləliə **fɔfɔ́kiə**.
/Malíá a ná bɛ-ləliə **fɔfɔ́kíə**/
1.Maria SM.1 PST2 8-varnish anoint.DUR
'Maria a [oint le vernis]$_{\text{FOC}}$.', 'Maria a oint [le vernis]$_{\text{FOC}}$.'
'Maria [applied the varnish]$_{\text{FOC}}$.', 'Maria applied [the varnish]$_{\text{FOC}}$.' [JO 2518]

We therefore see that OV in Tunen is found across multiple different discourse contexts, including both focal and extrafocal contexts, suggesting that it is in fact a pragmatically-neutral word order.

An additional test for effect of givenness on word order is whether pronominal objects pattern differently to lexical DP objects, as seen for Ewondo, Eton, and Nomaándé in (286), (287) and (288) above. In Tunen, we see that pronominal objects behave like full noun phrases, i.e., are canonically in a preverbal position (**O**V). This is exemplified in (294), where the class 1 pronoun *wɛ́ɛya* 'her' appears before the verb, just as the lexical DP objects did in the previous examples. Example (295) shows the use of OV order with personal pronouns in natural speech, and (296) illustrates OV word order for pronominal objects from the object pronoun series (Chapter 4 section §4.3.8).

(294) mɔndɔ ɔwá mɔ́ná á ndɔ naa a nɔ́ wɛ́ɛya **ákánana** ɔ ndɔ́kɛt.
/mɔ-ndɔ ɔwá mɔ-ná a ^{H}ndɔ náá a nɔ́ wɛ́ɛya **ákánana**
1-person REL.1 1-child SM.1 PRS be_sick SM.1 PST1 PRN.1 leave.APPL
ɔ ndɔ́kɛta/
PREP 7.doctor
'L'homme dont la fille est malade l'amène à la clinique.'
'The man whose child is sick took her to the clinic.' [PM 2179]

(295) Context: "Afterwards, when I arrived at the town square, they were dancing the *ɛŋganda*, dancing the *ɛŋganda*, dancing the *ɛŋganda*,"
á↓há mɛ́nɔ́ aŋɔ́á **yama**, mbaá ósɛ ámɛ́á á ɛlísa wə́ən, mɛ́ ↓ká ámɛ weɛ́ya **hólí**.

á↳há	mɛ́	nɔ́	aŋɔ́á	**yama**	mbaá	ɔ-sɛ́á	ámɛ	á
thus	SM.1SG.DEP	PST2	PRN.2SG	notice	thus	SM.2SG-say	PRN.1SG	COP

ɛlísa	wə́ni	mɛ́	ka	ámɛ	wɛ́ɛya	**hólíə́**/
1.Elisabeth	DEM.DIST.1	SM.1SG.SBJV	PST3	PRN.1SG	PRN.1	greet

'C'est ainsi que je t'ai aperçu, ainsi tu m'as dit «voilà Elisabeth, va la saluer».'
'And so I noticed you, and so you said to me "Elisabeth is over there, go and greet her".' [EO 1008]

(296) Context: "As for small mangoes, the small ones we get here in Cameroon,"
ɛbáka ɔ maáta **hikəkiə**?

/ɛ-bá-aka	ɔ	maáta	**hikəkiə**/
SM.7-be-DUR	SM.2SG	PRN.OBJ.6	like

'tu les aimes ?'
'do you like them?' [PM 950]

From this, we see that OV word order is available both for focal and non-focal objects, and both for pronominal and non-pronominal objects, meaning that S-Aux-O-V-X should be considered the pragmatically-neutral word order in Tunen.

An alternative analysis along the lines of what is proposed by Güldemann (2007) is that VO is the unmarked order in Tunen and OV is marked. While in other languages such as Aghem the preverbal object position can be captured in terms of being extrafocal, to extend this analysis to Tunen, one is forced to group information focus together with given objects. While it could be argued that OV is marked as 'non-contrastive', such a term is conceptually problematic in that it refers to a diverse class of objects and relates to the absence of a feature rather than membership of a natural class. I therefore consider it more accurate to consider OV to be unmarked and derive any deviations through the unified IS feature of 'contrast'. Note here the discussion from Chapter 5 of how such an analysis may account for contrastively-focussed VO patterns described in Mous (1997, 2005), which we saw are infrequent in Tunen, with contrastive term focus on the object more generally expressed through a biclausal reverse pseudocleft.

In the following sections I discuss in more detail the Tunen-specific nature of the S-Aux-O-V-X template, given that it is known that there is syntactic variation

within languages that have S-Aux-O-V-X word order on the surface (Creissels 2005, 2018; Sande et al. 2019, a.o.). I first show that the S slot is properly considered the position for subjects, rather than just the position for topics. While the nature of the verb (V) slot is uncontroversial as the main finite verb of the clause, other languages with Aux-O-V(-X) order have been shown to vary in the nature of the Aux, O, and X components. I therefore discuss each of these slots in turn.

6.2.3 On the nature of the S slot

Given that there is an intrinsic relationship between subjecthood and topicality (see e.g. Chafe 1976; Li and Thompson 1976; cf. Chapter 2 section §2.2), it is worth considering whether the *S* slot of S-Aux-O-V-X is best characterised in terms of the grammatical role relation of *subject* or in terms of the discourse role relation of *topic* (which would then recast the word order as Top-Aux-O-V-X). This can be done by investigating word order in environments where the subject is non-topical, as found by testing thetics and quantified subjects (Van der Wal 2021).

The thetic test considers whether the S slot can be filled in thetic constructions. As thetics differ from categorial sentences in having no topic-comment split (Sasse 1987, 1996; Chapter 2 section §2.2), a subject in a thetic sentence is necessarily non-topical. In Tunen, the S slot can be filled in thetics (297),[6] thus providing evidence that this slot is compatible with non-topical subjects.

(297) a. Context: Out-of-the-blue (thetic)
nguə́yilə yɛ́ ná mubúmə́bumə kumun.
/**nguə́yilə** yɛ́ ná mɔ-búmə́bumə kumunə/
9.lion SM.9 PST2 1-hunter attack
'Un lion a attaqué un chasseur.'
'A lion attacked a hunter.' [PM 1753]

b. Context: You walk into a room and see a broken window. Someone announces:
Biə́lɛ a ná itúbə́ san.
/**Biə́lɛ** a ná ɛ-túbə́ sána/
1.Pierre SM.1 PST2 7-window break
'Pierre a cassé la fenêtre.'
'Pierre broke the window.' [EE+EB 1669]

[6] As the focus in these subsections are slots other than O and V, for these subsections I use boldface to indicate the slot of interest.

The quantified subject test relies on the fact that certain phrases cannot be topicalised, such as 'someone' or quantificational phrases like 'each person'. In Tunen, these phrases can appear in the S slot (298), (299), showing again that this slot is not restricted to topics.

(298) Context: You are inside the house and hear a knock outside (but don't see who is there).
mɔndɔ a lɛ́ u niki.
/**mɔ-ndɔ** a lɛ́á ɔ nɛ-kí/
1-person SM.1 be PREP 5-door
'Quelqu'un est à la porte.'
'Somebody is at the door.' [EO 404]

(299) a. **bɔlɛ́á tíá** bɔ́ báka na hinoní (hímoti).
/**bɔ-lɛ́á tíá** bɔ́ bá-aka na hɛ-noní (hɛ́-mɔtɛ́)/
14-tree each SM.14 be-DUR with 19-bird (19-one)
'Chaque arbre a un oiseau.' (∀ > ∃)
'Each tree has one bird.' (∀ > ∃) [JO 1288]

b. **baná bɔ́kim** bá ná masɔ́ma kiak !
/**ba-ná bá-kimə** bá ná ma-sɔ́ma kɛa-aka/
2-child 2-all SM.2 PST2 6-homework do-DUR
'Tous les enfants ont fait leurs devoirs !'
'All the children did their homework!' [EE+EB 1816]

This evidence therefore shows that the S slot of the Tunen S-Aux-O-V-X template should be defined in terms of subjecthood rather than in terms of topicality.

6.2.4 On the nature of the Aux slot

One possible point of confusion and problem of comparison between languages described as having S-Aux-O-V-X word order patterns is that there is variation in the literature as to the definitional criteria used for the *Aux* slot within this S-Aux-O-V-X template.

A narrow definition of an auxiliary requires it to have verbal origin. We will see in section §6.8 that in many languages it is unclear whether auxiliaries derived from verbal sources; for some Mande languages it is in fact clear that the auxiliary component (termed 'predication marker' in Mande linguistics) is derived from a *non*-verbal source (see e.g. Creissels 2005; Kastenholz 2003).

In Tunen, the origin of the tense markers that appear in the Aux slot is unclear. I note in Kerr (2024) that verbs considered to be common sources for the grammaticalisation of TAM forms crosslinguistically show no clear relationship to Tunen's tense-marking system. In other words, I did not find evidence to support a V→Aux grammaticalisation pattern in Tunen (section §6.8). Nurse (2008) similarly reports uncertainty in the origin of TAM forms of zone A Bantu languages, showing that more research is needed on the diachrony of Tunen's TAM forms in order to determine a verbal origin. For our current purposes, because it cannot be shown that Tunen tense markers originate from verbs, the definition of 'Aux' must be agnostic with respect to verbal origin. I therefore adopt such a permissive definition, while maintaining the use of 'Aux' in S-Aux-O-V-X so as to be consistent with the general term used in the literature. However, if one adopts the definition of auxiliary to require verbal origin, then the formulation of the template would more properly be S-TAM-O-V-X, where TAM indicates a tense/aspect complex. Note however that subject marking, negation and directional affixes also form part of the Tunen TAM complex, as shown in (300)-(301), so the most accurate template would be S-SM(-NEG)-TAM(-AND/VEN)-O-V-X. I use 'Aux' as a shorthand for this SM-NEG-TAM-AND/VEN cluster.[7]

(300) « muití ɛ́mbɔ́ma **á ndɔ nda** hulək. »
/mɔ-ití ^{H}=ɛ-mbɔ́ma a **^{H}ndɔ nda** húlə́-aka/
1-owner ASSOC=7-field SM.1 PRS VEN
'« Le propriétaire du champ va venir. »'
"'The owner of the field is coming.'" [JO 1755]

(301) **mɛ lɛ́ ndɔ** tunəni ɔ́kɔ.
/**mɛ lɛ ^{H}ndɔ** tu-nəni ɔ́kɔ/
SM.1SG NEG PRS 13-Nen understand
'Je ne comprends pas la langue tunen.'
'I don't understand Tunen.' [JO 804]

Given that a non-verbal definition of auxiliary is adopted here, we may ask what true auxiliary verbs look like in Tunen. Here, we see an S-TAM-Aux-O-V-X pattern, whereby the auxiliary can be analysed as verbal (S-TAM-V-(O-)V-X), as with *tíkə́*

[7] Note here the discussion in Chapter 4 regarding the use of the Tunen community orthography convention of separating elements of the TAM cluster by whitespace, without analysing these as functioning in the grammar as separate words, i.e., as a commitment to a higher degree of morphosyntactic analyticity.

'stay' (Dugast 1971); (302). In complex tenses with the *-báka* habitual, there is a second subject marker on the main verb (303), showing that both the auxiliary verb *-báka* and the main verb are verbal.

(302) tɔ ná **tíkə́** sáá.
/tɔ ná **tíkə́** sáá/
SM.1PL PST2 stay come
'Nous arriverons.'
'We will follow.' [PM 1058]

(303) **mɛ báka mɛ ákaka** ɔ nioní yiilə tɛ́.
/**mɛ** **bá-aka** **mɛ** **ákaka** ɔ nɛ-oní yiilə tɛ́á/
SM.1SG be-DUR SM.1SG leave PREP 5-market Wednesday every
'Je vais au marché chaque mercredi.'
'I go to the market every Wednesday.' [PM 192]

As these auxiliaries behave syntactically as verbs, I do not cover them further in this chapter (cf. Chapter 4 section §4.4.4).

6.2.5 On the nature of the O slot

An important aspect of variation between languages described as having S-Aux-O-V-X constituent order is the definitional criteria for the *O* slot, which has been shown in the literature on African languages to vary in the four dimensions given in (304) below.

(304) **Dimensions of variation in the O slot in languages of West/Central Africa**

i. Number of O: single preverbal O or multiple allowed
ii. Syntactic type of O: pronominal only or also lexical NP
iii. IS of O: extrafocal, focal, contrastive
iv. Thematic type of O: theme, recipient/beneficiary, locative object

In addition to these four dimensions of variation, work on object placement crosslinguistically discusses three additional dimensions of variation, as in (305).

(305) **Other dimensions of variation in the O slot cross-linguistically**

v. the definiteness of the object

vi. the heaviness of the object

vii. the status of the object as (un-)incorporated

I therefore turn to these after discussing the first four dimensions, which are most relevant for the languages of West/Central Africa.

Previous work by Gensler and Güldemann (2003) takes the canonical S-Aux-O-V-X word order pattern as containing a single object in the O slot. Such a classification has been taken over in broader crosslinguistic work on Aux-O-V, where a syntactic typology of Aux-O-V word orders is presented in which a type "African SAuxOVX" or "real SAuxOVX" is taken as having a *single* preverbal object. However, languages like Tunen allow for *multiple* preverbal objects, meaning that Aux-O-V in African languages should not be considered to be restricted to single objects (or, alternatively, that there exists multiple types of Aux-O-V languages in Africa).

Looking at variation in the number of objects permitted in the O slot, we can start by observing that in some Senufo/Gur languages, the theme object is preverbal and the goal object is postverbal, marked by an adposition (Givón 1975; Claudi 1993; Gensler 1994), a pattern also found in the Mande language Mandinka (306).

(306) a. u a kù **kàn** mìì-á.
s/he PERF it give me-to
'S/he gave it to me.'
(Supyire (Gur), Carlson 1991:217, cited in Gensler 1994:6)

b. mòolu ye kinoo **dii** n na.
people PAST food give me to
'The people gave me food.'
(Mandinka (Mande); Creissels 1983:134, cited in Gensler 1994:3)

According to Creissels (2005), other Mande languages have a strict requirement of having a single preverbal object, but vary in the thematic role that that object can have. He writes that languages such as Soso never have more than one nominal between S and V, but this preverbal object can either be theme or the goal, with any other object appearing postverbally and obligatorily marked as oblique (as shown by the postpositions in (307)).

(307) a. ń nìngéé **fíí-mà** í má.
1SG cow give-TAM 2SG PO
'I will give you a cow.'

b. ń í **kíí-mà** nìngéé rá.
1SG 2SG give-TAM cow PO
'I will give you a cow.' (Soso (Mande), Creissels 2005:ex5, adapted)

While these languages with a single preverbal object in the O slot support the presentation of 'African' S-Aux-O-V-X of Gensler and Güldemann (2003) as having a single preverbal object, other languages in the literature are reported to allow multiple (non-oblique) preverbal objects. In these cases, the order is always Goal-Theme (never Theme-Goal) (Gensler 1994). This availability of multiple preverbal objects is illustrated below for Ewondo (Bantu (Benue-Congo); Redden 1980), Wobé (Kru; Marchese 1986, cited in Gensler 1994), Kisi (Atlantic; Gensler 1994), and Attie (Kwa; Kouadio 1996); (308).

(308) a. a-kad mə dzɔ **və́**.
he-do.usually me it give
'He usually gives it to me.'
(Ewondo (Bantu), Redden 1980:167, cited in Gensler 1994:5)

b. ɔ se kei ko **kpa** dè dɔɔ.
he NEG Kei rice bring LOC market
'He didn't bring rice to Kei at the market.'
(Wobé (Kru), Marchese 1986:243, cited in Gensler 1994:5)

c. ò có ndú kóná **dóónɔ̌ng**
he FUT him message pour.forth
'He will relate the message to him.'
(Kisi (Atlantic), Childs 1988:139, cited in Gensler 1994:5)

d. mɛ̃ jī-ī jàpí ʃìkā **dzé** jábò lə̄.
1S father-PM Yapi money give market there
'My father is giving money to Yapi at the market.'
(Attie (Kwa); Kouadio 1996, Creissels 2005:§4.3)

Tunen similarly allows multiple preverbal objects as one of the means of forming a ditransitive (see Chapter 4 section §4.5.2; Chapter 5 section §5.2.6).[8] The order

[8]The second form of a ditransitive is to have the recipient/beneficiary object in postverbal posi-

of objects follows the strict Goal-Theme order found in other languages, and is not affected by IS (being focal/non-focal), as shown in the following dataset and also discussed in Chapter 5 (cf. Kerr to appear).

(310) Context: 'Who is the woman giving a gourd to?' + photo from BaSIS stimuli

a. a nɔ́ ɔsɔ́kɔ́ hɛtɛ́tɛ́ **indi**.
/a nɔ́ **ɔsɔ́kɔ́ hɛ-tɛ́tɛ́** índíə/
SM.1 PST1 1.other 19-gourd give
'Elle donne une gourde à [l'autre]$_{\text{FOC}}$.'
'She gives a gourd to [the other (woman)]$_{\text{FOC}}$.'

b. *a nɔ́ hɛtɛ́tɛ́ ɔsɔ́kɔ́ **indi**.
/a nɔ́ **hɛ-tɛ́tɛ́ ɔsɔ́kɔ́** índíə/
SM.1 PST1 19-gourd 1.other give
Intd.: 'Elle donne une gourde à [l'autre]$_{\text{FOC}}$.'
Intd.: 'She gives a gourd to [the other (woman)]$_{\text{FOC}}$.'
(Tunen (Bantu) [PM 1541, 1542])

(311) Context: 'What is the woman returning to the child?'
muəndú á ndɔ mɔná imítə́ **túmbi**.
/mɔ-əndú a ^{H}ndɔ **mɔ-ná ɛ-mítə́** túmbiə/
1-woman SM.1 PRS 1-child 9-calabash return
'La femme remet [la calebasse]$_{\text{FOC}}$ à l'enfant.'
The woman returns [the calabash]$_{\text{FOC}}$ to the child.'
(Tunen (Bantu); [JO 1587])

This S-Aux-O$_{\text{Goal}}$-O$_{\text{Theme}}$-V-X order applies equally in negative contexts, as in (312) below.

---

tion, in which case it must be obliquely marked (309), thus fitting the canonical S-Aux-O-V-X word order pattern. The availability of these two options matches the crosslinguistically common ditransitive alternation (Malchukov et al. 2010).

(309) Context: "Who is the woman returning the calebasse to?"
muəndú á ndɔ imítə́ **túmbiə** ɔ̰ mɔn.
/mɔ-əndú a ^{H}ndɔ ɛ-mítə́ túmbiə **ɔ mɔ-ná**/
1-woman SM.1 PRS 9-calabash return PREP 1-child
'La femme remet la calebasse [à l'enfant]$_{\text{FOC}}$.'
'The woman returns the calabash [to the child]$_{\text{FOC}}$.' ([JO 1586]; Kerr to appear)

(312) mé sá mɔná bɔ́la **indi.**
/mɛ sá mɔ-ná bɔ-la índíə́/
SM.1SG NEG 1-child 14-thing give
'Je n'ai rien donné à l'enfant.'
'I haven't given the child anything.' [EO 1485]

We therefore see that Tunen differs from some West African languages in that it allows multiple preverbal objects in the O slot of the S-Aux-O-V-X template.

Note that locative objects by contrast are always obliquely marked and postverbal.[9] This differs from languages such as Attie which also allow locative objects to occupy the preverbal O slot.

(313) a. mɛ̰̄ jī-ī jàpí ʃìkā **dzé** jábò lə̄
1SG father-PM Yapi money give market there
'My father is giving money to Yapi at the market.'

b. jàpí-ī kpɔ̄ɛ̂ pjà̰ **nœ̰̄**
Yapi-PM forest.DEF in walk
'Yapi is walking in the forest
(Attie (Kwa); Kouadio 1996; Creissels 2005:§4.3, adapted)

Adding this to what we have seen in the previous subsections, we can summarise that the O slot in Tunen can contain lexical noun phrases and pronominal objects, focal and non-focal objects, and theme and goal objects, but cannot contain locative objects.

We can turn now to the other factors said to influence object placement crosslinguistically, namely (v) the definiteness of the object, (vi) its heaviness, and (vii) its status as incorporated or unincorporated with the verb (305). Starting with definiteness, we can differentiate the nature of the objects along the definiteness hierarchy in (314), which may correlate with differences in linguistic expression, as shown for example in differential positioning of definite and indefinite objects (see e.g. Diesing 1992; Enç 1991).

(314) **Definiteness hierarchy:**
Personal pronoun > Proper name > Definite NP > Indefinite specific NP > Non-specific NP (Aissen 2003:437)

[9] A small number of inherently-licensed (i.e., not overtly obliquely-marked) locative objects are also found postverbally in Tunen (Mous 2003; Kerr to appear; cf. Appendix Text 2 fn15).

As we saw in Chapter 4 section §4.3.11 and as is standard for a Bantu language, Tunen has no obligatory marking of definiteness or specificity, with unmodified nouns compatible with both definite and indefinite interpretations, dependent on discourse context (see also Kerr 2020). This applies to preverbal objects, which means that objects in the O slot can be interpreted as definite or indefinite (315).

(315) mɛ́ ndɔ <u>mɔ́ndɔ</u> **si**.
/mɛ ᴴndɔ mɔ-ndɔ siə/
SM.1SG PRS 1-person search
'Je cherche {quelqu'un/une personne/la personne}.'
'I'm looking for {someone/a person/the person}.'
[JO 898]; (Kerr 2020:246)

While bare nouns are thus ambiguous in terms of definiteness in Tunen, we can also test the definiteness of the object by overtly marked definites and overtly marked indefinites. Firstly, examples (316) and (317) show that the preverbal object can be definite. Example (316) shows that a discourse-linked (D-linked) object, visibly definite due to the possessive pronoun *wə́yíə́* 'his', must be preverbal and cannot be postverbal, while examples (317a)-(317b) show that proper nouns and pronouns (both taken to be inherently definite and thus at the top of the definiteness hierarchy; Aissen 2003; Abbott 2006) are also preverbal.

(316) Context: 'What happened?'

a. yəmisə́ a ka <u>wə́yíə́</u> <u>mɔtɔ́á</u> **lú**.
/yamíá-isə́ a ka <u>wə́yíə́</u> <u>mɔ-tɔ́á</u> **lúə**/
PRN.POSS.1SG.9-9.father SM.1 PST3 PRN.POSS.1.3 3-car sell
'Mon père a vendu sa voiture.'
'My father sold his car.' [JO 2445]

b. *yəmisə́ a ka **lúə** <u>wə́yíə́</u> <u>mɔtɔ́á</u>.
/yamíá-isə́ a ka **lúə** <u>wə́yíə́</u> <u>mɔ-tɔ́á</u>/
PRN.POSS.1SG.9-9.father SM.1 PST3 sell PRN.POSS.1.3 3-car
Intd.: 'Mon père a vendu sa voiture.'
Intd.: 'My father sold his car.' [JO 2446]

(317) a. mɛ́ ndɔ Biə́lə **sin** isiŋak.
/mɛ ndɔ Biɛlɛ **sinə** isiŋaka/
SM.1SG PRS 1.Pierre see now
'Je vois Pierre maintenant.'
'I see Pierre now.' [EO 1412]

b. Context: You are telling a story about a man called Emmanuel.
mɔndɔ a ná wɛ́ɛya **tanák**.
/mɔ-ndɔ a ná wɛ́ɛya **taná-aka**/
1-person SM.1 PST2 PRN.1 wound-DUR
'L'homme/Quelqu'un l'a blessé.'
'The man/Somebody injured him.' [EB+JO 2682]

Turning now to overt marking of indefinites, example (318) shows that objects marked by the specific indefinite determiner *-mɔté* (for which see Chapter 4 section §4.3.11 and Kerr 2020) are preverbal. Examples (319) further show that indefinites under negation are also preverbal. We therefore see that the preverbal object position is compatible with indefiniteness.

(318) Context: You are looking for your friend Daniel.
mɛ́ ndɔ wɔmɔté mɔ́ndɔ **si**. neayá nínyə á Təniɛl.
/mɛ ᴴndɔ ɔ́-mɔté mɔ-ndɔ **siə** neayá nɛ-nyə á Təniɛ́lɛ/
SM.1SG PRS 1-one 1-person search PRN.POSS.1.5 5-name COP 1.Daniel
'Je cherche une certaine personne. Son nom est Daniel.'
'I'm looking for someone. His name is Daniel.' [JO 891]; (Kerr 2020:246)

(319) a. Context: EO describes a picture of a fisherman (Max Planck stimulus)
ɔ háa a sá bɔla **halɛn**
/ɔ háaha a sa bɔ-la **halɛna**/
PREP DEM.PROX.LOC SM.1 NEG 14-thing catch
'Ici il n'a rien attrapé.'
'Here he hasn't caught anything.' [EO 1483]

b. a sá mɔndɔ **sin**.
/a sá mɔ-ndɔ **sinə**/
SM.1 NEG 1-person see
'Il n'a vu personne.'
'He hasn't seen anybody.' [EO 1485]

These definite and indefinite-marking tests show that OV word order in Tunen is not restricted in terms of definiteness or specificity of the object, being found for objects across the definiteness hierarchy. The O slot should therefore be taken as a general object position not restricted by definiteness.

Turning now to the possible role of heaviness on the material found in the O slot, we can note already from (316a) and (318) above that preverbal objects can be modified, showing that they are syntactically larger than a single noun. Further evidence that preverbal objects can be heavy is given in (320) and (321) below.

(320) Context: Your friend asks what happened at church.
mɔtát a ná imbə́nu yɛ fəkin nɛ́ Yə́səs ɔ Yɛrúsalɛm **nɔŋɔnak**.

/mɔ-táta	a	ná	ɛ-mbə́nu	yɛ	fəkinə	nɛ́	Yə́səsu	ɔ
1-pastor	SM.1	PST2	9-news	ASSOC.9	5.entrance	5.ASSOC	Jesus	PREP

Yɛrúsalɛmɛ	**nɔŋɔnɔ-aka**/
Jerusalem	tell-DUR

'Le pasteur a raconté des nouvelles de l'entrée de Jésus à Jerusalem'.
'The pastor told the news of Jesus' entrance into Jerusalem.' [DM 166]

(321)

a	ná	wɛɛ́ya	mamanɛna	má	misí	məkimə	**ínə́níə́**	na
SM.1	PST2	PRN.1	6.kingdom	ASSOC.6	3.ground	3.all	show	with

túə́búə́	tuúmə.
PRN.POSS.2.13	13.splendour

'He showed him all the kingdoms of the world and all their splendour.'
(Matthew 4.8; CABTAL 2019:7)

Note that while modified noun phrases can be preverbal in this way, discontinuous modification is also possible, as will be discussed in more detail in Chapter 7. The relevant point for this section is that the O slot in Tunen is not restricted in terms of definiteness or syntactic size or prosodic weight, with the O slot filled by a syntactic phrase rather than a single head.

The final potential factor influencing object placement from (305) is whether the object may be treated as incorporated into the verb through the process of noun incorporation. Noun incorporation here refers to the creation of a new lexical item V from the combination of a noun and a verb (O+V).

There are several arguments against an analysis of OV constructions in Tunen as instances of noun incorporation. Firstly, there is no clear morphophonological

evidence that the object is integrated into the verb in Tunen, with no morphosyntactic evidence for detransitivisation of the verb (as found for example with incorporated objects in the Mande language Soninke; Creissels 2018:750). Secondly, the noun component of a noun incorporation structure cannot be definite, referential, or specific (Mithun 1984), while we have seen in (315)-(317b) above that Tunen preverbal objects may be definite. Nouns in incorporated structure cannot be modified by definiteness markers, demonstratives, or numerals (Mithun 1984), whereas the preverbal object in Tunen can. Similarly, proper names are considered not to be incorporated (Mithun 1984:864), while in Tunen we have seen that the O slot can be filled by a proper noun (317a). Fourthly, noun incorporation results in set lexical meanings, while in Tunen we see that OV is productive, found across verbs and nouns and not seeming to be limited to certain combinations. There is no indication in previous lexicographic work on Tunen for Tunen to have verbs derived from N+V combinations with set lexical meanings (Dugast 1967), nor any indication from my consultants that the object and verb are considered one lexical item by Tunen speakers.[10] Moreover, noun incorporation is primarily used to background arguments (Mithun 1984:863), while we have seen above that the preverbal object in Tunen may be focal, i.e., non-backgrounded (section §6.2.2). Finally, noun incorporation is found crosslinguistically more frequently with certain predicates (e.g. 'to make', 'to eat' are preferred over 'to look at', 'to hear'; Mithun 1984:863), while in Tunen, OV word order is consistent across different predicate types (including those considered less likely to incorporate). Noun incorporation is therefore not at all motivated as an account of OV word order in Tunen.

To sum up this subsection, we have seen that the preverbal object slot in Tunen is used for objects across discourse contexts, can be filled by multiple objects, is found for objects across the definiteness hierarchy, and can be filled by heavy objects. The only type of object not allowed in the O slot is locative objects, which are always postverbal and typically obliquely marked. When multiple objects appear preverbally, they are always in strict Goal-Theme order, matching what is found for other languages in West/Central Africa with multiple preverbal objects (308) and differing from the single preverbal type of S-Aux-O-V-X language described in Gensler and Güldemann (2003).

[10] Such an indication would be visible, for example, if when working 'mot-à-mot' (word-by-word) in the transcription process for elicitation sessions, the consultant were to pronounce the object and a verb as one word. This was not the case in my field sessions, with the object and verb pronounced as separate lexical items.

6.2.6 On the nature of the V slot

The *V* slot of the Tunen S-Aux-O-V-X pattern corresponds to the main verb of the sentence. The verb does not take inflectional prefixes, with this inflectional information instead appearing on the Aux element; this is referred to as *split predication* (e.g. Gensler and Güldemann 2003; Güldemann 2022; see Chapter 4 section §4.4). However, the two slots are adjacent in intransitive sentences which lack an O element, meaning that some sources on Tunen transcribe the Aux and V components as one word.

The Tunen verb can take derivational suffixes, traditionally referred to as 'extensions' in Bantu studies (see Chapter 4 section §4.4). Examples are the causative suffix and the middle voice marker, which is unusually a prefix rather than a suffix (Mous 2008) (322).

(322) mi ná Sisília **bíhólí**.
/mɛ ná Sisília **bɛ́**-hólíə/
SM.1SG PST2 1.Cecile MID-thank
'Je remercie Cecile.'
'I thank Cecile.' [JO 516]

These derivational affixes will be discussed further in section §6.4.1 below, where they will be important for the theoretical analysis of the position of the verb in Tunen clausal syntax.

6.2.7 On the nature of the X slot

The postverbal *X* (or 'Other') slot can be filled by a variety of material, including locative phrases, time expressions (323), prepositionally-marked objects (324), comitatives and instruments (325), adverbs (326), and discontinuously-positioned nominal modifiers (395).

(323) Context: Out-of-the-blue (thetic).
bɛfɔŋɔ bɛ́ ká fámáka **naánɛkɔla (ɔ) ɛ́tɔbɔtɔb**.
/bɛ-fɔŋɔ bɛ́ ka fámá-aka **naánɛkɔla** **ɔ** **ɛ-tɔbɔtɔ́bɔ́**/
8-cow SM.8 PST3 arrive-DUR yesterday PREP 7-field
'Les vaches sont apparues dans le champ hier.'
'The cows appeared in the field yesterday.' [JO 2600]

(324) Context: "Who is the woman returning the calabsh to?"
muəndú á ndɔ imítə́ túmbiə **ɔ mɔn.**
/mɔ-əndú a ᴴndɔ ɛ-mítə́ túmbiə **ɔ mɔ-ná**/
1-woman SM.1 PRS 9-calabash return PREP 1-child
'La femme remet la calebasse [à l'enfant]$_{\text{FOC}}$.'
'The woman returns the calabash [to the child]$_{\text{FOC}}$.' [JO 1586]

(325) Context: EO: "- He wrote '*God hates the wicked*'."
PM: "I also saw it."
EO: "'*God hates the wicked*'."
mɛ ka ámɛ siəkinə **na má↓mɛ́á məə́sə máfandɛ́ máam**!
/mɛ ka ámɛ siəkinə **na máᴸmɛ́á ma-ə́sə má-fandɛ́**
SM.1SG PST3 PRN.1SG see.DUR with PRN.POSS.1SG.6 6-eye 6-two
máama/
DEM.PROX.6
'Moi j'ai vu avec mes propres yeux !'
'I saw (it) with my own two eyes!' [PM 1050]

(326) Context: Despite being born outside Ndiki, Papa Daniel is considered Munen (i.e., a local).
a ka nyɔɔkɔ háaha ɔ uwəsú **mɔŋɛŋ.**
/a ka nyɔ-aka háaha ɔ uwəsú **mɔŋɛ́ŋa**/
SM.1 PST3 work-DUR DEM.PROX.LOC PREP PRN.POSS.EMPH.1PL much
'Il a beaucoup travaillé ici chez nous'.
'He worked a lot here in our region.' [EO 1043]

(327) Context: 'What do you see?'
mɛ́ ndɔ **tunɔní** sinə **tɔ́lál.**
/mɛ ᴴndɔ **tɔ-noní** sinə **tɔ́-lálɔ́**/
SM.1SG PRS 13-bird see 13-three
'Je vois [trois oiseaux]$_{\text{FOC}}$.'
'I see [three birds]$_{\text{FOC}}$.' [EO 225]

Note here that multiple constituents are possible in the postverbal domain, as seen for example in (323) and (326). In general, the order of elements in the postverbal domain (i.e., the X slot) appears to be flexible; there are preferences rather than

strict ordering restrictions. I leave the exact nature of such preferences for more detailed study and note for our current purposes that these postverbal elements are syntactic adjuncts (with the exception of modifiers in discontinuous DPs, to be covered further in Chapter 7).

Finally, note that clausal complements also follow verbs (and cannot appear preverbally), as illustrated in (328) below, repeated from (281) above.

(328) mɛ́ ndɔ **manya** [ɔwá Matɛ́ŋɛ a ka hiəfulə **fanak**].

/mɛ	ᴴndɔ	**manya**	ɔwá	Matɛ́ŋɛ	a	ka	hɛ-əfulə	**fana-aka**/
SM.1SG	PRS	know	REL.1	1.Martin	SM.1	PST3	19-book	read-DUR

'Je sais que Martin a lu le livre.'
'I know that Martin has read the book.' [JO 905]

This means that 'object' is used to refer to nominal objects; I do not consider clausal complements further here, besides showing in section §6.4.2 (cf. Kerr 2024) that their head-initiality provides some evidence in favour of assuming that the Tunen verb phrase is also head-initial underlyingly.

6.2.8 Section summary

To sum up the empirical section of this chapter, we have seen that Tunen S-Aux-O-V-X word order is consistent across TAM contexts and IS contexts and found in both affirmative and negative clauses and both main and embedded clause types. The S refers to subjects (which may be topical or non-topical), Aux refers to the TAM cluster (which is not necessarily derived from a verbal source), O refers to objects, and X refers to other material. The O slot may be filled by multiple objects in a ditransitive construction, and does not vary by definiteness, specificity, or heaviness. As seen in Chapter 5, VO word order does exist in Tunen but is marginal and is not the unmarked word order; rather, S-Aux-O-V-X is the pragmatically-neutral and the canonical word order. Here, 'pragmatically-neutral' can be considered as multifunctional (i.e., available in multiple IS contexts) or as underspecified, and 'canonical word order' is used synonymously with 'basic word order' or 'prototypical word order'.[11]

Note that we have seen so far that in its basic S-Aux-O-V-X pattern across TAM and IS contexts, Tunen matches more closely the Mande-type profile than the TAM /IS-based alternation proposed by Güldemann (2007) for the Benue-Congo group to which Tunen belongs genealogically (cf. Chapter 2 section §2.5.2). Interestingly,

[11]Throughout this thesis, I follow the BaSIS project convention of using 'word order' rather than 'constituent order', although the second term is also applicable (cf. Kerr et al. 2023).

Tunen differs here from its neighbouring Bantu/Bantoid languages Nyokon, Tikar, Nomaándé, Ewondo, and Eton. I will return in sections §6.7-§6.8 to reflecting on what this more detailed understanding of Tunen means for the comparative and historical picture. First, I will continue the investigation of Tunen by developing a formal analysis of its synchronic syntax.

6.3 Derivations of disharmony: Background

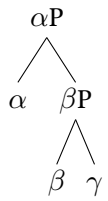
6.3.1 S-Aux-O-V-X as a disharmonic order

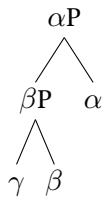
So far, we have seen that Tunen is unusual for a Bantu language in having OV word order, specifically the pattern S-Aux-O-V-X. We can note now that its clausal syntax of S-Aux-O-V-X is disharmonic: the tense/auxiliary component is head-initial (Aux-**VP**) while the verb phrase is head-final (O-**V**). This particular type of disharmony is therefore an instantiation of a head-initial structure dominating a head-final one. Disharmonic word order patterns like this are interesting from a comparative linguistic perspective, given that it is generally assumed that languages prefer cross-categorial harmony, i.e. consistency in headedness across the grammar (see e.g. Greenberg 1963; Hawkins 1983; Dryer 1992).

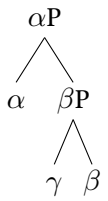
While typologically rare, this Aux-O-V clausal word order pattern is consistent with the Final Over Final Condition (FOFC), a proposed structural universal ruling out certain types of disharmonic word order patterns (329).

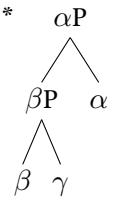
(329) **The Final-Over-Final Condition (FOFC)**
"*[αP [βP β γ] α], where β and γ are sisters and α and β are members of the same extended projection"
i.e., "A head-final phrase αP cannot immediately dominate a head-initial phrase βP, if α and β are members of the same extended projection."
(Holmberg 2017:1; see also Biberauer et al. 2014; Biberauer 2017b:190)

FOFC is illustrated in the tree structures below. Structures (330) and (331) are harmonic structures: (330) is consistently head-initial (a head-initial αP dominates a head-initial βP) while (331) is consistently head-final (a head-final αP dominates a head-final βP). Structures (332) and (333), by contrast, are disharmonic – the phrases αP and βP differ from each other in their direction of headedness. FOFC states that only tree (332) with a head-initial αP dominating a head-final βP is possible, with structure (333) with head-final αP dominating a head-initial βP ungrammatical (as indicated by the asterisk).

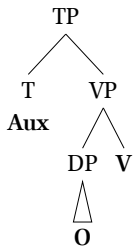
(330) 

(331) 

(332) 

(333) * 

Tunen's Aux-O-V order can be taken as an instantiation of the possible disharmonic structure (332), with TP substituted for αP and VP for βP, as in (334).

(334) 

The main research question for this section is how Tunen's S-Aux-O-V-X word order should be derived formally. Given that we have seen here that Aux-O-V is a disharmonic pattern, a relevant comparison point for a formal analysis are other languages with such disharmonic word order, many of which have been studied in the generative syntax literature in relation to FOFC. I argue that FOFC in turn makes predictions about the diachronic origin of Tunen's OV syntax that can be applied to the West/Central Africa context, which I will come back to in section §6.8 below after considering the formal analyses.

6.3.2 Formal models of Aux-O-V disharmony

In the rest of this section, I show how three different types of formal models have been proposed to account for disharmonic Aux-O-V derivations crosslinguistically: (i) roll-up movement accounts, as applied to Aux-O-V disharmony in Germanic, (ii) base-generation of head-final VP, as invoked in analyses of Aux-O-V in West African languages, and (iii) head movement accounts, as applied for analyses of the Bantu verb, which then must be modified by the additional mechanism of object movement to derive Aux-O-V. After presenting each type of analysis, I will discuss how they can be adapted for Tunen as a basic analysis, and then consider more specific empirical facts that help tease the different analyses apart.[12]

[12] I use 'formal models' here as a shorthand for formal models in the generative approach to syntax, and I assume the background knowledge on generative syntax presented in Chapter 2 section §2.3.

6.3.3 Analysis type 1: Roll-up movement in Germanic

S-Aux-O-V word order patterns are found in embedded clauses in various Germanic varieties (see Roberts 2019 and references therein), as illustrated in (335a) below. Note here that the verb is final in the clause, meaning that the word order pattern is more specifically S-Aux-O-V#.

(335) a. ...das de Hans wil es huus **chaufe**.
that the Hans want.3SG.PRS a house buy.INF
'...that Hans wants to buy a house.'
(Zurich German; Haegeman and van Riemsdijk 1986, cited in Roberts 2019:114)

b. ...az Jonas vil a hoyz **koyfn**.
that Jonas want.3SG.PRS a house buy.INF
'...that Jonas will buy a house.'
(Yiddish; Haider 2013:119 citing Vikner 2001:66, cited in Roberts 2019:116)

Aux-O-V in Germanic is an example of a FOFC-compliant disharmonic word order of the kind seen in section §6.3.1. above. The pattern has been discussd in terms of *verb-projection raising* (VPR; Haegeman and van Riemsdijk 1986; Dros-Hendriks 2018), where the object can interrupt an auxiliary-verb cluster (e.g. the object *es huus* 'a house' interrupting the verb cluster *wil chaufe* 'wants to buy' in (335a)). Aux-O-V in Germanic has generated a large number of formal analyses in the literature. These analyses employ different mechanisms, including (combinations of) base-generation of VO, base-generation of OV, phrasal movement of the object, verb/auxiliary movement to C (generating V2 or Aux-O-V when the auxiliary raises to C) and remnant movement of the VP from which the V has raised (see e.g. Koster 1975; Zwart 1993, 1997; Svenonius 2000).

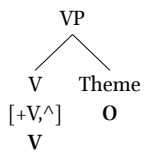
In this section I consider a recent formal approach to deriving S-Aux-O-V# disharmony in Germanic through roll-up movement, i.e., progressive application of Comp-to-Spec movement.[13] This roll-up movement operation is formalised in Biberauer et al. (2014) as a formal feature ^, more precisely a feature of a feature. This

[13]The reasons not to go through all the different analyses attested primarily focus on practical constraints on the length of this chapter. However, the arguments I will present for and against the three analyses covered in this chapter can be extended to many of the alternative analyses proposed for Germanic Aux-O-V. For example, the discussion regarding verbal suffixation and the motivations for head movement (to be seen in analysis type 3) can be applied to analyses where the whole VP moves, and base-generation of OV versus VO will be shown in discussion of analysis type 2 to be irrelevant due to empirical diagnostics of movement in Tunen (ruling out derivation of Aux-O-V word order from a base structure).

^-feature is akin to an [EPP] feature in that its appearance triggers movement, and this movement is formally-conditioned rather than having any semantic import (Sheehan 2013; Sheehan et al. 2017; Roberts 2019). Such movement is considered to be driven by licensing and thus sometimes referred to as *L(icensing)-movement*.

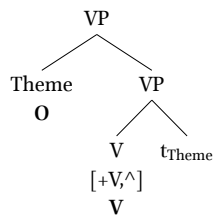
The roll-up account works as follows. When the ^-feature appears on a head, it obligatorily triggers roll-up of its complement to its specifier. Within the verbal domain, the featural specification [+V, ^] thus triggers movement of the theme complement to the specifier of VP, deriving OV (337) from a Kayneian VO base (i.e., Spec-Head-Comp; Kayne 1994) (336).

(336)



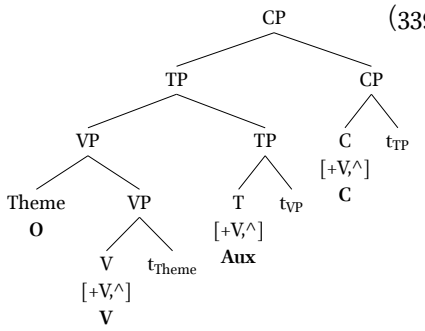
⇒

(337)

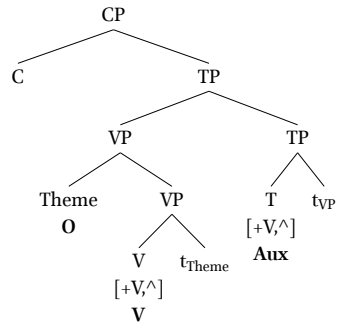


The ^-feature is specific to the given category (here, V), and so FOFC applies within an extended projection (here, the extended projection of the verb, i.e., the clausal domain). One key point is that the presence of a ^-feature must always start at the bottom of the projection (*Start At The Bottom Generalization*/SATBG; Roberts 2019:140-141). The ability for languages to vary in word order is thus captured by variation in spread of this ^-feature up the heads of the tree. If the ^-feature applies to all heads within an extended projection, then the structure has successive roll-up yielding harmonic head-finality (338). Disharmonic structures of the Aux-O-V kind are derived when the ^-feature stops at a certain point within the extended projection, resulting in partial roll-up (e.g. (339)). Importantly, there is a 'stop/go restriction': only contiguous heads from the lowest one can trigger roll-up. This stop/go restriction rules out FOFC non-compliant orders of the kind in (333).

(338)



(339)



While Aux-O-V has been studied in much more detail for Germanic, previous work in the formal syntactic literature has suggested that the Niger-Congo cases of Aux-O-V[14] likely differ from the Germanic cases:

> "**Aux-O-V is relatively common as a surface order, though this does not mean that all surface strings have the same underlying syntax.** In Germanic, Aux-O-V arises as a result of V2, which by hypothesis involves movement of the finite auxiliary to C or verb projection raising in embedded clauses. **The fact that the basic word order in Niger Congo is S-Aux-DO-V-IO strongly suggests that OV is derived by object movement, in an otherwise head-initial grammar.**"
>
> (Sheehan 2013 [NWP verison p149], emphasis added)

I therefore turn now to which analyses have been proposed specifically for the Niger-Congo cases of Aux-O-V, starting with base-generation accounts.

6.3.4 Analysis type 2: Base-generation of Aux-O-V in West Africa

We saw in section §6.2 above that various different languages of West and Central Africa have Aux-O-V word order. This raises the question as to whether formal analyses proposed for these cases of Aux-O-V can be extended to account for the type of Aux-O-V found in Tunen.

Koopman (1984) is to my knowledge the earliest generative analysis of S-Aux-O-V-X vs SVO alternation in West Africa, as applied to the analysis of Vata and Gbadi (Kru). Her analysis derives the variation between the two word order patterns by the presence or absence of an Aux element in T, which blocks or allows V-to-T movement. A similar notion of V-to-T movement that is blocked in certain TAM configurations is employed in Sande (2017) and Sande et al.'s (2019) analysis of Guébie (Kru, Côte d'Ivoire). Here, S-Aux-O-V is taken to be the in-situ syntax (with a base-generated head-final VP), while S-V-O derives from V-to-T movement.[15] Note here that the analysis is non-Kayneian in allowing base-generation of head-finality, in contrast to Koopman's (1984) approach, which assumes Spec-Head-Complement underlying order.

---

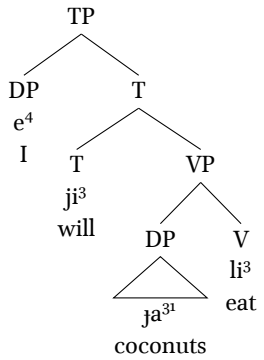
[14] Note that Mande languages are presumably considered here as part of Niger-Congo, although within Africanist linguistics they are nowadays considered a separate family or at least considered of unproven relationship (see Güldemann 2018:189-192 for a recent overview).

[15] For the purposes of comparing derivations in this chapter, traces can be understood as basically notationally equivalent to a strikethrough (~~example~~) or movement arrows. As stated earlier, the superscript numbers in the Guébie examples indicate tones.

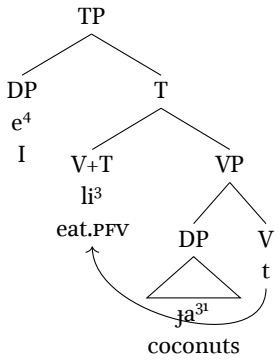
(340) a. e^{4} ji^{3} ɟa^{31} **li$_{3}$**
1SG.NOM FUT coconuts eat
'I will eat coconuts.' Guébie (Kru; Sande et al. 2019:668)

b. e^{4} **li^{3}** ɟa^{31}
1SG.NOM eat.PFV coconuts
'I ate coconuts.' Guébie (Kru; Sande et al. 2019:672)

(341)



(342)



If V always moves to T when it can (i.e., when T is not filled by a TAM marker/auxiliary), then there is an empirical prediction that there should always be SVO when there is no auxiliary element. This is the formal explanation for West African S-Aux-O-V-X/SVO word order alternations conditioned by TAM proposed in analyses following Koopman (1984).[16]

While V-to-T movement combined with base-generation of OV order is proposed for some West African languages, in Gwari (Nupoid), general head-initial properties lead Sande et al. (2019) to propose a different derivation of S-Aux-O-V from a base-generated head-initial VP.

(343) w-a kú àshnamá **si**.
3sg-T.PST COMPL:PL yams buy
'S/he has bought yams.' (Gwari (Nupoid); Hyman and Magaji 1970:57, cited in Sande et al. 2019:680)

[16]Note that, because the empirical prediction doesn't always hold in every language, authors such as Sande et al. (2019) are forced to stipulate a null auxiliary ∅ in certain constructions, serving to block V-to-T movement.

S-Aux-O-V in Fongbe (Kwa) is similarly analysed by Sande et al. (2019) as underlyingly head-initial ('fake'/'apparent' SAuxOV languages in their terminology), this time resulting from a head-initial VP with a nominalised complement, as supported by language-internal morphological evidence for nominalisation of the apparent 'V' element (344a)-(344b).

(344) a. Ùn **ɛ̀** nú **ɖù** jí.
1SG fall thing eat.NOM on
'I began to eat.'

b. Àsíbá **ɖò** [[ví ɔ̀ **kpɔ́n**] wɛ̄]
Asiba be.at child DEF look.at.NOM POST
'Asiba is looking at the child.'

(Fongbe (Kwa); Lefebvre and Brousseau 2002:215, cited in Sande et al. 2019:677, 685)

The most significant conclusion here is that while all these languages have S-Aux-O-V word order on the surface, they are argued to derive from different underlying structures. This means that S-Aux-O-V is not a uniform phenomenon in West African languages; there are multiple different S-Aux-O-V word orders. Sande et al. (2019) therefore propose a structural classification of 'strict'/underlying versus 'fake'/apparent S-Aux-O-V languages. This strict/fake distinction based on whether verb phrase is base-generated as head-initial (VO) or head-final (OV), as illustrated for 4 languages of West Africa (Table 6.1).[17]

	Type	O|V	Gen|N	PP	V|Adv	Vmove?
Guébie	Strict	OV	GenN	PostP	Adv-V	Yes
Dafing	Strict	OV	GenN	PostP	V-Adv	No
Gwari	Fake/Apparent	VO	GenN	Pre	V-Adv	Yes
Fongbe	Fake/Apparent	VO	NGen	Pre/Post	V-Adv	?

Table 6.1: Sande et al.'s (2019) structural comparison of 4 S-Aux-O-V languages in West Africa.

[17] As pointed out to me by Ines Fiedler, the classification Pre/Post is somewhat misleading as there is language-internal evidence for only one element being a true adposition. I leave the table here as presented in Sande et al. (2019) [cf. the 2017 version]. Note that while in the main text they focus on these four languages, they provide a table with a structural comparison of 54 languages in their appendix (Sande et al. 2019:696-698).

Parameters of variation for Aux-O-V versus VO derivations in West African languages thus include (i) whether the VP is base-generated as OV or VO, (ii) whether there is V-to-T movement, and (iii) whether there is a nominalised complement.

Looking beyond African languages, proposals of Aux-O-V via base generation have been made by Haider (2010, 2013) in terms of the Binary Branching Conjecture (BBC), which proposes that the VP is underlyingly head-final. This base-generation account therefore differs from Antisymmetric approaches following Kayne (1994), in which all XPs are underlyingly head-initial, with head-finality derived through movement (see e.g. Svenonius 2000 for the applications of this kind of analysis in different languages, primarily but not all from the Germanic family, and see Pregla in prep., 2023 for extension to Uralic languages, e.g. South Sámi).

6.3.5 Analysis type 3: Verbal head movement in Bantu

A final relevant type of analysis for S-Aux-O-V-X word order in Tunen is analyses proposed for other Bantu languages, which typically rely on the mechanism of verbal head movement. While not having been previously extended to S-Aux-O-V-X word orders, such analyses are a relevant point of comparison given they have been widely used in the analysis of Bantu languages to which Tunen is closely related.

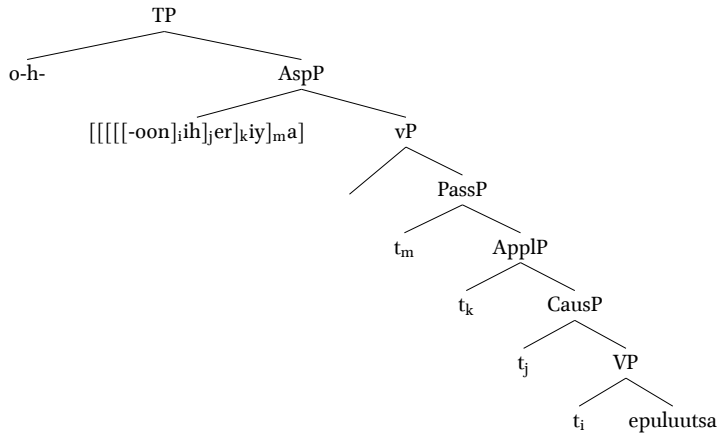
Bantu verbs are often analysed as involving V movement to a head lower than T—see amongst others Buell (2005); Carstens (2005); Myers (1990); Ngonyani and Githinji (2006); Julien (2002); Van der Wal (2009, 2022). The motivation for postulating verb movement is that various derivational markers are *suf* fixal. Under approaches to the morphology/syntax interface adopting the Mirror Principle (Baker 1985), the morphology reflects the order of operations in the syntax (cf. Chapter 2 section §2.3). Under such syntacticocentric accounts, suffixal morphology is derived through movement, while the prefixes on the verb are taken to be the spell-out of heads in their base positions. The whole verbal structure is then spelled out as a single phonological word at the phonological interface (PF) (Van der Wal 2020).

To illustrate the verb movement account, consider the canonical Bantu agglutinative verb form, as exemplified by the Makhuwa example in (345). Here, the verb root *oón* 'see' is modified by inflectional prefixes for subject and tense marking, and has multiple derivational suffixes (termed 'extensions' in the Bantuist literature; see e.g. Bearth 2003). The canonical Bantu word order considered from a grammatical role perspective is SVO (Downing and Marten 2019), seen in the Makhuwa example in (345) with the class 9 theme object *epuluutsa* 'blouse' following the verb.

(345) Nlópwáná o-h-oón-**íh-er-íy-á** epuluutsa
1.man SM.1-PFV.DJ-see-**CAUS-APPL-PASS-FV** 9.blouse
'The man was shown the blouse.'
(Makhuwa (Bantu), Van der Wal 2009:168-9)

The basic idea of the Bantu verb movement analysis is that V head-moves up iteratively to get derivational suffixes, but stops before T, thus deriving the subject and tense marking as prefixes and the derivational extensions as suffixes (346). Supporting evidence is that the Bantu derivational affixes reflect the ordering of heads along the clausal spine.[18]

(346)



(Van der Wal 2009:169)

Alternative accounts along the same lines are provided in Ngonyani (2000); Wasike (2007); Zeller (2013b) (as cited in Van der Wal 2022), who propose further V movement to Aux/T (see also Buell 2005; Carstens 2005; Myers 1990; Ngonyani and Githinji 2006; Julien 2002). While different authors propose a different set of XPs in the verbal domain and slight differences in verb height, the basic underlying factor is that the Bantu verb is derived through head movement. The relevant question for Tunen, then, is whether there is evidence for verbal head movement, and if so, to what degree. A secondary question is how such a verbal head movement account

[18]This is a simplified presentation of the analysis; various discussions relating to post-syntactic readjustment rules have been made in the literature on Bantu verbal derivation, based on deviations from the so-called CARP template (see e.g. Hyman 2003b; Good 2005, 2016; Zeller 2017). As these discussions rely on differences in scope order of the derivational suffixes, which are not the focus for the current section aimed at presenting the basics of verbal head movement as an analysis of the Bantu verb, I leave them aside for now (to be returned to in section §6.5.1).

for Bantu languages with VO word order can be extended to the OV word order found in Tunen.

6.4 A basic analysis for Tunen

6.4.1 Determining V height

The first relevant question for an analysis of Tunen verbal syntax is how high the verb is in the structure - is there verb movement, and if so, to what height?

Classical tests used as evidence for V height include (i) the negation test, and (ii) the adverb placement test (Pollock 1989). I will show that these tests indicate that there is no V-to-T movement in Tunen (and, by extension, no higher verb movement, given the Head Movement Constraint; Travis 1984). Next, I will discuss how Tunen's verbal morphology is compatible with a low level of verb movement, thus arguing against base-generation accounts of OV (analysis type 2).

6.4.1.1 Negation test

The negation test looks at whether the main exponent of negation (taken to be a functional head) precedes the verb (**Neg**-V) or follows it (V-**Neg**). The former order is found in English, while the latter order surfaces in French (347). These data are classically taken as evidence that the languages differ in terms of whether the verb has moved to T, i.e. to a higher syntactic position than Neg (assuming a [TP [NegP [VP]]] base structure).

(347) a. I do **not** eat apples. (English, Neg-V)

b. Je ne mange **pas** de pommes. (French, V-Neg[19])

Applying this test to Tunen, we see a consistent Neg-V order (348a), which therefore provides evidence that the Tunen verb has not moved to the T position (assuming that negative morphology is spelled out in a Neg head in the inflectional domain; Pollock 1989 *et seq.*).[20] The object is consistently above the verb, leading to Neg-O-V order (348b).

[19] The main negation is *pas*; *ne* is ignored for analysis. Supporting evidence for this is that *ne* is dropped in spoken French (see work on the Jespersen's cycle).

[20] Aside from following the assumptions made for English and French, this approach is motivated for Tunen given that the NEG morpheme is the sole and obligatory marker of negation and always appears in a fixed slot within the Aux cluster, preceding the TAM marker. I illustrate the negation test for forms with *lɛ* NEG here, but the same applies also to negation markers in other TAM contexts (for which see Chapter 4 section §4.4.4.

(348) a. mɛ **lɛ** aŋɔ́á nimb. (Tunen, Neg-O-V)
/mɛ **lɛ** aŋɔ́á nimbə/
SM.1SG **NEG** PRN.EMPH.2SG deceive
'Je ne te trompe pas.'
'I'm not lying to you.' [PM 1042]

b. mɛ **lɛ́** ndɔ tunəni ɔ́kɔ. (Tunen, Neg-O-V)
/mɛ **lɛ** ᴴndɔ tɔ-nəni ɔ́kɔ/
SM.1SG **NEG** PRS 13-Nen understand
'Je ne comprends pas la langue Tunen.'
'I don't understand the Tunen language.' [JO 804]

As both the object and verb follow the negation in Tunen, we can put a structural upper bound on V height at T. The next section will investigate the structural lower bound for V height, i.e., investigating whether the verb has moved at all.

6.4.1.2 Adverb placement test

Under basic theories of syntactic structure, the theme object is generated as the complement of V, meaning that they are sisters and form a constituent. Therefore, if an adverb intervenes between the object and the verb, this can be taken as indication of movement (regardless of the base-generated order being ascending or descending). In this way, adverb placement has been used as additional evidence for V-to-T movement applying in French but not in English (349) (Pollock 1989).

(349) a. I <u>often</u> **eat** apples. (English, Adv-V)

b. Je **mange** <u>souvent</u> des pommes. (French, V-Adv)

When applying the adverb placement test to Tunen, we see that manner adverbs are consistently postverbal (V-Adv; (350)), with Adv-V ungrammatical (351).

(350) Malíá a ná nyɔ́kɔ́ **biabia**. (Tunen, V-Adv)
/Malíá a ná nyɔ́-aka **biabia**/
1.Maria SM.1 PST2 work-DUR **slowly**
'Maria a travaillé lentement.'
'Maria worked slowly.' [JO 2560]

(351) *ɛndánáná yɛ́ ↓ná **biabia** yɔlaka (Tunen, *Adv-V)
/ɛ-ndánáná yɛ́ ná **biabia** yɔ́la-aka/
7-ice SM.7 PST3.REL **slowly** melt-DUR
Intd.: 'La glace a fondu lentement.'
Intd.: 'The ice melted slowly.' [JO 2558]

While the adverb follows the verb as it does in French, note that the rotation is different. The Tunen tense marker precedes the adverb (mɛ́ **ndɔ**), and the object also precedes it (Tunen O-V-Adv vs French V-Adv-O). The examples below show the same V-Adv/*Adv-V patterning with transitive predicates, where the object must precede the verb and adverb.

(352) a. mɛ́ ndɔ mɔná sɔa **biabia**. (Tunen, O-V-Adv)
/mɛ ᴴndɔ mɔ-ná sɔ́á **biabia**/
SM.1SG PRS 1-child wash slowly
'Je lave l'enfant doucement.'
'I wash the child carefully.' [JO 820]

b. *mɛ́ ndɔ mɔná **biabia** sɔa. (Tunen, *O-Adv-V)
/mɛ ᴴndɔ mɔ-ná **biabia** sɔ́á/
SM.1SG PRS 1-child slowly wash
Intd.: 'Je lave l'enfant doucement.'
Intd.: 'I wash the child carefully.' [JO 821]

c. *mɛ́ ndɔ **biabia** mɔná sɔa. (Tunen, *Adv-O-V)
/mɛ ᴴndɔ **biabia** mɔ-ná sɔ́á/
SM.1SG PRS slowly 1-child wash
Intd.: 'Je lave l'enfant doucement.'
Intd.: 'I wash the child carefully.' [JO 822]

The following example from natural speech supports an analysis in which adverbs are in the postverbal X position (S-Aux-O-V-X), like other adjuncts, as they can follow other postverbal material (here, the locative phrase *háaha ɔ uwəsúə́* 'here in our region').

(353) Context: Despite being born outside Ndiki, Papa Daniel is considered a Munen (i.e., a local).
a ka nyɔɔkɔ háaha ɔ uwəsú **mɔŋɛŋ**.

/a	ka	nyɔ-aka	háaha	ɔ	uwəsú	**mɔŋɛ́ŋa**/
SM.1	PST3	work-DUR	DEM.PROX.LOC	PREP	PRN.POSS.EMPH.1PL	much

'Il a beaucoup travaillé ici chez nous'.
'He worked a lot here in our region.' [EO 1043]

The adverb placement test is therefore compatible with some verb movement in Tunen, but Tunen differs from French in having O-V-Adv and not V-Adv-O order. Here, relevant questions are whether the verb has moved past the adverb (i.e., [V[Adv[V̶]]]) and whether the object is in its base position. If the verb has moved, to correctly derive Tunen OV rather than VO order, we need an additional movement mechanism to account for the position of the object.

Summing up, the negation and adverb placement tests have shown that Tunen has a SM-TAM cluster as a separate phonological word, separated from V by O (Mous 2003:291). Tunen negation is higher than V (Neg-V), so V cannot have risen to T, and adverbs follow V (V-Adv). We therefore have evidence against V-to-T movement, putting an upper bound on verb movement. We can now turn to the lower bound on verb movement, asking whether the verb has moved at all. Addressing this question concerns the difference in the base generation analysis of OV word order proposed by Sande et al. (2019) for West African languages (analysis type 2) and the verbal head movement account proposed for Bantu languages (analysis type 3). As the head movement account for Bantu was motivated on the basis of Bantu verbal morphology, we can turn now to deriving verbal morphology in Tunen.

6.4.1.3 Verbal morphology

We saw in section §6.3 above that suffixal verbal morphology in Bantu is often used in the literature as evidence for partial V movement. Turning now to Tunen, we can ask whether there is similar verbal morphology that can be used to motivate a syntactic analysis involving head movement of the verb from its base position.

While Tunen patterns with Northwestern Bantu and Bantoid languages in having phonological reduction (see e.g. Marten 2020), and while the inflectional information is split from the verb by the theme object, the verb nevertheless shows morphological overlap with other Bantu languages. Dugast (1971), Mous (2003) and Kongne Welaze (2010) show that Tunen has a variety of verbal extensions, which, like in Narrow Bantu, are suffixal. There is however one interesting exception, namely the prefix *bé-*, which Mous (2008) analyses as a middle marker (transcribed as *bé-*

in his orthography). The full inventory of Tunen extensions is given in Table 6.3 below, repeated from Chapter 4 Table 4.22.

Middle	*bɛ́-*	Reciprocal	*-an/ən*
Applicative	*-ɛn/in*	Short causative	*-i*
Diminutive	*-ɛl/il, -al/əl*	Long causative	*-əsi*
Positional	*-ɛm/im*	Neuter	*-ɛ/i*
Intensive	*-ɛn/in*	(Impositive	*-ɛ/i*)
Separative	*-on/un*	(Durative/Pluractional	*-ak/ək*)

Table 6.3: Tunen verbal extensions (adapted from Mous 2003:289).

The following examples extracted from the Tunen field corpus (Kerr in prep.) illustrate how verbal derivation is achieved by suffixation in Tunen.

(354) índíə̰ ~ índíə̰**kinə**
índíə̰ ~ índíə̰-**aka-inə**
give ~ give-DUR-APPL
'give', 'give to'

(355) tálɛ́á ~ tálɛ́**áka**
tálɛ́á ~ tálɛ́á-**aka**
cook ~ cook-DUR
'cook'

(356) fáma ~ fə́m**i** ~ fám**álána**
fáma ~ fáma-i ~ fáma-**al-ana**
go.out ~ go.out-CAUS ~ go.out-DIM-RECIP
'go out', 'to bring out', 'to go out again'

Examples (357) and (358) provide illustration of the prefixal middle marker *bɛ́-*, the semantics of values are discussed in further detail in Mous (2008).

(357) nɛáyɛ́á ni kúnyiə nɛ́ móhókí nɛ lɛ́ ndɔ mianɔ́ **bí**híki.
/nɛáyɛ́á nɛ́ kúnyiə nɛ́ ma-hókí nɛ lɛ ᴴndɔ
PRN.POSS.1.5 ASSOC.5 teach ASSOC.5 6-language SM.5 NEG PRS
mianɔ́á **bɛ́**-hikiə/
PRN.EMPH.1SG MID-like
'Sa façon d'enseigner les langues ne me plaît pas.'
'I don't like the way she teaches languages.' (lit. 'Her way of teaching languages doesn't please me.')

[EE+GE+PB 2758]

(358) a ná búáyé bólmó **bɛ́**-kɛ́nd-ák-án-ɛ́ná wéya
SM.1 PST2 PRN.POSS.1.14 14.load MID-walk-DUR-RECIP-APPL PRN.1
bɛ́mwɛt.
self
'He carried his load himself.' (Mous 2008:309, adapted)

While not all the Proto-Bantu derivational suffixes are found synchronically in Tunen—a notable absence being a reflex of the Proto-Bantu passive suffix *-*ʊ/-ibʊ* (for which see Stappers 1967; Schadeberg 2003a; Guérois to appear)—the inventory in Table 6.3 and the data above nevertheless show that Tunen employs a Bantu derivational suffixal system. I assume that the suffixes are productive in Tunen, i.e., built in the Narrow Syntax (rather than simply being lexically specified). A structural analysis therefore needs to derive suffixal morphology in Tunen, just as for Narrow Bantu.

Aside from the lack of certain extensions and the fact that the middle marker is prefixal, a further interesting difference from the verbal morphology systems of canonical Bantu is that the final vowel (FV) on the verb in Tunen does not encode aspectual distinctions (Mous 2003; cf. Good 2022). This lack of aspectual distinction in the FV is an important difference from the Narrow Bantu languages such as Makhuwa in terms of the implications for the formal analysis. While previous authors have postulated V-to-Asp movement in order to derive the Narrow Bantu verb form with aspectual encoding in the FV, I propose based on this difference in aspectual encoding that for Tunen, the movement stops at a lower head along the clausal spine than Asp. Specfically, I propose that this head is *v*. This difference in height of verb movement between Narrow Bantu and Tunen has interesting consequences for deriving the differences between Tunen's syntax and the canonical SVO Bantu language, which I will discuss further in §6.5-6.8. We can conclude the current investigation into V height in Tunen with the conclusion that the verb does move in Tunen, but only to a low position below T.

6.4.2 Determining headedness

Having seen in section §6.3.4 above that syntactic headedness can be used to motivate OV versus VO underlying order, we can ask whether Tunen has head-final syntax beyond the VP. In other words, to what extent does OV in Tunen reflect a general tendency for head-final syntax? Properties to test in this respect are features identified in crosslinguistic typological work on headedness variation (e.g. Greenberg 1963; Hawkins 1983; Dryer 1992), such as having prepositions vs postpositions, Adv-V vs V-Adv order, and C-Comp vs Comp-C order.

As Sande et al. (2019) discuss, and as builds on a long literature on word order variation in West Africa (see e.g. Heine 1976; Claudi 1993; Creissels et al. 2008), there is crosslinguistic variation within Niger-Congo and nearby languages with respect to these headedness diagnostics. Some languages with S-Aux-O-V-X order show consistent head-final properties, e.g. postpositions in Mande, Gen-N order, Adv-V order, while other S-Aux-O-V-X languages pattern more generally as head-initial.

