

Yanomama Clause Structure

Published by

LOT

Trans 10

3512 JK Utrecht

The Netherlands

phone: +31 30 253 6111

e-mail: lot@uu.nl

<http://www.lotschool.nl>

Cover illustration: Building house, Tihinaki village, Papiu 2011. Photo by Ana Maria Antunes Machado

ISBN: 978-94-6093-258-8

NUR 616

Copyright © 2017: Helder Perri Ferreira. All rights reserved.

Yanomama Clause Structure

Proefschrift

ter verkrijging van de graad van doctor

aan de Radboud Universiteit Nijmegen

op gezag van de rector magnificus prof. dr. J.H.J.M. van Krieken,

volgens besluit van het college van decanen

in het openbaar te verdedigen op dinsdag 28 november 2017

om 10.30 uur precies

door

Helder Perri Ferreira

geboren op 1 juli 1976

te São Paulo, Brazilië

Promotor:

Prof. dr. P.C. Muysken

Copromotoren:

Dr. E.I. Crevels (Universiteit Leiden)

Dr. M. Vuillermet (Université Lumière Lyon II, Frankrijk)

Manuscriptcommissie:

Prof. dr. H. de Hoop (voorzitter)

Prof. dr. M.-C. Mattéi Muller (Universidad Central de Venezuela)

Dr. F. Seifart (Universiteit van Amsterdam)

This research was made possible by a scholarship awarded by the CAPES Foundation of the Ministry of Education of Brazil (proc. no. BEX 0944-12-2).

CAPES Foundation
Ministry of Education of Brazil
Caixa Postal 250
70040-020
Brasília – DF
Brazil

For Ana and Lino,

and in memory of Luís Fernando Pereira

Table of contents

Acknowledgements	xi
Abbreviations	xiii

Part I

Chapter 1. Yanomama language and people	3
1.1. The Yanomami people and territory	3
1.2. Typological profile	7
1.3. Genetic relations of the Yanomami linguistic family	10
1.4. Diversity within the Yanomami linguistic family	10
1.5. Yanomam and the variety spoken in Papiu – Yanomama	12
1.6. The region of Papiu: history and the current situation	16
1.7. Early literature	22
1.8. Fieldwork and personal experience with the Yanomami people	25
1.9. Corpus used in this work	27
1.10. Purpose of this work and overview of the following chapters	32
Chapter 2. Phonological sketch	37
2.1. Introduction	37
2.2. Vowels	37
2.3. Consonants	42
2.3.1. Consonantal inventory	42
2.3.2. Consonantal contrasts	43
2.4. Syllable structure	49
2.5. Word and prosodic stress	52

ii Yanomama clause structure

2.6. Allophony	60
2.6.1. Free variation between voiced and voiceless consonants	60
2.6.2. Free variation between lateral approximant [l] and alveolar tap [ɾ]	65
2.6.3. Phonological processes	66
2.6.3.1. Anticipatory weak lowering of the high vowel in bound morphemes	66
2.6.3.2. Progressive backness assimilation by the dynamic morpheme =i	69
2.6.3.3. Full anticipatory vowel harmony of /ə/ in bound morphemes	70
2.6.3.4. Loss of aspiration of the aspirated stop /tʰ/ in bound morphemes	72
2.6.3.5. Progressive lowering of the stative morpheme =o	73
2.6.3.6. Anticipatory nasalization of the approximant /j/	73
2.6.3.7. Anticipatory alveolarization of palatal /ʃ/	74
2.6.3.8. Nasalization of the palatal approximant	75
2.6.3.9. Nasalization of the lateral approximant	75
2.7. Orthography	77
2.8. Final remarks	79
Chapter 3. Parts-of-speech, free morphemes, and bound morphemes	81
3.1. Introduction	81
3.2. Nouns and verbs: a semantic first-approach	82
3.3. Nouns, verbs and word order patterns	87
3.3.1. Elicited sentences	88
3.3.2. Spontaneous texts	91
3.4. Basic morphological properties of nouns and verbs	92
3.4.1. Clitic clusters and parts-of-speech	94
3.4.1.1. Nominal clitics	94
3.4.1.2. Verbal clitics	98

3.4.1.3. Summary of the clitic clusters	106
3.5. Formal definition of nouns and verbs	107
3.6. Orthography issues about clitic clusters	107
3.7. Concluding remarks	109
Chapter 4. The noun phrase	111
4.1. Introduction	111
4.2. Different types of nouns	114
4.2.1. Morphological structure	120
4.2.2. Size of the paradigms	121
4.2.3. Number markers	125
4.2.4. Behavior in possessive and part-whole constructions	132
4.2.5. Incorporation into the predicate	136
4.2.6. Possibility of omission in minimal clause	139
4.2.7. Possibility of performing the role of agent of transitive clauses	142
4.2.8. Summary of the distinctive features of the nominal types	144
4.2.9. Type 4 – kinship terms	145
4.2.10. Other nouns with ambiguous behavior	156
4.3. Pronouns and Adnominals	161
4.3.1. Possessive Pronouns	162
4.3.2. Demonstratives	165
4.3.3. Quantifiers	169
4.3.4. Personal Pronouns	175
4.3.5. Indefinite pro-form <i>pei</i>	178
4.3.6. Attributive modifiers	182
4.4. Concluding remarks	184

Chapter 5. Verb stems	187
5.1. Introduction	187
5.2. Four basic types of verb stems	187
5.3. Differences between the verb stem types	190
5.3.1. Morphemes in present readings	191
5.3.2. Morphemes in imperfective past readings	194
5.3.3. Morphemes in subordinate clauses with = <i>těhě</i> ‘when’, ‘if’	195
5.3.4. Inherent argument structure	198
5.3.5. Access to directional markers	202
5.3.6. Access to locational markers	204
5.3.7. Access to nominalizer <i>-rima</i>	207
5.3.8. Access to nominalizer <i>-tima</i>	209
5.3.9. Canonic secondary predication	211
5.3.10. Summary of the distinctive features of the verbal stems	213
5.4. Simple verb stems and verb roots	215
5.4.1. Simple attributive stems	218
5.4.2. Simple positional stems	224
5.4.3. Simple dynamic stems	226
5.4.4. Flexible roots	231
5.4.5. Consonantal roots	234
5.5. Compound verb stems	239
5.5.1. Body-part + verb	240
5.5.2. Clitic + verb	250
5.5.3. Attributive verb + dynamic or attributive verb	256
5.5.4. Reduplication	258

5.6. Derived verb stems	262
5.6.1. Zero derivation	262
5.6.2. Resultative = <i>no</i> : DYN > ATTR	266
5.6.3. Attenuative = <i>h</i> [V] : ATTR > (attenuated) ATTR	268
5.6.4. Dynamizer = <i>a</i> : POST/ATTR > DYN	269
5.6.5. Intransitive derivational morpheme = <i>pru</i> (= <i>pra</i>): > POST/DYN	276
5.6.6. Transitive derivational morpheme = <i>pra</i>	280
5.6.7. Intransitivizer = <i>mu</i> and the transitivizer = <i>ma</i> : POST>DYN	282
5.6.8. Conservative (to have, to keep, to possess) = <i>pu</i>	284
5.6.9. Attributivizer = <i>ri</i> (used with smells)	288
5.6.10. Derivation: from nouns to verbs	288
5.7. Final discussion	299
Chapter 6. Verb Morphology	301
6.1. Introduction	301
6.2. Tense and aspect	302
6.2.1. Present	302
6.2.2. Past categories	305
6.2.3. Perfective markers	309
6.2.4. Durative = <i>ti</i>	322
6.2.5. Progressive = <i>imatayu</i>	324
6.2.6. Non-punctual or distributive morpheme = <i>ra</i> / = <i>a</i>	326
6.2.7. Celerative = <i>ta</i>	329
6.3. Irrealis mood markers	332
6.3.1. Future irrealis = <i>pě</i>	332
6.3.2. Volitional <i>riã</i> =	335

vi Yanomama clause structure

6.3.3. Conditional <i>xa</i> =	337
6.4. Locational markers	339
6.5. Directional markers	345
6.6. Associated motion	349
6.6.1. Simultaneous motion	351
6.6.2. Motion prior to the action	353
6.6.3. Motion subsequent to the action	356
6.6.4. Motion both prior and subsequent to the action	357
6.6.5. Associated motion summary	358
6.7. Negation	359
6.8. Final discussion	362

Part II

Chapter 7. Argument marking: word order, flagging and indexing	365
7.1. Introduction	365
7.2. Some few basic concepts	366
7.2.1. Argument and flagging	366
7.2.2. Verb valency and indexing	367
7.2.3. Core and non-core arguments	372
7.3. Word order	373
7.3.1. Word order patterns in intransitive clauses	373
7.3.2. Word order patterns in transitive clauses	378
7.4. Case system	384
7.4.1. Absolutive: zero case = \emptyset	388
7.4.2. Ergative = <i>ni</i>	393
7.4.3. Instrumental/causal = <i>ni</i>	399

7.4.4. Additive =xo	403
7.4.5. Obliques =ha and =hami	410
7.5. Verb Indexing	420
7.5.1. Set 1 – Subject (S) and Patient (P) markers	421
7.5.2. Origins of Set 1: procliticization of the enclitics of the absolutive argument	426
7.5.3. Set 2 – Agent (A) markers	429
7.5.4. Morphosyntactic alignment of Sets 1 and 2	434
7.5.5. The different participant marker e=	436
7.6. Concluding remarks	438
Chapter 8. Non-verbal predication	441
8.1. Introduction	441
8.2. Proper inclusion and equative predicates	442
8.2.1. Proper inclusion	442
8.2.2. Equative	448
8.2.3. Equative predicates with possessive constructions	450
8.3. Locative predicates	454
8.4. Existential predicates	457
8.4.1. First strategy	457
8.4.2. Second strategy	459
8.5. Attributive predicates	460
8.6. Final remarks	462
Chapter 9. Valency and Voice changing mechanisms	463
9.1. Introduction	463
9.2. Lexical causatives	464

9.3. Labile causative alternation	465
9.4. Restricted labile alternation among positional stems	472
9.5. Valency-increasing mechanisms	473
9.5.1. Causative marker = <i>ma</i>	473
9.5.2. Argument restructuring and Comrie's "paradigm case"	478
9.5.3. Transitive morpheme = <i>pra</i>	484
9.5.4. Applicative derivations	487
9.5.4.1. Associative applicative <i>kăyô</i> =	487
9.5.4.2. Goal/locative applicative <i>napě</i> = <i>kăyô</i> = / <i>namo</i> = <i>kăyô</i> =	494
9.5.4.3. Content promoter 'applicative' <i>pihi</i> = <i>kăyô</i> = / <i>mihi</i> = <i>kăyô</i> =	498
9.6. Valency-decreasing mechanisms	501
9.6.1. Antipassive = <i>mu</i> or = <i>a</i> = <i>mu</i>	504
9.6.2. Reflexive = <i>mu</i>	509
9.6.3. 'Pseudopassive' or reflexive-causative markers = <i>mu</i> or = <i>ma</i> = <i>mu</i>	513
9.6.4. Reciprocal = <i>yu</i>	525
9.6.5. Intransitive morpheme = <i>pru</i>	532
9.7. Possessor promotion and possessed denominalization	533
9.8. Summary and final remarks	541
Chapter 10. Multi-verbal clauses	543
10.1. Introduction	543
10.2. Secondary predication	548
10.2.1. Canonical depictive secondary predicates	548
10.2.2. Non-canonical depictive secondary predicates	559
10.3. Adverbial modification	563
10.4. Serial verb constructions (SVCs)	565

10.4.1. Morphosyntax of SVCs	566
10.4.2. Semantics of SVCs	575
10.5. Complementation	585
10.5.1. Type 1 – Motion with purpose	585
10.5.2. Type 2 – Verbs <i>tai</i> ‘to know’ and <i>wapai</i> ‘to try’	588
10.5.3. Type 3 – Verbs <i>taai</i> ‘to see,’ <i>himai</i> ‘accuse,’ <i>wasuu</i> ‘to forbid’	592
10.5.4. Type 4 – Predicative complementation	596
10.6. Summary of the differences between the multi-verbal constructions	600
10.7. Final remarks	603
Chapter 11. Evidentiality: time, location, direction	605
11.1. Introduction	605
11.2. Earlier literature	608
11.3. Evidentially in simple declarative clauses	613
11.3.1. Witnessed information	614
11.3.1.1. The <i>k</i> -words	614
11.3.1.2. The probable source of the <i>k</i> -words	624
11.3.1.3. The <i>t</i> -word <i>tha</i> = <i>re</i>	627
11.3.2. Inferred (=no / =no + <i>k</i> -word/ <i>t</i> -word)	630
11.3.3. Auditory information (<i>wãa</i> =/ <i>ã</i> =)	637
11.3.4. Reported hearsay/quoted information (<i>ẽ</i> = <i>hã</i> =)	641
11.3.5. Assumed or supposed information: the <i>m</i> -words	646
11.4. Is there a single evidentiality system in YMA or is it multiplex?	660
11.5. On the obligatoriness of the evidentiality markers	663
11.6. Dreamed information <i>mahari</i> / <i>utupë</i>	666
11.7. Apparently - Low level of certainty (<i>nẽhẽ</i> =)	670

x Yanomama clause structure

11.8. Evidentiality in subordinate clauses	673
11.9. Final discussion	681
Chapter 12. Non-declarative speech acts	683
12.1. Introduction	683
12.2. Manipulative speech acts	684
12.2.1. Imperative	684
12.2.2. Prohibitive (=no <i>mai</i>)	688
12.2.3. Cessative imperative	691
12.3. Questions	692
12.3.1. Polarity questions	692
12.3.2. Permission questions = <i>xa</i>	699
12.3.3. Constituent questions	702
12.3.4. Adverbial questions	708
12.4. Final remarks	714
Chapter 13. What's next: further research on YMA	715
References	723
Summary in English	733
Resumo em Português	737
Samenvatting in het Nederlands	741
Curriculum Vitae	745

Acknowledgements

First of all, my gratitude goes to all Yanomama people from Papiu, who always have received me with warm hospitality and immense generosity, sharing with me not only their food and shelter, but their way of life and thinking, and their language. More specifically, I like to mention the names of my brother-in-law Alfredo Himotona, and my younger brothers Genivaldo Krepuna and Marconi Kariuna, who have been patiently teaching me Yanomama, always engaging in our (sometimes) endless discussions on the language with a lot of interest, joy and good humor. I am really grateful for the numerous and accurate transcriptions they have made in these years, which enriched this work immensely.

I also owe my special gratitude to my supervisor Pieter Muysken for his great support and intellectual generosity over the last four years. Pieter tirelessly read through multiple versions of all of my chapters, even the sketchiest ones. His ideas, criticisms, comments and corrections were always treasured and helped me to present my arguments in a clear and logical way. I am profoundly grateful, too, for his reassurance about and unlimited enthusiasm for my work.

Many thanks are also owed to my co-promotors Mily Crevels and Marine Vuillermet. Mily's comments and ideas were crucial in the early stages of the project and the organization of the general structure of the thesis. I especially thank Marine for engaging with a vivid interest in the reading of the final versions of the manuscript. Her observations, always very critical and well-informed, were decisive to give the final shape of the text.

I am most grateful to the members of my reading committee, Helen de Hoop, Marie-Claude Mattéi Muller and Frank Seifart, for agreeing to take on this task. I thank Helen for her careful reading of the thesis and her precious comments and corrections. I thank Marie-Claude for sharing her expertise on Yanomami of Venezuela, particularly on the lexicography of the language. Most of her suggestions for better English translations for Yanomama words were followed here. I am honored to have all of them on my reading committee.

I'd also like to thank Bruna Franchetto, Roberto Zavala and Denny Moore for their support in my application for a scholarship. I owe a special debt of gratitude to Denny who has reassured this support every year.

Many thanks to Estevão Senra for kindly providing the updated data on the demographics of Yanomami languages and most of the maps of this book.

I cannot forget to mention the institutions that made possible this thesis, not only for supporting its writing but for allowing the creation of an extensive documentation archive of the Yanomama language, on which this thesis is mostly based. The Endangered Languages Documentation Project (ELDP/SOAS) first supported our documentation project in 2010, followed over the years by the Museu do Índio (Funai), Instituto Socioambiental (ISA), Hutukara Associação Yanomami (HAY), Observatório de Educação Especial Indígena (OEEI/FAE/UFMG) and the project Saberes Yanomami nas Escolas (MEC/FNDE/UFMG). I thank all of them for their valuable support. I am also sincerely grateful to the Radboud Universiteit for agreeing to host my Ph.D. project, and to CAPES Foundation of the Ministry of Education of Brazil for funding it through a scholarship (proc. no. BEX 0944-12-2).

Warm thanks to Henk, Marja, Iris and Sil and to all my dear neighbors at Tolhuis, whose kindness and hospitality helped me to go through these years in the Netherlands feeling part of a community and at home. I thank also Alê, Rita and Max for the friendship and the shelter in São Paulo.

I am grateful to my parents – Sergio Mesquita Ferreira and Magali Cotrim Perri - for their never-failing encouragement and support during my whole life.

Finally, I thank my dear Ana Maria Machado for being a constant source of support, friendship and love throughout these years. Thanks for being with me in Nijmegen and taking care of our Lino so nicely when I was away writing this book.

Abbreviations

Abbreviation	Gloss	Abbreviation	Gloss
1	first person	DIF.PART	different participant
2	second person	DIM	diminutive
3	third person	DIR	directional
ADD	additive case	DIR.AND	andative directional
ADVLZ	adverbializer	DIR.VEN	venitive directional
ANA	anaphoric pronoun	DISTR	distributive
APPL	applicative	DRV	derivational morpheme
ARCH	archaism	DU	dual
ATTR	attributive stem	DUR	durative
CAT	cataphoric pronoun	DYN	dynamic
CAUS	causative	DYN	dynamic stem
CAUSE	cause case	ERG	ergative case
CEL	celerative	EXPL	expletive
CLN	nominal classifier	FOC	focalizer
CLN.GNR	general classifier	FOC.CONC	concessive focalizer
CMPLZ	complementizer	FOC.INT	interrogative focalizer
CNJ.EXPLV	explicative conjunction	FUT	future
CNT.FACT	counterfactual	HAB	habitual
CONCS	concessive conjunction	HOD	hodiernal past
COND	conditional	HON	honorific/ reverential
COP	copula	HSY	hearsay
COP.ASS	assumptive copula	IDEO	ideophone
CSVT	conservative	IMPFV	imperfective
DEPRC	depreciative	INDEF	indefinite pronoun

Abbreviation	Gloss	Abbreviation	Gloss
INFR	inferential	POST	positional stem
INS	instrumental case	PRE.HOD	pre hodiernal past
INT.PRO	interrogative pronoun	PRE.HOD.NON. WIT	non witnessed pre hodiernal past
INTR	intransitive stem	PRG	progressive
INTRZ	intransitivizer	PST	past
IRREG	irregular	PTC.INT	interrogative particle
LINK	linking morpheme	REAS	reason conjunction
LOC	locational	RECP	reciprocal
NEG	negation	REL	relativizer
NMLZ	nominalizer	REL.PRS	relative present
NOT_SG	non singular	REL.PST	relative past
OBL	oblique case	RESULT	resultative
PERM	permissive	SG	singular
PFV	perfective	STV	stative
PFV.VWL	perfective vowel	TRZ	transitivizer
PFV1	perfective (series 1)	TR	transitive stem
PFV2	perfective (series 2)	V.PTC	verbal particle
PFV3	perfective (series 3)	VLZ	verbalizer
PL	plural	VOC	vocative
POS	possessive pronoun	VOL	volitional
POST	positional	WTNS	witnessed

Part I of II

1. Yanomama language and people

1.1. The Yanomami people and territory

This thesis provides a description of the clause in Yanomama (YMA), a language variety of the Yanomami family. The languages of Yanomami family are spoken by about 33,000 people¹ living in approximately 670 communities scattered throughout a vast and densely forested area on the Brazil-Venezuela border (Tillett et al. 2014). Map 1.1 shows the current distribution of the Yanomami communities. On the Brazilian side, the Yanomami land, which is comparable in size to Portugal or Hungary, is officially recognized (since 1991) as Indigenous Territory (in brown) for exclusive use by the Yanomami people. The Venezuelan government considers most of their land to be National Parks (the Alto Orinoco–Casiquire Biosphere Reserve), excluding many communities from any formal protection. The gray area represents the territory occupied by the Yanomami in Venezuela.

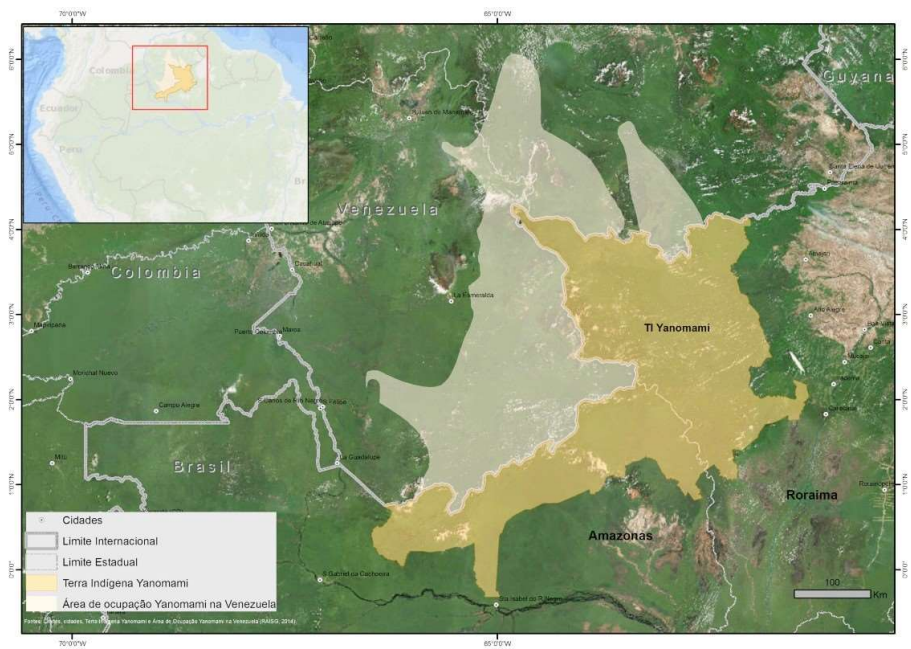
There are five languages or groups of language varieties in the family: Sanöma (Sanima), Ninam, Țaroamē, Yānomami and Yanomam (Perri Ferreira, 2011). There is significant dialectal variation within each language, which is the reason why I consider them to be groups of language varieties. The Yanomam group, to which Yanomama of Papiu belongs, is mainly spoken in the State of Roraima, in Brazil, even though there are several Yanomam-speaking communities in the most eastern part of the territory on the Venezuelan side, and a handful of them in the State of Amazonas in Brazil. The speakers of this branch of the family correspond to about one-third of the total number of speakers of Yanomami, making it the second biggest language group in the family, just after Yānomami, which is spoken by approximately half of the Yanomami population. Most speakers of Yanomam still live in the Parima-Surucucus mountain range, a region that is considered to be the ancestral land for most

¹ There are 21.627 Yanomami people in Brazil and 11.341 in Venezuela. However, Tillett et al. (2014 cited from Machado, 2015) points out that the figures in Venezuela maybe highly underestimated since about 35% of the Yanomami communities has never been surveyed.

4 Yanomama clause structure

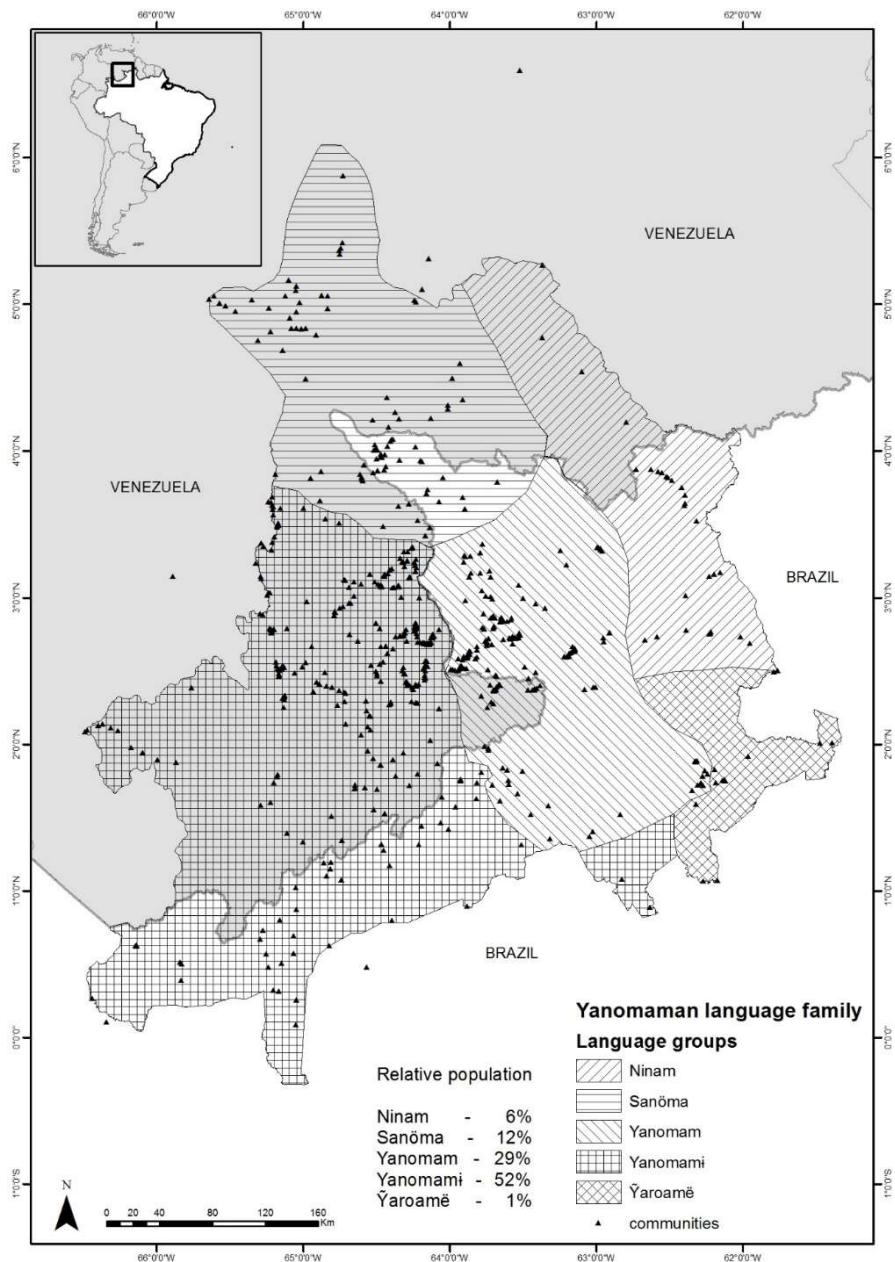
of the Yanomami people(s), including the Yanomama people of Papiu, who claim to have left the mountain region in the mid of last century. Map 1.2 presents the isoglosses of the internal diversity of the Yanomami family, with the localization of Papiu region and the Surucucu-Parima mountain system. The map also indicates the approximate number of speakers of each language group and its percentage in relation to the total number of speakers in the family.

Map 1.1 – The Yanomami territory in Brazil and Venezuela²



² Estevão Senra from the Instituto Socioambiental (ISA) kindly provided all the maps used in this chapter, except for Map 1.4, which was elaborated by me.

Map 1.2 – Languages of the Yanomami family



To avoid confusion then, the following terms are used in this thesis:

- Yanomami = may refer to the language family or to people that speak one of the languages of the family. Migliazza (1972: 33) uses the term “Yanomama” with the same meaning. “Yanoam” or “Yanomamö” can also be found to refer to the family in early publications.
- Yanomam = either refers to a language of the Yanomami family or to its speakers. It corresponds to what Ramirez (1994a: 35) called the “Oriental super-dialect of Yanomami” or “Oriental Yanomami” (Yor). Migliazza (1972: 34) calls this language “Yanomam” as well. The language is also known as Waika or, marginally, Central-Waika.
- Yanomama = it is a variety or dialect of the Yanomam language spoken in Papiu, among other regions. The people that speak this dialect may also be referred as “Yanomama”. It roughly corresponds to what Ramirez (1994a: 35) called the variety X of the Oriental super-dialect of Yanomami or “Oriental Yanomami-x” (Yor-x). Throughout this work, the Yanomama variety will be referred by the abbreviation YMA.
- Yãnomami = it is a language of the Yanomami family but the term can also be applied to its speakers. Ramirez’s Ph.D. thesis has this language as subject. The author called it the “Occidental super-dialect of Yanomami” or “Occidental Yanomami” (Yoc) (Ramirez, 1994a: 35). The language is also known as Xamathari or Xamatari. In Venezuela, the term is spelled as “Yanomamö”, but pronounced similarly.

The northern part of the territory, corresponding more or less to the Sanima isogloss, overlaps with the Ye’kuana/Dekuana. Some communities in Brazil from the Erico/Saúba regions (and possibly some communities on the Venezuelan side as well) identify themselves ethnically as Uruak (or Arutani, Awake) even though they earlier adopted Ninam as their L1. Some rememberers of the Uruak language are claimed to be living in the border area, but no documentation has confirmed those claims. In the 20th century, several Mako communities, whose language is possibly close-related to Uruak (Kaufman, 1990), were reported in the highlands as well (in Surucucu and

Awaris) (Koch-Grumberg, 1923; Rice, 1978), but all of them have disappeared. In the east and southeast other Cariban-speaking communities, such as Sapara and Pauxiana, have also died out due to western diseases or have left their original territory during the last century, allowing several Yanomami groups to take it over. It is believed that the south, southwestern and western parts of the territory were being occupied by Arawakan-speaking groups, such as Bahuana, Wirina, Yabahana, Manao and Ciriana, which were also displaced by the contact with the Brazilian society in the late 1800s and during the 1900s (Ramirez, 1994a: 8). The Guinau language, also extinct, was the only Arawakan language spoken in the northern part of the territory (Ramirez, 1994a: 9). Due to the disappearance of the neighboring peoples and the subsequent occupation of their territory by the Yanomami peoples, it is claimed that the Yanomami territory was enlarged by the order of sixteen during the 19th and 20th centuries (Ramirez, 1994a; 17; Le Tourneau, 2010: 53).

1.2. Typological profile

In its phonology, YMA has 7 contrastive vowels and only 12 contrastive consonants. All vowels have a nasal counterpart, and there is a strong tendency towards nasal harmony of all vowels of bound and free morphemes. Similarly to what Migliazza (1972: 157-159) and Ramirez (1994a: 66-75) have observed, nasalization in YMA is a word-level or at least morpheme-level feature, i.e. the words and morphemes in YMA tend to be either entirely nasal or oral. A small fraction of YMA words does not follow this rule³. The most relevant feature in the small consonantal inventory (with only twelve segments) is the absence of the contrast between voiced and voiceless sounds; that is, the glottal state in the consonantal sounds is always irrelevant. It is also worth mentioning that there are no affricate sounds in YMA (see further §2.3).

In spite of its rich morphology, there are very few true affixes in YMA. Almost all bound morphemes are clitics in the language, in the sense that they are loosely

³ Ramirez (1994a: 70) calculates that only 5.5% of the Yanomami words and morphemes deviate from this pattern. The author claims that obstruents before the nasal vowel prevent the nasalization to spread regressively in the word/morpheme.

attached to the lexeme, displaying great mobility and combinatory possibilities within the noun or verb phrases. Most of these clitics occupy a post-stem position, i.e. they are bound to the right side of the lexeme, even though verbs can host bound morphemes from both sides. We will see in Chapter 3 that the clitics of the language can be grouped into three fixed positions: one after the noun, one before the verb and one after the verb. These clitic clusters are, therefore, a useful diagnostic to distinguish the major word classes of the language. Verbal morphology is highly synthetic and can potentially yield very long words. In contrast, nominal morphology is considerably more isolating and with much less morphological possibilities. Another interesting feature of YMA's morphology regards the fact that body-part terms are not free words but bound morphemes (also clitics).

YMA is a double-marking language; that is, it has both a case system and a verb indexing system for indicating the syntactic roles of the arguments in the clause. In practice YMA could be considered a head-marking language since the majority of the clauses only expresses nouns implicitly; i.e. the nominal arguments are omitted (see §3.3 and §7.3), and thus the speakers have to rely more often on the verbal indexing system to work out the syntactic configuration of the sentence. The case marking morphology displays an ergative alignment for all grammatical persons and settings. While the ergative argument is overtly marked with a case marker, the absolutive argument remains unmarked in all contexts. The set of index markers in the verb, on the other hand, displays different alignments according to the grammatical person and syntactic configuration of the clause. In my analysis, the use of this set of markers obeys a person-based hierarchy. The verbal indexes for 3rd person singular, for instance, display absolutive alignment in all configurations, i.e. the index in the verb used when a 3rd person is the subject of an intransitive clause is the same as that of a 3rd person patient/object of a transitive clause. There is no index for this person when it is the agent of the transitive clause. The indexes for 3rd person non-singular (dual and plural), on the other hand, have an ergative-absolutive alignment, that is, besides the absolutive indexes, there are also ergative indexes for these grammatical persons. While the indexes for singular SAPs (speech-act participants) have neutral alignment, the indexes for non-singular SAPs display an ergative-absolutive alignment, but only

if we consider mixed configurations, that is, transitive clauses that have a SAP agent and a 3rd person patient/object, and vice versa. However, if we consider the so-called local configurations, i.e. when only SAPs are involved in transitive clauses, the SAP indexes (either singular or non-singular) display absolutive alignment, since the ergative indexes are not realized in these contexts.

Another feature of YMA grammar includes AOV as the basic word order. The position of O right before the verb is highly rigid but A enjoys some flexibility being able to appear after the verb in some topicalized or focalized contexts. OV thus forms a so-called tight constituent and no other element can intervene between them (Paine, 2006: 220)

Valency and voice changing morphology is very rich in the language. There is a diathesis changing mechanism in YMA that is particularly interesting from a typological perspective since it is not attested in any other language of my knowledge. This derivation promotes a container-like noun (or a means-of-transportation-like noun) to a core position in the clause while it demotes the content-like noun (or the transportee-like noun) to an oblique position (check §9.5.4.3). The language has two types of applicative constructions, and overt morphology for causative, reflexive, and reciprocal derivations. Another interesting fact of YMA is the possibility of the combination of causative and reflexive morphology in the same construction. This reflexive-causative construction allows the speaker to express situations where a participant, affected by an action perpetrated by others, is seen as somehow responsible for triggering that action or letting it happen in first place (see §9.6.3).

Also, YMA serial verbs constructions are quite productive. Nearly 40% of the clauses in my corpus have one or more verbs serialized. In YMA, serial verbs add typical aspectual and adverbial meanings to the main predicate. As we will see in Chapter 10, this construction is not easily recognized in the language, since there are other construction types that also display more than one verb stem in the predicate, such as secondary predication, adverbial modification, and some highly integrated complementation clauses.

As a final interesting note, YMA grammar allows its speakers to mark five distinct evidentiality categories morphologically: eye-witnessed, auditory, reported,

inferred and assumed information. The YMA system has one category more than Yanomami, as described by Ramirez (1994a), and is similar in complexity to the systems described in the languages of the Vaupés river basin, a well-known hot-spot for complex evidentiality systems (Aikhenvald and Dixon, 1998).

1.3. Genetic relations of the Yanomami linguistic family

Despite several hypotheses that have been put forward, the genetic relationship between the Yanomami family and other linguistic families has not been demonstrated yet. The family has already been tentatively linked to the Cariban (Migliazza, 1972), Panoan (Migliazza, 1978b; Migliazza, 1985; Girard, 1971), and Chibchan families (Migliazza, 1978b, 1985), and to the hypothetical and unsubstantiated Macro-Chibchan or Chibchan–Paezan languages (Greenberg, 1987). None of these hypotheses has consensus among experts on Amazonian languages. Ramirez (1994a, 29-30) points out, however, that the Yanomami lexicon displays 13% of cognates with the Warao language of the Orinoco delta, 10% with Hodĩ (Hotĩ, Yuwana, Waruwaru, or Chikano) (unclassified) and some unspecified percentage with the Irantxe (Mükü) (also unclassified), a language spoken in the State of Mato Grosso in Brazil. Ramirez rejected, nevertheless, any precipitate conclusion on this matter, since no reliable grammar on those other languages were available at the time of writing for an in-depth comparison at the time of writing. Since I do not have any new and independent data on this subject, I will follow Koch-Grünberg (1913), Loukotka (1968) and Ramirez (1994a) in considering the Yanomami languages an isolate cluster.

1.4. Diversity within the Yanomami linguistic family

The Yanomami linguistic family has five languages: Yanomam⁴, Sanöma, Ninam⁵, Ỹaroamě⁶, and Yānomamĩ⁷. All those terms mean ‘person’ or ‘human being’ in the

⁴ Also known as Yanomac, Yanomami and, more marginally, Waika or Central-Waika.

⁵ Also referred as Yanam in the literature and regionally known as Xiriana and Xirixana.

⁶ Also known as Jawari, Waika and Ajarani.

⁷ Xamathari, Xamatauteri and Yānomani are other terms to refer to this language.

respective languages. The word ‘language’ is translated more precisely by the expressions ‘the sound of our mouths’ or ‘the sound of the people’, as in YMA *kami yamaki kahikiã* or ‘*yanomama thãa*’, respectively.

There is no consensus yet on this subdivision of the Yanomami family among the linguists working in the family. Ramirez (1994a: 35), for instance, considers Yanomami and Yanomam to be *super-dialects* of the same language. If we take into consideration the high number of lexical cognates⁸ between Yãnomami and Yanomam, and how few phonological changes those cognates underwent, Yãnomami is the closest language of the family to Yanomam. No other pair of languages in the family display such similarity to each other. Based on my experience as a translator and educator, I confirm that Yãnomami is indeed the most easily intelligible language in the family for a Yanomam speaker. Nevertheless, the same experience tells us that, unless this Yanomam speaker is actually familiar and in constant contact with Yãnomami speech, the level of intelligibility of Yanomami oral or written texts hardly reaches 60%⁹. Migliazza’s 1972 thesis, the *Grammar and Intelligibility of Yanomama*¹⁰ points in the same direction, even though his study was based on only one speaker of each language. A more in-depth study on the mutual intelligibility of the Yanomami languages is still to be done, but in this thesis, I will follow Migliazza’s proposal and consider Yanomami and Yanomam to be different languages.

On the other hand, Migliazza’s internal division of the Yanomami family excludes the varieties of Yãroamẽ as an independent language, placing them under the Ninam isogloss. Ramirez (1994a) was the first to propose the split of the Ninam and Yãroamẽ¹¹ languages, even though no hard data on this ‘new’ language was presented at that time by the author or available independently. Between 2010 and 2012, a number of colleagues and myself carried out a documentation project on the Yãroamẽ variety of Serra do Pacu simultaneously with the documentation of two

⁸ Around 80% in Ramirez calculations (1994a: 31-32)

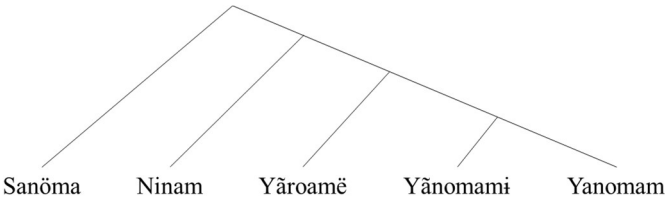
⁹ This figure is just an estimation based on personal impressions and fieldwork experience.

¹⁰ The term *Yanomama* refers, in Migliazza’s thesis, to the Yanomami family, not to the variety spoken in Papiu.

¹¹ Ramirez does not use the term Yãroamẽ, but language A instead. This letter (A) refers to one of the regions where the language is spoken (the Ajarani region).

varieties of Ninam. Grammatical sketches of each of those varieties were elaborated by our team, and the comparison of them showed that Ninam and Ỹaroamẽ are indeed two separate languages. Moreover, we found that Ỹaroamẽ is closer to Yãnomami than Ninam in several aspects of its grammar, what leads us to conclude that that Ỹaroamẽ and Yãnomami should be placed near each other in the Yanomami family tree, as shown in Figure 1.1.

Figure 1.1 – Proposed structure of the Yanomami language family



1.5. Yanomam and the variety spoken in Papiu – Yanomama

Yanomama is a dialect of the Yanomam¹² language. The Yanomam group of language varieties is spoken in the mid-eastern portion of the Yanomami territory. As I mentioned, *yanomama* is the word used in the language to refer to a person, to a human being. Other varieties of Yanomam use slightly different variations of this word: *yanomae*, *yanomami*, and *yanomam*.

The language is spoken by about 11,300 people in the eighteen regions listed in Table 1.1. In the second column we have the population of each region according to the FUNASA¹³ census of 2015¹⁴ and the Venezuelan Indigenous census of 2013 elaborated by the Hõrõnami Yanomami Association. The numbers on the Venezuelan side are allegedly on the low side, since not all communities were visited during the census.

¹² Also know as Yanomae, Yanomami and, more marginally, Waika or Central-Waika.

¹³ A Brazilian healthcare agency

¹⁴ Many thanks to Estevão Senra from the Instituto Socioambiental (ISA) for this updated data and the maps of this chapter.

Table 1.1 - Yanomam-speaking regions¹⁵

Region	Pop.	State/ Country	Region	Pop.	State/ Country
Alto-Catrimani	223	RR/BR	Missão Catrimani	815	RR/BR
Arathau	566	RR/BR	Novo Demini	381	AM/BR
Demini	211	AM/BR	Palimiu	729	RR/BR
Haiau	131	RR/BR	Parafuri	533	RR/BR
Hakoma	552	RR/BR	Surucucu	1496	RR/BR
Haxiu	956	RR/BR	Toototopi	788	AM/BR
Homoxi	550	RR/BR	Waputha	556	RR/BR
Kayanau	229	RR/BR	Xitei	1622	RR/BR
Papiu	395	RR/BR	Chalbaud ¹⁶	584	AM/VE

From the relatively small number of inhabitants in Papiu (less than 400 people), one could mistakenly assume a perfect linguistic homogeneity in the region. Quite on the contrary; there is considerable dialect diversity in Papiu, which reflects the different historical origins and migratory movements of the current inhabitants of the region. In Papiu there are migrants or descendants of migrants from Maraxiu, Hayau, Haxiu, Okomou, Porai, Maamakatiopë (Surucucu), Parahuri (these regions are in the highlands on the Brazilian side), Alto-Catrimani (Wakathau), Missão-Catrimani (Wakathau) (these two regions are in the lowlands on the Brazilian side), Alto-Mucajá, Uxiu (these two are Ninam-speaking regions), and a handful of communities from the highlands on the Venezuelan side.

¹⁵ The abbreviations used in this table: BR – Brazil, VE – Venezuela, RR – State of Roraima and AM – State of Amazonas (either the Brazilian or the Venezuelan State).

¹⁶ The region is named after the mountain Carlos Delgado Chalbaud, on the headquarters of the Orinoco river.

Even though most of the regions mentioned above are Yanomam-speaking regions, several differences characterize their dialects. Speakers of the variety from Alto-Catrimani, for instance, apparently tend to prefer the ergative case marker =*nə* instead of the variant =*ni*, preferred by speakers of other dialects. This variation between *i* and *ə* is still observed in the oblique marker =*hami*/= *hamə* and in lexical words, such as in *miramai* /*məramai* ‘to con’. This variety also prefers /ə/ in some contexts where others prefer /u/, as in *əkai* instead of *ukai* ‘to take out’. The lexicon of the varieties spoken in Papiu also display minor differences. The variety from Missão Catrimani, for instance, uses *xori*, *mirena*, and *yāukai* to refer to ‘brother-in-law’, ‘mirror’ and ‘to draw’, while other varieties prefer *amaārĩ*, *kara*, and *utupě thai* for the same referents.

The dialectal differences are not restricted, however, to lexical choice or lexical variation. The argument indexing system of the variety spoken in Missão Catrimani, for instance, is different from that used by other varieties in Papiu. The main difference between these systems resides in how the 1st person object is expressed. While most varieties in Papiu use the morphemes *ya*=, *yahaki*= and *yamaki*= for 1st person singular, dual and plural, the variety of Missão Catrimani uses in the same context the forms *ware*=, *wahareki*=, *wamareki*=, respectively. The pair of examples in (1) illustrate this variation. Both sentences were produced by the same speaker in two different contexts. In the first example (1a), he is being interviewed by his brother and me about the recent history of the Papiu region; in the second context (1b), he is sending a voice message to a person born in Missão Catrimani, and tries to imitate the argument indexing system of the variety spoken there. This topic will be discussed in detail in Chapter 7 (see §7.5), where I will describe the argument marking strategies in the language. The person indexers are in bold.