In contrast to the West African S-Aux-O-V-X languages with head-final properties (the 'real' S-Aux-O-V languages in Sande et al.'s (2019) structural typology), Tunen is consistently head-initial (aside from OV), as summarised in Table 6.5.[21]

Property	Expectation if head-initial	Tunen pattern
Order of N and Mod	N-Mod	N-Mod
Adposition type	Prepositions	Prepositions
Order of N and Poss (pronoun)	N-Poss	Poss-N
Order of N and Gen	N-Gen	N-Gen
Canonical order of O and V	VO	OV
Order of Aux and V	Aux-V	Aux-V
Order of O and V in imperatives	VO	VO (V-IO-DO)
Order of C and Comp	C-Comp	C-Comp
Order of Cop and Compl	Cop-Compl	Cop-Compl
Order of V and manner adverb	V-Adv	V-Adv
Canonical adjunct position	SVOX	SOVX
Low subjects (VS)?	(possible)	✗

Table 6.5: Headedness properties of Tunen (Kerr 2024:12, adapted)

This head-initiality is illustrated for the nominal domain in (359),[22] and for Cop-Compl order and prepositions in (360).

[21]Table 6.5 shows Poss-**N** in addition to **N**-Gen order, with Poss-**N** the order found with a possessive pronoun (e.g. *yamíá* ***isə́*** 'my **father**') (Chapter 4 sections §4.3.7,4.3.8). As discussed in Mous (2005) (cf. Kerr 2024), there is evidence that the head-initial type **N**-Poss is the historic order. Note also that while there is a sentence-final question particle (Chapter 4 section §4.5.8), following Biberauer (2017b) I do not take this to be evidence for head-finality, in that such particles are likely not syntactic heads.

[22]Note that Roberts (2019:177) writes that the combination of C-Aux-O-V with Dem-N-Num "does not seem to be attested", but these data show that this is the order combination found in Tunen (though Roberts elsewhere specifies Dem-(Rel)-N-Num as the relevant subtype).

(359) tɔ́ɔ́yɛ **tɔbanána** tɔté↓té tɔfítitiə tɔ́fandɛ.
/tɔ́ɔyɛ **tɔ-banána** tɔ-té↳téá tɔ-fítitiə tɔ́-fandé/
DEM.PROX.13 13-banana 13-small 13-black 13-two
'ces deux petites bananes noires'
'these two small black bananas' [JO 844]

(360) Context: Where are you?
mɛ **lɛ** ɔ nioní.
/mɛ **lɛa** ɔ nɛ-oní/
SM.1SG be PREP 5-market
'Je suis au marché.'
'I am at the market.' [PM 102]

To show the variation in headedness between Tunen and head-final Aux-O-V languages of West Africa, compare S-Aux-[O-V]$_{\text{NOM}}$-**V** in Kru and Mande (361) with the S-Aux-**V**-[O-V]$_{\text{NOM}}$ patterning in Tunen (362).[23]

(361) a. e^{4} ji^{3} [ɟa^{31} la^{2} li-li-je$^{3.2.2}$] **koci$^{23.1}$**
1SG.NOM FUT coconuts of eat-RED-NMLZ start
'I will start eating coconuts.' Guébie (Kru), (Sande et al. 2019:672)

b. wúrú-ˈú ˈní [ʃwó-ˈó ɲì mí-í] **dàmnà**
dog-DEF PFV meat-DEF [unglossed] eat-DEF begin
'The dog began eating the meat.'
Dafing (Mande); (Sande et al. 2019:675)

(362) miɔkɔ́ a lɛ́ **ɔ́sɔ** [ɔ bɛŋgwɛtɛ ɔ ɔbáta].
miɔkɔ́ a lɛ **óso** [ɔ bɛ-ŋgwɛtɛ ɔ ɔ-báta]
9.chicken SM.1 NEG can PREP 8-potato PREP INF-collect
'La poule, elle ne pouvait pas ramasser ses patates.'
'The chicken wasn't able to collect up her potatoes.'
[JO 1764]; (Kerr 2024:318)

The headedness diagnostics therefore show that Tunen consistently patterns as a head-initial language, with the exception of having OV word order. For this reason,

[23]These headedness diagnostics are discussed further in Kerr (2024), with a full list of supporting data provided in the appendix.

I will adopt an analysis where disharmonic S-Aux-O-V-X word order is derived from an underlying head-initial structure (compatible with Kayne 1994).

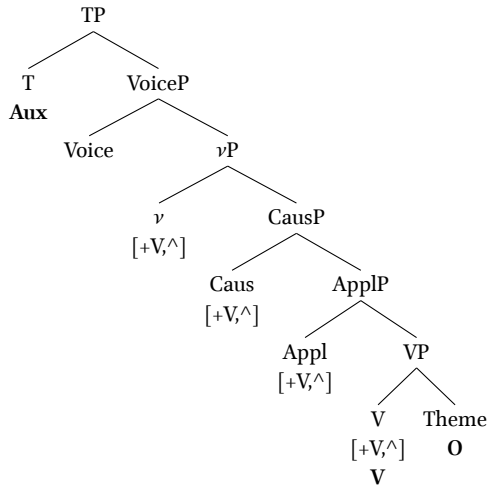
To sum up, we have seen that Tunen shows evidence for some degree of V movement, but only to a head lower than T (which I proposed to be *v*, noting a difference in encoding of aspectual distinctions in the FV that argue against a V-to-Asp account as proposed for other Bantu languages such as Makhuwa). While Tunen shows head-finality in the verb phrase, other headedness diagnostics show a consistent head-initial syntax, supporting an analysis in which the syntax is underlyingly head-initial (in contrast to analyses of certain West African languages with Aux-O-V word order in which the syntax is underlyingly head-final; Sande et al. 2019). With these basic empirical facts in place, we can turn to consider what the three types of analysis introduced above would look like as applied to Tunen.

6.4.3 Analysis type 1: Tunen Aux-O-V by FOFC-style roll-up

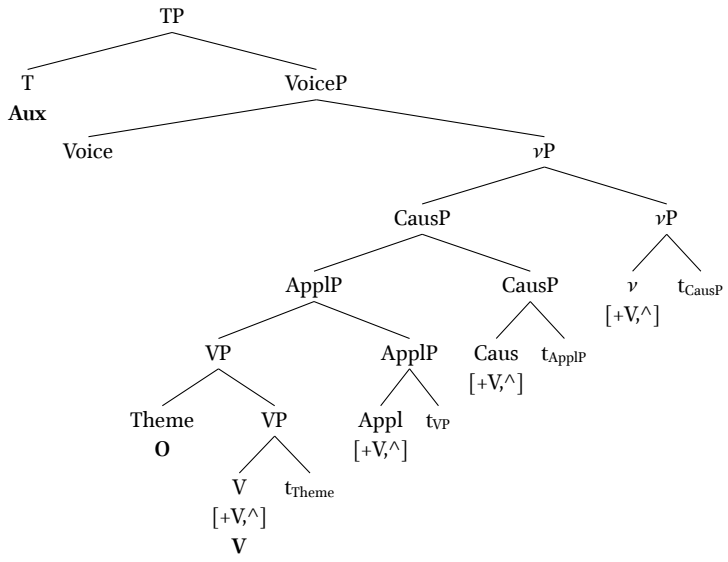
Before turning to more advanced diagnostics, we can consider what a basic analysis would look like for each of the three analysis types introduced in section §6.3.2 above, starting with the roll-up movement account as applied to Tunen.

As we have seen general head-initiality, and as follows Antisymmetric theoretical assumptions of Kayne (1994), this analysis posits a harmonically head-initial S-Aux-V-O base word order for Tunen, with S-Aux-O-V derived through roll-up movement caused by ^-feature on [+V] heads up to *v* (and crucially not extending further to T and C). The underlying tree structure in (363) therefore results in the structure in (364) through roll-up movement, which then generates the correct Aux-O-V order when linearised at PF.

(363) →



(364)



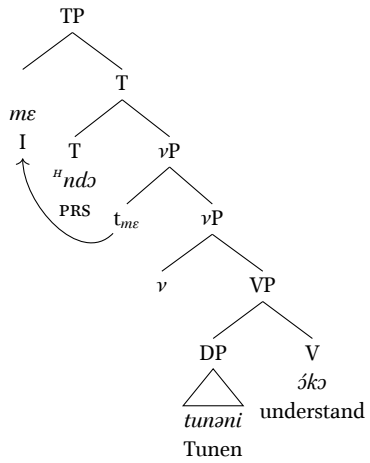
I will discuss the details of this roll-up analysis for Tunen and its empirical predictions in section §6.5, after first illustrating the basic analysis for analysis types 2 (base-generation) and 3 (verbal head movement + object movement).

6.4.4 Analysis type 2: Tunen Aux-O-V by base-generation

We saw above that certain approaches derive Aux-O-V disharmony through base-generation of head-final VPs, as in Sande et al.'s (2019) derivation of so-called 'fake'/apparent S-Aux-O-V languages of West Africa, in other accounts following the Basic Branching Conjecture of Haider (2010, 2013), and in other approaches that allow base-generation of OV (e.g. Barbiers 2000; Koster 1975 for Dutch OV). For example, the analysis of a simple transitive sentence in Tunen such as (365) would be as in (366), where the VP is underlyingly head-final.

(365) mɛ́ ndɔ <u>tunəni</u> **ɔ́kɔ**.
/mɛ ^{H}ndɔ tɔ-nəni ɔ́kɔ/
SM.1SG PRS 13-Nen understand
'Je comprends la langue tunen.'
'I understand Tunen.' [JO 801]

(366)



For ease, I represent the subject here simply as the subject marker *mɛ*; a more detailed discussion of the syntax of subjects will follow in section §6.5.3 and Chapter 8 section §8.4.2. Following standard analyses, the subject is base-generated within the *v*P phase, where it receives its θ-role, and then moves to a higher position for case reasons, resulting in S-TAM order. I represent the base-generation position of the external argument as Spec*v*P for current purposes, but will update this later in section §6.5.3 in discussion of subjects and VoiceP.

Returning to the point at hand regarding the headedness of the VP, the basic data have already raised issues for this kind of a base-generation analysis of OV in Tunen, given that we have seen evidence for verb movement. This means that the verb cannot in fact be in-situ as it is in (366), and so it would still be linearised as VO (unless the Tunen verbal morphology is derived by other means). I will return to the question of verbal morphology as test 1 in section §6.5.1. First, let us complete our set of analyses by illustrating the verb movement analysis (analysis type 3).

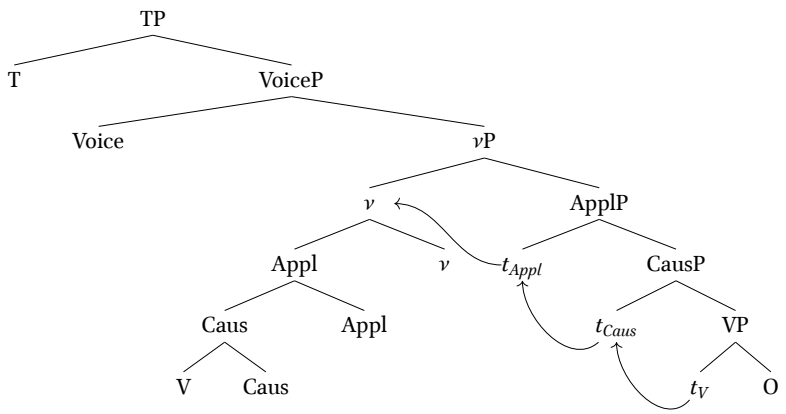
6.4.5 Analysis type 3: Tunen Aux-O-V by verbal head movement

6.4.5.1 Tunen verb movement

If we follow the analysis of other Bantu languages as deriving suffixes through verb movement (e.g. Ngonyani 2000; Wasike 2007; Zeller 2013a; Van der Wal 2009, 2022; section §6.3.2), this means that the Tunen verb must also move to a higher position in order to derive derivational suffixes. We saw above that Tunen differs from core Bantu in having a prefixal middle voice marker (Mous 2008), which I propose is located in Voice. I also pointed out that Tunen does not encode aspectual distinctions on the final vowel, which I formalise as the lack of V-to-Asp movement (in contrast

to analyses of Narrow Bantu in which the verb has been taken to move to an aspectual head, e.g. Van der Wal 2009, 2022 for V-to-Asp movement in Makhuwa). In an account whereby syntax directly reflects morphology, this means that the verb in Tunen must move to a position lower than Asp and lower than Voice, which I take to be *v*. This results in the head movement analysis shown in (367) below.[24,25]

(367)



This verb movement account provides the correct spell-out of a prefixal middle with other derivational affixes as suffixal. However, unlike for Makhuwa, this account by itself is insufficient, as we also need to get OV spell-out in Tunen.

In sum, then, the verb movement account can generate Tunen verbal morphology, but to get the correct OV word order, the account of Bantu verbal morphology must be adapted to include movement of the object (as suggested already by Sheehan 2013; section §6.3.3 above).[26] Analysis type 3 therefore needs to be modified for Tunen by the addition of object movement.

[24] I differ from Van der Wal (2009, 2022) in showing the complex heads formed by each stage of verb movement, in order to be explicit about the theory of suffixation assumed here; this complex head movement is the same as what was proposed in Van der Wal (2009, 2022), following Julien (2002).

[25] As current purposes are focussed on deriving the correct clausal word order, rather than the make-up of the Aux component, I do not show the fully articulated inflectional domain, using TP as a simplified representation.

[26] Alternatively, we need an account of Bantu verbal morphology without V-to-*v* movement, e.g. postsyntactic morphological rules to derive suffixes vs prefixes. I will come back to this analytical possibility in section §6.5 below.

6.4.5.2 The addition of object movement

Given we require object movement to derive OV in a verb movement account, we can ask whether there is a trigger for object movement in Tunen.[27] Relevant work on object position has proposed that information-structural considerations can motivate differences in object position (i.e., object movement, in transformational frameworks). The idea of object position varying dependent on IS status is key in Güldemann's (2007) descriptive work on object placement in Benue-Congo, where the proposal is that languages have unmarked VO order but can have OV word order when the object is "extrafocal". Similar calls for IS as key for object placement have been formalised in the literature on OV/VO variation in Germanic, for example in recent work by Struik and Van Kemenade (2020), Struik (2022), and Struik and Schoenmakers (2023), who argue for IS-conditioned object placement in the diachrony of Germanic varieties. The basic proposal from a generative perspective is that some Germanic languages had VO base word order, with OV an alternative pattern derived via object movement triggered by givenness.

For Tunen, however, we have already seen that IS does not drive OV word order synchronically, as OV word order was found in section §6.2 above to be compatible with a variety of IS contexts, namely information focus on the object, all-new/thetics, predicate-centred focus, and given objects. S-Aux-O-V-X was therefore argued to be taken as the pragmatically-neutral order that should therefore be analysed as the unmarked order in Tunen.

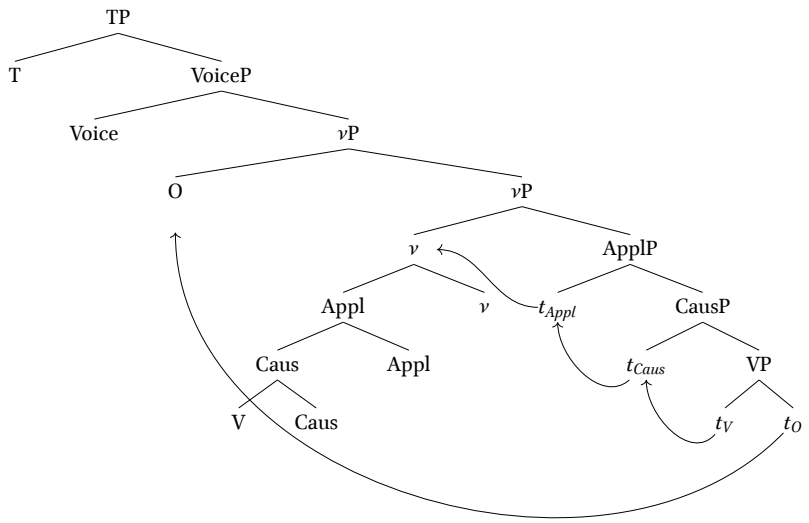
The point to make here in terms of the implications for the formal analysis is that Tunen does not show synchronic evidence for IS as a factor conditioning OV order. Instead, OV should be taken as the unmarked order. This means that object movement in Tunen is formally-conditioned, rather than triggered by an IS feature such as [-given] (cf. Chapters 2 section §2.3 on crosslinguistic variation in the use of discourse features in Narrow Syntax, to be returned to in Chapter 8).

This leads us to the following 2-step analysis of Tunen syntax, as building from previous analyses of Bantu in deriving suffixation through head movement, with

[27] Throughout this thesis, I use the term "object movement" as a neutral term, rather than using "object shift" or "object scrambling", which some authors use for a more specific type of object movement that does not necessarily correspond to what is seen in Tunen (see Broekhuis 2023 for relevant discussion of the use of these terms in work on Germanic and Scandinavian languages). For example, we saw in section §6.2 above that the 'O' slot in Tunen is not restricted by definiteness or specificity, unlike what is found in some languages with object scrambling, and we also saw that both nominal and pronominal expressions appear preverbally in Tunen, unlike what is found in Scandinavian object shift (Holmberg 1986; Vikner 1990; Johnson 1991). The specific type of object movement I will end up proposing for Tunen matches what some authors classify as "short object movement" or "short object shift".

the additional mechanism of object movement used to derive OV order:

(368)



For now, I postulate that the landing site of object movement is Spec*v*P, as shown in (368), matching analyses of object movement in other languages (see e.g, Broekhuis (2022) for Germanic). In section §6.5.3 I will discuss arguments for SpecVoiceP as an alternative landing site.

6.5 Teasing apart the analyses

So far, we have seen three basic analytical options for deriving Tunen's disharmonic S-Aux-O-V-X clausal word order: (i) a roll-up movement account, (ii) an account with base-generation of OV order in the verb phrase, and (iii) an account with verbal head movement combined with object movement. I showed that verb movement diagnostics provide evidence against the base-generation proposal (analysis type 2), and thus exclude it from further discussion. In this section, I consider some more complex parts of Tunen syntax that can be used to tease apart the two remaining analyses, highlighting where certain analyses make incorrect empirical predictions.

6.5.1 Test 1: Deriving Bantu verbal morphology

The first major consideration for a theoretical model of OV syntax in Tunen is how to derive the correct derivational morphology, namely derivational suffixes with

the middle marker *bɛ́* as a prefix, as discussed in section §6.4.1 above.

We have already seen that Tunen matches the typical Narrow Bantu profile of having suffixal derivational markers. This can be derived in analysis type 1 through progressive roll-up movement up the clausal spine (with [+V, ^-feature] on all heads up until *v*) and an approach to morphological spell-out that takes all the heads as suffixes. The basic pattern can similarly be derived in analysis type 3 through the mechanism of verbal head movement, which results in complex head formation of all heads up until *v*, which are then spelled out as a single morphological word.

The key challenge for a full formal account is deriving the *bɛ́* middle marker in Tunen. I proposed above that *bɛ́* is the spellout of a Voice head, based on its semantics. The test then for the analyses is how to account for the fact that *bɛ́* attaches as a prefix on V when O intervenes, as in (369), under the background assumption that VoiceP directly dominates *v*P in the clausal spine ([VoiceP Voice [*v*P]]; (Kratzer 1994, 1996) *et seq.*).

(369) a. nɛáyɛ́á ni kúnyiə né móhókí nɛ lɛ́ ndɔ mianɔ́ **bí**híki.

/nɛáyɛ́á né kúnyiə né ma-hókí nɛ lɛ ᴴndɔ
PRN.POSS.1.5 ASSOC.5 teach ASSOC.5 6-language SM.5 NEG PRS
mianɔ́á **bɛ́**-hikiə/
PRN.EMPH.1SG MID-like

'Sa façon d'enseigner les langues ne me plaît pas.'
'I don't like the way she teaches languages.' (lit. 'Her way of teaching languages doesn't please me.') [EE+GE+PB 2758]

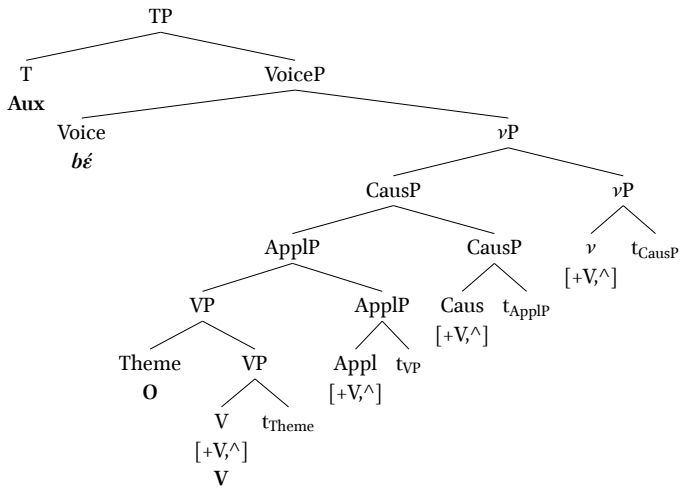
b. a ná búáyé bólmó **bɛ́**-kɛ́nd-ák-án-ɛ́ná wéya
SM.1 PST2 PRN.POSS.1.14 14.load MID-walk-DUR-RECIP-APPL PRN.1
bɛ́mwɛt.
self

'He carried his load himself.' (Mous 2008:309, adapted)

Here, the pronominal object *mianɔ́* 'me' in (369a) and the modified DP object *búáyé bólmó* 'his load' in (369b) occur in the preverbal O slot, with the *bɛ́* middle marker following as a prefix attached to the verb.

This order of object and prefix is a challenge for the roll-up analysis (analysis type 1) introduced above and repeated in (370) (with the voice prefix indicated as the head of the VoiceP), because such an analysis without any additional modification predicts the middle prefix to be linearised before the object rather than as a prefix to the verb.

(370)

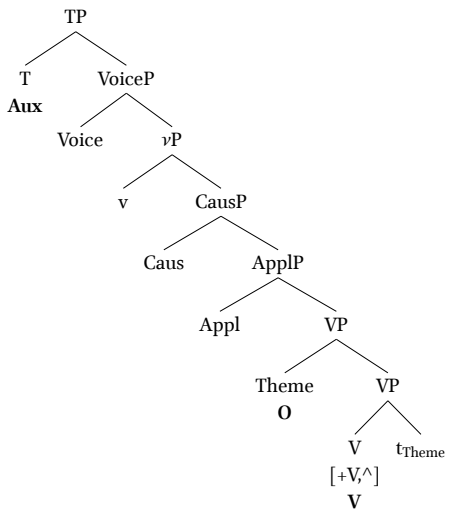


The roll-up account must therefore be adjusted in order to correctly derive *bɛ́* as a prefix on the verb (Aux-O-*bɛ́*-V) rather than as a marker preceding the object (*Aux-*bɛ́*-O-V).

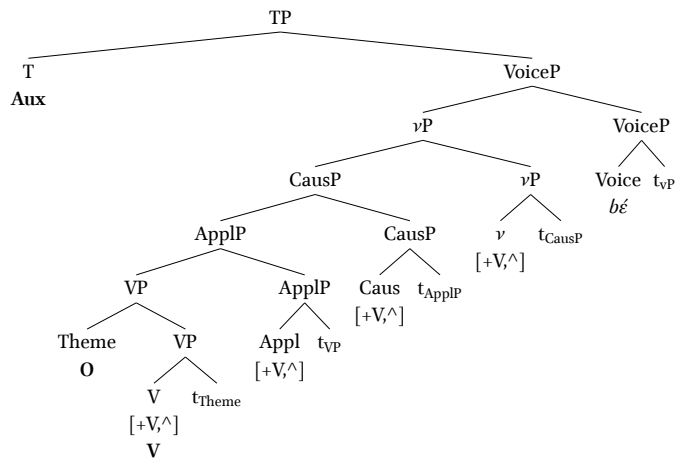
One possible adjustment to the model is to have postsyntactic morphological readjustment rules. Such rules have been motivated in other Bantu languages in order to account for differences in scope readings for derivational suffixes, notably the causative, applicative, reciprocal, and passive (see discussion of the CARP template in e.g. Hyman 2003b; Good 2005, 2016; Zeller 2017). These readjustment rules can take multiple forms. One fairly extreme approach would be to have no syntactic movement operations for the purposes of affixation, and rather sort out all of the affixation in the morphology. In the roll-up movement account considered here, this would mean that only V would have a ^-feature movement trigger, with Compl-to-Spec movement of the object to SpecVP the only roll-up movement, as schematised in (371) overleaf.

This style of approach therefore puts the brunt of the work in the morphology and requires a more detailed theory of the morphological component. A syntacticocentric approach that retains the idea that syntax reflects morphology could alternatively have higher roll-up movement to SpecVoiceP, as shown in (372), the last stage of which then being "undone" in the morphology by readjusting what would be a middle suffix into a middle prefix.

(371)



(372)



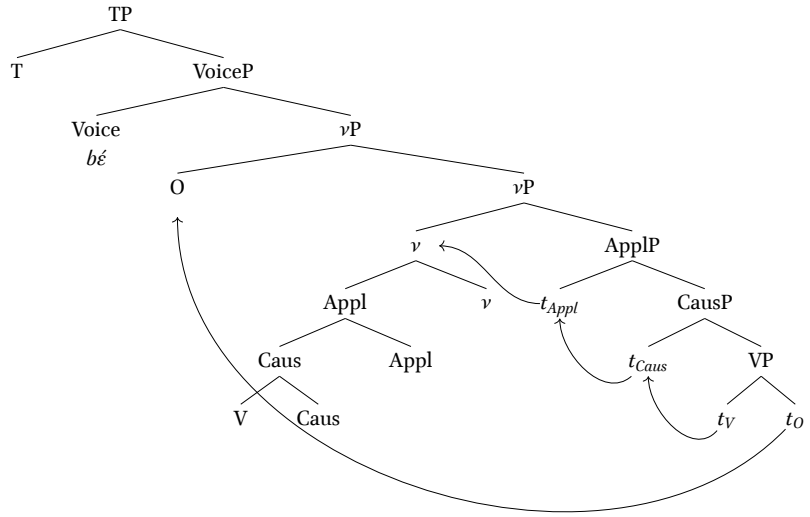
An alternative account would be to question whether the derivational suffixes are syntactic heads and propose instead that they are clitics. One possible argument against such an account is that it means that the Tunen verb would be derived differently from the canonical Bantu verb, despite appearing the same on the surface and related historically. Another issue with such a phonological account is that the object should be a possible host for a voice clitic, but the voice prefix is only ever found on the verb. Proposing that the Tunen tense markers are clitics has further issues, given that subject markers must then be taken as pronominals, as if they were also clitics there would be no host (cf. Chapter 8 section §8.4.2 on diachronic

variation in the syntactic status of subject markers). Finally, there is no variation in placement of the suffixes, as may be expected if they are clitics, again making such an account less appealing. I therefore assume for current purposes that the suffixes are indeed syntactic heads.

A final possible fix for the roll-up analysis would be to make the stipulation that the voice prefix lowers via the mechanism of affix lowering. While this is a possible analysis, it requires the additional mechanism of affix lowering and is therefore less desirable on metatheoretical grounds. We therefore see that there is no analysis of the O-*bé*-V construction under the roll-up movement account in Tunen that does not involve unwelcome stipulation.

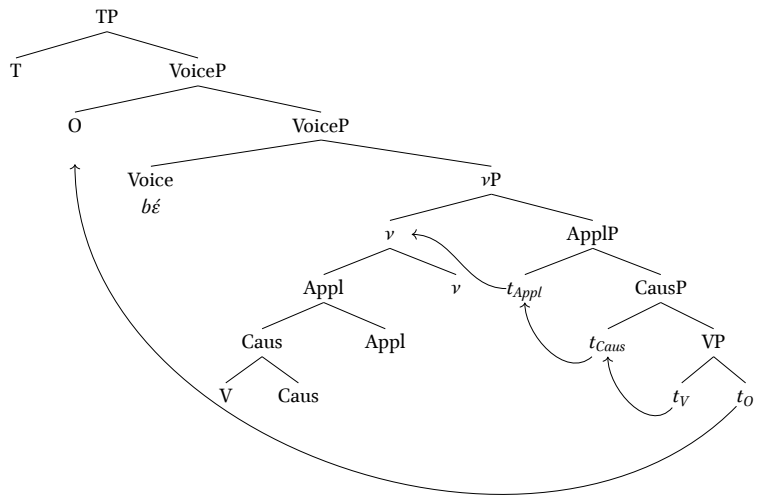
Turning to the verbal head movement + object movement analysis (analysis type 3), we saw above that this analysis was proposed on the basis of Tunen's morphology, and thus correctly derives the order of affixes, as shown in the tree in (373).

(373)



However, this analysis has the same issue as the roll-up account with deriving *bé* as a middle prefix that attaches to the verb and not to the direct object. In other words, the structure in (373) predicts the incorrect linearisation *bé*-O-V rather than the attested O-*bé*-V order. A solution to this problem would be if the object were to move to a position higher than Voice, which I postulate to be SpecVoiceP. This results in the revised structure shown in (374) below.

(374)



This structure then derives the correct O-*bɛ́*-V spell-out. Postulating SpecVoiceP instead of *v*P as the landing site of object movement has important consequences regarding the analysis of the subject, which we will come back to in section §6.5.3 below. For now, we can conclude this section by noting that we have seen that Tunen's verbal morphology causes issues for the roll-up movement analysis (analysis type 1), while being correctly accounted for on the head movement + object movement account (analysis type 3) under the proposal that the object moves to SpecVoiceP.

6.5.2 Test 2: Aux-O-V with O-V-X

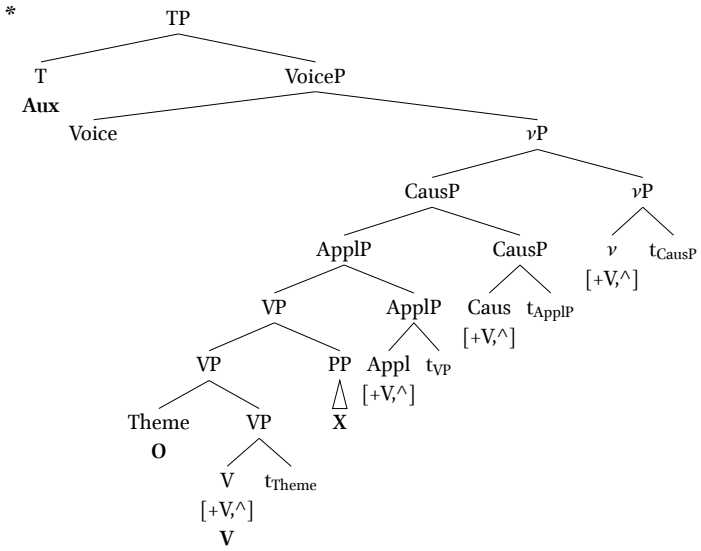
We saw above that Tunen has not only the disharmonic word order Aux-O-V but also a postverbal 'Other' position (O-V-X). This distinguishes Aux-O-V in Tunen from Aux-O-V in the Germanic varieties seen above, which were verb-final (Aux-O-V#). This combination of Aux-O-V with O-V-X means that the roll-up movement analysis based originally on Germanic data (analysis type 1) must be adapted in order to account for the Tunen data.

In this section, I will consider how to model postverbal obliques, as common material within the X slot. An initial theoretical question is how adjuncts are modelled. Here, I assume that adjuncts can be left- or right-adjoined (matching common practice and analyses of other Bantu languages such as Zulu, but differing from the Antisymmetric system of Kayne 1994 in which only left-adjunction is permissi-

ble). The motivation for right adjunction is simplicity of analysis, as left-adjunction would require additional roll-up movement and the postulation of XPs which serve solely as the landing sites of the movement, which I consider more cumbersome than base-generation of right-adjunction.

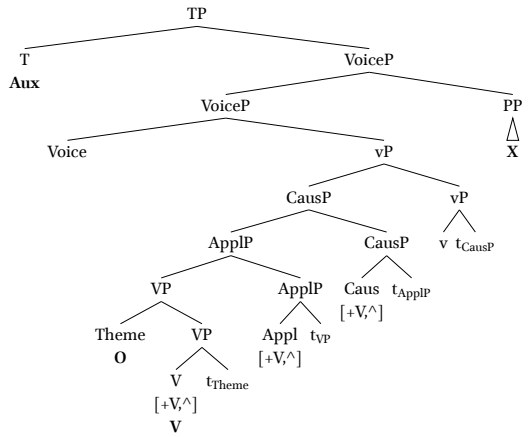
Let us start with the roll-up analysis (analysis type 1). At first sight, right-adjoining adjuncts in Tunen captures their postverbal linearisation as Aux-O-V-X. However, the issue for the roll-up analysis is that a VP-adjunct adjoined to the right would form part of the complement of higher heads with the [V+,^] specification (which were motivated on the basis of Tunen verbal morphology, as discussed in the previous section), and so will be subsumed under the roll-up movement operation. This falsely predicts that a PP adjunct appears *before* the derivational extensions, as shown in (375), where the PP adjunct is predicted to be linearised before the applicative and causative affixes rather than appearing in the X slot.

(375) *



The question then is whether the roll-up approach can be adjusted so as to linearise obliques as following the verbal extensions, i.e., in the postverbal X slot. To get the right morphology, we either need a different theory of suffixation (thus requiring a departure from the syntacticocentric model of the syntax-morphology interface adopted here and discussed in section §6.5.1 above), or we would need to attach these adjuncts at least as high as *v*P so that they are unaffected by roll-up movement, as shown in (376).

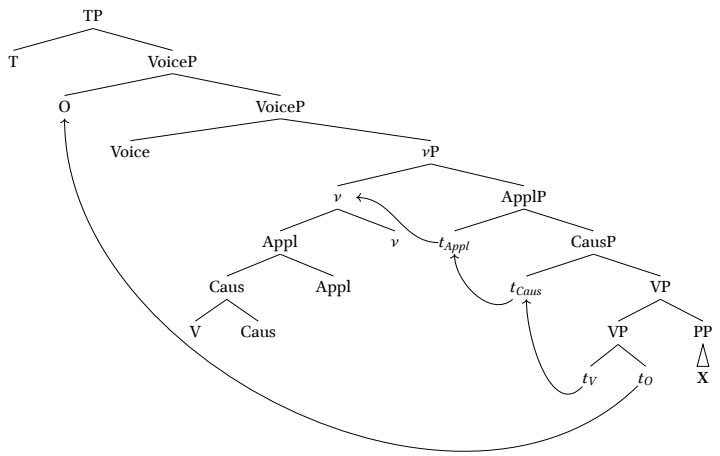
(376)



While the structure in (376) linearises correctly as (S-)Aux-O-V-X, an issue is that there is no semantic motivation for high adjunction at the VoiceP level instead of the VP level used in other analyses of Bantu syntax. Similarly to the postsyntactic morphological readjustment rules/use of affix lowering in test 1, fixing the roll-up account in this way therefore requires additional stipulation.

Analysis type 3 on the other hand can capture the postverbal adjunct placement, as the Aux-O-V order is derived through verbal head movement and object movement, which crucially do not affect any VP-adjuncts. This means that the PP adjunct may simply be left in-situ, as shown in (377).[28]

(377)



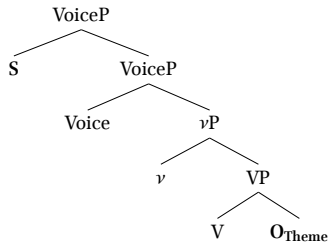
[28]Note by the by that this approach would also derive the correct linearisation for the data

The combination of Aux-O-V with O-V-X is therefore better-captured in the head movement + object movement analysis (analysis type 3) than in the roll-up movement analysis (analysis type 1). Attaching PP adjuncts to a higher position as a fix to the roll-up analysis makes empirical predictions regarding the interpretation of these adjuncts that could be tested in further work.

6.5.3 Test 3: In-situ subjects

So far, we have only considered the position of the object and the verb, without considering the subject in any detail. In generative approaches, the subject as external argument of the verb is assumed to be base-generated in the verbal domain. This proposal was originally formulated in the Government and Binding Theory (GB) era under the *verb phrase-internal subject hypothesis* (VPSH; Fukui and Speas 1986; Koopman and Sportiche 1991), with the external argument base-generated in SpecVP for θ-role assignment. In later approaches, the verb phrase was extended by *v*P, leading to Spec*v*P as the site for base-generation of the external argument. In approaches postulating a VoiceP (Kratzer 1994, 1996 *et seq.*), SpecVoiceP has become the base-generation site for the external argument. As I argued in section §6.5.1 above that the presence of a voice prefix in Tunen provided evidence in favour of a VoiceP projection in Tunen (see e.g. Pylkkänen 2002, 2008; Harley 2017 for the idea that languages vary in whether they project both a *v*P and a VoiceP or just one projection), I assume here that SpecVoiceP is the in-situ subject position. This means that the base structure for the internal and external argument of a transitive construction in Tunen is as in (378).

(378)

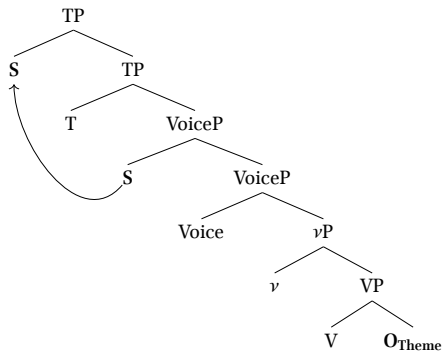


From this base structure, movement operations lead to the surface patterns seen. Concentrating on the external argument, we have seen that in Tunen, lexical noun phrase subjects always precede the subject marker and tense marker (S-Aux-O-V-X, where Aux contains a subject marker). This linear order provides evidence

discussed so far under a model following Kayne (1994) that only allows left adjunction, as neither the verb nor the object surface in their base positions. I leave the question of whether left adjunction makes different empirical predictions for other parts of the grammar for further work.

that the subject is higher than the in-situ VoiceP-internal subject position – in other words, that the subject must have raised to a position higher than Tense/Neg. For current illustrative purposes, I suggest that this higher position is SpecTP (379), following standard practice.[29,30]

(379)



I provide (379) as a basic account of subjects in Tunen. A more complete analysis would require discussion of lexical noun phrase subjects versus subject markers (SMs), as widely discussed in the literature on Bantu regarding the distinction between SMs as agreement morphology versus pronominal elements (Bresnan and Mchombo 1987 *et seq.*). As our current goal is accounting for the order of the object related to other elements, I leave these details about the analysis of different types of subjects aside (to be returned to in Chapter 8 section §8.4.2).

While this basic analysis accounts for most structures in Tunen, there is one construction in which a subject appears to surface in a low domain. In this construction, a personal pronoun co-referential with the subject marker (SM) surfaces in a low position below T, as in (380)-(382) below. This split pronoun / split subject construction is not known for any other Mbam languages besides Nomaándé (Bantu A46) (Taylor 1999; Wilkendorf 2001; Mous 2005; Philippson 2022b), Tunen's

[29] The general idea is that the subject nominal must raise to SpecTP in order to be licensed, a mechanism that dates back to the Extended Projection Principle (EPP) within Government and Binding Theory (Chomsky 1981, 1982). However, I do not commit to SpecTP as the final landing site for Tunen subjects – evidence for subjects being above negation and tense can provide evidence for an alternative analysis where the subject is in SpecFinP (as suggested for the Bantu language Teke-Kukuya in Li to appear *b*), and it is also possible for Tunen subjects to be in a left-peripheral SpecTopP position when topical (cf. Chapter 5). As the relevant point here is whether subjects have raised from their base position, rather than the details of exactly where this higher position is and what featural specification drives the movement, I leave these points aside.

[30] In (379) I only indicate movement of the subject; this should not be read as a statement that this movement precedes other syntactic operations such as verbal head movement and object movement.

neighbour to the South-East and closest genealogical relative.[31]

(380) Context: EO describes how he ended up at the town square; PM says:
ɔ ná ndá **aŋɔ́á** bɛ́nyánánɛ́na ɔban-
/ɔ ná nda **aŋɔ́á** bɛ́-nyánánɛ́na ɔbánɔ/
SM.2SG PST2 VEN PRN.2SG MID-find.REP only
'Tu es revenu te retrouver comme ça.'
'You found yourself like that.' [PM 1009]

(381) Context: "Because I knew it was his funeral today, I passed by."
mɛ nɔ́ ka **ámɛ** bɛlɛŋa bɛ́- bí- bíúŋúnəní, mɛ nɔ́ bɛ́suala [...]
/mɛ nɔ́ ka **ámɛ** bɛ-lɛŋa **bɛ́**-úŋúnəníə mɛ nɔ́
SM.1SG PST2 AND PRN.1SG 8-clothes MID-change SM.1SG PST1
bɛ́-sɔ́á-ala/
MID-wash-DIM
'Je suis allé me changer, je me suis débarbouillé,'
'I went and got changed, I had a quick wash,' [PM 1014]

(382) okay. həníə́ ɔ́ ndɔ aŋɔ́á tuənə nə́ə, ɔ Bafɛa? ɔ́ ndɔ tuənə ɔ Bafɛa ?
/okay həníə́ ɔ ᴴndɔ **aŋɔ́á** tuənə nə́ə ɔ Bafɛa ɔ
okay.EN where SM.2SG PRS PRN.2SG live then PREP Bafia SM.2SG
ᴴndɔ tuənə ɔ Bafɛa/
PRS live PREP Bafia
'Okay. Où resides-tu alors - à Bafia ? Résides-tu à Bafia ?'
'Okay. So where do you live - Bafia? Do you live in Bafia?' [PM 956]

Note in these examples that the pronoun precedes the middle prefix *bɛ́* (380), (381), and that the theme object intervenes between the pronoun and the verb (381). The examples are, interestingly, all from natural speech data. We see in (382) that the low subject pronoun is not syntactically required, as speaker PM repeats the question without it. This gives some support to Dugast's (1971) analysis that such split pronouns are used for pragmatic reasons related to emphasis. However, the exact discourse function of the pronouns is unclear and difficult to evaluate from the current corpus; they do not necessarily have to encode contrastive focus on the

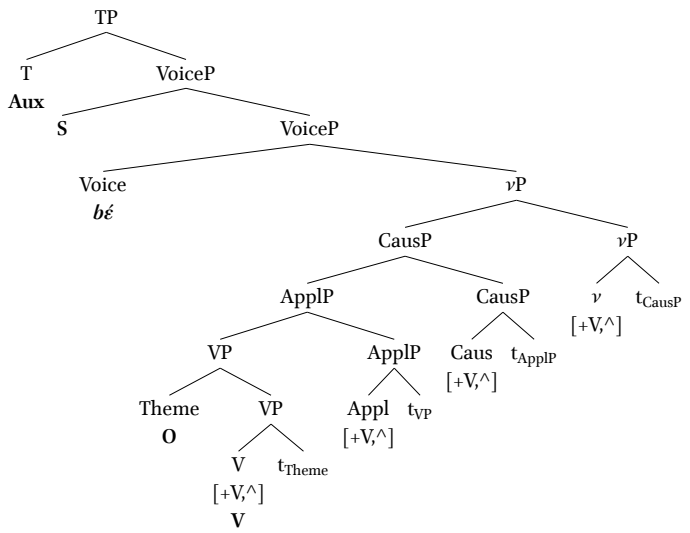
[31]Mous (2005:412) and Philippson (2022b:255) write that no other Mbam language besides Nomaándé has this construction, although the construction was previously noted for Tunen in Dugast (1971:334-5), who analyses it as a single emphatic pronoun which is split up by the TAM marker.

subject. I suggest tentatively that they may be used in natural speech to encode an individual's stance as part of the turn-taking patterns of dialogic speech.[32]

Turning back to the formal analysis of this construction, I propose that we can consider it as an instantiation of the in-situ subject position in which the low pronominal component is a subject pronoun realised in its base position. In other words, I presume that the low pronominal element – such as *aŋɔ́á* 'you' in (382) – is base-generated and pronounced in SpecVoiceP. A formal analysis then needs to capture the right SM-TAM-S_{Pron}-O-Voice-V order, with the voice prefix *bɛ́* attaching as a prefix to the verb and the subject pronoun preceding the theme object and the verb. This construction therefore is diagnostic for the structure of the Tunen verb phrase, and so forms the third test for the analyses of Tunen Aux-O-V disharmony.

We saw in section §6.5.1 that the roll-up account (analysis type 1) struggles to capture the Voice prefix as attaching to the verb and not to intervening material. As the analysis does not adequately derive SM-Aux-O-Voice-V order without additional stipulations regarding the syntax/morphology interface, it also does not adequately derive the SM-TAM-S_{Pron}-O-Voice-V order. We can however adapt the structures seen in §6.5.1 to show the proposal that the subject pronoun is base-generated in SpecVoiceP, as in (383), an update of (370).[33]

(383)

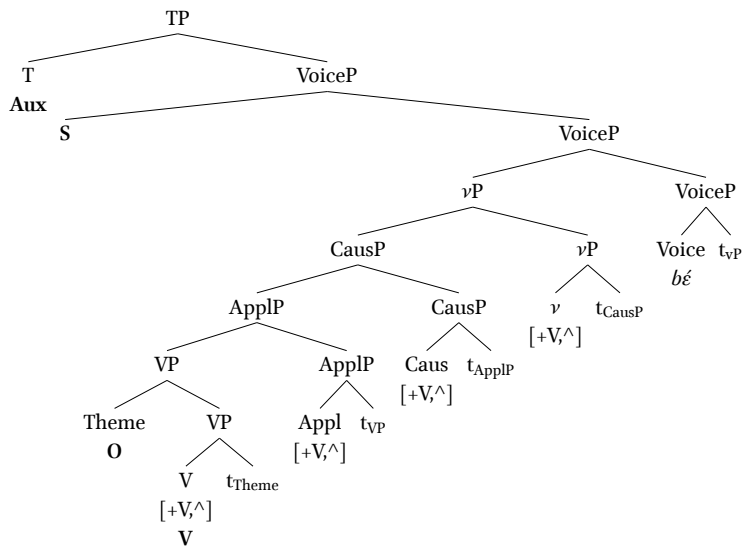


[32]Note that in Nomaándé, such split pronoun constructions, while not found in all tense/mood contexts, appear from the description in Taylor (1984, 1999); Wilkendorf (2001) to be much more frequent than in Tunen. This could be due to having grammaticalised from a previously more discourse-conditioned function. I leave this microvariation between Nomaándé and Tunen for further study.

[33]For brevity, I do not show the movement of the subject above the auxiliary in these trees (but still assume the movement schematised in (379)).

Alternatively, if the approach is taken where there is roll-up to SpecVoiceP, the last stage of which is undone post-syntactically via a morphological readjustment rule, then the structure would be as in (384). Note here that it is crucial that the verbal part is in the lower specifier of the VoiceP projection. This is possible if the movement of VoiceP's complement to SpecVoiceP precedes the External Merge operation that builds the SpecVoiceP position in which the subject is merged.

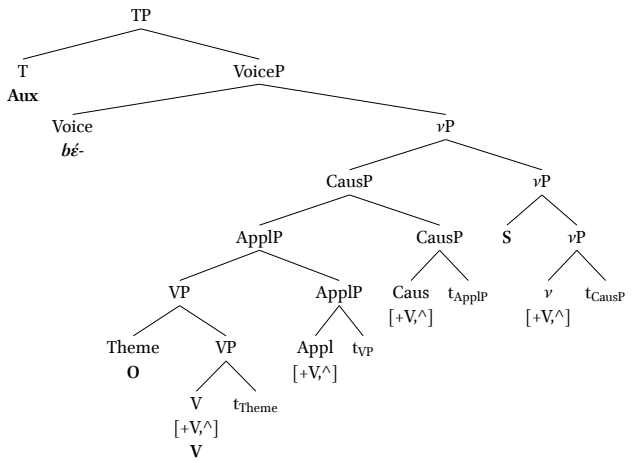
(384)



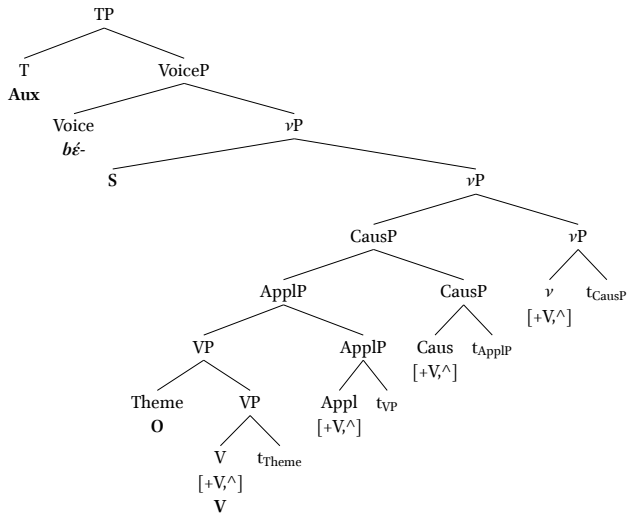
Note that if one instead takes Spec*v*P rather than SpecVoiceP as the position where the subject is base-generated, two specifiers are required: one for generation of the subject and another to serve as the landing site for roll-up of the CausP projection (or whichever of the verbal phrases is projected last). While the model I adopt allows for multiple specifiers (as presented as the null hypothesis in e.g. Chomsky 2008:146), note that this is incompatible with a strict application of the Antisymmetry approach of Kayne (1994), where the *Linear Correspondence Axiom* (*LCA*) disallows multiple specifiers for reasons of linearisation. The model I propose in this thesis therefore requires a different linearisation algorithm than the LCA.

Here, the model can *prima facie* have either of the two logically possible orders of specifiers, with nothing in the theory distinguishing between the two. However, we can see that only one order of specifiers matches the empirical situation in a construction where personal pronouns are taken to be spell-out of the subject in Spec*v*P. Order 1 incorrectly puts the object before the in-situ subject (385). Order 2 does not have this problem, although still has the more general challenge of the roll-up account in deriving the middle prefix as a prefix attaching to the verb (386).

(385)



(386)

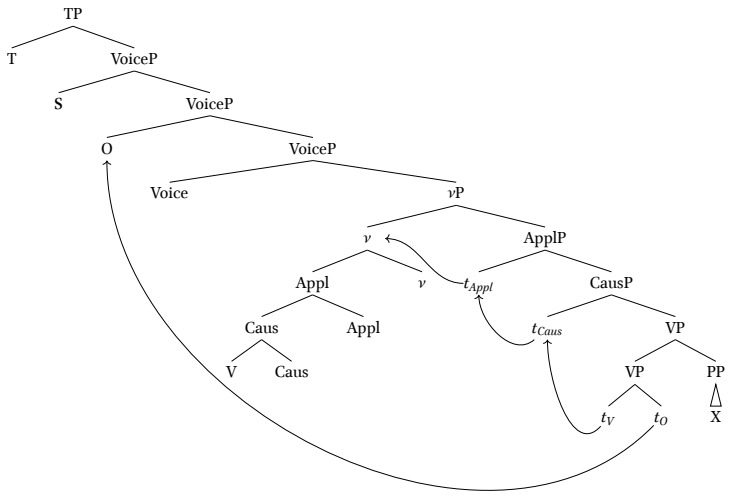


In summary, the roll-up movement analysis struggles to capture the SM-TAM-S_{Pron}-O-Voice-V construction due to its more general issue in capturing the prefixal Voice morphology, as seen in section §6.5.1, although the subject pronoun can be captured with respect to the rest of the *v*P when the roll-up triggered by [*v* [+V,^]] applies before the External Merge operation that inserts the subject pronoun.

Turning to the verbal head movement + object movement account, recall that V+*v* form a complex head. As discussed above, I take SpecVoiceP to be the base-generation site for the subject (378). The proposal then looks as follows (387).[34]

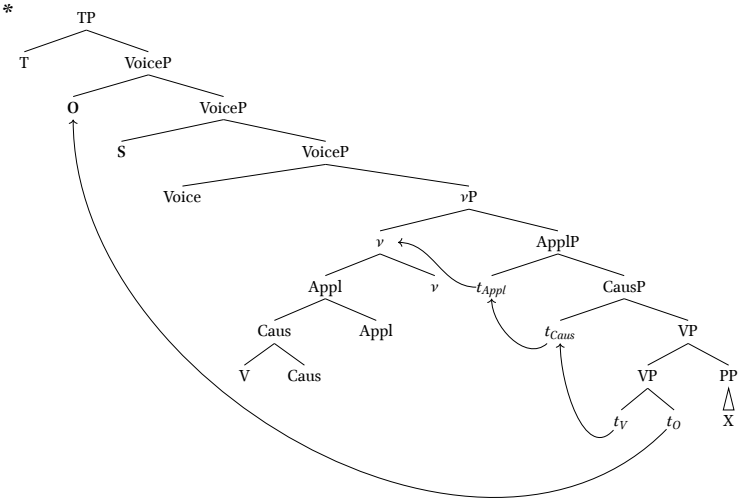
[34]Note here that if the object moves to Spec*v*P instead of SpecVoiceP, then the structure would be linearised with the incorrect order S_{PRON}-Voice-O-V, not the desired S_{PRON}-O-Voice-V order. The

(387)



This version of analysis type 3 correctly captures the linearisation SM-TAM-S_{PRON}-O-Voice-V. Note however that such an analysis crucially relies on the object occupying the innermost specifier of VoiceP. If the object moved to the higher specifier, the derivation would generate the incorrect order O-S_{FOC}-Voice-V, as in (388).

(388) *



position of in-situ subjects is therefore a further argument in favour of SpecVoiceP as the landing site of object movement in Tunen (cf. section §6.5.1 above).

There are two ways of deriving the order of specifiers in (387), depending on the order of operations assumed in the syntax. The first way is to propose that the object movement operation precedes the structure-building operation that introduces the subject. The second way is to propose that the object moves after the subject has already been generated in SpecVoiceP, which means that the object must move via so-called *tuck-in movement* (i.e., movement to the innermost specifier). Whether or not this second analysis is desirable therefore depends on metatheoretical preferences regarding tuck-in movement and multiple specifiers. I will return to the discussion of tuck-in movement in relation to the derivation of ditransitives in section §6.5.5. I leave evaluation of the first analysis to a more comprehensive model of Tunen syntax that discusses the order of operations. Whatever the details of the analysis chosen, the point to conclude this test with is that the in-situ subject construction in Tunen can be derived in analysis type 3, providing evidence for SpecVoiceP rather than Spec*v*P as the landing site of object movement.

6.5.4 Test 4: Extension to ditransitives

So far, we have seen analyses applied to the derivation of transitive S-Aux-O-V-X constructions in Tunen. However, we saw in section §6.2.5 that the preverbal O slot in Tunen can be filled by multiple objects in a ditransitive construction. The fourth test for the formal analyses is therefore how well they can be extended to these double objects constructions.

As discussed in Chapters 4 and 5 (see also Kerr to appear), Tunen has two types of ditransitive constructions, one in which both objects are preverbal (S-Aux-O_{Goal}-O_{Theme}-V-X) and one in which the goal object is postverbal (S-Aux-O_{Theme}-V-Prep-O_{Goal}). The preverbal objects cannot be obliquely marked (i.e., cannot be introduced by a preposition), while the postverbal object must be. We saw in section §6.2 above that when the preverbal double object construction is used, there is a strict Goal-Theme order; the reverse order is not possible, regardless of IS context:

(389) Context: 'Who is the woman giving a gourd to?' + BaSIS photo stimulus

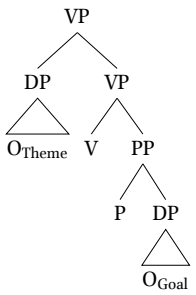
a. a nɔ́ **ɔsɔ́kɔ́ hɛtétɛ́** indi.
/a nɔ́ **ɔsɔ́kɔ́ hɛ-tétɛ́** índíə́/
SM.1 PST1 1.other 19-gourd give
'Elle donne une gourde à [l'autre]$_{FOC}$.'
'She gives a gourd to [the other (woman)]$_{FOC}$.' [PM 1541]

b. *a nɔ́ **hɛtɛ́tɛ́ ɔsɔ́kɔ́** indi.
/a nɔ́ **hɛ-tɛ́tɛ́ ɔsɔ́kɔ́** índíə́/
SM.1 PST1 19-gourd 1.other give
Intd.: 'Elle donne une gourde à [l'autre]$_{\text{FOC}}$.'
Intd.: 'She gives a gourd to [the other (woman)$_{\text{FOC}}$.' [PM 1542]

(390) Context: 'Who is the woman returning a calabash to?'
muəndú á ndɔ imítə́ túmbiə ɔ **mɔn**.
/mɔ-əndú a ^{H}ndɔ ɛ-mítə́ túmbiə ɔ **mɔ-ná**/
1-woman SM.1 PRS 9-calabash return PREP 1-child
'La femme remet la calebasse [à l'enfant]$_{\text{FOC}}$.'
'The woman returns the calabash [to the child]$_{\text{FOC}}$.' [JO 1586]

I assume that the two types of ditransitive constructions in Tunen derive from different underlying structures, following standard analyses of double object constructions crosslinguistically (see amongst others Anagnostopoulou 2003; Bruening 2010; Jackendoff 1990; Pesetsky 1995; Hale and Keyser 1993; Harley 1995, 2002; Ramchand 2008; Holmberg and Platzack 1995; Holmberg et al. 2019; see however Larson 1988; Ormazabal and Romero 2010; Hallman 2015 for alternative accounts). Specifically, the prepositional object construction in (390) can be simply analysed as an instance of the canonical S-Aux-O-V-X word order, where the goal object is a PP complement of the verb (391).

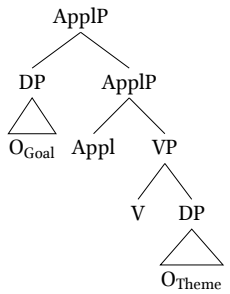
(391)



For the double object construction in (389a), there is no P head to license the recipient object; instead, the proposal is that it is licensed by an Appl head, crucially being generated in a higher position than the Theme object (which is licensed as complement to the V head) (392).[35]

[35] Appl is more specifically a high applicative head in proposals with both an inner (Appl$_{\text{low}}$) and outer (Appl$_{\text{high}}$) applicative, the former being generated within the VP and the latter dominating VP, as it does in (392) (Pylkkänen 2002, 2008 *et seq.*).

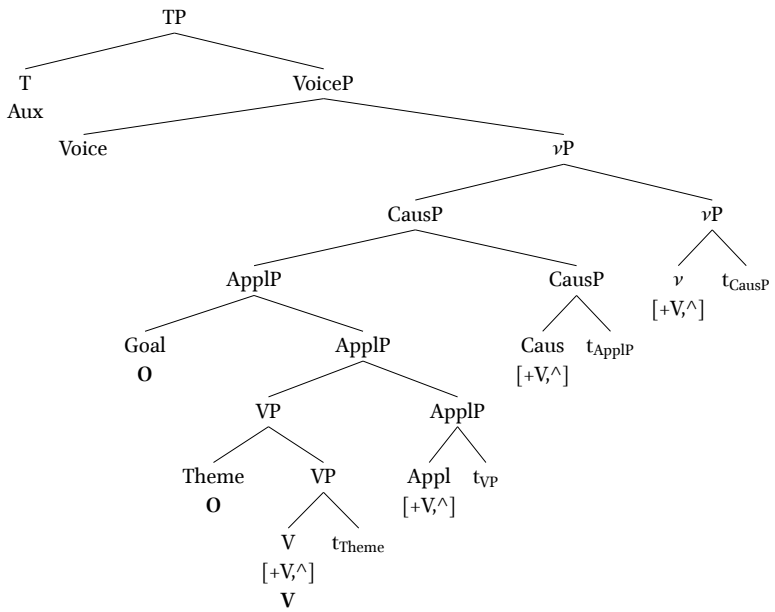
(392)



The prepositional object construction is easy to capture in the models developed of Tunen syntax so far (at least for analysis type 3), as obliquely-marked objects must stay in their base position. However, the ability for multiple objects to appear in the preverbal O slot as in (389a) requires further steps of analysis.

For the roll-up analysis (analysis type 1), multiple preverbal objects can be derived from the proposal that the recipient object is base-generated in SpecApplP. Here, the sequence Goal-Theme-V is then taken as part of the complement of the subsequent [V+,^] heads of the verbal head that trigger roll-up movement (393), resulting in the correct invariant Goal-Theme-V word order.

(393)

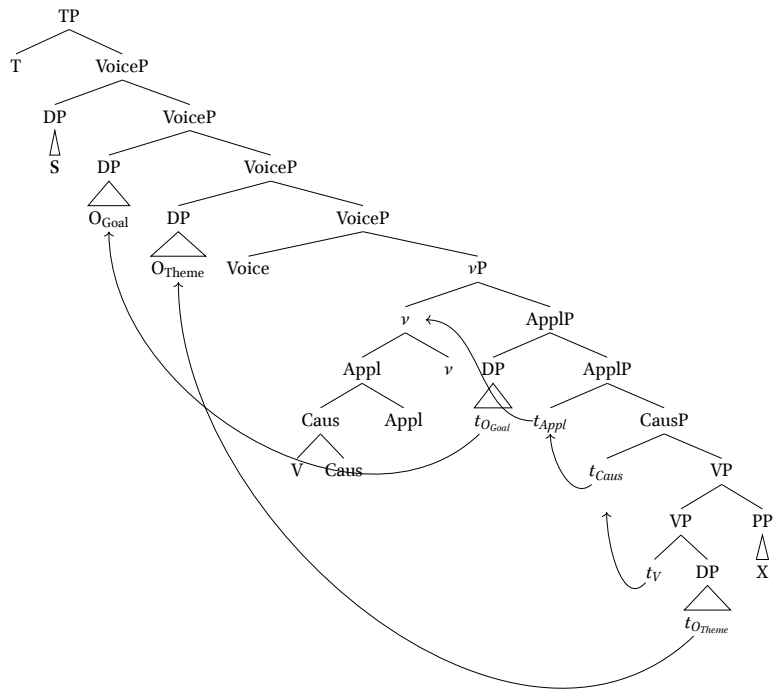


As (393) shows, the multiple preverbal objects in ditransitives are captured by the same mechanism of roll-up movement already applied in transitive construc-

tions and so do not constitute a problem for the roll-up movement analysis. The ability to account for ditransitives without additional mechanisms is therefore an advantage of analysis type 1.

In analysis type 3, by contrast, the object movement mechanism applied for transitive constructions does not derive the correct Goal-Theme-V order (assuming in the same way that the recipient object is base-generated in SpecApplP), because the movements postulated for the verb and theme object (387) do not affect the goal object. In other words, the basic proposal would predict the incorrect Theme-V-Recipient order, showing that adjustment is needed to capture the preverbal position of the recipient object. This can be done by postulating object movement of the goal object to a higher position than the theme object, as shown in (394).

(394)



While analysis type 3 can be adjusted in this way to derive the ditransitive constructions, it requires two stipulations. First, the analysis requires the stipulation that the landing site of the goal object is higher than that of the theme object. Note here that strict O_{GOAL}-O_{THEME} order is found for double object constructions in other languages and is therefore a restriction not only found in Tunen. For Scandi-

navian languages, for example, the strict O_{GOAL}-O_{THEME} order follows from Holmberg's Generalisation, which bans movement of the theme object across the indirect object (see e.g. Holmberg 1986, 1997; Broekhuis 2023). This stipulation for Tunen may therefore be captured as part of a broader study of derivational restrictions on movement operations, which I leave for further work.

The second stipulation is, if this analysis is applied with SpecVoiceP as the landing site for object movement, as illustrated in (394) above, it also relies on VoiceP having three specifiers, in strict S-Goal-Theme order.[36]

The use of multiple specifiers is significant both in terms of metatheoretical preferences regarding tuck-in movement (i.e., movement to an inner specifier) and in terms of phase theory. For example, under certain definitions of phases, only the outermost specifier is directly accessible after phasal transfer, meaning that only the Goal object in Tunen would be accessible (assuming Voice is a phase head). In this sense, the stricter nature of PIC1 would result in different predictions regarding accessibility for further operations than PIC2 would (Chapter 2 section §2.3.2). I leave these details for further study; the point to note here is that the analysis chosen to deal with the current data will make empirical predictions regarding availability for material to participate in operations in subsequent phases. As a more general metatheoretical evaluation, by involving two movement mechanisms in contrast to the single roll-up mechanism used in analysis type 1, the head movement + object movement analysis is a less elegant analysis of ditransitives. However, it is still able to capture the data.

6.5.5 Test 5: Extension to modified DPs

The final challenge for the roll-up and head movement + object movement analysis to Tunen is the derivation of modified DPs. One main component of this is that Tunen has discontinuous DPs of the construction S-Aux-O-V-Mod (395), found for numerals, quantifiers, adjectives, for objects and subjects (to be further illustrated in Chapter 7).

(395) Context: 'What do you see?'
mɛ́ ndɔ **tunoní** sinə **tɔ́lál.**
/mɛ ʰndɔ **tɔ-noní** sinə **tɔ́-lálɔ́**/
SM.1SG PRS 13-bird see 13-three
'Je vois trois oiseaux.'
'I see three birds.' [EO 225]

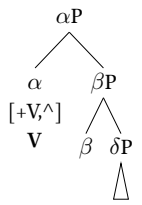
[36] If applied with Spec*v*P as the landing site for object movement, this analysis of ditransitives still requires the stipulation of strict Goal-Theme order of the two VoiceP specifiers.

(396) Context: 'Do you see two birds?'
ɛ́ɛ, mɛ́ ndɔ **tunoní** sinə **tɔ́fandɛ**.
/ɛɛ mɛ ʰndɔ tɔ-noní sinə tɔ́-fandɛ́/
yes SM.1SG PRS 13-bird see 13-two
'Oui, je vois deux oiseaux.'
'Yes, I see two birds.' [EO 1408]

While discontinuous DPs are often viewed as low-frequency constructions driven by a difference in IS status between the noun and modifier (e.g. Fanselow and Ćavar's 2002 Contiguity Principle), in Tunen, this construction is common (across consultants) and is pragmatically-neutral, as I will show in Chapter 7. There is therefore no reason to motivate movement of Mod driven by IS features (unlike discontinuous DPs in other languages formed by A'-movement to the clausal left periphery). Instead, the intuition is that the modifier is stranded in-situ, while the object has moved higher via formal movement.

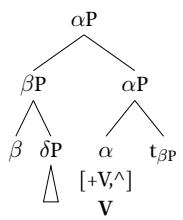
Discontinuous DPs of this kind are a significant challenge for the roll-up movement account (analysis type 1) because ^-feature driven movement always takes the whole complement. In other words, it is not possible under such a roll-up account to take only a sub-XP of V's complement such that the modifier is stranded postverbally. This restriction is illustrated below. From a base structure in which a head has the ^-feature specification (397), the only possible result is to move the entire complement of that head into the specifier position (398); it is not possible to only move a sub-component of the complement (399).

(397)

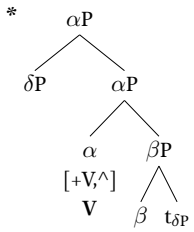


↓

(398)



(399) *



In the next chapter, I will show that this causes severe issues for the application of the roll-up analysis to Tunen. As the details require a proposal of the internal structure of the Tunen DP, I leave them out here for brevity reasons (see Chapter 7). The basic point is that any modifier present within βP in (397) will be obligatorily moved under the roll-up analysis and cannot be stranded in the postverbal position.

Although I focus here on the derivation of discontinuous DPs, a related issue is that VO orders are sometimes accepted when modifiers are present, constituting an exception to the general unavailability of VO word order in Tunen (cf. Chapter 5 section §5.3). We will see in Chapter 7 that while the discontinuous O-V-Mod order is standard (395)-(435), V-O-Mod is also accepted (400a). O-Mod-V in contrast is generally judged ungrammatical or reduced acceptability (400b) (despite N-Mod being the order in contiguous DPs; Chapter 4 section §4.3, Chapter 7).

(400) Context: "How many people do you see?" (+ picture)

a. mɛ́ ndɔ sinə **bɛndɔ báfandɛ**.
/mɛ ᴴndɔ sinə **bɛndɔ** **bá-fandɛ́**/
SM.1SG PRS see 2.person 2-two
'Je vois deux personnes.'
'I see two people.' [JO 541]

b. ?mɛ́ ndɔ **bɛndɔ báfandɛ́** sinə.
/mɛ ᴴndɔ **bɛndɔ** **bá-fandɛ́** sinə/
SM.1SG PRS 2.person 2-two see
'Je vois deux personnes.'
'I see two people.' [JO 543]

These data are surprising for our understanding of Tunen, which is otherwise consistently OV and not VO. In terms of the formalism, the challenge is how such postverbal objects are licensed. I assume that the object movement postulated in analysis type 3 is an instance of A-movement driven by licensing (i.e., L-movement). This proposal is motivated by the fact that the O slot in Tunen OV constructions is only filled by DP objects, not PP objects (which are licensed by the P head) or clausal objects. In this way, Tunen matches other languages with OV surface patterns argued to derive from object movement of DP objects (see e.g. Thráinsson 2007; Svenonius 2000). The standard movement of the object is therefore movement to a structural case position.