- (1) a. *ya* *pata* *hĩmĩri* *těhě* [...]
 ya= *pata* *hĩmĩ* =*ri* =*těhě*
 1SG= elder accuse =PFV1 =REL.PRS
 ‘If you call me old [...]’ (PDYP_MIC_B_07_06)

- b. *ware* *ãha* *haimai* *yaro* [...]
ware= *ãha*= *hai* =*ma* =*i* =*yaro*
1SG= sound= pass_through =CAUS =DYN =REAS
‘For you say [keep saying] my name [...]’ (m006_arok_mari)

There are three native speakers of Ninam that made their way to Papiu through marriage. This is a consequence of an old alliance with the Ninam speaking groups of the Mucajaí river, namely Alto-Mucajaí and Uxiú (see 1.6.) Several communities from Papiu, especially the communities of Maharau, Sikamapiu, Okorasipi, Xokotha/Surinapi, still maintain close relations with those Ninam communities. These connections include mutual visiting for funeral festivals, as the communities share a lot of common relatives, inter-community marriage, and consequent moving of the groom/new husband into the community¹⁷. All members of the mentioned communities in Papiu developed a certain degree of proficiency in Ninam, and a few of them became fully bilingual in Ninam and Yanomama. The influence of Ninam in Yanomama from Papiu can be attested by some Ninam loanwords in the language and even in the grammar. It is not uncommon to hear people in Papiu using the Ninam prohibitive construction, as in (2a). Even though native speakers consider this construction to be “pure” YMA, it is clear for us that it is Ninam for it is not found in other Yanomam varieties and, on the other hand, the Ninam from Alto-Mucajai and Uxiu do use it. In (2b) we have the “actual” YMA prohibitive construction.

- (2) a. *waa* *thapě* *xiha* !
wa= *a*= *tha* =*pě* =*xiha*
2SG= 3SG= do; make =FUT =NEG
‘Don’t do it!’ (elicited)

¹⁷ When a couple gets married, the groom/new husband has to move in to the bride’s community and live and work there for some months, years and sometimes forever, as payment for the marital services.

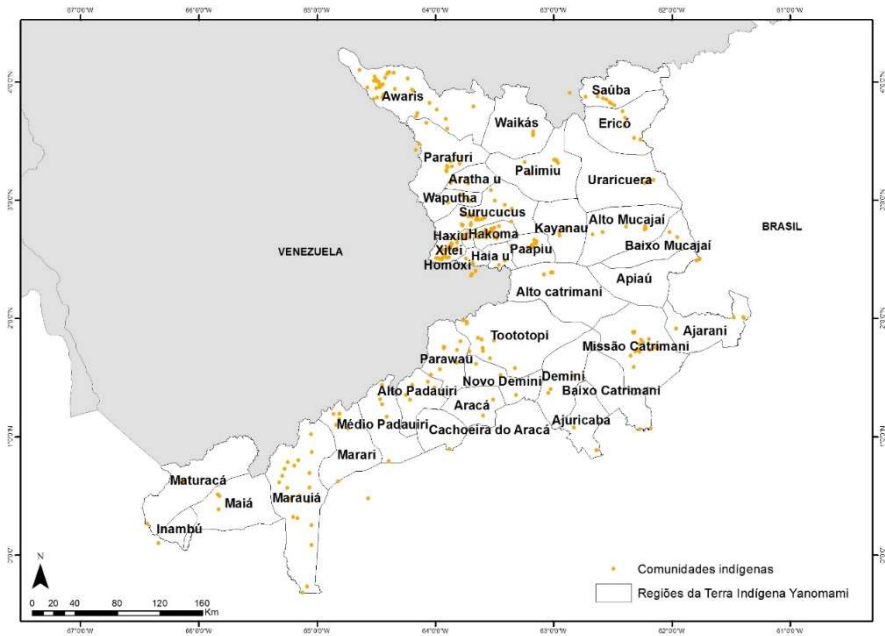
b. <i>waa</i>	<i>thano</i>	<i>mai</i> !
<i>wa=</i>	<i>a=</i> <i>tha</i>	<i>=no</i> <i>mai</i>
2SG=	3SG= do; make	=RESULT NEG
'Don't do it!' (elicited)		

The communities of the Kayanau region, which are originally Yanomama speakers, have experienced an even greater influence from the Ninam culture and language. Those communities (they comprise about 150 people now) migrated from the Papiu region at the end of the 90's and settled on the Mucajaí River, much closer to the Ninam communities. Inter-community marriage with the Ninam is much more widespread there, and many families residing in the region use Ninam as L1. Full bilingualism is prevalent there, and the impact of this close contact on both languages still needs to be better accounted for.

For methodological reasons, I will be chiefly concerned in this study with the varieties spoken by the descendants of migrants from the highlands, i.e. Maraixu, Hayau and Haxiu, even though none is entirely homogeneous. This language of reference will be referred to as YMA and corresponds approximately to what Ramirez called Yor-x, or the variety X (after the region Xitei) of Oriental Yanomami (Ramirez, 1994a: 24-25). When dealing with a particular feature of a different variety, I will make it explicit.

1.6. The region of Papiu: history and the current situation

Since the first health care programs were implemented in Yanomami land in Brazil in the mid-90s, the territory has been subdivided into regions for logistic and administrative purposes. Each region has a permanent facility (the health office) which hosts the medical staff and concentrates the medical assistance to the nearby communities. Some of them also have a FUNAI office. There are 39 regions in the Yanomami land in Brazil, as presented in Map 1.3.

Map 1.3 - Regions of the Yanomami land in Brazil

Papiu (also known as Paapiu and Maloca Paapiu) is a region in the heart of Yanomami territory in the State of Roraima; it comprises 13 villages with a total population of about 400 people. The Map 1.4 shows the approximate location of each community in the Papiu region. The area is 250 km distant from the State capital of Boa Vista and is crossed by the Herou River (or Couto de Magalhães River, on Brazilian maps), a tributary of the Mucajai River.

Map 1.4 – Communities (villages) of the Papiu region¹⁸

As the reports on their personal history indicate, the current people of what is now known as Papiu began to occupy the area in the late 1950s and the early 1960s, allegedly fleeing from endless conflicts that were taking place in the highlands by that time. The first settlers came from a community called *Maraxiu* and many Yanomami people still refer to the people of Papiu as *Maraxiu thëripë* or “the inhabitants of Maraxiu” in reference to their old village¹⁹.

Several other communities in the lowlands report similar stories of displacement because of warfare. These conflicts were probably due to old quarrels that were enormously exacerbated by contact with Western society. The introduction of firearms, the massive deaths caused by Western diseases (which were interpreted by several Yanomami groups as a product of their enemies’ witchcraft) and the frenzy created by the arrival of Western (metal) goods are the reasons pointed out by some authors (Ferguson, 1995: 346) to explain the sharp increase of violence in the densely populated highlands. Moreover, not only the contact increased the violence in the highlands, displacing several groups scared with its by-products, but also made

¹⁸ In the map, a red dot represents a community, the yellow square indicates the health office, and the white line at its side, the airstrip. The geo-location of the health office is: 2°39'34.08"N 63°9'24.14"W

¹⁹ The village was named after the river Maraxiu that crossed it.

several other communities migrate voluntarily pursuing better access to the points of distribution for Western goods.

According to this interpretation, the Yanomama people that moved into the Papiu region was not only fleeing from violence but also wanted to get closer to the Missão Evangélica da Amazonia (MEVA)²⁰ missionaries that had just settled, in 1958, among the Ninam speaking communities of the Mucajaí river (Early and Peters, 1990: 19) and thus have a more privileged access to the axes, machetes, hooks and firearms that were being provided by the missionaries.

Early and Peters (1990: 65) point out that the Ninam people from Mucajai and the *Maraxiu thëripë* first met each other only in 1959, after a terrible misunderstanding. The Ninam people had heard of the existence of the *Maraxiu thëripë* from two Brazilian mining prospectors that were returning from an expedition upstream, and the former soon began to accuse the latter of practicing witchcraft and being responsible for the recent deaths in the community²¹. The Ninam people then organized a punitive expedition against the people upriver to revenge their dead relatives. After some talk, nonetheless, the *Maraxiu thëripë* allegedly convinced the Ninam people of their peaceful intentions and practices and the two sealed an alliance that lasts up to the present.

In any event, the *Maraxiu thëripë* descended from the mountains to the Papiu region and pursued closer contact with the missionaries. According to their reports, the Yanomama cleared the forest of a piece of flat land in Papiu to allow airplanes to land and eventually convinced the ministers to move in and begin working there. I am not sure when the missionaries arrived exactly and for how many years they remained in the region, but they eventually got expelled by the community, very upset with their proselytic work and the prohibitions imposed upon Yanomama cultural practices, especially shamanism.

²⁰ Evangelical Mission for the Amazon

²¹ Early and Peters (1990: 65) points out that the Ninam people were dying from infectious diseases brought by the contact.

We have very little information on what happened after the expulsion of the missionaries up to the mid-1980s when the most tragic chapter of the recent history of the Yanomama people begins. Papiu was one of the regions most affected by a gold rush that took place in the 1980s and 90s attracting more than 40,000 Brazilian gold-miners²² to the Yanomami territory, many of them fleeing from the then recently closed Serra-Pelada mine in the State of Pará. The invasion had terrible effects for the Indigenous people, who suffered a brutal health, cultural and social degradation and witnessed the destruction and contamination of their forest and rivers. At least half of the population of Papiu perished by Western diseases (malaria, measles, flu, tuberculosis, chickenpox...), starvation and violent incidents with the gold miners. The expulsion of the miners in the mid-90s by the Brazilian army only came after an intense campaign (both at the national and international levels) on the Brazilian government for the recognition of Yanomami rights over their lands. In 1992, the area was finally demarcated and with the work of sanitary control carried out by NGOs, such as *Médicins du Monde* (MDM), the Pro-Yanomami Commission (CCPY) and the Urihi Yanomami Health Care Organization, the population eventually started growing again and several traditional practices that were abandoned during the invasion reflourished.

During the time of the miners' invasion, a type of Portuguese pidgin was developed to allow basic communication between the miners and Yanomama people. Several words and expressions of this pidgin are still in the memory of the community, even though not in use anymore, such as *xapexape* 'to go, to walk' (from the sound that flipflops make when people walk wearing them), *barriga morreu* 'I am hungry' (lit. "[my] belly has died") and *xikixiki* 'to have sex'²³. A lot of Portuguese words arrived in the community at that time, especially those that refer to Western goods, and are still in use today. A few Yanomama people, especially young and adult men, learned a little bit more of "proper" Portuguese's grammar with the miners, but none

²² In 1980s, the Yanomami total population in Brazil was estimated in between 12.000 to 14.000 people. It is believed that 13% of them died during the miners' invasion (Albert and Le Tourneau, 2005: 11).

²³ One can still hear those words in Papiu, but only in mocking contexts.

of them became even incipient bilinguals. Since inter-generation transmission was not interrupted, the children kept learning Yanomama as their only L1.

The current situation is quite similar, even though a handful of members of the community has become bilingual in Portuguese and Yanomama, at incipient to intermediate level. Three of them may be considered to have advanced knowledge of Portuguese. Portuguese words are also widespread in the communities, probably reflecting the increasing access to Western goods but it is not explained exclusively by this, though. The displacement of Yanomami words non-related to goods by the Portuguese ones, such as *não* ‘no’ and *dois* ‘two’ and the interrogative expression *cadê?* ‘where is that?’ by almost all members of the linguistic community, indicates that the language is still undergoing a substantial change and may not be as safe as it looks like at the first sight, or I would want it to be.

School education and literacy started informally in Papiu in the late 1990’s as a personal initiative of the *Médicins du Monde* medical staff. This action responded both to a demand from the Yanomama and to a need of the medical staff to have a better interaction with and help from the Yanomama. Literacy classes started therefore in a small room of the health office, using only materials developed for other regions (and dialects) and aiming only a few members of the community. This activity attracted significant interest from the people from Papiu and soon the room in the health office became too small for all students. The medical staff also faced a lot of difficulties adapting the pedagogical materials to the Papiu context. For those reasons, in 1999 MDM asked the education staff of Roraima’s diocese to take over of the matter. The diocese’s educators worked in Papiu until 2002 when they had to leave, reportedly for personal problems with some members of the community. That these educators did not try to evangelize the Yanomama is praiseworthy; they focused only on school education itself. It is also worth mentioning that, during these first years of the school, almost everyone that was between 20 to 40 years old at that time got greatly interested in the school and had some degree of engagement with its activities. Most of these students eventually gave up studying, but some are still able to read words today. When the Roraima diocese education staff left Papiu, CCPY took over the educational work in Papiu and started the intensive training of four local teachers.

Eventually, this number increased to 7 teachers. The region has now about 100 literate people or 25% of its population. Since 2012, there are four teachers of the Papiu region attending undergraduate courses at the Insikiran Indigenous University Education Institute at the Federal University of Roraima.

More on the history of literacy in Papiu will be discussed in Chapter 2 (§2.7), when presenting the practical orthography used in this work, which is the same as that employed by the community.

1.7. Early literature

The Yanomami has been one of the most studied Amazonian indigenous groups. Several aspects of the Yanomami society have been the subject of fierce discussions and controversies. Contrastingly, the studies on the languages of the Yanomami family are relatively scarce and very few linguists (only a handful of them) have produced descriptive works on them.

The first explicit documentation of a Yanomami language was made by Theodor Koch-Grunberg in his 1913 report on his journey from the northern region of Brazil to the Orinoco river basin, further complemented by the fourth of his five volume piece of work *Vom Roraima zum Orinoco* (1923). In that volume, the German ethnologist presents word lists of and grammatical comments on 14 languages of that extensive region, some of which reasonably detailed, especially on Cariban and Arawakan languages. Among the isolated languages, Koch-Grunberg placed *Schirianá* and provided a list of 300 words of the language and some few sentences. The word list is clearly from a variety of the Yanomami family, and *Schirianá* (or *Xiriana*, in the current local orthography and pronounced with the stress on the penultimate syllable) is still the ethnonym used by Ninam-speaking groups of Urariquera river basin to designate themselves. Koch-Grumberg (1913; 554) was the first to point out the lack of genetic relation between of the Yanomami languages and their neighborhood.

Except some ethnological work that also contemplated aspects of the Yanomami languages, such as George Salathé's (1932) word list of the Karime language from the Catrimani region, which was probably a variety of Yãromaë, the Yanomami

languages received little attention from secular linguists until the 1970's. American missionaries from different evangelical denominations (particularly from New Tribes Mission and Evangelical Mission for the Amazon) and Salesian catholic missionaries dominated the description and documentation of the Yanomami languages in that period, such as James Baker (1956; 1979), José Berno (1969), Donald Borgman (1969-1970; 1965 with Sandra Cue; 1974) and several lesser-known linguists from the Summer Institute of Linguistics.

The linguistic investigation carried out by non-missionary researchers only started gaining some prominence again in 1970 with the publication of the *Dictionnaire Yanómami-Français* by the French anthropologist Jacques Lizot and several other language related articles by the same author, such as his 1973 “Onomastique Yanómami”.

The first lengthy description of the Yanomami grammar was only produced in the beginning of the 1970s with Migliazza's Ph.D. thesis on the *Yanomama Grammar and Intelligibility* (1972). In that piece of work, the author comparatively examines several grammatical features of four varieties of the family and also investigated their mutual intelligibility, using short recordings of each variety which were later presented to speakers of other varieties to assess their understanding of them. This survey led the author to propose the first representation of the internal diversity of the Yanomami languages. His four-languages division proposal was the most widely accepted and quoted representation until the beginning of the 2010s, when the existence of the Țaroamě language (the fifth language of the family) was finally accepted by the majority of the linguists and anthropologists working in the Yanomami area.

The study of the Yanomami languages enjoyed a great renewal in the 1990s, with the publication of lengthy descriptions of three Yanomami languages. While Gale Goodwin-Gomez was defending her thesis on *The Shiriana Dialect of Yanam (Northern Brazil)* in 1990, Donald Borgman published in the same year a chapter on Sanima's morphosyntax in the *Handbook of Amazonian Languages* (edited by Derbyshire and Pullum). In 1994, Henri Ramirez published his *Le Parler Yanomami des Xamatauteri*, a very detailed description of all grammatical aspects of the

Yānomami language spoken in the Marauiá region in Brazil. In this work, Ramirez also deepens the discussion on the internal structure of the family proposing several dialectal subdivisions for the individual Yanomami languages. Jacques Lizot also contributed to this with his *Introducción a la lengua yanomami: Morfología* (1996) which gives a fair description of the main aspects of the Yānomami language spoken in the Mavaca region in Venezuela. The grammar of the Yanomam varieties did not receive such detailed attention in that decade, but Henri Ramirez published two very useful pedagogical grammars (booklets) aiming non-indigenous people who needed to learn the some aspects of language to work in the Yanomami land. As for the Yanomam language, it is also worth of mention the *Saúde Yanomami – um Manual Etnolinguístico (Yanomami Health Care – an Ethnolinguist Handbook)* elaborated by the anthropologist Bruce Albert with the help of Gale Goodwin-Gomez and published in 1997. The book presents a comprehensive account of the Yanomami's world view on health, sickness and healing methods with an extensive vocabulary related to this semantic domain. Ÿaroamë was the only language of the family that remained completely undescribed by then.

In the years 2000s, two other lengthy and quite complete dictionaries on the Yanomami from Venezuela were published, first the Jacques Lizot's *Diccionario enciclopédico de la lengua yānomāmi* in 2004 and then Marie Claude Mattei-Muller's *Lengua y cultura yanomami: diccionario ilustrado yanomami-español, español-yanomami* in 2007. At the end of that decade, I wrote my MA dissertation on the Noun Classifiers of Yanomama from Papiu (*Los Clasificadores Nominales del Yanomama de Papiu*), which was the first description of this variety of the Yanomam language.

In 2010, I started a documentation project on the Yanomama from Papiu funded by the Endangered Languages Documentation Programme (ELDP). The first product of this project was a *Portuguese – Yanomama Dictionary of Verbs (Dicionário de Verbos Português – Yanomama)* published in 2011 and involved several Yanomama researchers in its elaboration, mainly Alfredo Himotona, Marconi Kariuna and Genivaldo Kreputa. Also in 2010, I initiated another documentation project on the Ÿaroamë of Serra do Pacu and two varieties of Ninam, with Gale Goodwin-Gomez, Gerson Levi-Lazzaris and several Yanomami researchers in our team. In 2011,

Goodwin-Gomez elaborated a grammatical sketch on a variety of Ninam, and I wrote the first grammatical description (also a sketch) on Ķaroamē. I also collected an extensive vocabulary on the three varieties, which will be available online sometime soon. During the project, I was able to compare those varieties and demonstrate that Ķaroamē is definitely not a dialect of Ninam. Not only do these two languages display several differences in their grammar and lexicon, but they are mutually unintelligible, according to the Yanomami researchers that worked on our project. As a measure of this lack of intelligibility, I may mention that those researchers talked to each other not using Ninam nor Ķaroamē, but Yanomam instead, a language that enjoys high prestige in the Yanomami land, for historical and cultural reasons²⁴.

1.8. Fieldwork and personal experience with the Yanomami people

The first time I entered the Yanomami territory was in November of 2002 to take part in the Yanomami's General Assembly as a junior officer of the Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA), a governmental organization subordinated to the Brazilian Ministry of Environment. At that time, I was an avid reader of every material concerning Indigenous issues in Brazil which fell in my hands, but had very little (or none) experience in the field. The sight of a very traditional Yanomami community, the vitality of their language and cultural practices just amazed me. That field experience lasted only a few days but was sufficient to keep me mentally occupied for weeks and make me unsure about whether I should keep on with that quite stable and promising career in the Brazilian state bureaucracy. As soon as March of 2003, I had already resigned from IBAMA and had started working for the Pro-Yanomami Commission (CCPY), a secular Brazilian NGO which had had a crucial historical role in the defense of the Yanomami peoples' rights, particularly on the demarcation of their territory in 1992. When I started

²⁴ The famous shaman and political leader Davi Kopenawa speaks Yanomam (a variety called Yanomae). The work of CCPY was mainly carried out in the Yanomam-speaking regions of the territory.

working there, CCPY had already widened its scope of work to include direct health care assistance and education, two strong and old demands of the Yanomami people.

I worked from 2003 to 2007 as an education fieldworker in the Papiu region for the Intercultural Educational Program of the CCPY. I closely followed and personally participated in the training of five Yanomama teachers of the community and ten local health agents. During this time, I produced educational materials and learned the Yanomama language. CCPY had a fascinating linguistic policy by then. Every new employee was immediately required to start learning a Yanomami language, and, after six months, the Yanomami people and older workers evaluated the linguistic competence of the newcomer and decided whether (s)he should keep her/his job. This linguistic policy was quite successful for years, and several non-Yanomami people ended up learning a Yanomami language, some of them with an advanced level of proficiency.

In 2007, I left the NGO to pursue my master's degree and entered the Master's Program in Indoamerican Linguistics at CIESAS (Centro de Investigaciones y Estudios Superiores en Antropologías Social) in Mexico. In 2008 and 2009, I still visited Papiu again to collect data for my research, and in December 2009 I presented a dissertation on the Nominal Classifiers of the Yanomama language.

In 2010, three indigenous teachers, the anthropologist Ana Maria Machado and I wrote a project to document the language and culture of the Yanomami people from Papiu (Project for the Documentation of the Yanomama of Papiu – PDYP) and submitted it to the Endangered Languages Documentation Program (ELDP). The project was eventually selected, and in 2011, our team began documenting several aspects of the Yanomama daily life and discourse genres, such as traditional narratives, ceremonial dialogues, and songs. In 2011, our team published the first result of this project, which was a Portuguese-Yanomama Dictionary of verbs. Moreover, the project collected more than 60 traditional narratives, which are now being processed, adapted to the written format and translated into Portuguese. The first two volumes of seven traditional stories are currently being published (2016) in fully monolingual books, which will be followed by the Portuguese versions. We also gave particular attention to the women's world, documenting several gender-specific

aspects of the Yanomami culture. We documented, for instance, the loin-cloths embroidered with glass beads – which are distinctive artifacts of the Yanomama women from Papiu – and the historical aspects behind them, namely the contact with the non-Indigenous society and other indigenous groups that brought the glass beads and the embroidering techniques to Papiu. In 2015, this material on the woman's loin-cloths became an exhibition at the *Museu do Índio* in Rio de Janeiro.

In total, the project produced more than 70 hours of video and audio recording, 60 hours of which were selected to be processed and used in this work, as I will discuss in the next section. Our project also received support from Museu do Índio/FUNAI, the Yanomami Association Hutukara (HAY), the Instituto Socioambiental (ISA/RR), the Observatory of the Indigenous Special Education (OEEI) of the Faculty of Education of the Federal University of Minas Gerais (UFMG) and the Indigenous Knowledge in the Schools Project (SIE) of the Brazilian Ministry of Education.

1.9. Corpus used in this work

Most of the corpus used in this work was gathered in the context of the Project for the Documentation of the Yanomama of Papiu (PDYP), but several recordings that antecede the project's official date of beginning were later processed and also incorporated into the project's archive and in the corpus of this thesis as well. I have been collecting tradition narratives, for instance, since 2006. The narratives stimulated by video were also gathered in 2008 for the corpus of my MA dissertation. In Table 1.2 presents the PDYP's archive that will be used in this work subdivided by speech genre. The second column refers to the prefix used to label each file type in the archive. The PDYP's archive was deposited at Endangered Language Archive (ELAR) in London, and at Museu do Índio in Rio de Janeiro.

Table 1.2 – PDYP’s Selected Archive

Speech genre	Prefix	Number of files	Length
Traditional Narratives (written)	(wtx_)	8	---
Traditional Narratives (recorded)	(n_)	95	14:20:38
Stimuled Narratives (Video Stimuli)	(s_)	122	04:17:40
Audio And Video Messages	(m_)	22	03:36:30
"Loin-cloths" Project	(PDYP_MIC_)	200	21:23:41
"Heri" Songs	(HF_), (HM_) and (HFXM_)	382	16:13:08
	TOTAL	821	59:51:37

Even though PDYP’s archive has a huge amount of recordings, I was not able to rely exclusively on spontaneous texts to illustrate every aspect of the YMA’s grammar, especially those which required negative evidence – which natural texts obviously do not provide – but not exclusively those. As we will see throughout this thesis, many examples were elicited. We can recognize these examples by the lack of a precise indication of their location in the archive, i.e. they lack the prefix and a number that identify them, or by explicit mention of their elicited status after the correspondent translation (elicited). In any event, it is worth mentioning that several elicitation sessions were also audio-recorded (we have more than ten hours of this type of recording) and, whenever possible, were carried out using the Yanomam language itself, and not Portuguese. In a lesser extent, I also used examples extracted from some written texts, especially from the written adaptations of the traditional narratives. We will present some comments below on each group of files types of the PDYP’s archive.

A. Traditional Narratives

A collection of 55 mythical, historical and testimonial narratives recorded in four lengthy interviews with the elder Juruna Yutu Yanomama carried out in 2006, 2008,

2010 and 2011 by our team. The interviews are currently being adapted to the written format and translated to Portuguese for eventual publication. The examples extracted from the latter format will be labelled in this study with the prefix <wtx_> and those chosen directly from the recorded version are identified with <s_>.

Table 1.3 – Traditional Narratives

Data processing status	Number of files	Length
not transcribed	32	03:48:54
transcribed but not translated	22	04:46:35
transcribed and translated	41	05:45:09
TOTAL	95	14:20:38

B. Narratives stimulated by video stimuli

These narratives were originally collected in 2008 for the corpus of my MA dissertation at CIESAS. Twenty-six speakers were selected and asked for retelling the events they had just watched on video two or three times. A set of seven short movies were used in the experiment, as shown in Table 1.4. The last column (“prefix”) refers to the exact name used to label the recordings obtained with each video stimulus.

Table 1.4 – Video Stimuli used in the elicitation

	Name of the stimulus	Reference	Prefix
1	<i>The Pear film</i>	Chafe 1980	(s_pear_)
2	<i>The chicken film</i>	Givón, 1990	(s_chic_)
3	<i>The red jacket on the tree</i>	Kita, 1995	(s_tree_)
4	<i>The stolen ball story</i>	Kita, 1995	(s_ball_)
5	<i>The mouse and the apple tree</i>		(s_ms01_)
6	<i>The mouse and the banana skin</i>	cartoon series of the German television <i>Die Sendung mit der Maus</i> edited by Kita (1995)	(s_ms09_)
7	<i>The mouse and the thorny fruit</i>		(s_ms10_)

In Table 1.5 below, I present the current processing status of this section of PDYP’s archive.

Table 1.5 – Narratives on the basis of stimuli

Data processing status	Number of files	Length
not transcribed	6	00:20:20
transcribed but not translated	87	02:55:09
transcribed and translated	29	01:02:11
TOTAL	122	04:17:40

C. Audio and video messages

When I worked as fieldworker for the NGO "Pro-Yanomami Commission", I was asked several times to deliver messages via audio or videotape to people in distant villages and Brazilian authorities. Some of them were recorded with relatively good equipment and selected to be part of PDYP’s archive. Speeches addressing the whole community were also included in this section of the archive. Most of these messages

and speeches are on political issues and do not have sensitive content. Permission from the correspondent speakers was obtained. Table 1.6 shows how much of the material in these files has already been processed.

Table 1.6 – Audio And Video Messages

Data processing status	Number of files	Length
not transcribed	12	01:53:55
transcribed but not translated	2	00:28:56
transcribed and translated	8	01:13:39
TOTAL	22	03:36:30

D. "Loin-cloth" Project

The project organized an exhibition in the Museu do Índio in Rio de Janeiro on the loin-clothes embroidered with beads that the Yanomama women of Papiu traditionally make for themselves. For this purpose, the team of the project interviewed several members of the community (women, elders, shamans) about the history of the beads, the loin-cloths, the history of the alliances and trades with other groups. The project also registered several procedural texts on the embroidering techniques and dialogues illustrating the women's daily life. In Table 1.7, I present the number of files gathered for this exhibition, their length, and their processing status.

Table 1.7 – "Loin-cloth" Project

Data processing status	Number of files	Length
not transcribed	92	04:35:58
transcribed but not translated	95	09:59:26
transcribed and translated	13	06:48:17
TOTAL	200	21:23:41

E. “Heri” Songs (HF_)(HM_)(HFXM_)

This section of the archive comprises recordings of the songs (*heri*) chanted during the funeral festivals called *reahu*. Three basic types of *heri* songs were collected: women’s songs (whose files received the prefix HF_), men’s song (identified by the prefix HM_) and the song duels between women and men (HFXM_). The latter type of songs are the women and men singing together, as loudly as they can, their regular songs with the purpose of surpassing each other in loudness. Table 1.8 presents the processing status of this section of the archive as a whole.

Table 1.8 – “Heri” Songs

Data processing status	Number of files	Length
not transcribed	0	00:00:00
transcribed but not translated	382	16:13:08
transcribed and translated	0	00:00:00
TOTAL	382	16:13:08

1.10. Purpose of this work and overview of the following chapters

The primary purpose of this work is to fill a significant gap in the description of the Yanomami languages by offering an in-depth description of the morphology and the syntactic structure of a variety of the Yanomam language. As I mentioned in §1.7, differently from Ninam, Sanima and Yanomami, the varieties of the Yanomam group have not been the subject of such a scrutiny yet. The only descriptions available on this language are Ramirez (1994b; 1999), which, despite their pedagogical quality, are not comprehensive, do not offer full explanations of the grammatical phenomena and were somehow biased or influenced by the author’s expertise on Yānomami.

Some of the structures described there are actually Yānomami, not Yanomam²⁵. Yaroamë, the fifth language of the family, still missing such a comprehensive description as well. In 2011, I wrote the first short grammatical sketch of this language (also possibly Yanomam-biased somehow as well), but a lot of research and descriptive work on this language is still needed. I hope that this final gap will also be filled up shortly and we can finally have at least one detailed description of each language in the Yanomami linguistic family.

This work intends to be the first of two volumes of a comprehensive grammatical description of YMA. In this book, I will only deal with grammatical aspects of the YMA's simple sentences, while in a planned second volume I will be focused on aspects of multi-clausal constructions in YMA, such as coordination, subordination, clause-chaining and other discursive resources of the language. This first volume is organized as following.

Chapter 2 gives an overview of the YMA segmental and suprasegmental phonology, by offering the phoneme inventory of the language and the basic phonological features of the YMA words and sentences, such as stress placement and the main syllabic patterns. Some phonological processes will also be discussed in that chapter, even though this subject will not be exhausted there. More work will still be required for a full understanding of this aspect of the YMA grammar. The orthography adopted in this work will also be presented in that chapter.

Chapter 3 lays the basis for the formal definition of nouns and verbs in YMA. Nouns and verbs are not only different by their semantic properties, but they display a different syntactic distribution and morphological possibilities. One important parameter to identify nouns and verbs in the language regards their position in relation to the three main clitic clusters of the language and their ability to host these different clusters. While nouns can host very few clitic types and only from their right side, verbs have both sides opened to receive bound morphemes, which also are much more diverse than the nouns's morphology.

²⁵ This is indeed consistent with the author's view on the *super-dialectal* status of the differences between the two groups of language varieties.

Chapter 4 investigates the different types of noun in the language. We will see that YMA has three main types, which have different morphological structures and syntactic properties. There is still a fourth subclass of noun with a very reduced paradigm comprising only kinship terms. We will also deal with other constituents of a typical nominal phrase in YMA, such as personal and possessive pronouns, demonstratives and quantifiers. Nominal morphology, which is much less complicated and more isolating than the verbal one, will also be discussed there.

Chapter 5 examines the different types of verbs in YMA. I will consider in this discussion two levels of the verb formation – verb stems and verb roots. We will see that there four basic types of stems – attributive, positional, dynamic and irregular – which are different from each other by their morphosyntactic properties and, at a certain degree, semantic features. Moreover, we will see that those stems may be morphologically simple words – made of only one lexical element (the verb root) – or complex words – decomposable in one root and one or more deriving morphemes. The level of morphological complexity of the verb stems will be a crucial parameter to identify clearly attributive, positional and dynamic verb roots. The notion of flexible roots – i.e. roots that can appear as different types of verb stem, dispensing with the need of any derivation – will also be discussed in that chapter.

Chapter 6 deals with the YMA's extremely rich and polysynthetic verbal morphology. Besides the morphemes that are associated with and define each type of verb stem, the language still has dedicated morphology to express several tense, aspectual, locational, directional and polarity categories. Derivational morphology is also quite rich in YMA, allowing the speakers to create new verbs from almost any noun (and also from other verbs) and to change the inherent voice and valance values of existing verbs of the language. I will also discuss in that chapter the morphological mechanisms that derive verbs in nouns.

Chapter 7 is concerned with the argument marking strategies found in YMA. Besides the word order, which is quite rigid regarding the placement of the absolutive argument before the verb, we will see that YMA has a case system and set of verbal indexes to express the syntactic configuration of the clause.

Chapter 8 discusses non-verbal predication, i.e. clauses that lack a verb or make use of copular elements only. We will see that this type of predicate is relatively rare in the language. Many of the constructions that in other languages tend to be expressed by verb-less clauses, such as attributive, equative, locational and possessive predicates, require a copular element in YMA or are expressed by lexically rich verbal stems.

Chapter 9 deals with the voice and valence change mechanisms of the language. We will see that YMA displays several morphological possibilities in this subject, allowing the speakers to increase the valence of the verb through causative and applicative derivations (two types of applicatives) and to reduce it through reflexive and reciprocal derivations. The language also has two mechanisms that only change the diathesis (voice) of the clause without changing its valence.

Chapter 10 discusses multi-verbal predicates which occur in clauses that display more than one verb stem. Multi-verbal predicates in YMA include secondary predication, adverbial modification, serial verbs constructions and several types of highly integrated complementation constructions. In this chapter, I intend to characterize these constructions comparatively, point out the main semantic and formal differences and similarities between them.

Chapter 11 describes the expression of the five evidentiality categories found in the YMA's texts. We will see that language developed two series of words (the *k*- and the *m*- words) that take part in most of the constructions marked for an evidentiality category. These words, apart from their evidentiality meaning, are also an alternative way of expressing several verbal categories (such as tense, location and direction) for which the language has a separate and dedicated morphology, as explained in Chapter 6. I will argue that those words are actually grammaticalized relative clauses with a copular element plus the tense, location and direction morphemes found in a regular relative construction.

Chapter 12 deals with non-declarative clauses. I will describe how polarity questions and questions about the arguments of the clause are structured in the language. Manipulative speech acts, such as imperative, prohibitive and permissive, will also be discussed here.

Finally, the concluding *Chapter 13* presents a discussion of the work that still needs to be done on the description and analysis of YMA.

2. Phonological sketch

2.1. Introduction

This chapter presents a phonological sketch of YMA. Section §2.2 describes the vowel inventory and provides minimal pairs to illustrate the semantic contrast produced by the commutation of these segments. Section §2.3 deals with the list of consonants in YMA, while §2.3.2 presents lexical contrasts between consonants that are similar, either sharing the same manner or the place of articulation. I will then turn to syllable structure in §2.4, discussing the main types of syllables found in the lexicon and their distribution. In Section §2.5, I will be concerned with the placement of stress in the YMA words and sentences. We will see that stress in YMA tends to occur on the penultimate syllable of the morphological word, no matter how many morphemes are bound to a given lexical word. Allophony will be discussed in §2.6. I will first comment on three cases of allophony in §2.6.1 and §2.6.2 without semantic contrast, i.e. free variation, and then present a series of phonological processes in §2.6.3 that explain the complementary distributions of some allophonic sounds. In §2.7, I will introduce the practical orthography employed by the linguistic community, which will be the same used throughout this work. I will close this chapter with some final remarks in §2.8.

2.2. Vowels

YMA has seven contrasting oral vowels, as shown in Table 2.1.

Table 2.1 – Vowel inventory of YMA

	Anterior	Central	Posterior
High	i	ɨ	u
Mid	e	ə	o
Low		a	

Other Yanomami languages, such as Yanomamĩ (Ramirez, 1994) and Sanõma (Autuori, 2015) share the same inventory. The remaining languages of the family – Ninam (Gomez-Goodwin, 1990) and Yãroamẽ (Perri Ferreira, 2011) – have only six contrastive vowels, since the sounds [i] and [ə] seems to be neutralized. Table 2.2 and Table 2.3 present minimal or near-minimal pairs illustrating the contrast between the YMA vowels.

Table 2.2 – Vowel opposition with semantic contrast

Phoneme	Form	Gloss	Form	Gloss
a/e	pola	‘waterfall’	pole	‘ghost’
a/i	mihi	‘that’ (near hearer)	mahi	‘many, much’
a/ə	waka	‘armadillo’	wakə	‘fire’
a/i	ala	‘macaw’	ila	‘jaguar’
a/o	lape	‘long’	lope	‘fast’
a/u	taai	‘to see’	tuai	‘to plant’
e/i	amat ^h a he	‘paca’s head’	amat ^h a hi	‘Duguetia stelechantha’ (tree)
e/i	ʃeemu	‘to rush’	ʃĩmu	‘to treat as father-in-law’
e/o	oke	‘savorless’	oko	‘crab’
e/u	hela	‘bush dog’	hula	‘malaria’

Table 2.3 – Vowel opposition with semantic contrast (cont.)

Phoneme	Form	Gloss	Form	Gloss
i/ə	liai	‘to eat sb. else’s food’	ləai	‘to pour out’
i/i	kōmilajoma	‘closed’	kōmilajoma	‘shouted’
i/o	mihi	‘that’ (near hearer)	mohi	‘lazy’
i/u	ʃiipə	‘feces’	ʃuupə	‘diarrhea’
ə/i	təhə	‘when’	tihi	‘jaguar’
ə/o	pəai	‘to get sick’	poai	‘to chop’
ə/u	ləkəi	‘to pull’	lukəi	‘to enter’
i/o	jali	‘lowlands’	jalo	‘animal’
i/u	ʃiimu	‘to treat as father-in-law’	ʃuumu	‘to have diarrhea’
o/u	toai	‘to collect’	tuai	‘to plant’

In YMA, nasality is a distinctive feature and all vowels of the YMA inventory have a nasal counterpart. At the same time, the majority of the YMA words are either completely oral or nasal due to a process of bidirectional (i.e. both progressive and regressive) assimilation of the nasality. This phonological process, already noted by Ramirez (1994: 70) in Yānomamĩ, is blocked only by plosive sounds preceding the source of nasality, but even this rule seems to be contradicted by divergent pronunciations. In any event, it is thus difficult to find pairs of words that formally differ by only one nasal or oral vowel, unless we consider monosyllabic words (or even better, monosyllabic roots), like the pair of verb roots /jã/ ‘to tie’ and /ja/ ‘to roast’, or /la/ ‘to wear’ and /lã/ ‘to wake up’. However, such pairs are infrequent in the dictionary.

Table 2.4 – Contrasts between oral and nasal vowels

Phoneme	Form	Gloss	Form	Gloss
a/ã	haali	‘sick’	hããlĩ	‘father’
	hoja	‘to throw away’	hõjã	‘to hide’
e/ẽ	hee	‘bat’	hẽẽ	‘his father’
	ʃee	‘remnant’	ʃẽẽ	‘his father-in-law’
i/ĩ	hiʃa	‘to stock’	hiʃã	‘to blow (nose)’
	ʃilofĩlo	‘swallow’	ʃĩlõ	‘single, alone’
ə/õ				
i/ĩ	jĩpĩ	‘to carry’	jĩpĩ	fruit (Maprounea sp.)
	ila	‘jaguar’	ĩlãl	‘to copy’
o/õ	hoko	‘forehead’	hõkõ	‘to pass through narrow space’
	walo	‘to arrive’	wãlõ	‘man’
u/ũ	hehu	‘mountain’	hẽhũ	‘to close’
	uʃĩ	‘black’	ũũʃĩ	‘inside’

I was not able to provide a minimal pair for the vowels /ə/ and /õ/. I consider this to just be an accidental gap and do not believe that those sounds are neutralized, even though I am not entirely sure about it. On the one hand, there are several examples of nasal /õ/ in the lexikon, as in (1), which indicates that the sound has at least a phonetic reality. On the other hand, we can not be sure whether the vowels in bold in (1) are natively nasal or acquired this feature through assimilation. Moreover, we do not find lexical examples of pure nasal /õ/, such as we do find of pure oral /ə/, as in (2). We still have to do more research on this pair of sounds.

- (1) a. /sõlã/ ‘to miss a shot’/ ‘bad hunter’

¹ Speakers of some varieties in Papiu pronounce this word as /õra/.

- b. /ĩjǣ/ ‘blood’
- c. /ãtʰǣ/ ‘CLN:liana’
- d. /jãtǣǣ/ ‘to swing’
- (2) a. /təhə/ ‘when’
- b. /warə/ ‘peccary’
- c. /əlɐpə/ ‘white hair’
- d. /həlɐi/ ‘to swim’

I am not sure whether vowel length should be considered a phonological feature or not. On the one hand, two pairs of lexical items suggest that this feature has a phonological status, as shown in (3) and (4).

- (3) a. /tai/ ‘to know’
- b. /taai/ ‘to see’
- (4) a. /he/ ‘head’
- b. /hee/ ‘bat’

On the other hand, I could not find another pair contrasting only by the length of one of the vowels. Moreover, in several instances where we find geminate vowels in written texts, these segments are not pronounced as a single unit (a long vowel), but with a hiatus, frequently with the help of an epenthetic glottal stop [ʔ] in between the geminate segments, as the examples in (5) show.

- (5) a. /hããlĩ/ → [hãʔãlĩ] ‘father’
- b. /jaali/ → [jaʔali] ‘right’
- c. /hiima/ → [hiʔima] ‘dog’

- d. /puusi/ → [puʔusi] ‘sugar cane’
- e. /wəəma/ → [wəʔəma] ‘gray deer’
- f. /hoomofi/ → [hoʔomofi] ‘*Genipa americana*’

The hiatus and the epenthetic glottal stop [ʔ] in the examples above, especially (5a-e), may be explained by stress, which prototypically falls on the penultimate syllable of the words (§2.5). In any event, as a working hypothesis, I will not consider vowel length as a productive feature of YMA phonology, although more research has to be done on this topic.

The next section describes the YMA consonants.

2.3. Consonants

2.3.1. Consonantal inventory

YMA distinguishes twelve consonantal sounds at six places of articulation, as given in Table 2.5.

Table 2.5 – The consonant inventory of YMA

	Bilabial	Alveolar	Postalveolar	Palatal	Velar	Glottal
Plain Stop	p	t			k	
Aspirated Stop		t ^h				
Fricative		s	ʃ			h
Approximant	w			j		
Lateral Approximant		l				
Nasal	m	n				

The YMA consonant inventory is typologically interesting in that it has no contrast between voiced and voiceless sounds, i.e. the glottal state is not a distinctive feature for any consonantal sound. Moreover, all occlusive consonants can be realized as voiced or voiceless sounds indistinguishably, though this allophony is not very frequent with the velar stop /k/.

The contrast between voiced and voiceless consonants is one of the features of Portuguese phonology with which Yanomama speakers struggle most, and this is not restricted to stop sounds. Even advanced bilingual speakers have severe difficulties distinguishing sounds that only differ by the vibration of the vocal cords.

Consonant sounds can only appear in the onset position, except the approximant sounds /w/ and /j/, which can occupy either the onset or coda positions, as discussed in §2.4 below.

It is worth mentioning the relatively high number of coronal segments in the inventory. There are six segments of this type of sound, which represents half of the consonantal phonemes of the language.

As a final comment, other varieties of the Yanomam group may display a slightly different consonantal inventory. The varieties of Yanomae from Demini, Toototopi, and Missão Catrimani, for instance, has three aspirated sounds (one more than YMA) – /h/, /t^h/ and /h^w/. Some of the words pronounced [h] in YMA are pronounced [h^w] in Yanomae. Some varieties of the Surucucus region seem to have /f/ instead of /h^w/ in their inventory. I am not sure, nevertheless, whether these differences are phonemic or phonetic, and more research on those other varieties is still needed. In any event, the sounds [h^w] and [f] are neither phonemes nor allophones in YMA and seem to be completely neutralized by the phoneme /h/ in this variety.

2.3.2. Consonantal contrasts

In this section, minimal or near minimal pairs demonstrate the contrastive opposition of the consonants listed in Table 2.5. I will contrast in turn sounds similar in their manner of articulation (stops, fricatives, approximants and nasals) and in their place of articulation. Table 2.6 presents contrasts between the four stop consonants of YMA, including the aspirated alveolar stop /t^h/.

Table 2.6 – Contrasts between stop consonants

Phoneme	Form	Gloss	Form	Gloss
p/t	pəai	‘to get sick’	təai	‘to take’
	poai	‘to chop’	toai	‘to collect’
p/k	pihi	‘thought’	kihi	‘that’
	təpəa	‘to sit (on a hammock)’	təkəa	‘to sit (on a stool)’
p/t ^h	poko	‘arm’	t ^h oko	‘cough’
t/k	talomai	‘to deepen’	kalomai	‘to open’
t/t ^h	tai	‘to know’	t ^h ai	‘to do, to make’
k/t ^h	pəka	‘hole’	pə ^h a	‘rope’
	maka	‘stomach’	ma ^h a	‘leg’
	komii	‘to shout’	t ^h omii	‘to steal’

The contrasts between fricative sounds are presented in Table 2.7.