The puzzle then is why movement of DP objects should be optional, resulting in both O-V-Mod and V-O-Mod orders with no clear IS difference (under the understanding that licensing is not optional). It could be argued that V-O-Mod is in fact

not a spell-out of the base V-O-Mod structure and instead involves extraposition (in parallel to treatment of verbs taking complement-initial embedded clauses in OV languages as always involving extraposition; see e.g. Biberauer et al. 2014:172). I leave this hypothesis to be tested when diagnostics of extraposition in Tunen are available. A second puzzle is why O-Mod-V should be ruled out.[37] If object movement is just formal movement of V's complement, there is no theory-internal reason why movement of the entire object should be dispreferred.[38]

In Chapter 7, I will provide more detail on the specific derivation of the discontinuous DP construction in Tunen, which requires an analysis of Tunen nominal syntax. The conclusion is that modified DPs provide additional evidence against the roll-up movement account and in favour of the head movement + object movement analysis. In Chapter 5, I discussed the rare cases of VO word order with unmodified DPs in Tunen. I will then tie together the consequences for the formal analysis in Chapter 8. For current purposes, we can conclude that this test provides a further challenge to the roll-up analysis (analysis type 1), while being possible to account for in the head movement + object movement analysis (analysis type 3).

6.6 Summary of analyses

In summary, we have seen in section §6.3 that multiple different underlying derivations have been proposed for disharmonic Aux-O-V word order patterns in different languages, as exemplified for roll-up movement in Germanic (analysis type 1), base-generation of Aux-O-V word order in West African languages (analysis type 2), and verbal head movement analyses in Bantu, which must be modified by the additional mechanism of object movement in order to apply to Tunen's Aux-O-V syntax (analysis type 3).

As motivations behind these different structural derivations included different empirical behaviour with respect to verb movement diagnostics and general headedness properties, in section §6.4 I showed how these basic syntactic diagnostics pattern for Tunen. These diagnostics showed that there is evidence for a low level of verb movement (to a head below Asp) in Tunen, and that the language is generally head-initial. On the basis of this, I showed what a basic application of the three formal analyses would look like for Tunen. The base-generation of OV analysis (analysis type 2) was noted to be incompatible with the evidence for verb movement

[37] As will be discussed in Chapter 7, note that this varies across speakers: some speakers do accept O-Mod-V, and this construction is attested in the Tunen Bible Matthew subcorpus (CABTAL 2019).

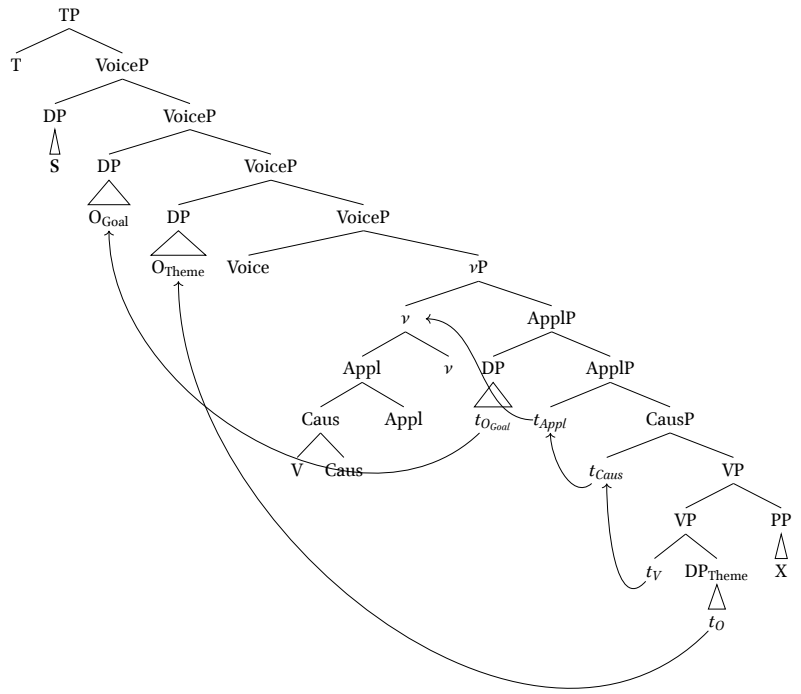
[38] Here, a parallelism can be made with pied-piping in *wh*-questions, where in some languages only the *wh*-word is fronted, while others allow the noun to move along with it.

and therefore ruled out from further consideration. This left analysis type 1 and 3 as serious contenders for Tunen.

In section §6.5, I presented five tests that served to tease apart the remaining two analyses, namely (i) the derivation of Tunen's verbal morphology, (ii) the derivation of O-V-X order in combination with Aux-O-V, (iii) the position of in-situ subjects, (iv) the derivation of ditransitives, and (v) the ability for modified DPs to result in discontinuous DPs and VO constructions. Tests (i)-(iii) were shown to require greater stipulation for analysis type 1 than for analysis type 3. Test (iv) was shown by contrast to require further stipulation in analysis type 3. Finally, test (v) was introduced as a serious issue for analysis type 1, which provides strong evidence in favour of analysis type 3 and so will form the focus of the next chapter.

On the basis of these test results, I propose that the best available analysis for Tunen's disharmonic word order is the proposal in (401), in which there is both V-to-*v* movement and object movement to SpecVoiceP.

(401)



The verb movement mechanism employed in this analysis matches common assumptions about the derivation of verbal morphology in Bantu, which is desirable considering the close genealogical relationship between Tunen and (other) Narrow Bantu languages.[39] Secondly, the derivation of OV in Tunen through object movement contributes to an understanding of nominal licensing in Tunen. Specifically, I propose that the object movement that derives OV word order is A-movement motivated by nominal licensing (i.e., L-movement). This movement is purely formally-conditioned, rather than being driven by an IS feature.

I will further discuss this analysis in the following chapters, when more data from discontinuous DPs and word order variation will be considered. This chapter will now continue its investigation into OV word order in Tunen by reflecting on the what this formal syntactic analysis of OV in Tunen means for our understanding of syntactic typology (section §6.7) and the diachrony of OV vs VO word order change in Benue-Congo (section §6.8).

6.7 Reflections on typology

6.7.1 Tunen within Benue-Congo and Africa more broadly

In the previous sections, I showed that OV order in Tunen is not conditioned synchronically by IS, and is instead unmarked. I also showed that Tunen has a disharmonic Aux-O-V clausal word order alongside O-V-X syntax. I showed that Tunen patterns otherwise similarly to (other) Narrow Bantu in being consistently head-initial, with verbal derivations built up as suffixes; the difference is the degree of verb height and the addition of object movement. We can ask now how this updated understanding of Tunen syntax fits into the comparative picture on word order variation in other languages.

Recall from section §6.2 above that Nyokon (Bantu A45, Cameroon) and Tikar (Bantoid, Cameroon) have TAM-conditioned S-Aux-O-V-X/SVO alternations (see also Mous 1997, 2014, 2022; Kerr 2024) and that Ewondo/Eton (A72, Cameroon) and Nomaándé (A46, Cameroon) have S-Aux-O-V-X restricted to pronominal objects, while other Bantu/Bantoid languages have SVO as the base word order.[40] We there-

[39] In other words, this analysis fares well under the metatheoretical heuristic to prefer to analyse closely related languages in the same fashion; proposing a completely different analysis for verbal morphology in Tunen would mean assuming that significant syntactic reanalysis has taken place somewhere in the diachrony of Tunen versus other Bantu. While this is possible, it should not be taken as the null hypothesis.

[40] Certain Bantu languages around the B70 group in Congo have SOV word order due to an immediate-before verb (IBV) focus position. Tonal evidence supports an analysis in which this word

fore see a difference in synchronic patterning between OV word order in Tunen and VO in its immediate neighbours within the Benue-Congo family.

Looking more generally at word order variation in Africa, S-Aux-O-V-X is argued to be crosslinguistically rare, but is found in West Africa in the Mande languages, Senufo/Gur, Kwa, and Atlantic groups (Creissels 2005, 2018; Gensler 1994, 1997; Gensler and Güldemann 2003; Heine 1976, a.o.). On the one hand, this has been taken as evidence for S-Aux-O-V-X (or subcomponents Aux-O-V/O-V-X) to be an areal feature of a region of West/Central Africa named the *Sudanic Zone* or the *Macro-Sudan Belt* (MSB; Gensler and Güldemann 2003; Güldemann 2008).[41] On the other hand, the S-Aux-O-V-X surface pattern is generally argued to have arisen through unrelated historical patterns, which many authors argue means that S-Aux-O-V-X should be treated as a group of word orders rather than a single pattern or feature (Creissels 2005; Nikitina 2011; Sande et al. 2019). Furthermore, Creissels (2005, 2018); Sande et al. (2019) argue that the uniformity and extent of S-Aux-O-V-X has been overstated (Hyman 2011).

As I showed in section §6.2.5, the 'O' of S-Aux-O-V-X has many aspects of variation within African languages, namely (i) the number of objects (single preverbal O or multiple objects allowed), (ii) the type of object (pronominal only or also lexical NP; locative), (iii) the IS status of the object (extrafocal, focal, contrastive), and (iv) the thematic type of object (theme, recipient/beneficiary). This amount of variation calls into question the validity of 'S-Aux-O-V-X' as a descriptive label and problematises presentations of a monolithic 'African Aux-O-V' word order type, which I argue are misleading.

In order to make sense of the variation, Güldemann (2008:162-3) proposes a bipartite distinction between (i) language families of the East which have S-(Aux)-O-V-X as a "grammatically conditioned phenomenon", i.e. in alternation, often conditioned by IS of the object (cf. Güldemann 2007), and (ii) language families of the West, where S-Aux-O-V-X is "far more salient" and hardly or not at all influenced by functional factors. Such a distinction into eastern versus western languages is endorsed by Creissels (2018), who additionally highlights distinctions between S-Aux-O-V-X in Mande and S-Aux-O-V-X patterns in other languages of West Africa.

What we have seen in this chapter for Tunen provides a counterpoint to this

order can be taken to be innovated from a cleft construction. Note that it is not taken to be the basic word order, which is SVO; I therefore do not discuss these languages further here and refer the reader to Kerr et al. (2023); Li (to appear *a*, *b*) and references therein for further discussion.

[41]Throughout this thesis, I use *West/Central Africa* as a descriptive label covering the region in which Tunen and these other languages are spoken. While this label is not perfect (especially as I do not mean to include languages throughout central Africa), I use it to avoid proposing that this is a linguistic area (cf. the use of the term *Northern Sub-Saharan Africa* in Idiatov and Van de Velde 2021).

bipartite presentation of S-Aux-O-V-X in Benue-Congo languages of the East versus languages of West Africa. Despite clearly being a Benue-Congo language (Chapter 2 section §2.5), Tunen has S-Aux-O-V-X word order that is not conditioned by IS, not being an exceptional pattern found alongside a basic VO pattern. Instead, the preverbal O position is a general position for objects, with S-Aux-O-V-X applying across TAM contexts and clause types.

We therefore observe different types of Aux-O-V languages within the Benue-Congo group. On the one hand, Tunen has rigid S-Aux-O-V-X word order, which I argued in sections §6.5-6.6 to be derived by formally-conditioned object movement in addition to verb movement. In contrast to Tunen, Nyokon (Bantu A45) and Tikar (Bantoid, Cameroon Stanley 1997) have TAM-conditioned OV/VO alternations (Mous 2005). Ewondo/Eton and Nomaándé on the other hand have OV restricted to pronominal objects, compatible with an analysis in which IS is the primary conditioning factor for determining clausal word order. These facts highlight the inadequacy of a monolithic characterisation of the 'eastern languages'. These differences within the Benue-Congo languages of Cameroon also parallel the differences reported between S-Aux-O-V-X languages of West Africa (the 'western languages'), as reflected on by Sande et al. (2019) (see also Creissels 2018:61-69):

> "while many typological discussions of word order are based on surface order, **the results in this section clearly demonstrate that syntactic typologies should be based on structural analyses of languages** instead. [...] A **potential problem for [the] claim [that S(-Aux-)O-V-X is a property of the Macro-Sudan Belt] is** that, as we have now seen, **S(Aux)OVX is almost certainly not a single syntactic phenomenon**. In particular, we must be careful to distinguish between the superficial appearance of such a word order with a structure that is actually distinct, as in Gwari and Fongbe, from the existence of genuine mixed clausal headedness in Mande and Kru."
>
> (Sande et al. 2019:693-4, emphasis added)

In other words, the label 'S-Aux-O-V-X' is misleadingly reductionist, and a more meaningful crosslinguistic comparison can be made on the basis of structural properties. On account of the empirical variation observed between the West African languages of Sande et al.'s (2019) study, they propose a 3-way structural typology of Aux-O-V languages within the Macro-Sudan Belt linguistic area.

(402) Type I. 'true' S-Aux-O-V as derived from a disharmonic underlying structure with V movement

Type II. 'true' S-Aux-O-V as derived from a disharmonic underlying structure without V movement
Type III. Languages in which S-Aux-O-V surface orders arise through verb movement from head-initial VP structures

Note here that Sande et al.'s (2019) sample of 54 languages of West Africa did not include the Benue-Congo languages Tunen, Nyokon, Nomaandé, Eton, or Ewondo. We can therefore extend their typology of Aux-O-V languages by noting that S-Aux-O-V-X in Tunen is derived by verb movement + object movement. The S-Aux-O-V-X pattern in Nyokon is more likely to be related to the T domain, while Ewondo S-Aux-O_{PRON}-O-V-X could potentially be derived through an IS-conditioned movement trigger. We can now consider a structural typology of Aux-O-V disharmony.

6.7.2 Tunen within a structural typology of disharmonic word orders

Based on the syntactic diagnostics and analyses reviewed in this chapter, we can identify the parameters of variation in analyses of Aux-O-V word order patterns crosslinguistically given in Table 6.7 overleaf.

While some of these aspects of variation may be argued to boil down to different theoretical preferences on the part of the authors, we have seen in this chapter that they are also motivated by significant differences in the (morpho)syntactic properties of each language. The investigation of S-Aux-O-V-X word order in Tunen showed that it patterns differently from other Benue-Congo languages in not being synchronically conditioned by TAM or IS context, instead being derived through formally-conditioned object movement. We can therefore update our typological understanding of Aux-O-V word order patterns in Africa to include the presence of formally-conditioned Aux-O-V word order outside of the Mande group.

This updated overview of differences in S-Aux-O-V-X word order patterns raises questions about how such synchronic variation in word order patterns came about diachronically, which we can turn to in the next section.

6.8 Reflections on diachrony

6.8.1 OV in Niger-Congo: old or innovative?

A widely-discussed question in Africanist syntax has been whether Proto-Bantu and Proto-Niger-Congo had OV or VO basic word order. Early proposals for the

Parameter	**Example**
Headedness	
Is the VP underlyingly head-final?	Guébie, Dafing, Uralic (e.g. South Sámi)
or is the VP underlyingly head-initial?	Gwari, Fongbe, Tunen, Nyokon
Nature of movement in the VP domain	
Is there V or VP raising?	Kru, Makhuwa vs Germanic
Is there roll-up movement?	Germanic dialects (e.g. Yiddish)
V movement	
Does V stay in-situ?	Guébie
Does V move to *v*?	Tunen
Does V move to Asp?	Canonical Bantu (e.g. Makhuwa)
Does V move to T?	Kru-type SVO/S-Aux-O-V-X alternation
Does V move to C?	Germanic V2
Object parameters	
Is the object nominalised?	Fongbe
Is there object movement?	Tunen
Is object movement driven by information structure (e.g. [+given])?	Ewondo/Eton, Old English
Is object movement driven only by a formal feature (e.g. [+V^])?	Germanic, Tunen

Table 6.7: Parameters of variation in formal analyses of Aux-O-V disharmony with example languages/language families discussed in this chapter.

syntax of Proto-Niger-Congo argued for *SOV[42] as the historical order (Givón 1975; Hyman 1975; Williamson 1986), while the more recent consensus is that the order was *SVO (Heine 1976, 1980; Heine and Reh 1984; Claudi 1993). Gensler (1994, 1997) and Gensler and Güldemann (2003) propose a third analytical possibility, whereby the disharmonic syntagm *S-Aux-O-V-X co-existed with *SVO (see also Güldemann 2022). The presence of languages with S-Aux-O-V-X is therefore significant for theories about the word order of the respective proto-languages. While Gensler (1994, 1997) proposes explicitly that *S-Aux-O-V-X word order in languages of West/Central Africa is a feature inherited from Proto-Niger-Congo, in Güldemann (2008), S-O-V-X is recast as an areal feature of the Macro-Sudan Belt (MSB) linguistic area.

6.8.2 The areal argument

Güldemann's (2008) alternative account for S(-Aux)-O-V-X word orders in Africa is that they have arisen in the MSB through areal pressure for this surface pattern (which may be arrived at through different underlying processes). Such a view is based partly on the argument that the pattern is crosslinguistically and typologically unusual, but found in multiple languages of Africa (Gensler and Güldemann 2003; Güldemann 2008; Creissels 2018).

While the MSB as a linguistic area is supported by a variety of linguistic features (e.g. ATR harmony systems and labio-velar stops; see a.o. Clements and Rialland 2008; Güldemann 2008; Rolle et al. 2020; Idiatov and Van de Velde 2021), the areal account of the 'S-Aux-O-V-X' feature (or the combination of 'Aux-O-V' and 'O-V-X' features) in particular has been critiqued by various sources. One issue is the extent to which S-Aux-O-V-X word order can be shown to have arisen through areal pressure versus language-internal change. Hyman (2011:11) for example asks "if this order is so old, why is it so common that we can identify the verbal origin of the "AUX"?', noting "no argument is given that it must be reconstructed to [Proto-Niger-Congo] rather than developing via the natural V > AUX grammaticalization pathway" (Hyman 2011:13). One potential counterpoint to this critique, however, is that the S-Aux-O-V-X template could go through multiple cycles of auxiliary creation and replacement, as considered by Gensler (1994).

Another issue regarding the areal argument is the empirical question as to how rare S-Aux-O-V-X word orders truly are. The most convincing portrayal of the argument is that S-Aux-O-V-X is only found in Africa (as in Gensler and Güldemann's 2003 proposal of this pattern as an 'Africa-specific quirk'). However, if S-Aux-O-V-X

[42] Following standard practice in historical linguistics, the asterisk <*> here indicates a reconstructed form (not an ungrammatical order).

is split into the subcomponent(s) Aux-O-V and/or O-V-X, as has been done in later work, then the rarity argument is weakened, as both Aux-O-V and O-V-X are found in many languages outside Africa. The number of Aux-O-V patterns crosslinguistically is similarly increased if a less restrictive definition of 'Aux' is used than that of Dryer (2013), where a non-verbal auxiliary is included (as discussed in section §6.2.4). Hyman (2011:13) also comments that "[the] distribution [of S-AUX-O-V is spotty [within the MSB]"; see also e.g. Creissels (2018). The argument here is that the extent of S-Aux-O-V-X has been somewhat overstated. If the word order spreads via areal pressure, the question is why so many intervening languages only have the VO pattern. In other words, why do so many languages in the area *not* have these S-Aux-O-V-X patterns?

This sceptism regarding the validity of the areal explanation draws on robust crosslinguistically-supported research showing that VO↔OV word order change can arise language-internally through known grammaticalisation paths (Heine and Reh 1984; Heine and Claudi 2001; Heine and Kuteva 2004), rather than being arrived at through contact or areal pressure, of which V>Aux grammaticalisation is one example. A similar language-internal argument to the language-internal V>Aux grammaticalisation proposal is provided by Heine and Claudi (2001), who argue that S-Aux-O-V-X has arisen not through areal diffusion or genetic inheritance, but recurrent grammaticalisation based on Gen-N order within the nominal domain. Heine and Claudi (2001:43) thus conclude that "the presence of type B [involving the word order S-Aux-O-V-X] in different African languages is neither a matter of common origin (= genetic relationship) nor of language contact (= areal relationship)", again calling into question the applicability of an areal analysis for Tunen.

Relevant to our study of Tunen, we can consider that Tunen is spoken far away from the West African Aux-O-V languages, at the Southern periphery of the proposed MSB linguistic area. Most interestingly, Tunen has in some ways greater syntactic similarity to Mande languages furthest from Cameroon in that the Aux-O-V pattern is rigid across TAM and IS contexts. While it is likely that Aux-O-V patterns in Kru and Gur are influenced through contact with adjacent Mande languages — meaning that there is indeed an areal component to the synchronic distribution of Aux-O-V word orders — the geographical distance from the Benue-Congo group Tunen which Tunen is part of makes it more likely that Tunen OV order grammaticalised independently from the West African cases. In other words, the null hypothesis should be that Tunen word order did not arise through contact with Mande; the burden of proof is on an areal account to show how such language contact could have arisen given the distances in question. I therefore consider it unlikely that Tunen's S-Aux-O-V-X is related to areal influence and propose a language-internal grammaticalisation account as the null hypothesis. I turn now to building up a basic

proposal of how such a language-internal process could have taken place.

6.8.3 Previous accounts of OV in Tunen

If OV order is not inherited from a proto-language and not arrived at through areal influence, the question arises as to how it developed in Tunen. This question is particularly pressing for authors who consider VO→OV word order change to be rarer than the inverse OV→VO pattern (see e.g Givón 1977:242; Kiparsky 1996:140; Roberts 2021:482). Earlier work on Tunen by Maarten Mous proposed that Tunen's OV syntax is an innovation from a historical VO word order (Mous 1997, 2005, 2014), a view supported by Hyman (2011). I review the basics of the proposal here, condensing arguments from Kerr (2024).

One existing proposal for VO → OV word order change in African languages relies on nominalised objects, where OV constructions can arise due to Gen-N word order in the noun phrase (Claudi 1993; Heine and Claudi 2001). As Mous notes (see also Williamson 1986:7), this proposal cannot however apply to Tunen, as Tunen has N-Gen, not Gen-N word order (Mous 2005; section §6.4.2 fn21). Mous therefore sketches a possible grammaticalisation scenario through nominalisation in infinitival constructions and homophony of the preposition and infinitival prefix, where the OV syntax found in infinitival constructions (403a) was generalised to all objects via analogy and V>Aux(>TAM) grammaticalisation (403b).

(403) **Mous' (2005) infinitival pathway**

a. S V ɔ O (ɔ) V_{INF}

b. S TAM O_{Pron} V (Kerr 2024:317)

Mous proposes that Tunen's neighbours with OV/VO alternations also have innovative OV word order. However, the details of the infinitival process are unclear and the empirical data on Nyokon, Ewondo, and Tikar are very limited. I discuss this further in Kerr (2024), where I argue that the infinitival pathway is a possible grammaticalisation source of OV order in these Cameroonian Bantu/Bantoid languages, but is still unclearly motivated, in part due to variation between Tunen, Nyokon, and Tikar, for example the lack of homophony of preposition and infinitive in languages besides Tunen.

Another relevant proposal for clausal word order change in African languages is the V>Aux(>TAM) grammaticalisation pathway, whereby the former main verb becomes an auxiliary or TAM marker, with another element then becoming the main verb (Claudi 1993; Heine and Kuteva 2004; Nurse 2008). Such a change has been proposed to be crosslinguistically common and therefore a natural change

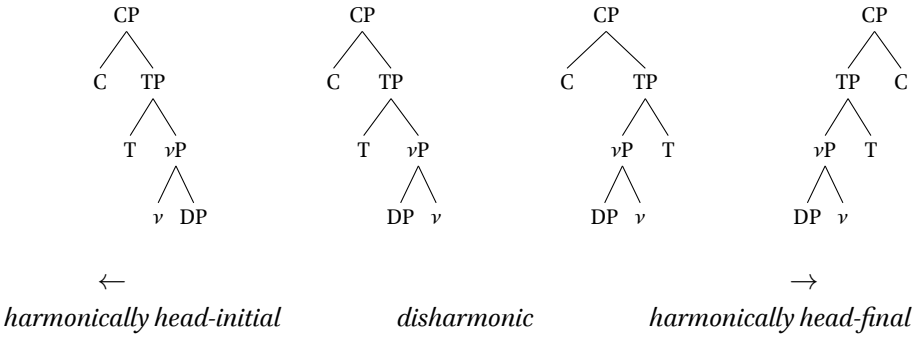
(Hyman 2011:13), found with verbs such as 'to begin', 'to finish', and 'to come' (Heine and Reh 1984:113-135). In comparing the Tunen forms of these verbs with the Tunen TAM system, I did not find any clear correspondences that provide evidence for this change (Kerr 2024:313-316). However, this is not to say that V>Aux grammaticalisation did not occur in Tunen, rather that no strong claims can be made about it in the absence of further evidence.

As the mechanism of innovation of OV word order in Tunen is thus not yet fully understood, a question we can ask is whether the formal synchronic analysis presented in this chapter can lead to any new insight into this diachronic question. In order to do so, some background on generative perspectives on word order change is needed.

6.8.4 Generative perspectives on word order change

Work in the generative literature on disharmonic word order related to FOFC makes strong predictions about the directionality of headedness change. The claim is that change to head-finality must start at the lowest phrase within an extended projection (SATBG; Roberts 2019:140-141; section §6.3.3). For our current purposes, the relevant extended projection is the verbal domain, and so we have the strong prediction that a head-initial language can introduce head-finality at the VP level, while a head-final language cannot move to head-initiality starting from the VP but must instead start from the top of the extended projection (i.e., the CP domain). This restricted pathway in word order change in the clausal domain is illustrated in (404).

(404) **Stages of word order change in the clausal domain**



This perspective is compatible with the idea that OV word order in Tunen is innovative (Mous 2005; Kerr 2024). Specifically, Tunen word order would be at Stage

II of (404), starting from a harmonically head-initial structure (Stage I). The relevant empirical context is that we see both languages with VO and Aux-O-V order in Africa (= Stages I and II), but not languages with C-O-V-T order (Stage III).[43] This makes the Aux-O-V patterns less likely to have derived from a harmonically head-final initial state (Stage IV) than a harmonically head-initial one (Stage I), as there is no trace of the Stage III part of the process in surrounding languages.

Another point relevant for the formal derivation of African Aux-O-V is the question as to whether the preverbal object position is conditioned by IS or by formal object movement. We can take the synchronic variation to reflect variation in whether such IS features are active in the grammar. Such debates are also found in the discussion of Aux-O-V derivation in other language families. For example, recent work on word order variation in Germanic has argued for IS as a conditioning factor for OV/VO variation, in contrast to previous work that relied on non-IS factors such as prosodic weight of postverbal objects. Struik and Van Kemenade (2020, 2022); Struik (2022) for example argue that the choice between VO and OV in Germanic was driven by object movement triggered by givenness (see also Bech and Eide 2014 and chapters therein). This leads to the proposal that variation in IS-sensitivity of OV languages in West/Central Africa may be related to variation in featural specification on heads in the verbal domain. In the following section, I propose that word order change in the African languages may be derived through the grammaticalisation of formal movement from previously IS-conditioned movement, i.e., whether or not IS-features drive movement operations within the Narrow Syntax.

6.8.5 Proposal for Tunen

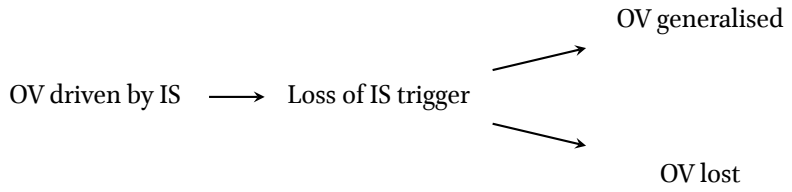
I have proposed in this chapter that Tunen's OV word order is derived via formally-conditioned A-movement of the object(s) to SpecVoiceP, driven by a licensing requirement (L-movement). In other words, Tunen's preverbal object placement is a basic fact of Tunen syntax rather than an IS-conditioned word order pattern.

While IS is therefore not required for the derivation of OV word order in synchronic terms, it is still possible that Tunen's word order has grammaticalised from an alternation that was conditioned by IS in an earlier stage of the language. I propose along these lines a diachrony of IS > formal movement conditioning, whereby OV order can be generalised from a previously IS-motivated system. Such an ap-

[43]This statement is based on comparative work on word order variation such as Heine (1976). It could be falsified if a language is found in which there is evidence for T consistently following the verb. I do not consider Mande languages in which the verb can take a TAM suffix as Stage III cases, as this is not the main TAM position able to appear alone (see e.g. Creissels et al. 2008:103), and so this verbal suffix is unlikely to reflect the T position.

proach is compatible with Güldemann's (2007) description of IS-conditioned object movement in Benue-Congo but extends it to a further grammaticalised type of movement no longer with a semantic/pragmatic function, as sketched in (405) below in comparison to Struik and Van Kemenade (2020, 2022) and Struiks' 2022 proposal for Old English.

(405) **Word order change related to IS features**



In other words, consistent OV word order in Tunen could have arisen from a historic stage in which OV was conditioned by an IS trigger; after the IS trigger was lost, the movement was generalised in Tunen. This is in contrast to the other logical possibility, in which the loss of an IS trigger results in the loss of OV (as in Old English). In this way, languages can differ in directionality of word order change due to changes between IS and formal movement features.

In considering the evidence for word order change, one question is the extent of variability in the data (which may be used to indicate a recent change that has not yet been fully generalised across all speakers' grammars). In terms of the rare SVO patterns found in Tunen (for which see Chapter 5 section §5.3), one hypothesis is that they are preservations of the earlier SVO syntax (although this is not the only possible account). However, we saw in section §6.2 and in Chapter 5 that OV in Tunen is synchronically consistent across TAM contexts, IS contexts, and clause types, meaning that the existence of a previously IS-conditioned stage proposed in (405) is based primarily on comparative arguments about OV across Benue-Congo.

An alternative to this proposal that a previously IS-conditioned movement alternation was generalised would be to say that OV in Tunen arose through a TAM-driven alternation, like what is seen in various West African languages like those of the Kwa and Gur groups, and what is also seen synchronically in the neighbouring Western Mbam language Nyokon and nearby Bantoid language Tikar (Stanley 1997; Mous 2005, 2014, 2022; Kerr 2024). Such TAM-conditioned alternations could be considered to be indirectly IS-driven in that there is an argued relationship between TAM forms like the progressive and IS categories like focus, as Güldemann (2003) argues. However, this account needs to be shown to capture the set of TAM forms that do and do not trigger OV order in individual languages. As the sets of

TAM contexts triggering OV vary across languages and are not restricted to the prototypical case of present progressive discussed in Güldemann (2003), the burden of proof is to show that there is a meaningful grouping of these TAM forms that can explain why these triggered OV while others show VO patterns. Furthermore, TAM-based alternations can alternatively be considered in relation to a structural difference in the availability of V-to-T movement (e.g. Koopman 1984); in many languages, TAM-dependent OV versus VO patterns depend on the presence or absence of material in the Aux slot. This means that alternative analyses are possible which only rely on the presence/absence of syntactic material and therefore do not need to make recourse to semantics or IS at all. I will return to this discussion about the necessity of IS in the formal analysis of Tunen syntax in Chapter 8, considering the empirical facts regarding VO word order and the expression of information structure discussed in Chapter 5. For now, I conclude with the proposal that Tunen's OV is synchronically independent of IS, but may have arisen historically through an IS-conditioned alternation, formalised in the change between IS-features to formal movement triggers (405), reflecting a Stage I-Stage II change in (404).

6.9 Conclusion

In this chapter I have considered the Tunen verb phrase, which differs from almost every other Bantu language in having OV as the basic word order, resulting more specifically in the disharmonic word order pattern S-Aux-O-V-X. I showed that this word order pattern is consistent across TAM and IS contexts in Tunen, meaning that it is the basic word order pattern, compatible with various information-structural contexts. I then gave a detailed empirical overview of what material can fall in each of the S, Aux, O, V, and X slots, showing in particular that the preverbal object position can take multiple objects and is not restricted by definiteness, heaviness, polarity, or main versus embedded clause type.

Next, I introduced S-Aux-O-V-X as a disharmonic word order pattern compatible with the Final-Over-Final-Condition (FOFC; Biberauer et al. 2014; Sheehan 2013; Sheehan et al. 2017). On the basis of this, I introduced three analyses of Aux-O-V discontinuity that have been applied to different languages, namely (i) a roll-up movement analysis, (ii) a base-generation of OV analysis, and (iii) a verb head movement analysis modified by the addition of object movement. I then presented a basic analysis in each of these types for Tunen, showing empirical diagnostics for low levels of verb movement and general head-initiality. These diagnostics presented evidence against the base-generation of OV analysis. Next, I showed how five different tests can be used to tease apart the roll-up movement analysis from the head

movement + object movement analysis, with four out of five tests providing evidence against the former analysis and in favour of the latter one. I therefore concluded in favour of the head movement + object movement analysis, to be further refined in Chapter 8. The core of the analysis is that Tunen's disharmonic S-Aux-O-V-X clausal word order is derived from an underlyingly harmonically head-initial structure of the kind found in other Bantu languages.

The chapter concluded by turning to consider what this more detailed synchronic understanding of OV word order and derivational disharmony in Tunen means for our understanding of the typology and diachrony of this word order pattern within Africa and more generally. I argued that the Tunen data show that previous descriptions of word order in Benue-Congo are over-simplified, specifically in the bipartite presentation of two types of S-Aux-O-V-X languages, one found in Western languages where the word order is rigid and one found within Eastern languages (including Benue-Congo) in which the word order is TAM-dependent or IS-conditioned. This division was criticised already by Creissels (2005, 2018) on the basis on glossing over too much variation within the Western group. Here, I also show that lumping the Eastern languages together does not capture the fact that the word order in Tunen in fact fits more within the 'Western' pattern in terms of the rigidity of the Aux-O-V order. I then considered how this word order may have originated, arguing in favour of Mous's (2005) proposal of OV as an innovation from an earlier VO word order pattern. I reflected on how this innovation of OV order can be captured in a generative analysis in terms of the generalisation of object movement from an earlier IS-conditioned alternation (compatible with Güldemann 2007) and argued that the grammaticalisation of OV in Tunen happened independently to that of other rigidly Aux-O-V languages such as Mande, rather than being arising through shared inheritance or areal pressure.

CHAPTER 7

Discontinuous DPs

7.1 Introduction

It is generally assumed that material that belongs together semantically will be contiguous syntactically, a notion that has been expressed in Behagel's (1932) First Law,[1] otherwise formulated as the *principle of iconic distance* (or *principle of iconicity of distance*; Newmeyer 1992:761-762, Schultze-Berndt 2022:866, cf. Haiman 1983:782), the *proximity principle* (Givón 1985:202), the *Principle of Domain Integrity* (Rijkhoff 1990, 2002:239-260), and the *Contiguity Principle* (Fanselow and Ćavar 2001, 2002). In generative terms, this means that any nominal modifier base-generated as part of a DP is predicted to remain contiguous with the head noun throughout the syntactic derivation, unless there is some other factor driving a violation of this iconicity principle (406).

(406) **Contiguity Principle**
"material that is contiguous at one step in the derivation (that is, e.g., merged as a single phrase) should remain contiguous unless other principles force a violation of contiguity."
(Fanselow and Ćavar 2002:86)

[1] "'Das oberste Gesetz ist dieses, daß das geistig eng Zusammengehörige auch eng zusammengestellt wird' [The principal law is this: that what belongs together semantically is also placed together syntactically]" (Behagel 1932:4, as cited and translated in Rijkhoff 2002:253).

As such a principle has been proposed to hold crosslinguistically, violations of it are of particular interest. This chapter looks at discontinuous noun phrases (*discontinuous DPs*) in Tunen, which (appear to) deviate from the Contiguity Principle in (406) in having a split between a modifier (e.g. numeral, quantifier) and a noun it modifies semantically.

The consensus of previous literature is that discontinuous DPs are found when there is a different information-structural status between the noun and the modifier (Fanselow and Ćavar 2002; Fanselow and Féry 2006; Louagie and Verstraete 2016, a.o.). This difference in information-structural status is then the driving force for the difference in syntactic position, and so does not truly constitute a violation of the Contiguity Principle: the different syntactic position of noun and modify iconically reflect a different information-structural status. For example, German and Chichewa both have a Top...Foc construction where a noun is topicalised via A'-movement to the left-periphery while the modifier remains low due to being in focus, as exemplified in (407)-(408) below.[2]

(407) **Interessante Bücher** hat sie mir **keine aus Indien** empfohlen
interesting books has she me none from India recommended
'She has not recommended any interesting books from India to me. '
(German (Germanic), Fanselow and Ćavar 2002:65)

(408) **Mbûzi** atsíkáná á mfúmu a-a-gul-á **zákúd-a.**
10.goats 2.girls 2.ASSOC 9.chief SM.2-PERF-buy-FV SM.10-black
Lit. 'Goats, the chief's girls have bought black (ones).'
(Chichewa (Bantu); Mchombo 2006:147)

In these examples, the initial element is topical and the modifier is focal, showing a split in IS between the modifier and the rest of the DP corresponding to the split in syntactic position. Another type of discontinuous DP construction found in the literature is the Foc...Comment construction. Like the Top...Foc construction, this construction is formed with A'-movement to the left periphery, but this time the leftmost rather than rightmost component is focal, as shown for a corrective focus context in Yucatec Maya in (409).

[2]Throughout this chapter, I indicate the head noun and its modifier(s) in boldface. Transcriptions and glosses are otherwise unchanged from their source, unless otherwise indicated. I assume the background knowledge on generative syntax (e.g. the notions of A-movement and A'-movement) introduced in Chapter 2 section §2.3.

(409) Context: 'Did three boys hit you?'

Ma'!	**X-ch'úuppal-o'ob**	jats'-ik-en	**óox-túul=i'**.
NEG	F-girl-PL	hit-INCMPL-B.1SG	three-CL.AN=LOC

'No! Three GIRLS hit me.'

(Yucatec Maya (Mayan), Skopeteas et al. 2020:628)

We therefore see that languages may vary in the exact nature of the IS difference between head noun and modifier, but the explanation of discontinuity as being driven by a difference in IS between the two elements remains applicable in all cases, thus remaining compatible with the Contiguity Principle in (406).

In a study of variation in the nominal domain in Bantu languages, Van de Velde (2022:909) reports that discontinuous DPs appear to be "very rare" in Bantu, with only four Bantu languages known to have them, namely Chichewa (ISO 639-3 [nya]; Guthrie code N30; Malawi/Zambia/Mozambique), Ganda ([lug]; JE15; Uganda), and Tunen. An additional Bantu language with discontinuous DPs to be added to this list is Basaá (A46, Cameroon), based on recent work by Bassong (2021).[3]

Chichewa discontinuous DPs have been studied in detail by Mchombo (2004, 2006) and Mchombo et al. (2005). As seen above in (408), the Chichewa discontinuous DP construction consists of a left-peripheral expression, often requiring indexation on the verb. In generative terms, these constructions are analysed as formed by A'-movement of the noun to an information-structural position within the clausal left periphery (see Mchombo et al. 2005 for an analysis within the Lexical Functional Grammar framework).

In Basaá, discontinuous DPs are shown by Bassong (2021) to involve one element taking a left-peripheral position while the other element remains postverbal. An example is given in (410) below, where the numeral *bí-sámal* 'six' is discontinuous from the rest of the noun phrase.

[3]Note that this inclusion of Basaá strictly speaking goes against Bassong's (2021) argument that the Basaá constructions are not true instances of discontinuous DPs, in that he argues that the modifier and head noun are base-generated in separate DPs, making the discontinuity only apparent. I come back to this question of analysis in section §7.2.4. For current purposes, I take any apparently discontinuous DP construction as relevant for consideration.

(410) Context i: There was only a set x of nice and unpleasant books such that out of x, I bought only six nice ones. I may have bought three unpleasant ones as well.
Context ii: #There was a set x of different items such as books, pens, clothes etc. such that I bought only six nice books (as opposed to other items).
Context iii: #There was a set x of nice books such that out of x, I bought only six nice ones.

bí-kaat	**bi-lâm**	**gw-ɔ́n**	mɛ	bí-sɔ́mb	**bí-sámal.**
8-books	8-nice	8-FOC	I	PST2-buy	8-six

'I bought six nice (as opposed to unpleasant) books.'
(Basaá (Bantu); Bassong 2021:13)

The Basaá discontinuous DP constructions therefore appear to be similar to Chichewa in having an IS-driven split formed by movement of one constituent to a left-peripheral position. Ganda discontinuous DPs, however, are formed somewhat differently. They are described by Givón (1974) as being formed from a modifier that takes the augment, which is a pre-prefix found in some Bantu languages (see e.g. Halpert ms., Katamba 2003:107-108; Van de Velde 2019 for overviews). Such augmented modifiers may be discontinuous from the noun they modify semantically, as shown in (411). The discontinuous construction in (411b) is said to differ from the contiguous version (411a) in having a non-restrictive interpretation (Van de Velde 2022:907).

(411) a.

o-mu-sajja	**o-mu-rungi**	agenze
AUG-1-man	AUG-1-good	left

'The good man left.' (restrictive)

b.

o-mu-sajja	agenze	**o-mu-rungi**
AUG-1-man	left	AUG-1-man-good

'The man left, the good one.' (non-restrictive)
(Ganda (Bantu); Givón 1974, cited in Van de Velde 2022:907, adapted)

In Tunen, discontinuous DPs have been highlighted in previous work by Mous (1997, 2003), the latter forming the source for Van de Velde's (2019; 2022) statements about Tunen. The Tunen discontinuous DPs have a different structure from the languages seen above. Firstly, Tunen does not have the augment pre-prefix or any traces of it — as is common for a Northwestern Bantu language (Van de Velde 2019:2429) — meaning that there is no alternation between augmented and augmentless nouns and modifiers and so no discontinuity of the type seen in Ganda

(411). Secondly, rather than consisting of a noun (phrase) A'-moved to the left periphery as in the German, Yucatec Maya, Chichewa, and Basaá examples seen above, Tunen discontinuous DPs appear in a S-O-V-Mod structure where neither element is in a left-peripheral position, as exemplified in (412).

(412) Context: 'What do you see?'
mɛ́ ndɔ **tunoní** sinə **tɔ́lál**.
/mɛ ʰndɔ **tɔ-noní** sinə **tɔ́-lálɔ́**/
SM.1SG PRS 13-bird see 13-three
'I see three birds.' [EO 225]

Here, the numeral modifier *tɔ́lál* 'three' is syntactically separated from the noun *túnɔni* 'birds' that it modifies by the verb *sinə* 'see'. We therefore have a discontinuous DP construction. However, the discourse context is term focus on the entire object, including the modifier, as shown by the context question of an object question. This means that the DP is discontinuous, with an apparent mismatch between syntactic constituency and semantic/pragmatic interpretation. As I showed in the previous chapter, the preverbal object position is driven by formal movement rather than an information-structural (IS) trigger, and the object noun is still *v*P-internal, not having A'-moved to the clausal left periphery (in other words, not having raised above Neg/T). We therefore see discontinuous DPs that are not clearly explained by the Contiguity Principle introduced in (406) above and that differ empirically from what has been reported in other Bantu languages.

The goal of this chapter is to present a description and analysis of S-O-V-Mod constructions such as (412) in Tunen, investigating the extent to which the discontinuity is driven by IS. First, a descriptive overview of discontinuous DPs in Tunen will be given. By controlling for IS context, I show that the postverbal modifier position is pragmatically-neutral, with IS not the driving force for discontinuous DPs in Tunen, in contrast to what has been reported for other languages and what was previously reported for Tunen (Mous 1997, 2003; Van de Velde 2019, 2022). I then consider the details of the construction, showing that only the S-O-V-Mod type is felicitous and showing that it is frequent for numeral and quantifier modifiers, available for adjectives, and unavailable for associatives (i.e., the genitive). Next, I provide a formal syntactic analysis of the construction, for which I consider the two main analytical approaches in the literature: (i) the modifier is base-generated in a separate DP from the head noun (meaning that discontinuity is only apparent), and (ii) the modifier and noun are base-generated as part of the same DP and are split via movement. I then reflect on the consequences for the general model of Tunen's syntax. Before discussing the Tunen data, I first give some further background in-

formation on discontinuous DPs crosslinguistically and the formal analyses that have been proposed for them in the generative framework.

7.2 Background

7.2.1 Defining discontinuity

Discontinuous DPs are discussed under many different terms within the literature, being also known as *discontinuous noun phrases*/*discontinuous NPs* (Skopeteas et al. 2020), *split DPs*/*split NPs*/*XP-split constructions* (Fanselow and Ćavar 2002), *split topicalisations*, *split scrambling*, *separation constructions*, *discontinuous* (*nominal*) *expressions* (Bliss 2012; Louagie and Verstraete 2016) and sometimes referred to in terms of *left branch extraction* or the *left branch condition* (Ross 1967; Bošković 2005; Skopeteas et al. 2020). I adopt the definition of discontinuity given in (413) and use the general term *discontinuous DPs* as a descriptive label for constructions with discontinuity following this definition (413).

(413) **Discontinuity**
"the dislocation of elements in a discontinuous noun phrase involves the separation of the head noun from its determiner, article, quantifier, or an adjective modifying it" (Fanselow and Féry 2006)

I use the term 'DP' here to refer to what may be called noun phrase (or 'NP') in other frameworks, following generative syntax convention of assuming the determiner phrase rather than the noun phrase as the maximal XP in the nominal domain (Abney 1987 *et seq.*).[4] I use the term 'modifier' to refer to any determiner, demonstrative, article, quantifier, numeral, or adjective that associates semantically with a noun, without committing to all of these elements having the same syntactic structure (i.e., some may be adjuncts and others heads).

A related phenomenon to discontinuous DPs of the kind discussed in this chapter is *quantifier float* (or *Q-float*; Sportiche 1988; Bošković 2004; Klein 1976; Kayne

[4]Note that within generative syntax, there is some debate as to whether DPs are universal, based on proposals that some languages only have NPs (see Bošković 2008 for such a proposal and Salzmann 2020; Köylü 2021 for recent overviews of resultant debate). For Tunen, there is clear language-internal evidence that a DP layer is projected, such as the existence of an overt determiner, namely the specific indefinite determiner *-mɔté* (Chapter 4 section §4.3.11 Kerr 2020). I therefore analyse Tunen as projecting a DP layer. For the other languages discussed in this chapter, I use the term "discontinuous DP" as a general term without taking a stance on whether a DP layer is projected.

1975), which is found with quantifiers such as 'all' and 'every'. Quantifier float constructions are analysed in generative terms as cases where a quantifier is found in a lower syntactic position instead of moving with the rest of the noun phrase. This is exemplified in English in (414) and (415) below, where the universal quantifier *all* may be contiguous with the rest of the noun phrase (414) or be stranded in a lower syntactic position (415).

(414) a. All the students left.

b. [All the students]$_i$ [$_{VP}$ t$_i$ left.]

(415) a. The students all left.

b. [The students]$_i$ [all t$_i$] [$_{V'}$ t$_i$ left.] (Bošković 2004:692)

I will return to quantifier float as a potentially relevant phenomenon in the discussion of adverbial analysis of discontinuity in section §7.4.1.

Turning back to discontinuous DPs as defined following (413), we see that they can be identified by the presence of intervening material between a noun and its modifier. For example, in the Croatian example in (416) below, non-DP material intervenes between the noun *knijge* 'books' and the adjectival modifier *zanimljive* 'interesting', despite the fact that the sentence is interpreted with the adjective as a qualitative modifier of the noun.

(416) **Knijge** mi je Marija **zanimljive** preporučila.
books me has Mary interesting recommended
'Mary has recommended interesting books to me.'
(Fanselow and Ćavar 2002:66)

As discussed in the previous section, such constructions are surprising as they appear to violate iconicity of syntactic constituency, formulated in generative terms under the Contiguity Principle (406). In observing discontinuous DPs, the question then is *why* a language would split up a DP rather than keep the contiguous structure that is assumed to be the default option. The answer proposed by Fanselow and Ćavar (2002:86) is that "XP-splits arise only if XP bears two different pragmatic or semantic functions", i.e., that discontinuous DPs arise in particular discourse contexts, such as contrastive focus on the modifier (with topicalised head noun). In this way, discontinuity no longer violates the Contiguity Principle or the principle of iconic distance, as the split between noun and modifier is iconic, indicating a difference in pragmatic or semantic interpretation. The hypothesis for investigating discontinuous DPs in Tunen is therefore that the discontinuity in S-O-V-Mod

structures such as (412) is motivated by a pragmatic or semantic interpretational difference between the noun and the modifier.

7.2.2 Inventory of discontinuity

Fanselow and Ćavar (2002) identify two types of discontinuous DPs, *pull splits* and *inverted splits*. Pull splits preserve the order of noun and modifier as found in contiguous DPs, while inverted splits show the opposite order, as shown in Table 7.2.

Contiguous DP order	Pull split	Inverted split
NP-Mod	NP ... Mod	Mod ... NP
Mod-NP	Mod ... NP	NP ... Mod

Table 7.2: Possible types of discontinuous DPs based on order of noun and modifier in contiguous DPs, where '...' indicates intervening material.

For example, Fuchs (2017:3) shows that Georgian, a language with Mod-N order in contiguous DPs, allows both inverted splits and pull splits, as in (417).

(417) a. Context: The boys in the class were divided into groups of various sizes and assigned different taks in preparation for Maya's birthday party. Two boys brought the cake, one boy bought paper plates, and four boys went to buy balloons. Mentioning one more thing some boys were assigned to do, Nino...

bitʃ'-ma Maya-s c'ign-i **sam-ma** uq'ida.
boy-ERG Maya-DAT book-NOM three-ERG bought
'As for boys, three (boys) bought Maya a book.'

b. Context: Nino is very superstitious. She has been noticing that everything today has been happening in sets of three. Three dogs barked at her this morning, three students failed the test, and three plates broke this morning. Her friend Mariam says another thing that happened that involved a set of three...

sam-ma Maya-s c'ign-i **bitʃ'-ma** uq'ida.
three-ERG Maya-DAT book-NOM boy-ERG bought
'As for threes, (three) boys bought Maya a book.' (Fuchs 2017:3)

Not all languages with discontinuous DPs allow both types of split, however. Fanselow and Ćavar (2002) suggest that all languages with discontinuous DPs allow inverted splits, while only some language allow pull splits. For Tunen, I will show that inverted splits are not possible, with discontinuous DPs always matching the order of nominal modifiers in contiguous DPs (for which see Chapter §4.5.2).[5]

7.2.3 Discontinuity crosslinguistically

Discontinuous DPs are found in various languages across the world, including but not limited to the Bantu languages seen above (Van de Velde 2022; Bassong 2021), Croatian (Fanselow and Ćavar 2002), German (Fanselow and Féry 2006), Georgian (Fuchs 2017), Hungarian (Fanselow 2013), Old Romanian (Nicolae 2019), Yucatec Maya (Skopeteas et al. 2020), various Australian languages (Hale 1983; Louagie and Verstraete 2016; Schultze-Berndt 2022), and various Algonquian languages (Reinholtz 1999; Lochbihler 2009; Bliss 2012, i.a.).

While discontinuous DPs are found in many languages, they are often treated as a marginal phenomenon. This is linked to their low textual frequency and the restricted discourse contexts in which they appear. For example, in a typological study of over 100 Australian languages, Louagie and Verstraete (2016) report that only 1-5% of noun phrases are discontinuous, with such constructions limited to particular discourse functions, namely contrastive focus.[6]

Early work on discontinuity linked the phenomenon to "nonconfigurational" syntax, for example in Reinholtz's 's (1999) work on Swampy Cree and Hale's (1983) work on Warlpiri. Here, the idea was that modifiers could be discontinuous from their nouns due to a broader property of certain languages as having a loose order of elements. More recent approaches have however challenged the dichotomy between non-configurational languages and grammatical role-oriented languages (see e.g. Surányi 2016). In the Bantu context, there is evidence that IS influences word order (see Downing and Hyman 2016; Downing and Marten 2019; Morimoto 2000, 2006; Kerr et al. 2023 and references therein), but this varies between languages (Kerr et al. 2023). Chapter 6 showed that Tunen's basic word order is consistent across grammatical roles, in other words providing evidence for configura-

[5]Note in relation to the formal analyses to be seen in section §7.2.4 below that the Tunen pattern of pull splits without inverted splits would only constitute a violation of Fanselow and Ćavar's (2002) generalisation if it can be shown that the noun and modifier in Tunen are base-generated as part of the same DP and separated through movement, rather than being base-generated as separated constituents. I return to this analytical question in section §7.4.

[6]Note that a more insightful statistic would be to compare the number of contiguous noun phrases consisting of a noun and modifier to the number of discontinuous ones, as the percentage of noun phrases in natural discourse that are modified (and therefore possible to split) is unknown.

tionality (see also Kerr to appear; Kerr et al. 2023). Because we see a strong influence of grammatical roles on Tunen's clausal word order, the validity of an explanation of discontinuous DPs being available due to non-cofigurationality is already questionable. However, if the Tunen discontinuous DP construction itself can be shown to be conditioned by IS, this would provide some evidence for influence of discourse roles on Tunen morphosyntax.

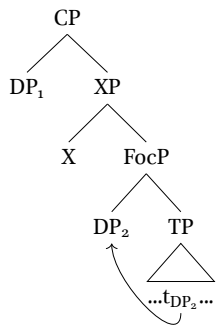
7.2.4 Theoretical analyses

As discontinuous DPs have been found in many languages, various formal analyses have been made of these constructions. A key analytical question is whether there is in fact one DP underlyingly, or whether there are two different DPs – one in which the noun is found and another in which the modifier is generated. The former analysis type concerns true discontinuity, while the latter type can be taken to only have *apparent discontinuity* (as the material was never together in the syntax). We therefore see two main types of analytical approaches: base-generation accounts (where discontinuity is apparent) and movement accounts (where discontinuity arises during the syntactic derivation). Movement accounts can in turn be split into subextraction and copy+deletion accounts, as we will see below. I review the core properties of each analysis type here.

7.2.4.1 Base generation accounts

The base generation type of account argues that discontinuity is only apparent, as the modifier and noun are not in fact base-generated as part of the same DP. An example of such an account is given in (418) below. Here, one DP is base-generated within the TP and moved to a higher peripheral position, while another DP (as indicated by the different indexation) is base-generated in the clausal left periphery.

(418)



Under an ellipsis account, only part of the DP_1 and DP_2 are pronounced at Spell-Out, giving the impression that the noun and modifier are from the same DP, while they are in fact different DPs throughout the syntactic derivation. The same effect is derived in a *pro*-form account by positing that one of the DPs contains a phonologically null *pro* element rather than the lexical noun.

Base generation accounts of this kind were suggested by Hale (1983) for Warlpiri and have been significant in debates regarding nominal licensing and discourse configurationality since then. A base generation account is for example proposed for discontinuous DPs in Blackfoot (Algonquian) by Bliss (2012), who argues against a focus movement account and proposes that the NP is merged in its theta position (for Case, i.e., licensing reasons) while modifiers are base-generated as *v*P adjuncts.

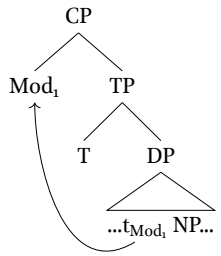
One puzzle outstanding from such accounts is how the correct semantics applies given the noun phrases are never syntactically linked in the derivation. For the Bantu context, the ϕ-feature agreement visible by morphological noun class prefixes would therefore need to be derived through a different relationship than an Agree relation within the same DP, for example through a pragmatic mechanism relying on the noun class of available referents in the discourse context. Alternatively, agreement can arise through the *pro*-form account.

One point to make regarding base generation accounts is that any DP base-generated in the clausal left periphery should not show traces of A'-movement, e.g. reconstruction and binding (Chapter 2 section §2.3.4). If such effects are found, this can instead be taken as evidence in favour of a movement account. Movement traces have therefore played a large part in determining between base generation and movement analyses in the literature (see e.g. Skopeteas et al. 2020 for the application of a detailed set of movement diagnostics applied to the investigation of discontinuous DPs in Yucatec Maya).

7.2.4.2 Traditional movement accounts

In movement accounts, the modifier and noun are base-generated as part of the same DP, with discontinuity arising through movement. Traditionally, this was formalised in terms of *subextraction*, namely movement of a sub-part of the DP. A subextraction account is illustrated in (419), showing a discontinuous DP construction in which the modifier has moved to a left-peripheral position.

(419)



Under such an account, discontinuous DP constructions originate from the same DP underlyingly, which is split up by subextraction of the modifier. It is possible for further movement operations to apply, e.g. for (remnant) movement to apply to the DP, such that the NP may also surface in a different position from its base position. The crucial point is that the modifier has sub-extracted, leading to a syntactic discontinuity between modifier and the head noun.

Lochbihler (2009) provides a subextraction account of discontinuous DPs in Algonquian languages, proposing that they are derived through A'-movement of a modifier, triggered by a contrastiveness feature [uCon]. This featural proposal is made on the basis of previous work on Ojibwe (Kathol and Rhodes 1999; Tourigny 2008) and Swampy Cree (Russell and Reinholtz 1995) which found that dislocated structures correspond to focus or contrast contexts and so can be formally modelled as subextraction driven by an IS feature.

While various subextraction accounts exist, this type of analysis has been challenged in more recent work. The crucial point relates to island effects (following Ross 1967). As Fanselow and Ćavar (2002) discuss, attested discontinuous structures would involve movement out of islands if analysed as deriving through subextraction. The attestation of such discontinuous DP constructions is therefore at odds with the theory of islands. As a result of this issue, later work has adopted the copy+deletion approach as an alternative type of movement analysis.

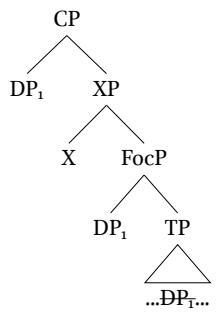
7.2.4.3 The Copy+deletion approach

As introduced in Chapter 2 section §2.3, Minimalist syntax (Chomsky 1993, 1995 *et seq.*) subsumes the Government and Binding theory (GB) operation *Move* into *Merge* (specifically *Internal Merge*). In the Copy theory of movement introduced as part of the Minimalist Programme, movement involves copying the moved material, with lower copies subsequently elided at PF. This is the approach to discontinuity advocated for in Fanselow and Ćavar (2002) as a fix for the incorrect island predictions of a subextraction account. As the movement involved is not the same

as the A'-movement required in the traditional movement account, no island violations are made.

An example of the copy+deletion approach is given in (420) below, which shows that a full copy of the DP is made at each movement stage. In this example, the original copy is entirely elided at PF (as indicated by the strikethrough on the TP-internal DP), while the upper copies (in SpecFocP and SpecCP) may have partial deletion. This leads to the noun and modifier appearing to be discontinuous.

(420)



The copy+deletion approach is therefore another type of movement approach. It differs from the subextraction approach in proposing movement of the entire DP rather than just a sub-part of it, making different empirical predictions in terms of island constraints. One important note is that the copy+deletion approach requires a model of ellipsis that results in part of both the lower and upper copies being deleted. As ellipsis applies within both DPs, it is sometimes referred to as *scattered deletion* (Bošković 2005) or *distributed deletion* (Fanselow and Ćavar 2001, 2002). The constraints assumed in one's analysis of ellipsis mechanisms will therefore make empirical predictions regarding the nature of discontinuous DPs that are predicted to be possible in the language, as I will come back to in section §7.4.2 when considering how such an analysis extends to Tunen.

7.2.4.4 Empirical diagnostics

In teasing apart the different possible analyses, the key question is whether there is evidence for the noun and modifier as being moved versus base-generated as different DPs. Various such diagnostics have been provided in the literature, including morphological case (mis)matching and definiteness morphology. For example, in some languages such as German and Hungarian (Fanselow 2013), morphological mismatches are possible between discontinuous nouns and their modifiers, as in (421) below, where the contiguous DP (421a-b) has 'weak inflection' of the quan-

tifier *kein* 'no', while in the discontinuous variant (421c-d), only strong inflection (*keines*) is possible.

(421) a. Ich habe **kein Geld.**
I have no money
'I have no money.'

b. *Ich habe **keines *Geld*.**

c. **Geld** habe ich **keines.**

d. ***Geld** hab ich **kein.** (Fanselow 2013:11, adapted)

Such morphological mismatches between contiguous and discontinuous DPs have been used by some authors as an argument against subextraction accounts and in favour of accounts with base-generation of the topic and the modifier (Ott 2011, 2012; Fanselow 1988, 2013). The logic is that if discontinuous DPs allow for morphological patterns not found in contiguous DPs, they are not analysable in terms of the assumed Agree operations, indicating that the two elements are actually separate in the underlying syntax. An alternative analytical possibility suggested by Fanselow (2013) is that morphological processes (can) apply at a late stage of the derivation after movement. Such discontinuous DPs are therefore significant for discussions of the syntax-morphology interface in terms of the order of operations.

Another type of morphological mismatch is that of morphological case marking. An example of such case concord effects in contiguous versus discontinuous DPs is given in Fuchs (2017), who shows that Georgian split noun phrases show case concord effects that differ from contiguous noun phrases. In discontinuous DPs, case morphology is obligatory on both the left-peripheral modifier and the noun (422b), whereas in contiguous DPs, only the noun takes case morphology (422a).

(422) a. Maya-s c'ign-i **p'at'ara(*-m)** **bitʃ'-ma** uq'ida.
Maya-DAT book-NOM small-ERG boy-ERG bought
'The small boy bought Maya a book.'

b. **p'at'ara*(-m)** Maya-s c'ign-i **bitʃ'-ma** uq'ida.
small-ERG Maya-DAT book-NOM boy-ERG bought
'The small boy bought Maya a book.' (Fuchs 2017:4)

Fuchs uses these data to argue that the noun and modifier are base-generated as separate DPs, with Mod-N order. The case suffix attaches at the right of the DP. In (422b), NP ellipsis applies, meaning that the case suffix attaches to the modifier.

Another diagnostic used is definiteness marking. For example, Nicolae (2019) links the availability of discontinuous noun phrases to definiteness marking of determiners in Old Romanian. Here, diachronic variation in availability of discontinuous DPs is linked to variation in grammaticalisation of determiners, affecting whether a nominal has a DP layer or just an NP (cf. Abney 1987; Bošković 2005, 2008; Salzmann 2020; Köylü 2021 on generative theories of the DP/NP distinction; fn4).

Finally, diagnostics related to A'-movement can be used as evidence in favour or against movement accounts. These include binding, reconstruction effects, and island violations (although cf. section §7.2.4 above on the copy+deletion approach as a possible movement approach compatible with apparent island violations).

Unfortunately, most of these diagnostics are language-specific and cannot be applied to Tunen. Tunen does not have a strong/weak inflection difference of the kind used as diagnostic for movement in the German data in (421). Tunen also does not have morphological case-marking on nouns and adjectives — as is common for a Bantu language (see e.g. Diercks 2012; Van der Wal 2015) — meaning that morphological case mismatches of the kind found in Georgian (422a) are not applicable. Likewise, Tunen does not have a system of definite and indefinite articles,[7] and so an account reliant on definiteness marking of the kind applied to Old Romanian by Nicolae (2019) is inapplicable to Tunen.

It is important to note here that the A'-movement diagnostics commonly invoked in discussions of discontinuous DPs — with island violations crucial for the choice between movement analyses — are inapplicable to Tunen under my analysis, as I will propose that the discontinuous DPs are derived via A-movement rather than A'-movement to the clausal left periphery. As the construction in Tunen is formed by A movement, A'-movement diagnostics therefore do not apply.

The remaining diagnostics available for diagnosing the underlying structure of Tunen discontinuous DPs are thus somewhat limited. These include noun class agreement (i.e., the possibility for mismatches in agreement morphology between a noun and its modifier in discontinuous versus contiguous DPs), any prosodic evidence for syntactic position, and different interpretational predictions of structural configurations (which we will see in discussion of adverbial versus non-adverbial analyses). I will review the language-specific evidence for the syntactic position of Tunen nouns and modifiers in section §7.3, after first introducing previous work on discontinuous DPs in Tunen.

[7] I showed in Chapter 4 section §4.3.11 and Chapter 6 section §6.2.5 that Tunen has a specific indefinite determiner *-mɔté*; as I discuss in Kerr (2020), this determiner is not an article, in that it is not obligatory and does not alternate with a nonspecific/definite counterpart.

7.2.5 Prior work on discontinuity in Tunen

While no detailed account of discontinuous DPs has been provided for Tunen, their existence has been mentioned as a point of interest in earlier studies on the language. For example, Mous (1997, 2003), argues that modifiers in Tunen can be discontinuous when in contrastive focus (423), with numerals "mostly" appearing in a discontinuous position, as in (424).

(423) mɛ̀-ná **ìmìtə̀** **yè** m^{w}**ə̀níí́** índí **mɛ̀-ŋɛ́ŋ** ò hɛ̀lɔ́bátɔ̀
1SG-HOD.PAST 9:calabash 9:of 6:water give:H 9-big LOC 19:child
'I gave the BIG water calabash to the child.' (Mous 1997:133; Mous 2003:305)

(424) èbàkó ná émɔ́à **nɛ̀bɔ́à** lúmwə́ **nɛ́tɔ̀tɛ̀**
lizard HOD.PAST dog medicine hitH one
'The lizard hit the dog by magic.' (Dugast 1975:63, via Mous 2003:305)

This description of discontinuously-positioned modifiers as being contrastive relates to Mous' (1997; 2003) more general proposal of a postverbal contrastive position, as I discussed and argued against in Chapters 5 and 6. In relation to numerals, Mous argues that their postverbal placement is due to their "selectional property" and "somewhat loose" semantic relations with the head noun (Mous 2003:305).

According to Mous, high tone spread (HTS; see Chapter 4 section §4.2) does not apply from the verb to the following modifier in the discontinuous DP construction, which he takes as indication for the modifier forming a separate syntactic phrase. This is seen in (423), where the H tone of the verb *índí* 'give' has not spread onto the first tone-bearing unit of the modifier *mɛ̀ŋɛ́ŋ* 'big' (data from Mous' elicitation). However, there are three issues with this empirical diagnostic. Firstly, this diagnostic relies on the assumption that prosodic phrasing matches syntactic phrasing, which, while a valid null hypothesis, should not be taken to be an absolute correlation (see e.g. Selkirk 2011). Secondly, it is still unclear exactly how robust this diagnostic is in the first place (Mous, p.c.; Chapter 4 section §4.2). A more thorough empirical investigation controlling for H tone specification of verbs is therefore needed before it can be treated as reliable evidence for the syntactic position of a postverbal element. Thirdly, the diagnostic, even if valid, is of limited use for the diagnosis of the syntactic phrasing of discontinuous DPs in Tunen. This is because many of the modifiers that can be discontinuously-positioned in Tunen already carry a H tone on their first tone-bearing unit. For example, numerals such as *-mɔté* 'one' always take a noun class agreement prefix that is H-toned (Chapter 4 Table 4.10), e.g. *ɔ́mɔté* 'one' (class 1), *némɔté* 'one' (class 5) (a regular property of

numerals in Bantu languages, with the H tone on the numeral prefix reconstructing to Proto-Bantu). As discussed in Chapter 4 section §4.2.6, Tunen has the following phonological pattern regarding realisation of underlying H tones:

(425) **Realisation of underlying H tones**

a. /H/ → H

b. /H-H/ → H

This means that it is impossible to identify whether a verb with final H tone has spread its H tone to the first TBU of a following quantifier or numeral modifier, as the H tone realised may just be the independently-present H tone from the numeral prefix without an additional H tone, i.e., situation (425a) instead of situation (425b). While the HTS test could still apply to discontinuous DPs formed with adjectives that begin with a L-toned prefix, this accident of phonology means that it is not possible to diagnose syntactic phrasing via H tone spread for discontinuous quantifiers and numerals, which we will see form most of the dataset in Tunen.

In Isaac's (2007) study of participant reference in six texts from the Dugast 1975 text corpus, he found that discontinuous DPs in Tunen are also available for the introduction of referents into a narrative. Importantly and in contrast to Mous' proposal that discontinuous DPs reflect constrastive focus on the modifier, this means that discontinuous DPs are not restricted to contrastive focus on modifiers. Isaac notes that discontinuous nominal modifiers in Tunen always agree in noun class with the preverbal head noun (Isaac 2007:61-2), and also argues that the postverbal modifiers are not necessarily sentence-final, as they can precede other adjuncts (426).

(426) a ná-kā **hikumukumu** nibə̀ **hímòti** o-bɛ́s' ò nuiy.
SM.1 PST-AND 19.old_person meet 19.one INF-bathe LOC river
'He met an old woman bathing in the river.'
(Dugast 1975, cited in Isaac 2007:61, glosses adapted)

Isaac (2007) follows Longacre (1995) in drawing a distinction between discourse *participants* and *props*, where props are defined as canonically inanimate or non-volitional animates (Isaac 2007:20-21). Isaac reports that discontinuous DPs are used for 13/260 prop references and 5/1400 participant references in the sample of six Dugast (1975) texts he studied, with "nearly all" of the discontinuous constructions used for props occurring when introducing the prop into the discourse. Discontinuous references to participants, on the other hand, are frequently used

for re-activation (i.e., mentioning a participant that was not referred to in the previous clause) (Isaac 2007:161). He therefore writes in summary that "[m]ost examples of discontinuous noun phrases are found for introductions" (Isaac 2007:172), highlighting that Tunen is unusual for a Bantu language in its "common use" of discontinuous noun phrases for first mentions and re-activation (Isaac 2007:178).

Isaac's (2007) study is therefore interesting in showing that discontinuous DPs are not restricted to the context of contrastive focus on the modifier as reported by Mous (1997). Isaac's study is however limited by only studying six texts with no detailed investigation of the range of IS contexts compatible with discontinuous DPs, instead focussing on a general description of participant reference in Tunen. Isaac (2007) also reports a limitation in himself not being familiar with Tunen, and therefore being solely reliant on Dugast's transcriptions, leading to uncertainty particularly around tone patterns and phonological phrasing. Finally, by nature of being a corpus study, there is no negative evidence that can be used to confirm the ungrammaticality of certain constructions (cf. Chapter 3 section §3.2.2).

One final point from previous studies to pick up on is that Mous (1997) and Isaac (2007) both show that relative clauses modifying objects may be discontinuous from the head noun, as in (427) below, where the theme object *ébōk* 'place' is discontinuously modified by the relative clause *òy' abák ìnyə́ twən* 'where his mother usually sat', with the verb *inəni* 'show' intervening (**O-V-Rel**).

(427) a n' **ébōk** inəni **òy'** **abák** **ìnyə́** **twən**.
SM.1 PST 7.place show REL.7 SM.1.be.DUR 9.mother sit
'He showed (him) the place where (his) mother usually sat.'
(Dugast 1975, cited in Isaac 2007:62, glosses adapted)

This ability for relative clauses to discontinuously modify objects is likely due to extraposition motivated by heaviness, as is common crosslinguistically with relative clauses (see e.g. Ross 1967; Culicover and Rochemont 1990). I will come back to this availability of discontinuous relative clauses in terms of the possible analysis of other modifiers as reduced relatives (as proposed in e.g. Cinque 2010).

In summary, then, previous work by Mous (2003) analysed discontinuous DPs in Tunen as driven by contrastive focus on the nominal modifier, while Isaac's (2007) study of Dugast (1975) texts pointed out the additional use of discontinuous DPs for the introduction of props and (to a lesser extent) participants into the discourse. The extent to which the discontinuous DP construction in Tunen can or must be used in different IS contexts therefore remains to be tested, especially in light of expectations from the Contiguity Principle (406) regarding the correlation between syntactic discontinuity and IS. In the next section, I present my fieldwork study

which tested the extent to which IS conditions discontinuous nominal expression in Tunen, which therefore serves to test Mous' (1997; 2003) hypothesis that discontinuity correlates with contrastive focus. I also discuss discontinuous DPs found in natural speech, further expanding upon Isaac's (2007) observations, and I discuss the syntactic material that can and cannot be discontinuous, in order to arrive at a more complete overview of the Tunen discontinuous DP construction.

7.3 Empirical investigation

This section is divided into two subsections. Section §7.3.1 investigates the different IS contexts in which discontinuous DPs are found in Tunen, thus testing the hypothesis that discontinuous modifier placement corresponds to a separation in IS interpretation between noun and modifier. Section §7.3.2 then investigates which types of syntactic material can be discontinuously-positioned in Tunen.

7.3.1 Information-structural restrictions on discontinuity

7.3.1.1 Focus on modifier only

As seen in sections §7.1-7.2 above, the crosslinguistic pattern for discontinuous DPs is that they are found when there is a split in IS status between the noun and its modifier. Focus on the modifier only is therefore predicted to be a felicitous discourse context for a discontinuous DP in Tunen. This is what was previously argued by Mous (1997, 2003) (section §7.2.5). This prediction is borne out in my field data, as (428) illustrates.

(428) Context: 'How many people do you see?' (+ picture; focus on modifier only)
mɛ́ ndɔ **bɛndɔ** sinə **báfandɛ**. (S-O-V-Mod)
/mɛ ᴴndɔ **bɛndɔ** sinə **bá-fandɛ́**/
SM.1SG PRS 2.person see 2-two
'J'en vois [deux]$_{\text{FOC}}$.'
'I see [two]$_{\text{FOC}}$ people.' [JO 542]

Note however that discontinuous DPs are not the only available word order when only the modifier is in focus: S-V-O-Num is also possible (429a). O-Num-V, on the other hand, was judged as degraded (429b).[8] The discontinuous order is the

[8] These data show consultant JO's judgements in this session; note that O-Num-V order is attested and found for example in the Tunen Bible translation (based on the Book of Matthew; CABTAL 2019; see Chapter 2 section §2.5.3; Chapter 3 section §3.4.2). I will discuss what the variability in judgements may mean in terms of the formal analysis and grammaticalisation in section §7.4.

most common order in this context and was provided across consultants, often as the first response within an elicitation context.

(429) Context: 'How many people do you see?' (+ picture; focus on modifier only)

a. mɛ́ ndɔ sinə **bɛndɔ báfandɛ**. (S-V-O-Mod)
/mɛ ^{H}ndɔ sinə **bɛndɔ** **bá-fandɛ́**/
SM.1SG PRS see 2.person 2-two
'Je vois deux personnes.'
'I see two people.' [JO 541]

b. ?mɛ́ ndɔ **bɛndɔ báfandɛ́** sinə. (?S-O-Mod-V)
/mɛ ndɔ **bɛndɔ** **bá-fandɛ́** sinə/
SM.1SG PRS 2.person 2-two see
'Je vois deux personnes'
'I see two people.' [JO 543]

The following example in (430) provides confirmation of Mous' example (423), showing that modifiers can be discontinuously-positioned both in the context of information focus and for more contrastive focus types (here, corrective focus; see Chapter 2 section §2.2 and Chapter 5 on focus types).

(430) bɔ́ɔ, mɛ ná **imítə** indiə **mɛŋɛ́ŋ** ɔ hɛlɔ́batɔ, (tátá ɔ mɛ́$^{\downarrow}$tɛ́tɛ́).
/bɔ́ɔ mɛ ná ɛ-mítə índíə mɛŋɛ́ŋa ɔ hɛ-lɔ́batɔ tátá ɔ
no SM.1SG PST2 9-calabash give 9.big PREP 19-child not PREP
mɛ́^{L}tɛ́tɛ́a/
9.small
'Non, j'ai donné la [grande]$_{FOC}$ calebasse à l'enfant, (pas la petite).'
'No, I gave the [big]$_{FOC}$ calabash to the child, (not the small one).'
[EE+EB 1833]

Finally, when attempting to elicit mirative expressions (i.e., expressions of surprise/unexpectedness; see Van der Wal 2021; Cruschina and Bianchi 2021 and references therein), discontinuous DPs were found, as below. These can also be analysed as focus on the modifiers. Example (431) shows an instance with the universal quantifier *-kimə* 'all' and example (432) shows an instance with a numeral modifier.

(431) Context: You are a farmer who has lost all of your animals, but by a stroke of luck, you find them all again.
mɛ ná Húɛ́lɛ́ hóli ɛ́↓sɛ́á mɛ́ ná **biá↓míá bɛhɔ́sɛ** bɔŋɔ **bikim**.
/mɛ ná Húɛ́lɛ́ hólíə ɛ-sɛ́á mɛ́ ná biá^{L}míá
SM.1SG PST2 God thank SM.7-say SM.1SG.DEP PST2 PRN.POSS.1SG.8
bɛ-hɔ́sɛ bɔ́ŋɔ́ bɛ́-kimə/
8-horse find 8-all
'Je remercie Dieu comme j'ai retrouvé tous mes chevaux.'
'I thank the Lord that I've found all my horses.' [EE+EB 1827]

(432) Context: You wake up after a party and see a surprising number of empty wine bottles.
naánɛkɔla ɛkɔlakɔ́lá tɔ ka **mindíŋgə** nɛ́ákɛna **ɛ́námanɛ yɛ́ məluk**!
/naánɛkɔla ɛ-kɔlakɔ́lá tɔ ka mɛ-ndíŋgə nɛ́ákɛna ɛ́-námanɛ
yesterday 7-evening SM.1PL PST3 4-bottle drink 4-eight
yɛ́ məlukə/
ASSOC.4 6.wine
'Hier soir nous avons bu huit bouteilles de vin !'
'We drank eight bottles of wine last night!' [JO 1941]

Example (432) additionally shows that a discontinuous numeral modifier may be followed by an associative phrase. We will see later in section §7.3.2 that the associative phrase cannot be the sole discontinuous element. The numeral *ɛ́námanɛ* 'eight' here could function here as a pronominal ('eight ones').

7.3.1.2. Focus on whole DP

As mentioned in the introduction to this chapter (section §7.1), discontinuous DPs are also possible in Tunen when the semantic scope of the focus is the whole DP, i.e., the head noun + modifier (433) (repeated from (412)). This shows a mismatch between syntactic contiguity and semantic scope of focus.

(433) Context: 'What do you see?' (focus on whole DP)
mɛ́ ndɔ **tunoní** sinə **tɔ́lál**.
/mɛ ^{H}ndɔ **tɔ-noní** sinə **tɔ́-lálɔ́**/
SM.1SG PRS 13-bird see 13-three
'Je vois trois oiseaux.'
'I see three birds.' [EO 397]

Example (434) shows the same pattern, where a discontinuous DP construction is possible with focus on the whole DP, this time with a quantifier as the nominal modifier.

(434) Context: A governor visits the school. Someone asks 'What did he give to the children?'
a ná baná **bɛkɔa** índíə́kín **biənyi**.
/a ná ba-ná **bɛ-kɔa** índíə́kínə́ **bɛ-ənyí**/
SM.1 PST2 2-child 8-thing give.APPL 8-many
'Il a donné beaucoup de choses aux enfants.'
'He gave out a lot of things to the children.' [JO 2329]

The compatibility between the S-O-V-Mod discontinuous DP construction and the IS context of focus on the entire DP (including the modifier) is thus significant in contrasting with the expectations from previous work on Tunen and the Contiguity Principle (406). Here, the discontinuous DP can be treated as a type of form-meaning mismatch, where there is a split in syntactic structure but not in semantic/pragmatic interpretation (as diagnosed in the examples above using the Q-A congruence test for information focus).

7.3.1.3. Predicate-Centred Focus

While we have so far seen discontinuous DPs for term focus, where part or all of the DP is in focus, they are also found in the Tunen dataset when the DP is part of the given material and therefore non-focal. An example of this is predicate-centred focus (PCF) contexts, where focus is on (part of) the verbal predicate and therefore not on the terms (cf. Chapter 2 Fig. 2.3). An example is the truth focus context in (435), where both the noun *tunoní* 'birds' and modifier *tɔ́fandɛ* 'two' are part of the given material (as part of the question), with only the positive polarity value of the proposition focal.

(435) Context: 'Do you see two birds?' (truth focus)
ɛ́ɛ, mɛ́ ndɔ **tunoní** sinə **tɔ́fandɛ**.
/ɛɛ mɛ ʰndɔ tɔ-noní sinə tɔ́-fandɛ/
yes SM.1SG PRS 13-bird see 13-two
'Oui, je vois deux oiseaux.'
'Yes, I see two birds.' [EO 1408]

We can note here that the discontinuous DP construction provided in Mous (2003) (cf. (430)) is also felicitous in such a truth focus context, as in (436) below.

This shows that while such constructions are indeed compatible with contrastive focus on the nominal modifier, as Mous (1997, 2003) argues to be the discourse condition for using a discontinuous DP, this is not the only IS context in which such constructions are available.

(436) Context: Did you give the large calabash of water to the child?
(ɛ́ɛ,) mɛ ná **imitə yə mənífí** indi **mɛŋɛ́ŋ** ɔ hɛlɔ́batɔ.
/ɛ́ɛ mɛ ná ɛ-mítə yɛ ma-nífə índíə mɛŋɛ́ŋa ɔ
yes SM.1SG PST2 9-calabash ASSOC.9 6-water give 9.big PREP
hɛ-lɔ́batɔ/
19-child
'(Oui,) j'ai donné la grand calebasse (de l'eau) à l'enfant.'
(Yes,) I gave the large calabash of water to the child.'
[EE+EB 1830; cf. Mous (2003)]

Finally, the example below from free dialogue shows a discontinuous DP used for a polar question (437b), while speaker EO responds using a discontinuous DP (437c), in a context where the numeral is contrastive.

(437) Context: PM instructs EO in the QUIS map task.

a. (ɔ) ɛnɔ́mɛ ɔyɛ́á yɛ́ ndɔ ákána ɛndɛndɛ́lɛ **miɔkɔ́** yɛ́ lɛ **ɛ́lál**.
/ɔ ɛ-nɔ́mɛ ɔyɛ́á yɛ́ ʰndɔ ákána ɛndɛndɛ́lɛ **mi-ɔkɔ́**
PREP 7-road REL.7 SM.7 PRS leave straight_on 10.chicken
yɛ́ lɛ́á **ɛ́-lálɔ́**/
SM.10 be 10-three
'Sur la route qui va tout droit il y a trois poules.'
'The road that goes straight on has three chickens.' [PM 686]

b. ɔ ná **miɔkɔ́** bɔ́ŋɔ́ **ɛ́lálɔ́?**
/ɔ ná **mi-ɔkɔ́** bɔ́ŋɔ́ **ɛ́-lálɔ́**/
SM.2SG PST2 10-chicken find 10-three
'Tu as trouvé les trois poules?'
'Have you found the three chickens?' [PM 687]

c. mɛ ná **miɔkɔ́** bɔ́ŋɔ́ **í - í - ínisə.**
/mɛ ná **mi-ɔkɔ́** bɔ́ŋɔ́ **ɛ́-nisə**/
SM.1SG PST2 10-chicken find 10-four
'J'ai trouvé qu- qu- quatre poules'
'I've found f- f- four chickens.' [EO 688]

Example (437a) also shows that a discontinuous DP can be used to introduce a discourse referent. This is another IS context in which discontinuous DPs are found, which we can now turn to.

7.3.1.4 Thetics

Another type of non-term focus context in which discontinuous DPs are found is thetic constructions, in which no constituent is taken to be in focus (or rather, there is broad focus at the sentence level; Sasse 1987, 1996; Lambrecht 1994; Erteschik-Shir 2007; Chapter 2 section §2.2.3). Surprisingly, discontinuous DPs are also felicitous in such scenarios in Tunen, and attested in the natural speech corpus. As discussed in section §7.2.5 above, such constructions are used to introduce props and participants in the Dugast (1975) texts (Isaac 2007). Example (437a) and (438) show the same introducing function in natural speech from my field data.

(438) Context: QUIS dialogue task:[9] EO has a picture from the end of a storyboard and must find out from PM (who has the rest of the storyboard) what happened before.

a. mba **bɛndɔ** bá báka háaha **balal**, yatɛ́ bá ndɔ kɛ?

/mba	**bɛndɔ**	bá	bá-aka	háaha		**bá-lálɔ́**,	yatɛ́	bá
but	2.person	SM.2	be-DUR	DEM.PROX.LOC		2-three	what	SM.2
	^{H}ndɔ	kɛa/						
	PRS	do						

'Mais il y a trois personnes ici, que font-elles ?'
'But there are three people here, what are they doing?' [EO 581]

b. Context: After concluding the explanation.
mhm. ɔ́↓há **bɛndɔ** bá ndɔ wɛɛ́ya sinə **balal**.

/mhm	ɔhá	bɛndɔ	bá	^{H}ndɔ	wɛ́ɛya	sinə	**bá-lálɔ́**/
PTCL	for_that	2.person	SM.2	PRS	PRN.1	see	2-three

'Mhm. C'est pour ça que trois personnes le regardent.'
'Mhm. That's why three people are looking at him.' [PM 597]

Here, the numeral *balal* 'three' is not so relevant, rather the fact that a group of people have gathered, and yet the numeral is in a discontinuous position from the noun it modifies. There is no difference in structure between (438a), where the referent is first mentioned, and (438b), which concludes.

[9] Dialogue task using Item 1 picture stimulus from QUIS Chapter 3 Task 15 (Eventives: Thetics and Categorical Utterances) Condition A (Skopeteas et al. 2006:121-125).

The presence of discontinuous DPs in thetics is interesting as a recent study by Schultze-Berndt (2022) reports the use of discontinuity in thetics in Australian languages. Schultze-Berndt argues that such a strategy is in fact iconic, in preventing a thetic clause being considered with a topic-comment split and instead packaging the information monolithically. Note here that the constructions involve discontinuous subject DPs; I will return to the relevance of subject vs object DPs for Tunen in section §7.5.4, after first providing an analysis of discontinuous object DPs.

7.3.1.5 Empirical summary of IS contexts

So far, we have seen that discontinuous DPs in Tunen are not restricted to the context of contrastive focus on the nominal modifier. They are also available when the entire DP is in focus, but also when the DP is part of the background – either as part of a PCF construction or in a thetic construction. The postverbal modifier position is therefore a pragmatically-neutral position rather than a position dedicated to a particular information-structural interpretation. This finding stands in contrast to the earlier presentation of Mous (1997, 2003) and is of crosslinguistic interest in going against expectations from the Contiguity Principle (406). In summary, while dicontinuous DPs were predicted to be low-frequency strategies available in particular discourse contexts, results from my fieldwork and analysis of Dugast (1975) texts showed that they are high-frequency and compatible with multiple IS contexts in Tunen, as shown in Table 7.4 below.

IS context	S-O-V-Mod?
Focus on modifier only	✓
Focus on whole DP (N+Mod)	✓
Predicate-centred focus	✓
Thetics/new discourse referents	✓

Table 7.4: Availability of the Tunen S-O-V-Mod discontinuous DP construction in different IS contexts.

Having seen the range of IS contexts in which discontinuous DPs occur, we can now turn to the syntactic material that may be discontinuous.

7.3.2 Syntactic restrictions on discontinuity

We have already seen many examples with numerals, which constitute the majority of examples in the data. However, discontinuity in Tunen is not restricted to

numerals, as will be covered in more detail in this section.

7.3.2.1. Numerals and quantifiers

We have seen already that both numerals and quantifiers can be discontinuous; see e.g. (428), (433), (432) above for examples with numerals and (431), (434) for examples with quantifiers. We can now ask whether there are any restrictions on which numerals and quantifiers can be split from the head noun.

In terms of numerals, many Bantu languages show a difference in cardinal numerals below 5 taking an agreement prefix and numerals above 5 not doing so (Meeussen 1967; Van de Velde 2019), leading to the question as to whether some numerals are adjectival. In Tunen, numerals up to 9 take an agreement prefix (see Chapter 4 section §4.3.3; Dugast 1971). All Tunen numerals appear to be able to be positioned discontinuously, with (432) above showing the availability of discontinuity for the numeral *-námanɛ* 'eight'. I am not aware of any restriction on which numerals can be discontinuously-positioned, although I have not tested discontinuous DPs with numerals above 10 and the numeral data from discontinuous DPs in natural speech were all numerals lower than 9.

In terms of quantifiers, some languages show a restriction that discontinuous DPs/quantifier float constructions are limited to universal quantifiers only. Example (439) below shows (following (434) above) that the ability for quantifiers to be discontinuously-positioned extends to other quantifiers in Tunen than the universal quantifier *-kimə* 'all'. We see here that the contiguous O-Q-V order is degraded (439a), while the discontinuous O-V-Q (439b) and the postverbal V-O-Q (439c) orders are grammatical. The degradation of O-Q-V order shows a different judgement for those to be seen in (445) below regarding adjectives, but matches consultants' dispreference for O-Num/Q-V orders.

(439) The governor visits the school and is so excited that he gives out a lot of different things to the students.
Context 1: 'Did he give out a lot of things to the students?' (truth focus)
Context 2: 'What did he give to the students?' (term focus on object)

a. ?a ná baná **bɛkɔa biəny** índíə́kín.
/a ná ba-ná **bɛ-kɔa** **bɛ-ənyí** índíə́kínə́/
SM.1 PST2 2-child 8-thing 8-many give.APPL
Intd.: 'Il a donné beaucoup de choses aux enfants.'
Intd.: 'He gave out a lot of things to the children.' [JO 2325]

b. a ná baná **bɛkɔa** índíəkín **biənyi**.
/a ná ba-ná **bɛ-kɔa** índíəkínə **bɛ-ənyí**/
SM.1 PST2 2-child 8-thing give.APPL 8-many
'Il a donné beaucoup de choses aux enfants.'
'He gave out a lot of things to the children.' [JO 2326, 9]

c. a ná baná índíəkín **bɛkɔa biənyi**
/a ná ba-ná índíəkínə **bɛ-kɔa bɛ-ənyí**/
SM.1 PST2 2-child give.APPL 8-thing 8-many
'Il a donné beaucoup de choses aux enfants.'
'He gave out a lot of things to the children.' [JO 2327, 30]

One question is whether numerals and quantifiers are grammatically distinct in Tunen. On a morphological level, both show a root with a noun class agreement prefix. In contiguous noun phrases, both follow the noun, and the relative position is free, as shown by the following minimal pairs (see also discussion of the Tunen noun phrase in Chapter 4 section §4.3.7).

(440) a. tɔ́amɛ́ tɔbanána **tɔ́lálɔ́ tukimə** tɔ́ lɛ́á húátɔ ɔtɛnɛa.
/tɔ́amɛ tɔ-banána **tɔ́-lálɔ́ tɔ́-kimə** tɔ́ lɛ́á húátɔ
PRN.POSS.1SG.13 13-banana 13-three 13-all SM.13 be finish.PTCP
ɔ-tɛnɛa/
INF-spoil
'Toutes mes trois bananes sont gâtées.', 'Mes trois bananes sont toutes gatées.'
'All three of my bananas have gone off.', 'My three bananas have all gone off.' [PB 2014]

b. tɔ́amɛ́ tɔbanána **tukimə tɔ́lálɔ́** tɔ́ lɛ́á húátɔ ɔtɛnɛa.
/tɔ́amɛ tɔ-banána **tɔ́-kimə tɔ́-lálɔ́** tɔ́ lɛ́á
PRN.POSS.1SG.13 13-banana 13-all 13-three SM.13-be finish.PTCP
húátɔ ɔ-tɛnɛa/
INF-spoil
'Tous mes trois bananes sont gâtées.'
'All three of my bananas have gone off.', 'My three bananas have all gone off.' [PB 2015]

(441) a. **baná bə́kimə bə́nis** báná masɔ́ma kiak !

/**ba-ná** **bá-kimə** **bá-nisə** bá ná ma-sɔ́ma kɛa-aka/
2-child 2-all 2-four SM.2 PST2 6-homework do-DUR
'Tous les quatre enfants ont fait leurs devoirs !'
'All four children did their homework!' [EE+EB 1817]

b. **baná bə́nis bə́kimə** bá ná masɔ́ma kiak !

/**ba-ná** **bá-nisə** **bá-kimə** bá ná ma-sɔ́ma kɛa-aka/
2-child 2-four 2-all SM.2 PST2 6-homework do-DUR
'Tous les quatre enfants ont fait leurs devoirs !'
'All four children did their homework!' [EE+EB 1818]

Such inflectional and distributional data suggest that numerals and quantifiers may be the same category in Tunen, which in turn opens up analytical possibilities whereby numerals are quantifiers, grammatically speaking. However, my consultants did give slightly different judgements for numerals and quantifiers in discontinuous DPs: only the universal quantifier was accepted for attachment with the subject (442).

(442) a. **baná** bá ná masɔ́ma kiak **bə́kim**.

/**ba-ná** bá ná ma-sɔ́ma kɛa-aka **bá-kimə**/
2-child SM.2 PST2 6-homework do-DUR 2-all
'Tous les enfants ont fait leurs devoirs !'
'All the children did their homework!' [EE+EB 1820]

b. ***baná** bá ná masɔ́ma kiak **bə́nis**.

/**ba-ná** bá ná ma-sɔ́ma kɛa-aka **bá-nisə**/
2-child SM.2 PST2 6-homework do-DUR 2-four
Intd.: 'Les quatre enfants ont fait leurs devoirs !'
Intd.: 'The four children did their homework!' [EE+EB 1819]

Example (442b) is somewhat contradictory to other examples of discontinuous DPs, where a discontinuous numeral was accepted as a modifier of a subject (e.g. (437a), (438a)). However, the data are interesting in that the consultants in this session then rejected a sentence with both a preverbal numeral and a postverbal quantifier (443).

(443) *baná **bə́nis** bá ná masɔ́ma kiak **bə́kim**.
/ba-ná **bá-nisə** bá ná ma-sɔ́ma kɛa-aka **bá-kimə**/
2-child 2-four SM.2 PST2 6-homework do-DUR 2-all
Intd.: 'Tous les quatre enfants ont fait leurs devoirs !'
Intd.: 'All four children did their homework!' [EE+EB 1821]

Further investigation is required to see how reliable these judgements are across speakers, and what differentiates the quantifier from the numeral syntactically. In the absence of clear arguments in favour of a unified analysis, I treat numerals and quantifiers as distinct within Tunen grammar.

7.3.2.2 Adjectives

Bantu languages are known to have a small number of adjectives (Van de Velde 2019). In Tunen, around 11 adjectives have been identified (Dugast 1971; Mous 2003; Chapter 4 section §4.3.4). While most instances of discontinuous DPs in my dataset are with cardinal numerals, Mous (2003) gives an example with an adjective *-ŋéŋa* 'big', which is translated with contrastive focus, as in (444) (repeated from (423)).[10]

(444) mɛ̀-ná **ìmìtə̀ yè m^{w}ə̀nífí** índí **mè-ŋéŋ** ò hɛ̀lɔ́bátɔ̀
/mɛ-na **e-mitə** **ye** **ma-nifə** indiə **me-ŋeŋ** ɔ
SM.1SG-PAT2 9-calabash ASSOC.9 6-water give 9-big PREP
hɛ-lɔbatɔ/
19-child
'I gave the BIG water calabash to the child.' (Mous 1997:133; Mous 2003:305)

As seen already in (430), this sentence was judged as grammatical by my consultants. The sentence was judged as felicitous both when the adjective was contrastively focussed (430) and when it was given (as was shown by a truth focus context; (436)).

Note that a discontinuous DP is not the only option here – a contiguous noun phrase is also possible in the same discourse contexts, as judged in (445) by the same consultants.

[10] The first line and translation are presented as in the source. I have added further segmentation in the morpheme break line and adapted the glosses accordingly.

(445) a. éɛ, mɛ ná **imítə́ mɛŋɛ́ŋ** indiə ɔ hɛlɔ́batɔ.
/éɛ mɛ ná **ɛ-mítə́ mɛŋɛ́ŋa** índíə́ ɔ hɛ-lɔ́batɔ/
yes SM.1SG PST2 9-calabash 9.big give PREP 19-child
'Oui, j'ai donné la grand calebasse (de l'eau) à l'enfant.'
'Yes, I gave the large calabash of water to the child.' [EE+EB 1831]

b. bɔ́ɔ, mɛ ná **imítə́ mɛŋɛ́ŋ** indiə ɔ hɛlɔ́batɔ, (tátá ɔ mɛ́↓tɛ́tɛ́).
/bɔ́ɔ mɛ ná **ɛ-mítə́ mɛŋɛ́ŋa** índíə́ ɔ hɛ-lɔ́batɔ tátá
no SM.1SG PST2 9-calabash big 9.give PREP 19-child not
ɔ mɛ́ᴸtɛ́tɛ́a/
PREP small
'Non, j'ai donné la [grande]$_{\text{FOC}}$ calebasse à l'enfant, (pas la petite)'
'No, I gave the [big]$_{\text{FOC}}$ calabash to the child, (not the small one).'
[EE+EB 1834]

In general, discontinuous constructions with adjectives are not found much in the dataset. This absence of examples of discontinuous adjectives in my corpus may be explained by the relatively small number of adjectives in Tunen (Dugast 1971:153) and therefore by the frequency of constructions with adjectives rather than the frequency of discontinuous noun phrases themselves. In this sense, low textual frequency of discontinuous O-V-Adj constructions is a side-effect of low frequency of adjectives in the corpus and therefore possibly independent of the discontinuous/continuous distinction. Note also that the current dataset also does not allow for any meaningful comparison of different types of adjectives, due to the paucity of examples. A larger natural speech corpus and more targeted elicitation on adjectives in Tunen would help investigate this further in future work. For current purposes, examples such as (430) are significant in showing that at least some adjectives can be discontinuously-positioned in Tunen, meaning that a formal analysis must allow for discontinuous DPs formed with adjectival modifiers. I will reflect on the possibilities for the formalism further in section §7.4 below.

7.3.2.3 Can't split 'how many?'

The examples of discontinuous DPs seen so far have been in declaratives and polar questions. A remaining question is therefore whether the modifier 'how many?' can be split from a head noun in a constituent question. The examples in (446) show that the question word 'how many?' cannot be in-situ in the S-O-V-Mod modifier position (446a). Instead, a question of quantity is formed ex-situ, with the noun pied-piped with the 'how many' question word (446b).

(446) a. *ɔ́ ndɔ **tunoní** sin **tɔ́nɛ́á** ?
/ɔ ᴴndɔ **tɔ-noní** sinə **tɔ́-nɛ́á**/
SM.2SG PRS 13-bird see 13-how_many
Intd.: 'Combien d'oiseaux vois-tu?'
Intd.: 'How many birds do you see?' [EO 1402]

b. **tunoní tɔ́nɛ́á** ɔ́ ndɔ sin?
/**tɔ-noní tɔ́-nɛ́á** ɔ ᴴndɔ sinə/
13-bird 13-how_many SM.2SG PRS see
'Combien d'oiseaux vois-tu?'
'How many birds do you see?' [EO 226]

This unavailability of discontinuous placement of the interrogative 'how many?' follows the broader pattern that wh-words must be ex-situ in Tunen (as discussed in Chapter 4 section §4.5.8 and Chapter 5). As expected given the requirement for question words to be ex-situ and the ban on inverted splits, fronting the noun while leaving the wh-word in-situ is ungrammatical (447a). Forming a cleft while leaving the noun in-situ is also not possible (447b).

(447) a. ***tunoní** ɔ́ ndɔ sin **tɔ́nɛ́á**?
/**tɔ-noní** ɔ ᴴndɔ sinə **tɔ́-nɛ́á**/
13-bird SM.2SG PRS see 13-how_many
Intd.: 'Combien d'oiseaux vois-tu?'
Intd.: 'How many birds do you see?' [EO 1403]

b. ***tɔ́n↓ɛ́á** á ɔ́ ná **tuɔfɔ́** nɔf ?
/**ɔ́-nɛ́á** á ɔ́ na **tɔ-ɔfɔ́** nɔfɔ/
13-how_many COP SM.2SG.REL PST2 13-fish catch
Intd.: 'Combien de poissons as-tu pêché?'
Intd.: 'How many fish have you caught?' [PM 1209]

However, a cleft is accepted when the object was moved (448). This gives an interpretation where the speaker cares only about the noun in question. In the example below, the addressee may have caught other sea-creatures such as crabs, but these are excluded.[11]

[11]Note that it is hard to know for sure how many *á*'s are present underlyingly given that Tunen has a vowel elision rule (for which see Chapter 4 section §4.2). However, the subject marker is normally low-toned, so we know from the realised H tone that there is relative marking on that part of the sentence, supporting a cleft analysis, as discussed in Chapters 4 and 5.

(448) **tɔ́n↓ɛ́á** á **tuɔf(ɔ́)** (á) ɔ́ ná nɔf ?
/**tɔ́-nɛ́á** á **tɔ-ɔfɔ́** á ɔ́ na nɔfɔ/
13-how_many PREP 13-fish COP SM.2SG.REL PST2 fish
'Combien de poissons as tu pêché?'
'How many FISH have you caught?' (don't care about crabs, prawns etc.)
[PM 1210]

In summary then, question words differ from foci in declaratives in that they cannot be discontinuous from the head noun in the S-O-V-Mod construction, matching a more general syntactic characteristic of ex-situ question formation in Tunen (Chapter 4 section §4.5.8, Chapter 5).

7.3.2.4. Relative clauses

In addition to numeral and quantifier modifiers and adjectives, relative clauses modifying objects are frequently discontinuous (449), (450).

(449) mɛ ná **wááyɛ́ múəndu** siəkin **ɔwánákáná ɔ bulí na móto**, tátá wə́n.
/mɛ ná **wááyɛ́** **mɔ-ə́ndu** siəkinə **ɔwá-á-ánákáná** **ɔ**
SM.1SG PST2 DEM.DISC.1 1-woman see.DUR REL.1-SM.1.REL-leave PREP
bɔ-lí **na** **móto** tátá wə́ni
14-work with 6.motorcycle NEG.COP DEM.DIST.1
'J'ai vu la femme qui est allée au travail avec le moto, pas l'autre.'
'I saw the woman who went to work by motorbike, not the other one.'
[PB 2019]

(450) mɛ ka ámɛ **yáyɛ́á ibəŋuluəkə yí búsíə́** siəkinə **ɔyɛ́á á ↓ná ɔnd**, [...]
/mɛ ka ámɛ yáyɛ́á ɛ-bəŋuluəkə yɛ́ búsíə́ siəkinə
SM.1SG PST3 PRN.1SG PRN.POSS.1.7 7-car ASSOC.7 front see.DUR
ɔyɛ́á á ˡná ɔ́ndɔ́/
REL.7 SM.1 PST3.REL buy
'Moi j'avais vu le premier véhicule qu'il a acheté, [..]'
'I myself saw the first vehicle he bought, [...] [PM 1045]

The discontinuous position of relative clauses is not the only possible construction; the relative clause may also be continuous before the verb (O-[Rel]-V; (451)) or continuous after the verb (V-O-[Rel]; (452)).

(451) (nɛɔfénɛ) Mətinə a ná **bɛlábɔ́néá bikimə** {ʔɔkɔlɔkɛn} **ɔbɛ́á yamíá inyə́ a ↓ná táléáká** naánɛkɔla {ɔkɔlɔkɛn(a)} (nɛɔfén).

/(nɛɔfénɛ) Mətinə a ná **bɛ-lábɔ́néá bɛ́-kimə** {ɔkɔlɔkɛna} **ɔbɛ́á**
(today) Martin SM.1 PST2 8-food 8-all {taste} REL.8

yamíá **inyə́** **a** **ˡná** **táléá-aka** naánɛkɔla
PRN.POSS.1SG.9 9.mother SM.1 PST3.REL cook-DUR yesterday

{ɔkɔlɔkɛna} (nɛɔfénɛ)/
{taste} (today)

'Martin a goûté (aujourd'hui) toute la nourriture que ma mère a cuisiné hier.'
'(Today,) Martin has tasted all the food that my mother cooked (yesterday).'
[PM 498]

(452) bá l(ɛ) utíbíniə **ɛbɔ́ka ɔyɛ́á mwití a ná fálɛ́**.

/ba lɛa ɔ-tibiniə **ɛ-bɔ́ka** **ɔyɛ́á** **mwití** **a** **ná** **fálɛ́a**/
SM.2 be INF-observe 7-place REL.7 PRN.OBJ.1 SM.1 PST2 tumble

'Ils sont en train d'observer l'endroit du la personne a degringolé.'
'They're looking at the place the guy fell.' [PM 582]

I suggest following Isaac (2007) that the variability in attachment of the relative clause may be related to independent factors such as prosodic weight. Given that relative clauses are frequently analysed as extraposed (see e.g. Ross 1967; Culicover and Rochemont 1990; Francis 2010), discontinuous relative clauses may thus be derived by a different syntactic mechanism than the discontinuous numeral, quantifier and adjective modifiers. Alternatively, however, an extraposition account as given for relatives could be extended to other modifiers, as suggested for adjectival expressions in Romance, which have been analysed as reduced relative clauses (Cinque 2010). I will return to this in section §7.4.

7.3.2.5. Can't split associative

As seen in Chapter 4, Tunen has the Bantu connective construction (also called the 'genitive' and the 'associative' construction, and glossed in my data with ASSOC for the associative marker) (Van de Velde 2013). The form of the construction in Tunen is $N_{Possessum}$-ASSOC-$N_{Possessor}$, where the associative marker agrees in noun class with the possessum (see Chapter 4). This is illustrated for contiguous noun phrases in (453)[12] and (454) below.

[12]The transcription line orthography has been adjusted to be consistent with the orthography in this thesis; an underlying line, gloss line, and English translation are added.

(453) **miɔkɔ́ yɛ muənd**
/mi-ɔkɔ́ yɛ mɔ-əndú/
9-chicken ASSOC.9 1-woman
'la poule de la femme'
'the woman's chicken' (Dugast 1971:133, adapted)

(454) hɛkɔkɛ búə́súə́ **bɔlábɔ́nɛ́á bɔ́ bə́nɛni**.
/hɛ-kɔkɛ bɔ-ə́súə́ **bɔ-lábɔ́nɛ́á bɔ́ ba-nɛni**/
19-kok 14-PRN.POSS.1PL.14 14-food ASSOC.14 2-Nen
'Le kok, c'est notre nourriture des Banen.'
'Kok is our food amongst the Banen.' [JO 1329]

While some languages such as German allow for splits in genitive constructions (Fanselow and Ćavar 2002), discontinuous associative constructions in Tunen were rejected by my consultants, both for a scrambling-type left-peripheral discontinuous noun phrase (455a) and for the O-V-Mod type (455b). We also see in (455c) that the inverted split of $N_{Possessor}$ and ASSOC-$N_{Possessum}$ is also ungrammatical, as expected from the general finding that Tunen discontinuous DPs are pull splits.[13]

(455) Context: 'Which member of Marie's family did the teacher meet at the school?'

a. ***yɛ́ Malíá** múləliə a ka **inyə** nyánána (u isukul).
/**yɛ** **Malíá** mɔ-ləliə a ka inyə nyánáná ɔ
ASSOC.9 1.Maria 1-teacher SM.1 PST3 9.mother meet.RECIP PREP
ɛ-sukúlu/
7-school
Intd.: 'Le maître a rencontré [la mère]$_{FOC}$ de Marie à l'école.'
Intd.: 'The teacher met Maria's [mother]$_{FOC}$ at the school.' [JO 2652]

b. *múləliə a ka **inyə** nyánána **yɛ́ Malíá**.
/mɔ-ləliə a ka **inyə** nyánáná **yɛ** **Malíá**/
1-teacher SM.1 PST3 9.mother meet.RECIP ASSOC.9 1.Maria
Intd.: 'Le maître a rencontré [la mère]$_{FOC}$ de Marie.'
Intd.: 'The teacher met [Maria]$_{FOC}$'s mother.' [JO 2655]

[13]For the remotely-elicited dataset in (456), the form ID in square brackets refers to the session number followed by the example number in this session.

c. *múləliə a ka **yɛ́ Malíá** nyánána **inyə**.
/mɔ-ləliə a ka **yɛ** **Malíá** nyánáná **inyə**/
1-teacher SM.1 PST3 ASSOC.9 1.Maria meet.RECIP 9.mother
Intd.: 'Le maître a rencontré [la mère]$_{\text{FOC}}$ de Marie.'
Intd.: 'The teacher met Maria's [mother]$_{\text{FOC}}$.' [JO 2654]

(456) Context: Correction of falsehood 'The teacher met Johannes' father'.

a. *bɔ́ɔ ! muləliə a ka **isə** nyánána **yɛ Malíá**.
/bɔ́ɔ mɔ-ləliə a ka **isə** nyánáná **yɛ** **Malíá**/
no 1-teacher SM.1 PST3 9.father meet.RECIP ASSOC.9 1.Maria
'Non ! C'est le père [de Maria]$_{\text{FOC}}$ que le maître a rencontré.'
'No! The teacher met [Maria's]$_{\text{FOC}}$ father.' [JO 71.85]

b. *bɔ́ɔ ! muləliə a ka **yɛ Malíá** nyánána **isə**.
/bɔ́ɔ mɔ-ləliə a ka **yɛ** **Malíá** nyánáná **isə**/
no 1-teacher SM.1 PST3 ASSOC.9 1.Maria meet.RECIP 9.father
'Non ! C'est le père [de Maria]$_{\text{FOC}}$ que le maître a rencontré.'
'No! The teacher met [Maria's]$_{\text{FOC}}$ father.' [JO 71.86]

Only contiguous orders were accepted for the associative construction, either the in-situ OV order (457)-(458a), or fronting or clefting of the entire DP (458b).

(457) Context: 'Which member of Marie's family did the teacher meet?'
múləliə a ka **inyə yɛ́ Malíá** nyánána (u isukul).
/mɔ-ləliə a ka **inyə** **yɛ** **Malíá** nyánáná ɔ
1-teacher SM.1 PST3 9.mother ASSOC.9 1.Maria meet.RECIP PREP
ɛ-sukulu/
7-school
'Le maître a rencontré [la mère]$_{\text{FOC}}$ de Marie.'
'The teacher met Maria's [mother]$_{\text{FOC}}$.' [JO 2651]

(458) Context: Correction of falsehood 'The teacher met Johannes' father.

a. bɔ́ɔ! mulə́liə a ka **isə yɛ Malíá** nyánan.

/bɔ́ɔ	mɔ-lə́liə	a	ka	**isə**	**yɛ**	**Malíá**	nyánáná/
no	1-teacher	SM.1	PST3	9.father	ASSOC.9	1.Maria	meet.RECIP

'Non ! C'est le père [de Maria]$_{\text{FOC}}$ que le maître a rencontré.'
'No! The teacher met [Maria's]$_{\text{FOC}}$ father.' [JO 71.84]

b. bɔ́ɔ ! **Isə yɛ Malíá** mulə́liə a ka nyánán.

/bɔ́ɔ	**isə**	**yɛ**	**Malíá**	mɔ-lə́liə	a	ka	nyánáná/
no	9.father	ASSOC.9	1.Maria	1-teacher	SM.1	PST3	meet.RECIP

'Non ! C'est le père [de Maria]$_{\text{FOC}}$ que le maître a rencontré.'
'No! The teacher met [Maria's]$_{\text{FOC}}$ father.' [JO 71.79]

Finally, recall example (432) above where O-V-Num-Assoc-N was grammatical, suggesting that associates may sometimes be split from the head noun. This is not possible when only the associative is postverbally-positioned without a postverbal numeral (*O-Num-V-Assoc-N), as (459) shows.

(459) *naánɛkɔla ɛkɔlakɔ́lá tɔ ka **mindíŋgə ɛ́námanɛ** nɛ́ákɛna **yɛ́ mə́lukə**.

/naánɛkɔla	ɛ-kɔlakɔ́lá	tɔ	ka	**mɛ-ndíŋgə**	**ɛ́-námanɛ**	nɛ́ákɛna
yesterday	7-evening	SM.1PL	PST3	4-bottle	4-eight	drink

yɛ́	**mə́luk**/
ASSOC.4	6.wine

Intd.: 'Hier soir nous avons bu huit bouteilles de vin !'
Intd.: 'We drank eight bottles of wine last night!' [JO 1942]

In summary then, associatives cannot be split from the noun they modify in Tunen. This shows an empirical difference between Tunen and languages such as German that allow certain discontinuous DP constructions with genitives.

7.3.2.7. *na N*

Two other types of syntactic material could be considered other cases of discontinuity, but I believe are better thought to be separate types of constructions. The first is the comitative *na N* 'with/and N' construction, as is common to Bantu languages. Here, Tunen expresses conjoined noun phrases with *na N* construction, where *na* can be translated as 'and' or 'with'. The same form is used for instruments, e.g. go by bicycle, and possessives following the verb 'to be' to mean 'to have' (lit. 'to be with') (see Chapter 4 section §4.5.5).

While contiguous DPs are formed as N_1 na N_2 (460), the discontinuous pattern N_1 ... na N_2 is also found (461).

(460) [...] **Ɛmánúwɛlɛ na Natanayɛ́lɛ** [...]
/**ɛmánúɛlɛ na Natanayɛ́lɛ**/
1.Emmanuel with 1.Nathaniel
'Emmanuel et Nathaniel'
'Emmanuel and Nathaniel' [JO 527]

(461) Ɛ́tasɛ mí hu, **tɔmbaŋa** tɔ́ bɛ́náka **na moló**, ɛ́kɛ tɔmbaŋa tɔ́ hɔ́á ɔ ɔbɛ́na mba mɛ́ sumún.
/ɛ́tasɛ mɛ =H huə **tɔ-mbaŋa** tɔ́ bɛ́ná-aka **na**
very_soon SM.1SG PROC cover 13-peanut SM.13.SBJV cook-DUR with
moló ɛ́kɛ tɔ-mbaŋa tɔ́ hɔ́á ɔ ɔ-bɛ́na mba mɛ
6.oil when 13-peanut SM.13 finish PREP INF-cook then SM.1SG
=H sumunə/
PROC remove
"Je vais couvrir, quand les arachides et l'huile vont finir de cuire, je vais enlever (de feu)."
"I'll put the lid on, when the peanuts and the oil have finished cooking, I'll take (them) off the heat." [JO 1375]

(462) **ɛmbɔ́ma** yɛ́ báka hə́ní **na bɛŋgwɛt**.
ɛ-mbɔ́ma yɛ́ bá-aka hə́níə́ **na bɛ-ŋgwɛtɛ**
7-field SM.7 be-DUR DEM.DIST.LOC with 8-potato
'Il y a un champ de patates là-bas.'
'There's a potato field over there.' [JO 1750]

This *na N* construction is analysed by Isaac (2007) as a case of discontinuity on par with other discontinuous modifiers. Although I tag some relevant cases as `discontinuous_DP` in the Dative database on account of this analytical possibility, I argue that the *na N* phrase is structurally and semantically different, as a PP rather than as a modifier within the DP. I therefore do not consider such constructions further here.

7.3.2.6. The *-átɔ* participle and secondary predication

The second phenomenon is participles formed with *-átɔ*. These participles are generally found in combination with a copular verb (Chapter 4 section §4.4.3), functioning as a passive (Chapter 5 section §5.6; Kerr to appear). However, they may also appear in the postverbal construction with non-copular verbs, as in the natural speech example in (463) below.

(463) ɔ ɔŋgɔ́ ɔ mɔkátá wɔ́ bɛnɔ́m, ɔ́ndɔ **hiaŋálɛ** nibəkə ɔmɔ́hɔ́yɛ **tɛ́nɛ́máat.**

/ɔ	ɔŋgɔ́	ɔ	mɔ-kátá	wɔ́	bɛ-nɔ́mɛ	ɔ	ʰndɔ	**hɛ-aŋálɛ**
SM.2SG	find	PREP	3-hand	ASSOC.3	8-right	SM.2SG	PRS	19-bicycle

nibə-aka	ɔmɔ́hɔ́yɛ́	**tɛ́nɛ́má-átɔ**/
find-DUR	DEM.DISC.EMPH.LOC	stand-PTCP

'Suis à droite, tu vas trouver une bicyclette là-bas.'
'Take a right, you'll find a bike there.' [PM 682]

While the participle *tɛ́nɛ́máat* 'stood' could be considered here as a modifier of the noun *hiaŋálɛ* 'bicycle' originating in the same DP, I suggest an alternative analysis where the verbal participle is a form of secondary predication, and therefore do not consider such cases further here.

7.3.2.8. Empirical summary of splits

This subsection has shown that discontinuous modifier placement is common in Tunen with numerals and quantifiers, but is also found with adjectives. Associatives and the 'how many' construction cannot be discontinuously-positioned, while relative clauses may be. This distribution is summarised in Table 7.6 below.

Table 7.6 reports the results for postnominal modifiers, as Tunen only has pull splits (N-V-Mod), with inverted splits (Mod-V-N) ungrammatical (cf. Table 7.2). Because of this, it is not possible for the Mod slot to be filled by a prenominal modifier, such as a demonstrative, the definite determiner, or the possessive (see Chapter 4 section §4.3.7). I will however return to the co-occurrence of prenominal and postnominal modifiers in section §7.5.2 as a relevant factor for further investigation into discontinuous DPs in Tunen.

As a final note regarding the nature of syntactic material that can be discontinuous, Fanselow and Ćavar (2002:94) report that "DP-splits can be well-formed in certain varieties of German only if the split phrase is a plural DP, or is projected from a mass noun." This restriction to plural nouns is likely language-specific: German singular nouns cannot form a DP by themselves, whereas in languages like

Modifier type	**S-O-V-Mod?**
Quantifiers	✓
Numerals	✓
Adjectives	✓
'how many'	✗
Associatives (genitive)	✗
Relative clauses	✓

Table 7.6: Ability for different items to be discontinuous from the head noun (S-O-V-**Mod**) in Tunen.

Tunen, singular nouns can stand alone.[14] As expected, there is no singular versus plural restriction on discontinuous DPs in Tunen, with discontinuous orders possible for both singular and plural nouns (464).

(464) a. mɛ́ ndɔ **hɛ́banána** nɛ́á **hímɔti** ɔ bwɔs.
/mɛ ʰndɔ hɛ-banána nɛ́á hɛ́-mɔté ɔ bɔ-ɔsɛ́/
SM.1SG PRS 19-banana eat 19-one PREP 14-day
'Je mange une banane par jour.'
'I eat one banana per day.' [PN 350]

b. mɛ́ ndɔ **tɔbanána** nyɛ́ **tɔ́fandɛ́** ɔ bwɔs.
/mɛ ʰndɔ tɔ-banána nɛ́á tɔ́-fandɛ́ ɔ bɔ-ɔsɛ́/
SM.1SG PRS 13-banana eat 13-two PREP 14-day
'Je mange deux bananes par jour.'
'I eat two bananas per day.' [PN 351]

This lack of relevance of singular versus plural status of the DP in Tunen highlights the crosslinguistic variation in factors that are relevant or irrelevant for characterising discontinuous DPs in different languages.

7.3.3 Empirical summary

In summary, we see that discontinuous DPs in Tunen are always pull splits, with the same order of modifiers as in a contiguous DP. Numerals and quantifiers are

[14] I follow Ferch's (2013) discussion of Shona DPs in considering these as bare (classified) nouns, i.e., nouns that are composed of a noun stem + class prefix, with no further modification.

frequently discontinuous, with examples of discontinuous adjectives rarer in the data but also found across speakers. The question word 'how many?' and associatives, on the other hand, cannot be split. Relative clauses modifying objects can be split, which is presumably due to independent mechanisms of extraposition motivated by prosodic heaviness. I also pointed out a few more points of interest, such as the non-influence of singular versus plural distinctions on the availability of splits.

7.4 Formal analysis

Having now seen evidence that S-O-V-Mod discontinuity is found across IS contexts in Tunen and found for different modifiers, we can turn to an analysis of the underlying syntactic structure. As outlined in section §7.2.4 above, there are two main analyses of discontinuous DPs in the formal literature: (i) the noun and modifier are base-generated in different syntactic positions, and therefore discontinuity is only apparent, and (ii) the noun and modifier are base-generated as part of the same noun phrase, and discontinuity arises during the derivation through either subextraction or copy+deletion. I will evaluate the application of these different analyses to Tunen in turn.

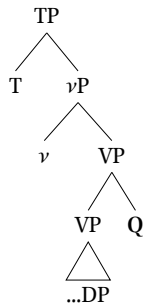
7.4.1 Apparent discontinuity analyses

Some evidence in favour of a base-generation account for Tunen is that discontinuous numerals and quantifiers can be interpreted as modifiers of either the object or the subject. While not impossible to capture in a movement account, this is easier to account for if the modifier is base-generated in a postverbal position separate from the DP in which the head noun is found. Two such analyses are found in the literature: adverbial analyses on the one hand and analyses with base-generation of two DPs + ellipsis on the other.

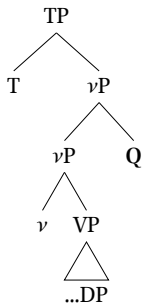
7.4.1.1. Against an adverbial analysis

Discontinuous DPs and floating quantifier constructions have been captured by treating the quantifier as an adverbial modifier. For example, such an analysis is provided by Bošković (2004) as an account of floating quantifiers in English. The treatment of quantifiers as adverbial adjuncts means that different interpretations can be captured by different attachment heights, as in (465)-(466).

(465)



(466)



However, there are four arguments against extending such an adverbial account to the Tunen discontinuous DPs. The first argument is that discontinuous modifiers in Tunen always show morphological noun class agreement with the head noun. This is a challenge for the adverbial account as Tunen adverbials do not inflect for noun class. This lack of noun class agreement on adverbials is illustrated in (467) and (468) below, where the adverbs *mɔŋɛ́ŋa* 'much' and *tɔfá* 'quickly' are invariant.[15]

(467) a. Context: '(He's a) Munen! I'm not lying to you.'
a ka nyɔɔkɔ háaha ɔ uwəsú **mɔŋɛ́ŋ**.
/a ka nyɔ-aka háaha ɔ uwəsú **mɔŋɛ́ŋa**/
SM.1 PST3 work-DUR DEM.PROX.LOC PREP PRN.1PL.POSS much
'Il a beaucoup travaillé ici chez nous.'
'He worked a lot here in our region.' [EO 1043]

b. Context: 'When did the dog bark a lot?'
ɛmɔ́á yɛ́ ná bɔ́mɔ́kɔ́ **mɔŋɛ́ŋa** nə́búlú.
/ɛ-mɔ́á yɛ́ ná bɔ́mɔ́-aka **mɔŋɛ́ŋa** nɛ-búlú/
7-dog SM.7 PST2 bark-DUR much 5-night
'Le chien a beaucoup aboyé [pendant la nuit]$_{\text{FOC}}$.'
'The dog barked a lot [at night]$_{\text{FOC}}$.' [JO 1105]

[15]Note that these examples also show that adverbials are free with respect to other postverbal adjuncts. In (467a) the adverbial is focal (in the context of a dialogue emphasising how someone should be considered a Munen despite being born elsewhere), while in (467b) the sentence-final non-argument 'at night' corresponds to the information focus.

(468) a. bə́ə́ní bɛndɔ bə́ə́ní bá ndɔ ɛŋganda bíínə **tɔfa ɛmbát**.

/bə́ə́ní	ba-ndɔ	bə́ə́ní	bá	^{H}ndɔ	ɛ-ŋganda	bínə
DEM.DIST.2	2-person	DEM.DIST.2	SM.2	PRS	7-enganda	dance

tɔfá	**ɛmbáta**/
quickly	too_much

Les gens-là dansent l'enganda trop rapidement.'
'Those people over there dance the enganda too quickly.' [EE+EB 1836]

b. Malíá a ná bɛlama ɔ́ndɔ **tɔfá**.

/Malíá	a	ná	bɛ-lama	ɔ́ndɔ	**tɔfá**/
1.Maria	SM.1	PST2	8-vegetable	buy	quickly

'Maria a acheté des légumes rapidement.'
'Maria bought the vegetables quickly.' [JO 2480]

Thus, taking morphological form as diagnostic for word category, Tunen modifiers do not appear to be adverbial, providing evidence against analysis of discontinuous modifiers as adverbial adjuncts. While this is by itself not conclusive evidence against the adverbial analysis, as noun class agreement can be derived by feature matching between two co-indexed phrases that were not base-merged together, I turn now to additional arguments that show further issues with the account.

The second issue with the adverbial analysis is that, while discontinuous noun phrases are far more frequently attested for numerals and quantifiers in Tunen, they are also available for adjectives, as seen in e.g. (430) above. Adjectives are much less clearly adverbial than quantifiers are, instead appearing to be qualificatory in nature. This again suggests that the modifiers in the S-O-V-Mod construction are not adverbial.[16]

The third issue is that under the adverbial analysis in (465)-(466) is that the modifier and DP do not form a constituent to the exclusion of other VP-internal material. However, evidence from constituency tests show that the noun and modifier do function as constituents in Tunen, as shown below for the fragment test (469), fronting (470), and clefting (471).

[16]It would also be possible to have an analysis of discontinuous DPs in Tunen where numerals and quantifiers are adverbial and therefore only apparently discontinuous, while adjectives are base-generated as part of the same DP as the head noun. Under metatheoretical concerns for parsimony (Chapter 3 section §3.2.1), I do not adopt this analysis here; if the data can be derived through one analysis, that is preferable.

(469) a. Context: 'How many people do you see?'
bɛndɔ báfandɛ.
/bɛndɔ bá-fandɛ/
2.person 2-two
'Deux personnes.'
'Two people.' [JO 540]

b. Context: 'What kind of flower do you see?'
umbɔndʒiə mɔŋɛ́ŋ.
/**u-mbɔndʒiə mɔ-ŋɛ́ŋa**/
3-flower 3-big
'Une grande fleur.'
'A big flower.' [JO 2354]

(470) Context: 'How many children do you see?'
mɔná ɔmɔtɛ mɛ́ ndɔ sin.
/mɔ-ná ɔ́-mɔtɛ́ mɛ ᴴndɔ sinə/
1-child one SM.1SG PRS see
'Je vois un enfant.'
'I see one child.' [DM 147]

(471) Context: 'What kind of flower do you see?'
umbɔndʒi mɔmɔakánɔ́ á mɛ́ ndɔ sin.
/**u-mbɔndʒi mɔ-nɔakánɔ́** á mɛ́ ᴴndɔ sinə/
3-flower 3-red COP SM.1SG.REL PRS see
C'est une fleur rouge que je vois.'
'I see a red flower.', 'It's a red flower that I see.' [JO 2350]

This does not mean that the analysis in (465)-(466) cannot apply for some modified DP constructions in Tunen, as it can be argued that the noun and modifier do not form a constituent when not adjacent to each other. However, it does mean that this cannot be the only account of modified DPs in Tunen. Based on the metatheoretical principle of parsimony introduced in Chapter 3 section §3.2.1, it would therefore be preferable to find an analysis of the discontinuous DP construction that also accounts for the analysis of contiguous DP constructions more generally.

Fourthly and finally, the adverbial account in (465)-(466) predicts that the modifier semantically modifies the event, rather than modifying the noun alone, as it is

attached as an adjunct within the verbal domain. While the semantic interpretation could be more thoroughly tested in future work using targeted elicitation and a larger natural speech corpus, this empirical prediction seems not to hold. For example, the discontinuous DP subject from the QUIS discourse task (EO explains to PM what happened earlier on in a cartoon sequence, elicited with a cartoon picture stimulus of three men by a tree; Skopeteas et al. 2006) involves the numeral 'three' (472). This clearly relates to a plural nominal referent and a single seeing event, rather than three seeing events.

(472) Context: After concluding the explanation.
mhm. ɔ̀↓há **bɛndɔ** bándɔ wɛ́ɛ́ya sinə **balal**.
/mhm ɔhá bɛndɔ bá ᴴndɔ wɛ́ɛya sinə **bá-lálɔ́**/
PTCL for_that 2.person SM.2 PRS PRN.1 see 2-three
'Mhm. C'est pour ça que trois personnes le regardent.'
'Mhm. That's why three people are looking at him.' [PM 597]

Other examples show the same lack of event semantic reading (e.g. (497) below from the Dugast (1975) text corpus). The adverbial account therefore requires additional explanation as to why the modifier is interpreted as modifying the noun rather than as modifying the event as a whole.

Taking these four arguments together, an adverbial adjunction account is therefore not well-motivated for discontinuous DPs in Tunen.

7.4.1.2 Base-generation of two DPs

An alternative base-generation account would be to posit two DPs, with ellipsis resulting in the modifier only spelled out in the lower one, as proposed for example for Georgian in Fuchs (2017).

If Tunen modifiers are base-generated in separate DPs, there is a question of how agreement arises. The common solution is to propose that the postverbal modifier is always base-generated with a head noun with which it agrees, with the head noun then elided. Alternatively, it could be suggested that agreement on the modifier is arrived at due to a *pro*-form or due to pragmatics, reflecting the noun class of available referents in the discourse situation. One suggestion for morphological matching of modifier and noun in a base-generation account is when the modifier and noun are linked by a binding relation. Such accounts are proposed for floating quantifiers in order to capture the dependency between the quantifier and head noun. For example, Doetjes (1997) argues that the adverbial quantifier in French floating quantifier constructions binds the trace of the moved DP, with the correct

inflectional morphology on the quantifier being spelled out through this binding relation. However, it is difficult to extend this specific analysis to Tunen because it predicts that the DP must move in order for the quantifier to be postverbal, while Tunen also allows V-O-Q constructions in which there appears to be no movement. In general, the Tunen data show a wider range of discontinuous material than is considered for the analyses of languages with quantifier float (Kayne 1975; Doetjes 1997; Bošković 2004, a.o.), meaning that the existing analyses cannot be readily adapted to capture the full Tunen data.

Another issue with the base generation type of analysis is that it requires either stipulation or an explanation of how ellipsis deletes the lower head noun. In other words, without a motivated theory constraining ellipsis of DP-internal copies at PF, the analysis lacks explanatory power and is too permissive. I therefore turn now to the alternative analysis type, whereby the modifier starts out as base-generated in the same DP as the head noun that is pronounced preverbally.

7.4.2 True discontinuity analyses

If Tunen discontinuous DPs are truly discontinuous, the noun and modifier must be base-generated as part of the same DP and then be split during the syntactic derivation. Supporting evidence for this kind of base-generation + movement/copying account is the noun class agreement facts, namely that discontinuously-positioned modifiers in Tunen match in noun class with the head noun. This morphological match in noun class is straightforward to capture if the modifier originated in the same DP as the head noun, with Agree applying before movement via Merge (see Chapter 2 for background on Agree/Merge). If cases are found where the modifier and noun have class mismatches, this would be a challenge for the base-generation account, as an explanation would have to be found for the morphological mismatch. However, all my examples and those in the Dugast (1975) texts studied by Isaac (2007) show identical noun class agreement and no difference with the noun class agreement found on modifiers of contiguous DPs (cf. the German strong/weak inflectional distinction and the Georgian case mismatches seen in section §7.2.4).

One piece of evidence that separates Tunen from other languages with discontinuous DPs analysed in the literature is the lack of a unifying trigger for movement. While languages like German have been captured by IS features driving A'-movement to the clausal left periphery, no such IS restriction was found in Tunen, as covered in section §7.3.1 above.

For these reasons, I suggest that discontinuous modifiers in Tunen arise as a by-product of the formally-conditioned object movement discussed in Chapter 6, whereby the object is raised to a *v*P-internal preverbal position (SpecVoiceP) from

an underlyingly postverbal position (the complement of V). To follow up on this intuition and build a full analysis, we first need a model of the internal structure of the Tunen DP. I turn to this now.

7.4.2.1 The structure of the Tunen DP

As there is no previous formal model of the Tunen noun phrase, I will now build up a proposal. Recall firstly from Chapter 4 section §4.3.7 that the order of modifiers in Tunen contiguous DPs is D(em)-N-Adj-Num/Q (Table 7.8, repeated from Table 4.16), as shown in (473) below for Dem-N-Adj-Num, (474a) for D-N, and (474b) for wh-N (see Chapter 4 section §4.3 and Dugast 1971; Mous 2003 for further evidence).

D			
Dem	<u>Noun</u>	Adj	Num
Poss			Q
wh			

Table 7.8: Linear order of Tunen nominal modifiers.

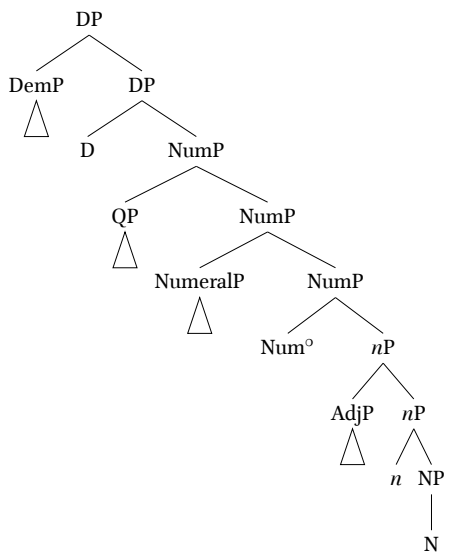
(473) tɔ́éyɛ tɔbanána tɔfítitiə tɔté↓téá tɔ́fandɛ
/tɔ́éyɛ <u>tɔ-banána</u> tɔ-fititiə tɔ-tɛtɛ **tɔ́-fandɛ́**/
DEM.PROX.13 13-banana 13-black 13-small 13-two
'ces deux petites bananes noires'
'these two small black bananas' [JO, 844]

(474) a. [...] **ɔmɔté** <u>mɔndɔ</u> [...]
/ɔ́-mɔté mɔ-ndɔ/
1-one 1-person
'[...] quelqu'un'
'[...] somebody' [PM 1189]

b. **éyáné** <u>mɔndɔ</u> wa ɛŋɔŋɔ [...]
/éyáné mɔ-ndɔ wɔ ɛ-ŋɔŋɔ/
1.which 1-person ASSOC.1 7-politics
'Quel politicien [...]'
'Which politician [...]' [PM 334]

I assume the base structure of DPs in Tunen given in (475) below. Here, quantifiers and numerals are taken to be adjuncts attached to the number phrase (NumP), given that the current data show no clear difference in ordering between the two.[17] As adjectives are obligatorily closer to the root (473), I take these to be adjuncts to the *n*P, i.e., adjoining at a lower level of the structure.

(475)



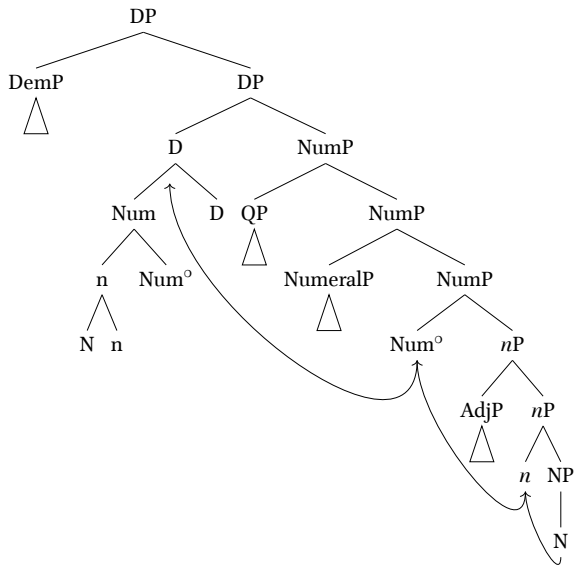
The next step of the analysis is to account for how the surface order of nominal modifiers is generated by movement operations from the base structure in (475). There are two main types of analyses to derive the surface order of nominal modifiers found in Bantu languages within the literature: (i) N-to-D movement and (ii) phrasal movement.

The N-to-D movement approach is characterised by head movement of N up to D. Such an approach has been previously applied to Bantu languages including Shona (S10; Carstens 2017) and Basaá (A43; Bassong 2021) (although see Bruening 2020 and references therein for arguments against it). The application of the N-to-D analysis for the Tunen base structure (475) results in the proposal in (476).[18]

[17] In order to avoid confusion between Num as head of the number phrase NumP and Num as in a numeral modifier, I indicate the head as Num° in the tree structures throughout this chapter.

[18] I represent head movement as resulting in complex head movement with the higher head as a suffix in the same way as discussed for head movement in the verbal domain in Chapter 6.

(476)



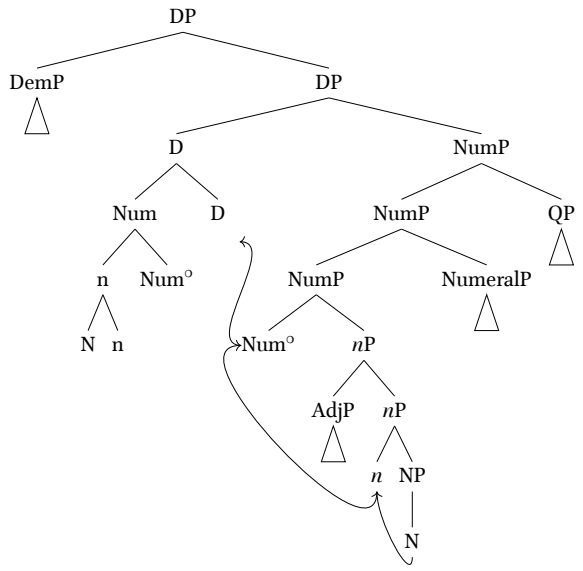
An issue for applying such an N-to-D analysis for Tunen in my account is that I take the indefinite determiner *-mɔté* seen in (474a) above to be the spellout of the D head (Kerr 2020). This determiner obligatorily precedes the head noun and is a separate phonological word (474a), which is not expected if D+N form a complex head (under the proposal of the syntax/morphology interface assumed here; see Chapter 6 for arguments in favour of such an approach within the verb phrase). In other words, the analysis in (476) predicts spell-out of (476) as *mɔndɔ ɔ́mɔté* (N-D) instead of the attested *ɔ́mɔté mɔndɔ* (D-N). Unless *-mɔté* is reanalysed as phrasal, occupying SpecDP (akin to Carstens's 2008 analysis of demonstratives in Swahili), this is a problem for the head movement analysis.[19]

Even if the phrasal analysis of the *-mɔté* determiner is accepted, the head movement analysis must be modified in order for the structure to linearise as D-N-Adj-Num and not *D-N-Num-Adj. One possible solution is to allow for right adjunction of nominal modifiers (as in Carstens 2008, 2017 but against the strict Antisymmetric approach of Kayne 1994). If right adjunction is permitted, then the N-to-D analysis can be adjusted to (477), which generates the correct D-N-Adj-Num order.[20]

[19]Accounting for Tunen demonstratives is however unproblematic for the head movement approach, as they could indeed be taken to be located in SpecDP as phrases, and therefore linearised prenominally.