Table 2.7 – Contrasts between fricative consonants

Phoneme	Form	Gloss	Form	Gloss
s/ʃ	siki	‘skin’	ʃiki	‘intestine’
s/h	si	‘cln:palm.tree’	hi	‘cln:tree’
ʃ/h	ʃama	‘tapir’	hama	‘guest’

Table 2.8 contrasts the three approximant sounds of the language.

Table 2.8 – Contrasts between approximant consonants

Phoneme	Form	Gloss	Form	Gloss
w/j	wamaki	‘you (pl)’	jamaki	‘we (pl)’
	wakəi	‘to ripen’	jakəi	‘to mistake’
w/l	walomai	‘to make arrive’	lalomai	‘to reproduce’
	wəai	‘to explain’	ləai	‘to pour out’
j/l	jāā	‘tied’	lāa	‘awake’
	hojai	‘to throw away’	holai	‘to blow’(person)

The contrasts between nasal consonants are provided in Table 2.9.

Table 2.9 – Contrasts between nasal consonants

Phoneme	Form	Gloss	Form	Gloss
m/n	mohi	‘lazy’	nohi	‘friend’
	maka	‘stomach’	naka	‘vagina’

Finally, Table 2.10 contrasts the two aspirated sounds in YMA.

Table 2.10 – Contrasts between aspirated consonants

Phoneme	Form	Gloss	Form	Gloss
t ^h /h	t ^h ai	‘to do, to make’	hai	‘to come out’
	t ^h oko	‘cough’	hoko	‘forehead’

The next tables provide minimal or near-minimal pairs of words with consonants sharing the same place of realization. I have chosen only three groups of consonants based on this criterion: Table 2.11 contrasts the bilabial consonants, produced by the lips, and Table 2.12 the sounds produced with the help of the dorsal part of the tongue.

Finally, Table 2.13 contrasts the coronal consonants, including both alveolar and post-alveolar sounds. According to the criterion of place of articulation, the glottal fricative does not regroup with any other sound of the language.

Table 2.11 – Contrasts between bilabial consonants

Phoneme	Form	Gloss	Form	Gloss
p/m	pihi	‘thought’	mihi	‘that’ (near 2)
	poko	‘arm’	moko	‘girl’
p/w	paʃo	‘bearded saki’	waʃo	‘spectral bat’
m/w	mārō	‘bone’	wālō	‘man’

Table 2.12 – Contrasts between dorsal consonants

Phoneme	Form	Gloss	Form	Gloss
l/w	mālō	‘bone’	wālō	‘man’

Table 2.13 – Contrasts between coronal consonants

Phoneme	Form	Gloss	Form	Gloss
t/t ^h	tai	‘to know’	t ^h ai	‘to make’
t/s	tipole	‘circle’	sipo	‘outside’
t/ʃ	patai	‘to get old/big’	paʃai	‘to carve’
t/n	talei	‘to rot’	nalei	‘to beg (food)’
t/l	talomai	‘to deepen’	lalomai	‘to reproduce’
t ^h /s	t ^h āihī	‘taut’	sāihī	‘mildly cold’
t ^h /ʃ	t ^h uwə	‘woman’	ʃuwə	‘swollen’
t ^h /n	t ^h athē	‘daughter-in-law’	nat ^h ə	‘egg’
t ^h /l	t ^h oko	‘cough’	loko	‘type of banana’
s/ʃ	siki	‘skin’	ʃiki	‘intestine’
s/n	sokāāmu	‘to have sex’ (vulg.)	nokāāmu	‘to follow’
s/l	asa	‘brother’ ♀ego	ala	‘macaw’
ʃ/n	ʃāāihī	‘father-in-law’	nāāihī	‘mother’
ʃ/l	ʃōmi	‘different’	lōmi	‘extremely thin’
n/l	nasi	‘bladder’	lasi	‘flat’

Contrasting /s/ with other sounds was not an easy task. The contrastive pair between /s/ and /t^h/ was the only one found in our YMA dictionary. The pair contrasting /s/ and /t/ is only near-minimal, as *sipo* and *tipole* do not have the same number of syllables. One reason for this difficulty resides in the heterogeneous distribution of the sound /s/. Table 2.14 shows that in 79% of the cases, /s/ combines with /i/. That is, the syllable /si/ is overwhelmingly more frequent than other syllables with /s/ as onset, while the syllable /t^hi/ is not attested in the language.

Table 2.14 – Distribution of simple onsets according to the nucleus vowel²

	*_[V]	*_a	*_e	*_ə	*_o	*_i	*_ĩ	*_u
[C]	20853	7107	1495	1732	2838	3658	1289	1814
h	3085	696	488	135	473	805	129	359
l	2668	586	369	135	349	833	110	286
m	2663	1668	13	10	440	139	96	297
t	2632	638	218	372	422	652	86	244
k	2523	640	135	126	547	198	585	292
p	1576	364	64	380	234	304	80	150
ʃ	1210	265	54	39	127	617	22	86
j	1109	623	26	98	246	1	15	100
w	928	750	62	116	---	46	11	---
n	926	501	6	65	162	63	129	---
t ^h	789	317	34	253	185	---	9	9
s	744	59	26	3	9	587	17	43

Migliazza (1972: 39) put forward the hypothesis that [s] and [t^h] are in complementary distribution in Yanomam, and that the segment [s] is not phonemic in the language.³ He attributes to lexical borrowings from European languages the few examples of words with syllables that have [s] as onset and a vowel different than [i] as nucleus. For example, the word /sapa/ ‘hoe’ is a borrowing from the Italian word *zappa*⁴. I tend to disagree with Migliazza and consider it a case of contrast with little

² Disregarding its oral or nasal status.
³ Migliazza uses the Yanomam variety from Palimiu as language of reference.
⁴ Probably via catholic missionaries.

productivity since I do found examples in the YMA dictionary of words with that phonological configuration that do not seem to be product of borrowing, such as /sāi/ ‘cold’, /sāihi/ ‘mildly cold’⁵, /hesaka/ ‘nape’, /asa/ ‘brother’, /ase/ ‘son’, /suhai/ ‘to swallow’, /sulai/ ‘to throw up’ and some others. But these words are indeed rare, as Table 2.14 shows.

Looking at other languages, the picture is however different. In Sanuma the segment [s] is in complementary distribution with the segment [ʃ] (Autuori, 2015). In Yãroamë, this sound [s] is in free variation with the sound [ʃ], which is in turn in complementary distribution with [x] (Perri-Ferreira, 2011). Yãnomami does not have a phoneme /tʰ/, which seems to have been neutralized in most contexts with /t/ and in few other with /s/. Interestingly, the segment /s/ is still the less frequent one in that language, corresponding to only 1.49% of the all consonantal realizations in the language (Ramirez, 1994: 63). Given the information we have on the inventory of other Yanomami languages, and even though this segment is a phoneme in YMA, Migliazza’s hypothesis still makes sense from a diachronic perspective.

It should also be noted in Table 2.14, the absence of the syllables /wo/ /wu/ and /nu/ and that there is a single example of /ji/. The limited (or inexistent) productivity of some of these syllables (namely /wo/, /wu/ and /ji/) is probably due to a restriction based on the coincident articulatory features of the consonants and vowels of these syllables. I do not discard a possible neutralization with other syllables but the data available so far is not conclusive.

2.4. Syllable structure

By far, the most common syllable in YMA is [CV], corresponding to approximately 71% of the syllables found in the YMA dictionary, followed by the syllable types [CVC] (15%) and [V] (10%). The remaining syllable types ([CCV], [CCVC] and [VC]) are much less frequent (4%).

⁵ Which contrasts precisely with tʰ, as we saw in Table 2.13.

Table 2.15– Syllable types distribution

[CV]	[CVC]	[V]	[CCV]	[CCVC]	[VC]	TOTAL
17309	3618	2550	323	350	307	24457
70.8%	14.8%	10.4%	1.3%	1.4%	1.2%	

There are very few consonant clusters in YMA. They are found exclusively in the onset position of the syllable, and none of them have more than two consonants. These clusters are definitely not productive throughout the lexicon and the morphology of the language, representing only 3.1% of the total of the consonantal onsets found in our YMA dictionary. In Table 2.16, I present the distribution of the two types of consonantal onsets in YMA.

Table 2.16 – Consonantal onset types distribution

	*_[V]	
[C]	20928	96.9%
[C][C]	673	3.1%
TOTAL	21601	

There are four types of consonant clusters, and they include the liquid /l/ in second position (or the tap /ɾ/, see discussion §2.6.2): /pl/, /kl/, /hl/, and /ml/. Apart from the derivative morphemes =*pla* and =*plo*, which can be attached to virtually all verbs and even some nouns, consonant clusters are not part of the YMA morphology and are restricted to very few lexical examples. Table 2.17 shows the high frequency of /pl/ compared to the others clusters.

Table 2.17 – Distribution of complex onsets according to the nucleus vowel

	*_[V]	*_a	*_e	*_ə	*_o	*_i	*_ĩ	*_u
[C][C]	673	391	49	15	43	14	9	152
pl	562	350	18	8	29	8	2	147
kl	77	18	31	5	14	4	2	3
hl	17	17	---	---	---	1	5	---
ml	3	3	---	---	---	---	---	---

Note that the cluster /*ml*/, for instance, appears exclusively with the vowel /a/ and only in three words, which actually share the same root *mlaka*(*mlaka*) ‘sand.’ The cluster /*hl*/ also has a lot of blank cells in the distribution chart. In Table 2.18 and Table 2.19, I present examples of lexical morphemes that display at least one consonantal cluster.

Table 2.18 - Lexemes with consonantal clusters /pl/ and /kl/

/pl/			/kl/		
	plaha	‘far’		klepu uhi	‘inga tree’
	ploke	‘empty’		əkləkə	‘crumpled (fabric)’
	plohe	‘loose’		klokekloke	‘cloud’
	plika	‘chili’		krãakrãa	‘kite’
	plee	‘also’		klaia	‘catterpillar’
	epruku	‘breeze’		kliit ^h ama	‘bird sp.’
	kaloplai	‘to open’		klipi	‘palm-fruit sp.’
	ʃiwariplu	‘always’		klukukuma namo	‘owl sp.’

Table 2.19 - Lexemes with consonantal clusters

/ml/	mlakamlaka	‘sand’	/hl/	hlake	‘slippery’
	mlaka nahi	‘tree sp.’		hlāme	‘spicy’
	mlakamlaka	‘sieve’		hlārē	‘yellow’
	pə laekatima			hlihlimima si	‘bird sp.’
				hlāa	‘to burn (eyes)’

All Yanomami languages except YMA and Yanomami lack these clusters. YMA and Yanomami seem to be conservative rather than innovative, because the other languages have preserved different parts of the consonantal clusters. For instance, Sanuma and Yāroamē have reduced the cluster /pla/ to /pa/, the varieties of Ninam have reduced it to /la/.

2.5. Word and prosodic stress

Stress is not a distinctive feature of the YMA lexical phonology: no pair of words contrasts only by the syllable on which stress falls. We will see below that stress does play a role at the prosodic level, though, helping to distinguish between declarative and question clauses. Except for a few noteworthy exceptions discussed later, the stress tends to fall on the penultimate syllable at the lexical level. This tendency applies both to morphologically simple items, such as roots, and to more complex ones, such as derived or inflected stems. This section illustrates the prototypical stress placement in YMA, first within the nominal domain of the lexicon and the morphology, and then within the verbal domain. In (6), we have some simple monomorphemic lexical words. Those are nouns of Type 1, i.e. they do not take a noun classifier (see Chapter 4, §4.2). The length of lexical roots in YMA rarely exceeds four syllables. Items with five or more syllables usually are inflected or derived forms, reduplications or borrowings and words such as *hājōkō* ‘*loma*’ ‘axe’ in (6h) are very

uncommon. Stress is represented by <'> before the stressed syllable, which is in bold as well.

- (6) a. /'t**i**·hɪ/ 'jaguar'
 b. /'a·l**a**/ 'macaw'
 c. /'w**a**·lõ/ 'man'
 d. /'t**h**u·wə/ 'woman'
 e. /ʃa·'l**a**·ka/ 'arrow'
 f. /ko·'l**a**·ha/ 'banana'
 g. /ho·lo·'k**o**·tʰo/ 'calabash'
 h. /hã·jõ·kõ·'l**o**·ma/ 'axe'

In (7), we have a different type of noun – nouns with noun classifiers. These nouns are morphologically complex units made up of one free morpheme – much like the lexical items presented in (6) – and a noun classifier, which is a clitic in YMA. In the examples below the noun classifiers are =*tihi* CLN:tree (7a), =*koko* CLN:round and black (7b), =*hi* CLN:circular (7c), =*hu* CLN:circular⁶ (7d), =*si* CLN:palm-tree (7e), and =*thuku* CLN:cotton (7f). The forms that precede the classifiers are mono-morphemic free words. The nouns with classifiers (free word plus classifier) constitute phonological units in the language. Following the tendency of the language, the stress always falls on the penultimate syllable. Note that in (7b) and (7c) the free morpheme is the same for both words (*naxi* 'cassava products'). While in (7c) the stress falls on the free morpheme because the classifier is monosyllabic, in (7e) it appears outside of it, on the disyllabic noun classifier. Some of the words below also display secondary

⁶ The forms =*hi* and =*hu* are allomorphs.

stress, which I will not consider in this study. More detailed investigation on this topic still needs to be done.

- (7) a. /huu·'ti·hi/ 'tree'
 b. /na·fĩ·'ko·ko/ 'cassava root'
 c. /na·'fĩ·hi/ 'cassava pancake'
 d. /fũ·'ũ·hu/ 'river shrimp'
 e. /ko·la·'ha·si/ 'banana tree'
 f. /rã·ka·ma·'tʰu·ku/ 'hammock'

There are other kinds of nominal clitics than noun classifiers, and they can combine in sometimes long strings of clitics (see Chapter 3, §3.4.1). These series (or clusters, as I prefer to call them) are more evident with verbal clitics since they are much more numerous and diverse. In the nominal phrase, the string tends to have fewer elements. In any event, in (8) I present the same words of (7) but with more clitics attached to them⁷. In all these complex nominal phrases, the stress still falls on the penultimate syllable.

- (8) a. /huu·ti·'hi·pə/ 'trees' (+plural =*pə*)
 b. /na·fĩ·ko·ko·'pə·ha/ 'cassava roots' (+plural =*pə*, +oblique marker =*ha*)
 c. /na·fĩ·'hi·ni/ 'with the cassava pancake' (+instrumental =*ni*)
 d. /fũ·ũ·'hu·fo/ 'also the river shrimp' (+additive case marker =*fo*)
 e. /ko·la·ha·'si·ha/ 'in/to the banana tree' (+oblique case marker =*ha*)

⁷ As explained in Chapter 3 (§3.4.1), the term “clitics” refer to bound morphemes loosely attached to the free word, in the sense that other morphemes (also clitics) can appear in between them.

f. /rã·ka· ma·tʰu·'ku·ha/ 'in/to the hammock'(+oblique case marker =*ha*)

There are at least three exceptions to the penultimate stress pattern. The first one to be explored is the singulative morpheme =*a*, which is a clitic, like the other bound morphemes mentioned before. When this is the sole morpheme that is attached to the free word, the stress of the word falls inevitably on the last syllable, which is the singular morpheme itself. This is an significant exception, since most nouns take this morpheme, like the Type 1-nouns illustrated earlier in (6) and below in (9)

- (9) a. /ti·hi·'a/ 'a jaguar'
 b. /a·la·'a/ 'a macaw'
 c. /wa·lõ·'a/ 'a man'
 d. /tʰu·wə·'a/ 'a woman'

The second exception is the morpheme that marks different participant =*e*, for instance in possessive constructions in which the possessor is a 3rd person singular. This morpheme also attracts word stress when it is the only enclitic of the nominal phrase as shown in (10).

- (10) a. /ʃa·la·ka·'e/ 'his arrow'
 b. /ko·la·ha·'e/ 'her banana'
 c. /ho·lo·ko·tʰo·'e/ 'her calabash'
 d. /hã·jõ·kõ·lo·ma·'e/ 'her axe'

The third exception is the noun classifier =*u* used with nouns to refer to liquid materials. Nouns taking the classifier =*u* are also stressed on the ultimate syll if no other clitic follow the classifier..

- (11) a. /maw·'u/ 'water'
 b. /ko·la·ha·'u/ 'banana porridge'

Note that the three exceptions described are caused by monosyllabic, onset-less morphemes. There is still a fourth exception caused by the trisyllabic classifier =*kohiu*, exclusively used with cassava beer, as in (12).

- (12) /na·ʃi·ko·hi·'u/ 'cassava beer'

I am not sure about the full etymology of this classifier, but its segment *u* is probably the noun classifier for liquids combined with another classifier =*kohi*, which is synchronically opaque. If this analysis proves correct, the stress on the last syllable follows what is observed with monosyllabic and onsetless classifiers, i.e. they are stressed when in the final position of the noun phrase.

As mentioned earlier, these three clitics attract the stress if and only they are the last one of the nominal phrase. If they are followed by other clitics, then they no longer attract the stress which then falls on its prototypical penultimate position. Example (13) illustrate the same words as in (12) with additional enclitics.

- (13) a. /ti·hi·'a·ni/ 'a jaguar' (+ergative =*ni*)
 b. /a·la·a·'ha·mi/ 'to the macaw' (+oblique =*hami*)
 c. /wa·lõ·a·'li·fo/ 'with the man' (+reverential =*li* +commitative =*fo*)
 d. /tʰu·wə·a·li·'ha·mi/ 'to the woman' (+reverential =*li* +oblique =*hami*)
 e. /ʃa·la·ka·'e·fo/ 'with his arrow' (+additive =*fo*)
 f. /ko·la·ha·e·'pə·ni/ 'with her bananas' (+plural =*pə*, +instrumental =*ni*)
 g. /ho·lo·ko·tʰo·e·'pə·ha/ 'in/to her calabashes' (+plural =*pə*, +oblique =*ha*)
 h. /hã·jõ·kõ·lo·ma·e·'pə·fo/ 'with her axes' (+plural =*pə*, +additive =*fo*)

The same rule applies to the noun classifier =*u* (and the related =*kohiu*). When other enclitics appear after it, the stress on the penultimate syllable is obligatory, as we can see by the examples in (14) and (15).

- (14) a. /maw·'u·ha/ 'in the water' (+oblique =*ha*)
 b. /ko·la·ha·'u·ni/ 'with banana porridge' (+instrumental =*ni*)
- (15) /na·ʃi·ko·hi·u 'pə ʃo/ 'with cassava beers' (+plural =*pə*, +additive)

I have discussed the patterns for stress within the nominal domain and its interaction with nominal morphology. The fact that the free and bound morphemes share the same primary stress will be used in the next chapter as a main piece of evidence for analyzing them as a phonological unit and for grouping all nominal morphemes together in the same string or cluster of clitics.

Let us move to the verbal domain. the first difference concerns the existence of monosyllabic roots. With few exceptions, monosyllabic nominal roots are restricted to body part terms, which are not free morphemes in the language, but clitics. By contrast, tonic, monosyllabic verb roots are very frequent. As a consequence, the stress falls on the only available syllable. In (16), I provide some examples of stressed monosyllabic verbal roots.

- (16) a. /'pla/ 'to lie'
 b. /'lo/ 'to squat'
 c. /'lā/ 'to awake'
 d. /'ke/ 'to fall'
 e. /'xə/ 'to hit'
 f. /'a/ 'to go'

In polysyllabic roots, the stress occurs on the penultimate syllable, as illustrated in (17).

- (17) a. /'tə·kə/ 'to sit'
 b. /'no·ma/ 'to die'

c. /'pɪ·li/ 'to lie on the hammock'

d. /'hɔ·re/ 'to crawl'

e. /hɔ·'fɪ·mi/ 'to be ugly/bad'

f. /to·'tɪ·hi/ 'to be nice/good'

Stress still falls on the penultimate syllable when these roots become stems (with or without derivation) and are inflected. Contrary to nouns, verbs can host bound morphemes on both sides (see Chapter 3, §3.4.1.2). In (18), the verbal roots presented in (16) are inflected.

(18) a. /a=·'pla·=a/

3SG= lie =POST

'She is lying.'

b. /pə=·'lɔ·=a/

3PL= squat =POST

'They are squatting.'

c. /a=·'ke·=ma/

3SG= fall =PST

'It fell.'

d. /a=·lã·=la·'jo·=ma/

3SG= go =PRF =PST

'He woke up.'

e. /a=·xə·='i·=he/

3SG= beat=DYN=3PL

'They are beating him.'

f. /a=·a·=la·jo·=hu·'lu·=ma/

3SG= go =PRF =AND =PST

‘She went away.’

Note that in (18d-f) stress appears outside the verbal root/stem. This is quite common in YMA, since its verbal morphology is highly polysynthetic. In (18f) there are three morphemes after the verbal stem. In (19), I provide some more examples with verbs inflected/derived by multiple morphemes. Note that this cases confirms the rule of the stressing the penultimate syllable.

(19) a. /ja=·tʰə=·pə=· tə·kə· =ma·='ke·=ma/

1SG= CLN.GEN= PL= lie =CAUS=PRF=PST

‘I made them sit.’

b. /pə=·no·ma·=rajo·=ha·la·'yo· =ma/

3PL= die =PRF=LOC:upriver=PST

‘They died upriver.’

c. /pə=·pi·li·=ma·=ke·=kili·'=**ma**·=he/

3PL= lie_in_hammock =CAUS =PRF=LOC:downriver=PST=3SG

‘They made them lie in the hammock downriver’ (i.e. ‘They made them move in downriver’) (‘lay in the hammock’ = ‘live in a place’)

As mentioned before, one would expect a secondary stress to appear in these long strings of morphemes, but this falls outside of the scope of this phonological sketch. Note that examples in (19) are not only inflected verbs, but they also constitute fully grammatical clauses. Chapter 3 shows that about half of the clauses in our sample are of this type, that is, without explicit nominal phrases (see §3.3 and also §7.3). From this observation, we can expect that the general stress of the noun-less clauses logically coincides with the stress of the verbs. That is indeed what happens. Moreover, since verbs prototypically go in the last position of the clause (whether in clauses without a noun phrase or not), the penultimate stress pattern is also repeated when there are nominal phrases in the clause. This is valid for every declarative clause in which no element is being focalized or topicalized. The study of prosodic stress in these contexts will be subject of future work.

It is important to remind that the stress pattern described in this section only apply to declarative clauses. As will be discussed in Chapter 12, non-declarative sentences, such as imperative, permissive and interrogative constructions display another stress pattern, and the stress falls on the last syllable of the clause. All interrogative words and particles that occupy a final position in the clause (= '*ʔa*, *ku'ha*, *ku'le*, *ku'la*, *kupe'le*...) attract prosodic stress (§12.3). The same occurs with permissive =*xa* which also appears in the final position and is stressed (§12.3.2). Imperative constructions are formed with the help of the perfective markers, which also attract the stress to the last syllable in the context of imperative constructions (§12.2.1).

We will now move to discussion of allophonic sounds in YMA.

2.6. Allophony

This section investigates allophony in YMA. I will start with allophones in free variation, whose appearance is apparently not phonologically conditioned. In §2.6.1, I will deal with the pairs of allophones [p] ~[b] and [t] ~[d] and also discuss the implications of the lack of contrast based on the glottal state for other segments of the language that do not display such variation. In 2.6.2, I will comment on the free variation between [r] ~[l]. In §2.6.3, I will describe nine cases of allophones in complementary distribution.

2.6.1. Free variation between voiced and voiceless consonants

As mentioned above, in YMA the glottal state [\pm voiced] is not a distinctive feature for any pair of phonemes. Moreover, at least two phonemes seem to be realized either voiced or voiceless, that is, they have two allophones in free variation. Those phonemes are /p/ and /t/, pronounced as [p] or [b], and [t] or [d]. While the [-voiced] version occurs more frequently in the beginning of word and simple onsets, the [+voiced] counter-part of the phonemes tends to appear more frequently in In consonant cluster and intervocalic contexts, but several counter-examples suggest that even in those contexts there is free variation. There is also a great amount of

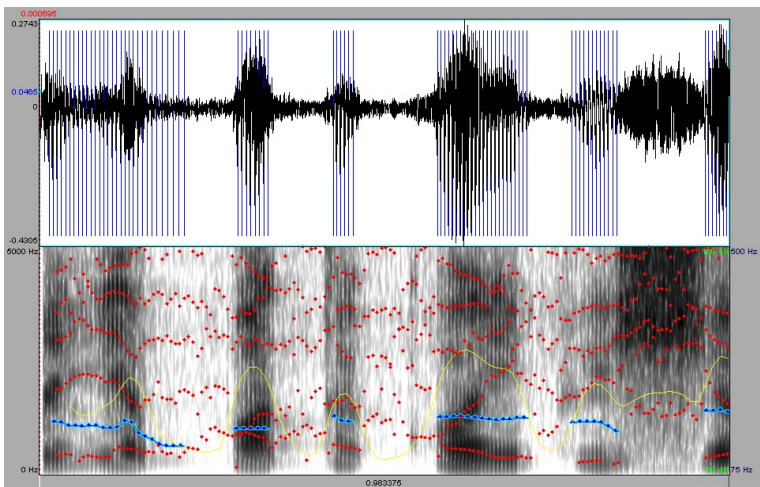
idiosyncratic behavior in this variation, that is, some speakers seem to pronounce one allophone more than the others in a particular context. This idiolectal heterogeneity may reflect the different origins of the inhabitants of Papiu and their ancestors, with some people coming from Venezuela, some from the Catrimani region and some from different regions of the Surucucu (Maraxiu, Haxiu, Parahuri, ...). A detailed sociolinguistic survey on this issue may shed light on this issue. At the moment, the attempt to systematize the allophonic distribution of those morphemes at the dialectal level and based exclusively on the surrounding context proved frustrating.

The spectrograms below illustrate the free variation of those phonemes in intervocalic contexts, in the middle of utterances. For the phonological representation of the phonemes, which may have voiceless and voiced counterparts, I have chosen the voiceless forms, since they are less marked, acoustically simpler and more common in the languages of the world, but this should not imply that they are the most frequent allophone in the language.

A. /p/ → [p] ~ [b]

The first two spectrograms show two distinct realizations of the word *pata* ‘greatly’ by the same speaker in the same recording. In Spectrogram 1, the complete interruption in the vibration of the vocal cords proves that the phoneme /p/ is being pronounced [p], while in Spectrogram 2.2, the vocal cords keep vibrating showing that the same segment is now realized [b].

Spectrogram 2.1

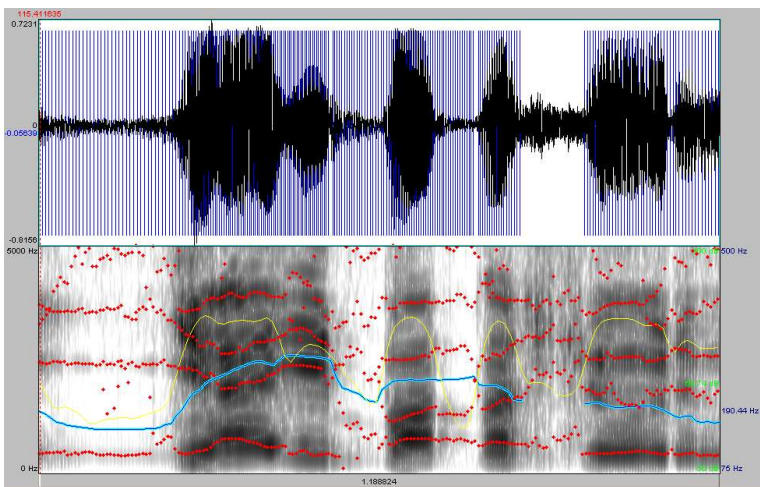


(20) [j a p a t a k o^h i p h i ʃ i o]

Phonological form: /ja pata kohipə hifio/

Translation: ‘I am greatly and strongly upset’. (m003_mau_gari)

Spectrogram 2.2



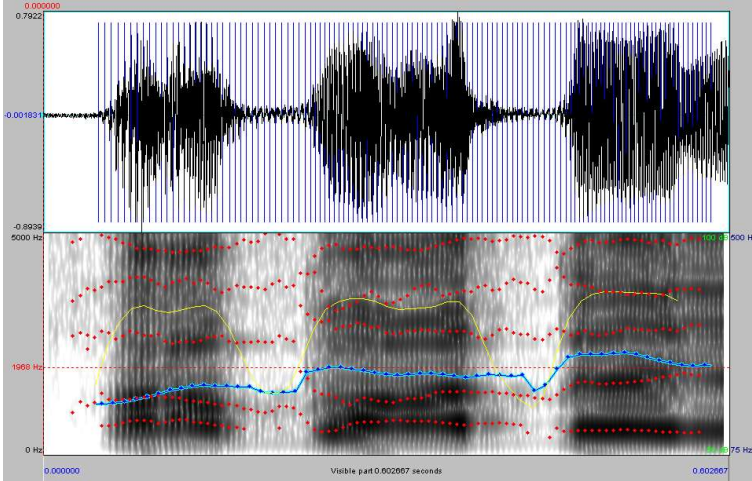
(21) [j e j b a d a ʃ u^h u r i]

Phonological form: jəj pata fuhuli

Translation: ‘[I am] really sad. (m003_mau_gari)

B. /t/ → [t] ~ [d]

Spectrogram 2.3

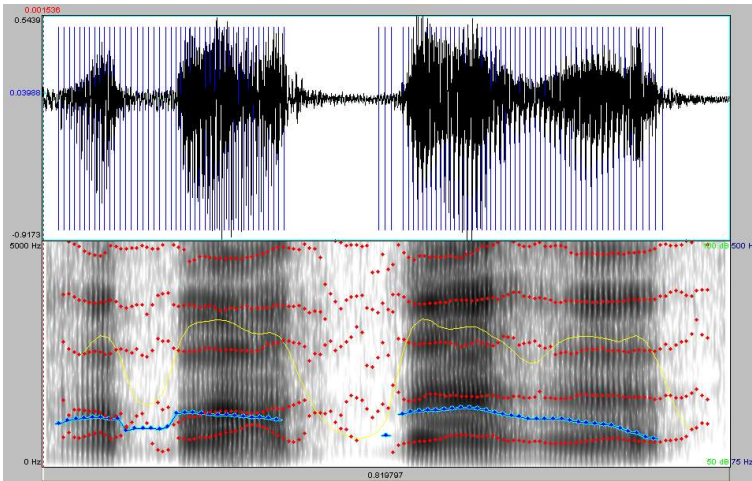


(22) [h a b a: d ə h ə]

Phonological form: /hapaa təhə/

Translation: ‘Erstwhile’. (lit. ‘When-before’) (m003_mau_gari)

Spectrogram 2.4

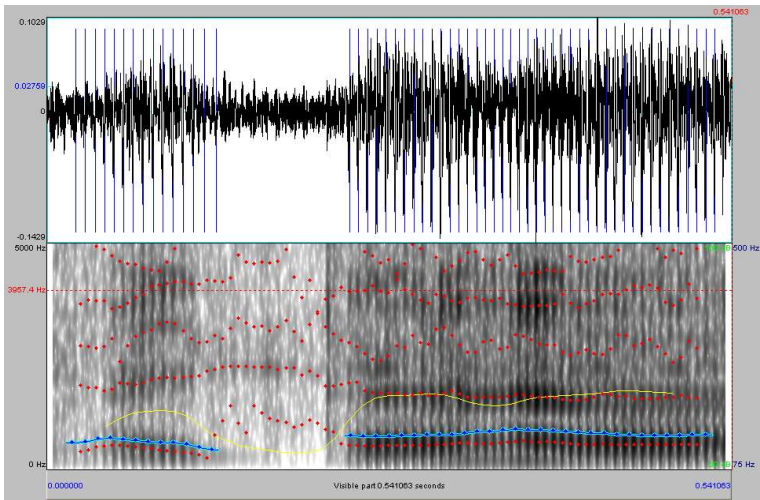


(23) [h a b a: t ə (h) ə]

Phonological form: /hapaa təhə/

Translation: ‘Erstwhile’. (m003_mau_gari)

Spectrogram 2.5



(24) [h e j t ə h ə]

Phonological form: /hej təhə/

Translation: ‘Today’. (m003_mau_gari)

The three spectrograms above show three realizations of the time conjunction *təhə* ‘when’, still by the same speaker and in the same recording.

It is worth mentioning that this variation is attested with the other occlusive consonant /k/, which never seems to be realized as [g]. No other consonants of the YMA inventory are affected by this variation in the glottal state, i.e. /ʃ/ o /s/ never appear as [ʒ] or [z], even though the native speakers struggle to distinguish those sounds in Portuguese or Spanish as much as with the occlusive sounds. That is, even though the speakers always pronounce those phonemes as voiceless, they interestingly do not have their acoustic perception entrained to distinguish sounds based only on this feature [±voiced]. Moreover, I conducted an informal experiment with several speakers in which I pronounced the consonants of several YMA words emphasizing the feature [+voiced], even in sounds regularly pronounced [-voiced], like the fricative sounds. For instance, I pronounced [ʒiga] instead of [ʃika] for the word /ʃika/ ‘corner’, and [zihĩ] instead of [sĩhĩ] for the word /sĩhĩ/ ‘scorpion’. None of the speakers that

took part in the experiment were able to spot the difference or said that the word was badly pronounced.

2.6.2. Free variation between lateral approximant [l] and alveolar tap [ɾ]

Those two sounds may also be considered in unrestricted free variation (#_ V, V_V, C_V; there is no [ɾ] or [l] in coda position). In our sample, we can hear a strong preference among speakers to pronounce [l] when it is at the beginning of word and [ɾ] when it is in the middle (intervocalic) position. This impression led us to assume initially that those sounds were in complementary distribution ([l] in the initial position and [ɾ] for intervocalic, and probably also vowel-conditioned) but a lot of counter-examples made us abandon this hypothesis. I also recognize that this can be at least partially explain by idiolectal (or dialectal) variation since there is a clear individual preference for pronouncing one or the other sound. In any event, I was not able to systematize this variation in a rule, and thus those allophones are still considered to be in free variation. In the examples in (25) we have four words illustrating this phenomenon.

- (25) a. /jalo/ → [jalo] ~ [jalo]
 ‘animal’
- b. /lope/ → [rope] ~ [lope]
 ‘quick’
- c. /laʃasi/ → [rasasi] ~ [lasasi]
 ‘peach-palm-tree’
- d. /plope/ → [proke] ~ [ploke]
 ‘empty’

I have temporarily chosen the form /l/ instead of /ɾ/ to represent the phoneme based on the criterion of typological frequency. The segment /l/ is more frequent in the languages of the world than /ɾ/: The PHOIBLE online repository indicates that 66% of the languages have the alveolar lateral approximant /l/ in their inventory,

against only 31% that has the alveolar flap /ɾ/ (Moran, McCloy, and Wright, 2014)⁸. As a secondary criterion, I also considered that /l/ is allegedly learned by the children much earlier than /ɾ/ (Arrellanes, 2003), which suggests a greater articulatory and acoustic simplicity of /l/ in comparison to /ɾ/. More investigation has to be done, nevertheless, on the behavior and properties of this segment in the language (using spectrographic analysis, with a greater sample and taking into account the specificities of language acquisition in YMA) to determine with certainty whether the sounds [ɾ] or [l] are really in free variation and which one should be considered the phonemic form.

2.6.3. Phonological processes

This section presents some of the phonological processes found in YMA. Several ones are actually morphophonological in nature: they affect a limited set of bound morphemes, or only take place in specific morpheme combinations. As will be shown in Chapter 3 (§3.4.1), most bound morphemes in the language are clitics and can combine in sometimes long strings, which I call (clitic) clusters. Some clusters are restricted to nouns and others verbs. Since many of the phonological processes described in this section affect only the clitics of the same cluster, understanding the scope of these operations is critical to understand the boundaries of the clitic clusters, which, in turn, helps us to have better parameters to distinguish nouns from verbs in YMA.

2.6.3.1. Anticipatory weak lowering of the high vowel in bound morphemes

This phonological process applies to most bound morphemes. It is a regressive assimilation of vowel height: the non-central high vowels /i/ and /u/ of some bound morphemes (especially verbal morphemes) become mid vowels [e] and [o] when in contact with bound morphemes whose first vowel is not a high vowel, such as the past and future markers =*ma* and =*pə*. The bound morphemes affected by this process are

⁸ Maddieson (1984: 73-90) calculations points to 38.58% as having /l/ and 20.18% as having /ɾ/.

the aspectual morphemes (*=rayu*, *=ri* and *=ki*), the locational morphemes (*=tayu* and *=harayu*), the reciprocal (*=yu*) and the intransitivizer (*=mu*). Examples (26b) and (27b) illustrate this process, while examples (26a) and (27a) show the same morphemes without any phonological change.

(26) a. /wakə wa= a= t^ha =**ki**/ → [wakə wa=a= t^ha =**ki**]

fire 2SG= 3SG= make =**PRF**

‘Light the fire!’

b. /wakə ya= a= t^ha =**ki**=ma/ → [wakə ya= a= t^ha =**ke**=ma]

fire 2SG= 3SG= make =**PRF** =**PST**

‘I lit the fire.’

(27) a. /ja= haali =**mu**=i/ → [ja= haali =**mu**=u]

1SG= be_sick =**INTRS** =**DYN**

‘I am getting sick.’

b. /ja= haali =**mu**=pə/ → [ja= haali =**mo**=pə]

1SG= be_sick =**INTRS** =**FUT**

‘I will get sick.’

This process is not restricted to segments separated from each other, like in (26) and (27), where there is a consonant in between the two vowels involved in the process. The example in (28) shows that morphemes that do not present a consonantal onset, such as the perfective vowel *=a*, which used in serial verbs constructions, are also able to produce this phonetic change in bound morphemes with a high vowel.

(28) /ja= haali =**mu**=a hat^hō =laju/ → [ja= haali =**mo**=a hat^hō =laju]

1SG= be_sick =**INTRZ** =**PRF.VWL** perhaps =**PRF**

‘I will get sick.’

Interestingly enough, this process does not affect the central high vowel /i/. In (29), we have an example with the locational morpheme *=kiri* ‘downriver’ illustrating this property.

- (29) /ja= haali =mu =**kili**=ma/ → [ja= haali =mu=**kili**=ma]
 1SG= be_sick =INTRZ =LOC:**downriver** =PST
 ‘I got sick downriver.’

Free morphemes that end in non-central high vowel are not affected by this process either, as shown by the example (30).

- (30) a. /ja= heri =ma/ → [ja= heri=ma]
 1SG= sing =PST
 ‘I sang.’
 b. /tʰə=noã= wafu =ma=he/ → [tʰə= wafu=ma=he]
 CLN.GEN= V.PTC= explain =PST =3PL
 ‘They explained it.’

This phonological process can be represented as in (31):

- (31) V⁹{+high, -central} → [V{+mid, -central}] / ____ [C]V{-high}
 → [V{+high, -central}] / elsewhere

There are a few intriguing exceptions to this morpho-phonological process. This rule does not apply to at least two bound morphemes that end with a high non-central vowel, which are the durative =*ti* and the andative =*huru*. I do not have an explanation for these exceptions.

- (32) a. [ja= julimu =**ti**=ma]
 1SG= fish =DUR =PAS
 ‘I fished for some time.’
 b. [a tuku-**hulu**-ma]
 3SG= flee =AND=PAS

⁹ Note that V must be part of a bound morpheme.

‘[He] fled away.’

Example (27a) showed another phonological process taking place: the dynamic vowel =*i*, which did not cause any alteration in the vowel quality of the morpheme =*mu*, turned to =*u*. this is the topic of the next section.

2.6.3.2. Progressive backness assimilation by the dynamic morpheme =*i*

This process applies exclusively to the dynamic morpheme =*i*, which is used with non-stative verb stems, as discussed in Chapter 5 (§5.3.1). In this process, the dynamic morpheme assimilates to the feature [+front] or [+back] of the immediately preceding vowel. The height of the dynamic morpheme is not affected. The syllable containing the high vowel, source of the assimilation, has to be adjacent to the dynamic morpheme. While verbal lexemes that end in /e/ and /i/ make the dynamic morpheme turn into [=i], as in (33), lexemes that end in /o/ and /u/ have the effect of shifting the dynamic vowel to [=u], as in (34) (see also (22) above). Central vowels do not affect the dynamic morpheme, as the examples in (35) indicate.

Lexical morphemes ending in front vowels /e/ and /i/:

(33) a. /hele=*i*/ → [hele=*i*]

‘to get wet’

b. /ohi=*i*/ → [ohi=*i*]

‘to get hungry’

Lexical morphemes ending in back vowels /o/ and /u/:

(34) a. /tuku=*i*/ → [tuku=*u*]

‘to flee’

b. /po=*i*/ → [po=*u*]

‘to hold, to have’

Lexical morphemes ending in central vowels /a/, /ə/ and /i/:

(35) a. /hələ =i/ → [hələ =i]

‘to swim’

b. /ta =i/ → [ta =i]

‘to know’

c. /komi =i/ → [komi =i]

‘to shout’

Not only high vowels in lexical morphemes can affect the dynamic enclitic =i. Bound morphemes that end with high vowels can also be the source of assimilation, as long as this vowel is immediately adjacent to the dynamic morpheme, such as in example (32).

(36) a. /ja= juli =mu =i/ → [ja= juli =mu =u]

1SG= fish = INTR=DYN

‘I am fishing’.

b. /wa= heli =ti =i/ → [wa= heli =ti =i]

1SG= sing =DUR =DYN

‘You’ve been singing for a while’.

This phonological process can be represented as in (37):

(37) /=i/ → [=u] / V {+back} _____

→ [=i] / V {+front} _____

→ [=i] / elsewhere

2.6.3.3. Full anticipatory vowel harmony of /ə/ in bound morphemes

Only bound morphemes may be subject to this process. This process applies, for instance, when the generic classifier =tʰə is followed by another noun classifier or a

body part term, which is also a clitic in the language, (see Chapter 3 for more details). For this process, it is irrelevant whether the second noun classifier or body part term has a consonantal onset (39) or not (38).

- (38) a. /rakama =**tʰə**=**uku**/ → [rakama =**tʰu**=**uku**] ~ [rakama =**tʰ**=**uku**]¹⁰

hammock =GEN.CLN=CLN:cotton

‘hammock’

- b. /janomama =**tʰə**=**ā**/ → [janomama =**tʰā**=**ā**]

Yanomama =GEN.CLN=sound

‘sound of a Yanomama’ (i.e. ‘Yanomama language’)

- (39) a. /thoo =**tʰə**=**tʰo**/ → [thoo =**tʰo**=**tʰo**]

liana =GEN.CLN=CLN:liana

‘liana (generic)’

- b. /huu =**tʰə**=**hi**/ → [huu =**ti**=**hi**]

tree =GEN.CLN=CLN:tree

‘sound of a Yanomama’ (i.e. ‘Yanomama language’)

The future marker =*pə* and the verbalizing morpheme =*pə* can also be affected by this process. In (40), we have a construction in which the vowel of the future marker =*pə* is harmonized with the vowel of negation enclitic =*imi*.

- (40) /ja= mi =o=**pə**=imi/ → [ja= mi =o=**pi**=imi]

1SG= sleep =STV =FUT=NEG

‘I will not sleep.’

This phonological process can be represented as in (41):

¹⁰ It is not clear for us why the harmonized vowel is elided here. Note that in the example (38b) such elision does not occur.

- (41) /ə/¹¹ → [V_b] / ____ =(C)V_b (where V_b ≠ /ə/)
 → [ə] / elsewhere

Note that in the example (39b) there is a second phonological process taking place, which is the loss of the aspiration of the stop consonant. This process will be discussed in the next section.

2.6.3.4. Loss of aspiration of the aspirated stop /t^h/ in bound morphemes

This regressive phonological process takes place, for instance, when /t^h/ is in the onset position of a syllable with the vowel /i/. Since no lexical morpheme has such a configuration, at least synchronically (see §2.3 above), this process is restricted to contexts where the vowel of a bound morpheme is harmonized as [i]. The process is therefore not very productive since this harmonization can only occur with very few bound morphemes whose last syllable has /t^h/ as onset and /ə/ as nucleus. I have identified two morphemes with such a syllabic configuration: the generic classifier =t^hə / t^hə= and the noun classifier =nat^hə / nat^hə=, used with strip-like or sling-like materials. We have already seen an example of this loss of aspiration of the generic classifier in the example (39b). In (42), we have an instance with the classifier =nat^hə / nat^hə.

- (42) /rãj =nat^hə =hi/ → [rãj =nati =hi]
 sling =CLN:sling =CLN:tree
 ‘sling-tree’ (i.e. ‘tree that provides material for sling.’)

The representation of this phonological process is as in (43).

- (43) /t^h/ → [t] / ____ /i/
 → [t^h] / elsewhere

¹¹ /ə/ must be in a bound morpheme.