[20]Note that I also used right adjunction in Chapter 6 for adjuncts in the 'X' position.

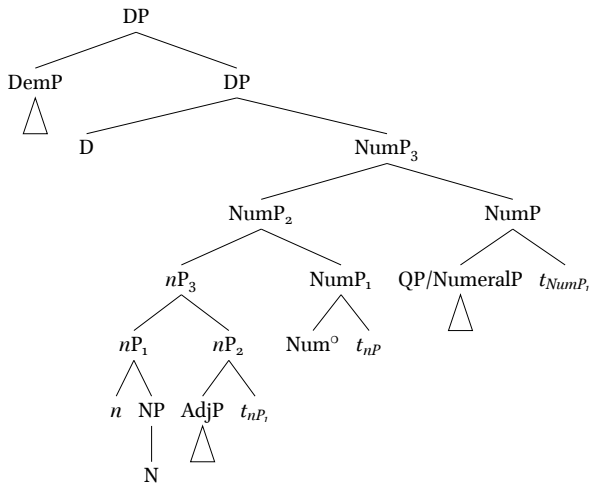
(477)



While this analysis accounts for the word order of contiguous DPs, it makes the prediction that the noun alone cannot be subextracted via phrasal movement, as it is not a phrase. Instead, it is a complex head, predicting that D+N must remain together also in discontinuous DPs. I will show in section §7.4.2 that this is a problematic restriction for attempts to derive Tunen's discontinuous DPs. First, however, I will show the phrasal movement alternative.

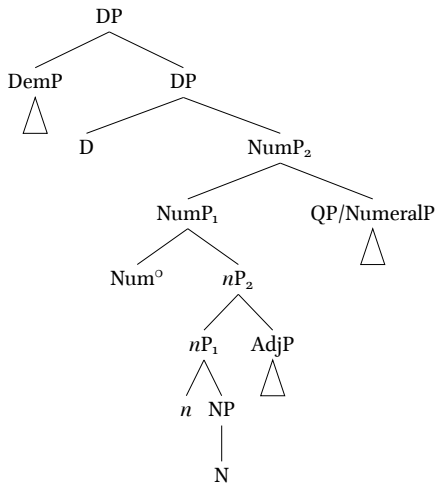
The phrasal movement account involves movement of XP constituents, as has been widely discussed in the literature on nominal syntax crosslinguistically in relation to Greenberg's Universal 20 (see e.g. Greenberg 1963; Cinque 2005; Rijkhoff 1990, 2002). There are different orders of nominal modifiers found crosslinguistically, some more common than others and other orders not being attested at all. Tunen's D-N-Adj-Num order is one of the attested orders, and can be derived in the models proposed in the literature. This is illustrated in (478) below, following Cinque's (2005) approach, which relies on phrasal roll-up (where the phrase must contain the head noun).

(478)



Alternatively, if right adjunction is taken to be possible (again departing from Kayne 1994), then the Tunen DP can be analysed directly as in (479).

(479)



This model makes different predictions about syntactic constituency than the N-to-D analysis in (477) did, as N+D do not form a complex head in (479) and therefore may be split in subsequent movement operations.

Based on the issues with the N-to-D analysis, I take (479) as the working hypothesis for the structure of Tunen DPs. With this model of contiguous DPs in place, we can turn now to its application to the discontinuous DP cases.

7.4.2.2 Application to discontinuous DPs

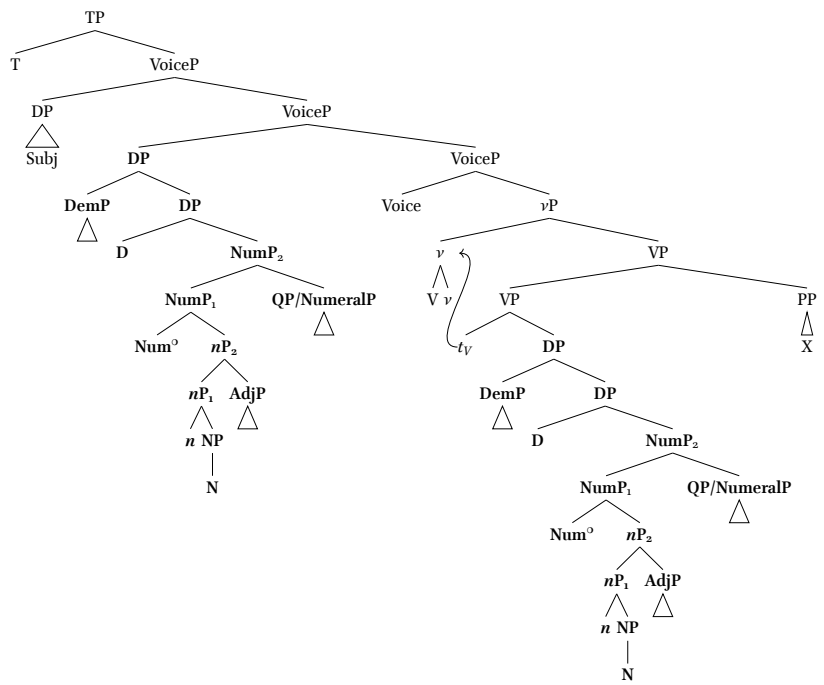
In Chapter 6 sections §6.3-6.6, I presented a working analysis of Tunen clausal syntax in which the object DP A-moved to SpecVoiceP, in order to capture the OV linearisation. In this section, I pursue an analysis in which discontinuous DPs are related to this object movement. The basic idea to be developed is that formally-driven A-movement of the theme object to the SpecVoiceP position can target a subpart of the DP that excludes one or more modifiers, which are thus stranded in the postverbal domain. However, the challenge is how to derive such subextraction. This requires a model of Tunen nominal syntax which shows that the preverbal DP containing N+Mod is a constituent excluding the stranded postverbal modifier.

I assume here for parsimony that the modifier stays in-situ while the object NP moves out — in other words, I will attempt to provide an analysis that does not require an additional movement operation applying to the modifier. An alternative account would be to also extrapose the modifier. Extraposition is crosslinguistically assumed for postposed relative clauses (of the kind also found in Tunen) (e.g. Culicover and Rochemont 1990), which means that such movement is likely available in Tunen at least for relative clauses. One piece of evidence in favour for extending the mechanism of extraposition to discontinuously-positioned modifiers in Tunen is the prosodic diagnostic suggested by Mous, namely that there is a lack of H tone spread from a verb to a following modifier (Mous 2003). However, I noted in section §7.2.5 above that there is no convincing evidence that this is a reliable diagnostic in Tunen, and in any case, it is mostly irrelevant for testing discontinuous DPs due to the fact that numerals and quantifiers take a H-toned agreement prefix for independent reasons. In the absence of prosodic evidence for extraposition, I therefore assume that the modifier may stay in-situ, which I take to be the null hypothesis on metatheoretical grounds for analytical parsimony.

I argued above against a base-generation analysis of Tunen discontinuous DPs and in favour of a movement account, illustrating the copy+deletion and subextraction subtypes. Updating these analyses now with the proposed analysis of the Tunen noun phrase sketched in (479) above, the copy theory looks like (480).[21]

[21] For current purposes, I represent the subject DP only in its base position (see Chapter 6 section §6.5.3 and Chapter 8 section §8.4.2 for discussion of the surface position).

(480)



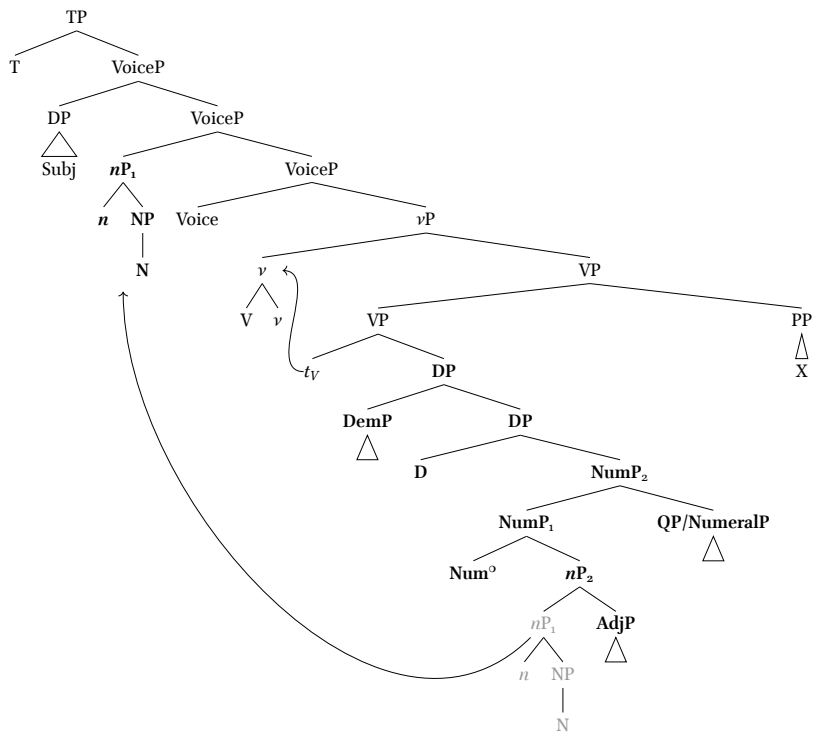
Here, the full DP structure is represented both in the base-generation position of the theme object (complement of V) and in the final landing site (SpecVoiceP). As the structure currently stands, it would predict a linearisation of noun and modifier in both positions, e.g. **N-Adj**-V-**N-Adj**. An extra ingredient is therefore needed, namely an account of ellipsis. The Tunen S-Aux-O-V-Mod construction should be derivable following one's assumed constraints on ellipsis, such as the requirement that only constituents can elide (as has for example been formalised in terms of there needing to be a licensing head containing an ellipsis feature ([E]-features) which triggers ellipsis of its complement; Merchant 2001, 2004). This requirement for ellipsis to target syntactic material is not always assumed for all types of ellipsis, as some authors propose that some types of ellipsis can apply at PF to non-constituents (see Lipták and Güneş 2022 for an overview). However, a restriction to constituents is commonly assumed for noun phrase ellipsis in particular (Yoshida et al. 2012), and is therefore expected to apply in an ellipsis-based account of discontinuous DPs in Tunen.

If this ban on non-constituent ellipsis is indeed valid for Tunen, then the structure in (480) generates some issues. For the lower DP (in which the modifier is taken to be spelled out), it would be possible to elide the *n*P constituent, correctly leaving the modifier in-situ. However, in the upper DP, what needs to be elided in order

to leave only the noun spelled out is not a constituent. The copy+deletion analysis therefore requires either a different theory of constraints on ellipsis or a different model of the DP structure.[22]

With these restrictions in mind, we can consider whether the subextraction approach to movement provides a workable alternative. Under this account, only a sub-XP of the DP A-moves to SpecVoiceP. Again assuming that the noun in a discontinuous DP is the spell-out of the *n*P constituent, the construction can be modelled as in (481).

(481)



Because this account does not involve movement of the whole DP to SpecVoiceP, no account of ellipsis is required beyond the standard assumption that the moved constituent is not pronounced in its base position. The subextraction analysis is therefore better able to account for the current data on Tunen discontinuous DPs.

[22]The consequences of such a restriction to constituent ellipsis are more serious when looking at the possibilities for discontinuous DPs in DPs with multiple modifiers, which I return to in section §7.5.1 as an important test case for further work.

A key advantage of the model in (481) is that it is able to derive the basic N-V-Mod construction through the independently-motivated mechanism of object movement. The presence of discontinuous DPs can therefore be related to Tunen's recent innovation of OV order (Mous 2005; Kerr 2024; Chapter 6 section §6.8).

The subextraction account is also able to account for variation in the grammar, as speakers may be able to move constituents larger than *n*P. This means that speakers who allow for N-Adj-V constructions can be understood simply as subextraction of NumP or DP rather than *n*P.

One question for the formalism is the nature of the formal movement trigger that derives the object movement introduced in Chapter 6 and considered here to be able to target different constituents within the DP. In other words, a formal model of syntactic features in Tunen needs to show how a Probe can find and attract a lower XP within the DP as Goal (if the movement is triggered by a feature on another head) or how the movement feature can project/fail to project to the entire DP (if the movement feature is part of the object).

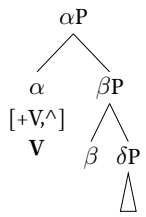
A final question considers licensing. In Chapter 6, I proposed that Tunen objects move for licensing reasons. However, some V-O-Mod constructions were seen in this chapter to be judged grammatical, possibly due to a preference for iconic syntactic contiguity overruling the general requirement for Tunen nominal objects to appear preverbally. On the assumption that all nominals must be licensed, this raises a puzzle. In the analysis presented here, I take the V-O-Mod constructions to be the spell-out of the in-situ object DP, which should not be licensed (otherwise, other objects would not need to move at all). An alternative analysis would be to license the objects by movement to another position. I leave the in-situ spell-out analysis as the null hypothesis; a formal account of licensing would need to consider the degree of variation in speakers' judgements regarding V-O-Mod versus O-Mod-V constructions and test further whether the DP in V-O-Mod constructions is in-situ or extraposed.

7.4.3 Proposal for Tunen

The consequence of the proposal in (481) is that the object movement mechanism must be able to select only the XP containing the object, at the exclusion of the larger XP projection containing the nominal modifier. This is significant particularly for the ^-movement analysis from Germanic FOFC accounts, in which any head with the ^-feature must trigger movement of the entire complement. Such an account does not allow the flexibility of a ^-carrying head to move a sub-XP of its complement. This inability for roll-up movement to strand a modifier was shown in Chapter 6 section §6.5.5 in abstract terms, as repeated in (482)-(484), where (484)

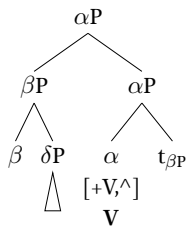
shows it is impossible for the roll-up movement operation to leave any material within the complement of a head carrying the movement trigger [+V, ^].

(482)

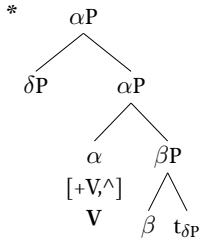


↓

(483)

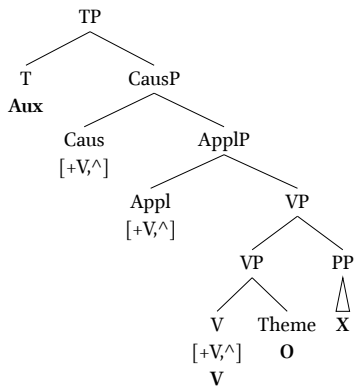


(484) *

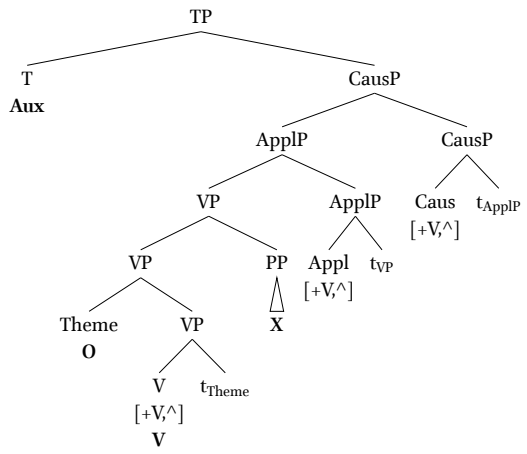


When applied to the Tunen discontinuous DP cases, the restriction is therefore that any modifier present on the theme object DP must move together with the rest of the DP due to the ^-feature on V, as in (485)-(486).

(485) →

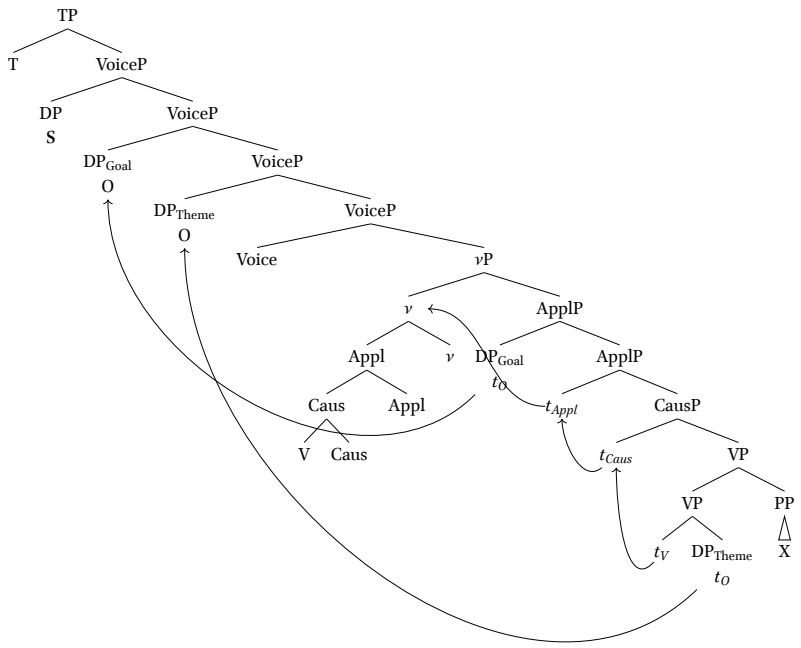


(486)



The inflexibility of the roll-up movement approach regarding whether all material in the complement moves is a key issue with it. Given we have seen other issues with the analysis in Chapter 6 section §6.5.1-6.5.4, I conclude that the verbal head movement+object movement analysis is preferable, as repeated in (487).

(487)



Here, we can understand the internal structure of the DP theme object as in (481) above, where discontinuous DP constructions arise when speakers A-move a smaller phrase within the DP to SpecVoiceP, e.g. *n*P (for N-V-Mod constructions) or NumP (for speakers who allow N-Adj-V-Mod).

7.5 Points for further study

Having drawn up a basic analysis based on the available field data testing for the extent to which discontinuous DPs in Tunen reflect IS, I will highlight in this section points of interest for further refinement of the model.

7.5.1 Extension to different modifiers

An important question to consider is why discontinuity is restricted to certain nominal modifiers, as seen in section §7.3. A desideratum of the model is for these syntactic restrictions to be explained by the structure of the DP. I propose that the Tunen discontinuous DP distribution reflects the fact that modifiers such as numerals and quantifiers are further from the head noun than adjectives are (488) (cf. (479)), and therefore harder to split.

(488) [Num/Q [Adj [N]]]

This matches the finding that numerals and quantifiers split more than adjectives, although the difference cannot be categorical (at least when comparing different speakers), as discontinuously-positioned adjectives are also attested. The variation can be captured in the subextraction account as subextraction of the *n*P, NumP, or DP constituents.

We also saw in section §7.3.2 that associatives cannot be split from the head noun (*N ... Assoc N). I suggest that the unavailability of discontinuous DPs with associatives similarly relates to the structure of the Tunen DP, with associatives closer to the NP than numerals. This proposal is based on the relative order of modifiers and associatives, as exemplified in (489) below (syntactic category line added).

(489)

bilíkə́	bɛ́	mɛ́kɔ	bɛ́fándɛ
8.widows	ASSOC.8	9.leopard	8.two
N	Assoc	N	Num

'The leopard's two widows' (Dugast 1975, via Isaac 2007:44, adapted)

This argument requires adjectives to canonically follow associatives, given that adjectives can be discontinuous. I leave the formal model of associatives in Tunen to further work on the validity of this empirical claim.

7.5.2 Extension to multiple modifiers

A second extension of the model that requires further empirical investigation relates to the behaviour of Tunen DPs that contain multiple modifiers. One possibility is that the movement in (481) is not possible when multiple modifiers are found, following the restrictions on left branch extraction with multiple adjectives reported in Bošković (2005). However, assuming that no such restrictions apply in Tunen, there are still two logical possibilities for discontinuous DPs, as shown in (490).

(490) a. O-V-Mod-Mod

b. O-Mod-V-Mod

The first order, O-V-Mod-Mod, was found in the field data, as shown in (491).

(491) Context: There are four children, all different – one is very studious, one is very naughty, and so on. You therefore don't expect them all to do their homework, but this time, they all did.

a. baná **bá ná** masɔ́ma kɛaka **bəkimə bə́nis**!

/ba-ná	**bá**	**ná**	ma-sɔ́ma	kɛ́á-aka	**ba-kimə**	**bá-nisə**/
2-child	SM.2	PST2	6-homework	do-DUR	2-all	2-four

'Tous les quatre enfants ont fait leurs devoirs !'
'All four children did their homework!' [EE+EB 2223]

b. baná **bá ná** masɔ́ma kɛaka **bə́nisə bəkim**!

/ba-ná	**bá**	**ná**	ma-sɔ́ma	kɛ́á-aka	**bá-nisə**	**bá-kimə**/
2-child	SM.2	PST2	6-homework	do-DUR	2-four	2-all

'Tous les quatre enfants ont fait leurs devoirs !'
'All four children did their homework!' [EE+EB 2224]

Given that Tunen has pull splits (section §7.3.2), the second order (O-Mod-V-Mod) would be a form such as N-Adj-V-Num or N-Adj-V-Q. Unfortunately, none of the elicitation data or fieldwork natural speech data show a noun modified by both an adjective and a numeral. I leave a study of whether such constructions appear in Tunen to other work, for example in study of the Dugast (1975) text corpus. As such constructions are likely very low frequency in discourse and as negative evidence is

important for testing the predictions of the analyses to be discussed in this chapter, additional elicitation would be very useful.

A related possibility regards prenominal modifiers, such as the indefinite determiner or the possessive pronoun. Again, given that Tunen only allows pull splits, we may ask whether D-N-V-Mod structures or D-V-N(-Mod) structures are possible. In searching my data, I found that Poss-N-V-Q was possible (492a). A contiguous Poss-N-Q-V order was provided as the first answer (492b), and both the discontinuous patterns N-V-Poss-Q and N-V-Q-Poss and the contiguous postverbal V-Poss-N-Q orders were all considered ungrammatical (492c)-(492e).

(492) Context: A farmer loses all their horses, but, by a stroke of luck, manages to find them all.

a. mɛ ná Húélé hóli é↓séá mɛ́ ná **biá↓míá bɛhɔ́sɛ** bɔŋɔ **bikim** !

/mɛ	ná	Húélé	hólíə	ɛ-séá	mɛ́	ná
SM.1SG	PST2	God	thank	SM.7-say	SM.1SG.SBJV	PST2

biá^{L}míá	bɛ-hɔ́sɛ	bɔ́ŋɔ́	bɛ́-kimə/
PRN.POSS.1SG.8	8-horse	find	8-all

'Je remercie Dieu comme j'ai retrouvé tous mes chevaux !'
'I thank the Lord that I've found all my horses!' [EE+EB 1827, 2226]

b. [...] é↓séá mɛ́ ná **biá↓míá bɛhɔ́sɛ bikimə** bɔŋɔ. [EE+EB 1826]

c. *[...] é↓séá mɛ́ ná **bɛhɔ́sɛ** bɔŋɔ **biá↓míá bikimə**. [EE+EB 1829]

d. *[...] é↓séá mɛ́ ná bɔŋɔ **biá↓míá bɛhɔ́sɛ bikimə**. [EE+EB 1828]

e. *[...] é↓séá mɛ́ ná **bɛhɔ́sɛ** bɔ́ŋɔ́ **bíkimə biá↓míá**. [EE+EB 2225]

Unfortunately, I lack the relevant data to investigate this properly, and so must leave this to be tested in further work. The availability of this type of multiple modifier construction within a discontinuous DP construction is important for testing the predictions of the subextraction analysis I propose here as the null hypothesis. If the judgements in (492a) turn out to be robust, then the subextraction analysis given in (481) needs to be adjusted in order to allow for the prenominal modifier to move along with the head noun, or else an alternative analysis should be proposed, such as extraposition of the postnominal modifier and/or evacuation movement of the postnominal modifier followed by remnant movement of the whole DP. I leave this to further work.

7.5.3 Discontinuous modifiers within the postverbal domain

While (426) above showed that discontinuously-positioned modifiers can precede other postverbal material (Isaac 2007:61-2), they can also follow other postverbal material, as in (493).

(493) bánɛ ɔ́ ndɔ **ɛndɔ́mbá** sinə hɔ́yɛ́ **ɛ́lálɔ́**?
/bánɛ ɔ ᴴndɔ **ɛ-ndɔ́mbá** sinə hɔ́yɛ́ **ɛ́-lálɔ́**/
is_it SM.2SG PRS 4-sheep see DEM.DISC.LOC 4-three
'Est-ce que tu vois trois moutons-là ?'
'Do you see three sheep over there?' [PM 917]

I expect that the nominal modifier would more often appear immediately after the verb, as a more iconic order (due to the higher degree of contiguity with the head noun). Whether such a tendency is found is something to test on a larger natural speech corpus. In terms of the analysis, there is a question as to whether the numeral is extraposed in (493) but left in-situ in other cases. This relates to a more general open question as to ordering preferences with the Tunen postverbal domain (cf. Chapter 6 section §6.2.7 on the X slot).

7.5.4 Discontinuous subject DPs

While my data mainly have discontinuous modifiers that modify the object (S-**O**-V-**Mod**), it is also possible for discontinuous modifiers to modify the subject (**S**-O-V-**Mod**), as seen above in section §7.3.1 and repeated in (494)-(496).

(494) Context: QUIS dialogue task, concluding the explanation of why three people are gathered around a tree.
mhm. ɔ́↓há **bɛndɔ** bá ndɔ wɛɛ́ya sinə **balal**.
/mhm ɔhá bɛndɔ ba ᴴndɔ wɛ́ɛya sinə **bá-lálɔ́**/
PTCL for_that 2.person SM.2 PRS PRN.1 see 2-three
'Mhm. C'est pour ça que trois gens le regardent.'
'Mhm. That's why three people are looking at him.' [PM 597]

(495) Context: Someone mistakenly says that not all the children did their homework (knowing that some are more studious than others).
bɔ́ɔ, **bá** ná masɔ́ma kiak **bə́kim**.
/bɔ́ɔ **bá** ná ma-sɔ́ma kɛa-aka **bá-kimə**/
no SM.2 PST2 6-homework do-DUR 2-all
'Non, c'est tous qui ont fait les devoirs.'
'No, *all* of them did the homework.' [EE+EB 1824]

(496) (Ɔ) ɛnɔ́mɛ ɔyɛ́á yɛ́ ndɔ ákána ɛndɛndɛ́lɛ **miɔkɔ́** yɛ́ lɛ **ɛ́lál**.
/ɔ ɛ-nɔ́mɛ ɔyɛ́á yɛ́ ᴴndɔ ákána ɛndɛndɛ́lɛ **mi-ɔkɔ́** yɛ́
PREP 7-road REL.7 SM.7 PRS leave straight_on 10-chicken SM.10
lɛ́á **ɛ́-lálɔ́**/
be 10-three
"Sur la route qui va tout droit il y a trois poules."
"The road that goes straight on has three chickens." [PM 686]

As discussed above in relation to Isaac's (2007) study, discontinuous modification of subject DPs is also attested in the Dugast (1975) texts, e.g. in the dependent clause in (497).

(497) ǎ **mʷɔ́sɛ** nā-tomba **màlānùʔ** inyə́ na-fɛ̀k á sɛ̀ʔ [...]
SUB days PST-pass five mother PST-think 3S:SM that
'When five days passed, the mother thought, "..." '
(Dugast 1975, as cited in Isaac 2007:150)

All examples of discontinuous subject DPs I have seen are with a postverbal numeral or quantifier. However, I do not have any negative data to rule out the possibility of a discontinuous subject DP with a postverbal adjective; the possibility for discontinous placement of adjectives modifying subjects needs to be tested.

Note finally that while discontinuous DPs are available for subjects, they are not the only option, as contiguous quantified DPs are also found (498).

(498) baná bə́kim (bə́nis) bá ná masɔ́ma kiak!
/ba-ná **bá-kimə** **bá-nisə** bá ná ma-sɔ́ma kɛa-aka/
2-child 2-all 2-four SM.2 PST2 6-homework do-DUR
'Tous les (quatre) enfants ont fait leurs devoirs!'
'All the (/All four) children did their homework!' [EE+EB 1816-7]

The availability of discontinuous DPs with subjects in Tunen is interesting given that similar constructions were reported in Australian languages in recent work by Schultze-Berndt (2022). Schultze-Berndt argues that such constructions provide evidence against an approach where discontinuous DPs are driven by contrastive focus on a modifier, with thetics shown to be a possible discourse context. However, Schultze-Berndt argues that such thetic cases do still preserve iconicity in that they partition a thetic sentence as a monolithic entity, with the subject and modifier at each end, thus preventing a topic-comment split.

While such an argument could be extended for some of the Tunen cases, there are differences in the data. For example, the availability of discontinuous subject DPs in Tunen extends beyond the predicate types mentioned in Schultze-Berndt (2022), which were restricted to verbs of appearance. Moreover, Schultze-Berndt's (2022) study only shows discontinuous DPs with intransitive verbs, while the Tunen data show that the construction is also possible with transitives (see e.g. (498)). The Tunen data therefore provide a bigger challenge to the Contiguity Principle than the data in Schultze-Berndt (2022) do. They also pose a challenge to the analysis sketched in (481), because subjects are taken to be base-generated in SpecVoiceP, meaning that any modifier should be linearised before the verb. The analysis here therefore only applies to objects, with further work needed on the syntax of subjects in Tunen (which I will return to in Chapter 8 section §8.4.2). The study of subjects may give evidence against the null hypothesis of stranded modifies that I presented here and in favour of an extraposition account of nominal modification in Tunen. This evidence is relevant for evaluating a recent proposal of nominal morphosyntax in Bantu languages, which I turn to in the next section.

7.5.5 The comparative Bantu context

In terms of the comparative picture, the recent *Adnominal Modifier Apposition and Reintegration* (AMAR) hypothesis proposed by Van de Velde (2022) states that Bantu languages vacillate between structures with nominal apposition and reintegration into the noun phrase, a diachronic scenario that explains the various typologically-rare orders of nominal modifiers attested in the Bantu language family (Rijkhoff 1990; Van de Velde 2005, 2019). As a simplified illustration, at first there can be a [N Mod] structure, with apposition resulting in an [N] [Mod] structure, with the modifier then being able to be reintegrated into the noun phrase, which may leave traces such as a prosodic boundary (see Van de Velde 2022:903 for the complete illustration, as applied to an adjectival modifier).

From this perspective, Tunen discontinuous DPs could be taken as a more extreme case of the apposition stage, where instead of a modifier being appositional

but string-adjacent to the noun ([N] [Mod]), it has been split from the noun, resulting in a discontinuous DP construction ([N] ... [Mod]). Although I did not follow an extraposition analysis of Tunen modifiers under considerations of analytical parsimony, further investigation into apposition in Bantu languages could provide more evidence to substantiate an extraposition analysis of Tunen modifiers. If such an account proves to hold, then Tunen modifiers would be moved from their base-generation site rather than the spell-out of the in-situ position, as I proposed here as the null hypothesis. Here, it would be useful to apply diagnostics used to test for appositional structures in other Bantu languages to the nominal domain in Tunen, in order to see if the same AMAR mechanism can be identified.

7.6 Conclusion

In summary, this chapter has considered the surprisingly frequent S-O-V-Mod discontinuous DP construction in Tunen, which appear to violate the Contiguity Principle (406) in having a split between syntactic structure and semantic/pragmatic interpretation. I showed that such constructions are higher frequency in Tunen than expected from other languages and are not restricted to the discourse context of contrastive focus on the nominal modifier. Instead, they are pragmatically-neutral in Tunen. I then showed which material may be discontinuous. Next, I considered the two possible types of formal syntactic analysis: apparent discontinuity vs discontinuity via subextraction/copy+deletion. After showing that an adverbial approach does not capture the Tunen data, I presented an account of true discontinuity, where the postverbal modifiers are left in-situ while the noun raises to a *v*P-internal position via formally-conditioned object movement. I showed that the discontinuous DP data is a serious challenge to the roll-up movement account of OV order discussed in Chapter 6 and argued instead for the head movement+object movement approach.

Because I argue that the discontinuous DP construction is derived through the independent mechanism of object movement, its rarity in Bantu can be explained straightforwardly by the lack of OV languages in the family. Additionally, a parallel can be made with the appositional structures seen in other Bantu languages. If the head movement+object movement analysis with stranding of the in-situ modifier is correct, we may then expect to see other languages with pragmatically-neutral discontinuous DPs of the Tunen kind in families where OV has been innovated from a VO base structure.

Looking beyond Bantu, such S-O-V-Mod discontinuous DPs are not widely reported in the general linguistics literature. Comparable constructions are however

found in Eastern Chibchan languages such as Cabecár (Stavros Skopeteas, p.c.), as illustrated in (499) below.

(499) Tulú te **dú** sṵ-ą̃ **bo-tkö.**
Tulu ERG bird see-PFV two-CL.FLAT
'Tulu saw two birds.' (Cabecár, Skopeteas fieldnotes ms.)

Here, just like Tunen, the theme object is preverbal while the numeral modifier is postverbal, showing an S-O-V-Mod construction. Interestingly in comparison to Tunen, some Chibchan languages show OV/VO variation, with OV the basic word order that has been reconstructed to the proto-language (Constenla-Umaña 1991:38; Constenla-Umaña 2012:407; Quesada 2007:29-31). Further investigation into discontinuous DPs in languages such as Cabecár may therefore provide further detail on the validity of the analysis of Tunen discontinuous DPs as deriving from object movement from an underlyingly VO structure. A relevant empirical question here is whether OV languages such as Cabecár allow for discontinuous DPs with adjectival modifiers as well as numerals/quantifiers.

Another point of crosslinguistic interest is the extent to which the Contiguity Principle holds. While many languages use discontinuous DPs in the information-structural context of a difference in discourse role between the noun and its modifier, this definition has been found to be too restrictive. In Schultze-Berndt's (2022) study of discontinuity of modifiers modifying subjects in thetics, she shows that the discourse condition of theticity can also license discontinuity (which she then takes to be a form of iconicity). My Tunen data show that other discourse possibilities beyond contrastive focus on the noun or modifier and theticity are possible. The Tunen discontinuous DPs therefore provide an interesting challenge to the Contiguity Principle in not being explainable by an difference in IS interpretation between the noun and modifier.

CHAPTER 8

Discussion and conclusion

8.1 Summary

8.1.1 Preliminaries

This thesis presented the results of a fieldwork study on the Bantu (Niger-Congo) language Tunen (ISO 639-3 [tvu]; Guthrie no. A44; Guthrie 1948, 1967-1971; Maho 2003, 2009; Hammarström 2019), spoken in Cameroon by approximately 70,000-100,000 people (Mous 2003; Eberhard et al. 2022) and known to have unusual syntactic properties (Dugast 1971; Mous 2003, i.a.). The introduction (Chapter 1) presented the central research question of the thesis, repeated in (500).

(500) **Central research question:**
To what extent is Tunen's syntax influenced by information structure?

The thesis continued with conceptual background on information structure, syntactic theory, comparative Bantu linguistics, and the Tunen language (Chapter 2), followed by discussion of the research methodology employed, namely in-situ fieldwork in Cameroon and the analysis of secondary sources (Chapter 3). Chapter 3 also provided information on the archiving of the data, with explanation of how the recordings can be accessed.

8.1.2 Grammatical overview

The next part of the thesis presented an overview of Tunen grammar (Chapter 4). This overview served to describe the core phonological and morphosyntactic features relevant for understanding the data presented in the rest of the thesis. I also highlighted deviations from previous authors' work on Tunen, most notably in the orthographic conventions adopted in relation to the sound system, but also in terms of previously unreported syntactic phenomena, such as the relative order of nominal modifiers.

The next chapters of the thesis comprised of studies on the interaction between syntax and information structure that served to address the research question introduced in (500) above. I briefly summarise each of these studies below before reflecting on the implications from the three taken together.

8.1.3 The expression of information structure

Chapter 5 asked how information structure is expressed in Tunen. Firstly, evidence was shown for S-Aux-O-V-X as the pragmatically-neutral word order, i.e. Tunen's canonical word order. Next, departures from this canonical word order were considered, including the VO constructions previously described for Tunen in Mous (1997, 2003, 2005, 2014) and picked up on by Bearth (2003); Güldemann (2007); Downing and Marten (2019) a.o., which were found much less frequently in my data than expected based on Mous' description. I then discussed the marker *á*, termed a contrast marker in Mous (1997, 2003) as part of a monoclausal analysis. I argued for an alternative analysis of the *á* marker, presenting evidence for *á* as the identificational copula as part of a biclausal cleft construction, with only limited evidence for it occuring as a marker of contrast. I then discussed topic expression, showing that topics may be left unmarked in Tunen or expressed in the clausal left periphery (marked by a preposition or a marker that function elsewhere as the conditional marker), with the right periphery available for afterthoughts. Next, as Tunen lacks a syntactic passive construction to demote the agent, functional equivalents of the passive were investigated. I discussed two relevant constructions, namely verbal participles formed with *-átɔ* PTCP and the *bá* SM.2 impersonals, commenting additionally on the middle voice prefix (cf. Mous 2008). The final part of the chapter considered how referent expression varies over discourse, as conditioned partly by IS (in terms of the accessibility/givenness of the referent; Ariel 2001; Gundel et al. 1993) but also by independent factors such as valency requirements of certain predicates. The chapter ended with a brief reflection on how Tunen's expression of IS compares to other Bantu languages, noting the relatively low degree of IS influence.

8.1.4 OV word order and derivational disharmony

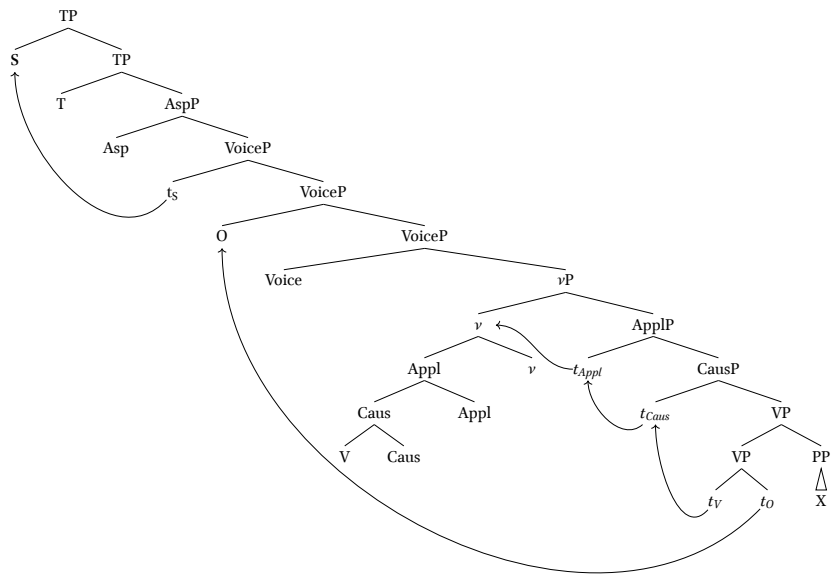
Chapter 6 considered Tunen's OV word order, which was shown to be more specifically characterised as S-Aux-O-V(-X), as illustrated in the thetic example (501).

(501) Context: You are at the riverside outside the village and see an elephant, which very rarely occurs, so run to tell the others.
mɛ nɔ́ misəku siəkin !
/mɛ nɔ́ misəku siəkinə/
SM.1SG PST1 3.elephant see.DUR
'Je viens de voir un éléphant !'
'I just saw an elephant!' [PM 316]

This OV word order is unusual from a comparative perspective given the VO word order in surrounding languages (Bearth 2003; Creissels et al. 2008; Dugast 1971; Mous 1997, 2003, 2005, 2014). In languages of West and Central Africa, OV has previously been considered to be a TAM or IS-conditioned variant of an unmarked VO word order (see e.g. Güldemann 2007, based on data from Mous 1997). By using both natural speech data and elicitation controlling for discourse context, I showed that the Tunen S-Aux-O-V-X word order pattern is in fact consistent across TAM contexts, IS contexts, and found with different clause types and different types of objects. A key finding is therefore that S-Aux-O-V-X should be considered the pragmatically-neutral word order in Tunen. I noted how this finding contrasts with expectations from other Niger-Congo languages of the Benue-Congo subgroup and discussed the implications for a historical-comparative analysis.

Chapter 6 then continued by developing the first formal analysis of Tunen syntax. I highlighted how S-Aux-O-V-X is of theoretical interest as an instance of disharmonic clausal word order, with a head-initial TP (**Aux**-V) dominating a head-final VP (O-**V**). Working within the generative syntax framework, I drew upon three types of analyses proposed for clausal disharmony crosslinguistically: roll-up movement driven by a movement feature (analysis type 1; see e.g. Sheehan 2013; Sheehan et al. 2017; Roberts 2019 on Aux-O-V in Germanic); base-generation of OV order (analysis type 2; cf. Haider's 2010; 2013 Basic Branching Constraint and Sande et al. 2019 on Aux-O-V in the Mande languages of West Africa); or verbal head movement + object movement (analysis type 3; modified from standard analyses of Aux-V in Bantu). After ruling out analysis type 2 on the basis of verb height diagnostics in Tunen, five further diagnostics on verbal derivation and clausal syntax were evaluated. I showed that these diagnostics provide evidence in favour of analysis type 3 over analysis type 1. This resulted in the basic formal model given in (502) below.

(502)

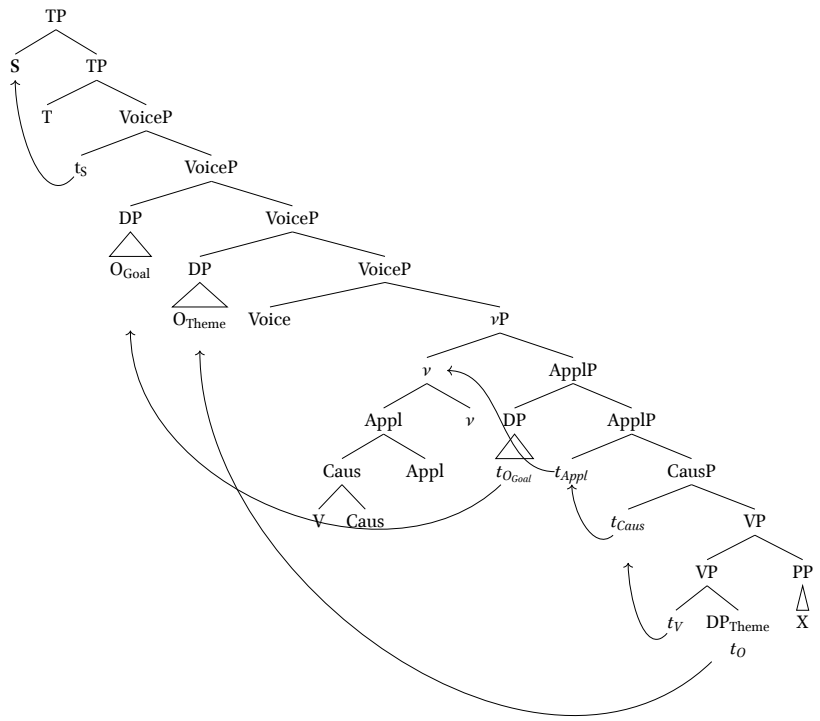


This analysis of Tunen syntax therefore involves two movement operations: (i) head movement of the verb up to *v* (V-to-*v* movement), and (ii) phrasal movement of the object to the innermost specifier of VoiceP. The verbal head movement analysis matches other generative analyses of Bantu verbal morphosyntax in that Bantu verbal suffixes are argued to be built up by head movement (Julien 2002; Ngonyani 2000; Wasike 2007; Van der Wal 2009, 2022; Zeller 2013a), but differs in that the head movement stops before T/Asp. I showed that this lower degree of verb movement correctly predicts the lack of aspectual encoding on the final vowel (FV) suffix in Tunen, in contrast to what is seen in canonical Bantu languages (cf. Good 2022). I also highlighted how this analysis allows for the innovation of preverbal objects and the position of objects relative to in-situ subject pronouns, thus making correct empirical predictions about Tunen's unusual syntax.

After presenting this basic model, I discussed the extension to ditransitive constructions, which can be captured by generating the Goal object in SpecApplP and moving it to a higher SpecVoiceP position (presumably also for licensing requirements). I also motivated the analysis of the subject in Tunen being base-generated in the outermost specifier of the verbal phase, i.e., SpecVoiceP, which I motivated on the basis of a construction with a split in subject expression between the subject marker and a co-referential pronoun that I argued was spelled out in the base

position. This resulted in the updated analysis in (503).

(503)



One of the five tests considered to tease apart the analyses was the ability for the analysis to account for a construction in Tunen in which a nominal modifier appears postverbally while the object is preverbal (S-O-V-Mod). I showed that these constructions pose a serious challenge for the roll-up movement analysis, as such an account incorrectly predicts that the modifier must move together with the rest of the object. Because of the significance of this construction for the evaluation of the formal models, I then turned to focus on discontinuous DPs as the next chapter.

8.1.5 Discontinuous DPs

Having built up this basic formal model, the next study (Chapter 7) looked in more detail at discontinuous noun phrases (*discontinuous DPs*), which were raised in Chapter 6 as a challenge for the formal analyses. The presence of such discontinuity in Tunen is interesting as discontinuous DPs are considered to be "very rare"

in Bantu, reported to be found in only 2 other of the 555-some Bantu languages (Van de Velde 2022:909). In Tunen, these constructions take the form noun-verb-modifier (**N-V-Mod**), as in (504).

(504) Context: 'What do you see?'
mɛ́ ndɔ **tunoní** sinə **tɔ́lál.**
/mɛ ʰndɔ **tɔ-noní** sinə **tɔ́-lálɔ́**/
SM.1SG PRS 13-bird see 13-three
'I see three birds.' [EO 225]

I showed that this construction is found for numeral, quantifier, and adjectival modifiers in Tunen; relative clauses modifying objects may also appear postverbally (likely for independent reasons related to extraposition), but associatives and the question word 'how many?' cannot be discontinuous from the head noun. The availability of the construction for adjectives and multiple types of numerals and quantifiers is significant in comparison to quantifier-float constructions found in other languages, which seem to be limited to a more restricted set of categories and can therefore be analysed by different formal models that do not readily transfer to the Tunen data.

While discontinuous DPs are generally thought to be conditioned by IS and are often analysed in generative frameworks as being formed by A'-movement of head or modifier to the clausal left periphery (see e.g. Fanselow and Ćavar 2002; Fanselow and Féry 2006; Hale 1983; Louagie and Verstraete 2016; Lochbihler 2009; Skopeteas et al. 2020), I showed that discontinuous DPs such as (504) in Tunen are (i) pragmatically-neutral (i.e., available for multiple different IS contexts), and (ii) formed through the independently-motivated A-movement of the object to a low position in the *v*P domain (motivated by licensing; L-movement), not by A'-movement. The O-V-Mod construction was shown to be difficult to account for in a roll-up analysis of the Tunen clausal domain, as such an account predicts that postverbal modifiers move together with the head noun. An alternative analysis whereby the modifiers are base-generated as outside of the DP as adverbial adjuncts was likewise ruled out on the basis of language-internal morphosyntactic and semantic evidence. The discontinuous DP constructions therefore provide key evidence in favour of the verbal head movement + object movement analysis of Tunen presented in (502) above.

8.2 Implications

On the basis of the findings from these three chapters, I conclude in answer to the central research question in (500) that Tunen syntax shows a low degree of IS influence for a Bantu language, with grammatical roles such as subject versus object having much more influence than discourse roles such as topic and focus. This reliance on grammatical role over discourse role is discussed for word order in Kerr et al. (2023), where we argued that Tunen shows the highest degree of grammatical role-oriented word order of the languages of the BaSIS sample. I turn now to the implications of these findings for this thesis' more general research question regarding the extent of influence of IS on Tunen's syntax.

8.2.1 The strong non-influence of IS hypothesis

The central research question asked the extent to which Tunen syntax is influenced by IS, with different possible answers ranging from a complete lack of influence to full determinism (Chapter 2 section §2.3.7). Based on the results presented in this thesis, I conclude that Tunen lies much closer to the former extreme than the latter. In this way, the results are largely compatible with the strong hypothesis that Tunen syntax has little influence from IS, as formulated in (505).

(505) **Strong non-influence of IS hypothesis**
Tunen syntax is not influenced by IS; IS features and positions are not required within the syntactic analysis.

This hypothesis is based on the empirical findings that certain constructions in Tunen previously thought to be conditioned by IS (such as OV word order and discontinuous DPs; Chapters 6-7) are in fact compatible with multiple different IS contexts, frequently being given as the first answer in elicitation and also being attested in natural speech data. In this way, the IS context is not deterministic, and other factors — such as grammatical role relations — appear to be more important for determining the choice of syntactic construction, and perhaps the only factors required for a complete formal analysis. The null hypothesis is therefore that Tunen syntax can be modelled without IS features or IS positions in the syntax.

While I take this strong hypothesis in (505) to be on the right track, I propose it along the lines of similar strong hypotheses within the Minimalist framework, which are taken not to be absolute truths but attempts to form the simplest analysis possible (Chomsky 1995). In other words, (505) reflects the metatheoretical stance that if an analysis of Tunen syntax can be made without IS features and positions, this is preferable, as the data available show little evidence that Tunen grammar

pays attention to these factors in its syntax. This fits into the metatheoretical stance that an acquirer would not need to suppose IS notions being active in the syntax on the basis of the input received (Chapter 2 section §2.3.5).

Within the context of research on syntax/IS crosslinguistically, a key question is whether any language can show complete independence between syntax and IS, given that constructions such as left-dislocation of topics and the use of clefts for (contrastive) focus appear to be universal (see e.g. Gundel 1988). In this sense, Tunen would not be at the absolute logical extreme of no influence of information structure, but perhaps at the extreme in terms of what is attested in human languages. I discuss this here for clefts and question formation.

Starting with clefts, a question for formal models is whether constructions such as clefts require IS-related features or positions in the model in order to be accounted for, as for example seen in approaches to focus that derive information focus as the absence of marking and contrastive focus as the presence of a [+exhaustive] (but crucially not a [+focus]) feature, meaning that the relationship with IS is only indirect, rather than encoded as a syntactic feature (as in Horvath's 2005; 2007 account for the syntax of foci in Hungarian; see e.g. É. Kiss 2009 for an overview). In terms of the presence of clefts in Tunen, this is unsurprising given the commonality of clefts crosslinguistically (Féry and Ishihara 2016b). I do not therefore commit to a particular formal analysis of clefts here, as the analysis of biclausal clefts is more a question of one's analytical preferences than one that will have a bearing on the answer to this research question.

Similarly, wh-movement can be analysed as driven by a [wh] or [Q] feature, with movement to a general SpecCP position rather than an IS-specific focus position in the clausal periphery (as conditioned by an IS-specific [focus] feature). This means that the presence of ex-situ wh-questions in Tunen does not necessarily imply a sensitivity to a notion of 'focus' in the syntax and would therefore be compatible with an account in which IS is not part of the syntax (as in e.g. Fanselow 2006). However, the finding that wh-questions are formed ex-situ in Tunen shows that the language *does* have A'-movement, just not (necessarily) any A'-movement operations driven by an IS feature.

One way to provide argumentation against the strong form of (505) is further study on the extent to which alternative constructions are available in Tunen besides the ones presented here. For example, we saw a degree of word order variation in Chapter 5 section §5.3 and regarding the contiguity versus discontinuity of noun and modifier in Chapter 7. As these constructions are less frequently attested, the extent to which their use in fact depends on conditions such as IS and prosodic weight remains a topic for further research. It could be the case that there are in fact IS contexts which favour these alternative constructions, meaning that

IS *does* exert influence on Tunen syntax, only in terms of preference for a particular construction rather than in terms of absolute acceptability of the construction. To arrive at a more detailed understanding of the degree of IS influence on Tunen syntax, a different type of dataset is therefore needed than what is currently available, namely a much larger corpus of natural speech, ideally supplemented by elicitation/experimental data from a much larger number of speakers. Such a dataset could be used to investigate to what extent the grammaticality and infelicity judgements found for the speakers in my field research are variable across speakers and to what extent such non-deterministic preferences can be identified, thereby confirming or falsifying the strong hypothesis present in (505).

In this way, it is important to bear in mind that the conclusion of this thesis should not be that IS has *no* effect on Tunen syntax, in the same way that there is likely no language in the world in which IS is entirely irrelevant for a language. For Tunen, however, the role of IS appears to be more likely to be in terms of likelihood of choosing an alternative construction, rather than being a core principle around which the grammar is organised. In returning to the web analogy from Chapter 2 Fig. 2.2, Tunen can therefore be taken to use less of the syntax side of the web than other languages do. This then raises the question whether other parts of the web (i.e., other aspects of the grammar) carry a higher functional load for the expression of IS in Tunen, as could be tested by further studies on Tunen phonology and Tunen semantics/pragmatics.

8.3 Limitations

As COVID-19 impacted the extent of data collection, future research on Tunen would benefit from a more extensive corpus, especially of naturalistic speech. While some natural speech data is available in Dugast's (1975) transcribed folktales, proverbs and prophecies and in the texts I collected for this study, a more diverse set of texts and a larger-size database would help strengthen the hypotheses made in this study, and good-quality recordings are necessary for any follow-up studies on the IS/prosody interface, a topic currently uninvestigated for Tunen.

This project was focussed on the interaction between syntax and IS. As a result, phonology was not studied in great detail. However, phonology (especially prosody) is likely to vary dependent on IS, even in languages such as the Bantu languages for which morphosyntactic expression is the primary factor (see e.g. Downing and Hyman 2016). A detailed study of Tunen prosody would therefore be useful. The study of prosody would also be useful to test predictions made in the syntactic analysis on constituency (to the extent that syntactic structure is taken to corre-

late with prosodic phrasing, which is not necessarily homomorphic; see e.g. Selkirk 2011). One example would be to test for H tone spread between verbs and postverbal objects as opposed to verbs and postverbal modifiers that are discontinuous from their head nouns and verbs and adjuncts, as raised in Chapter 4 and **??**-7, in order to test whether such constituents are best thought as in-situ or extraposed. As my audio (and video) recordings are archived open access as part of this study (Kerr in prep.; Chapter 3 section §3.6), they will be available for such research.

8.4 Topics for further research

8.4.1 Features and argument licensing

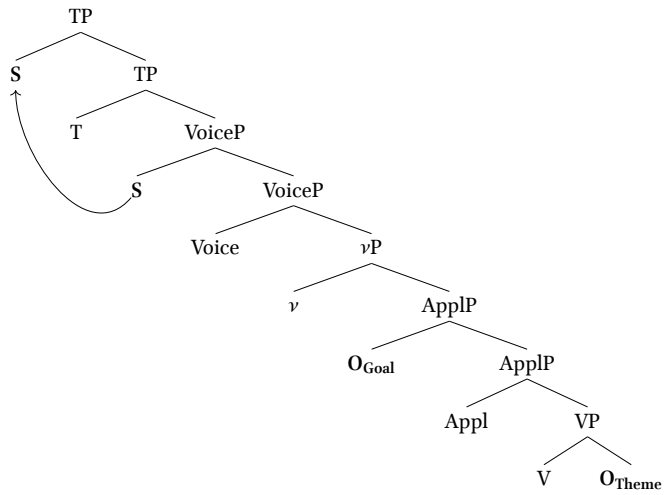
In the analysis proposed in this thesis, Tunen's preverbal object position is derived through formally-conditioned phrasal movement of the object to SpecVoiceP. One question for further research is the exact mechanisms of this movement, i.e., the features that condition it. Two types of analysis are possible here, one in which the object itself carries a movement trigger, and one in which the object moves as result of an [EPP] featural specification on a higher probe. Analyses of the second type are found in analyses of pre-stem object markers in Narrow Bantu, raising the question of the possible diachronic link between OV in Tunen's clausal syntax and the OV found at the word level in Narrow Bantu (in the sense of pre-stem object markers) (see e.g. Hyman 2011; Güldemann 2022). While OM-marked objects may be treated as given and therefore carrying IS-features in the syntax (as in Mursell 2021; Van der Wal 2022), in Tunen, the preverbal object position is filled synchronically by given and non-given objects alike. I therefore proposed in Chapter 6 section §6.8 that the movement feature in Tunen is a formal movement trigger rather than one with IS content, although I note such a trigger may have been present historically (cf. Güldemann 2007).

An outstanding issue with the formal analysis is how the Probe finds the object rather than the subject, which can be taken as a closer position (as base-generated in SpecVoiceP). This question relates to discussion of the order of operations Merge and Agree. An alternative featural specification could be developed under a Probe analysis, or else an account using defective probing. It could otherwise be argued that the object itself carries a movement trigger feature. I leave these matters of formalisation open for further research.

8.4.2 The syntax of subjects

A second topic for further research is the syntax of subjects. I assumed here that the subject is base-generated in SpecVoiceP where it receives its θ-role, from which it A-moves to SpecTP (506) for licensing reasons. When the subject is topical, however, it may alternatively be considered to be located in a higher functional projection of the clause, e.g. the SpecTopP position within a Rizzian extended left periphery (Rizzi 1997 *et seq.*).

(506)



However, I have not discussed in detail the nature of the subject marker (SM) as opposed to the lexical DP subject. There is variation within Bantu languages as to whether the SM is considered to be agreement or pronominal (Bresnan and Mchombo 1987). One interesting point in relation to Tunen subjects is that there appears to be a systematic difference between my fieldwork data and the data presented in Dugast (1971, 1975) with regards to the ability for SMs and lexical DP subjects to co-occur, as I noted in Chapter 5 section §5.5.1. In my data, lexical DP subjects can co-occur with SMs within the same prosodic domain (or with the lexical DP subject in a clause-external topic as part of a separate prosodic domain), as discussed in Chapter 6. In Dugast's data, by contrast, it has been argued that the lexical DP subject and SM cannot co-occur within the same prosodic domain (Isaac 2007). One clear example of this is when a lexical DP subject is found without a SM, as in (507a), a construction that is not grammatical in my consultants' grammars, who consistently use a subject marker alongside lexical noun phrase subjects (507a).[1]

[1]The only exception here was in testing for subject agreement with conjoined subjects, where

(507) a. mɛkɔ̀ ná mànyó wəy o-kànda tīkəkəʔ
9.leopard PST2 again PRN.POSS.1 INF-cut.raphia_leaves set
mʷɔ̌sɛ màlɛ́ndolonùm.
6.days 6.seven
'The leopard again set his raphia cutting (assembly) in seven days.'
(Dugast 1975, cited in Isaac 2007:37, glosses adapted)

b. mɛkɔ **a** n(á) ákan, [...]
/mɛ-kɔ **a** ná ákáná/
9-panther SM.1 PST2 leave
'La panthère est partie, [...]'
'The panther left, [...]' [JO 2037]

It is harder to show that lexical DP subjects and SMs in Dugast's data cannot co-occur within the same prosodic domain, given that no recordings are available and Dugast does not give clear prosodic demarcation. Nevertheless, Isaac (2007) argues that Dugast's use of the symbol <ʔ> can be used to diagnose prosodic domains, in that <ʔ> indicates a pause, being found only at the right edge of a prosodic domain. He then notes that lexical DP subjects co-occuring with SMs are often transcribed as ending in <ʔ>, thus indicating a pause before the SM (Isaac 2007:59) (508).

(508) wə́ni wà mǒná 'mɔ̀tɛʔ **a** nə́-wə̀.
DEM.DIST.1 ASSOC.1 1.child 1.one SM.1 PST.2-die
'The one who had one child, she died.'
(Dugast 1975, cited in Isaac 2007:59 (glosses adapated))

These data suggest that the DP is dislocated and the SM is a pronoun. This pattern is different from my consultants' judgements, where there is no restriction on the co-occurence of lexical DP subjects and SMs (but cf. Chapter 5 on the availability for clause-external topics which form a separate prosodic domain from the main clause). Given the time depth of Dugast's data (collected in the 1930s-1950s; Chapter 2 section §2.5.3), it could be argued that the SM in Tunen has grammaticalised from a pronoun to an agreement element that can be doubled, as following the independent pronoun → agreement marker grammaticalisation pathway found across African languages (Creissels 2006:44-45) and therefore indicative of language change in the time since Dugast made her transcriptions. Relevantly,

one avoidance strategy was to omit the subject marker altogether. As discussed in Chapter 4 section §4.3.3.3, because of the unnaturalness of this specific test and the fact that all other answers to conjoined subject prompts did have a SM, I do not take this as strong evidence for the ability to omit SMs in modern-day Tunen.

there is variation in the surrounding Mbam languages from the Western Mbam and Sanaga Mbam groups regarding subject indexation, with Nuasúɛ (A62A) showing minimal subject expression, with SMs unable to co-occur with DP subjects (Bebine 2019:397-399), while Nomaandé (A46) on the other end shows double indexation of the subject via the split subject construction (discussed for Tunen in terms of in-situ subjects in Chapter 6 section §6.5.3) (Wilkendorf 2001; Taylor 1984, 1999). This variation across closely-related Mbam varieties suggests variation over time, supporting the idea that subject indexation in present-day Tunen differs from the variety recorded in Dugast's work. I leave this as an interesting topic for further comparative research, which has bearing on the understanding of Tunen's predicate structure and morphosyntactic variation in Bantu/Bantoid.

8.4.3 The diachrony of word order change in the Mbam languages

Finally, this thesis had a synchronic focus, aiming to investigate the extent of influence of IS on Tunen's synchronic syntax. Having established that IS features and positions are not necessary for a synchronic account of Tunen's clausal syntax, in Chapter 6 section §6.8 I sketched out a proposal of how Tunen's word order may have arisen diachronically, suggesting that the OV order was innovated from a previous VO pattern.

This diachronic proposal can be tested in future work by means of data collection on the neighbouring Mbam Bantu languages, which I hypothesise to be at an intermediate stage of development as compared to Tunen versus canonical Bantu languages (cf. Chapter 6 section §6.8). Further detail on other zone A Bantu languages and non-Bantu Bantoid languages of Cameroon/Nigeria would also be relevant, as noted by Hamlaoui (2022) in terms of the possible relationship between degree of analyticity and the (un)availability of IS-conditioned word order (cf. Kerr et al. 2023 on the link between IS and word order variation in North-Western Bantu). Here, the variation found in this thesis between Tunen and surrounding languages illustrates the need for detailed empirical investigations into different languages of the Northwestern Bantu/non-Bantu Bantoid region, which is known to show a high degree of linguistic diversity (see e.g. Marten 2020). Such an investigation into the degree of analyticity of the Mbam languages is of broader scientific interest given the currently-unresolved debate as to whether analytic morphosyntax reflects the older (Güldemann 2011, 2022) or more innovative morphosyntactic profile (Hyman 2004, 2011; Nurse 2007) in Niger-Congo languages as a whole and the Benue-Congo group in particular.

8.5 Conclusion

In summary, then, Tunen's unusual syntax provides an important comparative point for understanding variation within Bantu syntax and for reconstructing the syntax of Proto-Bantu and the Benue-Congo subgroup of Niger-Congo more broadly. More generally, the co-occurrence of OV order with head-initial syntactic properties, the variation in the syntax of subjects, and the ability for modifiers to appear discontinuously from the nouns they modify are all typologically-interesting syntactic properties that provide interesting case studies in language change. I present the formal analysis of Tunen syntax in this thesis as a first hypothesis, with further modifications to be made on the basis of insights from further empirical study.

References

Abbott, B. (2006). Definiteness and indefiniteness. In Horn, L. R. and Ward, G., editors, *The handbook of pragmatics*, pages 122–149. Wiley/Blackwell.

Abney, S. P. (1987). *The English noun phrase in its sentential aspect*. PhD thesis, MIT.

Aboh, E. O. (2010). Information structuring begins with the Numeration. *Iberia*, 2(1):12–42.

Abwa, D. (1995). The Banen and slavery. *Paideuma*, pages 107–125.

Aissen, J. (2003). Differential object marking: Iconicity vs. economy. *Natural Language & Linguistic Theory*, 21:435–483.

Anagnostopoulou, E. (2003). *The syntax of ditransitives*. Berlin: Mouton de Gruyter.

Ariel, M. (2001). Accessibility theory: An overview. In Sanders, T., Schilperoord, J., and Spooren, W., editors, *Text representation: Linguistic and psycholinguistic aspects*, volume 8, pages 29–87. John Benjamins.

Asiimwe, A. and van der Wal, J. (to appear). The expression of information structure in Rukiga. In Van der Wal, J., editor, *The expression of information structure in Bantu*. Berlin: Language Science Press.

Atindogbé, G. G. and Grollemund, R., editors (2017). *Relative clauses in Cameroonian languages: Structure, function and semantics*. Berlin: De Gruyter Mouton.

Audacity Team (2023). Audacity(R): Free audio editor and recorder. Version 3.4.1 retrieved November 2023 from http://audacity.sourceforge.net/.

Baker, A. (2022). Simplicity. In Zalta, E. N., editor, *The Stanford Encyclopedia of Philosophy* (*Summer 2022 Edition*).

Baker, M. (1985). The mirror principle and morphosyntactic explanation. *Linguistic inquiry*, 16(3):373–415.

Baker, M. (2001). *The atoms of language: The mind's hidden rules of grammar*. New York: Basic Books.

Baker, M. C. (2008). The macroparameter in a microparametric world. In Biberauer, T., editor, *The Limits of Syntactic Variation*, page 351–373. Amsterdam: John Benjamins.

Bancel, P. (1991). The three-way vowel harmony in Nen. In *Annual Meeting of the Berkeley Linguistics Society*, volume 17(2), pages 3–14.

Barbiers, S. (2000). The right periphery in SOV languages: English and Dutch. In Svenonius, P., editor, *The derivation of VO and OV*, pages 181–218. John Benjamins.

Bassong, P. R. (2021). Mismatching nominals and the small clause hypothesis. *Journal of Linguistics*, 57(4):737–782.

Bearth, T. (2003). Syntax. In Nurse, D. and Philippson, G., editors, *The Bantu Languages*, pages 283–306. Routledge.

Bebine, A. J. (2019). *Description phonologique et morphosyntaxique du nuasúɛ (langue bantu A62A)*. PhD thesis, Université Yaoundé I.

Bech, K. and Eide, K. G., editors (2014). *Information structure and syntactic change in Germanic and Romance languages*. Linguistik Aktuell/Linguistics Today. John Benjamins.

Behagel, O. (1932). Deutsche Syntax: Eine geschichtliche Darstellung, vol. 4: Wortstellung. *Periodenbau. Heidelberg: Carl Winter*.

Belika, L. M. (2015). *La notion de personne humaine chez les Banen du Cameroun*. Éditions universitaires européennes.

Belletti, A. (2004). Aspects of the low IP area. *The structure of CP and IP. The cartography of syntactic structures*, 2:16–51.

Bianchi, V., Bocci, G., and Cruschina, S. (2015). Focus fronting and its implicatures. *Romance languages and linguistic theory 2013: Selected papers from 'Going Romance' Amsterdam 2013*, pages 1–20.

Biberauer, T. (2017a). Factors 2 and 3: A principled approach. *Cambridge Occasional Papers in Linguistics*, 10:38–65.

Biberauer, T. (2017b). The Final-Over-Final Condition and particles. In Sheehan, M., Biberauer, T., Roberts, I., and Holmberg, A., editors, *The Final-Over-Final Condition: A Syntactic Universal*, pages 187–296. Cambrdge, MA: MIT Press.

Biberauer, T. (2018). Pro-drop and emergent parameter hierarchies. In Cognola, F. and Casalicchio, J., editors, *Null subjects in Generative Grammar: A synchronic and diachronic perspective*, pages 94–140. Oxford: OUP.

Biberauer, T., Holmberg, A., and Roberts, I. (2014). A syntactic universal and its consequences. *Linguistic Theory*, (45):169–225.

Bliss, H. (2012). A split DP analysis of Blackfoot nominal expressions. In *Proceedings of the 2012 annual conference of the Canadian Linguistic Association*.

Boersma, P. (2001). Praat, a system for doing phonetics by computer. *Glot International*, 5:9/10:341–345.

Bošković, Ž. (2004). Be careful where you float your quantifiers. *Natural language & linguistic theory*, 22(4):681–742.

Bošković, Ž. (2005). On the locality of Left Branch Extraction and the structure of NP. *Studia Linguistica*, 59(1):1–45.

Bošković, Ž. (2008). What will you have, DP or NP? *Proceedings of the North East Linguistics Society*, (1):1–14.

Bošković, Ž. (2014). Now I'm a phase, now I'm not a phase: On the variability of phases with extraction and ellipsis. *Linguistic Inquiry*, 45:27–89.

Bostoen, K. (2018). The Bantu expansion. *Oxford Research Encyclopedia of African History*, https://doi.org/10.1093/acrefore/9780190277734.013.191.

Bostoen, K. (2020). The Bantu Expansion: Some facts and fiction. In Crevels, M. and Muysken, P., editors, *Language dispersal, diversification, and contact*, page 227–239. Oxford: OUP.

Bostoen, K. and Mundeke, L. (2012). Subject marking, object-verb order and focus in Mbuun (Bantu, B87). *Southern African Linguistics and Applied Language Studies*, 30:139–154.