2.6.3.5. Progressive lowering of the stative morpheme =o

The stative vowel =o appears with attributive and positional verb stems in past contexts and subordinate clauses (see Chapter 5, §5.3.2). Whenever the last vowel of the stative verb stem is /a/, the stative vowel [o] fully harmonizes, that is, it lowers to [a], as illustrated in (44).

(44) a. /a= pra =o=ma/ → [a= pra =a=ma]

3SG= lie_on_the _floor =STV =PST

‘[She] was lying on the floor.’

b. /ja= plaha =o=təhə/ → [ja= plaha =a=təhə]

1SG= be_far_away =STV =when

‘When I am far away.’

Only the low vowel /a/ can affect the stative morpheme =o. In all other contexts, this morpheme conserves its vowel quality. The rule that predicts this process can be stated as in (45):

(45) /o/ → [=a] / V[+low]_____

→ [=o] / elsewhere

As a final note, this process is characteristic of the variety spoken in Papiu. Closely related varieties, such as the Yanomae of Demini and Toototopi, do not display such assimilation.

2.6.3.6. Anticipatory nasalization of the approximant /j/

The phoneme /j/ has two allophones – [j] and [ɲ] – in perfect complementary distribution in the language. While the realization [j] occurs when the nucleus of the syllable has an oral quality, the realization [ɲ] occurs in the remaining contexts, i.e. when the vowel of the syllable is nasal. In (46), I present two examples of this phonological process.

(46) a. /ya= tʰə= jã =ke =ma/ → [ya= tʰə= **j**ã =ke =ma]

1SG=CLN.GEN= tie =PRF=PST

‘I tied it’.

b. /jano/ → [nãnõ]

‘house’

This phonological process can be represented as in (47):

(47) /j/ → [ɲ]/ ____ V {+nasal}

→ [j]/ elsewhere

2.6.3.7. Anticipatory alveolarization of palatal /j/

This phonological process takes place when a lexical item that displays a /j/ as the onset of one of its syllables, takes a noun classifier or a body part term¹² that has /s/ as the onset of one of its syllables. In (48), we have two instances of this process.

(48) a. /raʃa =si/ → [rasa =si]

peach_palm_fruit =CLN:palm_tree

‘peach-palm tree’

b. /pafo =si/ → [paso =si]

bearded_saki =skin

‘bird (*Piranga rubra*)’ (lit. ‘Bearded saki’s skin’)

Contrary to what the examples in (48) may suggest, the source of assimilation does not need to be in the immediate adjacency of the targeted segment. This is an anticipatory process that can affect the palatal consonants separated by two to four syllables can equally be affected, like the example (49) shows.

¹² We will see in Chapters 3 and 4 that both noun classifiers and body part terms are clitics in YMA.

- (49) /haʃima =kohosi/ → [hasima =kohosi]
 curassow =loin
 ‘fruit (*Tetragastris panamensis*)’ (lit. ‘Curassow’s’loin)

See also (24c) above. This phonological process can be represented as in (50):

- (50) /ʃ/ → [s] / ____[...]/s/
 → [ʃ] / elsewhere

2.6.3.8. Nasalization of the palatal approximant

This process affects the palatal approximant /j/ when it is the onset of a syllable with a nasal nucleus. In this context, the phoneme is realized as [ɲ]. In (51), I present some words in which this nasalization process can be observed.

- (51) a. /jãmããsĩ/ → [ɲãmããsĩ]
 ‘pineapple’
 b. /jĩpĩmu/ → [ɲĩpĩmu]
 ‘to menstruate’
 c. /jõrã/ → [ɲõra]
 ‘horn’

This process is represented in (52).

- (52) /j/ → [ɲ] / ____V{+nasal}
 → [j] / elsewhere

2.6.3.9. Nasalization of the lateral approximant

This is a bidirectional phonological process that takes place when the lateral approximant is in intervocalic position and immediately adjacent to a front high nasal vowel. In (53), we have three words affected by this process.

(53) a. /mõlĩ/ → [mõnĩ]

‘one’

b. /hĩlĩ/ → [hĩnĩ]

‘to hear’

c. /ʃĩlõ/ → [ʃĩnõ]

‘only, alone’

If we were to represent this process, it would be something like (54):

(54) /l/ → [n] / [V]____ /ĩ/

→ [n] / /ĩ/____ [V]

→ [l] / elsewhere

This phonological process could alternatively be a case of “acoustic illusion”. The doubt about the acoustic or articulatory nature of this phenomenon has to do with the fact the vowel /i/ is the higher one among the vowels, i.e. the one that produces the greatest narrowing of the mouth cavity. This narrowing combined with the partial obstruction produced by the lateral (or the tap, from a phonetic perspective) would cause the acoustic impression of a total obstruction of the oral cavity, even though this would not eventually not be the case from an articulatory perspective. That is, instead of total obstruction, with the consequent change from [l] or [ɾ] to [n], maybe the liquid segment is only acquiring the [+nasal] without losing its laterality (nor the quick flap that characterizes the *tap*). I did not conduct experiments nor carried out spectrographic analyses to check whether this hypothesis is correct. But if it proves right, the words in (53) would be better represented as in (55).

(55) a. /mõlĩ/ → [mõlĩ] ~ [mõĩĩ]

‘one’

b. /hĩlĩ/ → [hĩlĩ] ~ [hĩĩĩ]

‘to hear’

c. /ʃɪlõ/ → [ʃɪ̃lõ] ~ [ʃɪ̃rõ]
 ‘only, alone’

In this case, the rule that expresses the process would be reformulated as (56).

(56) /l/ → [ɫ̃] ~ [r̃] / ____ /ɪ̃/
 → [ɫ̃] ~ [r̃] / /ɪ̃/ ____
 → [l] ~ [r] / elsewhere

2.7. Orthography

The practical orthography adopted throughout this work is the one used by the native-speakers in Papiu and several other Yanomam-speaking communities. This orthography is phonemic in some aspects and phonetic in others. On the one hand, for most of the YMA phonemes, there is one and only one grapheme to represent them and allophony in free variation (described in §2.6.1 and §2.6.2) is disregarded. On the other hand, the phonemes /w/ and /j/ have two graphemic values, depending on whether they are in onset position – in which case their graphemes are *w* and *y* – or in coda position – and then they are represented by the vowels *u* and *i*. Moreover, allophony in complementary distribution (see Table 2.20) is represented not by its underlying form but by the phonetic one.

Table 2.20 presents the set of graphemes used in the YMA orthography and their phonemic values. The graphemes generally correspond to the IPA, with 5 exceptions:

- The central mid-open vowel /ə/ becomes *ẽ*;
- The aspirated stop /t^h/ becomes *th*;
- The postalveolar fricative /ʃ/ becomes *x*;
- The lateral approximant /l/ becomes *r*;
- The palatal approximant /j/ represented by *y* (or *i*).

Nasalization is indicated by a tilde < ~ > over only one vowel of the word (regularly the first one), even when the other vowels are also nasal. Nasality of a vowel whose syllable begins with a nasal consonant is not indicated, like in *narã* ‘opossum’.

Table 2.20 - Graphemes of the YMA practical orthography

phoneme	grapheme	phoneme	grapheme
/a/	<i>a</i>	/s/	<i>s</i>
/e/	<i>e</i>	/ʃ/	<i>x</i>
/o/	<i>o</i>	/h/	<i>h</i>
/ə/	<i>ẽ</i>	/m/	<i>m</i>
/i/	<i>i</i>	/n/	<i>n</i>
/ɨ/	<i>ĩ</i>	/l/	<i>r</i>
/u/	<i>u</i>	/w/#	<i>u</i>
/p/	<i>p</i>	#/w/	<i>w</i>
/t/	<i>t</i>	/j/#	<i>i</i>
/k/	<i>k</i>	#/j/	<i>y</i>
/tʰ/	<i>th</i>	nasal vowel	<i>~</i>

This orthography is fairly widely accepted by the Papiu literate community and also employed in other Brazilian regions where a variety of the Yanomam branch is spoken. I have reports of this orthography being used in the regions of Kayanaú, Xitei, Haxiu, Hayau, Arathau, Homoxi, Surucucus, Demini, Toototopi, Missão Catrimani and Alto Catrimani. The only Yanomam-speaking region that does not use this orthography in Brazil seems to be Palimiu (or Parimiu, in YMA orthography), which adopts an orthography similar to the one for Ninam from Mucajaí river. The similarity between Palimiu and Ninam orthography is explained by the missionary work carried

out in both regions by the same institution (MEVA – Missão Evangélica da Amazônia).

The YMA orthography is very similar to the one employed by Salesian missionaries on the Venezuelan side of the territory to write Yanomami, with few adaptations (the main one concerns the use of the grapheme *x* instead of *sh* to represent the phoneme /ʃ/). I am not sure whether this orthography was developed there or borrowed from a different language. In any event, this orthographic system was first used on the Brazilian side in the mid-1980s, also by the Salesians working with the Yanomami variety spoken in the State of Amazonas.

Henri Ramirez (1994b) was the responsible for bringing the Salesian orthography to the Yanomam-speaking regions and the State of Roraima. In the Missão Catrimani region, a different orthography was in use in the beginning of the 1990s by the catholic missionaries but was later abandoned after workshops organized with this linguist. Formal education started in the other Yanomam speaking regions by secular NGOs (mainly CCPY and Urihi) between the mid-1990s and the beginning of the 2000s, depending on the region. The first pedagogical works produced by CCPY in Demini and Toototopi in 1993 already employed this orthography.

2.8. Final remarks

In this chapter, I described the fundamental aspects of the YMA segmental and suprasegmental phonology, such as the phoneme inventory, vocalic and consonantal contrasts, and allophony, and provided a rough overview of syllable structure and the word and prosodic stress patterns. I am fully aware that this is just an incomplete sketch. Several aspects of YMA phonology were left out for the sake of brevity, such as the acoustic characterization of the vowel qualities, the description of secondary stresses and the discussion of the morpheme-level status of the nasalization. A better characterization of the allophones allegedly in free variation is needed, in particular the variation between [l] and [r], as well as a full description of all phonological processes of YMA.

I am confident that this chapter provided the basic information necessary to understand the topics of the YMA morphosyntax raised in the remaining chapters of

this work. This applies in particular for the phonological processes, which are in most cases morphophonological processes, as we saw. I will refer to them at several points in my analysis. Moreover, we observed that stress in YMA tends to occur in the penultimate syllable of the morphological word, and thus is a useful diagnostic to determine whether a given morpheme is bound or not to the free word. This will be crucial in the discussion of the words classes in YMA in the next chapter.

3. Parts-of-speech, free morphemes, and bound morphemes

3.1. Introduction

This chapter describes the basic properties of the two major word classes in YMA, namely nouns and verbs. Although not disregarding semantics, especially when first approaching the subject, I will be mainly concerned with identifying the morphosyntactic features that distinguish these two types of words, i.e. their syntactic distribution and the set of morphemes that can be attached to them or coexist with them. For this purpose, I will start with an overview of the word order patterns and the different types of bound morpheme clusters found in the language. This overview will be later complemented by a full discussion of the word order patterns in Chapter 7 about argument marking systems, and by a detailed description of the morphological paradigms in Chapters 4 and 6 about nominal and verbal morphologies. The primary aim here is to establish formal criteria for distinguishing nouns and verbs. This characterization will lay the basis for the identification of other word classes and feed into the discussion of whether or not there is a major class of adjectives in the language.

In the next section (§3.2) I will begin by presenting a selection of words that could be expected to be nouns or verbs, according to their semantic properties. In Section §3.3, I will analyze the syntactic distribution of those words in basic predicates, and in §3.4, I will point out some morphological properties that characterize each type of word, showing how the position of the bound morphemes can help us distinguish nouns and verbs. In Section §3.4.1, I will present morphological paradigms that prototypically attach to nouns and verbs and in Section §3.5, I will offer the formal definition of prototypical nouns and verbs in the language. Before closing the chapter with the concluding remarks in Section §3.7, I will discuss in section §3.6 some issues regarding the separation of written words and the representation of bound morphemes.

3.2. Nouns and verbs: a semantic first-approach

Every textbook will tell us that verbs denote an “action or process” while nouns refer to “people, animals, things or places”. Following this definition, we can say that ‘woman’, ‘dog’, ‘flower’ and ‘nail’ are nouns in English, while ‘to run’, ‘to swim’ and ‘to work’ are verbs. Nevertheless, it is widely acknowledged (Dixon, 1982; Beck, 1999: pp. 14-17; Haspelmath, 2001: p. 16540) that purely semantic criteria for identifying nouns and verbs may prove problematic for some marginal cases in every language, and particularly for part-of-speech systems in more ‘exotic’¹ languages. Take for instance the English words such as ‘gymnastics’ or ‘trip’, which are formally nouns in the language but have an explicit verbal content, or verbs such as ‘to nail’, ‘to flower’ or ‘to ice’, whose nominal content is evident by their etymology.

Although problematic when used in isolation, semantics is nevertheless difficult to avoid when starting an investigation of the parts-of-speech of any language. From where should one start otherwise? Selecting words from random utterances, then studying their phonological and morphosyntactic properties, and finally grouping together those that display similar properties? Not to mention its impracticality, this methodology still faces the fundamental problem of labeling each of the identified group of words with similar properties. For instance, if there was, in an imaginary language, a group of words with similar intonation pattern, the same morphological properties and similar syntactic distribution (let’s say that those words are all paroxytones, always occur at the beginning of the clauses and always display a suffix *-zo* in independent clauses), how to decide whether this group of words should be called verbs or nouns, or any other type of word class? This question is hardly answered without the help of semantics.

Having this in mind, I decided to use a reverse methodology. I will consider the analysis of the semantic content of the words as a starting point, i.e. a shortcut for identifying those words that are more likely to be nouns and verbs, and whose

¹ i.e. “non-Indo-European-like” languages

morphosyntactic behavior should be investigated. I am assuming from this perspective that at least some of the words that have noun-like content will display similar formal properties, which will allow us to categorize them under the same label, namely the class of the nouns. Similarly, I am also assuming that some words that have verb-like content will have similar properties, which will be different from those of the words with noun-like content. I am consequently assuming as a first hypothesis that there is in YMA a word class of verbs and a word class of nouns, possibly with sub-classes.

The methodology adopted here consists of the following: I began the study of nouns and verbs in YMA by elaborating two word lists with prototypical nouns and verbs in the language, according to their semantic content. I am not assuming, nevertheless, that all words with noun-like content are necessarily nouns or that all words with verb-like contents are indisputable verbs. The idea behind these lists is to provide a first corpus of words whose properties I would like to study. I then analyzed their syntactic distribution in basic predicates (§3.3) and their morphological properties (§3.4). This first characterization of nouns and verbs will be further complemented in the chapters ahead.

These two lists of words were generated using slightly different methodologies, but both in the context of the activities for the elaboration of the dictionary of Yanomama². The lists of possible nouns and verbs are therefore much longer than the ones presented here. For the first list (the list of “nouns”), I used objects and visual stimuli consisting of pictures of people, animals, things or places. Some of the images were of single entities (one dog, one bird...) and had a counterpart in which several of those entities were represented. I expected to have nouns as answer to the question “what is this?” or “what are these?” while holding a picture of people, animals, things or places or pointing to an object or objects. Part of this list is presented in Table 3.1

The words in Table 3.2 and Table 3.3 were elicited by dramatization (i.e. me acting out) and using pictures and videos of a person or a couple of people performing

² In 2011, our team published the first version of part of this work: the Dictionary of Verbs – Yanomama – Portuguese [Perri-Ferreira, H; Himotona, A; Krepuna, G.; Kariuna, M. 2011. Dicionário de Verbos Português-Yanomama. São Paulo: Instituto Socioambiental – ISA.]. However, there is much more work to do.

a particular task. Table 3.2 shows the answer given by the consultants for the question “what is he doing?” or “what is happening to him?”, while I was acting something out or still presenting the video of a person or some people “doing things”, or of something “happening” to them. The answers in Table 3.3 were given to the question “what did he do” or “what did happen to him” after I had finished acting out or showing the visual stimulus. I made clear to the consultants that that action should be understood as if it had been completed. For these questions, in both situations, I expected to have mainly verbs as answers.

Table 3.1 – Answers to the question “What is this?”/“What are they?”

What is this?		What are they?	
a. <i>thuëa</i>	a woman	<i>thuëpë</i>	women
		<i>thuëthëpe</i>	women
b. <i>wãroa</i>	a man	<i>warõpë</i>	men
		<i>warõthëpe</i>	men
c. <i>uhurua</i>	a child	<i>uhurupë</i>	children
d. <i>oxea</i>	a child	<i>oxethëpe</i>	children
e. <i>xaporía</i>	a shaman	<i>xaporipë</i>	shamans
f. <i>hiímaa</i>	a dog	<i>hiímapë</i>	dogs
g. <i>karakaa</i>	a chicken	<i>karakapë</i>	chickens
		<i>warëpë</i>	peccaries
h. <i>warëa</i>	a peccary	<i>warëkiki</i>	peccaries
i. <i>araa</i>	a macaw	<i>arapë</i>	macaws
j. <i>hãyokoromaa</i>	a axe	<i>hãyokoromapë</i>	axes
k. <i>xarakaa</i>	a arrow	<i>xarakapë</i>	arrows
l. <i>pooa</i>	a knife	<i>poopë</i>	knives
m. <i>yanoa</i>	a house	<i>yanopë</i>	houses
n. <i>hehua</i>	a mountain	<i>hehukiki</i>	mountains
o. <i>wakëa</i>	fire		
p. <i>hutukanaa</i>	a garden	<i>hutukanapë</i>	gardens
q. <i>orukiki</i>	a snake	<i>orupë</i>	snakes
r. <i>kamixakiki</i>	a T-shirt	<i>kamixapë</i>	T-shirts
s. <i>naxikoko</i>	a cassava tuber	<i>naxikokopë</i>	cassava tubers
t. <i>naxihi</i>	a cassava pancake	<i>naxihipë</i>	cassava pancakes
u. <i>hutusi</i>	a cassava tree	<i>hutusipë</i>	cassava trees
v. <i>huutihi</i>	a tree	<i>huutihipë</i>	trees
w. <i>rãasihi</i>	a bowl	<i>rãasihipë</i>	bowls
x. <i>rakamathuku</i>	a hammock	<i>rakamathokopë</i>	hammocks
y. <i>hutumosi</i>	the sky		

Table 3.2 - Answers to the question “What is he doing?”/“What are they doing?”

What is he doing? / What is happening to him?		What are they doing? / What is happening to them?	
a. <i>arërëi</i>	[he] is running	<i>përërëi</i>	[they] are running
b. <i>ahërëi</i>	[he] is swimming	<i>pëhërëi</i>	[they] are swimming
c. <i>aiai</i>	[he] is eating	<i>pëiai</i>	[they] are eating
d. <i>akomii</i>	[he] is shouting	<i>pëkomii</i>	[they] are shouting
e. <i>akei</i>	[he] is falling	<i>pëkei</i>	[they] are falling
f. <i>atëkëa</i>	[he] is sitting	<i>pëtëkëa</i>	[they] are sitting
g. <i>aroa</i>	[he] is squatting	<i>përoa</i>	[they] are squatting
h. <i>apraa</i>	[he] is lying (on the floor)	<i>pëpraa</i>	[they] is lying (on the floor)
i. <i>apiria</i>	[he] is lying (in the hammock)	<i>pëpiria</i>	[they] are lying (in the hammock)
j. <i>amia</i>	[he] is asleep	<i>pëmia</i>	[they] are asleep
k. <i>aupraa</i>	[he] is standing up	<i>pëupraa</i>	[they] are standing up
l. <i>naxi hiwai</i>	[he] is eating a cassava pancake	<i>naxi</i>	[they] are eating cassava
m. <i>hiwai</i>	[he] is eating a cassava (it)	<i>hipëwaihe</i>	pancakes
n. <i>ara axëi</i>	[he] is killing the macaw	<i>hipëwaihe</i>	[they] are eating cassava (them)
o. <i>axëi</i>	[he] is killing (it)	<i>ara axëihe</i>	[they] are killing the macaw
p. <i>yano awãriai</i>	[he] is destroying the house	<i>a xëihe</i>	[they] are killing (it)
q. <i>awãriai</i>	[he] is destroying (it)	<i>yano</i>	[they] are destroying the house
r. <i>mau upëkoai</i>	[he] is drinking water	<i>awãriaihe</i>	[they] are destroying (it)
s. <i>upëkoai</i>	[he] is drinking (it)	<i>mau</i>	[they] are drinking water
t. <i>pora axeei</i>	[he] is throwing the ball	<i>upëkoaihe</i>	[they] are drinking (it)
u. <i>axeei</i>	[he] is throwing (it)	<i>pora</i>	[they] are throwing balls
		<i>pëxeeihe</i>	[they] are throwing (them)

Table 3.3 - Answers to the question “What did she do?”/“What did they do?”

What did he do? / What did happen to him?		What did they do? / What did happen to them?	
a. <i>arërërayoma</i>	[he] rany	<i>përërëyoma</i>	[they] ran
b. <i>ahërërayoma</i>	[he] swam	<i>pëhërërayoma</i>	[they] swam
c. <i>aiarayoma</i>	[he] ate	<i>pëiarayoma</i>	[they] ate
d. <i>akomirayoma</i>	[he] shouted	<i>pëkomirayoma</i>	[they] shouted
e. <i>akerayoma</i>	[he] fell	<i>pëkerayoma</i>	[they] fell
f. <i>atëkëkema</i>	[he] sat	<i>pëtëkëkema</i>	[they] sat
g. <i>arokema</i>	[he] squatted	<i>përokema</i>	[they] squatted
h. <i>aprakema</i>	[he] lay (on the floor)	<i>pëprakema</i>	[they] lay (on the floor)
i. <i>apirikema</i>	[he] lay (in the hammock)	<i>pëpirikema</i>	[they] lay (in the hammock)
j. <i>amikema</i>	[he] is asleep	<i>pëmikema</i>	[they] are asleep
k. <i>auprarayoma</i>	[he] is stood up	<i>pëuprarayoma</i>	[they] are stood up
l. <i>naxi hiwarema</i>	[he] ate a cassava pancake	<i>naxi</i>	[they] ate cassava
m. <i>hiwarema</i>	[he] ate (it)	<i>hipëwaremahe</i>	pancakes
n. <i>ara axërema</i>	[he] killed the macaw	<i>hipëwaremahe</i>	[they] ate cassava (them)
o. <i>axërema</i>	[he] killed (it)	<i>ara axëremahe</i>	[they] killed the macaw
p. <i>yano awãriarema</i>	[he] destroyed the house	<i>axëremahe</i>	[they] killed (it)
q. <i>awãriarema</i>	[he] destroyed (it)	<i>yano</i>	[they] destroyed the house
r. <i>mau upëkoarema</i>	[he] drank water	<i>awãriaremahe</i>	[they] destroyed (it)
s. <i>upëkoarema</i>	[he] drank (it)	<i>mau</i>	[they] drank water
t. <i>pora axeerema</i>	[he] threw the ball	<i>upëkoaremahe</i>	[they] drank it
u. <i>axeerema</i>	[he] threw (it)	<i>pora</i>	[they] threw balls
		<i>pëxeeremahe</i>	[they] threw (them)

3.3. Nouns, verbs and word order patterns

I will now begin the identification of the syntactic distribution of the words of Table 3.1, Table 3.2 and Table 3.3. I have chosen two methodologies for this. I first analyze

(§3.3.1) the order of the words of some basic predicates that were elicited with bilingual consultants and then (§3.3.2) analyze the behavior of those same words in spontaneous texts.

3.3.1. Elicited sentences

In this section, I analyze some basic predicates that were elicited with bilingual consultants during fieldwork. The elicitation session had the following format: I first prepared several sentences beforehand in Portuguese using the (Portuguese) words of Tables 3.1-3.3, and then requested the consultants to translate the sentences into YMA. It goes without speaking that they were free to add any grammatical morpheme required for grammaticality. The answers under a. were the best translation in the opinion of the consultants. The consultants' best choice often coincided with the first translation given by them, but it was not always the case. The consultants could reformulate their translation at their will until they felt confident in choosing the best translation. I then scrambled the order of the words of this "best translation" several times and checked with the consultants the grammaticality of the resulting clauses. The orders of the examples beginning with (*) were considered ungrammatical.

- (1) a. *xama a hērēi* .
tapir (is) swimming
- b. * *a hērēi xama* .
(is) swimming tapir
- c. * *hērēi xama a* .
swimming a tapir
'The tapir is swimming.'
- (2) a. *xapori pē komi* .
shaman (are) shouting
- b. * *komi xapori pē* .
shouting shamans
- c. * *pē komi xapori pē* .
(are) shouting shamans

‘The shamans are shouting.’

- (3) a. *pixata aha uhuru pē praa* .
on the ground child (are) lying
- b. *uhuru pē praa pixata aha* .
child (are) lying on the ground
- c. * *pixata aha praa uhuru pē* .
on the ground lying children
- d. * *praa uhuru pē pixata aha* .
lying children on the ground
- ‘The children are lying on the floor.’

- (4) a. *warō pēni yano a thaihe* .
men house (are) building (it)
- b. *yano a thaihe warō pēni* .
house (are) building (it) men
- c. * *a thaihe warō pēni yano a* .
(are) building (it) men a house
- d. * *warō pēni a thaihe yano a* .
men (are) building (it) a house
- ‘The men are building a house.’

- (5) a. *karaka ani naxi koko wai* .
chicken cassava (is) eating (the tuber)
- b. *naxi koko wai karaka ani* .
cassava (is) eating (the tuber) chicken
- c. * *wai karaka ani naxi koko* .
(is) eating chicken cassava tuber
- d. * *wai naxi koko karaka ani* .
is eating cassava tuber chicken
- e. * *karaka ani wai naxi koko* .
chicken is eating cassava tuber
- ‘The chicken is eating the cassava tuber.’

- (6) a. *poo ani* *thuě ani ara* *a xěi* .
 with the knife woman macaw (is) killing (it)
- b. *thuě ani poo ani* *ara* *a xěi* .
 woman with the knife macaw (is) killing (it)
- c. *thuě ani ara* *a xěi* *poo ani* .
 woman macaw (is) killing (it) with the knife
- d. *poo ani* *ara* *a xěi* *thuě ani* .
 with the knife macaw (is) killing (it) woman
- e. * *poo ani* *thuě ani xěi* *ara a* .
 with the knife woman (is) killing a macaw
- f. * *ara a* *poo ani* *thuě ani xěi* .
 a macaw with the knife woman (is) killing
- g. * *thuě ani ara a* *poo ani* *xěi* .
 woman a macaw with the knife (is) killing
- h. * *xěi* . *thuě ani ara a* *poo ani*
 (is) killing woman a macaw with the knife
 ‘The woman is killing the macaw with the knife.’

We can see in all the examples under a. that a word from Table 3.1 (a “noun”) never appears after a word from Table 3.2 (a “verb”) in those sentences considered by the consultant as his first-choice translation. Examples (3b), (4b), (5b), (6b) show nevertheless that a word from Table 3.2 does not necessarily have to go before the words from Table 3.1 to preserve the grammaticality of the clause, but there are several instances where this arrangement results in ungrammatical constructions, (1b-c), (2 b-c), (3 c-d), (4c-d), (5 c-e) and (6e-h).

Examples (1b-c), (2 b-c), (3d), (4c), (5c-d) and (6h) tell us that it is not acceptable for all words from Table 3.1 (“noun”) to go after the word from Table 3.2 (“verb”); i.e. at least one word from Table 3.1 must appear before the word from Table 3.2, (3b), (4b), (5b), (6b).

3.3.2. Spontaneous texts

In this section, I analyze 2100 predicates extracted from spontaneous texts. These texts are 37 narratives that were obtained by video stimuli (see Chapter 1, §1.9). I counted the clauses in which there was at least one noun-like word. I assumed that all clauses have a verb. While the elicited sentences were simple independent clauses, in these spontaneous texts we can find independent clauses alongside to subordinate clauses. Both types of clauses were considered in the this first counting.

Table 3.4 – Frequency of the words from Table 3.1 and Table 3.2 in the clauses

	Clauses	Frequency
There is at least one word that resembles a noun (Table 3.1) and one that resembles a verb (Table 3.2)	885	42.14%
There is at least one word that resembles a verb (Table 3.2) but no word that resembles a noun (Table 3.1)	1215	57.86%
TOTAL	2100	100.00%

This result is not untypical for Amazonian languages, as argued e.g. by Doris Payne (1985: 344) for Yagua, where also most predicates (62%) just contained a single content word (also a verb).

Table 3.5 – Position of the word from Table 3.1 in relation to the word from Table 3.2

	Clauses	Frequency
before	766	86.55%
after	71	8.02%
before and after	48	5.42%
	885	100.00%

As we can conclude from the data presented in Table 3.5, the order of the words from Table 3.1 (“nouns”) and Table 3.2 (“verbs”) in spontaneous texts is consistent with the native speaker preference for elicited clauses, in which words from Table 3.1 always appeared before the word from Table 3.2.

3.4. Basic morphological properties of nouns and verbs

In YMA, free words are not entirely free, in the sense that they are not defined by their ability to occur *freely* (i.e. alone) in a sentence or an argument of the clause. It is only in very few exceptional contexts that *some* free words (not all) can appear without the need of any other morpheme. In most cases, free words do require at least one (and frequently more than one) bound morpheme to yield grammatical sentences. The definition of free word in YMA hinges, instead, on their ability to be the morphological hosts of bound morphemes.

We can tell by the comparison between the first and the third columns of Table 3.1 that the answers given by the consultant are not monomorphemic words, but rather morphologically complex constructions. Several answers of column 1 (words from a. to p.), for instance, end with *a*, which is substituted by *pě* (or *thěpě*, in the first two examples) in the answers of column 3. The form *pě* still appears in other words of column 3, even when the counterpart in column 1 does not end with *a* (words from q. to y.). We can infer that *pě* is a plural marker, while *a* a type of singular marker for at least some words.

The same analytical procedure can be done for the words from Table 3.2. We can see that the words from a. to k. in the first column display *a* at the beginning, which is replaced by *pě* in the third column. This allows us to conclude that *a* is a type of agreement marker for singular (probably 3rd person singular), while *pě* is the marker for plural (also probably for 3rd person). Some answers (l. to u.), nevertheless, did not present this variation at the beginning, but did display an extra *he* at the end. We can also infer, by the translations, that this is probably a marker for 3rd person plural, that may be used only in some contexts. Additionally, comparing the words from Table 3.2 and Table 3.3, we can see that the words from Table 3.3 end with *rayoma*, *kema* or *rema*, forms which are all missing from the words from Table 3.2,

which display only *i*, *i*, *u* or *a* instead. We can assume that those forms in Table 3.3 (*rayoma*, *kema* and *rema*) are past or perfective markers, while the forms in Table 3.2 (*i*, *i*, *u* and *a*) are present or progressive markers.

We will see in the chapters ahead that all these glosses will prove to be correct, but this is not really the point of the argument. What is important for now is to notice that the words from Table 3.1 can only host morphemes at the end, while the words from Tables 3.2 and 3.3 have positions open on their two sides, left and right.

Words with noun-like content = **bound morphemes**

bound morphemes = Words with verb-like content = **bound morphemes**

YMA has very few real suffixes. Most of the bound morphemes of the language are clitics, in the sense that they are loosely attached to the free words that act as their hosts, displaying a variable position in relation to them. Bound morphemes in YMA are not attached to words, but to the entire nominal or verbal phrase they belong to. Comparing the examples in (7) and (8), we can see that in (7c) and (8c) some additional morphemes (in bold) were interposed between the free words and the bound morphemes of (7b) and (8b).

(7) a. * *xaraka* .
 xaraka
 arrow
 ‘(These are) arrows.’

b. *xarakapë* .
 xaraka =*pë*
 arrow =PL
 ‘(These are) arrows.’

c. *xarakaepë* .
 xaraka =***e*** =*pë*
 arrow =DIFF.PART =PL
 ‘(These are) his arrows.’

(8) a. * *piri* .

piri
to lie

‘(She) is lying (in the hammock).’

b. *apiria* .

a= piri =a
3SG= to lie =POST

‘(She) is lying (in the hammock).’

c. *arĩpiritayaa* .

a= rĩ= piri =taya =a
3SG= HON= to lie =LOC:not_far =POST

‘(She) is just lying over there (in the hammock).’

In YMA, clitics can combine in clusters, which sometimes is a very long chain of clitics, but clitic clusters, no matter their length, still need to be attached to a free word. Each clitic cluster can attach only to particular types of free words, has a predictable position in the clause, and has its own paradigm of morphemes. The latter also have a predictable position within the cluster. The description of the properties of these different clitic clusters is therefore crucial for understanding what it means to formally be a noun or a verb in YMA.

3.4.1. Clitic clusters and parts-of-speech

3.4.1.1. Nominal clitics

We have seen that the words with noun-like content has only one end open where bound morphemes can attach to. Two of those morpheme are the number markers *=a*, for singular, and *=pẽ*, for plural. Examples (3)-(6) show that they can combine with the morphemes *=ni* and *=hami*, which are argument marking morphemes (case markers). In (7c) the plural marker *=pẽ* appears associated with the different participant morpheme *e*, which is used in possessive constructions where the possessor is a 3rd person singular. In examples (9) and (10), we have constructions

with increasingly more complex combinations of morphemes. Note that the absolute position of some morphemes (final position, or just after the root, for instance) changes if other morphemes appear in the construction, which indicates the clitic nature of these bound morphemes.

(9) a. *korahaa*

koraha =*a*
 banana =SG
 ‘a banana’

b. *korahasi*

koraha =*si*
 banana =CLN:palm_tree
 ‘a banana tree’

c. *korahasipë*

koraha =*si* =*pë*
 banana =CLN:palm_tree =PL
 ‘banana trees’

d. *korahaesipë*

koraha =*e* =*si* =*pë*
 banana =DIF.PART =CLN:palm_tree =PL
 ‘his/her banana trees’

e. *korahaesipëi*

koraha =*e* =*si* =*pë* =*i*
 banana =DIF.PART =CLN:palm_tree =PL =DIM
 ‘his/her (+DIM) banana trees.’

f. *korahaesipëixo*

koraha =*e* =*si* =*pë* =*i* =*xo*
 banana =DIF.PART =CLN:small =PL =DIM =ADD
 ‘also with his/her (+DIM) banana trees.’

(10) a. *warõa*

warõ =*a*
 man =SG
 ‘a man’

b. *warõe*

warõ =*e*
 man =DIF.PART
 ‘her husband’

c. *warõepoko*

warõ =*e* =*poko*
 man =DIF.PART =arm
 ‘her husband’s arm’

d. *warõepokopë*

warõ =*e* =*poko* =*pë*
 man =DIF.PART =arm =PL
 ‘her husband’s arms’

e. *warõepokopëri*

warõ =*e* =*poko* =*pë* =*ri*
 man =DIF.PART =arm =PL =HON
 ‘her husband’s (+REV) arms’

f. *warõepokopëriha*

warõ =*e* =*poko* =*pë* =*ri* =*ha*
 man =DIF.PART =arm =PL =HON =OBL
 ‘in her husband’s (+REV) arms’

All these clitics belong to what I call the Clitic Cluster A or the Nominal Enclitic Cluster. This cluster coexists only with lexical morphemes from Table 3.1 and has eight slots, which can be filled, in a predictable order, with different types of morphemes. The semantic content of these clitics is primarily grammatical. Among other categories, they can express:

Table 3.6 – Categories expressed by each slot of Cluster A

Slot	Category
A1	person (1st and 2nd persons)
A2	differerent participant
A3	noun classifiers
A4	number (singular, dual, plural, colective)
A5	body-part terms
A6	number (singular, dual, plural, colective)
A7	reverence, depreciation, and size (diminutive and aumentative)
A8	case (ergative, intrumental, oblique...)

Note that two types of enclitics in this cluster have a clear lexical content. Those clitics are the nominal classifiers (slot 3) and unalienable nouns (body-part terms) (slot 5). Table 3.7 shows the schematic structure of this cluster and the morphemes that occur in it. Lexical morphemes from Table 3.2 cannot take these morphemes directly, requiring a previous derivation with one of the deverbalizing morphemes of the language. Two of those deverbalizing morphemes are clitics and can be found in the Sub-Cluster CC, but there are also two suffixes (*-rima* and *-tima*)³ that derive nouns from verbs.

³ See Chapter 5, §5.3.7 and §5.3.8.

Table 3.7 – Cluster A: nominal enclitic cluster

A1	A2	A3	A4	A5	A6	A7	A8
SAP	DP	NCLN	NUM	BODY PARTS	NUM	DIM/REV/DEPRC	CASE
<hr/>							
= <i>ya</i>				= <i>pihi</i>			
= <i>yaha</i>		= <i>thě</i>		= <i>aka</i>		= <i>rĩ</i>	= <i>ni</i>
= <i>yama</i>		= <i>hi</i>	= <i>a</i>	= <i>amuku</i>		= <i>i/</i>	
		= <i>kipě</i>			= <i>pě</i>		= <i>xo</i>
= <i>wa</i>	= <i>e</i>	= <i>koko</i>		= <i>matha</i>		= <i>wai</i>	
			= <i>pě</i>		= <i>ki</i>		= <i>hami</i>
= <i>waha</i>		= <i>u</i>	= <i>he</i>			= <i>wãrĩ/</i>	= <i>ha</i>
			= <i>ki</i>				
= <i>wama</i>		[...]		= <i>si</i>		= <i>wěĩ</i>	
				[...]			
<hr/>							

3.4.1.2. Verbal clitics

The words with verb-like content are open on both sides for morphemes. On the left side, we have seen that the proclitic *a=*, used to mark 3rd person singular, is replaced by *pě=* when referring to a 3rd person plural. Example (8c) shows the morpheme *pě=* combined with the reverential proclitic *rĩ=*. In example (11), we can see an even more complex combination of five proclitics.

- (11) a. *ahuma* .
 a= hu =ma
 SG= to go =PST
 ‘He went.’
- b. *yamakihuma* .
 yama= ki= hu =ma
 1PL= PL= to go =PST
 ‘We went.’

c. *yamakikāyohuma*

yama= ki= kāyo= hu =ma

1PL= PL= APPL= to go =PST

He went with us.

d. *yamaakāyohuma*

yama= a= kāyo= hu =ma

1PL= 3SG= APPL= to go =PST

We went with him.

e. *yamapēkāyohuma*

yama= pē= kāyo= hu =ma

1PL= 3SG= APPL= to go =PST

We went with them.

f. *yamapēkāyorihuma*

yama= pē= kāyo= rĩ= hu =ma

1PL= 3SG= APPL= HON= to go =PST

We went with them (+REV).

g. *yamapēkāyoriārīhuma*

yama= pē= kāyo= riā= rĩ= hu =ma

1PL= 3SG= APPL= VOL= HON= to go =PST

We wanted to go with them (+REV).

Up to twelve morphemes can appear combined at the left end of the words from Table 3.2. These morphemes belong to the Clitic Cluster B or the Verbal Proclitic Cluster. The twelve slots of this cluster can be occupied by clitics that express the following categories.

Table 3.8 – Categories expressed by each slot of Cluster B

Slot	Category
B1	person markers (1st and 2nd persons)
B2	differerent participant morpheme
B3	noun classifiers
B4	number (singular, dual, plural, colective)
B5	body part terms
B6	number (singular, dual, plural, colective)
B7	applicative
B8	evidentialily (auditory source)
B9	verbal particles (of phrasal verbs)
B10	volitive particle
B11	reverentialness, depreciativeness and size (diminutive and aumentative)
B12	focalizers and the sequential marker

Like the Nominal Enclitic Cluster (Cluster A), there are two slots that can be filled up by clitics with lexical content, slot 3, occupied by the nominal classifiers, and slot 5 where unalienable nouns (body-part terms) appear. The comparison between Table 3.7 and Tables 3.9 and 3.10 shows that most of the forms are the same but that they are attached to the lexical root in different positions (one to the right and other to the left).

Table 3.9 – Cluster B: verbal proclitic cluster (first slots)

B1	B2	B3	B4	B5	B6
SAP	DIF.PART	NCLN	NUM	BODY PART	NUM
<i>ya=</i>				<i>pihi=</i>	
<i>yaha=</i>		<i>thě=</i>		<i>aka=</i>	
<i>yama=</i>		<i>hi=</i>	<i>a=</i>	<i>amuku=</i>	<i>pě=</i>
<i>wa=</i>	<i>e=</i>	<i>koko=</i>	<i>pě=</i>	<i>matha=</i>	<i>ki=</i>
<i>waha=</i>		<i>u=</i>	<i>ki=</i>	<i>he=</i>	
<i>wama=</i>		[...]		<i>si=</i>	
				[...]	

Table 3.10 – Cluster B: verbal proclitic cluster (final slots)

B7	B8	B9	B10	B11	B12
APPL	EVID	PART VERB	VOL	DIM/REV/DEPRC	SEQ/FOC/ TENSE
				<i>rĩ=</i>	<i>ha=</i>
				<i>i=</i>	<i>ta=</i>
<i>kăyô=</i>	<i>(a)hă=</i>	<i>nĩ=</i>		<i>wai=</i>	<i>ka=</i>
		<i>něhě=</i>	<i>riă=</i>	<i>wări=</i>	<i>kata=</i>
				<i>wěri=</i>	<i>ma=</i>
					<i>xa=</i>

The right end of the words from Table 3.2 and Table 3.3 hosts the most complex combination of bound morphemes of YMA. The examples in (12) show some of the morphemes that can attach in this position.

- (12) a. *apiria* .
 a= *piri* *=a*
 3SG= to lie =POST
 ‘He is lying down.’

b. *apirikema*

a= piri =ki =ma
 3SG= to lie =PFV2 =PST

‘He lay down.’

c. *apirimakema*

a= piri =ma =ki =ma
 3SG= to lie =CAUS =PFV2 =PST

‘He laid it/him/her down.’

d. *apirimakipima*

a= piri =ma =ki =pi =ma
 3SG= to lie =CAUS =PFV2 =3DU =PST

‘They two laid it/him/her down.’

e. *apirimakemahe*

a= piri =ma =ki =ma =he
 3SG= to lie =CAUS =PFV2 =PST =3PL

‘They laid it/him/her down.’

f. *apirimaketayomahe*

a= piri =ma =ki =tayo =ma =he
 3SG= to lie =CAUS =PFV2 =LOC:not_far =PST =3PL

‘They laid it/him/her down over there.’

g. *apirimapotayomahe*

a= piri =ma =po =tayo =ma =he
 3SG= to lie =CAUS =CSV2 =LOC:not_far =PST =3PL

‘They kept it/him/her laying down over ther.’

h. *apirimaketayomayarohe [...]*

a= piri =ma =ki =tayo =ma =yaro =he
 3SG= to lie =CAUS =PFV =LOC:not_far =PST =REAS =3PL

‘Because they laid it/him/her down over there [...]

These morphemes make up the Cluster C or the Verbal Enclitic Cluster, which has 19 positions that can be occupied exclusively by grammatical morphemes. Based on the semantics of those morphemes and their position in the cluster, we can group these enclitics in three different sub-clusters of morphemes: derivational morphemes, flexional morphemes and clausal morphemes.

Cluster C: verbal enclitic cluster (3 sub-clusters)

Sub-Cluster CA derivative enclitics (8 slots). These derivative enclitics are all verbalizers, in the sense that they only create new verbs (either from verbs or nouns). See Table 3.11.

Sub-Cluster CB flexional enclitics (8 slots). See Table 3.12.

Sub-Cluster CC clausal enclitics (3 slots) [there is one flexional morpheme in this sub-cluster]. See Table 3.12.

Table 3.11 -- Cluster C: verbal enclitic cluster (Sub-Cluster CA)

CA1	CA2	CA3	CA4	CA5	CA6	CA7	CA8
	DERV =pra =pro =a	DERV =pa INTRZ1 =mo	CEL/ RGRDLSS =ta	CAUS / TRZ1 =ma	CONSERV =po	INTRZ2 =mo RECP =yo	CAUS / TRZ2 =ma

Table 3.12 -- Cluster C: verbal enclitic cluster (sub-clusters CB and CC)

CB1	CB2	CB3	CB4	CB5	CB6	CB7	CB8	CC1	CC2	CC3
					LOC =tayu =harayu =kiri	PAST =ma =n		NOMZ =wei		PLSEMIC =ni
	STV =o			PRF =rayo =re =ki =pi	DIR =ima =huru =imatayu =you =horo	DYN =i POS =a FUT =pë	NEG =imi	CONJ. REAS =yaro =kutayo NOMZ =pë	3PL. ERG =he	CONJ.TIME =tëhë CONJ.REAS =ha CONJ.MANNER =ndha
HAB =taa	PRF. VOWEL =a	3DL. ERG =pi	DUR =ti DISTR =ra =a	SIMULT =ra	PRGRS =imatayu =huru	RSLT =no		INTRR =si =tha		

Derivational enclitics appear in the eight slots nearest to the lexical morpheme. This is the Sub-Cluster CA or the derivational enclitic cluster. The attenuative morpheme appears in slot 1 (CA1), three polysemous derivative morphemes can occupy slot 2 (CA2), the intransitivizer *=mo* and another polysemous derivative morpheme *=pa* go in slot 3 (CA3), the celerative/regardless *=ta* goes in slot 4 (CA4), the causative morpheme, which is also a transitivizer, occurs in slot 5 (CA5), the conservative morpheme *=po* appears in slot 6 (CA6), the reciprocal marker *=yo* goes in slot 7 (CA7), where the intransitivizer *=mo* can also appear again, and finally the transitivizer/causative marker has a second possible position in slot 8 (CA8). All these morphemes create new verbs, whether from lexical morphemes from Table 3.1 or from Table 3.2. Lexical morphemes from Table 3.1 need one morpheme of this clitic sub-cluster to be able to receive any other morpheme of the clitic Cluster C. Lexical morphemes from Table 3.2 don not display this limitation, being able to host directly any morpheme of the clitic Cluster C. The derivation of a lexical morpheme from Table 3.2 with a morpheme of the Sub-Cluster CA results in changes in its lexical semantics, like the one in (12c), where a causative meaning ('to lay') was added to its non derived version, (12b) ('to lie').