Bowern, C. (2015). *Linguistic Fieldwork: A Practical Guide*. London: Palgrave Macmillan, 2nd edition.

Boyd, V. L. (2015). *The phonological systems of the Mbam languages of Cameroon with a focus on vowels and vowel harmony*. PhD thesis, Leiden University.

Bresnan, J. and Mchombo, S. A. (1987). Topic, pronoun, and agreement in Chicheŵa. *Language*, 63(4):741–482.

Broekhuis, H. (2022). VO or OV: V to *v* or not to *v*. *Linguistic Variation*, 23(2):343–378.

Broekhuis, H. (2023). Object shift and object scrambling in Germanic. In *Oxford Research Encyclopedia of Linguistics*. Oxford: OUP. https://doi.org/10.1093/acrefore/9780199384655.013.977.

Bruening, B. (2010). Double object constructions disguised as prepositional datives. *Linguistic Inquiry*, 41:287–305.

Bruening, B. (2020). The head of the nominal is N, not D: N-to-D movement, hybrid agreement, and conventionalized expressions. *Glossa: a journal of general linguistics*, 5(1)(15).

Buell, L. (2006). The conjoint/disjoint verb alternation: Focus or constituency? *ZAS Papers in Linguistics*, (43):9–30.

Buell, L. C. (2005). *Issues in Zulu morphosyntax*. PhD thesis, University of California Los Angeles.

CABTAL (2019). *Hɛtɔnyɛ́ Hiɔ́sɔ* [*Le Nouveau Testament en langue Tunen*]. Yaoundé, Cameroon: Association Camerounaise pour la Traduction de la Bible et l'Alphabétisation (CABTAL).

Carstens, V. (2005). Agree and EPP in Bantu. *Natural Language and Linguistic Theory*, 23(2):219–79.

Carstens, V. (2008). DP in Bantu and Romance. In *The Bantu–Romance Connection: A comparative investigation of verbal agreement, DPs, and information structure*, pages 131–165. John Benjamins.

Carstens, V. (2017). Noun-to-Determiner movement. In Everaert, M. and van Riemsdijk, H., editors, *The Wiley Blackwell Companion to Syntax*, page 2758–2783. Somerset, NJ: John Wiley and Sons, 2nd edition.

Chafe, W. (1976). Givenness, contrastiveness, definiteness, subjects, topics, and point of view. In Li, C., editor, *Subject and topic*, pages 27–55. Academic Press.

Chafe, W. (1987). Cognitive constraints on information flow. In Romlin, R. S., editor, *Coherence and grounding in discourse*, volume 11, pages 21–51. John Benjamins.

Cheng, L. L.-S. and Downing, L. J. (2012). Against FocusP: Arguments from Zulu. In Kučerová, Ivona and Neeleman, Ad, editors, *Contrasts and positions in Information Structure*, pages 247–266. Cambridge: CUP, Cambridge.

Chomsky, N. (1957). *Syntactic structures*. The Hague: Mouton & Co.

Chomsky, N. (1959). A review of B. F. Skinner's Verbal Behavior. *Language*, 35(1):26–58.

Chomsky, N. (1965). *Aspects of the Theory of Syntax*. Cambridge, MA: MIT Press.

Chomsky, N. (1981). *Lectures on Government and Binding*. Dordrecht: Foris.

Chomsky, N. (1982). *Some concepts and consequences of the theory of Government and Binding*. Cambridge, MA: MIT Press.

Chomsky, N. (1986). *Knowledge of Language: Its Nature, Origin, and Use*. Cambridge, MA: MIT Press.

Chomsky, N. (1993). A minimalist program for linguistic theory. In Hale, K. and Keyser, S. J., editors, *The view from Building 20*, pages 1–52. Cambridge, MA: MIT Press.

Chomsky, N. (1995). *The Minimalist Program*. Cambridge, MA: MIT Press.

Chomsky, N. (2000). Minimalist inquiries: The framework. In Martin, R., Michaels, D., and Uriagereka, J., editors, *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, page 89–155. Cambridge, MA: MIT Press.

Chomsky, N. (2001). Derivation by phase. In Kenstowicz, M., editor, *Ken Hale: A life in language*, page 1–52. Cambridge, MA: MIT Press.

Chomsky, N. (2004). Beyond explanatory adequacy. In Belletti, A., editor, *Structures and Beyond—The Cartography of Syntactic Structure*, volume 3. Oxford: OUP.

Chomsky, N. (2005). Three factors in language design. *Linguistic Inquiry*, 36:1–22.

Chomsky, N. (2008). On phases. In Freidin, R., Otero, C., and Zubizarreta, L., editors, *Foundational Issues in Linguistic Theory: Essays in Honor of Jean-Roger Vergnaud*, pages 133–166. Cambridge, MA: MIT Press.

Cinque, G. (2005). Deriving Greenberg's Universal 20 and its exceptions. *Linguistic inquiry*, 36(3):315–332.

Cinque, G. (2010). *The syntax of adjectives: A comparative study*, volume 57. Cambridge, MA: MIT Press.

Claudi, U. (1993). *Die Stellung von Verb und Objekt in Niger-Kongo-Sprachen: Ein Beitrag zur Rekonstruktion historischer Syntax*. Universität zu Köln.

Clements, G. N. and Rialland, A. (2008). Africa as a phonological area. In Heine and Nurse, D., editors, *A linguistic geography of Africa*, page 36–87. Cambridge: CUP.

Cole, D. T. (1955)). *An introduction to Tswana grammar*. Longmans, Green.

Collins, C. and Kayne, R. S. (2023). Towards a theory of morphology as syntax. *Studies in Chinese Linguistics*, 44(1):1–32.

Constenla-Umaña, A. (1991). *Las lenguas del Area Intermedia: introducción a su estudio areal*. San José: Editorial de la Universidad de Costa Rica.

Constenla-Umaña, A. (2012). Chibchan languages. In Campbell, L. and Grondona, V., editors, *The indigenous languages of South America: A comprehensive guide*, pages 391–440. De Gruyter Mouton.

Creissels, D. (2000). Typology. In Heine, B. and Nurse, D., editors, *African languages: An introduction*, pages 231–258. Cambridge: CUP.

Creissels, D. (2005). S-O-V-X constituent order and constituent order alternations in West African languages. *Proceedings of the Annual Meeting of the Berkeley Linguistics Society*, 31(2).

Creissels, D. (2006). A typology of subject and object markers in African languages. In Voeltz, F. E., editor, *Studies in African Linguistic Typology*, pages 43–70. John Benjamins.

Creissels, D. (2017). The conjoint/disjoint distinction in the tonal morphology of Tswana. In Van der Wal, J. and Hyman, L. M., editors, *The conjoint/disjoint alternation in Bantu*, pages 200–38. De Gruyter Mouton.

Creissels, D. (2018). Current issues in African morphosyntax. In Güldemann, T., editor, *The Languages and Linguistics of Africa*, pages 712–821. De Gruyter Mouton.

Creissels, D., Dimmendaal, G., Frajzyngier, Z., and König, C. (2008). Africa as a morphosyntactic area. In Heine, B. and Nurse, D., editors, *A linguistic geography of Africa*, pages 86–150. Cambridge: CUP.

Cruschina, S. (2021). The greater the contrast, the greater the potential: On the effects of focus in syntax. *Glossa: A journal of general linguistics*, 6(1)(3).

Cruschina, S. and Bianchi, V. (2021). Mirative implicatures at the syntax-semantics interface: A surprising association and an unexpected move. In Trotzke, A. and Villalba, X., editors, *Expressive Meaning Across Linguistic Levels and Frameworks*, pages 86–107. Oxford: OUP.

Culicover, W. and Rochemont, P. M. S. (1990). Extraposition and the complement principle. *Linguistic Inquiry*, 21:23–47.

De Kind, J. (2014). Pre-verbal focus in Kisikongo (H16a, Bantu). *ZAS Papers in Linguistics*, 57:95–122.

den Dikken, M. (2007). Phase extension: Contours of a theory of the role of head movement in phrasal extraction. *Theoretical Linguistics*, 33(1):1–41.

Di Carlo, P., Good, J., and Diba, R. O. (2016). Multilingualism in rural Africa. In Aronoff, M., editor, *Oxford research enclopedia of linguistics*. Oxford: OUP.

Diesing, M. (1992). *Indefinites*. Linguistic Inquiry Monograph 20. Cambridge, MA: MIT Press.

Dik, S. C. (1997). *The theory of functional grammar, part 1: The structure of the clause*. Berlin/New York: Mouton de Gruyter.

Doetjes, J. (1997). *Quantifiers and Selection. On the distribution of quantified expressions in French, Dutch and English*. PhD thesis, Leiden University.

Downing, L. J. and Hyman, L. M. (2016). Information structure in Bantu. In Féry, C. and Ishihara, S., editors, *The Oxford handbook of information structure*. Oxford: OUP.

Downing, L. J. and Marten, L. (2019). Clausal morphosyntax and information structure. In Van de Velde, M. L., Bostoen, K., Nurse, D., and Philippson, G., editors, *The Bantu Languages*, pages 270–307. London/New York: Routledge, 2 edition.

Dros-Hendriks, L. D. (2018). *Not another book on Verb Raising*. PhD thesis, Utrecht University.

Dryer, M. S. (1992). The Greenbergian word order correlations. *Language*, 68(1):81–138.

Dryer, M. S. (2013). Order of object and verb. In Dryer, Matthew S. & Haspelmath, M., editor, *The World Atlas of Language Structures Online.* Leipzig: Max Planck Institute for Evolutionary Anthropology. (Available online at http://wals.info/chapter/83, Accessed on 2022-02-11.).

Dryer, M. S. and Gensler, O. (2005). Order of object, oblique, and verb. In Haspelmath, M., Dryer, M. S., Gil, D., and Comrie, B., editors, *The World Atlas of Language Structures*, pages 342–345. Oxford: OUP.

Dugast, I. (1955). *Monographie de la tribu des Ndiki* (*Banen du Cameroun*), volume 1: Vie matérielle. Institut d'ethnologie Paris.

Dugast, I. (1960). *Monographie de la tribu des Ndiki* (*Banen du Cameroun*), volume 2: Vie sociale et familiale. Institut d'ethnologie Paris.

Dugast, I. (1967). *Lexique de la langue Tunen:* (*parler des Banen du Sud-Ouest du Cameroun*). Librarie Klincksieck.

Dugast, I. (1971). *Grammaire du Tunen*. Éd. Klincksieck.

Dugast, I. (1975). *Contes, proverbes et devinettes des Banen: Sud-Ouest du Cameroun*. Société d'études linguistiques et anthropologiques de France (SELAF).

Déprez, V. (1989). *On the Typology of Syntactic Positions and the Nature of Chains*. PhD thesis, MIT.

Eberhard, D. M., Simons, G. F., and Fennig, C. (2022). Ethnologue: Languages of the world (25th edn). SIL International, http://www.ethnologue.com.

É. Kiss, K. (2009). Structural focus and exhaustivity. In *Information Structure: Theoretical, Typological, and Experimental Perspectives*, pages 64–88. Oxford: OUP.

Embick, D. and Noyer, R. (2001). Movement operations after Syntax. *Linguistic Inquiry*, 32(4):555–595.

Embick, D. and Noyer, R. (2007). Distributed Morphology and the Syntax-Morphology Interface. In Ramchand, G. and Reiss, C., editors, *The Oxford handbook of linguistic interfaces*. Oxford: OUP.

Enç, M. (1991). The semantics of specificity. *Linguistic inquiry*, pages 1–25.

Erteschik-Shir, N. (2007). *Information structure: The syntax-discourse interface* (*Vol. 3*). Oxford: OUP.

Fanselow, G. (1988). Aufspaltung von NPn und das Problem der 'freien' Wortstellung. *Linguistische Berichte*, 114:91–113.

Fanselow, G. (2006). On pure syntax (uncontaminated by information structure). In Brandt, P. and Fuss, E., editors, *Form, Structure and Grammar*, pages 137–158. Berlin: Akademie Verlag.

Fanselow, G. (2013). *Morphological mismatches in discontinuous noun phrases*, pages 11–25. Berlin: Akademie Verlag.

Fanselow, G. and Féry, C. (2006). Discontinuous noun phrases. Ms., Universität Potsdam.

Fanselow, G. and Ćavar, D. (2001). Remarks on the economy of pronunciation. In Müller, G. and Sternefeld, W., editors, *Competition in Syntax*, page 107–150. Berlin: Mouton de Gruyter.

Fanselow, G. and Ćavar, D. (2002). Distributed deletion. In Alexiadou, A., editor, *Theoretical approaches to universals*, pages 65–107. John Benjamin.

Ferch, E. (2013). Scopeless quantity words in Shona. *Natural language semantics*, 21(4):373–400.

Fiedler, I., Hartmann, K., Reineke, B., Schwarz, A., and Zimmermann, M. (2010). Subject focus in West African languages. In Zimmermann, M. and Féry, C., editors, *Information structure: Theoretical, typological and experimental perspectives*, page 234–257. Oxford: OUP.

Fleisch, A. (2005). Agent phrases in Bantu passives. In Voeltz, F. K. E., editor, *Studies in African linguistic typology*, 64, pages 93–111. John Bnejmamins.

Fuchs, Z. (2017). Movement vs. base-generation in Georgian split DPs. Handout of a talk presented at the 91st annual meeting of the LSA in Austin, TX.

Fukui, N. and Speas, M. (1986). Specifiers and projection. *MIT Working Papers in Linguistics*, (8):128–172.

Féry, C. and Ishihara, S. (2016a). Introduction. In Féry, C. and Ishihara, S., editors, *The Oxford Handbook of Information Structure*, pages 1–15. Oxford: OUP.

Féry, C. and Ishihara, S., editors (2016b). *The Oxford Handbook of Information Structure*. Oxford: OUP.

Gensler, O. D. (1994). On reconstructing the syntagm S-Aux-O-V-Other to Proto-Niger-Congo. *Proceedings of the Twentieth Annual Meeting of the Berkeley Linguistics Society: Special Session on Historical Issues in African Linguistics*, pages 1–20.

Gensler, O. D. (1997). Grammaticalization, typology, and Niger-Congo word order: Progress on a still-unsolved problem [review of Claudi 1993]. *JALL*, 18:57–93.

Gensler, O. D. and Güldemann, T. (2003). S-Aux-O-V-Other in Africa: Typological and areal perspective. Handout presented at Workshop on Distributed Predicative Syntax (S P O V X), 4th World Congress of African Linguistics (WOCAL), Rutgers University, June 2003.

Gibson, H., Guérois, R., and Marten, L. (2019). Variation in Bantu copula constructions. In *The Grammar of Copulas Across Languages*, pages 213–242. Oxford: OUP.

Givón, T. (1974). Syntactic change in lake Bantu: A rejoinder. *Studies in African Linguistics*, 5(1):117–139.

Givón, T. (1975). Serial verbs and syntactic change: Niger-Congo. In *Word Order and Word Order Change*, pages 47–112. Austin: University of Texas Press.

Givón, T., editor (1983). *Topic Continuity in Discourse: A Quantitative Cross-Language Study*. Amsterdam: John Benjamins.

Givón, T. (1977). The drift from VSO to SVO in Biblical Hebrew: The pragmatics of tense-aspect. In Li, C. N., editor, *Mechanisms of Syntactic Change*, pages 181–254. University of Texas Press.

Givón, T. (1985). Iconicity, isomorphism and non-arbitrary coding in syntax. In Haiman, J., editor, *Iconicity in Syntax: Proceedings of a Symposium on Iconicity in Syntax, Stanford, June 24-26, 1983*, pages 187–220. Amsterdam/Philadelphia: John Benjamins.

Good, J. (2005). Reconstructing morpheme order in Bantu: The case of causativization and applicativization. *Diachronica*, 22:3–57.

Good, J. (2010). Topic and focus fields in Naki. In Fielder, I. and Schwarz, A., editors, *The expression of information structure: A documentation of its diversity across Africa*, pages 35–67. John Benjamins.

Good, J. (2016). *The Linguistic Typology of Templates*. Cambridge: CUP.

Good, J. (2017). Niger-Congo languages. In Hickey, R., editor, *The Cambridge Handbook of Areal Linguistics*, pages 471–499. Cambridge: CUP.

Good, J. (2022). Reconstructing the development of the Bantu final vowels. In Bostoen, K., de Schryver, G.-M., Guérois, R., and Pacchiarotti, S., editors, *On reconstructing Proto-Bantu grammar*, Niger-Congo comparative studies 4, pages 173–236. Berlin: Language Science Press.

Gordon, R. G. J. (2005). Ethnologue: Languages of the world (15th edn). http://www.ethnologue.com.

Greenberg, J. H. (1963). Some universals of grammar with particular reference to the order of meaningful elements. *Universals of language*, 2:73–113.

Grice, P. (1975). Logic and conversation. In Cole, P. and Morgan, J., editors, *Syntax and Semantics 3: Speech Acts*, page 41–58. New York, NY: Academic Press.

Grice, P. (1989). *Studies in the Way of Words*. Harvard University Press.

Grinevald, C. (2000). A morphosyntactic typology of classifiers. In Senft, G., editor, *Systems of nominal classification*, pages 50–92. Cambridge: CUP.

Grollemund, R., Branford, S., Bostoen, K., Meade, A., Venditti, C., and Pagel, M. (2015). Bantu expansion shows that habitat alters the route and pace of human dispersals. *PNAS*, 112(43):13296–13301.

Gundel, J. K. (1974). *The role of Topic and Comment in Linguistic THeory*. PhD thesis, University of Texas, Austin.

Gundel, J. K. (1988). Universals of topic-comment structure. In Hammond, M., Moravcsik, E. A., and Wirth, J., editors, *Studies in Syntactic Typology*, page 209–42. Amsterdam: John Benjamins.

Gundel, J. K., Hedberg, N., and Zacharski, R. (1993). Cognitive status and the form of referring expressions in discourse. *Language*, pages 274–307.

Guthrie, M. (1948). *The Classification of the Bantu Languages*. Oxford: OUP.

Guthrie, M. (1967-1971). *Comparative Bantu: An intrdocution to the comparative linguistics and prehistory of the Bantu languages*, volume 1-4. Farnborough: Gregg Press.

Guérois, R. (to appear). Passive constructions. In Marten, L., Kula, N. C., Hurst, E., and Zeller, J., editors, *The Oxford guide to the Bantu languages*. Oxford: OUP.

Güldemann, T. (2003). Present progressive vis-à-vis predication focus in Bantu: A verbal category between semantics and pragmatics. *Studies in Language*, 27(2):323–360.

Güldemann, T. (2007). Preverbal objects and information structure in Benue-Congo. In E. O. Aboh, Hartmann, K. and Zimmermann, M., editors, *Focus strategies in African languages*, pages 83–112. Berlin/New York: De Gruyter.

Güldemann, T. (2008). The Macro-Sudan belt: Towards identifying a linguistic area

in northern sub-Saharan Africa. In Heine, B. and Nurse, D., editors, *A linguistic geography of Africa*, pages 151–185. Cambridge: CUP.

Güldemann, T. (2011). Proto-Bantu and Proto-Niger-Congo: Macro-areal typology and linguistic reconstruction. In Hieda, O., König, C., and Nakagawa, H., editors, *Geographical typology and linguistic areas, with special reference to Africa*, pages 109–141. John Benjamins.

Güldemann, T. (2015). Variation in information structure with special reference to Africa. *Annual Review of Linguistics*, 1:155–78.

Güldemann, T. (2018). Historical linguistics and genealogical language classification in Africa. In Güldemann, T., editor, *The Languages and Linguistics of Africa*, pages 58–444. Berlin/Boston: De Gruyter Mouton.

Güldemann, T. (2022). Predicate and argument indexing in early Bantu. In Bostoen, K., de Schryver, G.-M., Guérois, R., and Pacchiarotti, S., editors, *On reconstructing Proto- Bantu grammar*, page 389–424. Berlin: Language Science Press.

Güldemann, T. and Fiedler, I. (2022). Predicate partition for predicate-centred focus and Meeussen's Proto-Bantu "advance verb construction". In Bostoen, K., de Schryver, G.-M., Guérois, R., and Pacchiarotti, S., editors, *On reconstructing Proto- Bantu grammar*, page 539–582. Berlin: Language Science Press.

Haegeman, L. and van Riemsdijk, H. (1986). Verb projection raising, scope, and the typology of rules affecting verbs. *Linguistic Inquiry*, 17:417–466.

Haider, H. (2010). *The syntax of German*. Cambridge: CUP.

Haider, H. (2013). *Symmetry breaking in syntax*. Cambridge: CUP.

Haiman, J. (1978). Conditionals are topics. *Language*, 54(3),:564–589.

Haiman, J. (1983). Iconic and economic motivation. *Language*, 59(4):781–819.

Hair, P. E. H. (1965). The enslavement of Koelle's informants. *Journal of African History*, 2:193–203.

Hale, K. (1983). Warlpiri and the grammar of non-configurational languages. *Natural Language & Linguistic Theory*, 1(1):5–47.

Hale, K. and Keyser, S. J. (1993). On argument structure and the lexical expression of syntactic relations. In Hale, K. and Keyser, S. J., editors, *The view from Building 20*, pages 53–109. Cambridge, MA: MIT Press.

Halle, M. and Marantz, A. M. (1993). Distributed Morphology and the pieces of inflection. In Hale, K. H. and Keyser, S. J., editors, *The View from Building 20: Essays in linguistics in honor of Sylvain Bromberger*, page 111–176. Cambridge, MA: MIT Press.

Hallman, P. (2015). Syntactic neutralization in double object constructions. *Linguistic Inquiry*, 46(3):389–424.

Halpert, C. (to appear). The augment. In Marten, L., Kula, N., Zeller, J., and Hurst, E.,

editors, *The Oxford guide to the Bantu languages*. Oxford: OUP. Ms., The Oxford guide to the Bantu languages.

Hamlaoui, F. (2022). On subject inversion in Proto-Bantu relative clauses. In Bostoen, K., Pacchiarotti, S., Guérois, R., and de Schryver, G.-M., editors, *On reconstructing Proto-Bantu grammar*, pages 497–537. Berlin: Language Science Press.

Hamlaoui, F. and Makasso, E.-M. (2015). Focus marking and the unavailability of inversion structures in the Bantu language Bàsàá (A43). *Lingua*, 154:35–64.

Hammarström, H. (2019). An inventory of Bantu languages. In Van de Velde, M., Bostoen, K., Nurse, D., and Philippson, G., editors, *The Bantu Languages*, pages 17–78. Routledge, 2 edition.

Harley, H. (1995). *Subjects, events and licensing*. PhD thesis, MIT.

Harley, H. (2002). Possession and the double object construction. *Yearbook of Linguistic Variation*, 2:29–68.

Harley, H. (2015). The syntax-morphology interface. In Kiss, T. and Alexiadou, A., editors, *Syntax: Theory and Analysis* (*Volume 2*), pages 1128–1154. De Gruyter Mouton.

Harley, H. (2017). The "bundling" hypothesis and the disparate functions of little v. In D'Alessandro, R., Franco, I., and Gallego, Á. J., editors, *The Verbal Domain*, page 3–28. Oxford: OUP.

Harris, A. C. and Campbell, L. (1995). *Processes that simplify biclausal structures*, page 151–194. Cambridge Studies in Linguistics. Cambridge: CUP.

Hawkins, J. (1983). *Word order universals*. New York: Academic Press.

Heine, B. (1976). *A typology of African languages based on the order of meaningful elements*. Berlin: Dietrich Reimer.

Heine, B. (1980). Language typology and linguistic reconstruction: The Niger-Congo case. *Journal of African Languages and Linguistics*, 2(2):95–112.

Heine, B. (1982). African noun class systems. In Seiler, Hansjakob Lehmann, C., editor, *Apprehension: Das sprachliche Erfassen von Gegenständen Teil I: Bereich und Ordnung der Phänomene*, pages 189–216. Tübingen: Gunter Narr.

Heine, B. and Claudi, U. (2001). On split word order: Explaining syntactic variation. *General Linguistics*, 38:41–74.

Heine, B. and Kuteva, T. (2004). *World Lexicon of Grammaticalization*. Cambridge: CUP.

Heine, B. and Reh, M. (1984). *Grammaticalization and reanalysis in African languages*. Hamburg: Helmut Buske.

Heugh, K. (2019). Multilingualism and education in Africa. In Wolff, H. E., editor, *The Cambridge Handbook of African Linguistics*, Cambridge Handbooks in Language and Linguistics, page 577–600. Cambride: CUP.

Heycock, C. (2012). Specification, equation, and agreement in copular sentences. *The Canadian Journal of Linguistics/La revue canadienne de linguistique*, 57(2):209–240.

Higgins, R. F. (1979). *The pseudo-cleft construction in English*. Garland.

Himmelmann, N. P. (2012). Linguistic data types and the interface between language documentation and description. *Language Documentation & Conservation*, 6:187–207.

Holmberg, A. (1986). *Word order and syntactic features in the Scandinavian languages and English*. PhD thesis, University of Stockholm.

Holmberg, A. (1997). The true nature of Holmberg's Generalization. *NELS*, 27:203–217.

Holmberg, A. (2017). Introduction. In Sheehan, M., Biberauer, T., Roberts, I., and Holmberg, A., editors, *The Final-Over-Final Condition: A Syntactic Universal*, pages 1–10. Cambrdge, MA: MIT Press.

Holmberg, A. and Platzack, C. (1995). *The role of inflection in Scandinavian syntax*. Oxford: OUP.

Holmberg, A., Sheehan, M., and van der Wal, J. (2019). Movement from the double object construction is not fully symmetrical. *Linguistic Inquiry*, 50(4):677–721.

Horvath, J. (2005). Is focus-movement driven by stress? In Piñón, C. and Siptár, P., editors, *Approaches to Hungarian 9*, page 131–58. Budapest: Akadémiai Kiadó.

Horvath, J. (2007). Separating "focus movement" from focus. In Karimi, S., Samiian, V., and Wilkins, W. K., editors, *Phrasal and clausal architecture syntactic derivation and interpretation in honor of Joseph E. Emonds*, Linguistik aktuell = Linguistics today, v. 101. Amsterdam/Philadelphia: John Benjamins.

Hyman, L. M. (1975). On the change from SOV to SVO: Evidence from Niger-Congo. In *Word order and word order change*, pages 113–147. Austin: University of Texas Press.

Hyman, L. M. (2003a). Basaá (a43). In Nurse, D. and Philippson, G., editors, *The Bantu languages*, pages 257–282. Routledge.

Hyman, L. M. (2003b). Suffix ordering in Bantu: A morphocentric approach. In Booij, G. and van Marle, J., editors, *Yearbook of Morphology 2002*, pages 245–281. Dordrecht: Springer.

Hyman, L. M. (2004). How to become a Kwa verb. *Journal of West African Languages*, 30(2):69–88.

Hyman, L. M. (2011). The Macro-Sudan Belt and Niger-Congo reconstruction. *Language dynamics and change*, 1:3–49.

Idiatov, D. and Van de Velde, M. L. (2021). The lexical distribution of labial-velar stops is a window into the linguistic prehistory of Northern Sub-Saharan Africa. *Language*, 97(1):72–107.

Isaac, K. M. (2007). Participant reference in Tunen narrative discourse. Unpublished M. Phil Thesis. Graduate Institute of Applied Linguistics.

Isac, D. and Reiss, C. (2013). *I-language: An introduction to Linguistics as Cognitive Science*. Oxford: OUP, 2 edition.

Jackendoff, R. (1972). *Semantics in Generative Grammar*. Cambridge, MA: MIT Press.

Jackendoff, R. (1990). On Larson's treatment of the double object construction. *Linguistic Inquiry*, 21(3):427–455.

Janssens, B. (1988). Ton et élision vocalique en nen. *Linguistique Africaine*, 1:61–94.

Janssens, B. (1993). *Doubles réflexes consonantiques : quatre études sur le bantu de zone A* (*bubi, nen, bafia, ewondo*). PhD thesis, Bruxelles: Université libre de Bruxelles.

Janzen, T. (1999). The grammaticalization of topics in American Sign Language. *Studies in Language*, 23(2):271–306.

Johnson, K. (1991). Object positions. *Natural Language and Linguistic Theory*, 9(4):577–636.

Johnson, M. (2012). *Ethnobotanik der Region NDIKI* (*Kamerun*)*: Die Pflanze im alltäglichen Leben der Banen der Region NDIKI; Der soziokulturelle Wert*. PhD thesis, Universitaet Hamburg.

Julien, M. (2002). *Syntactic heads and word formation*. Oxford: OUP.

Kastenholz, R. (2003). Auxiliaries, grammaticalization, and word order in Mande. *Journal of African Languages and Linguistics* (*JALL*), 24:31–53.

Katamba, F. (2003). Bantu nominal morphology. In Nurse, D. and Philippson, G., editors, *The Bantu languages*, pages 103–120. Routledge.

Kathol, A. and Rhodes, R. A. (1999). Constituency and linearization of Ojibwe nominals. In Caldecott, M. G., Gessner, S. C., and Kim, E.-S., editors, *Proceedings of WSCLA 4 - Workshop on Structure & Constituency in Native American Languages*, pages 75–91. Vancouver, BC: UBC Working Papers in Linguistics.

Kayne, R. S. (1975). *French Syntax*. Cambridge, MA: MIT Press.

Kayne, R. S. (1994). *The Antisymmetry of Syntax*. Cambridge, MA: MIT Press.

Keine, S. (2018). Case vs. positions in the locality of A-movement. *Glossa: a journal of general linguistics*, 3(1)(138).

Kerr, E. J. (2018). A Dynamic Syntax account of the conjoint/disjoint alternation in Zulu. Master's thesis, School of Oriental and African Studies, University of London.

Kerr, E. J. (2020). The grammaticalisation of a specific indefinite determiner: Prenominal *-mɔ̀tɛ́* in Tunen. In Van der Wal, J., Smits, H. J., Petrollino, S., Nyst, V. A., and Kossmann, M. G., editors, *Essays on African languages and linguistics: In honour of Maarten Mous*. Leiden: African Studies Centre Leiden Occasional Publications.

Kerr, E. J. (2024). On OV and VO at the Bantu/Bantoid borderlands. In Huang, Y., Kaldhol, N. H., Lim, J., Rose, S., and Struthers-Young, A., editors, *Selected Papers from the 53rd Annual Conference on African Linguistics*, page 297–345. Berlin: Language Science Press.

Kerr, E. J. (in prep.). Item "Recordings and database on Tunen syntax and information structure" in collection "Bantu Syntax and Information Structure (BaSIS)". *The Language Archive*, https://hdl.handle.net/1839/8f0f1a65-9a90-42e3-ae39-7bed93009b5a (Accessed 2024-07-11).

Kerr, E. J. (to appear). The expression of information structure in Tunen (A44). In Van der Wal, J., editor, *The expression of information structure in Bantu*. Berlin: Language Science Press.

Kerr, E. J., Asiimwe, A., Kanampiu, P., Nshemezimana, E., Li, Z., and van der Wal, J. (2023). Bantu word order between discourse and syntactic relations. *Linguistique et Langues Africaines*, 9(1).

Kerr, E. J. and van der Wal, J. (2023). Indirect truth marking via backgrounding: Evidence from Bantu. *Zeitschrift für Sprachwissenschaft*, 42(3):443–492.

Kertész, A. (2017). *The Historiography of Generative Linguistics*. Tübingen: Francke Attempto Verlag GmbH.

Kiparsky, P. (1996). The shift to head-initial VP in Germanic. In Thráinsson, H., Epstein, S., and Peter, S., editors, *Studies in Comparative Germanic Syntax II*, pages 140–179. Dordrecht: Kluwer.

Klein, S. (1976). A base analysis of the floating quantifier in French. In Kegl, J., Nash, D., and Zaenen, A., editors, *NELS VII: Proceedings of the Seventh Annual Meeting of NELS*. Department of Linguistics and Philosophy, MIT, Cambridge, MA.

Koelle, S. (1854[2023]). CLDF dataset derived from Koelle's "Polyglotta Africana" from 1854 (v2.0) [Data set]. Zenodo. https://doi.org/10.5281/zenodo.8405204.

Koile, E., Greenhill, S. J., Blasi, D. E., Bouckaert, R., and Gray, R. D. (2022). Phylogeographic analysis of the Bantu language expansion supports a rainforest route. *PNAS*, https://doi.org/119.e2112853119.

Kongne Welaze, J. (2010). Morphologie verbale du tunen. Unpublished DEA, Université de Yaoundé I, April 2010.

Koni Muluwa, J. and Bostoen, K. (2014). The immediate before the verb focus position in Nsong (Bantu B85d, DR Congo): a corpus-based exploration. *ZAS Papers in Linguistics*, 57:123–135.

Koopman, H. and Sportiche, D. (1991). The position of subjects. *Lingua*, (85):211–258.

Koopman, H. J. (1984). *The syntax of verbs: From verb movement rules in the Kru languages to Universal Grammar*. PhD thesis, Tilburg University.

Koster, J. (1975). Dutch as an SOV language. *Linguistic Analysis*, 1:111–136.

Kouadio, N. J. (1996). *Description systématique de l'attié de Memni*. PhD thesis, University of Grenoble.

Kratzer, A. (1994). On external arguments. *Functional projections: UMass Working Papers in Lingusitics*, pages 103–130. GLSA Publications, Amherst, MA.

Kratzer, A. (1996). Severing the external argument from its verb. In Rooryck, J. and Zaring, L., editors, *Phrase Structure and the Lexicon*, page 109–137. Dordrecht: Kluwer.

Krifka, M. (2008). Basic notions of information structure. *Acta Linguistica Hungarica*, 55(3-4):243–276.

Köylü, Y. (2021). An overview of the NP versus DP debate. *Language and Linguistic Compass*, 15(3).

Lambrecht, K. (1994). *Information structure and sentence form*, volume 71 of *Cambridge Studies in Linguistics*. Cambridge: CUP.

Larson, R. K. (1988). On the double object construction. *Linguistic Inquiry*, 19:335–391.

Li, C. N. and Thompson, S. A. (1976). Subject and topic: A new typology of language. In Li, C. N. and Thompson, S. A., editors, *Subject and topic*, page 459–489. New York: Academic Press.

Li, Z. (to appeara). The expression of information structure in Teke-Kukuya (B77). In Van der Wal, J., editor, *The expression of information structure in Bantu*. Berlin: Language Science Press.

Li, Z. (to appearb). *Word order, agreement, and information structure in Teke-Kukuya*. PhD thesis, Leiden University.

Lipták, A. and Güneş, G. (2022). The derivational timing of ellipsis: An overview of theoretical approaches. In Güneş, G. and Lipták, A., editors, *The derivational timing of ellipsis*, pages 1–56. Oxford: OUP.

Lochbihler, B. (2009). Discontinuous DP constructions. In *2009 CLA Conference Proceedings*.

Lohndal, T. (2013). Generative grammar and language mixing. *Theoretical Linguistics*, 39:215–224.

Lohndal, T., Rothman, J., Kupisch, T., and Westergaard, M. (2019). Heritage language acquisition: What it reveals and why it is important for formal linguistic theories. *Language and Linguistics Compass*, 13:e12357.

Louagie, D. and Verstraete, J.-C. (2016). Noun phrase constituency in Australian languages: A typological study. *Linguistic Typology*, 20(1):25–80.

Lüpke, F. (2019). Language endangerment and language documentation in Africa. In Wolff, H. E., editor, *The Cambridge Handbook of African Linguistics*, Cambridge Handbooks in Language and Linguistics, page 468–490. Cambride: CUP.

Maho, J. (2003). A classification of the Bantu languages: an update of Guthrie's referential system. In Nurse, D. and Philippson, G., editors, *The Bantu Languages*, pages 639–651. Routledge.

Maho, J. F. (2009). NUGL online: The online version of the New Updated Guthrie List, a referential classification of the Bantu languages. *Online file: http://goto.glocalnet.net/mahopapers/nuglonline.pdf*.

Malchukov, A., Haspelmath, M., and Comrie, B. (2010). *Ditransitive constructions: A typological overview*, pages 1–64. De Gruyter Mouton, Berlin/New York.

Marten, L. (2014). The preverbal position(s) in Bantu inversion constructions: Theoretical and comparative considerations. In Hamlaoui, F., editor, *Proceedings of the Workshop BantuSynPhonIS: Preverbal Domain(s)* (*ZAS Papers in Linguistics 57*, pages 136–159. Berlin: ZAS.

Marten, L. (2020). Bantu and Bantoid. In Vossen, R. and Dimmendaal, G. J., editors, *The Oxford Handbook of African Languages*. Oxford: OUP.

Marten, L., Kula, N. C., and Thwala, N. (2007). Parameters of morphosyntactic variation in Bantu. *Transactions of the philological society*, 105(3):253–338.

Marten, L. and van der Wal, J. (2014). A typology of Bantu subject inversion. *Linguistic Variation*, 14(2):318–368.

Matić, D. and Wedgwood, D. (2013). The meaning of focus: The significance of an interpretation-based category in cross-linguistic analysis. *Linguistics*, 49(1):127–163.

Mbongue, J. (2005). *Macro-Approach of the Tunen Bible Translation: An Application of the Key Biblical Technical Termini*. PhD thesis, University Halle-Wittenburg.

Mchombo, S. A. (2004). *The syntax of Chichewa*. Cambridge: CUP.

Mchombo, S. A. (2006). Linear order constraints on split NPs in Chichewa. *ZAS Papers in Linguistics*, 43:143–160.

Mchombo, S. A., Morimoto, Y., and Féry, C. (2005). Partitioning discourse information: A case of Chicheŵa split constituents. In Butt, M. and Holloway, K. T., editors, *Proceedings of the LFG05 conference*. Bergen: CSLI Publications.

Meeussen, A. E. (1967). Bantu grammatical reconstructions. *Africana linguistica*, 3(1):79–121.

Merchant, J. (2001). *The Syntax of Silence: Sluicing, Islands, and the Theory of Ellipsis*. Oxford: OUP.

Merchant, J. (2004). Fragments and ellipsis. *Linguistics and Philosophy*, 27:661–738.

Mikkelsen, L. (2011). Copular clauses. In Maienborn, C., von Heusinger, K., and Portner, P., editors, *Semantics*, Handbooks of Linguistics and Communication Science (HSK), pages 1805–1829. de Gruyter.

Mithun, M. (1984). The evolution of noun incorporation. *Language*, 60(4):847–894.

Miyagawa, S. (2010). *Why Agree? Why Move*. Cambridge, MA: Massachusetts Institute of Technology (MIT) Press.

Miyagawa, S. (2017). *Agreement Beyond Phi*. Cambridge, MA: Massachusetts Institute of Technology (MIT) Press.

Morimoto, Y. (2000). *Discourse configurationality in Bantu syntax*. PhD thesis, Stanford University.

Morimoto, Y. (2006). Agreement properties and word order in comparative Bantu. *ZAS Papers in Linguistics*, 43:161–187.

Morimoto, Y. (2017). The Kikuyu focus marker *nĩ*: Formal and functional similarities to the conjoint/disjoint alternation. In Van der Wal, J. and Hyman, L., editors, *The conjoint/disjoint alternation in Bantu*, pages 147–174. De Gruyter Mouton.

Moro, A. (2000). *Dynamic antisymmetry*, volume 38. Cambridge, MA: MIT press.

Mous, M. (1986). Vowel harmony in Tunen. In Bogers, K., van der Hulst, H., and Mous, M., editors, *The phonological representation of suprasegmentals: Studies on African languages offered to John M. Stewart on his 60th birthday*. Walter de Gruyter GmbH & Co KG.

Mous, M. (1997). The position of the object in Tunen. In Déchaine, R.-M. and Manfredi, V., editors, *Object positions in Benue-Kwa*, pages 123–137. Holland Academic Graphics.

Mous, M. (2003). Nen (A44). In Nurse, D. and Philippson, G., editors, *The Bantu Languages*, pages 283–306. Routledge.

Mous, M. (2005). The innovative character of object-verb word order in Nen (Bantu A44, Cameroon). In Bostoen, K. and Maniacky, J., editors, *Studies in African Comparative Linguistics with Special Focus on Bantu and Mande*, pages 411–424. Tervuren: MRAC.

Mous, M. (2008). Voice in Tunen: The so-called passive prefix *bé*. *Studies in Slavic and General Linguistics*, 33:303–312.

Mous, M. (2014). TAM-full object-verb order in the Mbam languages of Cameroon. *Proceedings of the Workshop BantuSynPhonIS: Preverbal Domain(s), ZAS, Berlin*, 57:72–94.

Mous, M. (2022). Tone and the verbal systems of Nyokon. *Journal of West African Languages*, 49(2):1–33.

Mursell, J. (2021). *The Syntax of Information-Structural Agreement*. John Benjamins.

Myers, S. (1990). *Tone and the structure of words in Shona*. New York: Garland.

Neeleman, A., Titov, E., van de Koot, H., and Vermeulen, R. (2009). A syntactic typology of topic, focus and contrast. In van Craenenbroeck, J., editor, *Alternatives to cartography*, pages 15–52. Berlin: Mouton de Gruyter.

Newmeyer, F. J. (1980). *Linguistic Theory in America: The first quarter-century of transformational generative grammar*. New York: Academic Press.

Newmeyer, F. J. (1986). *Linguistic Theory in America*. New York: Academic Press, 2 edition.

Newmeyer, F. J. (1992). Iconicity and Generative Grammar. *Language*, (4):756–796.

Newmeyer, F. J. (1996). *Generative Linguistics: A historical perspective*. London/New York: Routledge.

Newmeyer, F. J. (2022). *American linguistics in transition: from post-Bloomfieldan structuralism to generative grammar*. Oxford: OUP.

Ngonyani, D. (2000). The structure of Kinande applicatives. In Carstens, V. and Parkinson, F., editors, *Advances in African Linguistics*, pages 61–76. Trenton, NJ: Africa World Press.

Ngonyani, D. and Githinji, P. (2006). The asymmetric nature of Bantu applicative constructions. *Lingua*, 116:31–63.

Nicolae, A. (2019). *Word Order and Parameter Change in Romanian: A Comparative Romance Perspective*. Oxford: OUP.

Nikitina, T. (2011). Categorial reanalysis and the origin of the S-O-V-X word order in Mande. *Journal of African Languages and Linguistics* (*JALL*), 32:251–273.

Nshemezimana, E. and van der Wal, J. (to appear). The expression of information structure in Kirundi. In Van der Wal, J., editor, *The expression of information structure in Bantu*. Berlin: Language Science Press.

Nsuka-Nkutsi, F. (1982). *Les structures fondamentales du relatif dans les langues bantoues*. Tervuren: MRAC.

Nurse, D. (2007). Did the Proto-Bantu verb have a synthetic or analytic structure? In Kula, N. C. and Marten, L., editors, *Bantu in Bloomsbury, 15*, pages 239–256. London: SOAS.

Nurse, D. (2008). *Tense and aspect in Bantu*. Oxford: OUP.

Odden, D. (2015). Bantu phonology. *Oxford Handbooks Online*, (online edn, Oxford Academic, 5 Dec. 2014), https://doi.org/10.1093/oxfordhb/9780199935345.013.59.

Ormazabal, J. and Romero, J. (2010). The derivation of dative alternations. In Duguine, M., Huidobro, S., and Madariaga, N., editors, *Argument structure and syntactic relations: A crosslinguistic perspective*, pages 203–232. John Benjamins.

Ott, D. C. (2011). *Local Instability*. PhD thesis, Harvard University.

Ott, D. C. (2012). *Local Instability: Split Topicalization and Quantifier Float in German*. Berlin, Boston: De Gruyter.

Ozerov, P. (2018). Tracing the sources of Information Structure: Towards the study of interactional management of information. *Journal of Pragmatics*, 138:77–97.

Pakendorf, B., Bostoen, K., and de Filippo, C. (2011). Molecular perspectives on the Bantu Expansion: A synthesis. *Language Dynamics and Change*, 1:50–88.

Paul, W. and Whitman, J. (2017). Topic prominence. In Everaert, M. and van Riemsdijk, H. C., editors, *The Wiley Blackwell Companion to Syntax*. John Wiley & Sons, Inc, 2 edition.

Pesetsky, D. (1995). *Zero Syntax: Experiencers and Cascades*. Cambridge, MA: MIT Press.

Philippson, G. (2022a). Double reflexes in northwestern Bantu and their implications for the Proto-Bantu consonant system. In Bostoen, K., Pacchiarotti, S., Guérois, R., and de Schryver, G.-M., editors, *On reconstructing Proto-Bantu grammar*, pages 3–58. Berlin: Language Science Press.

Philippson, G. (2022b). Proto-Bantu **k* and **g* in the Mbam languages: A problem in classification. *Language in Africa*, 3(2):239–258.

Polak, L. (1986). Les infixes ('préfixes objets') du bantou et leur reconstruction. *Africana Linguistica*, 10:365–421.

Pollock, J.-Y. (1989). Verb movement, universal grammar, and the structure of IP. *Linguistic inquiry*, 20(3):365–424.

Pregla, A. (2023). *Word order variability in OV languages: A study on scrambling, verb movement, and postverbal elements with a focus on Uralic languages*. PhD thesis, Potsdam University.

Pregla, A. (in prep.). South Sámi in the typology of SAuxOV languages. Ms., University of Potsdam.

Pylkkänen, L. (2002). *Introducing arguments*. PhD thesis, MIT.

Pylkkänen, L. (2008). *Introducing arguments*. Cambridge, MA: MIT Press.

Quesada, J. D. (2007). *The Chibchan Languages*. Cartago, Costa Rica: Editorial Tecnológica.

Ramchand, G. C. (2008). *Verb meaning and the Lexicon: A First Phase Syntax*. Cambridge: CUP.

Reich, I. (2002). Question/answer congruence and the semantics of wh-phrases. *Theoretical Linguistics*, 28(1):73–94.

Reinhart, T. (1982). Pragmatics and linguistics: An analysis of sentence topics. *Philosophica*, 27:53–93.

Reinholtz, C. (1999). On the characterization of discontinuous constituents: Evidence from Swampy Cree. *International Journal of American Linguistics*, 65:201–227.

Rijkhoff, J. (1990). Explaining word order in the noun phrase. *Linguistics*, 28:5–42.

Rijkhoff, J. (2002). *The Noun Phrase*. Oxford: OUP.

Rizzi, L. (1997). The fine structure of the left periphery. In Haegeman, L., editor, *Elements of grammar: Handbook in generative syntax*, pages 281–337. Dordrecht: Springer.

Roberts, C. (1996). Information Structure in Discourse: Towards an Integrated Formal Theory of Pragmatics. *Semantics & Pragmatics*, 5(6):1–69.

Roberts, I. G. (2019). *Parameter hierarchies and Universal Grammar*. Oxford: OUP.

Roberts, I. G. (2021). *Diachronic Syntax*. Oxford: OUP, 2nd edition.

Rolle, N., Faytak, M., and Lionnet, F. (2017). The distribution of advanced tongue root harmony and interior vowels in the Macro-Sudan Belt. *Proceedings of the Linguistic Society of America*, 2(10):1–15.

Rolle, N., Lionnet, F., and Faytak, M. (2020). Areal patterns in the vowel systems of the Macro-Sudan Belt. *Linguistic Typology*, 24(1):113–179.

Rooth, M. (1985). *Association with focus*. PhD thesis, UMass, Amherst.

Rooth, M. (1992). A theory of focus interpretation. *Natural Language Semantics*, 1:75–116.

Ross, J. R. (1967). *Constraints on variables in syntax*. PhD thesis, MIT.

Russell, K. and Reinholtz, C. (1995). Hierarchical structure in a nonconfigurational language: Asymmetries in Swampy Cree. In Camacho, J., Choueiri, L., and Watanabe, M., editors, *Proceedings of the Fourteenth West Coast Conference on Formal Linguistics*, pages 413–445. Stanford: CSLI Publications.

Salzmann, M. (2020). The NP vs. DP debate. Why previous arguments are inconclusive and what a good argument could look like. Evidence from agreement with hybrid nouns. *Glossa: a journal of general linguistics*, 5(1)(83):1–46.

Sande, H., Baier, N., and Jenks, P. (2019). The syntactic diversity of SAuxOV in West Africa. In Emily Clem, P. J. and Sande, H., editors, *Theory and description in African Linguistics: Selected papers from the 47th Annual Conference on African Linguistics*, page 667–701. Berlin: Language Science Press.

Sande, H. L. (2017). *Distributing Morphologically Conditioned Phonology: Three Case Studies from Guébie*. PhD thesis, University of California Berkeley.

Sanker, C., Babinski, S., Burns, R., Evans, M., Johns, J., Kim, J., Smith, S., Weber, N., and Claire, B. (2021). (Don't) try this at home! the effects of recording devices and software on phonetic analysis. *Language*, 97(4):e360–e382.

Sasse, H.-J. (1987). The thetic/categorical distinction revisited. *Linguistics*, 25:511–580.

Sasse, H.-J. (1996). *Theticity*. Köln: Institut für Sprachwissenschat der Universität zu Köln.

Satre, S. A., Welaze, J. K., Batouan, J.-A. B., Bete, S., and Sebineni, A. F. (2008). Précis d'orthographe pour la langue tunen. Yaoundé, Cameroon: Association Camerounaise pour la Traduction de la Bible et l'Alphabétisation (CABTAL).

Schadeberg, T. (2003a). Derivation. In Nurse, D. and Philippson, G., editors, *The Bantu Languages*, pages 71–89. Routledge, 1st edition.

Schadeberg, T. (2003b). Historical linguistics. In Nurse, D. and Philippson, G., editors, *The Bantu Languages*, pages 143–163. Routledge, 1st edition.

Schadeberg, T. and Bostoen, K. (2019). Word formation. In Van de Velde, M. L. O., Bostoen, K., Nurse, D., and Philippson, G., editors, *The Bantu Languages*, pages 172–203. London/New York: Routledge, 2 edition.

Schultze-Berndt, E. (2022). When subjects frame the clause: discontinuous noun phrases as an iconic strategy for marking thetic constructions. *Linguistics*, 60(3):865–898.

Scontras, G., Fuchs, Z., and Polinsky, M. (2015). Heritage language and linguistic theory. *Frontiers in Psychology*, 6.

Selkirk, E. (2011). The syntax-phonology interface. In Goldsmith, J. A., Riggle, J., and Yu, A. C. L., editors, *The handbook of phonological theory*, pages 435–484. Wiley Online Library, 2 edition.

Sheehan, M. (2013). Explaining the Final-over-Final Constraint: formal and functional approaches. In Biberauer, T. and Sheehan, M., editors, *Theoretical approaches to disharmonic word orders*, pages 407–44. Oxford: OUP.

Sheehan, M., Biberauer, T., Roberts, I., and Holmberg, A. (2017). *The final-over-final condition: A syntactic universal*. Cambridge, MA: MIT Press.

Skopeteas, S., Fiedler, I., Hellmuth, S., Schwarz, A., Stoel, R., Fanselow, G., Féry, C., and Krifka, M. (2006). *Questionnaire on Information Structure (QUIS): reference manual*. Universitätsverlag Potsdam.

Skopeteas, S., Verhoeven, E., and Fanselow, G. (2020). Discontinuous noun phrases in Yucatec Maya. *Journal of Linguistics*, 58(3):609–648.

Sperber, D. and Wilson, D. (1995). *Relevance: Communication and Cognition*. Wiley-Blackwell.

Sportiche, D. (1988). A theory of floating quantifiers and its correlates for constituent structure. *Linguistic Inquiry*, 19(3):425–449.

Stanley, C. (1997). *Description Morpho-Syntaxique de la langue Tikar (parlée au Cameroun)*. Societe Internationale de Linguistique (SIL).

Stappers, L. (1967). Het passief-suffix -u- in de bantoe-talen. *Africana Linguistica*, 3:137–145.

Struik, T. (2022). *Information Structure Triggers for Word Order Variation and Change: the OV/VO alternation in the West-Germanic Languages*. PhD thesis, Radboud Universiteit Nijmegen.

Struik, T. and Schoenmakers, G.-J. (2023). When information structure exploits syntax: The relation between the loss of VO and scrambling in Dutch. *Journal of Linguistics*, 59(3):655–690.

Struik, T. and Van Kemenade, A. (2020). On the givenness of OV word order: a (re)

examination of OV/VO variation in Old English. *English Language & Linguistics*, 24(1):1–22.

Struik, T. and Van Kemenade, A. (2022). Information structure and OV word order in Old and Middle English: a phase-based approach. *The Journal of Comparative Germanic Linguistics*, 25(1):79–114.

Surányi, B. (2016). Discourse-configurationality. In Féry, C. and Ishihara, S., editors, *The Oxford handbook of information structure*, page 422-440. Oxford: OUP.

Svenonius, P., editor (2000). *The Derivation of VO and OV*. John Benjamins.

Taylor, C. (1984). Participant reference in Nomaándé narrative discourse. Ms., SIL Cameroon.

Taylor, C. (1999). Pronouns in Nomaande. Ms., SIL Cameroon.

Thráinsson, H. (2007). *The syntax of Icelandic*. Cambridge: CUP.

Tourigny, H. (2008). Configurationality in Ojibwe: Focus on word order. Ms., University of Ottawa.

Traugott, E. C. (1985). Conditional markers. In Haiman, J., editor, *Iconicity in Syntax: Proceedings of a Symposium on Iconicity in Syntax, Stanford, June 24–26, 1983*, pages 289–308. Amsterdam: John Benjamins.

Travis, L. D. (1984). *Parameters and effects of word order variation*. PhD thesis, MIT.

Vallduví, E. and Vilkuna, M. (1998). On rheme and kontrast. In Culicover, P. and McNally, L., editors, *The limits of syntax*, pages 79–106. New York: Academic Press.

Van de Velde, M. L. O. (2005). The order of noun and demonstrative in Bantu. In Bostoen, K. and Maniacky, J., editors, *Studies in African Comparative Linguistics with Special Focus on Bantu and Mande*, pages 425–442. Tervuren: MRAC.

Van de Velde, M. L. O. (2008). *A grammar of Eton*. Walter de Gruyter.

Van de Velde, M. L. O. (2009). Eton tonology and morphology. In Epps, P. and Arkhipov, A., editors, *New Challenges in Typology : Transcending the Borders and Refining the Distinctions*, pages 35–62. Berlin/New York: Mouton de Gruyter.

Van de Velde, M. L. O. (2013). The Bantu connective construction. In Carlier, A. and Verstraete, J.-C., editors, *The Genitive*, pages 217–252. Amsterdam/Philadelphia: John Benjamins.

Van de Velde, M. L. O. (2019). Nominal morphology and syntax. In Van de Velde, M. L. O., Bostoen, K., Nurse, D., and Philippson, G., editors, *The Bantu Languages*, pages 237–269. London/New York: Routledge, 2 edition.

Van de Velde, M. L. O. (2022). The AMAR mechanism: Nominal expressions in the Bantu languages are shaped by apposition and reintegration. *Linguistics*, 60(3):899–931.

Van der Hulst, H., Mous, M., and Smith, N. (1986). The autosegmental analysis of reduced vowel harmony systems: the case of Tunen. In Beukema, F. and Hulk, A.,

editors, *Linguistics in the Netherlands*, pages 105–112. Berlin/Boston: De Gruyter Mouton.

Van der Wal, J. (2009). *Word order and information structure in Makhuwa-Enahara*. PhD thesis, Leiden University.

Van der Wal, J. (2015). Bantu syntax. *Oxford Handbooks Online*, (online edn, Oxford Academic, 5 Dec. 2014), https://doi.org/10.1093/oxfordhb/9780199935345.013.50.

Van der Wal, J. (2016). Diagnosing focus. *Studies in Language*, 40(2):259–301.

Van der Wal, J. (2017). What is the conjoint/disjoint alternation? Parameters of crosslinguistic variation. In Van der Wal, J. and Hyman, L. M., editors, *The conjoint/disjoint alternation in Bantu*, pages 14–60. De Gruyter Mouton.

Van der Wal, J. (2020). From macroparameters to nanoparameters – a comparative Bantu case study. In Bárány, A., Biberauer, T., Douglas, J., and Vikner, S., editors, *Syntactic architecture and its consequences I: Syntax inside the grammar*, pages 25–60. Berlin: Language Science Press.

Van der Wal, J. (2021). The BaSIS basics of information structure. Ms., Leiden University. https://hdl.handle.net/1887/3608096.

Van der Wal, J. (2022). *A featural typology of Bantu agreement*. Oxford: OUP.

Van der Wal, J., editor (to appeara). *The expression of information structure in Bantu*. Berlin: Language Science Press.

Van der Wal, J. (to appearb). The expression of information structure in Makhuwa. In Van der Wal, J., editor, *The expression of information structure in Bantu*. Berlin: Language Science Press.

Van der Wal, J., Asiimwe, A., Kanampiu, P., Kerr, E. J., Li, Z., Lusekelo, A., Nhantumbo, N., and Nshemezimana, E. (to appear). On the expression of information structure in Bantu. In Van der Wal, J., editor, *The expression of information structure in Bantu*. Berlin: Language Science Press.

Van der Wal, J. and Hyman, L. M., editors (2017). *The conjoint/disjoint alternation in Bantu*. De Gruyter Mouton.

Van Leynseele, H. (1977). Essai d'analyse historique des voyelles et consonnes du tunen (Bantu A.44). Ms., Leiden University.

Van Urk, C. (2015). *A uniform syntax for phrasal movement: A case study of Dinka Bor*. PhD thesis, MIT.

Vaux, B., Cooper, J., and Tucker, E. (2006). *Linguistic Field Methods*. Eugene, OR: Wipf & Stock Publishers.

Vergnaud, J.-R. (1977[2008]). Letter to Noam Chomsky and Howard Lasnik on "Filters and Control" April 17, 1977. In Freidin, R., Otero, C. P., and Zubizarreta, M. L., editors, *Foundational Issues in Linguistic Theory: Essays in Honor of Jean-Roger Vergnaud*. Cambridge, MA: MIT Press.

Vikner, S. (1990). *Verb Movement and the Licensing of NP-positions in the Germanic Languages*. PhD thesis, Université de Genève.

Wasike, A. (2007). *The left periphery, wh-in-situ and A-bar movement in Lubukusu and other Bantu languages*. PhD thesis, Cornell University, Ithaca.

Watters, J. R. (1979). Focus in Aghem. In Hyman, Larry, editor, *Aghem Grammatical Structure*, pages 137–197. University of Southern California, Los Angeles.

Watters, J. R. (2018). East Benue-Congo. In Watters, J. R., editor, *East Benue-Congo*, pages 1–25. Berlin: Language Science Press.

Wilkendorf, P. (2001). *Sketch Grammar of Nomaándé: Sections 1-4*. Ms., SIL Cameroon.

Wilkinson, R. W. (1975). Tunen tone changes and derived phonological contrast. *Language*, 51(3):561–575.

Williams, N., Silva, W. D. L., McPherson, L., and Good, J. (2021). COVID-19 and documentary linguistics: Some ways forward. *Language Documentation and Description*, 20:359–377.

Williamson, K. (1986). Niger-Congo: SVO or SOV? *Journal of West African Languages*, 16(1):5–14.

Wurmbrand, S. (2017). Stripping and topless complements. *Linguistic Inquiry*, 48(2):341–66.

Yoneda, N. (2011). Word order in Matengo (N13): Topicality and informational roles. *Lingua*, 121(5):754–771.

Yoshida, M., Wang, H., and Potter, D. (2012). Remarks on "gapping" in DP. *Linguistic Inquiry*, 43(3):475–494.

Zeller, J. (2013a). In defence of head movement: evidence from Bantu. In Cheng, L. and Corver, N., editors, *Diagnosing syntax*, pages 87–111. Oxford: OUP Oxford.

Zeller, J. (2013b). Locative inversion in Bantu and predication. *Linguistics*, 6(51):1107–46.

Zeller, J. (2017). A note on Bantu extensions and syntactic word formation. *Nordic Journal of African Studies*, 26(4):256–276.

Zeller, J. (2020). Syntax. In Dimmendaal, G., editor, *The Oxford handbook of African languages*, pages 66–87. Oxford: OUP.

Zimmermann, M. (2016). Predicate focus. In Féry, C. and Ishihara, S., editors, *The Oxford handbook of information structure*, page 314–335. Oxford: OUP.

Zwart, J.-W. (1993). *Dutch Syntax: A minimalist approach*. PhD thesis, University of Groningen.

Zwart, J.-W. (1997). *Morphosyntax of Verb Movement*. Dordrecht: Kluwer.

Appendix: Sample texts

This appendix provides four transcribed texts, including two dialogues and two monologues. These texts are examples of natural speech data that form part of the audiovisual corpus deposit associated with this thesis (see Chapter 3 section §3.6 for details on accessing the corpus). The characteristics of the four sample texts are summarised in Table 9.2.

Text no.	Text name	Text type	Subtype
1	QUIS map task dialogue	Dialogue	Task-based dialogue
2	Dialogue after dancing	Dialogue	Free dialogue
3	Cooking *kok* recipe	Monologue	Procedural
4	The chicken and the partridge	Monologue	Animal story

Table 9.2: Overview of the four sample texts in this appendix.

The texts are formatted here for a general linguistics audience. This means that each example is interlinearised following the example presentation format used throughout this thesis, as explained in Chapter 4. I also use the same convention of transcribing surface tone and not transcribing unpronounced vowels on the first line, which differs from the Tunen community orthography in which the underlying forms are written (as discussed in Chapter 4). To convert the texts to the community orthography, the information from the underlying transcription line must therefore be combined with the first transcription line. The only difference from example presentation elsewhere in this thesis is that I have adapted the punctuation use for presentation as a text, e.g. using capital letters for the start of each sentence.

9.1 Text 1: QUIS map task dialogue

In this text, PM and EO perform the map task from the Questionnaire on Information Structure (QUIS; Skopeteas et al. 2006), using visual stimuli from the map pair from QUIS Task 20 (Map Task: Contrastive and selective focus in spontaneous dialogue) Item 1 (Skopeteas et al. 2006:155-157). Here, PM has a map with a route indicated on it and EO has a map without the route marked on it (Fig. 9.1). The goal of the task is for PM to instruct EO on what route to take (without showing each other the maps). The two maps are slightly different, which (in contrast to the QUIS procedure version) the speakers were not made aware of in advance. The task is designed to record interactional speech and provides examples of imperatives and corrective focus.

Text name:	QUIS map task
Text type:	Dialogue
Subtype:	Task-based dialogue
Participants:	EO, PM
Also present:	EK
Recording date:	2019-04-29
Location:	DM's house, inside (Ndikiniméki)
Recording set-up:	Zoom H5 + stereo mic (audio), Sony CX625 (video)
Recording duration:	00:04:54 (incl. instructions)
Transcribed by:	PM, EK
File info:	A44-20190429-EK-EOPM-QUISmaptask.wav A44-20190429-EK-EOPM-QUISmaptask.mp4

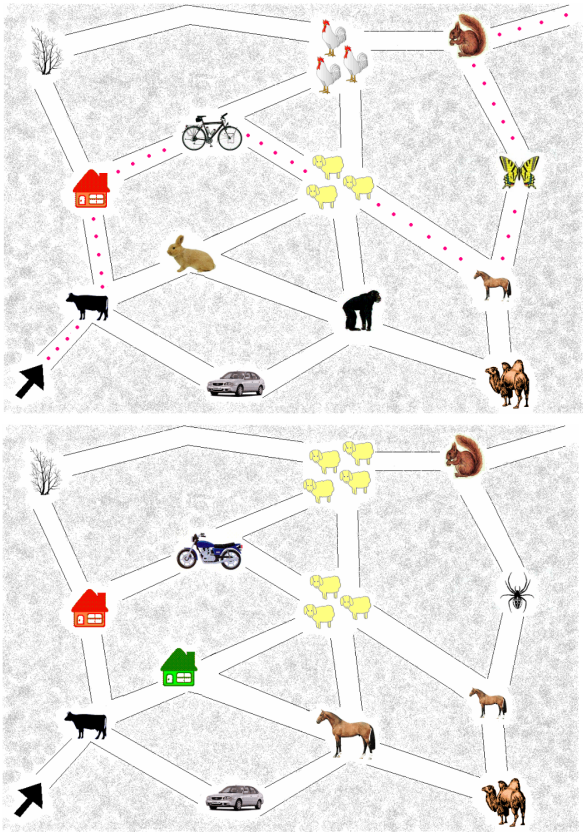


Figure 9.1: Map provided to PM (top) and EO (bottom) (Skopeteas et al. 2006:157).

Figure 9.2: EO (left) and PM (right) performing the QUIS map task.

(509) Ítiənə, ɔ ná yá ?[1]
/á[3] Itiənə ɔ ná yá/
VOC Etienne SM.2G PST2 rise
"Etienne, bonjour."
"Etienne, good morning." [PM 657]

(510) Ɛ́ɛ.
/ɛ́ɛ/
yes
"Bonjour."
"Good morning." [EO 658]

(511) Ɔ́ ndɔ sinə hɔ́yɛ́ ɔhá ɔmbɔ́áŋɛ́ wɔ́ lɛ́á lutə́↓tɔ́ ?
/ɔ ᴴndɔ sinə hɔ́yɛ́ ɔhá ɔ-mbɔ́áŋɛ́ wɔ́ lɛ́á lutə́-átɔ/
SM.2G PRS see DEM.DISC.LOC REL.LOC 3-arrow SM.3 be draw-PTCP
"Vois-tu là où est dessinée la flèche ?"
"Do you see there where the arrow is drawn?" [PM 659]

(512) Ɛ́ɛ.
/ɛ́ɛ/
yes
"Oui."
"Yes." [EO 660]

(513) Yatɛ́ yɛ́ lɛ́á u busíə́ bɔ́ ɔmbɔ́áŋ ?
/yatɛ́ yɛ́ lɛ́á ɔ busíə́ bɔ́ ɔ-mbɔ́áŋɛ/
what SM.7 be PREP 14.front ASSOC.14 3-arrow
"Qu'est-ce qu'il y a devant la flèche ?"
"What's in front of the arrow?" [PM 661]

---

[3]This greeting is used in the morning, translating literally as "Did you rise?". I use free translations to express the equivalent meanings in French and English.

[3]The vocative particle is found in the dataset as *á*, *a*, *ə́*, and *ə*; here, it is only visible on the surface line from the H tone (via High Tone Spread; Chapter 4 section §4.2). Dugast (1971) treats the vocative as one function of the *á* found in focus expression (cf. Chapter 5). I gloss them as distinct items, as discussed in Chapter 4 section §4.6.1.

(514) Túbíə́lúníná tɔ́ lɛ bɛnɔ́mɛ bɛlal.
/tɔ-bíə́lúníná tɔ́ lɛa bɛ-nɔ́mɛ bɛ́-lálɔ́/
13-intersection SM.13 be 8-road 8-three
"Il y a un carrefour de trois routes."
"There is an intersection with three roads." [PM 662]

(515) Hibíə́lúníná hí búsíə́ -
/hɛ-bíə́lúníná hɛ́ busíə́/
19-intersection ASSOC.19 14.front
"Le premier embranchement -"
"The first road -" [PM 663]

(516) Mɛ́ ndɔ sinə ... mɛnyama ɛkáhɔ.
/mɛ ᴴndɔ sinə mɛ-nyama ɛ-káhɔa/
SM.1SG PRS see 9-animal 9-beef
"I see ... a cow."
"Je vois ... une vache." [EO 664]

(517) mhm.
/mhm/
PTCL
"mhm."
"mhm." [PM 665]

(518) Yɛ́ ↓léá[4] tɛ́nɛ́mátɔ.
/yɛ́ léá tɛ́nɛ́má-átɔ/
SM.7 be stand-PTCP
"Il est debout."
"It's stood there." [EO 666]

(519) Ɔ ná ɛkáhɔa bɔ́ŋɔ́ ?
/ɔ ná ɛ-káhɔa bɔ́ŋɔ́[6]/
SM.2SG PST2 7-cow find
"Tu as trouvé une vache ?"
"You've found a cow?" [PM 667]

[4]The downstep before *léá* is unexpected.
[6] For verbs that surface with final H tones in contexts such as the polar question context here, I

(520) Ɛ́ɛ.
/ɛ́ɛ/
yes
"Oui."
"Yes." [EO 668]

(521) Ɔ́ ɔŋgɔ́ ɔ mɔkátá (wɔ́) bɛnɔ́m, ɔ́ ndɔ bakatóló siəkin.
/ɔ́ ɔŋgɔ́ ɔ mɔ-kátá wɔ́ bɛ-nɔ́mɛ ɔ ᴴndɔ
SM.2.COND follow PREP 3-hand ASSOC.3 8-right SM.2SG PRS
bakatóló siəkinə/
7.rabbit see.DUR
"Si tu tourne à droite, tu verras un lapin."
"If you take a right, you will see a rabbit." [PM 669]

(522) Mba, ɔ l(ɛ) ɛt(á) ɔ́ ɛnɔ́mɛ yɛ́ bɛnɔ́m - yɛ́ mɔ́kátá (wɔ́) bɛnɔm.
/mba ɔ lɛ ɛtá ɔ ɛ-nɔ́mɛ yɛ́ bɛ-nɔ́mɛ yɛ́
but SM.2SG NEG take PREP 7-road ASSOC.7 8-right ASSOC.7
mɔ-kátá wɔ́ bɛ-nɔ́mɛ/
3-hand ASSOC.3 8-right
"Mais ne prend pas la route du mal - la route droite."
"But don't take the bad road - the one on the right." [PM 670]

(523) Mɔkátá wɔ́ bɛ́nɔ́mɛ wú búsíə́ ibuŋuluəkə yɛ́ nda báká háaha ɔ matá.
/mɔ-kátá wɔ́ bɛ-nɔ́mɛ wɔ́ busíə́ ɛ-buŋuluəkə yɛ́ nda
3-hand ASSOC.3 8-right ASSOC.3 14.front 7-car SM.7 VEN
bá-aka háaha ɔ matá/
be-DUR DEM.PROX.LOC PREP bottom
"Il y a une véhicule en bas au premier embranchement à droite."
"There's a car at the bottom on the first road on the right." [PM 671]

---

take the tone of that form as the underlying tone to represent in the underlying line of the database, with realisations with final L tone taken to be instantiations of tone reduction rules (Chapter 4 section §4.2.6). This differs from the presentation in Mous (2003:295), where such final H tones are taken to be part of the TAM conjugation rather than represented as part of the tone of the verb root itself. For my database, I use the surface tone for the underlying form in the absence of data indicating deviation. Note here that Dugast's (1967) lexicon provides the tone for verbs produced in citation form, meaning that the underlying final tone is not retrievable from that source (as noted in Chapter 4 section §4.3.1).