The flexional morphemes attach to the lexical morphemes from Table 3.2 directly or after the derivational morphemes, when it is the case. These flexional morphemes belong to the Sub-Cluster CB or the Flexional Enclitic Sub-Cluster. This sub-cluster has seven slots. Slot 9 (CB1) is for the habitual morpheme *=taa*, slot 10 (CB2) for the imperfective marker *=o*, slot 11 (CB3) is occupied by the maker for 3rd person dual agent. In slot 12 (CB4) appear either the durative *=ti* or the distributive (or non-punctual) *=(r)a*; in slot 13 (CB5) is dedicated to simultaneous morpheme *=ra* and the perfective makers *=rayo*, *=re*, *=ki* and *=pi* and in slot 14 (CB6) appear the relative location markers (*=tayū*, *=harayū* and *=kirī*), the directional enclitics (*=imā*, *=huru* and *=you*) and the progressive markers (*=imatayū* and *=huru*). In slot 15 (CB7) occur the past markers *=ma* and *=n*, the dynamic *=i*, the positional *=a*, the future marker *=pē* and the polysemic enclitic *=no* (used for instance as resultative marker) and, finally, in slot 16 (CB8) occur the negation enclitic *=imi*. Lexical morphemes

from Table 3.1 can not take these morphemes, unless they receive first one of the morphemes of the Sub-Cluster CA.

The last group of enclitics of the Cluster C is the Clausal Enclitic Sub-Cluster or the Sub-Cluster CC. This sub-cluster has only three positions. The first position (CC1) is occupied by the nominalizers =*wei* and =*pě*, the conjunctions =*yaro* and =*kutayo*(=*ni*) and the interrogative particles =*tha* and =*si*. In slot 18 (CC2) appears the only flexional morpheme of this cluster, the marker for 3rd person plural agent =*he*. Example (12h) show us the position of this enclitic. The last slot of the sub-cluster (CC3) is reserved for the conjunctions =*těhě*, =*ha* and =*naha* and the polysemic enclitic =*ni*, which is part, for instance, of the reason conjunction =*kutayo*=*ni*.

3.4.1.3. Summary of the clitic clusters

We have seen that the words from Table 3.1 can host morphemes only on their right end. Up to eight bound morphemes can appear in this position and they make up the Cluster A. The words from Table 3.2, on the other hand, can accommodate bound morphemes on their left side, where the proclitics of the Cluster B attach to in 12 different slots, and on their right side, where a potentially very large cluster of enclitics appear, the Cluster C with 19 slots. This cluster can be partitioned in three sub-clusters, according to the general properties of the morphemes that appear within them: the sub-cluster (8 slots), with derivational morphemes (8 slots), the Sub-Cluster CB (8 slots), with flexional enclitics, and the Sub-Cluster CC (3 slots), with mainly clausal or connective enclitics, but with one enclitic that is actually a flexional marker.

Words with noun-like content=cluster A

cluster B=Words with verb-like content=cluster CA=cluster CB=cluster CC

- Cluster A - nominal enclitic cluster (8 slots)
- Cluster B - verbal proclitic cluster (12 slots)
- Cluster C - verbal enclitic cluster (19 slots). It is subdivided in three sub-clusters:

Sub-Cluster CA derivative enclitics (8 slots)

Sub-Cluster CB flexional enclitics (8 slots)

Sub-Cluster CC clausal enclitics (3 slots)

3.5. Formal definition of nouns and verbs

According to the discussion so far, I can now propose some definitions.

Definition of nouns: a noun is a free word that preferably has an initial position in the clause, can only host bound morphemes on its righthand side, is able to take any morpheme of Cluster A but needs one of the derivational morphemes of CA to host the morphemes of CB or CC.

Definition of verbs: a verb is a free word that preferably occurs in non-initial position in the clause, has its both sides (right and left) opened to receive morphemes, and can host any morpheme of the Sub-Cluster CB or CC dispensing with the morphemes of the Sub-Cluster CA, but can not take the Cluster A without a previous derivation. Verbs can still host the Sub-Cluster CA in the cases of derivational processes for the purpose of lexical creation or valence or voice changes.

3.6. Orthography issues about clitic clusters

If the analysis that the clitic clusters are attached to the lexical morphemes is correct, we will face the inevitable problem of representing the words they form together, which can potentially be very large strings of morphemes. Examples (9)-(12) illustrate this problem. Example (12h), for instance, shows a word (an inflected verb) with 25 letters and 13 syllables. This is neither very practical for those learning how to write the language nor popular among those who already write in YMA. Literate native speakers, nevertheless, have still not reached a common agreement on how separate written words, often relying on personal preferences or the very young local traditions on the matter to make orthographic choices. Although a great deal of variation is attested throughout the YMA original texts, some recurring patterns can be mentioned. One general pattern is the avoidance of vary large (written) words. Native speakers clearly tend to limit the length of the written words to five or six syllables,

rarely exceeding this number. It is not uncommon to find a clitic cluster or part of it written as discrete “word”, i.e. separated from the lexical morphemes that host them. Examples (9f), (10f), (11g) and (12h), for instance, are more likely to be written by a native speaker as in the examples in (13), (14), (15) and (16).

(13) a. *koraha esipëi xo.*

b. *koraha esi pëixo.*

c. *koraha e si pëi xo.*

‘Also with his/her (+DIM) banana trees.’

(14) a. *warõ epokopërîha.*

b. *warõe pokopërî ha.*

c. *warõ epoko përiha.*

‘In her husband’s (+REV) arms.’

(15) a. *yamapë kâyo riârî huma.*

b. *yama pë kâyoriârî huma.*

c. *yama pë kâyo riâ rî huma.*

‘We wanted to go with them (+REV).’

(16) a. *a pirimaketayoma yarohe*

b. *a pirimake tayoma yarohe*

c. *a pirimake tayoma yaro he*

‘Because they laid it/him/her over there [...].’

The transcriptions I will be using here were entirely made by Yanomama researchers (who are also native speakers). Considering that there is an expectation that both the grammatical description and the annotated corpus of our documentation project can eventually be used by members of the linguistic community, I decided that I will not rely exclusively on the morphological freedom of the morphemes to separate the words of the practical orthography line of the examples, as I have been doing in this chapter. In contrast, I decided to generally preserve the transcription presented by the native-speakers, making minor (i.e. not polemic) modifications to increase the

level of standardization of the texts or when it was really necessary. I will, for instance, keep together any pair of morphemes that exert phonological influence on each other. In (16), the preferable word separation would be *a.*, because *=ke* is an allomorph of the perfective marker *=ki*, occurring only when it precedes a clitic whose first syllable has an *a*.

For the sake of uniformity, I took the following additional decisions: I will never write any morpheme from Clusters A and B attached to the lexical morpheme and I will always write Sub-clusters CA and CB together with the lexical morpheme. Sub-Cluster CC will be written as a single graphic word⁴, never attached to the lexical morpheme or to the Sub-clusters CA and CB. Clusters A and B can be further subdivided, but clitics expressing similar categories should remain together. In (15), I would prefer the word separation in *a.*, where the two argument markers *yama=*, for 1st person plural, and *pě=*, for 3rd person plural, appear in the same written word.

3.7. Concluding remarks

This chapter presented the general formal properties of semantically prototypical nouns and verbs in YMA. We have seen that words with verb-like content tend to occur at the end of the clauses while words with noun-like content in the beginning. Moreover, these two types of words have different morphological properties, regarding the position where bound morphemes can attach to them and the different morphological paradigms that can coexist with them without additional derivational processes.

Nevertheless, this is not a full account of these two parts of speech. We will see in the chapters ahead that there are other subclasses of nouns and verbs that do not fit perfectly in the definitions presented here, although they do not entirely contradict them either. One of the nominal subclasses was already mentioned in this chapter: the body part terms, which are not morphological free words, but clitics, and are part of

⁴ Or exceptionally two words, when one of the morphemes is *=təhě* ('when'). This morpheme is widely represented, only in Papiu, as a single word.

the nominal enclitic cluster (Cluster A) and the verbal proclitic cluster (Cluster B) . Nouns that take noun classifiers are also a special type of noun with specific properties. I will deal with these two subclasses of noun in the chapter on nouns and noun morphology. We will see in the chapter on verbs and verb morphology that there is a subtype of verb whose lexical content is not represented exclusively by the free morpheme (the lexical morpheme), but by a combination of the free morpheme and a verbal particle (a proclitic of the Cluster B).

Although incomplete, this first characterization of nouns and verbs will be crucial for the definition of other word classes and especially important for the discussion of whether or not the adjectives are a major word class in YMA. This discussion and the study of other word classes of the language will be the subject of the next chapter.

4. The noun phrase

4.1. Introduction

In Chapter 3, I presented a brief characterization of nouns, to differentiate them with respect to verbs. I arrived at the formal definition of nouns as content words (free words) that tend not to occur in the final position of the clause, and that can host bound morphemes from Cluster A, only to their right. I showed that these features are absent in words with prototypical verb-like content, which in turn have different syntactic distribution and morphological structure, occurring preferably at the end of the clause and hosting morphemes from Clusters B and C on both sides of the word.

A detailed check going through the YMA texts reveals nevertheless that this definition is incomplete in several respects¹. On the one hand, it does not give a full account of all subclasses of nouns in the language, since not all words that denote “people, animals, plants, things and places” have precisely this morphological structure, made up of a lexical morpheme hosting grammatical morphemes following it (1).

- (1) a. *iwa* *a*
 iwa =*a*
 caiman =SG
 ‘a caiman’
- b. *thuě* *a*
 thuě =*a*
 woman =SG
 ‘a woman’

Some of the words with a content prototypically associated with nouns, like the ones that refer to ‘water’ or ‘tree’, for instance, have a slightly different morphological

¹ An earlier version of part of this chapter appeared in Spanish as Perri Ferreira, 2009 (MA dissertation).

structure, and are composed of two morphemes with lexical content, a free morpheme and an enclitic (a noun classifier) (2).

- (2) a. *mau u*
mau =u
 water =CLN:liquid
 ‘water’

- b. *huu tihi*
huu =tihi
 tree =CLN:tree
 ‘a tree’

Moreover, the nouns that denote body parts and parts of plants and things (in bold) are not even free morphemes in the language, but rather one of the enclitics of Cluster A (3) as defined in Chapter 3.

- (3) a. *iwa xina*
iwa =xina
 caiman =tail
 ‘the caiman’s tail’

- b. *thuë yamaka*
thuë =yamaka
 woman =ear
 ‘the ear of the woman’

On the other hand, the characterization of the nouns presented in the last chapter is insufficient to distinguish them from some other word classes, since these properties seem to hold equally for words that are not semantically prototypical nouns. Demonstratives (4a), quantifiers, (4b), possessive pronouns, (4c) and (4e), and indefinite pronouns, (4d), for instance, can also take the enclitics from Cluster A, and apparently have a syntactic distribution very similar to that of the noun, also preferring a non-final position in the clause, as shown in (4d) and (4e).

(4) a. *hei pē**hei* =*pē***this** =PL

‘these ones’

b. *mōri hi**mori* =*hi***one** =CLN:tree

‘one tree’

c. *aho a**aho* =*a***2POS** =SG

‘It is yours.’

d. *ai pēni ya nakaremahe**ai* =*pē* =*ni* *ya*= *naka* =*re* =*ma* =*he***other** =PL =ERG 1SG= call; ask =PFV1 =PST =3PL

‘Other (people) called me.’

e. *ipa sipē ārīkirayoma**ipa* *si*= *pē*= *ārīki* =*rayu* =*ma***1POS** CLN:palm_tree= PL= parch =PFV1 =PST

‘My (banana) trees dried out.’

This chapter has two aims. In Section §4.2, I first deepen the characterization of the nouns by describing the formal and semantic properties of three subclasses of nouns in YMA. I show that the subclasses of noun display different morphological structures (§4.2.1) and paradigm sizes (§4.2.2), and express the singular in a variety of ways (§4.2.3). Moreover, these subclasses have different syntactic properties in possessive constructions (§4.2.4), in minimal clauses (§4.2.6), and when performing core syntactic roles in the clause, either in an absolutive role (i.e. subject of an intransitive clause or object of transitive) (§4.2.5) or in an ergative role (i.e. agent of transitive clause) (§4.2.7). In §4.2.8, I present a summary of the properties of these

three subclasses. In §4.2.9 I deal with kinship terms, which are the fourth subclass of nouns in the language with very peculiar characteristics, given the limited size of its paradigm and the heterogeneity of the formal properties of its members. Finally, in §4.2.10, I discuss some nouns that seem to have mixed or ambiguous properties, i.e. they may display the properties of the specific subclass in one context and those of another subclass in other contexts.

In Section §4.3 I will then discuss the word classes whose properties overlap with some of the nouns, presenting additional criteria to distinguish them. These word classes are possessive pronouns (§4.3.1), demonstratives (§4.3.2), quantifier (§4.3.3), personal pronouns (§4.3.4), indefinite pronouns (§4.3.5) and attributive modifiers (§4.3.6), and I will show that these overlapping properties with nouns are evident only when these other word classes are performing pronominal functions, but different features become apparent when they occupy adnominal positions.

4.2. Different types of nouns

In YMA, there are at least four subclasses of nouns that are identifiable by their morphosyntactic and semantic properties. The first type of noun (Type 1) is semantically defined as the class of words that prototypically denote discrete and independent entities; these nouns, labelled ‘holonyms’ here, or noun of Type 1, are formally polymorphemic constructions made up of one lexical morpheme and one grammatical morpheme from Cluster A. In Table 4.1, I present some of the nouns of Type 1 (complete entities). These nouns are also alienable nouns in the language.

Table 4.1 – Nouns of Type 1 (Holonyms)

Form	Gloss	Form	Gloss	Form	Gloss
<i>apiama=a</i>	airplane	<i>mayapa=a</i>	toucan	<i>tihī=a</i>	jaguar
<i>arima=a</i>	parakeets	<i>mokawa=a</i>	rifle	<i>uhuru=a</i>	child
<i>haya=a</i>	deer	<i>moko=a</i>	girl	<i>warō=a</i>	man
<i>sapa=a</i>	hoe	<i>mothaka=a</i>	sun	<i>watori=a</i>	wind
<i>hee=a</i>	bat	<i>napē=a</i>	foreign	<i>werehe=a</i>	parrot
<i>hehu=a</i>	mountain	<i>oko=a</i>	crab	<i>wii=a</i>	basket
<i>hiima=a</i>	dog	<i>poxe=a</i>	peccary	<i>xahema=a</i>	fan
<i>yuri=a</i>	fish	<i>pixata=a</i>	earth	<i>xama=a</i>	tapir
<i>hiya=a</i>	boy	<i>poo=a</i>	knife	<i>xaraka=a</i>	arrow
<i>koraha=a</i>	banana	<i>poripa=a</i>	moon	<i>yanomama=a</i>	human
<i>krokekroke=a</i>	cloud	<i>thuë=a</i>	woman	<i>yaro=a</i>	animal

The second type of noun (Type 2) comprises ‘meronyms’, i.e. words that are parts of discrete entities like ‘arm’ or ‘head’, or objects that are conceived to be dependent on other entities like ‘remnants’. This dependence is expressed in YMA by the *morphological* dependency of these forms, which in actual effect are clitics. In Table 4.2 there is a brief list of the nouns of Type 2 (parts of entities).

Table 4.2 – Nouns of Type 2 (Meronyms)

Form	Gloss	Form	Gloss	Form	Gloss
= <i>āmo</i>	liver	= <i>makasi</i>	belly button	= <i>nahasi</i>	finger nail
= <i>hana</i>	leaf	= <i>mamo</i>	eye	= <i>naka</i>	vagina
= <i>hoko</i>	forehead	= <i>mahuku</i>	foot	= <i>nasipē</i>	urine
= <i>homothokɨ</i>	column	= <i>matha</i>	calf	= <i>parɨki</i>	chest
= <i>hoxo</i>	peak	= <i>maxikopē</i>	kidney	= <i>pihiki</i>	face
= <i>hriki</i>	loin	= <i>maxiopē</i>	heart	= <i>poko</i>	arm
= <i>humapē</i>	back	= <i>mayo</i>	trail	= <i>si</i>	skin
= <i>imi</i>	finger	= <i>mo</i>	seed	= <i>wathēmo</i>	testicle
= <i>kahiki</i>	mouth	= <i>moupē</i>	sperm	= <i>xina</i>	tail
= <i>kanasi</i>	remnants	= <i>moxi</i>	penis	= <i>yamaka</i>	ear
= <i>maheko</i>	knee	= <i>na</i>	tooth	= <i>yōra</i>	horn

There is another type of nouns (Type 3), which, like Type 1 nouns, also refers to discrete and independent entities. However, in this case, the entity referred to is part of a larger group from the speaker's perspective and falls under one of the nominal categories of the language. These nouns are morphologically complex constructions composed of two lexical elements, a free morpheme and a clitic, which is a nominal classifier indicating the class to which the noun belongs, i.e. showing the membership of the noun to that class. I will refer to Type 3 nouns with the label 'classified holonyms' when I want to emphasize their similarities with Type 1 nouns (called 'holonyms'), or just simply 'nouns with classifiers'. A considerable part of Type 3 nouns belongs to the plant and fungi kingdoms ('mushroom', 'tree', 'palm-tree', 'seeds that grow in pods', 'fruits with utile seeds', etc.) (cf. Table 4.3), and a smaller part to the animal kingdom ('bees', 'snakes', 'birds with characteristic plumage',

‘woodpeckers’ etc.) (cf. Table 4.4). The remaining nouns still include animal and vegetal entities but also other kind of entities like Western products, and they are then classified according to their form, functional properties or substance, such as *kahe u* ‘coffee’ or *ãama upê* ‘gasoline’ (cf. Table 4.4).

Table 4.3 – Plant and fungi nouns of Type 3 with transparent CLNs (I)

<i>=hi</i>	CLN:tree	<i>=thotho</i>	CLN:liana
<i>ahôï =hi</i>	avocado tree	<i>riporiporima =thotho</i>	liana used as a rope
<i>rokoroko =hi</i>	papaya tree	<i>akanasima =thotho</i>	liana used as a rope
<i>kãï =hi</i>	inga tree	<i>apasi =thotho</i>	medicinal liana
<i>pahi =hi</i>	inga tree	<i>naxuruma =thotho</i>	passion fruit liana
<i>mukuru =hi</i>	medicinal tree	<i>horokotho =thotho</i>	gourd liana
<i>=si</i>	CLN:palm-tree ²	<i>=ãmo</i>	CLN:mushroom
<i>ëri =si</i>	cumare palm	<i>ãra =amo</i>	edible mushroom
<i>kõanari =si</i>	pataua palm	<i>hramirima =amo</i>	edible mushroom
<i>kui =si</i>	moriche palm (buriti)	<i>(riã) moxirima =amo</i>	edible mushroom
<i>mai =si</i>	açai palm	<i>pihi waiyorema =amo</i>	inedible mushroom
<i>rasa =si</i>	peach-palm (pupunha)	<i>uxipirima =amo</i>	edible mushroom
<i>rihoari =si</i>	yacaratia tree	<i>xetema =amo</i>	edible mushroom

² This classifier is still assigned to other types of plants that are not palm-trees, such as the banana and cassava trees, and the taioba plant (a type of yam). For the sake of economy, I will also use the gloss ‘CLN:palm-tree’ to refer to the classifier of these nouns in this book.

Table 4.4 – Nouns of Type 3 with transparent CLNs (II)

<i>=ma</i> CLN:stone, hard fruit		<i>=na</i>	CLN:wasp, bee
<i>maa =ma</i>	stone, pebble	<i>hesi =na</i>	wasp species
<i>hoko =ma</i>	bacaba fruit	<i>karoxo =na</i>	wasp species
<i>mai =ma</i>	açaí fruit	<i>himoto =na</i>	bee species
<i>kōanari =ma</i>	pataua fruit	<i>hiporo =na</i>	bee species
<i>=koko</i> CLN:round and dark		<i>=koxi</i>	CLN:aracari (small toucan)
<i>naxi =koko</i>	cassava	<i>aroaroma =koxi</i>	azara aracari
<i>mai =koko</i>	rosin (pitch)	<i>hāhāama =koxi</i>	tucanete culik aracari
<i>warapa =koko</i>	light rosin	<i>krêkêkrêkêma =koxi</i>	green aracari
<i>ārepa =koko</i>	termite mound	<i>meremere =koxi</i>	black-necked aracari
<i>=u(pě)</i> CLN:liquids		<i>=kiki</i>	CLN:snake and snaky entity
<i>pata =u</i>	river	<i>horema =kiki</i>	flatworm
<i>kahe =u(pě)</i>	coffee (beverage)	<i>aroama =kiki</i>	lancehead snake
<i>mau =u(pě)</i>	water	<i>heputu =kiki</i>	swamp eel
<i>nara =upě</i>	dark ink	<i>haro =kiki</i>	medicinal necklace
<i>aaāma =upě</i>	gasoline	<i>masi =kiki</i>	liana used as a rope

Table 4.3 and Table 4.4 should not give the false impression that the paradigm of the nouns with classifiers is entirely regular regarding their number of members and the transparency of the semantic features that define each category. Some classes present a paradigm of only one member or of very heterogeneous members, which makes the attribution of clear meaning to the classifier very difficult. Consider the examples presented in Table 4.5.

Table 4.5 – Nouns of Type 3 with opaque CLNs

<i>=aka</i>	CLN:tongue?	<i>=xi</i>	CLN:intestine?
<i>yamara =aka</i>	ray (fish)	<i>hapaka =xi</i>	crook, pot
<i>ama =aka</i>	fruit (flat and long pod)	<i>nara =xi</i>	achiote (urucu)
<i>waima =aka</i>	tegu lizard	<i>oru =xi</i>	cashew (fruit)
<i>rema =aka</i>	lizard	<i>xiho =xi</i>	small catfish
<i>=moxi</i>	CLN:penis?	<i>=mo</i>	CLN:seed?
<i>tëpëtëpë =moxi</i>	trogon (bird)	<i>hatakoa =mo</i>	chachalaca (bird)
<i>hoo =moxi</i>	genipapo, huito (fruit)	<i>wëtë =mo</i>	severe macaw
<i>kuku =moxi</i>	night monkey	<i>maku =mo</i>	bagre puyón
<i>pori =moxi</i>	sunshine, sunbeam	<i>hiiha =mo</i>	abeja
<i>=mosi</i>	CLN:?	<i>=husi</i>	CLN:carapace?
<i>yãno =mosi</i>	ornate hawk-eagle	<i>hõra =husi</i>	scarab
<i>hutu =mosi</i>	sky	<i>mau =husi</i>	gourd
<i>yãno =mosi</i>	wasp	<i>piriya =husi</i>	transverse beam
<i>=ãhi</i>	CLN:?	<i>=moka</i>	CLN:penis?
<i>paxa =ãhi</i>	carrying basket	<i>xama =moka</i>	esp. of fish

The last type of nouns consists of kinship terms. It has only about a dozen members and will be dealt with separately in Section §4.2.9. Table 4.6 presents a summary of the types of noun in YMA and the basic semantics associated to each of them.

Table 4.6 – Types of noun in YMA

Type 1	Type 2	Type 3	Type 4
holonyms	meronyms	classified holonyms	kiship terms
independent entity	dependent, part of independent entity	independent entity	independent entity

4.2.1. Morphological structure

The morphological structure of the nouns described in Chapter 3 only holds for the nouns of Type 1 or holonyms. According to that description, these words are polymorphemic constructions made up of one lexical morpheme and at least one grammatical morpheme from Cluster A. Schema 4.1 illustrates this structure.

Schema 4.1 – Morphological structure of Nouns of Type 1

Free Word	=Enclitic Cluster A
lexical morpheme	=grammatical morphemes

This is not, nevertheless, the only possible morphological structural arrangement for nouns in YMA, since some of enclitics of Cluster A also have lexical content, as mentioned in Chapter 3. Body part terms (nouns of Type 2) are one set of these. The nouns that denote parts of human or animal bodies and parts of plants and things are prototypically expressed in YMA by clitics. These nouns are morphologically dependent, as they always require a free word to host them (the “X” in the Schema 4.2). This formal dependency correlates with a semantic dependency. These nouns are always in a meronymic relation with another entity. In other words, these nouns refer to parts that belong to someone or something.

Schema 4.2 – Morphological structure of Nouns of Type 2

X	=Enclitic Cluster A
X	=lexical and grammatical morphemes

Like the nouns of the first type, the nouns of Type 3 (nouns with classifiers or classified holonyms) also denote complete entities, but they differ from the latter in the sense that the entity they refer to is part of a larger group from the speaker's perspective. The nominal classifiers, which are one type of lexical morpheme that appears in Cluster A, indicate this relation of membership. Schema 4.3 illustrates the morphological structure of this kind of noun.

Schema 4.3 – Morphological structure of Nouns of Type 3

Free Word	=Enclitic Cluster A
lexical morpheme	=lexical and grammatical morphemes

4.2.2. Size of the paradigms

I mentioned before that the size of the paradigm of kinship term (the nouns of Type 4) is very reduced, counting only a handful of members. The other three types of nouns constitute much larger paradigms of different sizes. The inventory of nouns of Type 2, for instance, is rather small, and only 322 instances of this type of noun were found in the YMA dictionary. It represents only 10% of the total of nouns. The nouns of Type 1 account for more than 1/3 of the nouns in the dictionary (1072 entries), while nouns of Type 3 totalize 1553 entries or more than 50% of the nouns in the language. Table 4.7 shows the number of each type of noun in the YMA dictionary.

Table 4.7 – Percentage of each type of noun in the YMA dictionary

Type	Semantics	Entries in the dictionary	Percentage
Type 1	non-classified holonyms	1072	36.18%
Type 2	meronyms	322	10.87%
Type 3	classified holonyms	1553	52.41%
Type 4	kinship terms ³	16	0.51%
TOTAL		2963	

The greater proportion of nouns of Type 3 in comparison to the nouns of Type 1 in the corpus is due to several factors. The first is that many of the nominalizations in the language take the generic classifier *=thě*, especially (but not exclusively) when the resulting noun is abstract or inanimate. Deverbalized nouns with the generic classifier correspond to about 12% of the nouns with a classifier (177 entries). In (5), I present some of these. The nominalizer morpheme *-tima* is in bold.

- (5) a. *wãritima* *thě*
 wãri ***-tima*** *=thě*
 ask **-NMLZ** =CLN.GNR
 ‘research’
- b. *urihi hěhũãtima* *thě*
 urihi hěhũã ***-tima*** *=thě*
 forest close **-NMLZ** =CLN.GNR
 ‘land demarcation’/‘limitation’

³ As we will see in section 4.2.9, kinship terms having the particularity of slightly varying their form according to the person to which they are related (whether 1st, 2nd or 3rd persons). For the counting presented in the table, I did not consider this variation and counted each root only once.

c. *yopi taatima* *thë*
yopi taa **-tima** =*thë*
 hot see **-NMLZ** =CLN.GNR
 ‘thermometer’

d. *matihi* *titipotima* *thë*
matihi *titipo* **-tima** =*thë*
 belongings keep inserted **-NMLZ** =CLN.GNR
 ‘backpack’

A second factor is related to the fact that many of the lexical free morphemes of the nouns with classifiers (Type 3) coincide with a lexical morpheme of a noun of Type 1. That is, several non-classified holonyms can become a classified holonym just by adding the noun classifier to the noun of Type 1. Some names of fruits, for example, are nouns of Type 1, but the names of the plants that produce these fruits and their byproducts (porridge, juice, artifacts...) are frequently nouns of Type 3. In the case of the names of plants, the noun classifier indicates the type of plant (tree, palm-tree, shrub, liana) that produced the fruit. The examples in (6), (7) and (8) illustrate this. In (6a), (7a) and (8a), we have nouns of Type 1 (non-classified holonyms) all of them referring to fruit; in (6b), (7b) and (8b), we have the classified noun of the correspondent plant that produces that fruit; and in (7c) and (8c), we have a by-product of that fruit, which is also a noun of Type 3. The noun classifiers are in bold.

(6) a. *ahõi* *a*
 ahõi =*a*
 avocado =SG
 ‘an avocado’

b. *ahõi* ***hi***
 ahõi =***hi***
 avocado =CLN:**tree**
 ‘an avocado tree’

- (7) a. *raxa* *a*
 raxa =*a*
 peach-palm =SG
 ‘a peach-palm’
- b. *raxa* *si*
 raxa =*si*
 peach-palm =CLN:**palm_tree**
 ‘a peach-palm tree’
- c. *raxa* *uku*
 raxa =*uku*
 peach-palm =CLN:**porridge**
 ‘peach-palm porridge’
- (8) a. *koraha* *a*
 koraha =*a*
 banana =SG
 ‘a banana’
- b. *koraha* *si*
 koraha =*si*
 banana =CLN:**palm_tree**
 ‘a banana tree’
- c. *koraha* *uku*
 koraha =*uku*
 banana =CLN:**porridge**
 ‘banana porridge’

The examples above show that a noun of Type 1 can potentially be part of nouns of Type 3. However, this property is not confined to the nouns of Type 1. That is, many nouns of Type 3 can also potentially generate other nouns of Type 3, by combining their classifiers with one or more other classifiers. To stay in the lexical

domain of the vegetables, the classifiers that appear in some names of fruits, for instance, also appear in the name of the plant that produces them, (9).

(9) a. *xinaru u*

xinaru =**u**

cotton =CLN:**cotton**

‘cotton’

b. *xinaru uhi*

xinaru =**u** =*hi*

cotton =CLN:**cotton** =CLN:tree

‘a cotton tree’

The point I am trying to make here is that the nouns of Type 3 are much more frequent than the nouns of Type 1, because in many derivational processes that create new nouns in the language, either by nominalizing a verb, (5), or deriving an existing noun, (6)-(9), the resulting word is often a noun of Type 3.

4.2.3. Number markers

Another difference between the three subclasses of nouns has to do with the expression of singular. All nouns of Type 1 take the marker =*a* for the expression of singular number, (10a), while the nouns of Type 2 and Type 3 cannot take this marker, (10c) e (10d). The nouns of Types 2 and 3 express singular without the need of any open class morphology. In the construction where a noun of Type 2 occurs with a noun that denotes a complete (non-classified) entity (Type 1), the meronym (Type 2) substitutes the singulative marker of the holonym, as exemplified in (10b).

NOUN OF TYPE 1 IN SINGULAR

(10) a. *xama a*

xama =**a**

tapir =SG

‘a tapir’

BODY-PART TERM (NOUN OF TYPE 2) IN SINGULAR

b. *xama mahu*

xama =***mahu***

tapir =**toe**

‘the foot of the tapir’

c. * *xama amahu*

xama =***a*** =***mahu***

tapir =SG =**toe**

‘the foot of the tapir’

d. * *xama mahua*

xama =***mahu*** =***a***

tapir =**toe** =SG

‘the foot of the tapir’

The nouns of Type 3 also occur without a singulative marker. The bare noun classifier itself, with no other marker attached, indicates that the number of entities represented by the noun is just one. The noun classifier cannot co-occur with the marker =*a*.

NOUN OF TYPE 3 IN SINGULAR

(11) a. *naxi hi*

naxi =***hi***

cassava =CLN:**round**

‘a cassava pancake’

b.* *naxi hi a*

naxi =***hi*** =***a***

cassava =CLN:round =3SG

‘a cassava pancake’

- c. *mau husi*
mau =husi
 water =CLN:bowl
 ‘a gourd’

- d. * *mau husi a*
mau husi =a
 water CLN:bowl =SG
 ‘a gourd’

The singular marker *=a* should not be considered a noun classifier. First of all, there is no common semantic feature that could explain why the nouns that take *=a* are of the same category. This is obviously not a distinctive feature of the classifiers since there are indeed several other noun classifiers that have opaque semantics, as I showed in Table 4.5. Different from singulative *=a*, nonetheless, those semantically opaque classifiers have very limited productivity in the language. All widespread classifiers in the language are semantically transparent, such as *=hi* ‘tree’, *=si* ‘palm-tree’ or *=u* ‘liquid’. There is a positive correlation between semantic transparency of a noun classifier and its lexical productivity. The more a noun classifier is used, the clearer its meaning will be. The semantic transparency of frequent noun classifiers also makes them a useful resource for creating new words or borrowing foreign ones. The loanwords in (12) exemplify this property.

- (12) a. *koko si*
koko =si
 coconut =CLN:palm-tree
 ‘a coconut tree’
- b. *māuka hi*
māuka =hi
 mango =CLN:tree
 ‘a mango tree’

- c. *kahe* *u*
kahe =*u*
 coffee =CLN:liquid
 ‘coffee (beverage)’

Given that singulative =*a* occurs with 36% of the nouns of the YMA dictionary, one would expect some transparency in its meaning, if singulative =*a* were indeed a noun classifier. However, this is not what happens, and no meaning can be attributed to =*a* other than ‘one’. The heterogeneity of the referents in (13) illustrates this. Notice that all the words in (13) are either loanwords or neologisms.

- (13) a. *koko* *a*
koko =*a*
 coconut =SG
 ‘a coconut’
- b. *mãuka* *a*
mãuka =*a*
 mango =SG
 ‘a mango tree’
- c. *kôputato* *a*
kôputato =*a*
 computer =SG
 ‘a computer’
- d. *apiama* *a*
apiama =*a*
 airplane =SG
 ‘an airplane’
- e. *hiramatima* *a*
hrama -*tima* =*a*
 teach -NMLZ =SG
 ‘a teacher’

- f. *hirimatima a*
hirima -tima =a
 heal -NMLZ =SG
 ‘a health professional’

The second reason for not considering the singular marker *=a* a classifier is that actual classifiers co-occur with the non-singular number markers *=kipě*, for dual, and *=pě* and *=ki*, for plural, as illustrated in the examples in (14)

- (14) a. *koko sikipě*
koko =si =kipě
 coconut =CLN:palm-tree =DU
 ‘two coconut trees’

- b. *māuka hipě*
māuka =hi =pě
 mango =CLN:tree =PL
 ‘mango trees’

On the other hand, singulative *=a* is in contrastive opposition with these markers and does not coexist with them, as shown in (15).

- (15) a. *xaraka a*
xaraka =a
 arrow =SG
 ‘an arrow’
- b. * *xaraka akipě*
xaraka =a =kipě
 arrow =SG =DU
 ‘two arrows’
- c. * *xaraka apě*
xaraka =a =pě
 arrow =SG =PL

‘arrows’

d. *xaraka kipě*

xaraka =*kipě*

arrow =DU

‘two arrows’

e. *xaraka pě*

xaraka =*pě*

arrow =PL

‘arrows’

Finally, there is a real noun classifier =*a* in the language, at least formally. The meaning of this classifier is quite obscure since it appears in the dictionary with only four nouns: three nouns of fruits (including chili) and one of a tuber. These do not have much in common. In (16a) and (17a) we have two examples of noun with this classifier. Different from singulative =*a*, nevertheless, the noun classifier =*a* does co-occur with non-singular markers, (16b), (16d), (17d) and (17c), and other noun classifiers, (16d), (17d), as true classifiers do.

(16) a. *prĩka a*

prĩka =*a*

chili =CLN:???

‘a chili pepper’

b *prĩka akipě*

prĩka =*a* =*kipě*

chili =CLN:??? =DU

‘two chili peppers’

c. *prĩka apě*

prĩka =*a* =*pě*

chili =CLN:??? =PL

‘chili peppers’

- d. *prīka ahi*
prīka =*a* =*hi*
 chili =CLN:??? =CLN:tree
 ‘chili pepper tree’

- (17) a. *wāha a*
wāha =*a*
 taioba =CLN:???
 ‘a taioba tuber (taro)’

- b. *wāha akipē*
wāha =*a* =*kipē*
 taioba =CLN:??? =DU
 ‘two taioba tubers’

- c. *wāha aki*
wāha =*a* =*ki*
 taioba =CLN:??? =PL
 ‘taioba tubers’

- d. *wāha asi*
wāha =*a* =*si*
 taioba =CLN:??? =CLN:palm_tree
 ‘taioba plant (taro plant)’

Table 4.8 below presents the paradigm of number morphemes for each type of noun in YMA. Note that the nouns of Type 1 stand out as the only type that has an overt marker for the singular. Nevertheless, the singular number of the nouns of Type 1 is not morphologically marked in part-whole constructions, the reason why = \emptyset is also attributed to the paradigm of this type of noun.

Table 4.8 – Number markers according to the type of noun

	Noun of Type 1	Noun of Type 2	Noun of Type 3
Singular	= <i>a</i>	<i>ø</i>	<i>ø</i>
Dual	= <i>kɨpě</i>	= <i>kɨpě</i>	= <i>kɨpě</i>
Plural	= <i>pě</i>	= <i>pě</i> , = <i>kɨ</i>	= <i>pě</i> , = <i>kɨ</i>

In the next section, I will investigate another context in which the different types of nouns of YMA do not display similar properties: possession and part-whole constructions.

4.2.4. Behavior in possessive and part-whole constructions

There is more than one possessive construction in the language, but not all of them are available for all types of possessed nouns and possessors. These constructions will be described in detail in §8.2.3. Here I will just focus on some major differences that characterize the behavior of each noun type in these contexts. Nouns of Type 1 and Type 3 have similar behavior in possessive constructions. Differently from meronyms (nouns of Type 2), holonyms (nouns of types 1 and 3) can take part in possession constructions with the possessive pronouns *ipa* ‘my’ and *aho* ‘your’, when the possessor is 1st or 2nd person (18), or with the different participant marker =*e*, when the possessor is 3rd person singular (19).

- (18) a. *ipa* *xaraka* *pě*
 ipa *xaraka* =*pě*
 1POS arrow =PL
 ‘my arrows’
- b. *aho* *rākama* *thuku*
 aho *rākama* =*thuku*
 2POS hammock =CLN:hammock
 ‘your hammock’

(19) a. *Ararima xaraka epë**Ararima xaraka* =*e* =*pë*

Ararima arrow =DIF.PART =PL

‘Ararima’s arrows’

b. *thuë rakama ethuku**thuë rakama* =*e* =*thuku*

woman hammock =DIF.PART =CLN:hammock

‘the hammock of the woman’

The part-whole relationship (meronymic relationship) is never expressed in YMA by possessive pronouns or by the different participant marker. It is like this type of relationship was not codified in the language as a possessive construction or one that clearly involves two participants. The sentences in (20) are not grammatical.

(20) a. * *ipa he**ipa* =*he*

1POS =head

‘my head’

b. * *aho mahuku**aho* =*mahu* =*ku*

2POS =foot =PL

‘your feet’

c. * *Kunathoi e poko**kunathoi e* = =*poko*

Kunathoi DIF.PART= =arm

‘Kunathoi’s arm’

This type of relationship (part-whole) is expressed by simply juxtaposing the meronym to the holonym or to the personal pronoun, when the whole entity is a 1st or 2nd person. We saw in Chapter 3 that the body-part terms occupy the 5th slot in the Cluster A, just after the slots for number markers and nominal classifiers, as illustrated in (21).

(21) a. *kami ya he*
kami =*ya* =*he*
 1 =1SG =head
 ‘my head’

b. *kaho wa mahuku*
kaho =*wa* =*mahu* =*ku*
 2 =2SG =foot =PL
 ‘your feet’

c. *Kunathoi poko*
kunathoi =*poko*
 Kunathoi =arm
 ‘Kunathoi’s arm’

d. *thuë thëpë hethaki*
thuë =*thë* =*pë* =*hetha* =*ki*
 woman =CLN.GNR =PL =hair =PL
 ‘women’s hair’

e. *xũu hupë siki*
xũu =*hu* =*pë* =*si* =*ki*
 shrimp =CLN:shrimp =PL =skin =PL
 ‘skins of shrimps’

There is an alternative construction to express the possession of a Noun of Type 1 or 3 that resembles the meonimic construction but is actually very different. In this alternative construction, the holonym is derived as a verb with the enclitic =*pë*, of Cluster C. We will see in Chapter 8 (§8.2.3) that the derived verb is an adjective/attributive verb. The resulting construction dispenses with the use of possessive pronouns and the different participant marker, and cannot morphologically express the number of the semantically possessed noun. The constructions in (18) and (19) can thus alternatively be elaborated as in (22) and (23).

(22) a. *kami ya xarakapě**kami ya* = *xaraka* = *pě*1 1SG = arrow = **VBLZ**

‘(They are) my arrows.’ (lit: ‘I am “arrowed”’)

b. *kaho wa rakamathothopě**kaho wa* = *rakamathotho* = *pě*2 2SG = hammock = **VBLZ**

‘(It is) your hammock.’ (lit: ‘You are “hammocked”’)

(23) a. *Ararima a xarakapě**Ararima a* = *xaraka* = *pě*Ararima 3SG = arrow = **VBLZ**

‘(They are) Ararima’s arrows.’ (lit: ‘Ararima is “arrowed”’)

b. *Ararima a rakamathothopě**Ararima a* = *rakamathotho* = *pě*Ararima 3SG = hammock = **VBLZ**

‘(It is) Ararima’s hammock.’ (lit: ‘Ararima is “hammocked”’)

Meronyms (nouns of Type 2) cannot undergo this derivation with =*pě* and, therefore, cannot take part in this kind of possessive construction. The constructions in (24) are all ungrammatical. Note that the deriving nouns in the examples below are the same meronyms of the examples in (21).

(24) a. * *kami ya hepě**kami ya* = *he* = *pě*1 1SG = head = **VBLZ**

‘My head.’

b. * *kaho wa mahupě**kaho wa* = *mahu* = *pě*2 2SG = foot = **VBLZ**

‘Your foot.’

- c. * *Kunathoi a pokopě*
Kunathoi a= poko =pě
 Kunathoi 3SG= arm =**VLZ**

‘Kunathoi’s arm.’

- d. * *thuě thěpě hethapě*
thuě thě= pě= hetha =pě
 woman CLN.GNR= 3PL= hair =**VLZ**

‘Women’s hair.’

- e. * *xũu hu sipě*
xũu hu= si =pě
 shrimp CLN:shrimp= skin =**VLZ**

‘Shrimp’s skin.’

We saw in this section that YMA makes a clear distinction between possession and part-whole constructions. In the former construction, and depending on the grammatical status of the possessor (whether 1st, 2nd or 3rd person), the speaker can make use of the personal pronouns, the different participant marker =*e* or the denominalized form of the possessed entity with the deriving morpheme =*pě*. The possessed entity in this construction must be an a holonym, i.e. a noun of Type 1 or 3. On the other hand, only meronyms, or nouns of Type 2, can take part in part-whole constructions, which do not require any extra morpheme to indicate this relation (part-whole), just relying on the juxtaposition of the holonym and the meronym, in this order. In the next section, we will examine another property of the meronyms that sets them apart from holonyms, which is their ability to appear incorporated into the verbal predicate.

4.2.5. Incorporation into the predicate

As already mentioned in Chapter 3 (§3.4.1.2), almost all Cluster A enclitics also appear in the Verbal Proclitic Cluster or Cluster B. We will see in Chapter 7 (§7.5.2) that this coincidence is due to a process of incorporation of the markers from Cluster A into the predicate. Body-part terms (nouns of Type 2) are included in this group,

which means that this type of noun can also appear inside the verb phrase. This happens whenever a noun of this Type 1 is the semantic subject of an intransitive predicate or the object of a transitive one. In this case, the ‘possessor’ or the whole of this part is promoted to the actual syntactic subject or object of the clause.

- (25) a. *kami ya **matha** kēprarioma*
*kami ya= **matha=** kē =pra =rio =ma*
 1 1SG= **leg=** break =DRV =PFV1 =PST
 ‘My leg broke.’

- b. *wāro pēni haya **matha***
*wāro =pē =ni haya **matha=***
 man =PL =ERG deer **leg=**
kēpramaremahe
kē =pra =ma =ri =ma =he
 break =DRV =CAUS =PFV1 =PST =3PL
 ‘The men broke the leg of the deer.’

- c. *kami yani haya ya **matha***
*kami =ya =ni haya ya= **matha=***
 1 =1SG =ERG deer 1SG= **leg=**
kēpramarema
kē =pra =ma =ri =ma
 break =DRV =CAUS =PFV1 =PST
 ‘I broke the leg of the deer.’

In contrast, when a noun of type 1 or type 3 is in the same context, i.e. the semantic subject of intransitive or object of transitive, it remains outside of the predicate and only the morphemes of the clitic Cluster A are incorporated into the verb phrase. Nouns of Type 3 have their classifiers incorporated, as they also belong to the Cluster A. In (26) the incorporated clitic cluster is in bold.

- (26) a. *Ararima xaraka e marayoma*
*Ararima xaraka **e=** ma =rayu =ma*
 Ararima arrow **DIF.PART=** not_exist =PFV1 =PST

‘Ararima’s arrow disappeared.’

b. *kami yani* *Ararima xaraka ya e*
kami =*ya* =*ni* *Ararima xaraka ya*= *e*=
 1 =1SG =ERG Ararima arrow 1SG= DIF.PART=
këprarema
kë =*pra* =*ri* =*ma*
 break =DRV =PFV1 =PST

‘I broke Ararima’s arrow.’

c. *kami yani* *haya ya a xëprarema*
kami =*ya* =*ni* *haya ya*= *a*= *xë* =*pra* =*ri* =*ma*
 1 =1SG =ERG deer 1SG= SG= beat; kill =DRV =PFV1 =PST

‘I killed the deer.’

d. *kaho wani* *Kunathoi koraha wa*
kaho =*wa* =*ni* *Kunathoi koraha wa*=
 2 =2SG =ERG Kunathoi banana 2SG=
esi *tiyërarema*
e= *si*= *tiyë* =*ra* =*ri* =*ma*
 DIF.PART= CLN:**palm_tree**= cut down =DISTR =PFV1 =PST

‘You cut down Kunathoi’s banana tree.’

No holonyms can be incorporated into the predicate, (26), unless the verbalizer =*pë* convert them into a verb, as illustrated in (27) with the derived verbs highlighted in bold. I will describe this derivation in detail in Chapter 5 (§5.6.10) with additional information in Chapter 9 (§9.7).

(27) a. *kami yani* *Ararima yaa* *xarakapë*
kami =*ya* =*ni* *Ararima ya*= *a*= ***xaraka*** =***pë***
 1 =1SG =ERG Ararima 1SG= 3SG= **arrow** =VBLZ
këprarema
kë =*pra* =*ri* =*ma*
 break =DRV =PFV1 =PST

‘I broke Ararima’s arrow.’ (lit: ‘I broke “arrowed” Ararima’).

b. <i>kaho wani</i>				<i>Kunathoi wa</i>			
<i>kaho</i>	=wa	=ni		<i>Kunathoi</i>	wa=		
2	=2SG	=ERG		<i>Kunathoi</i>	2SG=		
<i>korahasipě</i>				<i>tiyěrarema</i>			.
<i>koraha</i>	=si		=pě	<i>tiyě</i>	=ra	=ri	=ma
<i>banana</i>	=CLN:palm_tree	=VBLZ	cut down	=DISTR	=PFV1	=PST	

‘You cut down Kunathoi’s banana tree.’ (lit: ‘You cut down “banana-treed” Kunathoi’).

When the noun hosting the clitic cluster is the subject of an intransitive or the object of a transitive clause, it is not always clear whether the enclitics of Cluster A are cliticized to the noun or whether they became proclitics of Cluster B, as in the examples in (25) and (26). There are two arguments in support the latter analysis. The first is the ordering of those morphemes in examples (26b) to (26d): the number marker, the noun classifier, and the body-part term appear between the verbal root and the markers for 1st or 2nd person singular agent. If that string of morphemes is not inside the predicate, we face an even more challenging problem of explaining how the 1st person agent marker became part of the nominal phrase, in a position between the free morpheme and its original clitic cluster. The second argument is based on the impossibility of omitting these clitics in a minimal clause (i.e. a grammatical clause without all the arguments that can be deleted), and this will be discussed in the next section.

4.2.6. Possibility of omission in minimal clause

In YMA, all nominal arguments of a clause, no matter whether they are core or oblique arguments, can be omitted without harming the main referential meaning of the clause and its grammaticality. Besides the verb root, only some bound morphemes from Cluster B and C are required in a minimal grammatical clause. As already mentioned in Chapter 3 (see Table 3.4), nounless clauses are the most frequent type in the language, making 57.86% of the total of our sample of 2100 clauses. The examples in (26), for instance, can be alternatively elaborated as in (28).

- (28) a. *e marayoma* .
e= ma =rayu =ma
 DIF.PART= not_exist =PFV1 =PST
 ‘It disappeared.’

- b. *ya e kēprarema*
ya= e= kē =pra =ri =ma
 1SG= DIF.PART= break =DRV =PFV1 =PST
 ‘I broke it.’

- c. *ya a xēprarema*
ya= a= xē =pra =ri =ma
 1SG= 3SG= beat; kill =DRV =PFV1 =PST
 ‘I killed it.’

As argued in §4.2.6, Type 2 nouns are bound morphemes that belong to clitic clusters A and B. When these nouns are incorporated into the predicate as Cluster B proclitics, they cannot be omitted in the minimal clause without a significant change in their meaning. If the examples in (25) were to be rephrased as minimal clauses with the same referential meaning, the body part terms (in bold below) in those clauses could not be omitted, as in (28). Note that the indefinite pro-form *pei* is optional in all the sentences below. We will explain the use of this form in 4.3.5.

- (29) a. [*pei*] *ya matha kēprarioma*
 [*pei*=] *ya= matha= kē =pra =rio =ma*
 [INDF=] 1SG= leg= break =DRV =PFV1 =PST
 ‘My leg broke.’
- b. [*pei*] *matha kēpramaremahe*
 [*pei*=] *matha= kē =pra =ma =ri =ma =he*
 [INDF=] leg= break =DRV =CAUS =PFV1 =PST =3PL
 ‘They broke its leg.’

- c. [pei] ya **matha** kēpramarema
 [pei=] ya= **matha**= kē =pra =ma =ri =ma
 [INDF=] 1SG= leg= break =DRV =CAUS =PFV1 =PST
 ‘I broke its leg.’

Nouns of Type 3 have a lexical component that is not a free word either. The bound element of these nouns is the noun classifier, which is also incorporated in the predicate as a proclitic from Cluster B when the noun to which it refers is in the absolutive position in the clause, as in (30). The noun classifiers are in bold.

- (30) a. *hapa mahi warō ani huu tihiki manima*
hapa mahi warō =a =ni huu tihi= ki= mani =ma
 before much man =SG =ERG tree CLN:tree= PL= cut =PST
hāyokoroma ani
hāyōkōrōma =a =ni
 axe =SG =INS

‘First, the man chopped the pieces of wood with the axe.’ (s_chck_carl)

- b. *kami yamakini mau yama u au totihi*
kami =yamaki =ni mau yama= u= au totihi
 1 =1PL =ERG water 1PL= CLN:liquid= clean good; nice
tapuu
ta =pu =i
 know =CSVT =DYN

‘We know (where there is) good and clean water.’ (PDYP_MIC_A_14_02)

In the minimal clause, therefore, the noun classifier cannot be omitted either. In (31), we have the same sentences as in (30) but reformulated as minimal clauses. Note that the indefinite pro-form is optional in this context.

- (31) a. [pei] **tihi** manima
pei tihi= ki= mani =ma
 INDEF CLN:tree= PL= cut =PST
 ‘[He] chopped the wood.’ (elicited)

b. [*pei*] *yama* **u** *au* *totihi* *tapuu*
 pei *yama*= **u**= *au* *totihi* *ta* =*pu* =*i*
 INDEF 1PL= CLN:**liquid**= clean good; nice know =CSVT =DYN
 ‘We know (where there is) good and clean water.’ (elicited)

We saw in this section that the three types of YMA's noun display different properties in the minimal clause. While the lexical element of the nouns of Type 1 is omittable in those clauses, the nouns of Type 2 are obligatory in this context. Nouns of Type 3, on the other hand, can only have the free morpheme omitted, but not the noun classifier, which happens to be a bound morpheme in this type of noun. Nouns of Type 2 and the classifiers of the nouns of Type 3 can coexist with the indefinite pro-form *pei*. In the next section, we will examine how those nouns behave as the agent in a sentence.

4.2.7. Possibility of performing the role of agent of transitive clauses

Another significant difference between meronyms (Type 2) and holonyms (Types 1 and 3) can be observed when those nouns are the semantic agent of transitive predicates. Meronyms cannot perform this role; only animate holonyms can. We will see in Chapter 7 (§7.4.2) that inanimate holonyms cannot be the syntactic agent of a transitive clause. It is not possible to say “the wind destroyed the house” or “the sun parched the banana tree.” To make the clauses grammatical, one must say “the house was destroyed because of the wind” and “the banana tree parched because of the sun.” Similarly, it is not possible to say “your nails are hurting the baby” in YMA or “Ararima’s feet dirty the cassava pancakes”, with this exact syntactic structural arrangement, i.e. with the body-part terms as syntactic agent of the clause and therefore controller of the agent markers in the verb. The hypothetical examples in (32) illustrate this.

- (32) a. * *kaho wa nahasikini uhuru ai*
kaho =wa =**nahasi** =**ki** =**ni** *uhuru a*= *i*=
 2 =2SG =**nail** =PL =ERG child SG= DIM=
tisikaihe .
tisika =*i* =**he**
 scrape =DYN =**3PL**
 ‘Your nails are hurting the baby.’

- b. * *Ararima mahukuni naxi hipě*
Ararima =**mahu** =**ku** =**ni** *naxi hi*= *pě*=
Ararima =**foot** =PL =REL.PST cassava CLN:round= PL=
xamimaremahe .
xami =*ma* =*ri* =*ma* =**he**
 dirt =CAUS =PFV1 =PST =**3PL**
 ‘Ararima’s feet dirtied the cassava pancakes.’

- c. * *Ararima mahukuni naxi hipě*
Ararima =**mahu** =**ku** =**ni** *naxi hi*= *pě*=
Ararima =**foot** =PL =ERG cassava CLN:round= PL=
xamimapirema .
xami =*ma* =**pi** =*ri* =*ma*
 dirt =CAUS =**3DU** =PFV1 =PST
 ‘Ararima’s feet dirtied the cassava pancakes.’

Instead, these sentences must occur in complete form as in (33), where complete and independent entities are the syntactic agents of the clause. Notice that the agent markers are always coreferent with the whole in these latter examples, and not with the part. In (33b), no marker appears because there is no marker for 3rd person singular agent. Body-part terms are conceived as inanimate entities or entities without agency.

- (33) a. *kaho wa nahasikini uhuru waai*
kaho =wa =nahasi =ki =ni *uhuru wa*= a= i=
 2 =2SG =nail =PL =ERG child 2SG= SG= DIM=
tisikai
tisika =i
 scrape =DYN

‘You are hurting/ the baby with your nails.’

- b. *Ararima mahukuni naxi hipë*
Ararima =mahu =ku =ni *naxi hi*= pë=
Ararima =foot =PL =ERG cassava CLN:round= PL=
xamimarema .
xami =ma =re =ma
 dirt =CAUS =PFV1 =PST

‘Ararima’s feet dirtied the cassava pancakes.’

4.2.8. Summary of the distinctive features of the nominal types

In the previous sections, we discussed several contexts in which the formal differences between the three major types of noun emerge. In Table 4.9, we present a summary of these differences.

Table 4.9 – Distinctive features of holonyms and meronyms

	Type 1	Type 2	Type 3
Require a marker in the singular	✓	✗	✗
Can take plural markers	✓	✓	✓
Lexical morpheme have morphological independence	✓	✗	✓/✗
Have coreferent morphemes in the clause or nominal phrase other	✓	✗	✓
Can occupy central roles in the clause	✓	✗	✓
Can be omitted in the minimal clause	✓	✗	✓/✗ ⁴
Can be incorporated into the predicate without derivation	✗	✓	✓/✗ ⁵
Coexist with the possessive pronouns <i>ipa</i> ‘my’ <i>y aho</i> ‘your’	✓	✗	✓
Can take the different participant marker = <i>e</i> when possessed by a 3rd person	✓	✗	✓
Can be derived with verbalizer = <i>pē</i>	✓	✗	✓
Coexists with indefinite proforms <i>pei</i>	✗	✓	✓ ⁶

4.2.9. Type 4 – kinship terms

Differently from what occurs in other languages where (in)alienability is a semantic category that productively predicts the morphosyntactic behavior of the nouns (Chappell and McGregor, 1995: 8), the kinship terms do not fall under the same category of inalienable nouns (nouns of Type 2). At the same time, we cannot say that

⁴ The classifier cannot be omitted.

⁵ The classifier is incorporated.

⁶ The noun classifier coexists in the minimal clause.

kinship terms are nouns of Type 1 or Type 3 because, as I will show, these nouns lack some of the morphosyntactic properties of prototypical holonyms and display some other properties absent in canonical alienable nouns. Therefore, this closed set of nouns in YMA seems to constitute a fourth type of noun in the language. Moreover, we will see that the paradigm of kinship terms is not homogeneous, i.e. some terms display formal properties not observable in other members of the paradigm.

In the tables below, I present the basic forms that comprise the kinship terms paradigm in YMA. Besides these basic words, there are some alternative terms used mainly as vocative or with an affective value (such as *arosikɨ* ‘scrotum’, used to make reference to a young male infant, and *nakasikɨ* ‘vaginal lips’, used to refer to young female relatives), and loan words from other Yanomami varieties that are widespread in Papiu due to migration movements and contact with other communities (such as *xori* ‘brother-in-law’). The study of the complete inventory of these terms as well as the description of their pragmatic and sociolinguistic value in the community falls outside the scope of this dissertation. The kinship system in Yanomami societies follows the Amazonian Dravidian pattern where the ideal marriage takes place between two cross cousins, i.e. between the son and the daughter of two siblings of different sex. The son and the daughter of two siblings of the same sex (parallel cousins) are considered siblings. The YMA kinship terminology reflects this system and, therefore, there is no word equivalent to the English word ‘uncle’, which corresponds in YMA to ‘father’ or ‘father-in-law’ (depending on whether he is a fraternal or maternal uncle, respectively), nor to ‘aunt’, which corresponds to ‘mother’ or ‘mother-in-law’ (also depending on the sex of the aunt’s sibling who is the parent of ego). The words for ‘nephew’ and ‘niece’ are also logically absent, being replaced by ‘son’ or ‘son-in-law’, and ‘daughter’ or ‘daughter-in-law’. Finally, the word for ‘cousin’ does not exist either; the terms ‘brother’ and ‘sister’ are used instead between parallel cousins, while the terms ‘husband’ and ‘wife’ are used by cross cousins of different sexes (even if they are not actually married), and ‘brother-in-law’ and ‘sister-in-law’ are used by cross cousins of the same sex. The terms are listed in Table 4.10, Table 4.11, Table 4.12 and Table 4.13.

Table 4.10 – Kinship terms – preceding generation

	Father	Mother	Father-in-law	Mother-in-law
	<i>hãa=a=rĩ</i>	<i>nãa=a=rĩ</i>	<i>xãa=a=rĩ</i>	<i>yãa=a=rĩ</i>
1	my_father=SG=REV 'my father'	my_mother=SG=REV 'my mother'	my_father-in-law=SG=REV 'my father-in-law'	my_mother-in-law=SG=REV 'my mother-in-law'
	<i>hãahu=a(=rĩ)</i>	<i>nãahu=a(=rĩ)</i>	<i>xãahu=a(=rĩ)</i>	<i>yãahu=a(=rĩ)</i>
2	your_father=SG(=REV) 'your father'	your_mother=SG(=REV) 'your mother'	your_father-in-law=SG(=REV) 'your father-in-law'	your_mother-in-law=SG(=REV) 'your mother-in-law'
	<i>hẽe=e</i>	<i>nẽe=e</i>	<i>xẽe=e</i>	<i>yẽe=e</i>
3	father=DIF.PART 'his father'	mother=DIF.PART 'his mother'	father-in-law=DIF.PART 'his father-in-law'	mother-in-law=DIF.PART 'his mother-in-law'

Table 4.11 – Kinship terms – same generation (1)

	Sister	Brother	Older brother (Ego ♂)	Brother (Ego ♀)
1	<i>ipa ami=a</i>	<i>ipa hepara=a</i>	<i>ayð=a=rĩ</i>	<i>ipa you=a</i>
	1SG.POS sister=SG	1SG.POS brother=SG	my_older_brother=SG=REV	1SG.POS brother=SG
	‘my sister’	‘my brother’	‘my older brother’	‘my brother’
2	<i>amihi=a</i>	<i>heparaha=a</i>	<i>ayðho=a</i>	
	your_sister=SG	your_brother =SG	your_older_brother =SG	
	‘your sister’	‘your brother’	‘your older brother’	<i>youhu=a</i> your_brother =SG ‘your brother’
3	<i>aho ami=a</i>	<i>aho hepara=a</i>	<i>aho ãyo=a</i>	
	2SG.POS sister=SG	2SG.POS brother=SG	2SG.POS older_brother=SG	
	‘your sister’	‘your brother’	‘your older brother’	
3	<i>ami=pê=e</i>	<i>heparapê^l=e</i>	<i>ayðpê=e</i>	<i>you=e</i>
	sister=DIF.PART	brother_menor=DIF.PART	older_brother=DIF.PART	brother=DIF.PART
	‘his sister’	‘his brother’	‘his older brother’	‘her brother’

Table 4.12 – Kinship terms – same generation (2)

	Brother-in-law	Husband	Wife
	<i>ama=a=rĩ</i>	<i>ipa heãro=a</i>	<i>ipa thuwẽ=a</i>
1	my_brother-in-law=SG=REV 'my brother-in-law'	1SG.POS husband=SG 'my husband'	1SG.POS mujer=SG 'my wife'
		<i>heãroho=a</i>	<i>thuwpẽpẽhẽ=a</i>
	<i>aho heri=a</i>	your_husband=SG 'your husband'	your_wife=SG 'your wife'
2	2SG.POS brother-in-law=SG 'your brother-in-law'	<i>aho heãropẽ=a</i>	<i>aho thuwpẽpẽ=a</i>
		2SG.POS husband=SG 'your husband'	2SG.POS wife=SG 'your wife'
	<i>heri=e</i>	<i>heãropẽ=e</i>	<i>thuwpẽpẽ=e</i>
3	brother-in-law=DIF.PART 'his brother-in-law'	brother-in-law =DIF.PART 'her husband'	wife=DIF.PART 'his wife'

Table 4.13 – Kinship terms – following generation

	Daughter	Son	Son-in-law	Daughter-in-law
	<i>ipa theë=a</i>	<i>ipa uhuru=a</i>	<i>ipa thar̥si=a</i>	<i>ipa thathë=a</i>
1	1SG.POS daughter=SG 'my daughter'	1SG.POS son=SG 'my son'	1SG.POS son-in-law=SG 'my son-in-law'	1SG.POS daughter-in-law=SG 'my daughter-in-law'
	<i>thëëhë=a</i>	<i>uhuru<u>hu</u>=a</i>	<i>thar̥sihi=a</i>	<i>thathëhë=a</i>
	your_son=SG 'your daughter'	your_son=SG 'your son'	your_son-in-law=SG 'your son-in-law'	your_daughter-in-law=SG 'your daughter-in-law'
2	<i>aho theë=a</i>	<i>aho uhurupë=a</i>	<i>aho thar̥si=a</i>	<i>aho thathë=a</i>
	2SG.POS daughter=SG 'your daughter'	2SG.POS son=SG 'your son'	2SG.POS son-in-law=SG 'your son-in-law'	2SG.POS daughter-in-law=SG 'your daughter-in-law'
	<i>thëë=e</i>	<i>uhurupë=e</i>	<i>thar̥sipë=e</i>	<i>thathë=e</i>
3	son=DIF.PART 'his daughter'	son=DIF.PART 'his son'	son-in-law=DIF.PART 'his son-in-law'	daughter-in-law=DIF.PART 'his daughter-in-law'

We can tell from the tables above that an obvious feature that distinguishes kinship terms from other nouns is the variation in the form of the word according to the grammatical person that is the ego of the relationship. Differently from what occurs, for instance, with a noun like *xaraka* ‘arrow’, that does not change the form of the root regardless of whether it is being possessed by 1st, 2nd or 3rd persons, (34), kinship terms undergo significant changes in their form when different grammatical persons are in relation with them, as shown in (35a) to (35c).

- (34) a. *ipa xaraka a*
 ipa xaraka =*a*
 1POS **arrow** =3SG
 ‘my arrow’

- b. *aho xaraka a*
 aho xaraka =*a*
 2POS **arrow** =3SG
 ‘your arrow’

- c. *kama xaraka e*
 kama xaraka =*e*
 3 **arrow** =DIF.PART
 ‘his arrow’

- (35) a. *hãa a rĩ*
 hãa =*a* =*rĩ*
 father =3SG =HON
 ‘my father’

- b. *haahu a rĩ*
 haahu =*a* =*rĩ*
 your_father =3SG =HON
 ‘your father’

- c. *kama hẽe e*
kama hẽe =e
 3 **father** =DIF.PART
 ‘his father’

The kinship terms that are susceptible to those changes do not cooccur with the possessive pronouns *ipa* ‘my’ and *aho* ‘your’ when the possessor is a 1st or 2nd person, (36a) and (36b). Nevertheless, as I mentioned before, the paradigm of kinship terms is heterogeneous, since there are terms that do preserve the same form even with distinct possessors. These words can receive the possessive pronouns for 1st and 2nd persons and behave as legitimate nouns of Type 1 in genitive constructions, (37).

- (36) a. * *ipa haã a rĩ*
ipa haã =a =rĩ
 1POS father =3SG =HON
 ‘my father’
- b. * *aho haãhu a rĩ*
aho haãhu =a =rĩ
 2POS your_father =3SG =HON
 ‘your father’
- (37) a. *ipa thathe a*
ipa thathe =a
 1POS daughter-in-law =3SG
 ‘my daughter-in-law’
- b. *aho thathe a*
aho thathe =a
 2POS daughter-in-law =3SG
 ‘your daughter-in-law’

Some kinship terms can optionally change their form, (38b), or take a possessive pronoun, (38a). There are some kinship categories that can be expressed by two terms,

one whose behavior is similar to $h\tilde{a}a=a=r\tilde{r}$ ‘my father’ in the genitive constructions (i.e. with a change in their form), and another that behave like a noun of Type 1, (39).

- (38) a. *aho ami a*
 aho ami =a
 2POS daughter =3SG
 ‘your sister’

- b. *amihi a*
 amihi =a
 your_sister =3SG
 ‘your sister’

- (39) a. *ama a r\tilde{r}*
 ama =a =r\tilde{r}
 brother-in-law =3SG =HON
 ‘my brother-in-law’

- b. *ipa heri a*
 ipa heri =a
 1POS brother-in-law =3SG
 ‘my brother-in-law’

We can see by the examples (38a), (38b) and (39a) that kinship terms also stand out by the fact that they frequently appear associated to the reverential/honorific clitic $=r\tilde{r}$. This clitic is one of the distinctive features of the YMA variety, being absent in very close related varieties such as the Yanomae from Demini and Toototopi.

We have seen that kinship terms display some particularities that make them distinct from any other type of noun in YMA. Nevertheless, when kinship terms are possessed by 3rd persons, they present all the properties that characterize a noun of Type 1: they take the different participant marker $=e$, (40a), but can also receive the verbalizer $=p\tilde{e}$, (40b).

- (40) a. *Ararima hẽe e*
Ararima hẽe =e
 Ararima father =DIF.PART
 ‘Ararima’s father’

- b. *Ararima a hẽepě*
Ararima a= hẽe =pě
 Ararima SG= father =VBLZ
 ‘Ararima’s father.’ (lit. ‘Ararima is fathered’).

Kinship terms can occupy two possible positions in the clause when they have an absolutive role (the subject of intransitive or object of transitive). They can be treated as a noun of Type 1 in an analytic possessive construction (41a), or as a verb in a secondary predication, (41b).

- (41) a. *Ararima hẽe ya e nakarema* .
Ararima hẽe ya= e= naka =re =ma
 Ararima father 1SG= DIF.PART= call; ask =PFV1 =PST
 ‘I invited Ararima’s father.’

- b. *Ararima ya a hẽepě nakarema* .
Ararima ya= a= hẽe =pě naka =re =ma
 Ararima 1SG= 3SG= father =VBLZ call; ask =PFV1 =PST
 ‘I invited Ararima’s father.’

Like other nouns that refer to animate entities, kinship terms can also perform the role of an agent of a transitive sentence and control the respective agreement markers on the predicate. Note in (42b) that the marker for 3rd person plural agent =*he* is coreferent with the genitive nominal phrase [*Ararima ami=e=pě*] ‘Ararima’s sisters.’

- (42) a. *Ararima ami eni ya nakarema* .
Ararima ami =e =ni ya= naka =re =ma
 Ararima daughter =DIF.PART =ERG 1SG= call =PFV1 =PST
 ‘Ararima’s sister invited me.’

- b. *Ararima ami e pë ni ya nakarema*
Ararima ami =e =pë =ni ya= naka =re =ma
 Ararima daughter =DIF.PART =3PL =ERG 1SG= call =PFV1 =PST

he

=he

=3PL

‘Ararima’s sisters invited me.’

Moreover, some kinship terms derived with the verbalizer *=pë* (43a) can optionally function as a noun of Type 1, with access to possessive pronouns (43b), number enclitics (43b), and the different participant marker *=e* (43c); they appear outside the verbal phrase (43d).

- (43) a. *kaho wa thuwëpë* .
kaho wa= thuwë =pë
 2 2SG= woman =VBLZ
 ‘Your wife.’ (lit: ‘You are “womaned”’)

- b. *aho thuwëpë a*
aho thuwëpë =a
 2POS wife =3SG
 ‘your wife’

- c. *Kunathoi thuwëpë e*
kunathoi thuwëpë =e
 Kunathoi wife =DIF.PART
 ‘Kunathoi’s wife’

- d. *aho thuwëpë ya a nakanimi* .
aho thuwëpë ya= a= naka =n =imi
 2POS wife 1SG= 3SG= call; ask =PST =NEG
 ‘I did not call your wife.’

All kinship terms can coexist with the indefinite proform *pei* (which is a formal property of the nouns of Type 2), even when the possessor is explicit in the clause, (44b) and (44c).

- (44) a. *pei* *hẽe* *e*
 pei *hẽe* =*e*
 INDEF father =DIF.PART
 ‘his father’
- b. *Ararima* *pei* *hẽe* *e*
 Ararima *pei* *hẽe* =*e*
 Ararima INDEF father =DIF.PART
 ‘Ararima’s father’
- c. *ipa* *pei* *ami* *a*
 ipa *pei* *ami* =*a*
 1POS INDEF daughter =3SG
 ‘my sister’

We have seen in this section that the nouns that refer to kinship relationships comprise a paradigm of heterogeneous forms regarding their typical formal properties. Almost all terms display a mix of properties of the nouns of Type 1 and Type 2. In the next section, I will examine other nouns that also show similar ambiguous behavior.

4.2.10. Other nouns with ambiguous behavior

There are a few nouns in YMA that display features both of nouns of Type 1 and Type 2. In (45), I present a list of some of them.

- (45) a. *yano* 'house'
b. *wakē* 'fire'
c. *urihi* 'forest'

- d. *utupě* ‘image’
 e. *wakixi* ‘smoke’
 f. *misiki* ‘thorn’

When playing an absolutive role (subject of intransitive or object of transitive), some of these nouns (such as *yano* ‘house’ and *wakě* ‘fire’) can either be incorporated into the predicate, (46b) and (46d), or appear as a free morpheme, (46a) and (46c).

- (46) a. *wakě ya a thai* .
 wakě ya= a= tha =i
 fire 1SG= 3SG= do; make =DYN
 ‘I am making fire.’
- b. *yano ya a iximai* .
 yano ya= a= ixi =ma =i
 house 1SG= 3SG= burn =CAUS =DYN
 ‘I am burning the house.’
- c. *ya wakě thai* .
 ya= wakě tha =i
 1SG= **fire** do; make =DYN
 ‘I am making fire.’
- d. *ya yano iximai* .
 ya= yano ixi =ma =i
 1SG= **house** burn =CAUS =DYN
 ‘I am burning the house.’

The alternation observed in (46) between the incorporated, and the analytic forms have discursive and stylistic functions, which will not be described here. Nevertheless, with other nouns, this alternation between use as a noun of Type 1 or a noun of Type 2 produces changes in the lexical meaning of the noun. This can be observed with the word *utupě*, which is originally a meronym (noun of Type 2)

meaning ‘image’, but can be used as a holonym (noun of Type 1) when referring to a picture (a printed image). In this last sense, the word can take part in genitive constructions with the possessive pronouns *ipa* ‘my’ and *aho* ‘your’ or with the different participant marker =*e* (properties that are not observed in nouns of Type 2).

(47) a. *hei Ararima utupě* .

hei Ararima =*utupě*

this Ararima =image

‘This is Ararima’s image.’

b. *hei Ararima utupě e* .

hei Ararima utupě =*e*

this Ararima image =DIF.PART

‘This is Ararima’s picture.’ (Ararima owns the physical picture).

c. *hei kami ya utupě* .

hei kami =*ya* =*utupě*

this 1 =1SG =image

‘It is my image’

d. *hei ipa utupě a* .

hei ipa utupě =*a*

this 1POS image =SG

‘This picture is mine.’ (I own the physical picture).

The explanation of the different semantic behavior of the words in (46) and (47) may come from the origin of the nouns that take part in those constructions. While the nouns in (46) are originally nouns of Type 1 that acquired some of the properties of the nouns of Type 2 (such as the ability of being incorporated into the predicate), in the case of the noun *utupě* in (47) the reverse occurs: it is originally a noun of Type 2 that has acquired the features of a noun of Type 1. In this latter process, the use as a noun of Type 1 entails a change in the lexical meaning and the word stops signifying a part of an entity and starts denoting an independent entity. The word ‘image’, which was meronymically related to an entity (a person, animal...) undergoes a process of

metonymic extension and acquires the meaning of one of the physical media that can convey ‘image,’ such as a piece of paper, which is an alienable, discrete and independent entity. This is, therefore, a morphologically null derivational process, used to create new words and senses in the language. Other similar examples seem to confirm this analysis, as Table 4.14 shows.

Table 4.14 – Nouns of Type 2 used as Type 1

Use as Type 2	Gloss	Use as Type 1	Gloss
<i>pei wirinapi</i>	chin	<i>wirinapi a</i>	mantis (<i>Mantodea</i>)
<i>pei yamakaki</i>	ears	<i>yamakaki a</i>	a metal pot (note: it has two big handles)
<i>pei makasi</i>	navel	<i>makasi a</i>	a fruit (<i>Bellucia grossularioides</i>) ⁷
<i>pei misiki</i>	thorn	<i>misiki a</i>	a needle

It is worth to mention that the reverse process, exemplified in (46), in which a noun of Type 1 acquires the properties of a noun of Type 2, does not constitute a mechanism for creating new nouns in the language since, as we saw, it is not used to designate new referents. Nevertheless, the allocation of the formal properties of a noun of Type 2 to a noun of Type 1, especially its cliticization, is essential to understanding the grammaticalization process of some noun classifiers, which have their origin in the nouns of Type 1⁷.

As a final comment, there are some few nouns of Type 2 that can be reduplicated to form nouns of Type 1. These derived forms acquire semantic and morphosyntactic freedom and are no longer dependent on a holonym or conceived as part of something else. I present some of these reduplicated terms in Table 4.15.

⁷ Check Perri-Ferreira 2009 and 2014 for more on this grammaticalization process.

Table 4.15 – Nouns Type 1 formed from reduplicated nouns of Type 2

Use as Type 2	Gloss	Use as Type 1	Gloss
<i>pei marō</i>	someone’s bone	<i>marōmarō a</i>	a bone
<i>pei ñyě</i>	someone’s blood	<i>ñyěñyě pě</i>	some blood
<i>pei xipě</i>	someone’s feces	<i>xiipě</i>	feces
<i>pei kōi</i>	someone’s hair	<i>kōikōi a</i>	a strand of hair
<i>pei axi</i>	something’s pollen	<i>axi axi pě</i>	some pollen
<i>pei hore</i>	something’s flower	<i>hore hore a</i>	a flower
<i>pei kōre</i>	someone’s gore	<i>kōrekōre a</i>	some gore

The derivation mechanism through reduplication is not available and replicable for all members of the nouns of Type 2 paradigm. Moreover, this mechanism is not even applicable for nouns whose referent may be found disconnected from the original entity. The following constructions, for instance, are ungrammatical.

(48) a. * *nahasinahasi* *a*
 nahasi =*nahasi* =*a*
 nail =nail =SG
 ‘a piece of nail’

b. * *hēthāhēthā* *a*
 hēthā *hēthā* =*a*
 hair hair =SG
 ‘a strand/lock of hair’

c. * *nasinasipě*
 nasi *nasi* =*pě*
 urine urine =PL
 ‘(some) urine’

4.3. Pronouns and Adnominals

In Section §4.2.1, I showed three schemas representing the morphological structure of the three main subclasses of nouns. The nouns of Types 1 and 3 have one free morpheme in common that hosts the Clitic Cluster A on its right. The free morpheme conveys lexical meaning in both types of noun, but only in the noun of Type 3 the morpheme from Cluster A also expresses lexical meaning.

Other types of words – and not only semantically prototypical nouns – fit this characterization as well. Demonstratives, quantifiers, and possessive and indefinite pronouns can also take the enclitics from Cluster A and seem to have a syntactic distribution similar to nouns. In (49), I present some examples of these pronominal forms (in bold).

(49) a. *hei a*

hei =*a*

this =3SG

‘this one’

b. *mōri hi*

mori =*hi*

one =CLN:tree

‘one tree’

c. *ipa sipě*

ipa =*si* =*pě*

1POS =CLN:palm_tree =3PL

‘my palm-trees’

d. *ai pě*

ai =*pě*

other =PL

‘others’

Moreover, the free words in (49) can appear together with a noun in the same noun phrase, directly modifying it. That is, those forms can be either pronouns or adnominals. In (50), I present examples of the adnominal use of the forms in (49).

(50) a. *hei hiima a*

hei hiima =a

this dog =3SG

‘this dog’

b. *mōri . ahōi hi*

mori ahōi =hi

one aguacate =CLN:tree

‘one aguacate tree’

c. *ipa koraha sipě*

ipa koraha =si =pě

1POS banana =CLN:palm_tree =3PL

‘my banana trees’

d. *ai yano pě*

ai yano =pě

other house =PL

‘other houses’

In the next subsections, I will discuss the properties and the paradigm of each of these pronominal/adnominal words.

4.3.1. Possessive Pronouns

YMA has possessive pronouns/adnominals only for two grammatical persons – 1st and 2nd persons singular. These pronouns are shown in Table 4.16.

Table 4.16 – Possessive pronouns

1SG.POS	2SG.POS
<i>ipa</i>	<i>aho</i>

When these forms directly modify the noun – i.e. when they are in adnominal position – the possessive adnominals always precede the possessed noun in the NP, as the examples in (51) demonstrate. The possessed noun in (51a) is *pata* ‘ancestor’ and is being modified by *ipa* ‘my’ while in (51b) the possessive adnominal *aho* ‘your’ modifies *wamotima* ‘food’.

- (51) a. *inaha ipa pata thēpē kuama* .
inaha ipa pata thē= pē= kua =ma
thereby 1POS elder CLN.GNR= 3PL= behave =PST
‘[...] Like that my ancestors behaved.’ (n001_iwa)

- b. *ōō aho wamotima thēki* .
ōō aho wamotima =thē =ki
IDEO:look! 2POS food =CLN.GNR =3PL
‘[Here you have] your food.’ (s_chkck_marc)

There are no possessive pronouns for non-SAPs. As we showed in §4.2.4, the indication that a noun is being possessed by a third person singular is made, not by a free word (as it is the case for 1st and 2nd persons singular), but by the different participant marker *=e* of Cluster A or *e=* of Cluster B, when incorporated into the predicate. In any event, if the possessor is realized in the construction, it always precedes the possessed noun. We presented examples of this construction in (19).

There are no possessive pronouns/adnominals for 1st or 2nd persons dual or plural. The forms in Table 4.16 can be extended to 1st or 2nd persons only in marginal and very specific contexts. For instance, in the context of an inter-community festival, a person may speak on behalf of his or her community and may refer to the community’s house, children or women as *ipa yano*, *ipa uhuru pē* or *ipa thuē pē*, respectively; and conversely she or he may hear people referring to them as *aho yano*,

aho uhuru pë or *aho thuë pë*. Note that the pronoun/adnominal for the 1st person (*ipa*) will always have an exclusive meaning in these marginal contexts.

The actual construction for expressing a possession relationship with plural possessors (including 3rd person plural) requires a previous derivation of the possessed noun with the verbalizer enclitic *=pë*. The resulting derived form is an attributive verb which has the possessor as its subject. The examples in (52) show this construction. This construction is not exclusive to plural possessors, as we have already seen by the examples in (22) and (23) that it can be used with singular ones as well. This construction will be discussed in more detail in Chapter 9 (§9.7), as a mechanism of changing the clause's voice.

- (52) a. *kami yamaki urihipë hami kariperu pë rukëi*
kami yamaki= urihi =pë =hami kariperu pë= rukë =i
 1 1PL= forest =**VLZ** =OBL miner 3PL= enter =DYN
kõo kutayoni [...]
kõ =o =kutayo =ni
 again =STV =REAS =REAS
 'For the miners are entering again in our forest [...]' (m002_cesa_gari)

- b. *kama pë urihipë yai prauku hetu* .
kama pë= urihi =pë yai prauku hetu
 3 3PL= forest =**VLZ** true wide also
 'Their forest is also large.' (m004_paya_gari)

As I have been indicating, the forms in Table 4.16 can act as modifiers/determiners of a possessed noun, but also can create a full NP by themselves. That is, those forms are also true pronouns. In the example (53), for instance, *ipa* 'my' is functioning as the sole constituent of the object argument. The speaker is referring to his 'collar' (*yarepotima*) that he wanted to exchange with the one that a spiritual entity was wearing, which was made of glass beads. He had already asked for the spirit's collar and explicitly mentioned it before.

- (53) *ipa waa yarea*
ipa wa= a= yare =a
 1POS 2SG= 3SG= wear on the neck =PFV.VWL
nõhõmaki
nõhõ =ma =ki
 subsequently =CAUS =PFV2
 ‘[Then] you wear mine subsequently.’ (PDYP_MIC_A_07_19)

As a final note, and reiterating what was explained in §4.2.4 about the behavior of the different types of nouns in possessive constructions, possessive pronouns can only be used with possessed alienable nouns in YMA, i.e. the nouns of Types 1 and 3.

4.3.2. Demonstratives

YMA has two different systems of spatial deictic pronouns/adnominals, one related to the location of people, objects and places in the “physical” space of the real world – exophoric demonstratives –, and another that locates them in the discursive space – endophoric demonstratives (Diessel 1999: 94). The exophoric system is person-oriented (Diessel 1999: 39) and has a tripartite paradigm, making a distinction between something near the speaker, near the hearer and far from both speaker and hearer. In Table 4.17, I present the demonstrative pronouns/adnominals in YMA.

Table 4.17 – Exophoric demonstratives

[-speaker, -hearer]	[-speaker, +hearer]	[+speaker, ±hearer]
that (distant from both speaker and hearer)	that (near the hearer)	this
<i>kihi</i>	<i>mihi</i>	<i>hei/ei</i>

Note that the demonstratives themselves are neutral regarding number. Like a regular noun of Type 1, these forms are free words in YMA and thus have to rely on the number morphemes of Cluster A or Cluster B to express this grammatical

category. In (54), we have examples showing the transnumeral nature of the demonstrative pronoun *mihi* ‘that’ (near 2nd person). The sentence in (54a), *mihi* modifies the noun *tēpē* ‘glass bead’, which is also transnumeral, as any noun in YMA; the number of this complex NP is singular and expressed by the proclitic *a*= incorporated into the predicate. In (54b) the pronoun *mihi* appears combined with/modified by the indefinite pronoun *ai* ‘other’, but the noun (*tēpē* ‘glass bead’) which is the semantic head of the NP is omitted; the number of the NP is dual, marked by proclitic *kipē*. Finally, in (54c) the pronoun replaces the same noun as the others (*tēpē* ‘glass bead’) and is the sole constituent of the NP; its number in this case is plural and is represented by the collective classifier *kiki*=, also incorporated in the predicate.

- (54) a. *mihi tēpē waa ka yarepore* .
mihi tēpē wa= a= ka= yare =po =re
that glass bead 2SG= SG= FOC= wear on the neck =CSVT =PRS
 ‘That glass bead you are wearing.’ (PDYP_MIC_B_09_02)

- b. *ai mihi wa kipē hōyaa kōri* .
ai mihi wa= kipē= hōya =a kō =ri
 other **that** 2SG= 3DU= hide =PFV.VWL again =PFV1
 ‘Hide that two (glass beads) again.’ (i.e. ‘put them behind the woolen yarn again’) [It is an instruction on how to weave loin-cloths] (PDYP_MIC_A_04_24)

- c. *mihi kiki yāikano*
mihi kiki= yāika =no
that CLN:collective= draw =RESULT
 Those (glass beads) embroidered.’ (i.e. ‘that resulted in a drawing’)
 (PDYP_MIC_B_01_17)

The forms in Table 4.17 can appear as the sole nominal free constituent of the NP, as in (55a), but can also appear as modifiers/determiners of nouns. When performing such an adnominal role, the demonstratives are always placed before the

modified noun. In (55b), we have examples of this latter use. Note that in both examples the singulative morpheme *=a/ a=* does not appear, since the semantic head of the NP is *pata u* ‘river’, a classified holonym (noun of Type 3) that takes the classifier for liquids *=u* or *u=*, which is not compatible with that number morpheme, as we saw in §4.2.3.

- (55) a. *hei u wāriā pēremahe* .
hei u= wāri =a pē =re =ma =he
this CLN:liquid= spoil =PFV.VWL vainly =PFV1 =PST =3PL
 ‘They destroyed this [river].’ (PDYP_MIC_A_03_18)
- b. *hei pata ukakii ha [...]*
hei pata u= ka= ki =i =ha
this big CLN:liquid FOC= COP =DYN =OBL
 ‘In this river (‘big water’) (+FOC) [...]’ (m005_wawa_gari)

As mentioned above, one important feature of the spatial deictic pronominal system in YMA is that the forms for extra-discursive referents (the exophoric system) is different from the forms used with the intra-discursive referents (the endophoric system). That is, the forms in Table 4.17 are not tools for discursive cohesion as they never refer to other NPs in the discourse but only to “real” entities outside the speech world.

Intra-discursive reference is made by a different set of pronouns/adnominals, which distinguish predecessor from successor NPs; there is one pronoun/adnominal with anaphoric directionality and one with cataphoric orientation, as presented in Table 4.18.

Table 4.18 – Endophoric demonstratives

Anaphoric pronoun	Cataphoric pronoun
<i>ihĩ</i>	<i>hapei/hapai</i>

In (56a) we present a spontaneous example with the anaphoric pronoun *ihĩ*, and in (56b) an example with its cataphoric counterpart.

- (56) a. *hapa xã* *Davi Kopenawa arĩkii* *ihĩ*
 hapa xãa *Davi Kopenawa a= rĩ ki =i ihĩ*
 before my_father-in-law Davi Kopenawa SG= HON COP =REL ANA
a rutamoma kutayoni [...]
a= rutamo =ma =kutayo =ni
 3SG= fight =PST =REAS =REAS

‘My father-in-law, Davi Kopenawa (+FOC +REV), for that one has fought first [...]’ (m002_cesa_gari)

- b. *hapai eha* *wãa* *harayoma*
 hapai =e *=ha wa= ã= ha =rayu =ma*
 CAT =DIF.PART =OBL 2SG= sound= pass_through =PFV1 =PST
 , *Tome eha* *wãa* *harayoma* .
Tome =e *=ha wa= ã= ha =rayu =ma*
 Tome =DIF.PART =OBL 2SG= sound= pass_through =PFV1 =PST

‘To the following one you spoke, to Tome you talked.’ (m006_arok_mari)

Similarly to what happens with the paradigm of the exophoric system, the forms of the endophoric system can either appear alone in the NP, as a true pronoun or modify the noun that is semantic head of the NP, as an adnominal. In the latter case, the adnominal also precedes the noun being modified. In (57a) we have an instance of the anaphoric form *ihĩ* as an adnominal, and in (57b) an example of its use as a pronoun.