(524) Ɛ́ɛ, mɛ́ ndɔ sin.[7]
/ɛ́ɛ mɛ ᴴndɔ sinə/
yes SM.1SG PRS see
"Oui, je le vois."
"Yes, I see it." [EO 672]

(525) Ɔ lɛ yɛ́↓táyɛ́ ɛnɔ́mɛ ɔŋgɔ.
/ɔ lɛ yɛ́ᴸtáyɛ́ ɛ-nɔ́mɛ ɔŋgɔ́/
SM.2SG NEG DEM.DISC.EMPH.7 7-road follow
"Ne suis pas cette route-la."
"Don't take that road." [PM 673]

(526) Mɛ lɛ ɔŋgɔ.
/mɛ lɛ ɔŋgɔ́/
SM.1SG NEG follow
"Je ne le suis pas."
"I won't take it." [EO 674]

(527) Ɔŋgɔ́ - Ɔ lɛ ɔŋgɔ́ (á) ɛ́nɔ́mɛ ɔyɛ́á bakatɔ́lɔ́ (yɛ́) lɛ́a.
/ɔŋgɔ́ ɔ lɛ ɔŋgɔ́ á[9] ɛ-nɔ́mɛ ɔyɛ́á bakatɔ́lɔ́ (yɛ́) lɛ́á/
follow SM.2SG NEG follow COP 7-road REL.7 7.rabbit SM.7 be
"Suis - ne suis pas la route où se trouve le lapin."
"Take - don't take the road with the rabbit." [PM 675]

(528) Ɔŋgɔ́ (á) ɛ́nɔ́mɛ ɔyɛ́á ɔ́ ndɔ ka miímə́ sinə u busí.
/ɔŋgɔ́ á[11] ɛ-nɔ́mɛ ɔyɛ́á ɔ ᴴndɔ ka miímə sinə ɔ busíə́/
follow COP 7-road REL.7 SM.2SG PRS AND house see PREP 14.front
"Suis la route ou tu vois la maison devant."
"Take the road where you see a house in front." [PM 676]

---

[7] The verb *sinə* 'to see' derives from the verb *siə* 'to want' by addition of an applicative. The ability for *sinə* to be used here without an overt object shows that the verb is lexicalised and therefore patterns differently from other applicative verbs (as discussed in Chapter 5). I follow the synchronic behaviour and do not reflect the historical origins of this verb in the glossing (cf. Chapter 4 on glossing decisions).

[9] This *á* is glossed as COP for consistency within the database, although could be analysed as a contrastive marker, as in Mous (1997, 2003); cf. Chapter 5 section §5.3.1. During the transcription session, PM indicated that the *á* was present underlyingly, with the segmental content elided due to vowel elision. However, as the verb *ɔŋgɔ́* ends in a H tone, the H tone realisation on *ɛ́nɔ́mɛ* 'road' could also be analysed as the result of HTS from the verb, with no *á* present. Because of this complication, I do not commit to an analysis here of a separate *á*.

[11] See previous footnote. Here, PM indicated that an imperative with *á* would mean 'do X and nothing else'.

(529) Ɛ́ɛ, mɛ n(á) ɔŋgɔ.
/ɛ́ɛ mɛ ná ɔŋgɔ́/
yes SM.1SG PST2 follow
"Okay, I've taken it."
"Oui, je l'ai suivi." [EO 677]

(530) Ɔ - Ɔ ná bɔ́ŋɔ́?
/ɔ ɔ ná bɔ́ŋɔ́/
SM.2SG SM.2SG PST2 find
"Tu - tu l'as trouvé ?"
"You - you found it?" [PM 678]

(531) Ɛ́ɛ.
/ɛ́ɛ/
yes
"Oui."
"Yes." [EO 679]

(532) Bon, ɛ́kɛ ɔ́ ká fámá ɔhá miímə yɛ́ ↓lɛ́á, ɔ lɛ ɔŋgɔ́ ɔ mɔkátá wɔ́ biən, ɔhá bɔ́lɛ́á bɔ́ ka lɛ́á.
/bon ɛ́kɛ ɔ́ ka fámá ɔhá miímə yɛ́ lɛ́á
good.FR when SM.2SG.SBJV AND arrive REL.LOC 3.house SM.3 be
ɔ lɛ ɔŋgɔ́ ɔ mɔ-kátá wɔ́ biəni ɔhá bɔ-lɛ́á
SM.2SG NEG follow PREP 3-hand ASSOC.3 8.left REL.LOC 14-tree
bɔ́ ka lɛ́á/
SM.14 AND be
"D'accord, lorsque tu y arrives là ou il y a la maison, ne suis pas la route de gauche, la ou il y a un arbre."
"Okay, when you get to the house, don't take the road on the left, where there's a tree." [PM 680]

(533) Ɛ́ɛ.
/ɛ́ɛ/
yes
"D'accord."
"Okay." [EO 681]

(534) Ɔ ɔŋgɔ́ ɔ mɔkátá wɔ́ bɛnɔ́m, ɔ́ ndɔ hiaŋálɛ nibəkə ɔmɔ́hɔ́yɛ ténɛ́máat.
/ɔ ɔŋgɔ́ ɔ mɔ-kátá wɔ́ bɛ-nɔ́mɛ ɔ ʰndɔ hɛ-aŋálɛ
SM.2SG follow PREP 3-hand ASSOC.3 8-right SM.2SG PRS 19-bicycle
nibə-aka ɔmɔ́hɔ́yɛ ténɛ́má-átɔ/
find-DUR DEM.DISC.EMPH.LOC stand-PTCP
"Suis à droite, tu vas trouver une bicyclette là-bas."
"Take a right, you'll find a bike there." [PM 682]

(535) Ɔ ná bɔ́ŋɔ́ ?
/ɔ ná bɔ́ŋɔ́/
SM.2SG PST2 find
"Tu as le trouvé ?"
"Have you found it?"
[PM 683]

(536) Mɛ ná ... mɛ ná ... mɛ ná bɔŋ.
/mɛ ná mɛ ná mɛ ná bɔ́ŋɔ́/
SM.1SG PST2 SM.1SG PST2 SM.1SG PST2 find
"Je ... Je ... Je l'ai trouvé."
"I ... I ... I've found it." [EO 684]

(537) Ɔmɔ́hɔ́yɛ́ ɔhá híáŋálɛ hé ↓lɛ́á, bɛnɔ́mɛ bɛ́ lɛ bɛ́fandɛ́.
/ɔmɔ́hɔ́yɛ́ ɔhá hɛ-áŋálɛ hɛ́ lɛ́á bɛ-nɔ́mɛ bɛ́ lɛ́á
DEM.DISC.EMPH.LOC REL.LOC 19-bicycle SM.19 be 8-road SM.8 be
bɛ́-fandɛ́/
8-two
"Là où il y a une bicyclette, il y a deux routes."
"There where the bicycle is, there are two roads." [PM 685]

(538) (Ɔ) ɛnɔ́mɛ ɔyɛ́á yɛ́ ndɔ ákána ɛndɛndɛ́l miɔkɔ́ yɛ́ lɛ ɛ́lál.
/ɔ ɛ-nɔ́mɛ ɔyɛ́á yɛ́ ʰndɔ ákána ɛndɛndɛ́lɛ mi-ɔkɔ́ yɛ́
PREP 7-road REL.7 SM.7 PRS leave straight_on 10-chicken SM.10
lɛ́á ɛ́-lálɔ́/
be 10-three
"Sur la route qui va tout droit il y a trois poules."
"The road that goes straight on has three chickens." [PM 686]

(539) Ɔ ná miɔkɔ́ bɔ́ŋɔ́ élálɔ́?
/ɔ ná mi-ɔkɔ́ bɔŋ́ɔ́ é-lálɔ́/
SM.2SG PST2 10-chicken find 10-three
"Tu as trouvé les trois poules?"
"Have you found the three chickens?" [PM 687]

(540) Mɛ ná miɔkɔ́ bɔ́ŋɔ́ í - í - ínisə.
/mɛ ná mi-ɔkɔ́ bɔ́ŋɔ́ é-nisə/
SM.1SG PST2 10-chicken find 10-four
"J'ai trouvé qu- qu- quatre poules."
'I've found f- f- four chickens." [EO 688]

(541) Á miɔkɔ́?
/á mi-ɔkɔ́/
COP 10-chicken
"(Tu parles) de poules ?"
"(Four) chickens?" [PM 689]

(542) Ɛ́ɛ.
/ɛɛ/
yes
"Oui."
"Yes." [EO 690]

(543) Okay, élálɔ́ yɛ́ ayɛ́ háaha lɛá ɔ ɔwám.
/okay é-lálɔ́ yɛ́ ayɛ́ háaha lɛ́á ɔ ɔwámɛ́/
okay.EN 10-three ASSOC.10 PRN.10 DEM.PROX.LOC be PREP POSS.PRN.1.7
"Okay, c'est trois qu'il y a ici sur ma carte."
"Okay, I have three of them here on mine." [PM 691]

(544) Ɔ l(ɛ) ɛnɔ́mɛ ɛt(á) ɔ́yɛ́á yɛ́ ndɔ́ ákána ɔ miɔkɔ́.
/ɔ lɛ ɛ-nɔ́mɛ ɛtá ɔyɛ́á yɛ́ ʰndɔ ákána ɔ mi-ɔkɔ́/
SM.2SG NEG 7-route take REL.7 SM.7 PRS leave PREP 10-chicken
"Ne prends pas la route qui mène aux poules."
"Don't take the road which leads to chickens." [PM 692]

(545) Ɛtá (á) ɛ́nɔ́mɛ ɔyɛ́á yɛ́ ndɔ́ ákána ɔ ɛndɔ́mb.
/ɛtá á ɛ-nɔ́mɛ ɔyɛ́á yɛ́ ᴴndɔ ákána ɔ ɛ-ndɔ́mbá/
take FOC 7-route REL.7 SM.7 PRS leave PREP 4-sheep
"Prends rien que la route qui mène aux moutons."
"You have to take the road which leads to sheep." [PM 693]

(546) Ɔ́ nd(ɔ) ɛndɔ́mbá sinə hɔ́y(ɛ́) ɛ́lálɔ́ ?
/ɔ ᴴndɔ ɛ-ndɔ́mbá sinə hɔ́yɛ́ ɛ́-lálɔ́/
SM.2SG PRS 4-sheep see DEM.DISC.LOC 4-three
"Vois-tu trois moutons là ?"
"Do you see three sheep there?" [PM 694]

(547) Mɛ́ nd(ɔ) ɛndɔ́mbá sin.
/mɛ ᴴndɔ ɛ-ndɔ́mbá sinə/
SM.1SG PRS 4-sheep see
"Je vois les moutons."
"I see the sheep." [EO 695]

(548) mhm. Aŋɔ́á ɔmɔ́↓hɔ́yɛ́ ɔhá ɛndɔ́mbá yɛ́ lɛ́á, ɔ ákáká nɔ́yɛ́ ʃʃíkíb, ɔ́ ndɔ k(a) ɛhɔ́sɛ bɔ́ŋɔ́kɔ́ u busí.
/mhm aŋɔ́á ɔmɔ́hɔ́yɛ́ ɔhá ɛ-ndɔ́mbá yɛ́ lɛ́á ɔ
PTCL PRN.2SG DEM.DISC.EMPH.LOC REL.LOC 4-sheep SM.4 be PREP
ákáka nɔ́yɛ́ ʃʃíkíbə ɔ ᴴndɔ ka ɛ-hɔ́sɛ bɔ́ŋɔ́-aka ɔ
leave thus straight_on SM.2SG PRS AND 7-horse find-DUR PREP
busíə/
front
"Mhm. Toi étant là où il y a des moutons, tu pars ainsi tout droit, tu trouveras un cheval devant."
"Mhm. With you there where the sheep are, go straight on along that road, you'll find a horse just ahead." [PM 696]

(549) Mɛ ná ɛhɔ́s(ɛ) ɛ́n.
/mɛ ná ɛ-hɔ́sɛ ɛ́na/
SM.1SG PST2 7-horse notice
"J'ai vu le cheval."
"I've seen the horse." [EO 697]

(550) mhm. Ɔh(á) ɔ́ nd(ɔ) ɛhɔ́sɛ sinə, ɔ lɛ híán(á) ɔ mɔkátá wɔ́ bɛnɔ́mɛ, kák(a) ɔ mɔkátá wɔ́ biəní.

/mhm	ɔha	ɔ	ʰndɔ	ɛ-hɔ́sɛ	sinə	ɔ	lɛ	híáná	ɔ
PTCL	REL.LOC	SM.2SG	PRS	7-horse	see	SM.2SG	NEG	return	PREP

mɔ-kátá	wɔ́	bɛ-nɔ́mɛ	ká-aka	ɔ	mɔ-kátá	wɔ́	biəní/
3-hand	ASSOC.3	8-right	go-DUR	PREP	3-hand	ASSOC.3	8.left

"Mhm. Là où tu vois le cheval, ne prends pas la droite, va à gauche."
"Mhm. There where you see the horse, don't take a right, take a left."
[PM 698]

(551) Ɔ n(á) ɛ́fafálaka bɔ́ŋɔ́?

/ɔ	ná	ɛ-fafálaka	bɔ́ŋɔ́/
SM.2SG	PST2	7-butterfly	find

"As-tu vu un papillon ?"
"Do you see a butterfly?" [PM 699]

(552) ták(a) á nɛ́lal?

/táká	á	nɛ-lala/
true	COP	5-spider

"N'est-ce pas une araignée ?"
"Isn't it a spider?" [EO 700]

(553) Ɛ́ɛ,[12] (á) ɛ́fafálak.

/Ɛ́ɛ	á	ɛ-fafálaka/
yes	COP	7-butterfly

"Oui, c'est un papillon."
"Yes, it's a butterfly." [PM 701]

(554) Mɛ ná yam.

/mɛ	ná	yama/
SM.1SG	PST2	find

"Je l'ai trouvé."
"I've found it." [EO 702]

[12] During the transcription session, PM said that he should have said *Bɔ́ɔ* 'no' here instead of *Ɛ́ɛ* 'yes'.

(555) Ɛfafálaka yɛ́ báka hɔ́yɛ ...
/ɛ-fafálaka yɛ́ bá-aka hɔ́yɛ/
7-butterfly SM.7 be-DUR DEM.DISC.LOC
"Il y a un papillon là..."
"There's a butterfly there..." [PM 703]

(556) Mɛ ná bɔŋ.
/mɛ ná bɔ́ŋɔ́/
SM.1SG PST2 find
"Je l'ai trouvé."
"I've found it." [EO 704]

(557) Ɔmɔ́↓hɔ́yɛ́, bɛnɔ́mɛ bɛ́ lɛ́ bá bɛ́fandɛ.
/ɔmɔ́hɔ́yɛ́ bɛ-nɔ́mɛ bɛ́ lɛ bá bɛ́-fandɛ́/
DEM.DISC.EMPH.LOC 8-route SM.8 NEG be 8-two
"Là-bas, il n'y a deux routes."
"At that point, there aren't two roads." [PM 705]

(558) Bɛ́ lɛ́ ba bɛ́fandɛ.
/bɛ́ lɛ bá bɛ́-fandɛ́/
SM.8 NEG be 8-two
"Il n'y en a pas deux."
"There aren't two." [PM 706]

(559) Hɛkɔlɛ hɛ́ ka báká həní u busí kásɛ himondokóloŋ.
/hɛ-kɔlɛ hɛ́ ka bá-aka həníə ɔ busíə kásɛ
19-squirrel SM.19 AND be-DUR DEM.DIST.LOC PREP front maybe
hɛ-mondokóloŋo/
19-mole
"Là-bas il y a un écureuil, ou peut-être une taupe."
"There's a squirrel there, or maybe a mole." [PM 707]

(560) Himondokóloŋ, mɛ ná bɔŋ.
/hɛ-mondokóloŋo mɛ ná bɔ́ŋɔ́/
19-mole SM.1SG PST2 find
"Une taupe, je l'ai trouvé."
"A mole, I've found it." [EO 708]

(561) Ɔ ná himondokóloŋo bɔ́ŋɔ́ ?
/ɔ ná hɛ-mondokóloŋo bɔ́ŋɔ́/
SM.2SG PST2 19-mole find
"Tu as trouvé la taupe ?"
"You've found the mole?" [PM 709]

(562) Ɛ́ɛ.
/ɛ́ɛ/
yes
"Oui."
"Yes." [EO 710]

(563) Bon. Ɔ́ ɔŋgɔ́ ɔ mɔkátá əlimə yɛ himondokóloŋ, mɔkátá ...
/bon. ɔ́ ɔŋgɔ́ ɔ mɔ-kátá əlimə yɛ
good.FR SM.2SG.SBJV follow PREP 3-hand 9.behind ASSOC.9
hɛ-mondokóloŋo mɔ-kátá/
19-mole 3-hand
"Bon. Si tu suis (la route de) la main derrière de la taupe, la route..."
"Great. If you follow the right (road) behind the mole, the road..."
[PM 711]

(564) Ɔ bɛnɔ́m.
/ɔ bɛ-nɔ́mɛ/
PREP 8-right
"...de droit."
"...on the right." [EO 712]

(565) Ɔ bɛnɔ́m. Ɔ lɛ ɔŋg(ɔ́) ɔ́ mɔkátá wɔ́ biən. Ɔŋg(ɔ́) ɔ́ mɔkátá (wɔ́) bɛnɔ́mɛ əlimə yɛ himondokóloŋ.
/ɔ bɛ-nɔ́mɛ ɔ lɛ ɔŋgɔ́ ɔ mɔ-kátá wɔ́ biəni ɔŋgɔ́
PREP 8-right SM.2SG NEG follow PREP 3-hand ASSOC.3 8.left follow
ɔ mɔ-kátá wɔ́ bɛ-nɔ́mɛ əlimə yɛ hɛ-mondokóloŋo/
PREP 3-hand ASSOC.3 8-right 9.behind ASSOC.9 19-mole
"De droit. Ne suis pas (la route) à gauche. Suis à droite derrière la taupe."
"On the right. Don't take a left. Take a right, behind the mole." [PM 713]

(566) Ɔ́ fámálána ɔ ɛnɔ́m.
/ɔ =H fámálána ɔ ɛ-nɔ́mɛ/
SM.2SG PROC go_out.DIM PREP 7-route
"Tu ressors en route."
"You go out on the road." [PM 714]

(567) Mɛ n(á) ɔ́ŋgɔ́.
/mɛ ná ɔŋgɔ́/
SM.1SG PST2 follow
"Je l'ai suivi."
"I've followed it." [EO 715]

(568) Ɛ́ɛ.
/ɛ́ɛ/
yes
"Oui."
"Yes." [PM 716]

(569) Mɛ ná yam. Mɛ ná binifun.
/mɛ ná yama mɛ ná bɛ́-nífúnə́/
SM.1SG PST2 find SM.1SG PST2 MID-find_again
"Je l'ai trouvé. Je me suis retrouvé."
"I've found it. I've got there." [EO 717]

(570) Ɔ́ ná bínífúnə́ ?
/ɔ ná bɛ́-nífúnə́/
SM.2SG PST2 MID-find_again
"Tu t'es retrouvé ?"
"You've got there?" [PM 718]

(571) Ɛ́ɛ.
/ɛ́ɛ/
yes
"Oui."
"Yes." [EO 719]

(572) (Ɔ́) énɔ́mɛ yɛ́ɛyɛ.
/ɔ́ ɛ-nɔ́mɛ yɛ́ɛyɛ/
COP.INANIM 7-route DEM.DISC.7
"Voilà la route."
"That's the route." [PM 720]

End of text 1.

9.2 Text 2: Dialogue after dancing

This text was recorded after the funeral of Papa Daniel Poakam in Ndikiniméki town square. EO, PM, and EK had met in the town square to participate in the celebration and record the *ɛŋganda* dancing and drumming. EK and PM also recorded an interview with the leader of the *ɛŋganda* group. After returning to DM's house, EO and PM recorded a free dialogue about the day's events. The dialogue shows natural interaction between two friends.

Text name:	Dialogue after dancing
Text type:	Dialogue
Subtype:	Free dialogue
Participants:	EO, PM
Recorded by:	EK
Also present:	-
Recording date:	2019-05-23
Location:	DM's house, inside (Ndikiniméki)
Recording set-up:	Zoom H5 + shotgun mic (audio), Sony CX625 (video)
Recording duration:	00:04:29
Transcribed by:	PM, EK
File info:	A44-20190523-EK-EOPM-DialogueAboutDancing .wav / .mp4

The recordings of the dancing, drumming, and interview are included in the archival deposit alongside this dialogue. The group leader gave consent for these recordings to be shared publicly. The interview with the group leader includes some explanation (in French and Tunen) of the structure of the dance; it is performed in a (semi)circle with members taking turns (arranged spontaneously) to dance in the centre, co-ordinated by a whistle. The *ɛŋganda* drumming uses underlying tones rather than surface tone and is therefore of linguistic as well as cultural interest (cf. Chapter 4 section §4.6.4). Example photos of the *ɛŋganda* performance are provided in Fig. 9.3 below.

Figure 9.3: Banen drummers from the group *ɛnganda yɛ́ ɛndɛkalɛ* performing in Ndikiniméki town square at the occasion of the funeral of Papa Daniel, 23rd May 2019. The large elongated drum (second from right) is used to relay messages via drumming the underlying tone pattern of Tunen phrases.

(573) Babá Ítiən,
/babá Ítiənə/
1.father 1.Etienne
"Papa Etienne,"
"Father Etienne,"
[PM 996]

(574) Ɛ́ɛ.
/ɛɛ/
yes
"Oui."
"Yes." [EO 997]

(575) Ɔ́ ndɔ aŋɔ́á bá nɛɔfɛ́nɛ ɔ ɛŋganda?
/ɔ ᴴndɔ aŋɔ́á bá nɛɔfɛ́nɛ ɔ ɛ-ŋganda/
SM.2SG PRS PRN.2SG be today PREP 9-occasion
"Toi, tu étais à la fête aujourd'hui ?"
"Were you yourself at the party today?" [PM 998]

(576) Ɔ yə́níə́ ɛŋgand(a) ?
/ɔ yɛ-ə́níə́ ɛ-ŋganda/
PREP 9-which 9-occasion
"À quelle fête ?"
"At which party?" [EO 999]

(577) Ɛŋganda yɛ buwə́.
/ɛ-ŋganda yɛ bɔ-wə́/
9-occasion ASSOC.9 14-death
"À la fête du deuil."
"At the party of the funeral." [PM 1000]

(578) Ɔ búə́níə́ buwə́ ?
/ɔ bɔ-ə́ní bɔ-wə́/
PREP 14-which 14-death
"À quel deuil ?"
"At which funeral?" [EO 1001]

(579) Káákə! Nɛɔfénɛ miaŋɔ́á mba mɛ́ aŋɔ́á lɛɛ́na mɛsɛ́á babá Daníélɛ a ka wə́ eé?
/káákə nɛɔfénɛ miaŋɔ́á mba mɛ́ aŋɔ́á lɛɛ́na
EXCL today PRN.EMPH.1SG but SM.1SG PRN.EMPH.2SG say.APPL
mɛ-sɛ́á babá Daníélɛ a ka wə́ eé/
SM.1SG-say 1.father 1.Daniel SM.1 PST3 die Q
"Bah! Est-ce que c'est moi qui va aujourd'hui te dire que papa Daniel était mort ?"
"Bah! Am I really the one to tell you today that Papa Daniel died?"
[PM 1002]

(580) Mɛ́ ndɔ ámɛ manya ?
/mɛ ᴴndɔ ámɛ manya/
SM.1SG PRS PRN.1SG know
"Est-ce que moi je sais ?"
"So I know about it?" [EO 1003]

(581) Ɔ lɛ́ ndɔ manya ?
/ɔ lɛ ᴴndɔ manya/
SM.2SG NEG PRS know
"Tu ne sais pas?"
"You don't know about it?" [PM 1004]

(582) Mɛaŋɔ́á, Mɛaŋɔ́á wa mukóto ?[13]
/mɛaŋɔ́á mɛaŋɔ́á wɔ mɔ-kóto/
PRN.EMPH.1SG PRN.EMPH.1SG ASSOC.1 1-Bamileke
"Est-ce que moi je suis Bamileke ??"
"Am I a Bamileke??" [EO 1005]

[13]This rhetorical question relates to the fact that Papa Daniel (the deceased man) was himself Bamileke rather than a Munen, as is returned to later in the dialogue.

(583) Mɛ ná húlə ɔ ɔwámɛ ɔmbél, mɛ nɔ́ ka nibə ɔ nɛahan, bá nɔ́ bikələ tábɔ́naka, mbaá básɛ nɛɔféne bá ná umiimə wɔ́ babá Daníélɛ fəmí.

/mɛ	ná	húlə	ɔ	ɔwámɛ		ɔ-mbéla	mɛ	nɔ́
SM.1SG	PST2	come_from	PREP	PRN.POSS.1SG.3		3-house	SM.1SG	PST1

ka	nibə	ɔ	nɛ-ahana	bá	nɔ́	bɛ-kələ	tábɔ́na-aka
AND	find	PREP	5-town_square	SM.2	PST2	8-gazebo	erect-DUR

mbaá	bá-séá	nɛɔféne	bá	ná	umiimə	wɔ́	babá
thus	SM.2-say	today	SM.2	PST2	3.corpse	ASSOC.3	1.father

Daníélɛ	fəmíə/
1.Daniel	bring_out

"En venant de chez moi, je suis allé trouver au carrefour qu'on a dressé des tentes/hangards, c'est alors qu'on dit qu'on a fait sortir le corps/le cadavre de papa Daniel aujourd'hui."

"When I left home, I found that they had erected gazebos in the town square, and that's why they say that they brought out Papa Daniel's body today."

[EO 1006]

(584) Básɛ *bíŋ bɔŋ bíŋ*[14] bá n(ɔ́) ákánana ɔ yəbúə misióni nɔ́yɛ́ mɛ́ ndɔ ámɛ manya.

/bá-séá	bíŋ	bɔŋ	bíŋ	bá	nɔ́	ákánána	ɔ	yəbúə
SM.2-say	IDEO	IDEO	IDEO	SM.2	PST1	leave.APPL	PREP	PRN.POSS.2.9

misióni	nɔ́yɛ́	mɛ	^{H}ndɔ	ámɛ	manya/
9.mission	thus	SM.1SG	PRS	PRN.1SG	know

"On dit *ping pong ping* - ils sont partis avec (le corps de Papa Daniel) á leur église, c'est tous que je sais."

"They went *ping pong ping* - they've taken (Papa Daniel's body) to their church, that's what I know."

[EO 1007]

[14]The sequence *bíŋ bɔŋ bíŋ* is an ideophone representing the noise of the cars transporting the corpse as part of the funeral procession.

(585) Əlimə yɛ ikúílí mɛ́ nda fámá ɔ nɛaháná ɛŋganda bá ndɔ yakɛm, bá ndɔ yakɛm, bá ndɔ yakɛm,

/əlimə	yɛ	ɛ-kúílí	mɛ	nda	fámá	ɔ	nɛ-aháná
9.behind	ASSOC.9	7-time	SM.1SG	VEN	arrive	PREP	5-town_square

ɛ-ŋganda	bá	ᴴndɔ	yakɛma	bá	ᴴndɔ	yakɛma	bá	ᴴndɔ
7-ɛŋganda	SM.2	PRS	dance	SM.2	PRS	dance	SM.2	PRS

yakɛma/
dance

"Après, quand je suis arrivé au carrefour, ils étaient en train de danserl'ɛŋgand, danser l'ɛŋgand, danser l'ɛŋgand,'
"Afterwards, when I arrived at the town square, they were dancing the ɛŋgand, dancing the ɛŋgand, dancing the ɛŋgand,' [EO 1008.1]

(586) Á↓há mɛ́ nɔ́ aŋɔ́á yam,

/áhá	mɛ	nɔ́	aŋɔ́á	yama/
thus	SM.1SG	PST2	PRN.2SG	notice

"c'est ainsi que je t'ai aperçu,'
"then I noticed you,' [EO 1008.2]

(587) mbaá ósɛ áméá á Ɛlísa wə́ən, mɛ́ ↓ká ámɛ wɛɛ́ya hólí.

/mbaá	ɔ-sɛ́á	amɛ́á	á	ɛlísa	wə́ni	mɛ́
thus	SM.2SG-say	PRN.1SG	COP	1.Elisabeth	DEM.DIST.1	SM.1SG.SBJV

ka	ámɛ	wɛ́ɛya	hólíə́/
AND	PRN.1SG	PRN.1	greet

"ainsi tu me dit « voilà Elisabeth, va la saluer ».'
"and so you said to me "Elisabeth is over there, go and greet her"." [EO 1008.3]

(588) Ɔ ná ndá aŋɔ́á bɛ́nyánánɛ́na ɔban-

/ɔ	na	nda	aŋɔ́á	bɛ́-nyánánɛ́na	ɔbánɔ́/
SM.2SG	PST2	VEN	PRN.2SG	MID-find.REP	only

"Tu es revenu te retrouver comme ça-"
"You found yourself like that-" [PM 1009]

(589) Ɛ́ɛ !
/ɛ́ɛ/
yes
"Oui !"
"Yes!" [EO 1010]

(590) Ɔwámɛ bɛ́↓múɛ́t, ikúílí ɔyɛ́á mɛ ná ká ámɛ tilə́ ɔ ɛmbɔ́ma, ɔ́↓húá mɛ́ nɔ́ ámɛ nibə bá nɔ́ nɛháná ... nɛŋɛlɛn.

/ɔwámɛ	bɛmuɛtɛ	ɛ-kúílí	ɔyɛ́á	mɛ	ná	ka	ámɛ				
PRN.EMPH.1SG	self	7-time	REL.7	SM.1SG	PST2	AND	PRN.1SG				
tilə́	ɔ	ɛ-mbɔ́ma	ɔ́^{L}hɔ́a	mɛ́	nɔ́	ámɛ	nibə	bá	nɔ́		
return	PREP	7-field	then	SM.1SG	PST1	PRN.1SG	find	SM.2	PST1		
nɛ-háná	nɛŋɛlɛna/										
5-grand_square	surround										

"Moi même, c'est à mon retour du champs que j'ai trouvé qu'ils ont envahi le carrefour."
"Me myself, it was when I got back from the fields that I found that they had amassed at the grand square." [PM 1011]

(591) Mɛ́ tɔmba, ah bon, ɛ́sɛ(a) ikúílí ɔyɛ́á mɛ́ ↓ná bá mɛ́ ndɔ ámɛ manya mɛsɛ́á nɛɔfɛ́nɛ á wə́yíə́ umiimə wɔ́ ↓ndɔ́ nda famak bɔkasɛ́á a ka kə wínə ɔ ɔwayɛ́ bɔnɔŋ, bá ná ká umiimə ɛ́ta.

/mɛ́	tɔmba	ah	bon	ɛ-sɛ́á	ɛ-kuili	ɔyɛ́á	mɛ́				
SM.1SG.SBJV	pass	ah.FR	good.FR	SM.7-say	7-time	REL.7	SM.1SG.REL				
^{L}ná	bá	mɛ́	^{H}ndɔ	ámɛ	manya	mɛ-sɛ́á	nɛɔfɛ́nɛ				
PST3.REL	be	SM.1SG.REL	PRS	PRN.1SG	know	SM.1SG-say	today				
á	wə́yíə́	umiimə	wɔ́	^{H}ndɔ	nda	fámá-aka	bɔkasɛ́á	a			
COP	PRN.POSS.1.3	3.corpse	SM.3	PRS	VEN	arrive-DUR	because	SM.1			
ka	ka	wínə	ɔ	ɔwayɛ́á	bɔ-nɔŋɔ	bá	ná	ka			
PST3	AND	die.APPL	PREP	PRN.POSS.1.14	14-village	SM.2	PST2	AND			
umiimə	ɛ́ta/										
3.corpse	take										

"En passant, ah bon, comme je savais que c'est aujourd'hui que son corps arrive, parce qu'il est allé mourir dans son village, on est allé chercher le corps."
"Passing by, ah bon, as I knew that his body was arriving today, because he went to die in his home village, they went there to get the body." [PM 1012.1]

(592) Nɛɔfɛ́nɛ á bá ná nda faman(a).
/nɛɔfɛ́nɛ á bá ná nda fámána/
today COP SM.2 PST2 VEN arrive.APPL
"C'est aujourd'hui qu'on est arrivé avec."
"It's today that they arrived with it." [PM 1012.2]

(593) Á mɛ́ ná ámɛ bikulə nibə - si↓síə́ á mɛ́ ná tɔmbaka bikulə bɛ́ sá bá.
/á mɛ́ ná ámɛ bɛ-kulə nibə sisiə á mɛ́
COP SM.1SG.DEP PST2 PRN.1SG 8-gazebo find morning COP SM.1SG.DEP
ná tɔ́mbá-aka bɛ-kulə bɛ́ sá bá/
PST2 pass-DUR 8-gazebo SM.8 NEG be
"Lorsque j'ai trouvé les hangards ... ce matin lorsque je suis passé, il n'y avait pas des hangards."
"When I found the gazebos ... this morning when I passed by, there weren't any gazebos." [PM 1013.1]

(594) mɛ nɔ́ nda híáná əlimə yɛ kɔsɔ mɛ nɔ́ bikulə nib, ɔ́↓hɔ́á mɛsɛ́á ata nəní wəyíə́ umiimə ɔ́ bɔ́áyɛ́á búwə́.
/mɛ nɔ́ nda híáná əlimə yɛ kɔsɔ mɛ nɔ́
SM.1SG PST1 VEN return 9.behind ASSOC.9 afternoon SM.1SG PST1
bɛ-kulə nibə ɔ́↓hɔ́á mɛ-sɛ́á ata nəníə́ wəyíə́ umiimə
8-gazebo find thus SM.1SG-say even how PRN.POSS.1.3 3.corpse
ɔ́ bɔ́áyɛ́á bɔ-wə́/
COP.INANIM PRN.POSS.14 14-death
"En revenant dans l'après-midi, j'ai trouvé des hangards. C'est ainsi que je me suis dit que dans tous les cas, c'est son deuil."
"When I returned in the afternoon, I found the gazebos. So I told myself that it must be his funeral." [PM 1013.2]

(595) Ɛ́sɛ́á ikúílí ɔyɛ́á mɛ́ ↓ná ba mɛ́ ndɔ ámɛ manya mɛsɛ́á bɔ́áyɛ́á buwə́ nɛɔfɛn, mɛ ná ámɛ tɔmb.

/ɛ-sɛ́á ɛ-kuili ɔ́yɛ́á mɛ ná bá mɛ ᴴndɔ ámɛ manya
SM.7-say 7-time REL.7 SM.1SG PST3 be SM.1SG PRS PRN.1SG know
mɛ-sɛ́á bɔ́áyɛ́á bɔ-wə́ nɛɔfɛ́nɛ mɛ ná ámɛ
SM.1SG-say PRN.POSS.1.14 14-death today SM.1SG PST2 PRN.1SG
tɔ́mbá/
pass

"Comme je savais que son deuil c'est aujourd'hui, je suis passé."
"Because I knew it was his funeral today, I passed by." [PM 1013.3]

(596) Mɛ nɔ́ ka ámɛ bɛlɛŋa bɛ́- bí- bíúŋúnəní, mɛ nɔ́ bɛ́suala mɛsɛ́á oo, tɔ lɛ ɔ nɛnyáná n(a) Ilísabɛt, mɛ́ ↓ndá sá tɔ... uwəsú nɛnyán.

/mɛ nɔ́ ka ámɛ bɛ-lɛŋa bɛ́- bɛ́- bɛ́-úŋúnəníə mɛ́
SM.1SG PST1 AND PRN.1SG 8-clothes MID- MID- MID-change SM.1SG
nɔ́ bɛ́-sɔ́á-ala mɛ-sɛ́á oo tɔ lɛ ɔ
PST1 MID-wash-DIM SM.1SG-say PTCL.DISC SM.1PL be PREP
nɛ-nyáná na Ilísabɛtɛ mɛ́ nda sá tɔ
5-meeting with 1.Elisabeth SM.1SG.SBJV VEN come SM.1PL
uwəsúə́ nɛ-nyáná/
PRN.POSS.1PL 5-meeting

"Je suis allé me changer, je me suis débarbouillé, je me suis dit, j'ai un rendez-vous avec Elisabeth, que je viens nous... à notre rendez-vous."
"I went and got changed, I had a quick wash, I told myself, I have a meeting with Elisabeth, so I better get going... to our meeting." [PM 1014]

(597) Əlimə yɛ ikúílí, mɛ nɔ́ bɛ́kɔ́lɔmɔna mɛsɛ́á bɔ́ɔ, ésɛ́á, í- ɔ má↓táyɛ́ məwə́ maŋɛ́ŋ, ɛbáka bá tukokó súbə́kə bə́ bínə́kə.

/əlimə	yɛ	ɛ-kuili	mɛ	nɔ	bɛ́-kɔ́lɔmɔna	mɛ-sɛ́á	bɔ́ɔ		
9.behind	ASSOC.9	7-time	SM.1SG	PST1	MID-remind	SM.1SG-say	no		
ɛ-ssɛ́á	ɛ-	ɔ	má↓táyɛ́		ma-wə́	ma-ŋɛ́ŋa	ɛ-báka		
SM.7-say	SM.7	PREP	DEM.DISC.EMPH.6		6-funeral	6-big	SM.7-be		
bá	tɔ-kokó	súbə́-aka	bá	bínə́-aka/					
SM.2	13-tam_tam	drum-DUR	SM.2	dance-DUR					

"Un instant après, je me suis rappellé que, a l'occasion de ces grands deuils, on joue souvent aux tam-tams."

"After that, I remembered that on the occasion of these big funerals, they normally drum the tam-tams." [PM 1015.1]

(598) Mɛ nɔ́ wɛɛ́ya nyɔŋɛna mɛsɛ́á ɔ́ miaŋɔ́á wɛ́yɛ́ ɔ ɔmbɛ́la mɛ́ ndɔ ɔ́kɔ hikokó hɛ́ ndɔ súbə.

/mɛ	nɔ	wɛ́ɛya	nyɔŋɛna	mɛ-sɛ́á	ɔ́	miaŋɔ́á				
SM.1SG	PST1	PRN.1	indicate	SM.1SG-say	COP.INANIM	PRN.EMPH.1SG				
wɛ́ɛya	ɔ	ɔ-mbɛ́la	mɛ	ᴴndɔ	ɔ́kɔ	hɛ-kokó	hɛ́	ᴴndɔ		
PRN.EMPH.1	PREP	3-house	SM.1SG	PRS	hear	19-drum	SM.19	PRS		
súbə/										
drum										

"Je lui ai fait signe que voilà, j'entend le son du tam-tams étant chez moi."

"I let her know that voilà, I hear tam-tams from my house." [PM 1015.2]

(599) Ɛ́bá ɔ óso ɔlɔɔ, ú ↓ndə́ síə́línə́ nəní ɛbáka bá bínə́kə ikúílí yɛ́ buwə́ á bɔ́ ↓lɛ́á.

/Ɛ́ɛ́bá	ɔ	óso	ɔ-lɔɔ	ɔ́	nda	siəlinə	nəní		
if	SM.2SG	be_able	INF-come_down	SM.2SG.SBJV	VEN	see.DIM	how		
ɛ-bá-aka	ba	bínə́-aka	ɛ-kúílí	yɛ́	bɔ-wə́	á	bɔ́		
SM.7-be-DUR	SM.2	dance-DUR	7-time	ASSOC.7	14-death	COP	SM.14		
lɛ́á/									
be									

"Si tu peux descendre, voir comment on danse quand il y a un deuil."

"If you can come down (into town), you will see how we dance when there is a funeral." [PM 1015.3]

(600) Aaa.
/aaa/
EXCL
"Aah."
"Aah." [EO 1016]

(601) Ɔ́↓hɔ́á mɛ nɔ́ ka ámɛ hualén, mɛ ná tíkə́ nda ámɛ fama Ilísabɛtɛ[15] -
/ɔ́-ɔhɔa mɛ nɔ́ ka ámɛ hualéna mɛ ná tíkə́
COP.INANIM-thus SM.1SG PST1 AND PRN.1SG leave SM.1SG PST2 stay
nda ámɛ fámá Ilísabɛtɛ/
VEN PRN.1SG arrive 1.Elisabeth
"C'est ainsi que je suis quitté, j'ai trouvé Elisabeth -"
"And so I left, I found Elisabeth - " [PM 1017]

(602) A nɔ́ bítíkəlin.
/a nɔ́ bɛ́-tíkəlinə/
SM.1 PST1 MID-settle
"Elle s'est déja installée."
"She'd already set up." [EO 1018]

(603) Há ɔ bɛbɔ́ka a nɔ́ bítíkəlin.
/háaha ɔ bɛ-bɔ́ka a nɔ́ bɛ́-tíkəlinə/
DEM.PROX.LOC PREP 8-place SM.1 PST1 MID-settle
"Là dans les lieux elle était déjà s'installée."
"There in those places, she was already set up." [PM 1019]

(604) Okay. Á muəndu - Á muəndú anyam.
/okay á mɔ-əndú á mɔ-əndú anyama/
okay.EN COP 1-woman COP 1-woman 1.brave
"Okay. C'est une brave femme."
"Okay. She's an impressive woman." [EO 1020]

[15]This example is interesting in appearing to be VO rather than the expected OV. Here, the proper name *Ilísabɛtɛ* 'Elisabeth' functions as a locative object, which is always postverbal (see Chapter 6 section §6.2.5). This analysis is supported by the fact that the verb *fámá* 'arrive' is intransitive, never taking a direct object.

(605) Ɔ́↓hɔ́á mɛ́ ná aŋɔ́á ɛ́lɛ́na mɛsɛ́á « mɛ nɔ́ nda ámɛ fámá mɛ lɛ háaha ɔ ɛnakaháká hə́ní ɔ́ aŋɔ́á lɛá eé »?

/ɔ́-ɔhɔ́á	mɛ́	ná	aŋɔ́á	ɛlɛ́na	mɛ-sɛ́á
COP.INANIM-thus	SM.1SG.SBJV	PST2	PRN.EMPH.2SG	call	SM.1SG-say

mɛ	nɔ́	nda	ámɛ	fámá	mɛ	lɛ́á	háaha	ɔ
SM.1SG	PST1	VEN	PRN.1SG	arrive	SM.1SG	be	DEM.PROX.LOC	PREP

ɛ-nakaháká	hə́níə́	ɔ	aŋɔ́á	lɛ́á	eé?/
7-town_square	where	SM.2SG	PRN.EMPH.2SG	be	Q

"C'est ainsi que je t'ai appelé pour dire que « je suis déjà arrivé ici au carrefour, et toi, tu es où ? » "

"And so I called you to say that "I've arrived here at the town square, where are you?"" [PM 1021]

(606) Há mɛ́ ná tɔmb, h(á) ábá ɔ́ sá miaŋɔ́ ɛ́lɛna há mɛ́ ná tɔmb.

/há	mɛ́	ná	tɔ́mbá	há	ábá	ɔ́	sá
thus	SM.1SG.SBJV	PST2	pass	thus	if	SM.2SG.SBJV	NEG

miaŋɔ́á	ɛ́lɛna	há	mɛ́	ná	tɔ́mbá/
PRN.EMPH.1SG	call	thus	SM.1SG.SBJV	PST2	pass

"Je serais passé. C'est que si tu ne m'avais pas appelé, je serais passé."

"I would've missed you. If you hadn't called me, I would've missed you." [EO 1022]

(607) uh huh.

/uh	huh/
PTCL	PTCL

"Uh huh."

"Uh huh." [PM 1023]

(608) Ɔsɛa ɔ́ aŋɔ́á wɔ́ɔwɔ ɛbɔ́ka bá ndɔ ...

/ɔ-sɛ́á	ɔ́	aŋɔ́á	wɔ́ɔwɔ	ɛ-bɔ́ka	bá	ᴴndɔ/
SM.2SG-say	COP.INANIM	PRN.EMPH.2SG	DEM.PROX.1	7-place	SM.2	PRS

"Tu dis que tu es là où on - "

"You said that you were there where they -" [EO 1024]

(609) - tukokó súb.

/tɔ-kokó	súbə́/
13-tam_tam	drum

"- tape les tam-tams."

"- drum the tam-tams." [PM 1025]

(610) - súb.
/súbə́/
drum
"- tape."
"- drum." [EO 1026]

(611) « Ɔ́ miaŋɔ́ wɔ́ɔwɔ ! »
/ɔ́ miaŋɔ́á wɔ́ɔwɔ/
COP.INANIM PRN.EMPH.1SG DEM.PROX.1
" « Me voici ! » "
""I'm here!"" [EO 1027]

(612) Ɛɛ.
/ɛ́ɛ/
yes
"Oui."
"Yes." [PM 1028]

(613) Ɔhá bá ndɔ ɛsɔŋɔ yí ... ɔhá bá ndɔ moló má matɔ́á sɛm.
/ɔhá bá ᴴndɔ ɛ-sɔŋɔ yɛ́ ɔhá bá ᴴndɔ
REL.LOC SM.2 PRS 7-oil_crude ASSOC.7 REL.LOC SM.2 PRS
ma-oló má ma-tɔ́á sɛma/
6.oil_refined ASSOC.6 6-car sell
" « (Me voici) là où on vend les carburants, pour les voitures. » "
" "(I'm here) where they sell crude oil, where they sell oil for cars." "
[EO 1029]

(614) Mɛ́ bɛ́hɛ́ámɛ́la mɛ nɔ́ Ilísa -
/mɛ bɛ́-hɛ́ámá-ɛ́la mɛ nɔ́ Ilísa/
SM.1SG MID-look-DIM SM.1SG PST1 1.Elisabeth
"J'ai jeté un coup d'œuil et j'ai -"
"I glanced around and I -" [EO 1030]

(615) - bɔŋ.
/bɔ́ŋɔ́/
find
"- found Elisabeth."
"- trouvé Elisabeth." [PM 1031]

(616) - yam.
/yama/
notice
"- aperçu Elisabeth."
"- noticed Elisabeth." [EO 1032]

(617) Okay. Bon, bəsú bəkimə tɔ ná siəkínə ɔyɛ́(á) əlimə yɛ yɛ́↓táyɛ́ ikúílí - bəsú bəkimə tɔná siəkínə yaté ɔyɛ́á yɛ́ ná bétɔ́mbáká, non ?
/okay bon bəsú bɛ́-kimə tɔ ná siəkinə ɔyɛ́á əlimə
okay.EN good.FR PRN.1PL 8-all SM.1PL PST2 see.DUR REL.7 9.after
yɛ yɛ́ᴸtáyɛ́ ɛ-kuili bəsú bɛ́-kimə tɔ ná siəkinə
ASSOC.9 DEM.DISC.7 7-time PRN.1PL 8-all SM.1PL PST2 see.DUR
yaté ɔyɛ́á yɛ́ ná bɛ́-tɔ́mbá-aka non/
what REL.7 SM.7 PST2 MID-pass-DUR no.FR
"Okay, nous tous nous avons vu que après cet instant - nous tous nous avons vu ce que s'est passé, n'est-ce pas ?"
"Okay, we both saw what was after that moment - we both saw what happened, right?" [PM 1033]

(618) Hɛ́! A Bíɛl,
/hɛ á Biɛlɛ/
EXCL VOC 1.Pierre
"Eh ! Pierre,"
"Hey! Pierre," [EO 1034]

(619) Papa.
/papa/
father.FR
"Papa."
"Father." [PM 1035]

(620) Wááyɛ́ mɔnd .. á Təníɛl, á Bɔ́ákám Təníɛl, a ka nɔmɔkɔ háaha u yíi(yi) bəlíkə yɛ iNdikiníməki.

/wááyɛ́ mɔ-ndɔ á Təniɛlɛ á Bɔ́ákám Təníɛlɛ a
DEM.DISC.1 1-person COP 1.Daniel COP 1.Boakama 1.Daniel SM.1

ka nɔmɔ-aka háaha ɔ yɛ́ɛyɛ bəlíkə yɛ
PST3 live-DUR DEM.PROX.LOC PREP DEM.PROX.7 9.town ASSOC.9

iNdikiniməkiə/
Ndikinimeki

"Cet homme, Daniel, Poakam Daniel, a vecu ici dans cette ville de Ndikiniéki."

"That man, Daniel, Poakam Daniel, lived here in this town of Ndikiniéki." [EO 1036]

(621) Básɛ .. mukót ... mba a ka híána munɛn.

/bá-sɛ́á mɔ-kóto mba a ka híána mɔ-nəni
SM.2-say 1-Bamileke but SM.1 PST3 become 1-Nen

"On dit que c'est un Bamileke, mais il est devenu un Munen."

"They say he's a Bamileke, but he became a Munen." [EO 1037]

(622) Munəni oó. Mɛ lɛ aŋɔ́á nimb. Ɔwámɛ bɛ́muɛt mɛ́ ndɔ ámɛ manya mɛsɛ́á -

/mɔ-nəni oo mɛ lɛ aŋɔ́á nimbə ɔwámɛ
1-Nen PTCL.DISC SM.1SG NEG PRN.EMPH.2SG deceive PRN.EMPH.1SG

bɛ́muɛtɛ mɛ ᴴndɔ ámɛ manya mɛ-sɛ́á/
self SM.1SG PRS PRN.1SG know SM.1-say

"Vraiment un munen. Je ne te trompe pas. Moi-même, je sais que -"

"A real Munen. I'm not lying to you. I myself, I know that -" [PM 1038]

(623) - Munɛn !

/mɔ-nəni/
1-Nen

"- un Munen !"

"- a Munen!" [EO 1039]

(624) Mɛ ka ámɛ fɛka mɛsɛ́á á háaha bá ndɔ́ wɛ́ɛya nyəkə sɛ́ɛbɛ.

/mɛ	ka	ámɛ	fɛka	mɛ-sɛ́á	á	háaha	bá	ᴴndɔ
SM.1SG	PST3	PRN.1SG	think	that	COP	DEM.PROX.LOC	SM.2	PRS

wɛ́ɛya	nyə-aka	sɛ́ɛbɛ/
PRN.1	bury-DUR	even

"J'ai pensé que c'est ici qu'on va même l'enterrer."
"I thought they would even bury him here." [PM 1040]

(625) Munɛn !!
/mɔ-nəni/
1-Nen
"Un Munen !!"
"A Munen!!" [EO 1041]

(626) Mɛ lɛ aŋɔ́á nimb.

/mɛ	lɛ	aŋɔa	nimbə/
SM.1SG	NEG	PRN.2SG	deceive

"Je ne te trompe pas."
"I'm not lying to you." [PM 1042]

(627) A ka nyɔɔkɔ háaha ɔ uwəsú mɔŋɛŋ.

/a	ka	nyɔ-aka	háaha	ɔ	uwəsúə́	mɔŋɛ́ŋa/
SM.1	PST3	work-DUR	DEM.PROX.LOC	PREP	PRN.POSS.EMPH.1PL	much

"Il a beaucoup travaillé ici chez nous."
"He worked a lot here in our region." [EO 1043]

(628) Ɔ lúmə́k uwəs, ɔ bíə́súə́ bisə́, uwəsú bɛ́muɛt, bə́súə́ ban, bə́súə́ bánan, bá ndɔ wɛ́ɛya many.

/ɔ	lúmə́-aka	uwəsú	ɔ	bíə́súə́	bɛ-isə	uwəsú
PREP	beginning	PRN.1PL	PREP	PRN.POSS.1PL.8	8-father	PRN.1PL

bɛ́muɛtɛ	bə́súə́	ba-na	bə́súə́	ba-nana	bá
self	PRN.POSS.1PL.2	2-child	PRN.POSS.1PL.2	2-child.DIM	SM.2

ᴴndɔ	wɛ́ɛya	manya/
PRS	PRN.1	know

"En commençant par nous, nos parents, nous mêmes, nos enfants, nos petits enfants, on le connait."
"Starting with us, our parents, ourselves, our children, our grandchildren, everyone knows him." [PM 1044]

(629) Mɛ ka ámɛ yáyɛ́á ibəŋuluəkə yí búsíə́ siəkinə ɔyɛ́á á ↓ná ɔnd, á Ínyasɛ á ↓ná bá á ndɔ kindi -

/mɛ ka ámɛ yáyɛ́á ɛ-bəŋuluəkə yɛ́ búsíə́ siəkinə
SM.1SG PST3 PRN.1SG PRN.POSS.1.7 7-car ASSOC.7 front see.DUR
ɔyɛ́á á ˡná ɔ́ndɔ́ á Inyasɛ á ˡná bá
REL.7 SM.1.REL PST3.REL buy COP 1.Inyas SM.1.REL PST3.REL be
a ʰndɔ kindiə/
SM.1 PRS drive

"Moi j'avais vu le premier véhicule qu'il a acheté, c'est Inyas qui conduisait - "

"I myself saw the first vehicle he bought, it was Inyas who drove (it) -"

[PM 1045]

(630) Mɛ ka ámɛ siəkinə.

/mɛ ka ámɛ siəkinə/
SM.1SG PST3 PRN.1SG see.DUR

"Moi, j'ai vu."

"I (also) saw it." [EO 1046]

(631) - a ka tiləkə « Dieu haït les méchants ».

/a ka tilə-aka Dieu haït les méchants/
SM.1 PST3 write-DUR God.FR hates.FR the.FR wicked_people.FR

"- Il avait écrit « Dieu haït les méchants »."

"- He wrote "God hates the wicked"." [PM 1047]

(632) Mɛ ka ámɛ siəkin

/mɛ ka ámɛ siəkinə/
SM.1SG PST3 PRN.1SG see.DUR

"Moi, j'ai vu."

"I (also) saw it." [EO 1048]

(633) « Dieu haït les méchants. »

/Dieu haït les méchants/
God.FR hates.FR the.FR wicked_people.FR

"« Dieu haït les méchants. »"

""God hates the wicked."" [PM 1049]

(634) Mɛ ka ámɛ siəkinə na má↓méá məə́sə máfandɛ́ máam.
/mɛ ka ámɛ siəkinə na máᴸméá ma-ə́sə má-fandɛ́
SM.1SG PST3 PRN.1SG see.DUR with PRN.POSS.1SG.6 6-eye 6-two
máama/
DEM.PROX.6
"Moi j'ai vu avec mes propres yeux."
"I saw it with my own two eyes." [PM 1050]

(635) Bon, nɛɔfénɛ básɛ tɔ́ wɛ́ɛya bíkókí táká tɔ ná siəkinə, táká bána ɛŋganda bínə́ká, táká tɔ ná masáká súbə́ká mba yaté tɔ́n ?
/bon nɛɔfénɛ bá-séá tɔ́ wɛ́ɛya bíkókí táká tɔ
good.FR today SM.2-say SM.1PL PRN.1 say_goodbye truth SM.1PL
ná siəkinə táká bá ná ɛ-ŋganda bínə́-aka táká tɔ
PST2 see.DUR truth SM.2 PST2 7-ɛŋganda dance-DUR truth SM.1PL
ná ma-saka súbə́-aka mba yaté tɔna/
PST2 6-instrument drum-DUR but what also
"Ainsi, aujourd'hui on dit que nous avons lui dit au revoir, n'est-ce que pas que nous avons vu (comment) on a dansé l'ɛŋgand, (comment) on a applaudi, mais quoi d'autre ?"
"So, today they say that we have said our goodbyes to him, have we not seen (how) they dance the ɛŋgand, how we clap, but what else?" [PM 1051]

(636) Á áyɛ́ ákan á bɛhɔsa falak -
/á áyɛ ákána á bɛ-hɔsa fala-aka/
SM.1.SBJV PRN.1 leave SM.1.SBJV 8-dew disturb-DUR
"Qu'il aille, qu'il dégage les rosées -"
"That he may go, that he may pass through the dewdrops -" [PM 1052]

(637) Á↓ká hɔtɔ́k ...
/á ka hɔtɔ́-aka/
SM.1.SBJV AND rest-DUR
"Qu'il parte se reposer."
"That he may go to rest." [EO 1053]

(638) Yə́súə́ á ɛnɔ́mɛ yɛ́ bəsú-
/yəsúə́ á ɛ-nɔ́mɛ yɛ́ bəsúə́/
PRN.POSS.1PL.7 COP 7-road ASSOC.7 PRN.1PL
"C'est notre chemin pour nous-"
"It's the road for (all of) us-" [PM 1054]

(639) - bəkim.
/bá-kimə/
all
"- tous."
"- all of us." [PM 1055]

(640) Ata á é↓yáné á ŋɔ ɔŋgɔk uwəbú ɔwá bá ndɔ buəkinə, bá bɛhɔsa falak,
/ata á é^{L}yáné á ŋɔ ɔŋgɔ-aka uwəbú ɔwá bá ^{H}ndɔ
even COP who SM.1.REL FUT follow-DUR PRN.2 REL.1 SM.2 PRS
buəkinə bá bɛ-hɔsa fala-aka/
lead SM.2 8-dew disturb-DUR
"N'importe qui suivra eux qui s'avance, qui dégagent des rosées,"
"Even those who follow those who lead, who pass through the dewdrops,"[16]
[PM 1056]

(641) - falak,
/fala-aka/
disturb-DUR
"- dégagent,"
"- pass through," [EO 1057]

(642) - tɔ ná tíkə́ sáá. Á kɛndaka muɛsɛ.
/tɔ ná tíkə́ sáá á kɛnd-aka muɛ́sɛ/
SM.1PL PST2 stay come SM.1.SBJV travel-DUR well
"- nous arriverons. Bon voyage a lui."
"- we will follow. May his voyage be peaceful." [PM 1058]

(643) Ɛ́ɛ, ata miaŋɔ́ nɔ́yɛ́ mɛ ná ámɛ laá mɛsɛ́á á kɛndaka muɛs. tɔ ná tíkə́ əsú sáá.
/ɛ́ɛ ata miaŋɔ́á nɔ́yɛ́ mɛ ná ámɛ laa mɛ-sɛ́á
yes even PRN.EMPH.1SG thus SM.1SG PST2 PRN.1SG say that
á kɛnd-aka muɛsɛ tɔ ná tíkə́ əsú sáá/
SM.1.SBJV travel-DUR well SM.1PL PST2 stay PRN.1PL come
"Oui. Moi aussi je lui ai souhaité un bon voyage. Nous, nous arriverons aussi."
"Yes. I also wished him a good journey. We will also follow." [EO 1059]

End of text 2.

[16] Here, the discussion of 'passing through the dewdrops' is a metaphor used to express the idea of the journey of the soul into the afterlife. When EO and PM continue to say 'we will follow', this refers to the fact that everybody is mortal and will therefore make this journey.

9.3 Text 3: Cooking *kok* recipe

This text is from a session in which JO demonstrates how to cook the Banen dish *hɛkɔkɛ* (*kok* in French). *Kok* is is a dish made from *hɛkɔkɛ* leaves (a type of collard greens) which is cooked with ground peanuts and smoked fish (or beef, if available). The recipe video was filmed at JO's house, with a short summary video following the cooking process. Between the recording files, there were gaps as the *kok* cooked (meaning that the duration of the cooking process was over an hour).

Text name:	Cooking *kok* recipe
Text type:	Monologue
Subtype	Procedural
Participant(s):	JO (+ EK)
Also present:	EK, JO's children, neighbouring children
Recording date:	2019-06-16
Location:	JO's house, Ndikiniméki
Recording set-up:	Zoom H5 + stereo mic (audio), Sony CX625 (video)
Recording duration:	00:30:03
Transcribed by:	JO, EK
File info:	A44-20190616-EK-JO- Kok01-PreparingPeanuts Kok02-DryingPeanuts Kok03-HowToPrepareGreens Kok04-OilWashWaterFish Kok05-LeavingToCook Kok06-GrindingPeanuts Kok07-CookingKok-01 Kok08-CookingKok-02 Kok-09-CookingKok-03 Kok10-FinishedKok .wav / .mp4

Figure 9.4: Stages of the cooking process: sorting the peanuts, drying the peanuts, the dried leaves, washing the leaves, boiling with water/oil/salt, adding the fish, leaving to cook, grinding the peanuts, combining the ingredients, the finished *kok*.

(644) Bon, miɔkɔ á mɛ́ ndɔ tɛ́f.
/bon mɛ-ɔkɔ á mɛ ʰndɔ tɛ́fa/
good.FR 4-pebble COP SM.1SG PRS sort
"Bon, ce sont les cailloux que je trie."
"So, I'm picking out the pebbles." [JO 1333]

(645) Miɔkɔ, les cailloux, na tɔmbaŋa tɔ́ máhilə, les arachides sales, túítə á mɛ́ ndɔ tɛfa mba mɛ́ ombóko.
/mɛ-ɔkɔ les cailloux na tɔ-mbaŋa tɔ́ ma-hilə les
4-pebble the.FR pebbles.FR and 13-peanut ASSOC.13 6-dirt the.FR
arachides sales túítə á mɛ ʰndɔ tɛ́fa mba
peanuts.FR dirty.FR PRN.OBJ.13 COP SM.1SG PRS sort so
mɛ́ ombóko-aka/
SM.1SG.SBJV throw-DUR
"Ce sont les cailloux et les arachides sales que je trie pour jeter."
"I'm sorting the pebbles and the spoiled peanuts to throw them out."
[JO 1334]

(646) Mɛ ná hɔ.
/mɛ ná hɔ́á/
SM.1SG PST2 finish
"J'ai fini."
"I've finished." [JO 1335]

(647) Ɛ́tasɛ mɛ́ ... mɛ́ hiwə ti mí hisini tálá ɔ hiwə, mɛ ángak, mɛ́ kútə́kí mba mɛ́ ɔkɔ́kɔ ɔ məsínə
/ɛ́tasɛ mɛ =ʰ mɛ =ʰ hiwə tiə mɛ =ʰ hɛ-sini
very_soon SM.1SG PROC SM.1SG PROC 19.fire light SM.1SG PROC 19-pot
tálá ɔ hiwə, mɛ ánga-aka mɛ =ʰ kútə́kíə mba
put PREP 19.fire SM.1SG roast-DUR SM.1SG PROC dry.DUR so
mɛ =ʰ okó-aka ɔ ma-sínə/
SM.1SG PROC crush-DUR PREP 6-machine
"Je vais allumer le feu, je pose la marmite, je grille, je fait sêcher, à fin j'écrase dans la machine."
"I'll light the stove, I'll put the pot on, I'll roast (the peanuts), I'll dry (them), at the end I'll crush (them) in the machine." [JO 1336]

(648) Mɛ ná hisini tálá ɔ hiwə. Mba mi tɔmbaŋa kútəkí. Ɛ́kɛ tɔ́ kɔ́táká, mba tú fámá muɛsɛ.

/mɛ ná hɛ-sini tálá ɔ hiwə mba mɛ tɔ-mbaŋa kútəkíə
SM.1SG PST2 19-pot put PREP 19.fire thus SM.1SG 13-peanut dry.DUR
ɛ́kɛ tɔ́ kɔ́táká mba tɔ́ fámá-aka muɛsɛ/
when SM.13 dry.DUR thus SM.13 turn_out-DUR well

"J'ai posé la marmite au feu. Alors, je vais secher des arachides. Quand ils sont séchés, ils vont bien sortir."

"I've put the pot on the fire. So, I will dry the peanuts. When they've dried, they'll turn out well." [JO 1337]

(649) Mɛ́ sá tɔmbaŋa háá tukim. Mɛ́ sá tɔmbaŋa háá tukim bɔkwásíá tɔ́ lɛ tuən. ɛ́kɛ mɛ háá tukimə ba tɔ́ hɛkɔkɛ tɛŋákɛ́n.

/mɛ sá tɔ-mbaŋa háá tɔ́-kimə mɛ sá tɔ-mbaŋa háá
SM.1SG NEG 13-peanut add 13-all SM.1SG NEG 13-peanut add
tɔ́-kimə bɔkwásíá tɔ́ lɛa tɔ-ənyí ɛ́kɛ mɛ háá tɔ́-kimə bá
13-all because SM.13 be 13-many when SM.1SG add 13-all be
tɔ́ hɛ-kɔkɛ tɛŋákɛ́na/
SM.13 19-kok spoil

'Je n'ai pas mis tous les arachides. Je n'ai pas mis tous les arachides parce que c'est beaucoup. Si je mets tous, ça va gater le kok.'

'I haven't added all the peanuts. I haven't added all the peanuts because there are a lot. If I add them all, the kok will be spoiled.' [JO 1338]

(650) Mɛ ka ákán(a) (ɔ) ɛmbɔ́m, mɛ ná hɛkɔkɛ kɛ́ták, mɛ ná nda híáná ɔ ɔmbɛ́l, mɛ ná tábɔ́náka, tɔ́ándʒɛ tɔbíá mɛ ombokok. mɛ ná tábɔ́nák, mɛ ná ɔ́lɔ́kɔ́k, mɛ ná sɛ́lák, ɔ́wa hɛ́ lɛ́á nána ... voilà.[17]

/mɛ	ka	ákáná	ɔ	ɛ-mbɔ́ma	mɛ	ná	hɛ-kɔkɛ	kɛ́tá-aka	
SM.1SG	PST3	leave	PREP	7-bush	SM.1SG	PST2	19-kok	gather-DUR	
mɛ	ná	nda	híáná	ɔ	ɔ-mbɛ́la	mɛ	ná	tábɔ́ná-aka	
SM.1SG	PST2	VEN	enter	PREP	3-house	SM.1SG	PST2	arrange-DUR	
tɔ-ándʒɛ	tɔ-bíá	mɛ	ombokoko	mɛ	ná	tábɔ́ná-aka			
13-leaf	13-bad	SM.1SG	throw.REP	SM.1SG	PST2	arrange-DUR			
mɛ	ná	ɔ́lɔ́kɔ́kɔ́	mɛ	ná	sɛ́lá-aka	ɔ́wa	hɛ́	lɛ́á	
SM.1SG	PST2	attach.REP	SM.1SG	PST2	cut-DUR	REL.3	SM.19	be	
nána	voilà/								
like_that	voilà.FR								

"Je suis partie en brousse, j'ai cueilli le kok, je suis revenue à la maison, j'ai arrangé les mauvaises feuilles, je les ai jétées, j'ai attaché, j'ai coupé, c'est devenu comme tu vois ... voilà."

"I went to the bush, I gathered kok, I returned home, I arranged the bad leaves, I threw them out, I attached the leaves, I cut (them), as you can see ... voilà." [JO 1339]

(651) Moló ?

/moló/

6.oil

"L'huile?"

"Oil?" [EK 1340]

(652) Uh-huh, moló, mi ná moló ha.

/uh	huh	moló	mɛ	ná	moló	háá/
PTCL	PTCL	6.oil	SM.1SG	PST2	6.oil	add

"Uh-huh, l'huile, j'ajoute l'huile."

"Uh-huh, oil, I'm adding oil." [JO 1341]

[17] The phrasing 'attach the leaves' refers to the fact that you hold the leaves in your hand to cut them.