- (57) a. *ihĩ yuri yama a hoximi wari tẽhẽ*
 ihĩ yuri yama= a= hoximi wa =ri =tẽhẽ
 ANA fish 1PL= 3SG= bad eat =PFV1 =REL.PRS
 ‘If we eat that bad/spoiled fish [...]’ (m002_cesa_gari)

b. *ihĩ pëni yamaki noamai yarohe* [...]

ihĩ =pë =ni yamaki= noamai =yaro =he

 ANA =PL =ERG 1PL= preserve =CNJ.EXPLV =3PL

 ‘For those ones have been protecting us [...]’ (m004_pay_a_gari)

4.3.3. Quantifiers

YMA does not have a word for ‘none’. Moreover, the language does not have real cardinal numbers in the sense of a set of words that consistently express an exact amount, as the translation of the forms in Table 4.19 suggests.

Table 4.19 – Quantifiers

Form	Gloss	Form	Gloss
<i>morĩ</i>	one or few than expected	<i>yãmi</i>	few, alone
<i>porokapi / porakapi / porakatapi</i>	two or three	<i>wãroho</i>	a lot
<i>yërëketapi</i>	four, five or six	<i>komi</i>	all
<i>thouhutapi</i>	about 10	<i>wãrõhõtapi</i>	a lot
<i>ai</i>	some, other	<i>yatehe</i>	a lot

The only possible exception is the word for ‘one’ (*mori*), but even that can have its use extended to represent any amount lesser than previously expected. For instance, when someone is promised to be given ten machetes and receive only five, she can answer that they are ‘few’ (*yãmi*) or just ‘one’ (*mori*). The spontaneous sentence in (58) illustrates this extended use. This example was video-recorded in the context of a crab-fishing/picking expedition organized by the women from Papiu for our documentation project. Unfortunately, the expedition was not very successful since the river was then too muddy which caused the crabs to hide deeper in their holes than they regularly do.

- (58) *hei mori oko pë xirõ* .
hei mori oko pë= xirõ
 this **one** crab 3PL= only
 ‘(We got) these crabs only.’ (PDYP_MIC_B_14_05).

Similarly to what happens with other forms discussed in section 4.3, quantifiers can also function either as pronouns or adnominals. The sentence (59a) is an instance of the use of quantifiers as direct modifiers of the noun, while (59b) shows an example of these forms being used as pronouns.

- (59) a. *Õëki yãmi a pirioma* .
Õëki yãmi a= piri =o =ma
Õëki few 3SG= lie =STV =PST
 ‘Õëki lived alone.’ (n034_oeki)
- b. *yãmi pëni yũu thothonpë*
yãmi =pë =ni yũu thothon= pë=
few =PL =ERG cotton hammock CLN:liana= 3PL=
tiyëpraihe .
tiyë =pra =i =he
weave =DRV =DYN =3PL
 ‘A few of them weave hammocks.’ (PDYP_MIC_A_13_07)

Differently from other forms, nevertheless, quantifiers do not have a fixed pre-nominal position when functioning as adnominals. These words can appear either before the noun, as in (60a) or after the noun, as in (60b).

- (60) a. *ai mōri napë a pree uwëmuu*
ai mori napë a= pree uwë =mu =i
 other **one** white person 3SG= also imitate =INTRZ =DYN
hetuoma
hetu =o =ma
 also =STV =PST

‘Another white person also appeared/performed.’ (s_pear_cesa)

b. *ipa uhuru **mori** yaa hapa thaprari*
*ipa uhuru **mōri** ya= a= hapa tha =pra =ri*
 1POS child **one** 1SG= 3SG= before do; make =DRV =PFV1
wei [...]
 =*wei*
 =NMLZ

‘My only/first child that I made before [...]’ (PDYP_MIC_A_01_42)

It is important to mention that at least three quantifiers – presented in Table 4.20 – display ambiguous behavior regarding its formal properties.

Table 4.20 – Quantifiers with flexible behavior

Form	Gloss
<i>yāmi</i>	few, alone
<i>wāroho</i>	a lot
<i>komi</i>	all

On one hand, these words can function as adnominals of a noun (61b-c) or be the sole pronoun of an NP (61a). Moreover, these words also display the same extended mobility in the clause that other quantifiers do when in the adnominal position, being able to occur before (61b) and after (61c) the noun that is the semantic head of the NP.

(61) a. ***komi** pē nomaa hikiokema tha?*
***komi** pē= noma =a hiki =o =ki =ma =tha*
all 3PL= die =PFV.VWL already =STV =PFV2 =PST =PTC.INT
 ‘All of them were already dead?’ (PDYP_MIC_B_01_17)

- b. *ĩhĩ tēhē komi matihi pēãhã warokema* .
ĩhĩ =tēhē komi matihi pē= ãhã= waro =ki =ma
 ANA =REL.PRS **all** belongings PL= name= arrive =PFV2 =PST
 ‘Then, all the words for [Western] goods arrived.’ (PDYP_MIC_A_13_13)

- c. *ĩhĩ tēhē matihi komi pēãhã warokema* .
ĩhĩ =tēhē matihi komi pē= ãhã= waro =ki =ma
 ANA =REL.PRS belongings **all** PL= name= arrive =PFV2 =PST
 ‘Then, all the words for [Western] goods arrived.’ (elicited)

Nevertheless, and on the other hand, the syntactic flexibility of these three words seems to be greater than that of other quantifiers, since they all can cross the noun-verb boundary, which is the clusters A and B in our analysis. That is, these latter quantifiers can also appear inside the verbal predicate, as an attributive verb stem. In Chapter 5 (§5.2), I will discuss in more detail the formal definition of an attributive stem. I will mention now only two of these properties for the sake of the argument. The first property exclusive to this type of verb is related to its ability to take part in depictive secondary predication constructions, dispensing with the need of any extra derivational morpheme to do that. The examples in (62b) present an instance of this type of construction with quantifier/attributive verb *yãmi* ‘few’ as the head of secondary predicate. In (62a) we have the same form on the nominal side of the clause, i.e. before the Cluster B.

- (62) a. *ai a yãmi huu kōimai tēhē* [...]
ai a= yãmi hu =i kō =ima =i =tēhē
 other 3SG= **few** go =DYN again =DIR.VEN =DYN =REL.PRS
 ‘When another one also came alone [...]’ (PDYP_MIC_B_07_06)

- b. *yãmi ya huu tēhē*
yãmi ya= hu =i =tēhē
few 1SG= go =DYN =REL.PRS
 ‘When I go alone [...]’ (n015_krukunari)

In (63) we have two examples with the quantifier *komi* ‘all’. In (63a), it appears inside the predicate as an attributive stem, while in (63b) it occurs inside the NP.

- (63) a. *ĩhĩ tēhē yamaki komi nomarayu* .
ĩhĩ =tēhē yamaki= komi noma =rayu
 ANA =REL.PRS 1PL= **all** die =PFV1
 ‘Then we will all die.’ (m002_cesa_gari)

- b. *ĩhĩ tēhē komi yamaki rāamoma*
ĩhĩ =tēhē komi yamaki= rā =a =mu =ma
 ANA =REL.PRS **all** 1PL= awaken =DISTR =INTRZ =PST
kutayoni [...]
=kutayo =ni
 =REAS =REAS

‘Then, for we all woke up (i.e. ‘gained consciousness’) [...]’

(PDYP_MIC_A_01_43)

In (64) we have another pair of examples showing the flexible positioning of the demonstratives from Table 4.20. In (64a), we have *wāroho* ‘a lot’ as the head of the secondary predication, and in (64b) the same stem appears outside the predicate as the sole pronoun of the absolute NP.

- (64) a. *aho thēpē wāroho nomarayoma tha?*
aho thē= pē= wāroho noma =rayu =ma =tha
 2POS CLN.GNR= 3PL= **a lot** die =PFV1 =PST =PTC.INT
 ‘Did many of your [people] die?’ (PDYP_MIC_B_10_2)

- b. *wāroho yamaki nomarayoma* .
wāroho yamaki= noma =rayu =ma
a lot 1PL= die =PFV1 =PST
 ‘Many of us died.’ (PDYP_MIC_B_10_2)

Other quantifiers that are not in Table 4.20 can eventually cross this noun-verb boundary and also appear as attributive verb stems. For that to occur, nevertheless, a verbalizer morpheme *=pě* is required, as shown in (65).

- (65) a. *hei oko pē morĩpě mahi* .
 hei oko pē= morĩ =pě mahi
 this crab 3PL= **one** =VBLZ much
 ‘These crabs are very few.’ (PDYP_MIC_B_14_05)
- b. *thuē pē aipě kopema* .
 thuē pē= ai =pě ko =pe =ma
 woman 3PL= **other** =VBLZ arrive =PFV3 =PST
 ‘Other women (from a different community) arrived.’ (elicited)

On a final intriguing and apparently contradictory note, I would like to mention that, in the close-related variety from the Demini and Toototopi regions (Yanomae), the form *mōri* can appear inside the predicate as an attributive stem in its non-derived version. When it occurs, nevertheless, this form loses its quantitative meaning and acquires the aspectual meaning of ‘almost’. In the variety of Papiu (YMA), this meaning is conveyed by the attributive complex stem *nĩ= mii*. In (66b), I present a YMA example of this construction. We do not have naturalistic examples from the Yanomae variety; hence, the example in (66b) is an elicited translation of the YMA example in (66a).

- (66) a. *yamaki nĩ mii maprarioma makii* [...]
 yamaki= nĩ= mii ma =pra =rio =ma =makii
 1PL= **V.PTC= not be** not_exist =DRV =PFV1 =PST =CONCS
 ‘Even though we had almost disappeared [...]’ (PDYP_MIC_A_01_43)
- b. *yamaki mori maprarioma makii* [...]
 yamaki= mōri ma =pra =rio =ma =makii
 1PL= **one** not_exist =DRV =PFV1 =PST =CONCS
 ‘Even though we had almost disappeared [...]’ (elicited)

4.3.4. Personal Pronouns

Personal pronouns are not morphologically simple words in YMA. All pronouns for the speech-act participants (SAP), for instance, are made of one free word and one or two clitics. The free morpheme only gives information about the person – *kami* for 1st persons or *kaho* 2nd persons – but not the number, while the clitics reinforce the information on the person category (1st or 2nd) and additionally express number (singular, dual or plural). In Table 4.21, I present the paradigm of the pronouns for the SAP.

Table 4.21 – SAP pronouns (free morpheme + Cluster A)

	Free morpheme	SG	DU	PL
1st person	<i>kami</i>	= <i>ya</i>	= <i>yaha=ki</i>	= <i>yama=ki</i>
2nd person	<i>kaho</i>	= <i>wa</i>	= <i>waha=ki</i>	= <i>wama=ki</i>

Note that singular persons have only one enclitic (=ya for 1SG and =wa for 2SG) while the non-singular persons seem to have two enclitics, according to their representation in Table 4.21, where one of them is the enclitic =ki. We donot consider this morpheme (which simply expresses non-singular) as part of the preceding enclitic because a few morphemes (namely noun classifiers and the different participant morphemes) can appear in between them in some particular contexts. The different participant marker =e/e=, for instance, goes in that position when the speaker wants to underline that there was a shift from a topicalized participant to non-topicalized one, or when a new participant is introduced. In (67), I present an example of the different participant marker in between the person and number morphemes.

- (67) a. “ *awei* , *kua* *hikia* ” *kami*
awei *ku* =*a* *hiki* =*a* *kami*
yes exist =POST already =POST 1
yamaeki *kurayoma*
yama= *e*= *ki*= *ku* =*rayu* =*ma*
1PL= **DIF.PART**= PL= say =PFV1 =PST
‘We said in turn “OK, that is enough.”’ (PDYP_MIC_A_06_08)

The contexts in which a noun classifier appears in that position are much rarer since it requires that the 1st or 2nd person is a classified entity in the language. However, SAPs refer prototypically to humans, which are not classified entities in YMA. In mythical texts, nevertheless, animals do speak and thus can be associated to a SAP. And when the noun of this animal is classified in the language, the correspondent noun classifier is interposed between the enclitics of the personal pronoun, like in the examples in (68)

- (68) *kami makôã* *yamahuki* *ni* *yama*
kami makôã =*yama* =**hu** =*ki* =*ni* *yama*=
1 Wing-banded Antbird =1PL =**CLN:???** =PL =ERG 1PL=
thë *hãxârëmai tai* *mahi* .
thë= *hãxârëmai ta* =*i* *mahi*
CLN.GNR= sweep know =DYN much
‘We, the ant birds, we know how to rake/clean up very well.’ (wtx_iwa)

For a 3rd person, the free morpheme is *kama* to which the number morphemes regularly used with nouns of Type 1 are attached, i.e., =*a* for singular, =*kipë* for dual, and =*pë* for plural. Table 4.22 displays the pronoun paradigm for 3rd person.

Table 4.22 – 3rd person pronouns (free morpheme + Cluster A)

	Free morpheme	SG	DU	PL
3rd person	<i>kama</i>	= <i>a</i>	= <i>kipë</i>	<i>q</i>

It is worth mentioning that when the 3rd person pronoun refers to a classified noun (noun of Type 3), it often takes the noun classifier of this noun. In the example in (69), *kama* substitutes for the noun of Type 3 *pesima* =*kiki* ‘loin-cloth’, where =*kiki* is the classifier used with fabric-like materials. The noun classifier is preserved when the pronoun is used instead of the lexical morpheme *pesima*.

- (69) *ei kama kiki* *nikere ka kurenaha* [...]
ei kama kiki= *nikere ka= ku =re =naha*
 this 3 CLN:collective= mixed FOC= COP =PRS =thereby
 ‘As mixed (i.e. colorful) as this [loin-cloth] [...]’ (PDYP_MIC_B_01_17)

All personal pronouns, for either SAP or 3rd persons, can also appear adnominally. In this case, the free morpheme of the pronoun always goes before the noun while the clitics remain in their post-nominal position, in the Cluster A or B, depending on the syntactic status of the NP (whether the subject, patient or agent). In (70), we have instances of adnominal use of the forms from Table 4.21 and Table 4.22. In (70a), we have first *kama* (3rd person) and then *kami* (1st person) as adnominals of *wāro* ‘man’ and *thuē* ‘woman’. In both cases, the complex NP is the subject of the predicate, reason why the clitics *pē=* and *yamaki=* appear incorporated in the predicate in the Cluster B. In (70b), the free morpheme *kaho* (2nd person) modifies the noun *napē* ‘white person’ and the clitic =*wamaki* remains in the complex NP since it syntactically is the agent (i.e. subject of a transitive) of clause. For more on the incorporation of enclitics from Cluster A in the predicate, please check Chapter 7 (§7.5.1 and §7.5.2).

- (70) a. *kama wāro pē* *noā* *thayopēha* , *kami*
 kama wāro pē= *noā=* *tha* =yo =pē =ha *kami*
 3 man 3PL= V.PTC= do; make =RECP =NMLZ =OBL 1
thuē yamaki *pree ukuo* .
thuē yamaki= *pree uku* =o
 woman 1PL= also walk =STV

‘We women also walk to [the place where] they, the men, were talking to each other.’ (PDYP_MIC_A_06_08)

b. *kaho napē wamakini wama thāa*
kaho napē =wamaki =ni wama= thā= ā=
 2 white person =2PL =ERG 2PL= CLN.GNR= sound=
xaariprapē !
xaari =pra =pē
 right =DRV =FUT
 ‘You, white people, correct [these] words!’ (n001_iwa)

In the next section, we will turn to the description of the indefinite pro-form *pei*.

4.3.5. Indefinite pro-form *pei*

In §4.2 we saw that body part terms (nouns of Type 2) are not free morphemes in the language, but they are part of the clitic clusters A and B. These nouns always need a morphological host to occur, i.e. they need either a noun (a holonym) or a verb to bound to. However, whenever the noun that refers to the holonym is not present, either because it is not known or simply omitted, the speaker may make use of indefinite pro-form *pei* to fulfill the gap. In elicitation sections of body part terms, for instance, the speakers frequently phrase their answers with the pro-form *pei* hosting the meronym, as in the examples in (71).

(71) a. *pei mamo*
pei =mamo
 INDEF =eye
 ‘(someone’s) eye’

b. *pei he*
pei =he
 INDEF =head
 ‘(someone’s) head’

- c. *pei aka*
pei =aka
 INDEF =tongue
 ‘(someone’s) tongue’

- d. *pei poko*
pei =poko
 INDEF =arm
 ‘(someone’s) arm’

In spontaneous utterances, *pei* also acts as a pronoun when the whole entity is not present in the part-whole noun phrase. In (72), I present two examples with *pei* in its pronominal function. Note that, in (72b), the whole entity is omitted twice, first in the oblique argument (*pei hākāimisi ha* ‘under her armpit’) and then in the absolutive position. That is, even when the body-part term is being incorporated (and hosted, therefore) in the predicate, the indefinite pronoun *pei* is required since the noun of the whole entity is not present.

- (72) a. *pei mahuhami pē huu tēhē* [...]
pei =mahu =hami pē= hu =i =tēhē
 INDEF =foot =OBL 3PL= go =DYN =REL.PRS
 ‘When they go on foot [...]’ (m003_manu_gari)

- b. *pei hākāimisi ha pei imi hooma* .
pei hākāimisi =ha pei imi= ho =o =ma
 INDEF armpit =OBL INDEF finger= insert =STV =PST
 ‘[She] kept her hand under her armpit.’ (n014_terema)

This pronominal form can also replace the free word of nouns with classifiers (nouns of Type 3) when it is omitted in the clause, as in (73).

- (73) a. *a huu kōimaïwei pei tihi*
a= hu =i kō =ima =i =wei pei tihi=
 3SG= go =DYN take =DIR.VEN =DYN =NMLZ INDEF CLN:tree=
pēhēthēha [...] *pēhēthē* =*ha*
 below =OBL

‘Coming [he] again to the botton of the tree [...]’ (s_ms01_arir)

- b. *pei thocho xaari taaremahe* .
pei thocho= xaari taa =re =ma =he
 INDEF CLN:liana= straight see =PFV1 =PST =3PL
 ‘They saw a straight liana.’ (n043_ware)

With this type of noun, *pei* tends not to appear if there is another pronoun in the NP, such as in the example in (74).

- (74) *ai mihi tihi ha wa roa*
ai mihi =tihi =ha wa= ro =a
 other that =CLN:tree =OBL 2SG= squat =PFV.VWL
paxiki .
paxi =*ki*
 be obvious =PFV2

‘Sit on that (near 2nd person) other piece of wood.’ (PDYP_MIC_B_06_04)

The indefinite pronoun *pei* can still replace the person of reference when it is omitted in noun phrases that express kinship relations. In (75), I present two instances of this usage.

(75) *apei . nēe eni ai kaxa epē*
pei nēe =e =ni ai kaxa e= pē=
 INDEF his_mother =DIF.PART =ERG other caterpillar DIF.PART= PL=
xee thakema .
xee tha =ki =ma
 be_remains put =PFV2 =PST

‘His mother put aside some caterpillar for him.’ (wtx_iwa)

b. *pei thuwēpē e huu xoaimama .*
pei thuwēpē e= hu =i xoa =ima =ma
 INDEF wife DIF.PART= go =DYN afterwards =DIR.VEN =PST
 ‘Then his wife came.’ (s_chck_arir)

Interestingly, in constructions that convey kinship relations, the indefinite pronoun can still be present even when the two relatives of the relationship are overtly indicated in the noun phrase.

(76) a. *iwa pei thuwēpē Hrāehrāema e moyāmi*
iwa pei thuwēpē Hrāehrāema e= moyāmi
 caiman INDEF wife Hrāehrāema DIF.PART= be_smart
mahioma .
mahi =o =ma
 much =STV =PST

‘The caiman’s wife, Hrāehrāema, was very smart.’ (wtx_iwa)

b. *napē pei amipē e rērēi*
napē pei amipē e= rērē =i
 white person INDEF sister DIF.PART= run =DYN
hetuimai wei [...]
hetu =ima =i =wei
 lay_above =DIR.VEN =DYN =NMLZ

‘Also coming, the sister of the white person [...]’ (s_pear_alfr)

4.3.6. Attributive modifiers

If we take Dixon's 1982 definition of adjectives, YMA does not seem to have them. That is, the words that express attributes are basically verbs in the language, as we will see in Chapter 5 (§5.3.7), and they cannot directly modify a noun inside the noun phrase without undergoing a previous derivation (Dixon, 1982: 11). The attributive verbs, as I call them, need to take the nominalizer suffix *-rima* in order to appear in a noun phrase. In (77), I present two examples of these derived verbs functioning as modifiers. Note that in both examples these forms go after the noun.

- (77) a. *ai tēpē aurima kiki waroo*
ai tēpē au -rima kiki= waro =o
 other glass bead **clean** **-NMLZ** CLN:collective= arrive =STV
totihionimi yaro [...]
totihi =o =n =imi =yaro
 good; nice =STV =PST =NEG =CNJ.EXPLV

'For the white glass beads did not arrive correctly [they had the wrong shade of white] [...]' (PDYP_MIC_A_13_07)

- b. *ai xīnaru wakērima wa u pihio*
ai xīnaru wakē rima wa= u= pihi =o
 other cotton **red** **-NMLZ** 2SG= CLN:cotton= give =STV
 'Give me another [hank of] red cotton.' (PDYP_MIC_B_01_14)

The nominalized attributive stem can also function as a pronoun, as the sentence in (78) indicates.

- (78) *wakērima u tha?*
wakē rima =u =tha
 red **-NMLZ** =CLN:cotton =PTC.INT
 'The red one?' (PDYP_MIC_B_01_14)

There are only a few words that indicate age (*oxe* 'young', *tuku* 'young [animal, plants]', *pata* 'old', *wārapata* 'old, elder'), sex (*thuwē* 'woman' and *wāro* 'man') and

age and sex combined (*moko* ‘girl’ and *hiya* ‘boy’) that can play the role of attributive modifiers of the semantic head of the NP. These words also have a post-nominal position in the NP, as we can see by the examples in (79).

- (79) a. *thuŵē moko thēpē wāroho mahioma* .
thuŵē moko thē= pē= wāroho mahi =o =ma
 woman **girl** CLN.GNR= 3PL= a lot much =STV =PST
 ‘The young women were (very) many.’ (PDYP_MIC_A_14_02)

- b. *iwa pata a hetu* [...] *iwa pata a= hetu*
 caiman **elder** 3SG= also
 ‘The old caiman also [...]’ (PDYP_MIC_A_07_19)

- c. *napē thuŵē ani mauka kiki riā pree*
napē thuŵē =a =ni mauka kiki= riā= pree
 white person **woman** =SG =ERG mango CLN:collective= VOL= also
kōohuru wei [...] *kō =o =huru =wei*
 take =STV =DIR.AND =NMLZ
 ‘The female white person also wanting to take away the mangos [...]’
 (s_chck_batm).

Interestingly, these words can still appear as attributive stems derived with *-rima*, as in the examples in (80).

- (80) a. *hiyarima thēpē yārimuu* .
hiya -rima thē= pē= yāri =mu =i
boy -NMLZ CLN.GNR= 3PL= wash =INTRZ =DYN
 ‘The boys are bathing.’ (n046_timayoma)

b. *inaha patarima pë kãyo kuu he*
inaha pata -rima pë= kãyo= ku =i he=
 thereby **elder** -NMLZ 3PL= APPL= say =DYN V.PTC=
*yati*ai .
yati =a =i
 persist =DRV =DYN
 ‘An so the elders continue to say.’ (m011_joan_tihi)

On a final and apparently contradictory note, we will see in Chapter 5 that, according to Dixon’s 2004 definition, YMA does have an open class of adjectives, in the sense that the property words display some formal properties that other types of words do not, which allow us to group them all in a single sub-class of verbs. We will see in Chapter 5 that one of these exclusive features is precisely the access to the nominalizer *-rima* (§5.3.7). In Dixon’s terminology, YMA has verb-like adjectives (Dixon, 2004: 14) and maybe a very small paradigm of noun-like adjectives, which comprises the words that express age and sex.

4.4. Concluding remarks

I offered an overview of the elements in this chapter in the YMA noun phrase . We saw that YMA has four basic types of nouns, which differ from each other in their morphological make up and morphosyntactic possibilities. We saw that one of these noun types (Type 2) is not a free word, but a bound morpheme in the language, that can even be incorporated in the predicate. Nouns of Type 1 are free morphemes, while the nouns of Type 3 are made out of one free morpheme and one or more noun classifiers, which are bound morphemes. Furthermore, we saw that each type of noun can also be characterized in its semantics. While nouns of Type 2 are meronyms, i.e. they express a part of a whole, nouns of types 1 and 3 are always holonyms, i.e. they refer to the whole, to complete and independent entities. The fourth type of noun comprises the paradigm of kinship terms and displays ambiguous morphosyntactic properties, behaving like a free word in some contexts and like a bound morpheme in others. We saw also that some other words may display similar behavior.

We also saw that other elements can still appear within the nominal phrase as free words, namely possessive and personal pronouns, demonstratives, quantifiers, the indefinite pro-form *pei*, and attributive modifiers, which are basically nominalized attributive verbs. These other types of words can play either a pronominal or an adnominal role, i.e. they can either by themselves alone make full NPs or act as modifier/determiner of the NP's semantic head. Furthermore, we saw that, in the modification function, most of those words have a rigid pre-nominal position, with the exception of the attributive modifiers and indefinite pro-form – which have a rigid post-nominal position – and the quantifiers – which enjoy much more flexibility in this regard, are able to appear either before or after the noun, and even inside the predicate.

We discussed several aspects of the YMA nominal morphology in this chapter, such as number expression, possessive and personal markers, and noun classifiers. Nevertheless, we left aside the description of the case marking system and the diminutive and reverential forms. We will deal with these in Chapter 7 when discussing the argument marking mechanisms of the language. In the next chapter, I will turn the description to the other major class of words in YMA: verbs.

5. Verb stems

5.1. Introduction

After having studied the formal and semantic characterization of nouns in the last chapter, I will move on to the study of the other major word class of the language, that of verbs. In Chapter 3 (§3.5), I provisionally defined verbs as free words that tend to appear at the end of the clause and can host bound morphemes at their two sides: on the left side they host morphemes from clitic Cluster B, and on the right side, from Cluster C.

We will see in this chapter that this straightforward characterization needs to be refined to account for all types of verbs found in the language for two reasons: first, there are four subtypes of verb stems, namely the attributive, positional, dynamic and irregular ones. These different stems behave differently with regard to nine distinctive features, like their basic morphology, their argument structure or their access to specific to spatial morphemes and canonical secondary predication (§5.3).

Second, verbs do not only display the simple morphological structure presented in Chapter 3, but can be morphologically simple (§5.4) or morphologically complex – either compound (§5.5) or composed of overtly derived stems (either from nouns or other verbs) (§5.6).

The chapter begins with a general overview in the next section of the three most important types of verb stems and of the irregular stems.

5.2. Four basic types of verb stems

In YMA there are four basic types of verb stems: attributive (1a), positional (1b), dynamic (1c), and irregular (1d). Each type of stem has a distinctive set of morphological and syntactic properties in different grammatical domains of the language.

ATTRIBUTIVE

(1) a. *Pakokai a yatoto*

Pakokai *a*= *yatoto*

Pakokai 3SG= short

‘Pakokai is short.’

POSITIONAL

b. *iha ya piria*

iha *ya*= *piri* =*a*

ANA:there 1SG= lie_in_hammock =POST

‘I live there (lit. ‘I lie in the hammock there’).’ (m_007_geni_kona)

DYNAMIC

c. *yokotho aha Okori a hërëi*

yokotho =*a* =*ha* *Okori* *a*= *hërë* =*i*

swamp =SG =OBL *Okori* 3SG= swim =DYN

‘Okori is swimming in the pond.’

IRREGULAR

d. *yano aha Ararima a kōo*

yano =*a* =*ha* *Ararima* *a*= *kō* =*o*

house =SG =OBL *Ararima* 3SG= go_back_home =STV

‘Ararima is going home.’ (lit. ‘Ararima is leaving [here] to home.’)

Prototypical predicates with the first two type of stems, the attributive and the positive ones, always have a stative aspect and an intransitive argument structure. As their names suggest, attributive stems prototypically take part in predicates that express a property of an entity (attributive predicates) (2a), while positional stems appear in sentences describing the position or the posture of someone or something (2b).

(2) a. *kihi koraha kiki wakë*

kihi koraha kiki= *wakë*

that banana CLN:collective= be_ripe

‘That bunch of bananas is ripe.’

- b. *kiha Kunatoi a praa* .
kiha Kunatoi a= pra =a
 there Kunatoi 3SG= lie =POST
 ‘Kunatoi is lying there on the floor.’

Positional stems are often used in locative and existential predicates (see §8.3 and §8.4).

Dynamic stems convey activities, doings, processes (including the processes of acquiring a property), achievements and accomplishments (including changing of position/posture). Dynamic stems can be either transitive (3a) or intransitive (3b).

- (3) a. *hutukana hami Kunatoi a kiãi* .
hutukana =hami Kunatoi a= kiã =i
 garden =OBL Kunatoi 3SG= work =DYN
 ‘Kunatoi is working in the garden.’
- b. *Okori ani wii a tiëi* .
Okori =a =ni wii a= tië =i
 Okori =SG =ERG basket 3SG= weave =DYN
 ‘Okori is weaving a basket.’

Semantic and morphosyntactic properties correlate well among the paradigm members of these three types of verb stems, but are not sufficient to correctly predict the properties of a verb stem in all instances. There are, for example, some few stems that behave like positional but actually convey attributes, processes or even activities, while other rare verbs morphologically resemble dynamic stems but have a clear attributive meaning.

The fourth type of verb stem consists of the irregular stems. This label derives less from the irregularity of their morphosyntactic properties than from the lack of semantic homogeneity among them. In (1d), we saw an example of the unergative irregular stem that conveys a motion activity, *kō* ‘go back home’. In (4a), an

unaccusative irregular verb conveys a physiological activity, and in (4b), a human propensity (thus an attribute).

This fourth type of verb stems is significantly rarer in the lexicon than the three other types: it includes about two dozen of stems in the YMA dictionary of different semantic domains. Many of the irregular stems express basic verbal concepts, such as *mio* ‘to sleep’, *ukuo* ‘to walk towards something’, *tuo* ‘to climb’, *kao* ‘to grow (vegetable)’, *moxi tuo* ‘to choke’, *kõo* ‘to go home’, *pihio* ‘to give (to first person)’ or *paxio* ‘to be evident’. They are very productive in serial verb constructions, especially the latter three verbs, as we will see in Chapter 10 (§10.4).

- (4) a. *reã si mioma wãrokoxi*
reã si= mi =o =ma wãrokoxi
mouse CLN:small= sleep =STV =PST sp._of_fruit
unahi nasikiha .
=una =hi =nasiki =ha
=CLN:??? =CLN:tree =root =OBL
‘The mouse was sleeping on the roots of the tree.’ (s_ms10_alfr)

- b. *ihĩ thẽha yamaki hixio* .
ihĩ =thẽ =ha yamaki= hixi =o
ANA =CLN.GNR =OBL 1PL= be_angry =STV
‘For that reason we are angry.’ (PDYP_MIC_A_14_02)

Leaving aside the semantics for a while, these four types of verbs stems have distinct and predictable morphosyntactic behaviors. Because the distinction between these four stems is crucial for understanding and describing several aspects of the YMA grammar, the next subsections discuss the formal properties of the four verb stem types.

5.3. Differences between the verb stem types

This subsection explores the distinctive features of the verbal stem types:

- the first three subsections deal with the basic morphology required in present readings (§5.3.1), imperfective past readings (§5.3.2) and in imperfective subordinate clauses (§5.3.3).
- the fourth subsection discusses their argument structure (§5.3.4);
- the following three subsections examine the access to the directional markers and the semantics associated (§5.3.5), to the locational markers (§5.3.6), to the nominalizers *-tima* (§5.3.7) and *-rima* (§5.3.8), and to canonical secondary predication (§5.3.9).
- the last subsection offers a summarizing table.

5.3.1. Morphemes in present readings

Independent clauses that do not display any overt marker for past, future or perfectivity often have a present reading in YMA. We will start the study of the verb stems by comparing their behavior in this context. Dynamic stems require the dynamic morpheme *=i* in this context, which often yields a progressive reading of the predicate. In §2.6.3.2, we saw that this morpheme assimilates the frontness/backness of the preceding vowel.

- (5) a. *oxe* *thëpë* *hërëi* .
 oxe *thë=* *pë=* *hërë* *=i*
 youngster CLN.GNR= 3PL= swim =DYN
 ‘The children are swimming.’
- b. *Okori ani* *naxi* *hi thai* .
 Okori *=a* *=ni* *naxi* *hi=* *tha* *=i*
 Okori =SG =ERG cassava CLN:tree= do; make =DYN
 ‘Okori is preparing the manioc bread.’
- c. *Ararima a* *yurimu* .
 Ararima *a=* *yurimu* *=i*
 Ararima 3SG= fish =DYN

‘Ararima is fishing.’

In present contexts, positional stems require the positional morpheme =*a*, as in (6). I am assuming that predicates with positional stems refer to a static state of affairs, i.e. they refer to the resulting position/posture of an entity¹ and not to the process through which the entity underwent to acquire it. The latter meaning is expressed by the dynamic version of the attributive stem.

- (6) a. *pata thëpë* *tëkëa* .
 pata thë= *pë= tëkë =a*
 elder CLN.GNR= 3PL= sit =POST
 ‘The elders [of the village] are sitting down.’

- b. *kihami ipa rakama thuku yãa* .
 kihami ipa rakama thuku= *yã =a*
 there 1POS hammock CLN:hammock= be tied =POST
 ‘My hammock is tied over there.’

Irregular stems take enclitic =*o* in present readings, as in example (7) (see also (1d) and (4a-b)). Since this same form appears with positional and attributive stems (stative verbs) in several other contexts (see §5.3.2, §5.3.3, and §5.3.8), I am glossing it for now as a stative morpheme for the sake of descriptive economy even though the lexical aspect of most irregular stems is not stative at all.

- (7) *apia hiha* *Kunathoi a tuo* .
 apia =hi =*ha* *Kunathoi a= tu =o*
 fruit =CLN:tree =OBL *Kunathoi* 3SG= climb =STV
 ‘Kunathoi is climbing/has climbed the *apia* tree.’

As the example in (8) shows, in their stative version, attributive stems are the only ones that do not take any morpheme in the present context other than the proclitic

¹ Or to an unaltered position/posture of an entity, when it is the case.

of person (Cluster B), which is also required for the other types of stems. When these verbs (attributive) refer to the process of acquiring or changing a property by an entity, they behave exactly like dynamic stems and we do not consider them to be attributive stems anymore. I will comment more on this in §5.6.1. In any event, according to our analysis, predicates with attributive stems will always have stative aspect.

- (8) a. *kami ya mar̃xi* .
 kami ya= mar̃xi
 1 1SG= be_sleepy
 ‘I am sleepy.’
- b. *hei karaka pẽ wĩte* .
 hei karaka pẽ= wĩte
 this chicken 3PL= be_fat
 ‘These chickens are fat.’

We saw that in present readings, dynamic stems take the dynamic morpheme =*i*, positional stems the positional morpheme =*a*, irregular stems the stative enclitic =*o*, and attributive stems do not receive any morpheme from Cluster C. Throughout this study, I will use the verb stems plus the morphology found in present readings as the citation form for them, as summarized in Table 5.1.

Table 5.1 - Citation form of the four verb stem types (basic morphology in the present readings)

Verb stem type	Citation form	Morpheme taken in present reading
attributive	stem+ Ø	none
positional	stem= a	Positional (POST)
dynamic	stem= i	Dynamic (DYN)
irregular	stem= o	Stative (STV)

The next section shows how these stems behave in past constructions.

5.3.2. Morphemes in imperfective past readings

Both attributive (9) and positional (10) stems take the stative morpheme =*o* (in bold) in imperfective constructions with the past marker =*ma*. We will see that the stative marker =*o* still appears with these types of stems in other grammatical contexts. Note that in (10b) the stative vowel is lowered to [a] when the last vowel of the stem is a low vowel.

- (9) a. *kami ya marĩxioma* .
kami ya= marĩxi =o =ma
 1 1SG= sleepy =STV =PST
 ‘I was sleepy.’

- b. *hei karaka pẽ wĩteoma* .
hei karaka pẽ= wĩte =o =ma
 this chicken 3PL= fat =STV =PST
 ‘These chickens were fat.’

- (10) a. *pata thẽpẽ tẽkẽoma* .
pata thẽ= pẽ= tẽkẽ =o =ma
 elder CLN.GNR= 3PL= sit =STV =PST
 ‘The elders [of the village] were sitting.’

- b. *kihami ipa rakama thuku yãama* .
kihami ipa rakama thuku= yã =o =ma
 there 1POS hammock CLN:hammock= be_tied =STV =PST
 ‘My hammock was tied over there.’

Irregular stems also require stative =*o* in the past, as long as the predicate does not display a perfective marker, as in (11).

- (11) *kaho waeha ya hixioma* .
kaho =wa =e =ha ya= hixi =o =ma
 2 =2SG =DIF.PART =OBL 1SG= angry =STV =PST
 ‘I was angry at you.’

Predicates with dynamic stems in the past which are not marked with a perfective morpheme frequently have an imperfective reading (12a-b). However, imperfective morphemes like the durative =*ti* force this reading, as in (12c).

- (12) a. *thuě ani wĩ a tiěma* .
 thuě =*a* =*ni* *wĩ* *a*= *tiě* =*ma*
 woman =3SG =ERG basket 3SG= weave =PST
 ‘The woman wove/was weaving a basket.’

- b. *yuri yaa wama* .
 yuri ya= *a*= *wa* =*ma*
 fish 1SG= 3SG= eat =PST
 ‘I ate/was eating a fish.’

- c. *Ararima a kiãtima* .
 Ararima a= *kiã* =*ti* =*ma*
 Ararima 3SG= work =DUR =PST
 ‘Ararima worked for a long time.’

In contrast to the other verb stem types, stative =*o* is not attested with dynamic stems in these cases with an imperfective reading.

In imperfective past contexts, we saw that positional, attributive and irregular verb stems show similar morphological behavior: all of them requiring the stative vowel =*o* for the grammaticality of the clause. By contrast, dynamic stems are only marked for past. The next subsection explores the morphological marking of the four verb types within the temporal subordinate clauses.

5.3.3. Morphemes in subordinate clauses with =*těhě* ‘when’, ‘if’

Subordinate clauses with the conjunction =*těhě* (‘when’, ‘if’) set a time reference for the event of the main predication, either as something that actually happened in the past, simultaneously with the main predication, (13a), or as some hypothetical or irrealis event that may be simultaneous or a condition in the future for the main

predication to occur, (13b). In both constructions, dynamic stems require imperfective dynamic **=i** (in bold).

- (13) a. *kami ya yurimuu tēhē , iwa yaa*
kami ya= yurimu =i =tēhē iwa ya= a=
 1 1SG= fish =DYN =REL.PRS caiman 1SG= 3SG=
taarema .
taa =ri =ma
 see =PFV =PST
 ‘When I was fishing, I saw a caiman.’

- b. *maa kei tēhē , yamaki rama huimi* .
maa ke =i =tēhē yamaki= rama hu =imi
 rain fall =DYN =REL.PRS 1PL= hunt go =NEG
 ‘If it is raining, we will not go hunting.’

In this context, attributive stems have to be inflected with stative **=o**, which is in bold in the examples (14) below.

- (14) a. *kami ya marĩxio tēhē , kama ani ya*
kami ya= marĩxi =o =tēhē kama =a =ni ya=
 1 1SG= be_sleepy =STV =REL.PRS 3 =SG =ERG 1SG=
noa thama .
noa= tha =ma
 V.PTC= do; make =PST
 ‘He explained [it] to me when I was sleepy.’

- b. *karaka pē wĩteo tēhē , ya pē*
karaka pē= wĩte =o =tēhē ya= pē=
 chicken 3PL= fat =STV =REL.PRS 1SG= 3PL=
xēprarema .
xē =pra =ri =ma
 beat; kill =DRV =PFV =PST
 ‘I killed the chickens when they were fat.’

Positional stems also require stative =*o* in subordinate clauses, as shown by the examples in (15).

- (15) a. *pata thēpē tēkēo tēhē , ya thēpē*
pata thē= pē= tēkē =o =tēhē ya= thē= pē=
 elder CLN.GNR= 3PL= sit =STV =REL.PRS 1SG= CLN.GNR= 3PL=
noa thaama .
noa= tha =a =ma
 V.PTC= do; make =DISTR =PST

‘I explained to the elders [of the village] when they were seated.’

- b. *kihami ipa rakama thuku yāa tēhē ,*
kihami ipa rakama thuku= yā =o =tēhē
 there 1POS hammock CLN:hammock= be_tied =STV =REL.PRS
thuku ãxirayoma .
thuku= ãxi =rayu =ma
 CLN:hammock= burn =PFV =PST

‘My hammock burnt when it was tied over there.’

Irregular verb stems behave similarly to positional and attributive stems in subordinate clauses, as they are also inflected by the stative =*o* (in bold), as the examples in (16) show.

- (16) a. *ĩhĩ rēa si mio tēhē [...]*

ĩhĩ rēa si= mi =o =tēhē
 ANA mouse CLN:small= sleep =STV =REL.PRS

‘When the mouse was sleeping [...]’ (s_ms10_alfr)

- b. *ĩhĩ tireha arĩ tuo tēhē e*
ĩhĩ tire =ha a= rĩ= tu =o =tēhē e=
 ANA high =OBL 3SG= HON= climb =STV =REL.PRS DIF.PART=
kāyo haikuhuruma .
kāyo= hai =ku =huru =ma
 APPL= pass =PFV2 =DIR.AND =PST

‘When the senior man was climbing the tree, the other passed by with that [the goat].’ (s_pear_arok)

As a final note, the same morphological markers are observed with these four verb stem types in nominalized clauses with =*wei* – i.e. =*o* with positional, attributive and irregular stems, and =*i* with dynamic stems. We will move now the discussion of the inherent argument structure of each type of verb stem.

5.3.4. Inherent argument structure

In their stative version, positional and attributive stems always display an intransitive argument structure. In (17a), we have a predicate with an attributive stem, and in (17b-d), clauses whose head is a positional stem.

ATTRIBUTIVE

- (17) a. *hei karaka pë wîte* .
 hei karaka pë= wîte
 this chicken 3PL= fat
 ‘These chickens are fat.’

POSITIONAL

- b. *oxe thëpë piria* .
 oxe thë= pë= piri =a
 youngster CLN.GNR= 3PL= lie =POST
 ‘The children are lying in the hammock.’
- c. *heha naxi kokopë tua* .
 heha naxi koko= pë= tu =a
 here cassava CLN:round.dark= 3PL= plant =POST
 ‘Here the manioc roots are buried/under the earth/are planted.’
- d. *pirio yokaha hiima a horea* .
 pirio =yo =ka =ha hiima a= hore =a
 door =CLN:track =hole =OBL dog 3SG= be on all fours =POST

‘The dog is on all fours at the door.’

Those stems only get a transitive argument structure when previously derived with the causative morpheme =*ma* ‘CAUS’ or dynamizer vowel =*a* ‘DRV’ (see §5.6.4). All derivations with the causative =*ma* result in dynamic transitive stems (18a-b). After the derivation with the dynamizer =*a* however, some positional stems become transitive dynamic stems (18c), while others remain intransitive (18d), as we will discuss in §5.6.4.

- (18) a. *hei karaka yapë wĩtemai* .
 hei karaka ya= pë= wĩte =ma =i
 this chicken 1SG= 3PL= be_fat =CAUS =DYN
 ‘I am fattening these chickens.’

- b. *oxe yathëpë pirimakema* .
 oxe ya= thë= pë= piri =ma =ki =ma
 youngster 1SG= CLN.GNR= 3PL= lie =CAUS =PFV2 =PST
 ‘I laid the children on the hammock.’

- c. *naxi ya kokopë tuai* .
 naxi ya= koko= pë= tu =a =i
 cassava 1SG= CLN:round.dark= 3PL= plant =DRV =DYN
 ‘I am planting manioc.’

- d. *rakama thuku pëhëthë ha , aho uhuru a*
 rakama thuku= pëhëthë =ha aho uhuru a=
 hammock CLN:hammock= below =OBL 2POS child 3SG=
horeai
hore =a =i
 be on all fours =DRV =DYN
 ‘Your child is crawling under the hammock.’

Irregular stems also project an intransitive argument on the clause when selected as the head of the predicate (19). There are no transitive irregular stems. Even those

stems that may be seen as semantically transitive, i.e. that imply two semantic participants like *hu* ‘answer’ in (19b), are syntactically intransitive: they allow only one core participant. The non-core argument *pata thēpē* ‘the elders’ is then marked with the oblique case morpheme =*ha*.

- (19) a. *kami yaeha* *a* *ukuo* *tëhë* [...]
kami ya =e =**ha** *a*= *uku* =o =*tëhë*
 1 1SG =DIF.PART =**OBL** 3SG= walk =STV =REL.PRS
 ‘When he walked towards me [...],’
- b. *pata thëpëha* *pëã* *huoimi*
pata thë =*pë* =**ha** *pë*= *ã*= *hu* =o =*imi*
 elder CLN.GNR =PL =**OBL** 3PL= sound= answer =STV =NEG
 ‘They do not obey the elders.’