(653) Tɔmbaŋa tɔ́ huhə́kə, ɛ́kɛ tú huhə́kə, mba tú okóko ɔ məsínə.
/tɔ-mbaŋa tɔ́ huhə́-aka ɛ́kɛ tɔ́ huhə́-aka mba tɔ́
13-peanut SM.13 cool-DUR when SM.13 cool-DUR then SM.13
okó-aka ɔ ma=sínə/
crush-DUR PREP 6-machine
"Les arachides doivent se refroidir, quand ça se refroidi, on va écraser dans la machine."
"The peanuts need to cool, when they've cooled, then you crush them in the machine." [JO 1342]

(654) Ɛsɛ́áŋáka mɛ́ hɛkɔkɛ sɔ́áka.
/ɛsɛ́áŋáka mɛ =H hɛ-kɔkɛ sɔ́á-aka/
now SM.1SG PROC 19-kok wash-DUR
"Maintenant, je lave le kok."
"Now, I wash the kok." [JO 1343]

(655) Mɛ́ hɛkɔkɛ sɔ́áka
/mɛ =H hɛ-kɔkɛ sɔ́á-aka/
SM.1SG PROC 19-kok wash-DUR
"Je lave le kok."
"I wash the kok." [JO 1344]

(656) Mɛ ná hɔ́á ɔ ɔsɔa
/mɛ ná hɔ́á ɔ ɔ-sɔ́á/
SM.1SG PST2 finish PREP INF-wash
"J'ai fini de laver."
"I've finished washing (it)." [JO 1345]

(657) mɛ́ əmbə́kínə ɔ mol.
/mɛ =H əmbə́kínə ɔ moló/
SM.1SG PROC throw.REP PREP 6.oil
"Je (le) lance dans l'huile."
"I'm throwing (it) into the oil." [JO 1346]

(658) Mɛ ná hɛkɔkɛ əmbínə ɔ moló.
/mɛ ná hɛ-kɔkɛ əmbínə ɔ moló/
SM.1SG PST2 19-kok throw PREP 6.oil
"J'ai lancé le kok dans l'huile."
"I've thrown the kok in the oil." [JO 1347]

(659) Bon, ɛsɛ́áŋáka mɛ́ kɔ́ŋɔ́náka.
/bon ɛsɛ́áŋáka mɛ =H kɔ́ŋɔ́ná-aka/
good.FR now SM.1SG PROC stir-DUR
"Maintenant, je tourne."
"Now, I stir." [JO 1348]

(660) Mɛ́ mənífə́ ha.
/mɛ =H ma-nífə́ háá/
SM.1SG PROC 6-water put
"Je met l'eau."
"I'm adding water." [JO 1349]

(661) Mɛ́ ibusə́ ha, ibusə́.
/mɛ =H ɛ-busə́ háá ɛ-busə́/
SM.1SG PROC 7-salt put 7-salt
"Je met le sel, le sel."
"I'm adding salt, salt" [JO 1350]

(662) Mɛ́ bilóló tábɔ́náka mɛ́ ha.
/mɛ =H bɛ-lóló tábɔ́ná-aka mɛ =H háá/
SM.1SG PROC 8-smoked_fish arrange-DUR SM.1SG PROC add
"J'arrange les poissons fumés, (et puis) j'ajoute."
"I'm sorting the smoked fish, (and then) I('ll) add (them)." [JO 1351]

(663) Mɛ ná bilóló ha.
/mɛ ná bɛ-lóló háá/
SM.1SG PST2 8-smoked_fish add
"J'ai mis les poissons."
"I've added the fish." [JO 1352]

(664) Mí hu. hí lúmə ɔ ɔfɛna.
/mɛ =H huə hɛ́ lúmə ɔ ɔ-fɛna/
SM.1SG PROC cover SM.19 start PREP INF-boil
"Je couvre. Ca commence a bouillir."
"I'm putting the lid on. It will begin to boil." [JO 1353]

(665) Ikúílí ɔ nɔ́ hɛkɔkɛ há, ɔ nɔ́ tɔ- ibusə́ há, na mənif, na ... tuɔfɔ, ɔ ná tálá ɔ hiwə, ɔ ná hu, í↓kúílí ébáka hé mɔŋaka mba hé bɛnak.

/ɛ-kúílí ɔ nɔ́ hɛ-kɔkɛ háá ɔ nɔ́ tɔ- ɛ-busə́ háá na
7-time SM.2SG PST1 19-kok put SM.2SG PST1 13- 7-salt put with
ma-nífə́ na tɔ-ɔfɔ́ ɔ ná tálá ɔ hiwə ɔ ná
6-water with 13-fish SM.2SG PST2 put PREP 19.fire SM.2SG PST2
huə ɛ-kúílí ɛ-bá-aka hé mɔŋa-aka mba hé bɛ́ná-aka/
cover 7-time SM.7-be.DUR 19 last-DUR then SM.19 cook-DUR

"Quand tu mets le kok, tu mets le- le sel, avec l'eau, et... le poisson, tu as couvert, c'est en ce moment que ça dure/ça met du temps au cuire."
"When you've put the kok, you've added the- the salt, and water, and ... fish, you've put the lid on, it's at that point that it takes a long time to cook."
[JO 1354]

(666) Tɔ́ ndɔ titənə ɛ́kɛ tu huhə́kə mba tú okóko o məsín.

/tɔ́ ᴴndɔ titənə ɛ́kɛ tɔ́ huhə́-aka mba tɔ okó-aka ɔ
SM.13 PRS heat when SM.13 cool-DUR then SM.13 crush-DUR PREP
ma-sínə/
6-machine

"Ça chauffe quand ça va se refroidir, on va écraser dans la machine."
"They heat up, when they're cooled, you crush them in the machine."
[JO 1355]

(667) Tú huhə́kə mba tú okók.

/tɔ́ huhə́-aka mba tɔ́ okó-aka/
SM.13 cool-DUR then SM.13 crush-DUR

"Ça va se refroidir, ça va s'écraser."
"When they're cooled, you crush them." [JO 1356]

(668) Ɛ́kɛ hɛkɔkɛ hɛ́ lúmə́ ɔfɛna mba tɔ́ ha, mba tɔ́ tɔmbaŋa ha.
/ɛ́kɛ hɛ-kɔkɛ hɛ́ lúmə́ ɔ-fɛna mba tɔ́ háá mba tɔ́
when SM.19-kok SM.19 start INF-boil then SM.13 put then SM.13
tɔ-mbaŋa háá/
13-peanut put
"Quand le kok va commencer à bouillir, on va mettre, on va mettre les arachides."
"When the kok has started to boil, you add, you add the peanuts."
[JO 1357]

(669) Tɔmbaŋa tú nú huhək.
/tɔ-mbaŋa tɔ́ ná huhə́-aka/
13-peanut SM.13 PST2 cool-DUR
"Les arachides se sont refroidies."
"The peanuts have cooled." [JO 1358]

(670) ɔ́ məsínə máama ɛ́tasɛ tɔ́ tɔmbaŋa okók.
/ɔ́ ma-sínə máama ɛ́tasɛ tɔ́ tɔ-mbaŋa
COP.INANIM 6-machine DEM.PROX.6 very_soon SM.1PL.SBJV 13-peanut
okó-aka/
crush-DUR
"Voici la machine, on va écraser les arachides."
"Here's the machine, we'll crush the peanuts." [JO 1359]

(671) Mɛ́ məsínə lɔŋá hə́n.
/mɛ =H ma-sínə lɔŋá hə́niə/
SM.1SG PROC 6-machine fasten DEM.DIST.LOC
"Je fixe la machine là-bas."
"I'll set up the machine over there." [JO 1360]

(672) Mɛ́ tɔmbaŋa okók
/mɛ =H tɔ-mbaŋa okó-aka/
SM.1SG PROC 13-peanut crush-DUR
"J'écrase les arachides."
"I'm crushing the peanuts." [JO 1361]

(673) Mɛ ná hɔ.
/mɛ ná hɔ́á/
SM.1SG PST2 finish
"J'ai fini."
"I've finished." [JO 1362]

(674) (*À l'enfant/to child:*)
Káka məsínə tə́tə́ní.
/Káka ma-sínə tə́tə́níə/
go 6-machine guard
"Va garder la machine."
"Go sort out the machine." [JO 1363]

(675) Ubusíə́ ɔbɔ́á mɛ́ tɔmbaŋa ha, mɛ́ bulə́lə, mɛ́ manyá ɔwá mənífə́ má báka hɔ́ánánátɔ
/ɔ-busíə́ ɔbɔ́á mɛ́ tɔ-mbaŋa háá mɛ =H bulə́lə
PREP-14.front REL.14 SM.1SG.SBJV 13-peanut put SM.1SG PROC turn
mɛ́ manyá ɔwá ma-nífə́ má bá-aka hɔ́ánána-átɔ/
SM.1SG.SBJV know REL.1 6.water SM.6.SBJV be.DUR suffice-PTCP
"Avant de mettre les arachides, je tourne, pour m'assurer que l'eau est suffisante."
"Before putting the peanuts in, I stir, so that I know there's enough water." [JO 1364]

(676) Mənífə́ má lɛ́ bá hɔ́ánánátɔ.
/ma-nífə́ má lɛ́ bá hɔ́ánáná-átɔ/
6-water SM.6 NEG be suffice-PTCP
"L'eau ne suffit pas."
"There isn't enough water." [JO 1365]

(677) Yɛ́ báka ɔwá mɛ́ mɔ́mɔtɛ́ mənífə́ kɔ́nda.
/yɛ́ bá-aka ɔwá mɛ́ má-mɔtɛ́ ma-nífə́ kɔ́nda/
SM.7 be-DUR REL.1 SM.1SG.SBJV 6-one 6-water add
"C'est que je dois ajouter l'autre."
"I need to add more water." [JO 1366]

(678) Mɛ́ tɔmbaŋa ha.
/mɛ =^{H} tɔ-mbaŋa háá/
SM.1SG PROC 13-peanut put
"Je met les arachides."
"I'm adding the peanuts." [JO 1367]

(679) Mɛ́ tɔmbaŋa ha. Mí bulə́k.
/mɛ =^{H} tɔ-mbaŋa háá mɛ =^{H} bulə́-aka/
SM.1SG PROC 13-peanut put SM.1SG PROC turn-DUR
"Je met les arachides. Je tourne."
"I'm adding the peanuts. I stir." [JO 1368]

(680) Mba mɛ́ siəkínə káasɛ tɔ́ ná hɔ́ánána.
/mba mɛ =^{H} siəkinə káasɛ tɔ́ na hɔ́ánána/
then SM.1SG PROC see.DUR whether SM.13 PST2 suffice
"Je vais voir si ça (les arachides) suffit."
"I'll see whether there are enough." [JO 1369]

(681) Ɛ́tasɛ mɛ́ mənífə́ kɔ́nda.
/ɛ́tasɛ mɛ =^{H} ma-nífə́ kɔ́nda/
very_soon SM.1SG PROC 6.water add
"Je vais ajouter de l'eau."
"I'll add some water." [JO 1370]

(682) Tɔmbaŋa ɔtɔ́á tɔ́ ná bɛ́mák, tuítə á mɛ́ ndɔ tɛsa háaha.
/tɔ-mbaŋa ɔtɔ́á tɔ́ ná bɛ́-máka tuítə á
13-peanut REL.13 SM.13 PST2 MID-form_clumps PRN.OBJ.13 COP
mɛ́ ^{H}ndɔ tɛsa háaha/
SM.1SG.REL PRS separate DEM.PROX.LOC
"Les arachides qui ont formé les boules, c'est elles que je suis en train d'écraser ici."
"The peanuts that have clumped up, it's them that I'm separating here."
[JO 1371]

(683) Á tɔ́tɔ nána. Á tɔ́t. Ɛ́tasɛ mɛ́ tɛsáka.

/á tɔ́ɔtɔ nana á tɔtɔ ɛ́tasɛ mɛ =^{H}
COP DEM.PROX.13 like_this COP DEM.PROX.13 very_soon SM.1SG PROC
tɛsá-aka/
separate-DUR

"Voici ça ici. Voici. Je vais les écraser."

"Look at the ones here. Look. I'm breaking them up." [JO 1372]

(684) Moló má lɛ́ bá hɔ́ánánátɔ

/moló má lɛ bá hɔ́ánána-átɔ/
6.oil SM.6 NEG be suffice-PTCP

"L'huile ne suffit pas."

"There isn't enough oil." [JO 1373]

(685) Mɛ́ mɔ́mɔtɛ́ kɔ́nda.

/mɛ =^{H} má-mɔtɛ́ kɔ́nda/
SM.1SG PROC 6-one add

"Je vais ajouter l'autre."

"I'll add some more." [JO 1374]

(686) Ɛ́tasɛ mí hu, tɔmbaŋa tɔ́ bɛ́náka na moló, ɛ́kɛ tɔmbaŋa tɔ́ hɔ́á ɔ ɔbɛ́na mba mɛ́ sumún.

/ɛ́tasɛ mɛ =^{H} huə tɔ-mbaŋa tɔ́ bɛ́ná-aka na
very_soon SM.1SG PROC cover 13-peanut SM.13.SBJV cook-DUR with
moló ɛ́kɛ tɔ-mbaŋa tɔ́ hɔ́á ɔ ɔ-bɛ́na mba mɛ
6.oil when 13-peanut SM.13 finish PREP INF-cook then SM.1SG
=^{H} sumunə/
PROC remove

"Je vais couvrir, quand les arachides et l'huile vont finir de cuire, je vais enlever (de feu)."

"I'll put the lid on, when the peanuts and the oil have finished cooking, I'll take (them) off the heat." [JO 1375]

(687) Mɛ́ ndɔ búŋúlə ɔwá tɔmbaŋa tɔ́ lɛ́ titə ɔ matá.
/mɛ ᴴndɔ búŋúlə ɔwá tɔ-mbaŋa tɔ́ lɛ́ titə ɔ
SM.1SG PRS turn.DIM REL.1 13-peanut SM.13.SBJV NEG burn PREP
matá/
bottom
"Je tourne pour que les arachides ne brûlent pas en bas (de la marmite)."
"I'm stirring (the pot) so that the peanuts don't burn on the bottom."
[JO 1376]

(688) Tɔmbaŋa tɔ́ ndɔ káyɛ́na ɔ matá.
/tɔ-mbaŋa tɔ ᴴndɔ káyɛ́na ɔ matá/
13-peanut SM.13 PRS stick PREP bottom
"Les arachides collent en bas."
"The peanuts stick to the bottom." [JO 1377]

(689) Ikúílí mɛ́ ndɔ bulə nána mɛ́ ndɔ káyɔ́na ... na hiɔs.
/ɛ-kúílí mɛ ᴴndɔ bulə nána mɛ ᴴndɔ káyɔ́na na
7-time SM.1SG PRS turn like_this SM.1SG PRS stick.RVS with
hɛ-ɔsɔ/
19-spoon
"Quand je tourne ainsi je décolle (les arachides) ... avec la louche."
"When I stir like this I unstick (the peanuts) ... with the ladle." [JO 1378]

(690) Mɛ́ ndɔ ɔ́kɔ́lɛna ábá ibusə́ yɛ́ bák.
/mɛ ᴴndɔ ɔ́kɔ́lɛna ábá ɛ-busə́ yɛ́ bá-aka/
SM.1SG PRS taste if 7-salt SM.7 be-DUR
"Je goute si il y a le sel."
"I taste a bit to see if there's salt." [JO 1379]

(691) Mí húə́ tɔmbaŋa tɔ́ bɛnak.
/mɛ =ᴴ húə́ tɔ-mbaŋa tɔ́ bɛ́ná-aka/
SM.1SG PROC cover 13-peanut SM.13 cook-DUR
"Je couvre les arachides pour cuire."
"I put the lid on so the peanuts cook." [JO 1380]

(692) Voilà, c'est bon.
/voilà c'est bon/
voilà it_is.FR good.FR
"Voilà, c'est bon."
"Voilà, it's good." [JO 1381]

(693) Mhm, muɛs !
/mhm muɛ́sɛ/
PTCL well
"Mhm, c'est bon !"
"Mhm, it's good!" [EK 1382]

(694) Mɛ́ úbúnə́ mulúkúlúku wɔ́ famak.
/mɛ =H úbúnə́ mɔ-lúkúlúku wɔ́ fámá-aka/
SM.1SG PROC open 3-vapour SM.3 leave-DUR
"J'ouvre pour que la vapeur sorte."
"I take the lid off to get rid of the vapour." [JO 1383]

(695) Ɔ ná siəkínə ɛ́↓sɛ́á a báka bá hɛkɔkɛ talɛ́(a) eé ?
/ɔ ná siəkinə ɛ́Lsɛ́á a bá-aka bá hɛ-kɔkɛ talɛ́á-aka eé/
SM.2SG PST2 see.DUR how SM.1 be-DUR SM.2 19-kok cook-DUR Q
"Est-ce que tu as vu comment on prépare le *kok* ?"
"Have you seen how we cook *kok*?" [JO 1384]

(696) *Mɛ́ ná sin.[18]
/mɛ ná sinə/
SM.1SG PST2 see
Intd.: 'J'ai vu.'
Intd.: 'I have seen.' [EK 1397]

(698) Ɔ ná talɛaka na ...
/ɔ ná talɛ́á-aka na/
SM.2SG PST2 cook-DUR with
"Tu as cuisiné avec..."
"You cooked (it) with..." [EK 1399]

[18]This example is marked as ungrammatical but appears in a natural speech text as it was produced by myself (EK) during the session in answer to JO's question. The grammatical version has a durative suffix on the verb, as given below by JO in the transcription session:

(697) Mɛ́ ná siəkin.
/mɛ ná siəkinə/
SM.1SG PST2 see.DUR
"J'ai vu."
"I have seen." [JO 1398]

Summary:

(699) Hɛkɔkɛ (á) tɔ́ ná talɛ́ák.
/hɛ-kɔkɛ á tɔ́ ná talɛ́á-aka/
19-kok COP SM.1PL.REL PST2 cook-DUR
"C'est le *kok* que nous avons preparé."
"What we cooked was *kok*." [JO 1328]

(700) Hɛkɔkɛ búəsúə bɔlábɔ́nɛ́á bɔ́ bə́nɛni.
/hɛ-kɔkɛ bɔ-əsuə bɔ-lábɔ́nɛ́á bɔ́ ba-nɛni/
19-kok 14-PRN.POSS.1PL 14-food ASSOC.14 2-Nen
"Le *kok*, c'est notre nourriture des Banen."
"*Kok* is our food amongst the Banen." [JO 1329]

(701) Bon... ɛbá... bənəni (ɛbáka) bá hɛkɔkɛ hikəkiə ɛmbát.
/bon ɛbá ba-nəni ɛ-bá-aka bá hɛ-kɔkɛ hikəkiə ɛmbáta/
good.FR if SM.2-Nen SM.7-be-DUR SM.2 19-kok like a_lot
"Bon... les Banen aiment beaucoup le *kok*."
"So... Banen people really love *kok*." [JO 1330]

(702) Ɛlɔ́áyɛ́ nɔ́yɛ́ mɛ́ ná hikə́kíə́ ɔwá, ɛ́↓sɛ́á ɔ́ ná nda fámá nána ɔ siəkínə ɛ́↓sɛ́á bá ndɔ hɛkɔkɛ, tálɛa uwəsú ɔ Bənɛn.
/ɛlɔ́áyɛ́ nɔ́yɛ́ mɛ ná hikəkiə ɔwá ɛ́ᴸsɛ́á ɔ ná nda fámá
for thus SM.1SG PST2 like REL.1 like SM.2SG PST2 VEN arrive
nána ɔ siəkinə ɛ́ᴸsɛ́á bá ᴴndɔ hɛ-kɔkɛ talɛ́á ɔ-wəsú
thus SM.2SG see.DUR like SM.2 PRS 19-kok cook PREP-PRN.1PL
ɔ ba-nɛni/
PREP 2-Nen
"C'est la raison pour laquelle j'ai voulu que, comme tu es arrivée (à la maison), tu vois comment on prépare le *kok* chez nous, les Banen."
"That's why I wanted that, when you came here (to the house), you would see how we cook *kok* here amongst the Banen." [JO 1331]

(703) Ɔ ná siəkínə ɛ́↓sɛ́á bá ndɔ hɛkɔkɛ tálɛ ɛnákɛ́á ɔ́ ákáná hənní, ɔ́ úhúlə ɔ́ ŋgɔ sá talɛaka, eé ? ... Voilà !

/ɔ	ná	siəkinə	ɛ́ᴸsɛ́á	bá	ᴴndɔ	hɛ-kɔkɛ	talɛ́á	ɛnákɛ́á	
SM.2SG	PST2	see.DUR	like	SM.2	PRS	19-kok	cook	when	
ɔ́	ákáná	hənníə	ɔ́	úhúlə	ɔ́	ŋgɔ	sá		
SM.2SG.SBJV	leave	DEM.DIST	SM.2SG.SBJV	return	SM.2SG	FUT	DIST		
talɛ́á-aka	eé	voilà/							
cook-DUR	Q	voilà.FR							

"Tu as vu comment on prépare le *kok*, quand tu vas aller là-bas [en Europe], (quand) tu vas rentrer, tu vas (le) préparer, non ? ... Voilà !"

"You have seen how we cook *kok*, when you go back there [to Europe], when you return, you will cook (it), no? ... Voilà!" [JO 1332]

End of text 3.

9.4 Text 4: Short story *The chicken and the partridge*

In this text, JO tells a short children's story entitled *La poule et le perdrix* ('The chicken and the partridge'). This in an example of an animal story, in which an explanation is provided for why the animals behave as they do today. JO first prepared the story in writing before telling it without a script, basing it on a book of animal stories from West Africa. She recounted the story first in Tunen and then in French. The French translations provided here are from the transcription session of the Tunen version (transcription conducted by EK and JO). The story shows the linguistic features of personification of animals in a story context, nominal compounding, and variation in referent tracking.

Text name:	Histoire Poule Perdrix
Text type:	Monologue
Subtype	Story (animal story)
Participant:	JO
Also present:	EK
Recording date:	2021-11-27
Location:	JO's house, inside (Ndikiniméki)
Recording set-up:	Zoom H5 + shotgun mic (audio), Sony CX625 (video)
Recording duration:	00:01:24
Transcribed by:	JO, EK
File info:	A44-2021127-EK-JO-HistoirePoulePerdrix.wav A44-2021127-EK-JO-HistoirePoulePerdrix.mp4

Figure 9.5: JO recounting the story at her kitchen table.

(704) Ɔ hítɛ́↓yí hiɔŋɔ, məhuə má sa bá mas.
/ɔ hítɛ́ᴸyí hɛ-ɔŋɔ ma-huə má sa bá ma-ɛ́sɛ/
PREP DEM.DISC.EMPH.19 19-year 6-harvest SM.6 NEG be 6-good
"Cette année, la récolte n'était pas bonne."
"This year, the harvest wasn't good." [JO 1744]

(705) Miɔkɔ́ a bɛ́bátak(a) asɛ :
/miɔkɔ́ a bɛ́-báta-aka a-sɛ́á/
9.chicken SM.1 MID-ask-DUR SM.1-say
"La poule s'est demandé :"
"The chicken asked herself:" [JO 1745]

(706) Nəní mba mɛ́ kɛ́áka mba mɛ́ bá↓mía bána lúkə́k(ə́) eé ?
/nəníə́ mba mɛ́ kɛ́á-aka mba mɛ́ báᴸmía
how then SM.1SG.SBJV do-DUR thus SM.1SG.SBJV PRN.POSS.1SG.2
ba-ná lúkə́-aka eé/
2-child feed-DUR Q
"« Comment je vais faire pour nourrir mes poussins ? »"
""How am I going to feed my children?"" [JO 1746]

(707) Hɛsɛ́mbá hɛ́ ná hul.
/hɛ-sɛ́mbá hɛ́ ná húlə́/
19-partridge SM.19 PST2 come
"Le perdrix est venu."
"The partridge came along." [JO 1747]

(708) A ná wɛ́ɛya lɛ́ná hɛ́ɛsɛ :[19]
/a ná wɛ́ɛya lɛ́ná hɛ-sɛ́á/
SM.1 PST1 PRN.1 say.APPL 19-say
"Elle lui a dit :"
"She said to her:" [JO 1748]

[19] JO noted in later discussion of this example that the class 1 form of the complementiser (*ásɛ*) would also be possible here, illustrating that the agreement can correspond to the noun class of the noun *hɛsɛ́mbá* 'partridge' or to the class for human animates, reflecting the use here for personified animals within a story context.

(709) « Tuənə́ yə́b! »
/tuənə́ yə́bə/
stay calm
"« Restez tranquille! »"
""Stay calm!"" [JO 1749]

(710) « Ɛmbɔ́ma yɛ́ báka hə́ní na bɛŋgwɛt. »
/ɛ-mbɔ́ma yɛ́ bá-aka hə́níə́ na bɛ-ŋgwɛtɛ/
7-field SM.7 be-DUR DEM.DIST.LOC with 8-potato
"« Il y a un champ de patates là-bas. »"
""There's a potato field over there."" [JO 1750]

(711) « Mba tú ákáná tú ka - tú ka siək. »
/mba tɔ́ ákáná tɔ́ ka tɔ́ ka siə-aka/
so SM.1PL.SBJV leave SM.1PL.SBJV AND SM.1PL.SBJV AND search-DUR
"« Alors nous allons partir chercher. »"
""So let's go - let's go search (over there)."" [JO 1751]

(712) Bá n(á) ákan.
/bá ná ákáná/
SM.2 PST2 leave
"Elles sont parties."
"They left." [JO 1752]

(713) A ná yaáy(á) éŋgwáyɛ miɔkɔ́ lɛ́na asɛ :
/a ná yáyɛ́á ɛ-ŋgwáyɛ miɔkɔ́ lɛ́ná a-sɛ́á/
SM.1 PST2 PRN.POSS.1.7 7-friend 9.chicken say.APPL SM.1-say
"Elle dit à son amie (la poule):"
"She said to her friend the chicken:" [JO 1753]

(714) « Ɔ bɛ́tátáka ! »
/ɔ bɛ́-tátá-aka/
SM.2SG MID-watch.out-DUR
"« Fait attention ! »"
""Watch out!"" [JO 1754]

(715) « Muití ɛ́mbɔ́ma á ndɔ nda hulək. »
/mɔ-ití ^{H}=ɛ-mbɔ́ma a ^{H}ndɔ nda húlə́-aka/
1-owner ASSOC.1-7-field SM.1SG PRS AND come-DUR
"« Le propriétaire du champ va venir. »"
""The owner of the field is coming."" [JO 1755]

(716) Bá ná bɛŋgwɛtɛ siək.
/bá ná bɛ-ŋgɛtɛ siə-aka/
SM.2 PST2 8-potato search-DUR
"Elles ont cherché le patat."
"They searched for the potatoes." [JO 1756]

(717) Bá ná bíə́bu niak.
/bá ná bíə́bu nɛa-aka/
SM.2 PST2 PRN.POSS.2.8 eat-DUR
"Elles ont mangé pour eux."
"They each ate their part." [JO 1757]

(718) Muəndú tɛ́á - Muɛ́ta tɛ́á a ná ɛtá bɛ́fandɛ.
/mɔ-əndú tɛ́á mɔ-ɛ́ta tɛ́á a ná ɛtá bɛ́-fandɛ́/
1-woman each 1-each each SM.1 PST2 take 8-two
"Chacun a pris deux patats."
"Each of them took two potatoes." [JO 1758]

(719) A ná bɛ́kɔ́ŋɔ́ná, a ná muití ɛmbɔ́ma bɔ́ŋɔ́ ɔ ɔsákɔn.
/a ná bɛ́-kɔ́ŋɔ́ná a ná mɔ-ití ɛ-mbɔ́ma bɔ́ŋɔ́ ɔ
SM.1 PST3 MID-return SM.1 PST2 1-owner 7-field find PREP
ɔ-sákɔna/
INF-come.PROG
"Elle se retourné, elle a vu le propriétaire du champ venir."
"She turned around, she saw the owner of the field coming." [JO 1759]

(720) A ná miɔkɔ́ lɛ́n(a) asɛ :
/a ná miɔkɔ́ lɛ́ná a-sɛ́á/
SM.1 PST2 9.chicken say SM.1-say
"Elle a dit à la poule :"
"She said to the chicken:" [JO 1760]

(721) « Muití ɛmbɔ́ma a nɔ́ nda fam. »
/mɔ-ití ɛ-mbɔ́ma a nɔ́ nda fámá/
1-owner 7-owner SM.1 PST1 VEN arrive
"« Le propriétaire du champ est déja arrivé. »'
""The owner of the field just got back."" [JO 1761]

(722) A ná bíáyɛ́á bɛ́ŋgwɛtɛ bat.
/a ná bíáyɛ́á bɛ-ŋgwɛtɛ báta/
SM.1 PST2 PRN.POSS.1.8 8-potato collect
"Elle a ramassé ses patates."
"She collected up her potatoes." [JO 1762]

(723) A ná hulúlúə a n(á) ákan.
/a ná hulúlúə́ a ná ákána/
SM.1 PST2 flee SM.1 PST2 leave
"Elle s'est envolé."
"She fled." [JO 1763]

(724) Miɔkɔ́ a lɛ́ ɔ́sɔ ɔ bɛŋgwɛtɛ (ɔ) ɔbáta.
/miɔkɔ́ a lɛ́ ɔ́so ɔ bɛ-ŋgwɛtɛ ɔ ɔ-báta/
9.chicken SM.1 NEG can PREP 8-potato PREP INF-collect
"La poule, elle ne pouvait pas ramasser ses patats."
"The chicken wasn't able to collect up her potatoes." [JO 1764]

(725) Muit(í) ɛ́mbɔ́ma a ná wɛ́ɛya halɛ́n.
/mɔ-ití H=ɛ-mbɔ́ma a ná wɛ́ɛya halɛ́na/
1-owner ASSOC.1-7-field SM.1 PST2 PRN.1 catch
"Le propriétaire du champ l'a arreté."
"The owner of the field caught her." [JO 1765]

(726) A ná wɛ́ɛya ákanána ɔ wáayɛ́ ɔmbɛl.
/a ná wɛ́ɛya ákánána ɔ wáayɛ́ ɔ-mbɛ́la/
SM.1 pst2 PRN.1 leav.APPL PREP PRN.POSS.1.3 3-house
"Il l'a amené dans sa maison."
"He took her into his house." [JO 1766]

(727) U bótólókiə ɔ hité↓yí hinó, miɔkɔ́ a ná hɛ́áná -

ɔ	bótólókiə	ɔ	hi↳téyí	hɛ-nó	miɔkɔ́	a	ná	hɛ́áná
PREP	from	PREP	DEM.DISC.EMPH.19	19-day	9.chicken	SM.1	PST2	become

"À partir de ce jour, la poule est devenue -"
"From this day on, the chicken has become -" [JO 1767]

(728) A níŋə́kə na bɛ́ndɔ ɔmbɛ́l.

/a	níŋə́-aka	na	bɛndɔ	ɔ-mbɛ́la/
SM.1	live-DUR	with	2.person	3-house

"Elle vivait avec les hommes à la maison."
"She lives with humans in their homes." [JO 1768]

(729) A bɛɔnɔ́ nɛakak, bɛ́ndɔ bá nɛak.

/a	bɛ-ɔnɔ́	nɛaka-aka	bɛndɔ	bá	nɛ́á-aka/
SM.1	8-egg	make-DUR	2.person	SM.2	eat-DUR

"Elle pond des œufs; les hommes les mangent."
"She lays eggs; people eat them." [JO 1769]

End of text 4.

Samenvatting in het Nederlands

Deze dissertatie bevat de resultaten van een veldwerkstudie over het Tunen (Niger-Congo, ISO 639-3 [tvu]; Guthrie-nr. A44; Guthrie 1948, 1967-1971; Maho 2003, 2009; Hammarström 2019), een Bantoetaal die in Kameroen gesproken wordt door ongeveer 70.000–100.000 sprekers (Mous 2003; Eberhard et al. 2022) en bekend staat om een aantal ongebruikelijke syntactische eigenschappen (o.a. Dugast 1971; Mous 2003). De introductie (hoofdstuk 1) leidt de hoofdvraag van de dissertatie in (zie (730)).

(730) **Hoofdvraag**
In welke mate wordt de syntaxis van het Tunen beïnvloed door de informatiestructuur?

Hoofdstuk 2 biedt conceptuele achtergrondinformatie over informatiestructuur, syntactische theorie, de vergelijkende Bantoelinguïstiek en het Tunen zelf. Hierop volgt hoofdstuk 3, waarin de onderzoeksmethodologie behandeld wordt: in-situ veldwerk in Kameroen en de analyse van secundaire bronnen. Hoofdstuk 3 sluit af met informatie over het archiveren van de gegevens, met uitleg over hoe de opnames kunnen worden geraadpleegd.

Hoofdstuk 4 bevat een grammaticaal overzicht van het Tunen, dat de belangrijkste fonologische en morfosyntactische eigenschappen beschrijft die nodig zijn om de data in de rest van de dissertatie te begrijpen. Dit hoofdstuk geeft ook duidelijk aan waar deze studie afwijkt van eerder gepubliceerde beschrijvingen; dit betreft met name de orthografische conventies en hun relatie tot de fonologie, alsmede enkele syntactische eigenschappen die niet eerder beschreven zijn, zoals de relatieve volgorde van nominale modificeerders. De latere hoofdstukken in deze dissertatie zijn geschreven binnen het kader van generatieve syntaxis, maar het

grammaticale overzicht in hoofdstuk 4 is bedoeld voor een breder publiek in de taalkunde en kan als zodanig op zichzelf gelezen worden.

Hoofdstukken 5–7 van deze dissertatie bestaan uit studies naar de wisselwerking tussen syntaxis en informatiestructuur, die de hoofdvraag in (730) trachten te beantwoorden.

Hoofdstuk 5 onderzoekt hoe informatiestructuur in het Tunen wordt uitgedrukt. Allereerst wordt bewijs geleverd voor S-Aux-O-V-X als de pragmatisch-neutrale woordvolgorde, ofwel de canonieke woordvolgorde van het Tunen. Vervolgens worden afwijkingen van deze canonieke woordvolgorde besproken, waaronder de VO-constructies die eerder voor het Tunen beschreven zijn in Mous (1997, 2003, 2005, 2014) en later opgenomen zijn door Bearth (2003); Güldemann (2007); Downing and Marten (2019). Deze komen veel minder vaak in de data voor dan wordt verwacht op basis van Mous' beschrijving. Voorts wordt de markeerder *á* besproken, die Mous (1997, 2003) een contrastmarkeerder noemt als onderdeel van een monoclausale analyse. Dit hoofdstuk stelt een alternatieve analyse voor de *á*-markeerder voor: *á* is hier het identificationele koppelwerkwoord in een biclausale cleftconstructie; er is slechts weinig bewijs voor het voorkomen ervan als contrastmarkeerder. Het hoofdstuk bespreekt verder hoe de notie topic wordt uitgedrukt en laat zien dat topics ongemarkeerd kunnen blijven of kunnen verschijnen in de linkerperiferie van de zin, waar ze gemarkeerd worden door een voorzetsel of een markeerder die elders fungeert als de markeerder voor conditionaliteit. De rechterperiferie is beschikbaar voor toevoegingen achteraf. Daarna kijkt dit hoofdstuk naar functionele equivalenten van de lijdende vorm in het Tunen, aangezien het Tunen geen syntactische passiefconstructie kent. Er worden twee relevante constructies besproken: verbale participia gevormd met *-átɔ* PTCP en de onpersoonlijke vormen met *bá* SM.2. Dit wordt gevolgd door commentaar op het mediumprefix (cf. Mous 2008). Het laatste deel van het hoofdstuk kijkt naar variatie in de uitdrukking van een referent in het discours. Deze wordt deels bepaald door de informatiestructuur (wat betreft de toegankelijkheid/gegevenheid van de referent (Ariel 2001; Gundel et al. 1993), maar ook door onafhankelijke factoren zoals de valentie-eisen van bepaalde predicaten. Het hoofdstuk eindigt met een korte reflectie op hoe de uitdrukking van informatiestructuur in het Tunen zich verhoudt tot die in andere Bantoetalen. Het valt hierbij op dat het Tunen voor een Bantoetaal betrekkelijk weinig beïnvloed wordt door informatiestructuur.

Hoofdstuk 6 behandelt de OV-woordvolgorde van het Tunen, die specifieker te karakteriseren is als S-Aux-O-V(-X), zoals te zien is in het thetische voorbeeld (731).

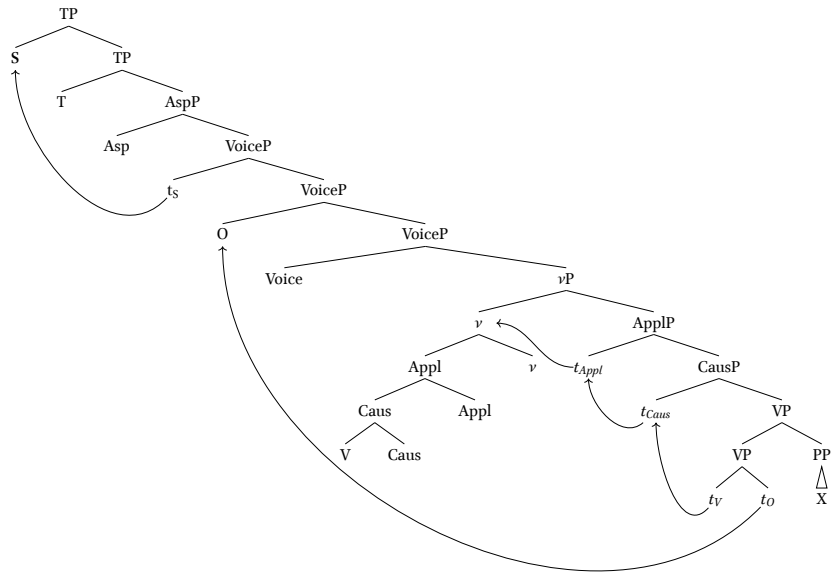
(731) Context: Je bevindt je aan de oever van een rivier buiten het dorp en ziet een olifant. Dit gebeurt zelden, dus je rent naar andere mensen om dit te vertellen.
mɛ nɔ́ misəku siəkin !
/mɛ nɔ́ misəku siəkinə/
SM.1SG PST1 3.olifant zie.DUR
'Je viens de voir un éléphant !'
'Ik heb net een olifant gezien!' [PM 316]

Deze OV-woordvolgorde is in de regio ongebruikelijk, aangezien de omliggende talen VO-woordvolgorde laten zien (Bearth 2003; Creissels et al. 2008; Dugast 1971; Mous 1997, 2003, 2005, 2014). In talen in West- en Centraal-Afrika werd OV eerder beschouwd als een variant op een ongemarkeerde VO woordvolgorde, die geconditioneerd is door TAM of informatiestructuur (zie bijv. Güldemann 2007, gebaseerd op data van Mous 1997). Met behulp van natuurlijkespraakdata en elicitatiedata die rekening houden met de discourscontext toont dit hoofdstuk aan dat het S-Aux-O-V-X-woordvolgordepatroon in het Tunen consistent is in alle TAM-contexten en IS-contexten, en dat we dit patroon in combinatie met diverse zinstypen en objecttypen vinden. Een belangrijke bevinding is daarom dat S-Aux-O-V-X beschouwd moet worden als de pragmatisch-neutrale woordvolgorde in het Tunen. Deze conclusie contrasteert met wat we zouden verwachten op basis van andere Niger-Congotalen van de Benue-Congo-subgroep, en leidt tot een bespreking van de implicaties voor een historisch-vergelijkende analyse. Er is meer diacrhoon onderzoek nodig, maar de Tunendata zijn in ieder geval verenigbaar met een scenario waarin de richting van de woordvolgordeverandering in het Tunen VO→OV is, onafhankelijk van de OV-patronen die in talen in West-Afrika gevonden worden.

Hoofdstuk 6 gaat verder met de ontwikkeling van een eerste formele analyse van de syntaxis van het Tunen. Allereerst wordt het theoretische belang van de S-Aux-O-V-X woordvolgorde benadrukt als een geval van disharmonische clausale woordvolgorde, waarbij een hoofdinitiële TP (**Aux**-V) een hoofdfinale VP (O-**V**) domineert. Binnen het kader van de generatieve syntaxis worden drie soorten analyses overwogen die voor clausale disharmonie in talen van de wereld zijn voorgesteld: roll-up movement gedreven door een verplaatsingskenmerk (analysetype 1; zie bijv. Sheehan 2013; Sheehan et al. 2017; Roberts 2019 over Aux-O-V in Germaanse talen); basisgeneratie van OV-woordvolgorde (analysetype 2; cf. Haider 2010, 2013's Basic Branching Constraint en Sande et al. 2019 over Aux-O-V in de Mandetalen van West-Afrika); of verbale hoofdverplaatsing + objectverplaatsing (analysetype 3; een aanpassing van standaardanalyses van Aux-V in Bantoetalen). Na analyse van de data wordt analyse type 2 uitgesloten op basis van diagnostiek voor de hoogte

van het werkwoord in het Tunen. Hierna worden vijf verdere testen over verbale afleiding en clausale syntaxis geëvalueerd. Deze laten zien dat analyse type 3 het best toegerust is om de kenmerken van het Tunen te verklaren. Het resultaat is het formele model dat in (732) hieronder gepresenteerd wordt.

(732)

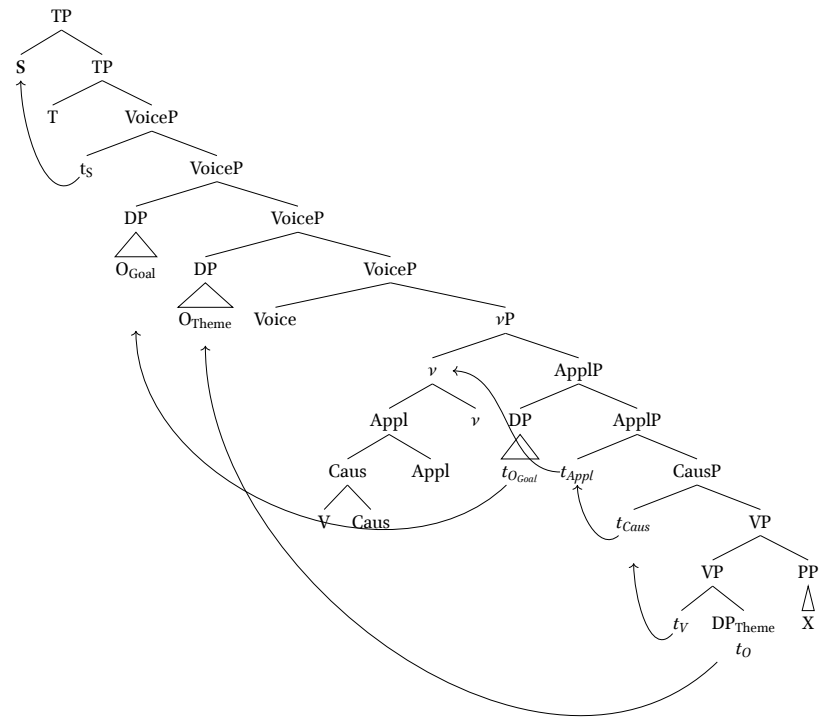


Deze analyse van de syntaxis van het Tunen bevat daarom twee verplaatsingsoperaties: (i) hoofdverplaatsing van het werkwoord tot aan *v* (V-to-*v* movement) en (ii) frasale verplaatsing van het object naar de binnenste specifier van VoiceP. De analyse van hoofdverplaatsing van het werkwoord komt overeen met andere generatieve analyses die op het gebied van verbale morfosyntaxis in de Bantoetalen geponeerd zijn: er wordt namelijk betoogd dat verbale suffixen in Bantoe opgebouwd zijn door hoofdverplaatsing (Julien 2002; Ngonyani 2000; Wasike 2007; Van der Wal 2009, Van der Wal 2022; Zeller 2013a). Tegelijkertijd is er het verschil dat de hoofdverplaatsing vóór T/Asp ophoudt. Deze lagere mate van werkwoordverplaatsing voorspelt correct dat het laatste achtervoegsel op het werkwoord (de *final vowel*; FV) geen aspect aanduidt in het Tunen, in tegenstelling tot wat we zien in canonieke Bantoetalen (cf. Good 2022). Verder wordt belicht hoe deze analyse de innovatie van preverbale objecten en de positie van objecten ten opzichte van in-situ onderwerpsvoornaamwoorden mogelijk maakt. Zo worden er correcte em-

pirische voorspellingen gedaan over de ongebruikelijke syntaxis van het Tunen.

Na de presentatie van dit basale model, wordt het model uitgebreid naar dubbele overgankelijkheid. Hierbij wordt het Goalobject in SpecApplP gegenereert en vervolgens verplaatst naar een hogere SpecVoiceP-positie (vermoedelijk omwille van licensing). Het hoofdstuk stelt ook dat we het onderwerp in Tunen als het gevolg van basisgeneratie moeten zien in de buitenste specifier van de verbale fase: SpecVoiceP. Dit wordt ondersteund door een constructie met een splitsing in de uitdrukking van het onderwerp tussen de onderwerpmarkeerder en een coreferentieel voornaamwoord dat de expliciete weergave van de basispositie lijkt te zijn. Dit resulteert in de bijgewerkte analyse in (733).

(733)



Een van de vijf tests die overwogen worden om de analyses uit elkaar te halen, is het vermogen van de analyse om een constructie in Tunen te verklaren waarin een nominale modificeerder in postverbale positie verschijnt terwijl het object preverbaal is (S-O-V-Mod). Hoofdstuk 6 toont aan dat deze constructies een serieuze

uitdaging vormen voor de analyse die uitgaat van roll-upverplaatsing, aangezien een dergelijke analyse onjuist voorspelt dat de modificeerder samen met de rest van het object moet verplaatsen. Vanwege het belang van deze constructie voor de evaluatie van de formele modellen, richt het volgende hoofdstuk zich nader op discontinue DP's.

Na het opbouwen van dit basismodel bestudeert hoofdstuk 7 discontinue naamwoordgroepen (*discontinuous DPs*) in meer detail, nadat deze in hoofdstuk 6 als een uitdaging voor de formele analyses werden genoemd. De aanwezigheid van dergelijke discontinuïteit in Tunen is interessant, aangezien discontinuïteit in Bantoetalen als "zeer zeldzaam" wordt beschouwd en slechts in 2 van de circa 555 Bantoetalen gerapporteerd is (Van de Velde 2022:909). In Tunen nemen deze constructies de vorm aan van zelfstandige naamwoord-werkwoord-modificeerder (**N**-V-**Mod**), zoals in (734).

(734) Context: 'Wat zie je?'
mɛ́ ndɔ **tunoní** sinə **tɔ́lál**.
/mɛ ^{H}ndɔ **tɔ-noní** sinə **tɔ́-lálɔ́**/
SM.1SG PRS 13-vogel zie 13-drie
'Je vois trois oiseaux.'
'Ik zie drie vogels.' [EO 225]

We zien dat deze constructie voorkomt bij numerale, kwantificerende en bijvoeglijke modificeerders in het Tunen; betrekkelijke bijzinnen die objecten modificeren kunnen ook postverbaal verschijnen (waarschijnlijk om andere redenen die verband houden met extrapositie), maar associatieven en het vraagwoord 'hoeveel?' kunnen niet discontinu zijn ten opzichte van het hoofdnaamwoord. De beschikbaarheid van de constructie voor bijvoeglijke naamwoorden en meerdere soorten numerale en kwantificerende modificeerders is significant gezien de quantifier-floatconstructies die in andere talen worden gevonden. Deze lijken beperkt te zijn tot een kleinere set categorieën en kunnen daarom niet eenvoudig worden overgenomen voor het Tunen.

Over het algemeen wordt verondersteld dat discontinue DP's bepaald worden door IS en worden ze vaak binnen generatieve theorieën geanalyseerd als het gevolg van A'-verplaatsing van het hoofd of een modificeerder naar de linkerperiferie van de zin (zie bijvoorbeeld Fanselow and Ćavar 2002; Fanselow and Féry 2006; Hale 1983; Louagie and Verstraete 2016; Lochbihler 2009; Skopeteas et al. 2020). Discontinue DP's in het Tunen zijn echter aantoonbaar (i) pragmatisch neutraal (d.w.z. beschikbaar in meerdere verschillende IS-contexten) en (ii) gevormd door de onafhankelijk gemotiveerde A-verplaatsing van het object naar een lage positie in het

*v*P-domein (gemotiveerd door licensing; *L-verplaatsing*), niet door A'-verplaatsing. De O-V-Mod-constructie blijkt moeilijk te verklaren in een roll-upanalyse van het clausale domein in het Tunen, aangezien een dergelijke analyse voorspelt dat postverbale modificeerders samen met het hoofdnaamwoord verplaatsen. Een alternatieve analyse die stelt dat de modificeerders buiten de DP uit basisgeneratie voortkomen als adverbiale bijwoordelijke adjuncten kan eveneens worden uitgesloten op basis van taalinterne morfosyntactische en semantische gegevens. De discontinue DP-constructies leveren daarom cruciaal bewijs ten faveure van de analyse voor het Tunen die uitgaat van verbale hoofdverplaatsing en objectverplaatsing zoals gepresenteerd in (502) hierboven.

Op basis van de bevindingen in deze drie hoofdstukken beantwoordt hoofdstuk 8 de hoofdvraag in (730) als volgt: de syntaxis van het Tunen toont een lage mate van IS-invloed voor een Bantoetaal. Grammaticale rollen zoals onderwerp vs. lijdend voorwerp hebben veel meer invloed dan discoursrollen zoals topic en focus. Deze grotere afhankelijkheid van grammaticale rol ten opzichte van discoursrol wordt ook besproken voor woordvolgorde in Kerr et al. (2023), waarin wordt betoogd dat het Tunen de hoogste mate van grammaticale rol-georiënteerde woordvolgorde van de talen van de BaSIS-steekproef laat zien.

De dissertatie sluit af met een discussie van de implicaties van de bevindingen voor de meer algemene onderzoeksvraag van de dissertatie over de mate van invloed van IS op de syntaxis van het Tunen. De hypothese wordt gesteld dat er sprake is van een "sterke non-invloed van informatiestructuur", en dat de syntaxis van het Tunen grotendeels onafhankelijk is van IS. Vervolgens worden er enkele factoren genoemd die beperken in hoeverre het bereik van de hier gestelde hypothese getoetst kan worden. Dit betreft met name de aard en omvang van de beschikbare data. Tot slot worden er enkele richtingen voor toekomstig onderzoek geïdentificeerd, namelijk (i) syntactische kenmerken en licnesiëring van argumenten, (ii) de syntaxis van onderwerpen, en (iii) de diachronie van woordvolgordeverandering in de Mbamtalen.

Résumé en français

Cette thèse présente les résultats d'une étude de terrain sur la langue bantoue (Niger-Congo) tunen (ISO 639-3 [tvu]; Guthrie no. A44; Guthrie 1948, 1967-1971; Maho 2003, 2009; Hammarström 2019), parlée au Cameroun par environ 70 000 à 100 000 personnes (Mous 2003; Eberhard et al. 2022) et connue pour avoir des propriétés syntaxiques inhabituelles (Dugast 1971; Mous 2003, i.a.). L'introduction (Chapitre 1) présente la question de recherche centrale de la thèse, donnée en (735).

(735) **Question centrale de la recherche**
Dans quelle mesure la syntaxe du tunen est-elle influencée par la structure informationnelle ?

Le chapitre 2 présente le contexte conceptuel de la structure informationnelle, de la théorie syntaxique, de la linguistique bantoue comparée et de la langue tunen. Il est suivi, au chapitre 3, d'une discussion sur la méthodologie de recherche employée, à savoir le travail de terrain in situ au Cameroun et l'analyse des sources secondaires. Le Chapitre 3 se conclut par des informations sur l'archivage des données et explique comment on peut accéder aux enregistrements.

Le Chapitre 4 présente une vue d'ensemble de la grammaire du tunen. Cette vue d'ensemble sert à décrire les principales caractéristiques phonologiques et morphosyntaxiques pertinentes pour comprendre les données présentées dans le reste de la thèse. Les écarts par rapport aux travaux des auteurs précédents sur le tunen sont également mis en évidence, notamment dans les conventions orthographiques adoptées en relation avec le système sonore, mais aussi en termes de phénomènes syntaxiques non mentionnés précédemment, tels que l'ordre relatif des modifieurs nominaux. Alors que les chapitres suivants de cette thèse sont rédigés dans le cadre de la syntaxe générative, l'aperçu grammatical du chapitre 4 est destiné à être accessible à un public de linguistes large et peut être lu comme un chapitre indépendant.

Les chapitres 5 à 7 de la thèse comprennent des études sur l'interaction entre la syntaxe et la structure informationnelle qui servent à répondre à la question centrale de la recherche introduite au point (735) ci-dessus.

Le Chapitre 5 interroge la manière dont la structure informationnelle (SI) est exprimée en tunen. Tout d'abord, il est démontré que S-Aux-O-V-X est l'ordre des mots pragmatiquement neutre, c'est-à-dire l'ordre des mots canonique du tunen. Ensuite, les écarts par rapport à cet ordre canonique des mots sont examinés, y compris les constructions VO précédemment décrites pour le tunen dans Mous (1997, 2003, 2005, 2014) et reprises par Bearth (2003); Güldemann (2007); Downing and Marten (2019) e.a., qui ont été trouvées beaucoup moins fréquemment dans les données que prévu sur la base de la description de Mous. Est ensuite abordé le marqueur *á*, qui a été qualifié de marqueur contrastif dans Mous (1997, 2003) dans le cadre d'une analyse monopropositionnelle. Ici est soutenue une analyse alternative du marqueur *á* comme copule d'identification dans le cadre d'une construction clivée bipropositionnelle, avec seulement des preuves limitées pour des productions de ce morphème avec une fonction contrastive. Le chapitre aborde ensuite l'expression des thèmes (*topics*), montrant que les thèmes peuvent être non-marqués en tunen, ou bien être exprimés dans la périphérie gauche de la proposition (marquée par une préposition ou un marqueur qui fonctionne ailleurs comme conditionnel), la périphérie droite étant disponible pour les après-pensées (*afterthoughts*). Ensuite, comme le tunen n'a pas de construction passive syntaxique pour rétrograder l'agent, des équivalents fonctionnels du passif sont étudiés. Deux constructions pertinentes sont présentées, à savoir les participes verbaux formés avec *-átɔ* PTCP et les impersonnels *bá* SM.2, en commentant en outre le préfixe de la voix moyenne (cf. Mous 2008). La dernière partie du chapitre examine la manière dont l'expression du référent varie au fil du discours, conditionnée en partie par la structure informationnelle (en termes d'accessibilité/givenness du référent; Ariel 2001; Gundel et al. 1993), mais aussi par des facteurs indépendants telles que les exigences de valence de certains prédicats. Le chapitre se termine par une brève réflexion sur la façon dont l'expression de la SI en tunen se compare à d'autres langues bantoues, en notant le degré relativement faible de l'influence de la SI pour une langue bantoue.

Le Chapitre 6 examine l'ordre des mots OV du tunen, qui se caractérise plus spécifiquement par S-Aux-O-V(-X), comme l'illustre l'exemple thétique (736).

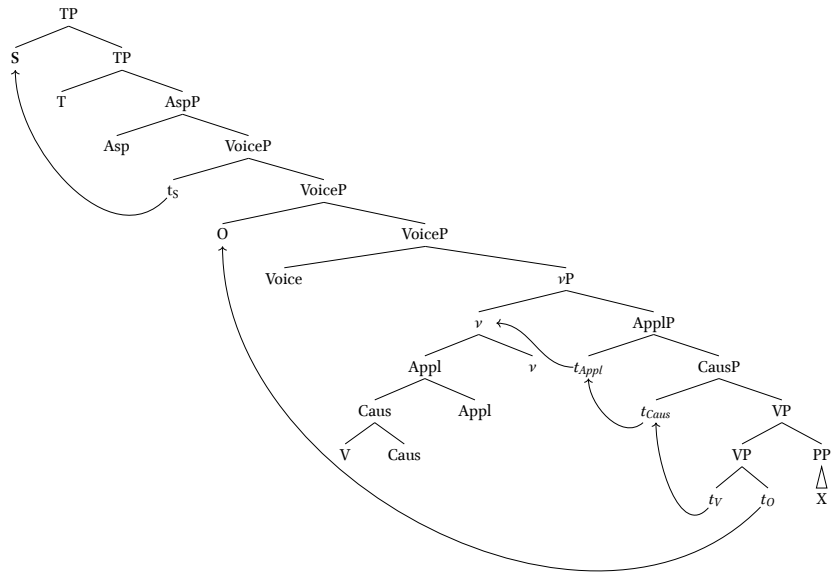
(736) Contexte : Vous êtes au bord de la rivière à la sortie du village et vous voyez un éléphant, ce qui arrive très rarement, et vous courez le dire aux autres.
mɛ nɔ́ misəku siəkin !
/mɛ nɔ́ misəku siəkinə/
SM.1SG PST1 3.éléphant voir.DUR
'Je viens de voir un éléphant !'
'I just saw an elephant!' [PM 316]

Cet ordre des mots OV est inhabituel d'un point de vue comparatif étant donné l'ordre des mots VO dans les langues environnantes (Bearth 2003; Creissels et al. 2008; Dugast 1971; Mous 1997, 2003, 2005, 2014). Dans les langues d'Afrique de l'Ouest et d'Afrique centrale, l'ordre OV a été précédemment considérée comme une variante conditionnée par le TAM ou la SI d'un ordre des mots VO non-marqué (voir par exemple Güldemann 2007, sur la base des données de Mous 1997). En utilisant à la fois des données de parole naturelle et une élicitation contrôlant le contexte discursif, il est démontré que le modèle d'ordre des mots S-Aux-O-V-X de Tunen est en fait cohérent dans les contextes de TAM et les contextes SI, et trouvé avec différents types de propositions et différents types d'objets. L'une des principales conclusions est donc que S-Aux-O-V-X doit être considéré comme l'ordre des mots pragmatiquement neutre en tunen. Il est noté que ce résultat contraste avec les attentes des recherches sur les autres langues Niger-Congo du sous-groupe Benue-Congo, avec une discussion des implications pour une analyse historico-comparative. Bien qu'une étude diachronique plus approfondie soit nécessaire, il est noté que les données du tunen sont compatibles avec un scénario où la directionnalité VO→OV du changement de l'ordre des mots se produit en tunen indépendamment des patterns OV trouvés dans les langues de l'Afrique de l'Ouest.

Le Chapitre 6 poursuit en développant la première analyse formelle de la syntaxe du tunen. La section d'analyse commence par souligner l'importance théorique de l'ordre S-Aux-O-V-X en tant qu'exemple d'ordre des mots propositionnel dysharmonique, avec un TP initial en tête (Aux-V) dominant un VP final en tête (O-V). En travaillant dans le cadre de la syntaxe générative, trois types d'analyses proposées pour la disharmonie propositionnelle crosslinguistique sont considérés : le mouvement de 'roll-up' piloté par une caractéristique formelle de mouvement (analyse de type 1 ; voir par exemple Sheehan 2013; Sheehan et al. 2017; Roberts 2019 sur Aux-O-V en germanique) ; génération de base de l'ordre OV (analyse de type 2 ; cf Haider 2010, 2013's Basic Branching Constraint et Sande et al. 2019 sur Aux-O-V dans les langues mandé d'Afrique de l'Ouest) ; ou mouvement de la tête verbale + mouvement de l'objet (analyse de type 3 ; modifiée à partir d'analyses standard de Aux-V en bantou). Après avoir écarté l'analyse de type 2 sur la base des diagnostics

de hauteur de verbe en tunen, cinq autres diagnostics sur la dérivation verbale et la syntaxe propositionnelle sont évalués. Il est démontré que ces diagnostics fournissent des preuves en faveur de l'analyse de type 3 au détriment de l'analyse de type 1. Il en résulte le modèle formel de base présenté en (737) ci-dessous.

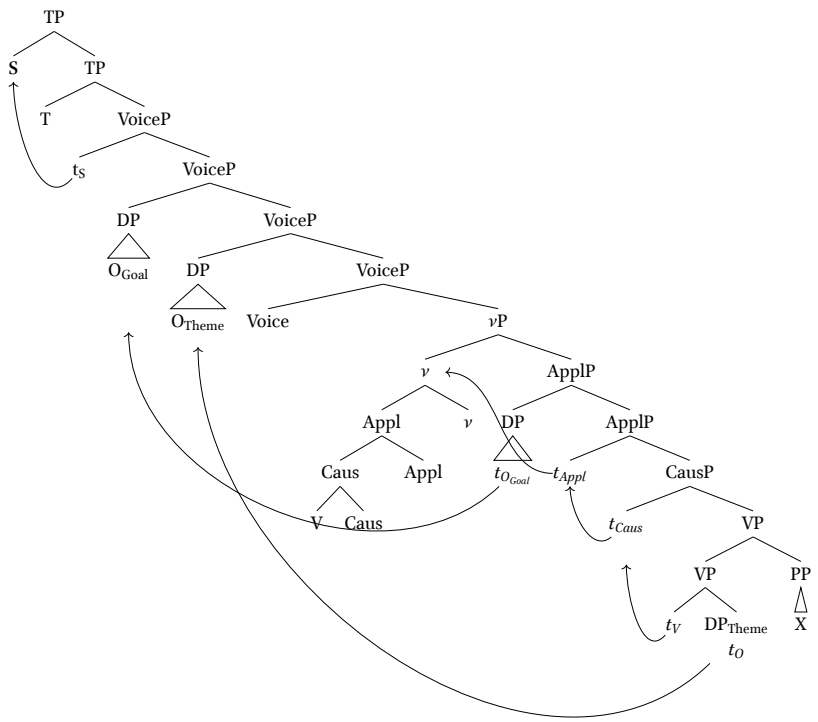
(737)



Cette analyse de la syntaxe tunen implique donc deux opérations de mouvement : (i) le mouvement de la tête du verbe jusqu'à la tête v (mouvement V-to-v), et (ii) le mouvement phrastique de l'objet jusqu'au spécificateur le plus interne de la VoiceP. L'analyse du mouvement de tête verbal correspond à d'autres analyses génératives de la morphosyntaxe verbale bantoue dans la mesure où les suffixes verbaux bantous sont considérés comme étant construits par le mouvement de tête (Julien 2002; Ngonyani 2000; Wasike 2007; Van der Wal 2009, 2022; Zeller 2013a), mais diffère en ce que le mouvement de tête s'arrête avant T/Asp. Il est montré que ce degré moindre de mouvement du verbe prédit correctement l'absence d'encodage aspectuel sur le suffixe de la voyelle finale (FV) en tunen, contrairement à ce qui est observé dans les langues bantoues canoniques (cf. Good 2022). Il est également souligné comment cette analyse permet l'innovation des objets préverbaux et la position des objets par rapport aux pronoms sujets in-situ, faisant ainsi des prédictions empiriques correctes sur la syntaxe inhabituelle du tunen.

Après avoir présenté ce modèle de base, l'extension aux constructions ditransitives est discutée, ce qui peut être fait en générant l'objet Goal dans la SpecApplP et en le déplaçant vers une position SpecVoiceP plus élevée (vraisemblablement aussi pour des raisons de licence). Est églament fournie une analyse du sujet tunen comme étant généré à la base dans le spécificateur le plus externe de la phase verbale, c'est-à-dire la SpecVoiceP, ce qui est motivé sur la base d'une construction avec une division dans l'expression du sujet entre le marqueur de sujet et un pronom coréférentiel argumenté comme étant l'épellation de la position de base. Il en résulte l'analyse actualisée en (738).

(738)



L'un des cinq tests envisagés pour départager les analyses est la capacité de l'analyse à rendre compte d'une construction du tunen dans laquelle un modifieur nominal apparaît en position postverbale alors que l'objet est préverbal (S-O-V-Mod). Le Chapitre 6 montre que ces constructions posent un problème sérieux à l'analyse du mouvement de roll-up, car une telle analyse prédit à tort que le modi-

fieur doit se déplacer en même temps que le reste de l'objet. En raison de l'importance de cette construction pour l'évaluation des modèles formels, le chapitre suivant se concentre plus en détail sur les DP discontinues.

Après avoir construit ce modèle formel de base, l'étude suivante (chapitre 7) examine plus en détail les phrases nominales discontinues (*DPs discontinues*), qui sont présentées dans le chapitre 6 comme un défi pour les analyses formelles. La présence d'une telle discontinuité en tunen est intéressante, car les DP discontinues sont considérés comme « très rares » en bantou, n'existant que dans deux autres des environ 555 langues bantoues (Van de Velde 2022:909). En tunen, ces constructions prennent la forme de l'ordre substantif-verbe-modifieur (**N**-V-**Mod**), comme en (739).

(739) Contexte : 'Qu'est-ce que tu vois ?'
mɛ́ ndɔ **tunoní** sinə **tɔ́lál.**
/mɛ ʰndɔ **tɔ-noní** sinə **tɔ́-lálɔ́**/
SM.1SG PRS 13-oiseau voir 13-trois
'I see three birds.' [EO 225]

Il est démontré que cette construction se retrouve pour les modifieurs numéraux, quantificatifs et adjectivaux en tunen ; les propositions relatives modifiant des objets peuvent également apparaître en position postverbale (probablement pour des raisons indépendantes liées à l'extraposition), mais les associatifs et le mot-question " combien ? " ne peuvent pas être discontinus par rapport à la tête nominale. La disponibilité de la construction pour les adjectifs et les multiples types de numéraux et de quantificateurs est significative par rapport aux constructions à quantificateur flottant trouvées dans d'autres langues, qui semblent être limitées à un ensemble plus restreint de catégories et peuvent donc être analysées par des analyses formelles différentes qui ne sont pas facilement transférables aux données du tunen.

Alors que les DP discontinues sont généralement considérées comme conditionnés par la SI et sont souvent analysées par les cadres générativistes comme étant formées par A'-mouvement de la tête ou du modifieur vers la périphérie gauche de la proposition (voir par ex. Fanselow and Ćavar 2002; Fanselow and Féry 2006; Hale 1983; Louagie and Verstraete 2016; Lochbihler 2009; Skopeteas et al. 2020), il est montré que les DP discontinues tels qu'en (5) en tunen sont (i) pragmatiquement neutres (c'est-à-dire, disponibles pour de multiples contextes de SI différents), et (ii) formées par l'A-mouvement indépendamment motivé de l'objet vers une position basse dans le domaine *v*P (motivé par la licence ; L-mouvement), et non par l'A'-mouvement. La construction O-V-Mod s'est avérée difficile à prendre en compte

dans une analyse roll-up du domaine propositionnel du tunen, puisqu'une telle analyse prédit que les modifieurs postverbaux se déplacent en même temps que la tête nominale. Une autre analyse, selon laquelle les modifieurs sont générés à la base à l'extérieur du DP en tant qu'adjoints adverbiaux, a également été écartée sur la base de preuves morphosyntaxiques et sémantiques internes à la langue. Les constructions DP discontinues fournissent donc des preuves essentielles en faveur de l'analyse du mouvement de la tête verbale + mouvement de l'objet présentée dans (737) ci-dessus.

Sur la base des résultats de ces trois chapitres, le chapitre 8 conclut, en réponse à la question centrale de la recherche énoncée en (735), que la syntaxe du tunen présente un faible degré d'influence de la SI pour une langue bantoue, les rôles grammaticaux tels que le sujet par rapport à l'objet ayant beaucoup plus d'influence que les rôles discursifs tels que le sujet et le point focal. Ce recours au rôle grammatical plutôt qu'au rôle discursif est aussi discuté pour l'ordre des mots dans Kerr et al. (2023), où il est affirmé que le tunen présente le plus haut degré d'ordre des mots orienté vers le rôle grammatical parmi les langues de l'échantillon BaSIS.

La thèse se termine par une discussion des implications des résultats pour la question de recherche plus générale de la thèse concernant l'étendue de l'influence de l'IS sur la syntaxe du tunen. Une «hypothèse forte de non-influence de la SI» est proposée, selon laquelle la syntaxe du tunen est largement indépendante de la SI. Certaines limites dans l'évaluation de la validité de cette hypothèse sont ensuite mentionnées, notamment l'étendue et la nature des données actuellement disponibles. Enfin, plusieurs directions de recherche future sont identifiées, à savoir (i) les traits et la licence des arguments, (ii) la syntaxe des sujets, et (iii) la diachronie du changement d'ordre des mots dans les langues mbam.

Curriculum Vitae

Elisabeth Jane Kerr was born on 22nd February 1996 in Cambridge, United Kingdom and grew up in the nearby countryside of Uttlesford, Essex. In 2014 she began a BA in Linguistics at King's College, University of Cambridge, graduating in 2017 with first class honours. After completing a summer internship programme in computational linguistics with the University of Cambridge Computer Laboratory and Africa's Voices Foundation in Cambridge/Nairobi, she moved to London in 2017 to read for an MA in Linguistics at the School of Oriental and African Studies (SOAS), University of London, graduating in 2018 with distinction. Directly after her MA, she moved to Leiden, The Netherlands to begin a PhD position on the Bantu Syntax and Information Structure (BaSIS) project led by Dr. Jenneke van der Wal at Leiden University, under co-supervision of Prof. Maarten Mous. This thesis is the principal research output of that PhD project.

Alongside her work on the BaSIS project, Elisabeth acted as Secretary of the PhD Council of the Leiden University Centre for Linguistics (2018-20), served as Board Member of the Student Organization of Linguistics in Europe (2018-20), and was elected to the Leiden University Council as representative of junior staff members through the party PhDoc (2020-22). From September-December 2022 she was a Short-Term Visiting Fellow at Potsdam University as part of the SFB 1287 project Limits of Variability in Language, working on the subproject C08/Consequences of Head Argument Order on Syntax (CHAOS; PI Gisbert Fanselow†). From August 2023-July 2024 she was employed as a Lecturer in English Language and Culture and Linguistics at the Leiden University Centre for Linguistics.