The transitive version of these stems is only obtained through derivation with the dynamizer vowel =*a*. These verbs can also be derived with causative =*ma*, but they always have to undergo a previous derivation with the dynamizer =*a*, in bold in the examples in (20).

- (20) a. *pata thēpēha* *ya pēā*
pata thē =*pē* =*ha* *ya*= *pē*= *ā*=
 elder CLN.GNR =PL =OBL 1SG= 3PL= sound=
huamai *pihio* .
hu =*a* =*ma* =*i* *pihi* =*o*
 answer =DRV =CAUS =DYN want =STV
 ‘I will make them obey the elders.’

- b. *kami yaeha* *a*
kami ya =*e* =*ha a*=
 1 1SG =DIF.PART =OBL 3SG=
ukuamaihe *tēhē* [...]
uku =*a* =*ma* =*i* =*he* =*tēhē*
 walk =DRV =CAUS =DYN =3PL =REL.PRS
 ‘When they made him walk towards me [...]’

Interestingly, some irregular verbs can be derived with the dynamizer =*a* alone to produce transitive dynamic stems, as in (21), but others only accept this deriving morpheme when they are also derived with the causative marker. The verbs *ukuo* ‘walk towards’ in (20b) and *tuo* ‘climb’ are among the irregular stems of the latter type.

- (21) *pata thēpēā* *huaimihe* .
pata thē= *pē*= *ā*= *hu* =*a* =*imi* =*he*
 elder CLN.GNR= 3PL= sound= answer =DRV =NEG =3PL
 ‘They do not obey (lit: ‘answer’) the elders.’ (Note: in this construction “the elders” is in the absolutive position of the clause)

On the other hand, dynamic stems can be either basic (i.e. non-derived) intransitive (22a), and or basic transitive (22b). We will see in Chapter 9 that both subtypes of dynamic stems can have their valency altered by morphological derivations.

- (22) a. *karaka a kerayoma* .
karaka a ke =*rayu* =*ma*
 chicken 3SG fall =PFV =PST
 ‘The chicken fell [from the arms of the woman].’ (s_chck_cesa)
- b. *Kunatoi ani* *huu tihi tiēi* .
Kunatoi =*a* =*ni* *huu tihi*= *tiē* =*i*
 Kunatoi =SG =ERG tree CLN:tree= cut down =DYN
 ‘Okori is cutting the tree.’

We saw in this section that predicates with irregular stems always display an intransitive argument structure and so do positional and attributive stems in their stative version. These three stem types can acquire a transitive argument structure only after a causative or ‘dynamizing’ derivation. By contrast, dynamic stems can be originally both intransitive and transitive.

I will now discuss how these verb stem types interact with the directional markers.

5.3.5. Access to directional markers

The stative version of positional and attributive stems cannot take directional morphemes either in their literal (spatial orientation of a movement) or extended meaning (progressive aspect). This is certainly due to their semantics. And for the same reasons, only a few dynamic stems that express motion can take the venitive morpheme =*ima* or andative =*huru* in their literal meaning of direction of movement. In (23), we have some examples of dynamic stems inflected with these morphemes in their literal sense.

(23) a. *Sinaheoma a huimai* .

Sinaheoma a= hu =ima =i

Sinaheoma 3SG= go =DIR.VEN =DYN

‘Sinaheoma is coming.’ (n015_krukunari)

b. *pora a kãyo rëëraahuruma* .

pora a= kãyo= rëë =rayu =huru =ma

ball 3SG= APPL= run =PFV =DIR.AND =PST

‘He ran away with the ball.’ (s_ball_marc)

Example (24) presents an irregular stem with the venitive directional marker =*ima*. Note that the stative vowel =*o* precedes the directional marker in (24) while the dynamic morpheme follows the same marker in (23a).

- (24) a. *ĩhĩ tēhē* *apia hiha* *oxe* *thēpē*
 ĩhĩ =*tēhē* *apia* =*hi* =*ha* *oxe* *thē*= *pē*=
 ANA =REL.PRS fruit =CLN:tree =OBL youngster CLN.GNR= 3PL=
*tuoi****mama*** .
tu =*o* =***ima*** =*ma*
 climb =STV =**DIR.VEN** =PST

‘Then the children climbed the *apia* tree.’ (Note: it implies that the speaker was already on the top of the tree when the children climbed it).

When used with dynamic or irregular verbs that typically convey motionless events, directionals may indicate that the event was carried out while in motion while simultaneously showing the direction of this movement. We will discuss associated motion in more detail in Chapter 6 (§6.6). In (25), we see two examples of associated motion with motionless dynamic stems.

- (25) a. *hei ya thē* *poi****mama*** .
 hei ya= *thē*= *po* =***ima*** =*ma*
 this 1SG= CLN.GNR= hold =**DIR.VEN** =PST

‘I brought this.’ (lit. ‘I held it [while coming] towards here’)

- b. *pē* *amoamu****huru*** .
 pē= *amoamu* =***huru*** =*ma*
 3PL= sing =**DIR.AND** =PST
 ‘They went away singing.’

Dynamic and irregular verbs that do not display the feature [+movement] in their semantics – such as the dynamic stems *kiai* ‘to work’ or *thai* ‘to do’ or the irregular one *mio* ‘to sleep’ – can take the andative morpheme =*huru* in its extended meaning as well, that is, as progressive aspect marker. This reading is particularly frequent in subordinate clauses with the conjunction =*tēhē*, as the examples in (26) show. In (26a) we have an example with a dynamic stem, and in (26b) with an irregular verb.

- (26) a. *naxi ya hi thahuruu tēhē* [...]
naxi ya= hi= tha =huru =i =tēhē
 cassava 1SG= CLN:round= do; make =DIR.AND =DYN =REL.PRS
 ‘When I was making cassava pancakes [...]

- b. *napē pē miohuru tēhē* [...]
napē pē= mi =o =huru =tēhē
 white person 3PL= sleep =STV =DIR.AND =REL.PRS
 ‘While the white people were sleeping [...]

Those markers do not co-occur with positional and attributive stems in the stative version in any context. We will now see how the verbs stems co-occur with the locational markers.

5.3.6. Access to locational markers

As we will see in Chapter 6 (§6.4), YMA has several locational morphemes that are bound to the verb and indicate where the event took place in relation to the speaker, such as =*tayū* ‘far away, but on the same river bank’, =*harayū* ‘far away, on the other side of river bank or upriver’, and =*kiri* ‘far away, downriver’. Only positional (28), dynamic (27) and irregular (29) stems can take these markers, i.e. attributive stems cannot.

DYNAMIC

- (27) a. *hutukana hami Ararima a kiatayuu* .
hutukana =hami Ararima a= kia =tayū =i
 garden =OBL Ararima 3SG= work =LOC:not_far =DYN
 ‘Ararima is working over there in the garden.’

b. *horepe hami thëpë*
horepe =hami thë= pë=
 highlands =OBL CLN.GNR= 3PL=
reahumoharayu
reahu =mu =harayu =i
 festival =INTRZ =DIR:upriver =DYN

‘People are making a festival up there in the highlands.’

POSITIONAL

(28) a. *ipa kanaa a ðkaaharaya*
ipa kanaa a= ðka =a =harayu =a
 1POS canoe 3SG= tie =POST =LOC:upstream =POST
 ‘My canoe is tied over on the other side of the riverbank.’

b. *kiha ipa hutukana praakiria*
kiha ipa hutukana pra =a =kiri =a
 there 1POS garden lie =POST =DIR:downstream =POST
 ‘My garden is downstream.’ (lit ‘is lying on the floor’)

IRREGULAR

(29) a. *ihĩ tireha a tuoharayu tēhē [...]*
ihĩ tire =ha a= tu =o =harayu =tēhē
 ANA high =OBL 3SG= climb =STV =LOC:upstream =REL.PRS
 ‘When he was climbing there [...]’ (s_pear_arok)

b. *apia hiha Pokarari a tuoharayu*
apia =hi =ha Pokarari a= tu =o =harayu
 fruit =CLN:tree =OBL Pokarari 3SG= climb =STV =LOC:upstream
 ‘Pokarari is climbing the apia tree up there.’

Note in (28) that the positional morpheme is doubled in the locational marker, but the dynamic and the stative vowel aren’t. I will discuss it in Chapter 6 in detail.

Locational markers do not appear in purely attributive predicates. This restriction probably derives from the impossibility of attributive stems to be the head of locative predicates. Note that all examples from (27) to (29) can be regarded as a type of locative predicate since they all can be the possible answer to the question “Where is he/she/it?” or “Where are they?”. The sentence in (30a) cannot be the answer to that question. I believe that this in part explains why the combination of an attributive stem with directional markers always results in ungrammatical predicates (30b).

- (30) a. **hutukana hami ipa koraha kiki wakë* .
 hutukana =hami ipa koraha kiki= wakë
 garden =OBL 1POS banana CLN:collective= ripe
 ‘My bananas are ripe in the garden.’ [attributive reading]

- b. * *hutukana hami ipa koraha kiki*
 hutukana =hami ipa koraha kiki=
 garden =OBL 1POS banana CLN:collective=
wakëkiri .
wakë =kiri
 ripe =LOC:downriver
 ‘My bananas are ripe downriver in the garden.’ [attributive reading]

Locational markers are however grammatical with attributive stems in two constructions. First, they may appear in secondary predication with a positional main verb (P2) like ‘exist’ in (31c), or a dynamic main verb like ‘reap’ in (31b).

- (31) a. *hutukana hami ipa koraha kiki wakë*
 hutukana =hami ipa koraha kiki= wakë
 garden =OBL 1POS banana CLN:collective= ripe
kuataya .
ku =a =taya =a
 exist =POST =LOC:a_bit_faraway =POST
 ‘My ripe bananas are [exist] there in the garden.’ [locative/existential reading]

- b. *hutukana hami hei koraha ya kiki wakē*
hutukana =hami hei koraha ya= kiki= wakē
 garden =OBL this banana 1SG= CLN:collective= ripe
hekēretayoma .
hekē =ri =tayu =ma
reap =PFV =LOC:not_far =PST
 ‘I picked these ripe bananas over there in the garden.’

Second, the locational marker may appear with attributive stems used dynamically. In the example (32), *wakēi* is not stative (‘to be ripe’) but dynamic (‘to ripen’), as the dynamic vowel at its end indicates. This contrasts with example (30b) where the combination of locational markers and the attributive *wakē* in its stative use is ungrammatical.

- (32) *hutukana hami ipa koraha kiki*
hutukana =hami ipa koraha kiki=
 garden =OBL 1POS banana CLN:collective=
wakētayuu .
wakē =tayu =i
 ripe =LOC:not_far =DYN
 ‘My bananas are ripening there in the garden.’ [inchoative dynamic reading]

To summarize, positional, dynamic and irregular stems can take these markers, while attributive stems cannot, unless they are marked with dynamic morphology.

5.3.7. Access to nominalizer *-rima*

Verbal stems can appear inside nominal phrases with a previous morphological derivation. The derived form can act as a modifier of the nominal head or as a nominal head itself. A handful of mechanisms are available in the language for that purpose, but different derivational morphemes give different meanings and formal properties to the resulting form. Moreover, not all derivational morphemes are available for all types of stems. For example, the morpheme *-rima* is only available with attributive stems and the derived form can function as an attributive modifier (much like an adjective in European languages) of the nominal head, (33).

(33) a. *xĩnaru aurima yama upě xa*
xĩnaru au -rima yama= u= pě= xa=
 cotton **be_white** -NMLZ 1PL= CLN:cotton= PL= COND=
rěpoma .
rě =po =ma
 wear =CSVT =PST

‘We wore [loin-cloths made of] white cotton.’ (PDYP_MIC_A_03_18)

b. [*těpě*] *wakěrima ya kiki pree*
těpě wakě -rima ya= kiki= pree
 glass bead **be_red** -NMLZ 1SG= CLN:collective= also
někěki xa ?
někě =ki =xa
 mix =PFV2 =PERM

‘Can I also mix the red [glass beads]?’ (PDYP_MIC_A_04_14)

c. *mamakasi komarima pěãha ka hirai*
mamakasi koma -rima pě= ãha= ka= hira =i
 eyelid **be_holeless** -NMLZ 3PL= name= FOC= transport =DYN
wehi
=we =hi
 =NMLZ =3PL

‘That thing that they call “holeless-eyelid” (referring to an unused bullet).’

(Note: ‘to transport a name’ = ‘to give a name’) (PDYP_MIC_B_08_01)

Dynamic stems do not have direct access to this derivation mechanism unless they previously undergo another derivation into an attributive stem. In (34), I present one rare example of this type of double derivation, involving the resultative =*no*. Examples of irregular and positional stems in this type of complex derivation are not attested in my corpus.

- (34) *thapranorima* *aha* *metao yama*
tha =*pra* =**no** -*rima* =*a* =*ha* *metao yama*=
do; make =DRV =**RESULT** -NMLZ =SG =OBL metal 1PL=
si *ha* *titikini* [...] *si*= *ha*= *titi* =*ki* =*ni*
CLN:small= REL.PST= insert =PFV2 =REL.PST

‘After we had inserted the small piece of metal into the made-one (referring to a reused or refilled bullet) [...]’ (PDYP_MIC_B_08_01)

We will now see how these stems behave with the other nominalizer morpheme *-tima*.

5.3.8. Access to nominalizer *-tima*

This morpheme is used with dynamic, positional and irregular stems, with some differences in the morphology and meaning of the derived form. Positional stems require the stative marker =*o* in this derivational process, and the derived noun often refers to a place or object used to hold the entity in a particular position, as in (35).

- (35) a. *tēkēotima* *tihiki* .
tēkē =**o** -***tima*** =*tihi* =*ki*
sit =STV -NMLZ =CLN:tree =PL
‘Stool’
- b. *praatima* *tihiki* .
pra =**o** -***tima*** =*tihi* =*ki*
lie =STV -NMLZ =CLN:tree =PL
‘Bed’
- c. *araatima* *tihiki* .
ara =**o** -***tima*** =*tihi* =*ki*
be_on_sth =STV -NMLZ =CLN:tree =PL
‘Shelf’

Irregular verbs derived with this morpheme are infrequent: we found only one example in the dictionary. This is probably due to their scarcity in the YMA lexicon rather than to a morphological restriction. The single example, presented in (36), shows that, like positional stems, irregular verb stems do require the stative vowel =*o* for the derivation.

- (36) *tuotima* *tihiki* .
tu =*o* *-tima* =*tihi* =*ki*
 climb =STV -NMLZ =CLN:tree =PL
 ‘Ladder’

Unlike positional and irregular stems, dynamic stem only requires the nominalizer *-tima* for the process to take place. The form derived from this type of stem is a noun that refers to someone or something that performs the action of the verbal stem, (37), or to the instrument used to perform it, (38).

- (37) a. *henimotima* *thëpë* .
henimu *-tima* =*thë* =*pë*
 hunt ritually -NMLZ =CLN.GNR =PL
 ‘The ceremonial hunters’

- b. *hiramatima* *a* .
hirama *-tima* =*a*
 teach -NMLZ =SG
 ‘Teacher’

- (38) a. *utupë taatima* *a* .
utupë taa *-tima* =*a*
 image see -NMLZ =SG
 ‘Television’

- b. *koatima* *thë* .
koa *-tima* =*thë*
 drink -NMLZ =CLN.GNR
 ‘Cup/glass’

Attributive stems can only take this nominalizer if they are first derived into a dynamic stem. In (39), we have the nominalization of the causative (dynamic) stem *sāimai* ‘to cool’, which in turn is derived from the attributive stem *sāi* ‘to be cold’ through the causative *=ma*.

- (39) *sāimatima* *thē* .
sāi *=ma* *-tima* *=thē*
 be cold =CAUS -NMLZ =CLN.GNR
 ‘Refrigerator’

In the next section, we will discuss the last grammatical context chosen in this study to compare the properties of the four types of verb stems.

5.3.9. Canonic secondary predication

Only attributive stems can take part in canonic secondary predication constructions as P2 or V2. In (40), I present some examples of this construction. The attributive stems are in bold.

- (40) a. *weyaha ya ohi kiāma* .
weyaha ya= ohi kiā =ma
 yesterday 1SG= **be_hungry** work =PST
 ‘Yesterday I worked [while] hungry.’

- b. *koraha ya kiki wakē tērema* .
koraha ya= kiki= wakē tē =ri =ma
 banana 1SG= CLN:collective= **ripe** take =PFV =PST
 ‘I took the bunch of ripe bananas.’

Positional, dynamic and irregular stems in this position result in ungrammatical constructions, such as the sentences in (41). Note in that, in spite of the semantics of the verb in (41c) being similar to an attributive stem, the fact that it is formally an irregular verb prevents it from occupying the head of the secondary predication.

POSITIONAL

- (41) a. * *koraha ya kiki praa tērema* .
koraha ya= kiki= pra =a tē =ri =ma
 banana 1SG= CLN:collective= lie =POST take =PFV =PST
 ‘I picked up the bunch of bananas [that was] lying on the ground.’

DYNAMIC

- b. * *koraha ya kiki kei huērema* .
koraha ya= kiki= ke =i huē =ri =ma
 banana 1SG= CLN:collective= fall =DYN grab =PFV =PST
 ‘I grabbed the bunch of bananas [while it was] falling.’

IRREGULAR

- c. * *weyaha ya hixio kiāma* .
weyaha ya= hixi =o kiā =ma
 yesterday 1SG= angry =STV work =PST
 ‘Yesterday I worked [while] angry.’

To get the readings intended in (41), it is necessary either to have a relative clause, like in (42a) with the nominalizer =*wei*, an adverbial subordinate clause, like in (42b), or the non-canonical secondary predication², as in (42c).

- (42) a. *koraha kiki praa wei ya kiki*
koraha kiki= pra =o =wei ya= kiki=
 banana CLN:collective= lie =STV =NMLZ 1SG= CLN:collective=
tērema .
tē =ri =ma
 take =PFV =PST
 ‘I picked up the bunch of bananas that was lying on the ground.’

² I analyze this construction as the non-canonical one due to its greater level of markedness than its canonical counterpart. Note that the construction in (42c) requires the morphemes =*ma* LINK and *kāyo*= APPL, which the constructions in (40) do not.

b. *koraha kiki* *ni* *mi* *kei* *tëhë* *ya*
koraha kiki= *ni*= *mi* *ke* =*i* =*tëhë* *ya*=
 banana CLN:collective= V.PTC= not_be fall =DYN =REL.PRS 1SG=
kiki *huërema* .
kiki= *huë* =*ri* =*ma*
 CLN:collective= grab =PFV =PST

‘I grabbed the bunch of bananas while it was falling.’

c. *weyaha ya hixioma* *kāyō kiāma* .
weyaha ya= *hixi* =*o* =*ma* *kāyō*= *kiā* =*ma*
 yesterday 1SG= angry =STV =LINK APPL= work =PST
 ‘Yesterday I worked while angry.’

I will discuss the canonical and non-canonical secondary predication constructions in Chapter 10 (§10.2.2) in more detail. For our argument, it is important to underline now that only attributive stems (in their stative version) can take part in the canonical construction. I will now summarize the main findings of this comparative study on the main morphosyntactic properties of the four types of verb stems in the language.

5.3.10. Summary of the distinctive features of the verbal stems

The previous sections several differences between the four types of verb stem in YMA. Several others could have been invoked, such as the serial verbs, non-canonical secondary predication, and some complementation constructions, but I will leave the description of these to the relevant chapters ahead, in the belief that the elements provided so far are sufficient for a first characterization of different verbal stems in YMA.

Table 5.2 - Distinctive features of the verbal stems

	ATTR	POST	IRREG	DYN
Morphemes in present readings (used in the citation form)	Ø	= <i>a</i>	= <i>o</i>	= <i>i</i>
Morphemes in imperfective past readings	= <i>o</i>	= <i>o</i>	= <i>o</i>	Ø
Morphemes in imperfective subordinate clauses with = <i>tēhē</i> ‘when’	= <i>o</i>	= <i>o</i>	= <i>o</i>	= <i>i</i>
Inherent argument structure	INTRS	INTRS	INTRS	INTRS/TRS
Access to directional markers (= <i>ima</i> , = <i>huru</i>) in their literal meaning	✗	✗	✓ some	✓ some
Access to directional markers (= <i>ima</i> , = <i>huru</i>) with associated motion meaning	✗	✗	✓	✓
Access to locational markers (= <i>taya</i> , = <i>haraya</i> , = <i>kiri</i>)	✗	✓	✓	✓
Access to nominalizer – <i>rima</i>	✓	✗	✗	✗
Access to nominalizer – <i>tima</i>	✗	✓	✓	✓
Canonic secondary predication	✓	✗	✗	✗

In the next sections, I will discuss the lexical and morphological sources of these different verb stems, i.e. the verb roots and the derivational and compositional mechanisms that allow the creation of new verb stems in the language. We will see that most verb roots yield only one type of morphologically simple verb stem, i.e. most of them are either originally attributive, dynamic or positional. We will also see that zero derivation is another process in YMA to allow one stem to change its morphological properties. That is (for instance?) the case of the inchoative derivation of attributive stems (to be ripe → to ripen), as briefly mentioned in §5.3.6 with the

locational marker and discussed in detail in §5.6.1. Moreover, §5.4.4 will show that the YMA lexicon has “flexible verb roots” or roots that can produce simple verb stems of more than one type with additional morphology.

5.4. Simple verb stems and verb roots

In the previous section, we saw some features that allow us to distinguish four basic types of verb stems in YMA from a morphosyntactic perspective. We will now move one level down and study the morpholexical components of these stems (i.e. their roots and deriving morphemes) giving particular attention to the semantics associated with these. Verb stems in YMA can be morphologically simple – consisting of one bare lexical root, as in (43)³ – or complex – composed of a lexical root and a derivational morpheme, like in (44), or the combination of two lexical morphemes, as in (45). This section is exclusively concerned with simple stems and will refer to derivation mechanisms only as the parameter to compare the level of markedness of the verb stems. Derived stems will be described in §5.6 and verbal compounding in §5.5.

SIMPLE STEMS

- (43) a. *xěi* ‘to beat’
 b. *maoa* ‘to be on someone’s shoulder’
 c. *wakě* ‘to be red’, ‘to be ripe’

DERIVED STEMS

- (44) a. *xěprai* ‘to kill’
 b. *maoai* ‘to carry on the shoulder’
 c. *wakěmai* ‘to redden’(tr), ‘to rippen’ (tr)

³ As mentioned earlier, the citation form of the verb is the verb stem plus its typical morphology in present readings.

COMPOUND STEMS

- (45) a. *pihi* = *kuu* ‘to think’ (lit. ‘to think-say’)
 b. *si* = *utiti* ‘to be smooth’ (lit. ‘skin-to be weak’)
 c. *yopi hai* ‘to sweat’ (lit. ‘to be hot-to exit’)

The majority of the verbal roots in the YMA dictionary yields only one type of morphologically simple verb stem. For instance, without the need of any extra morpheme, the root *tiyë* ‘to cut down’ produces only a dynamic stem (46a), and the root *titi* ‘to be inserted’ can only make a morphologically simple positional root (46b). I consider these non-flexible roots.

- (46) a. *e* *tihi* *tiyëi* .
 e = *tihi* = *tiyë* = *i*
 DIF.PART = CLN:tree = **cut_down** = DYN
 ‘He is cutting down the tree.’ (n046_timayoma)

- b. *pei* *amo* *xa* *titia* .
 pei *amo* = *xa* = *titi* = *a*
 INDEF palm-cabbage = COND = **be_inserted** = POST
 ‘[There is] palm-cabbage inside.’ (lit. ‘Its palm-cabbage is inserted’)
 (n018_yari)

These stems can undergo morphological derivation and then acquire the properties of a different verb stem type. The dynamic stem *tiyëi* ‘to cut down’, for instance, can take the resultative =*no* and become an attributive stem. It is then able to head a secondary predicate (47a), a property exclusive to attributive stems. The positional stem *titia*, on the other hand, needs the dynamizer morpheme =*a* to form the dynamic stem that conveys the meaning of ‘to insert (tr)’ (47b).

- (47) a. *huu tihi tiyëno*
huu tihi= tiyë =no
 tree CLN:tree= cut_down =RESULT
tëruhurmahe
të =ru =huru =ma =he
 take =PFV1 =DIR.AND =PST =3PL
 ‘They took the log (a cut-down tree) away.’

- b. *ipa pataria yaa titiai pario*
ipa pataria ya= a= titi =a =i pari =o
 1POS battery 1SG= 3SG= insert =DRV =DYN first =STV
 ‘I will first insert “my battery”.’ (battery = tobacco roll) (i.e. ‘I will first put my tobacco roll in the mouth’) (PDYP_MIC_B_06)

According to my analysis, these derivational mechanisms are available at the stem and not at the root level for the following reason: these derivations are also found with stems that were previously derived with other morphemes, such as those in (44). The derivation with the resultative *=no*, for instance, can be applied to the dynamic verb stem *pirimai* ‘to lay down on a hammock’ (trans.), which in turn is formed by the positional stem *piria* ‘to be lying in a hammock’ and the causative morpheme *=ma*. The resulting form, *pirimano* ‘to be laid down on a hammock’, is formally an attributive stem. The derivation is a property of the dynamic stems and does not apply directly to the positional stems, such as *piria* ‘to be lying in a hammock’, let alone the verbal root *piri*.

In any event, I consider the roots *tiyë*, *titi*, and also *ixi*, non-flexible roots because they produce only one type of simple stems. Contrastingly, there are flexible roots, which can provide more than one type of non-derived stems in the language (see §5.4.4 below). The root *rukë* can form the positional stem *rukëa* ‘to be inserted’ and the dynamic stem *rukëi* ‘to enter’, as the pair of examples in (48) show.

- (48) a. *eha yaro pë ripi pata rukëa* .
eha yaro pë= ripi pata rukë =a
 here animal 3PL= cooked elder enter =POST
 ‘Here, the cooked meat was inserted.’ (n022_xitei)

- b. *moxi pata rukëi kōkema makii* [...]
moxi= pata rukë =i kō =ki =ma =makii
 penis= elder enter =DYN again =PFV2 =PST =CONCS
 ‘Even though he entered his penis again [...]’ (n031_omamayesie)

It is worth noting that this phenomenon differs from the zero derivation of attributive in dynamic (inchoative) stems, which will be discussed in §5.6.1. This latter aspect is a property of all attributive stems. In contrast, root flexibility is confined to some specific lexical items and is not a property of a verbal stem type itself. We will see in Section §5.4.5 that one type of root, labeled consonantal roots by Ramirez (1994:230), has a particular propensity to display morphological flexibility. Before dealing with those roots in §5.4.5, I will start presenting simple verb stems of the three major types of verb stems (attributive, positional and dynamic stems) in YMA, underlining the semantic possibilities of each type. I will not deal with irregular stems here.

5.4.1. Simple attributive stems

The semantics of the attributive roots includes most of the meanings prototypically associated with adjectives (Dixon, 2004:3). The majority of the Property Concepts are conveyed in the language by a simple attributive stem. For instance, all the words that express dimensions (Table 5.3) belong to the subclass of attributive stems in the language.

Table 5.3 – Simple attributive stems – dimension

Form	Gloss	Form	Gloss
<i>hīyātu</i>	very tall	<i>rākōhi(pē)</i>	slim and tall
<i>hotaka</i>	small	<i>rape</i>	long; tall
<i>hototi</i>	short	<i>tire</i>	high
<i>pata</i>	big	<i>uxitipē</i>	slim and short
<i>prauku</i>	wide; big	<i>wāisi(pē)</i>	small; little
<i>pree</i>	big	<i>yākētē</i>	very small; miniaturized
<i>pretihita</i>	of medium size	<i>yarēhē</i>	tall; long
<i>puhutu</i>	short	<i>yatoto</i>	short
<i>puuxi</i>	small; short; little	<i>yeeeksi</i>	short; dwarf

Words that express other physical properties, such as those presented in Table 5.4, are also simple attributive stems in YMA.

Table 5.4 – Simple attributive stems – physical properties

Form	Gloss	Form	Gloss
<i>apote</i>	cracked	<i>prokoko</i>	loose; baggy (cloth)
<i>ataha</i>	wry	<i>raako</i>	creased
<i>au</i>	clean	<i>rasi</i>	thin
<i>ëkrëkë</i>	wrinkly/gaunt	<i>rasisi</i>	smashed
<i>ërëkë</i>	gaunt	<i>rômihipë</i>	gaunt
<i>ëtë</i>	dirt	<i>sãĩ</i>	cold
<i>ëtë</i>	hard (wood)	<i>sãĩ</i>	cold
<i>ëthëthë</i>	crooked (things); handsome (people)	<i>tariki</i>	obese
<i>ëxëhë</i>	slim	<i>taro</i>	deep
<i>ëyëkë</i>	serpentine	<i>thooro</i>	loose; baggy (cloth)
<i>hëtëhë</i>	light (weight)	<i>thoruku</i>	bent
<i>hetutu</i>	to have two similar parts	<i>toroko</i>	crooked
<i>hõohõ</i>	to have holes	<i>ũikĩ</i>	wrinkly
<i>hopaka</i>	to have holes; bumpy	<i>wãeke</i>	creased
<i>hrakehe</i>	slippery	<i>wãhete</i>	slim (athletic)
<i>hututu</i>	tight (cloth)	<i>wãiki</i>	wrinkly
<i>kõehe</i>	fat	<i>wãkĩhĩ</i>	tight (cloth)
<i>kohipë</i>	strong; hard	<i>wãkõkõ</i>	concave
<i>koropë</i>	rough	<i>wehe</i>	dry
<i>krëëthë</i>	handsome; pretty	<i>wĩte(pë)</i>	fat, greasy
<i>maketi</i>	shallow	<i>xaari</i>	straight
<i>matha</i>	lacking a piece	<i>xãmi</i>	dirty
<i>namo</i>	sharp	<i>xëkrëkë</i>	crossed
<i>ohuhu</i>	to have holes	<i>yapaha</i>	coiled
<i>õki</i>	to be filled up (river)	<i>yĩhĩti</i>	plump; brawny

Colors are conveyed in YMA by attributive verb stems as well. Table 5.5 presents simple verb stems with this meaning. It is worth noting that some of the forms

below also have another meaning as attributive stems, such as *au* ‘white / to be clean’, *riyě* ‘green / to be unripe’, *wakě* ‘to be ripe’ and *okoxi* ‘to be almost ripe’. My interpretation is that the color meaning was extended from these latter ones. Compound verbs can also express some color attributes, as we will see in §5.5.

Table 5.5 - Simple attributive stems - colors 1

Form	Gloss	Form	Gloss
<i>au</i>	white	<i>rohore</i>	color of rotten meat
<i>axi</i>	yellow	<i>ruwě</i>	green
<i>hrārě</i>	yellow; orange	<i>uxi</i>	black
<i>krokehe</i>	gray	<i>uxixi</i>	dark gray
<i>okoxi</i>	light green	<i>wahě</i>	light gray
<i>parahi</i>	lilac; pink	<i>wakě</i>	red
<i>riyě</i>	green		

Attributive stems also comprises words that express flavors and smells. Table 5.6 offers some verbs that specify flavors. The words for smells are not morphological simple stems, but both compound and derived verbs though. I will therefore deal with them in §5.5.2 (see Table 5.30) and in §5.6.9, respectively.

Table 5.6 – Simple attributive stems – flavors

Form	Gloss	Form	Gloss
<i>ãseke</i>	sour (unripe fruit)	<i>nosi</i>	savorless (tobacco)
<i>hrãmi</i>	spicy	<i>oke</i>	savorless
<i>keteti</i>	sweet	<i>witati</i>	tasty
<i>koãimi</i>	bitter	<i>wĩte</i>	greasy
<i>naxi</i>	salty; sour	<i>eherexi</i>	watery

The words that convey stages of life – presented in Table 5.7 – also display the properties of an attributive verb stem. However, it should be mentioned that many of them are made of flexible roots, but not of the type described in §5.4.4. Some roots of these attributive stems are noun roots and can be the head of a noun phrase without any derivation. In this sense, these roots can be labeled “*extremely* flexible roots”. Table 5.7 presents these words.

Table 5.7 – Attributive stems – stages of life/age

Form	Gloss as an attributive verb	Gloss as a noun
<i>hiya</i>	to be young (male)	boy, young man
<i>hote</i>	to be shabby	---
<i>māhārā</i>	to be adolescent	adolescent
<i>moko</i>	to be young (female)	girl, young woman
<i>oxe</i>	to be young	to be young
<i>pata</i>	to be adult	adult, elder
<i>tuku</i>	to be immature (non-human)	cub, bud
<i>tute</i>	to be new	---
<i>wārāpata</i>	to be very old	elder

As I mentioned in Chapter 4 (§4.3.3), the words that express quantity also display ambiguous properties with respect to their position in the clause. Table 5.8 shows some of these words again. When preceding the Cluster B, they are considered a pronominal/adnominal form with the same morphosyntactic possibilities as nouns (see §4.3.3). When following Cluster B, they behave like verbs and can take, for instance, the clitics from Cluster C, which is an exclusive property of verbs, as we saw in §3.5.

Table 5.8 – Attributive stems – quantity

Form	Gloss	Form	Gloss
<i>xīkō</i>	a lot	<i>wārōhō</i>	a lot
<i>xīrō</i>	alone; single	<i>yāmi</i>	few

This section presented an overview of the semantics of the attributive stems. These forms can still convey some other meaning not mentioned here, but most if not

all of them circumscribed by the Property Concepts domain. A full account of these stems will be given in the forthcoming YMA dictionary.

5.4.2. Simple positional stems

It may sound redundant to say that positional stems convey the position or posture of an entity. Indeed, several instances of this type of verb stem seem to support this label, such as those words presented in Table 5.9.

Table 5.9 – Positional stems that convey position

Form	Gloss	Form	Gloss
<i>araa</i>	to be lying on sth	<i>roa</i>	to be squatting
<i>horea</i>	to be on all fours	<i>tĕkĕa</i>	to be sitting
<i>ithāa</i>	to be on the floor (pot)	<i>tĕpĕa</i>	to be sitting on the hammock
<i>kaihia</i>	to be leaning (tree)	<i>tĕrĕkĕa</i>	to be bent
<i>katia</i>	to be upstanding	<i>upraa</i>	to be upstanding
<i>piria</i>	to be lying (on the hammock), to reside	<i>yaakoa</i>	to be perched (several birds)
<i>praa</i>	to be lying on the floor	<i>yakaa</i>	to be lying in the same hammock
<i>rakia</i>	to be leaning on	<i>puuxia</i>	to be shrunk (because of the cold)

However, the meaning of several (possibly most) verbs of this paradigm is not of a prototypical position or posture, properly speaking, but rather a resultative state, generally caused by a participant different from the syntactic subject of the positional stem, as illustrated in Table 5.10. Note that the state expressed by the verbs in Table 5.9 can be easily conceived as a consequence of a self-caused event. This semantic difference has repercussions on the morphological properties of these two types of positional stems (see §5.6.4), for instance, where the derivation of the stems from

Table 5.10 often results in transitive dynamic stems while the words in Table 5.9 are frequently not possible or lead to intransitive dynamic stems.

Table 5.10 – Positional stems (resultative)

Form	Gloss	Form	Gloss
<i>harea</i>	to be hanging	<i>utua</i>	to be hold by the hand
<i>hatētēa</i>	to be tied (in the belt)	<i>weia</i>	to be hold on sbd's teeth
<i>hooa</i>	to be inserted; to be pierced	<i>xākoa</i>	to be folded
<i>karea</i>	to be placed on sbd's lips	<i>xatia</i>	to be stuck
<i>kuxēa</i>	to be untied	<i>yaa</i>	to be on the embers (being roasted)
<i>ōkāa</i>	to be tied	<i>yāa</i>	to be tied
<i>thāihiā</i>	to be strained	<i>yarea</i>	to be hanging
<i>titia</i>	to be inserted	<i>yētēa</i>	to be stuck, to be glued
<i>tua</i>	to be buried	<i>yohoa</i>	to be covered
<i>tua</i>	to be placed on the fire (pot)	<i>yaua</i>	to be hanging

The semantics of positional stems finally includes positions relative to another entity (transversal, parallel, perpendicular...), some particular attributes, such as ‘to not be tall enough’, ‘to be distressed’ and ‘to be abundant’, and even some dynamic events that are conceptualized in the language as states, such as ‘to debouch’ and ‘to flow’ (both employed with rivers). The physiological state ‘to be awake’ is also expressed in YMA by a positional stem. Table 5.11 presents those words.

Table 5.11 – Positional stems (others)

Form	Gloss	Form	Gloss
<i>hahitia</i>	to be transversal	<i>paa</i>	to debouch (river)
<i>hākikĩã</i>	to be hugging	<i>rãa</i>	to be awake
<i>hãyõkoã</i>	to be clinging	<i>thouhua</i>	to be abundant (trees)
<i>hěa</i>	to be remaining	<i>tixoxoa</i>	to be tangled
<i>heerua</i>	to be parallel to sth	<i>wërěa</i>	to be flowing (water)
<i>hrikia</i>	to be in the middle	<i>yawěa</i>	to not be tall enough
<i>imiã</i>	to be crossing a river (fallen tree)	<i>yõõrõa</i>	to be perpendicular
<i>ĩrãa</i>	to be balancing	<i>wãyãa</i>	to be distressed

I will now turn to the presentation of the simple dynamic stems.

5.4.3. Simple dynamic stems

As we saw in §5.3.4, dynamic stems can be either transitive or intransitive. From a semantic perspective, dynamic stems are the most diverse type of verbs in YMA. For instance, intransitive dynamic stems can select either a highly volitional subject, as the verbs that express a manner of motion, or one affected unintentionally by the predicate. Table 5.12 offers some verbs of the first type.

Table 5.12 - Intransitive dynamic stems – Manner of motion

Form	Gloss	Form	Gloss
<i>huu</i>	to go	<i>tokuu</i>	to run away
<i>a⁴</i>	to go	<i>reraï</i>	to soar
<i>yëï</i>	to fly	<i>hërëï</i>	to swim
<i>yutuhuu</i>	to hop	<i>karëï</i>	to sail/to float
<i>puruu</i>	to roll	<i>imïï</i>	to cross a bridge
<i>rërëï</i>	to run	<i>timïï</i>	to descend (from a mountain)

The few verbs that express direction of motion are presented in Table 5.13.

Table 5.13 – Intransitive dynamic stems – Direction of motion

Form	Gloss
<i>rukëï</i>	to enter
<i>hai</i>	to enter; to exit
<i>yapai</i>	to return

All the verbs in Table 5.12 and Table 5.13 can be considered unergatives. There are also unergative dynamic stems that do not express movement/displacement, such as those presented in Table 5.14.

⁴ The dynamic verb stem *a* is defective and only appears in perfective contexts, that is, it cannot occur with the dynamic vowel, for instance. It is in complementary distribution with *huu* ‘to go’ which is only employed in imperfective predicates.

Table 5.14 – Intransitive dynamic stems (unergative)

Form	Gloss	Form	Gloss
<i>herii</i>	to sing	<i>komii</i>	to shout
<i>hokii</i>	to stand up; to wake up and leave	<i>kuu</i>	to say
<i>iai</i>	to eat (intr)	<i>kuyēi</i>	to give up
<i>ikāi</i>	to laugh	<i>prai<i>ai</i></i>	to present oneself dancing during a festival
<i>ithou</i>	to alight	<i>uprai</i>	to stand up
<i>kiāi</i>	to work; to move (muscle)	<i>yutuu</i>	to jump; to stumble

We will see in Chapter 7, that there is no split in the paradigm of intransitive argument marking. All intransitive verbs are treated similarly in this respect, regardless the type of subject they project in the clause. That is, unergative and unaccusative intransitive verbs belong to the same subclass of verbs in the language. Table 5.15 show some verbs of the latter type.

Table 5.15 – Intransitive dynamic stems (unaccusative)

Form	Gloss	Form	Gloss
<i>harou</i>	to heal (intr)	<i>poyuu</i>	to drip
<i>hitii</i>	to snap (rope)	<i>praruruu</i>	to plummet
<i>homou</i>	to explode	<i>prērēi</i>	to plummet
<i>kahei</i>	to slip/to slide	<i>rarou</i>	to reproduce (intr)
<i>kei</i>	to fall	<i>suhara<i>i</i></i>	to vomit
<i>nomai</i>	to die, to faint	<i>wahei</i>	to plummet
<i>ikii</i>	to cry	<i>yoruu</i>	to boil

The semantics of transitive dynamic stems is also varied. It includes verbs of various semantic domains, such as actions that may affect a patient-like entity (to cook, to blow up, to sew, to do...) communicative activities (to ask, to forbid, to call...), physiological actions (to eat, to drink, to swallow...), and cognitive and perceptual verbs (to know, to see, to hear...).

Table 5.16 – Transitive dynamic stems

Form	Gloss	Form	Gloss
<i>hanii</i>	to cut	<i>suhaï</i>	to swallow
<i>harii</i>	to cook	<i>taai</i>	to see
<i>hehãï</i>	to sew	<i>tai</i>	to know
<i>hëtëi</i>	to look for	<i>tëi</i>	to take
<i>hipii</i>	to give	<i>tëpëi</i>	to present sbd
<i>hirii</i>	to hear; to listen	<i>thai</i>	to do; to make
<i>hoãï</i>	to scratch	<i>tikai</i>	to pound
<i>horai</i>	to blow	<i>tiyëi</i>	to cut down
<i>hoyai</i>	to throw out	<i>tiyëi</i>	to weave
<i>huhei</i>	to let fall	<i>turixai</i>	to pick (lice)
<i>ihii</i>	to carry (on the back)	<i>tusuu</i>	to smash
<i>koai</i>	to drink	<i>wai</i>	to eat
<i>mahii</i>	to lend/borrow	<i>wârïi</i>	to ask
<i>manii</i>	to cut off	<i>wasuu</i>	to forbid
<i>nakai</i>	to call	<i>xeei</i>	to throw
<i>niai</i>	to shoot	<i>xëi</i>	to beat; to kill
<i>otoai</i>	to soak	<i>yaikai</i>	to draw
<i>pou</i>	to hold; to possess	<i>yarëi</i>	to make sth move or glide with the blow
<i>riëi</i>	to grate	<i>yaruu</i>	to wash

In the previous sections, we saw morphological simple verbs stems of the three major verb stem types in YMA. These simple stems are formed by single verb roots and typically yield only one type of simple verb stem. In the next section, we will see some roots that are capable of assuming the properties of more than one type.

5.4.4. Flexible roots

Various morphological mechanisms in YMA allow the derivation of a given verb stem type into another type. However, some forms can function as more than one simple verb stem type with no additional morphology: the flexible roots⁵. I am still not entirely sure about the extent of this phenomenon in the YMA lexicon and more investigation on this topic should be carried out. In any event, there are three types of flexible roots. The first two only differ from a lexico-semantic perspective and will be described here. The third type will be dealt with in the next section.

The first type is illustrated in Table 5.17. The flexible roots have the same basic meaning but vary in the lexical aspect characteristic of each associated verb stem type. For instance, the pair *upraa* ‘to be upstanding’ and *uprai* ‘to stand up’ displays the same set of semantic features except for one feature: while *upraa* is [+stative], *upraai* is [+dynamic]. The same analysis can be replicated to the other forms below.

⁵ I use an adaptation of the concept of flexible word classes as presented by Hengeveld et al. (2004: 531).

Table 5.17 – Flexible roots

Dynamic	Positional	Attributive	Irregular	Gloss
<i>uprai</i>	<i>upraa</i>	---	---	to stand up/to be upstanding
<i>rukēi</i>	<i>rukēa</i>	---	---	to enter/to be inserted
<i>yipii</i>	<i>yipia</i>	---	---	to hold/to be hanging (from one's arm)
<i>he yatii</i>	<i>he yatia</i>	<i>he yati</i>	<i>he yatio</i>	to insist; to continue; continuously
---	<i>hetua</i>	<i>hetu</i>	<i>hetuo</i>	to be lying in a hammock above another hammock
<i>ihii</i>	<i>ihia</i>	---	---	to carry on the back/to be on the back of someone or something
<i>tirei</i>	<i>tirea</i>	<i>tire</i>	---	to be on a higher position, to be high (mountain, tree...)
---	<i>mia</i>	---	<i>mio</i>	to sleep
---	<i>thāihia</i>	<i>thāihi</i>	---	to be stretched
<i>yohou</i>	<i>yohoa</i>			to cover / to be covered

The second type of flexible roots displays a significant change in the lexical meaning associated to each verb stem type. I have only one clear example of this latter type, which is presented in (49). One should note that the meaning of the positional stem *puuxia* (49b) is much more specific than that of the attributive stem *puuxi* (49a) and that the dynamic versions of them are different, as the translations of (49c) and (49d) indicate.

- [illegible]

c. *puuxii* ‘to shrink’ (intr)

d. *puuxiai/puuximuu* ‘to shrink’ (intr) (in the hammock...)

Some roots seem to be flexible (of the second type) but are actually simple homophones. That is, even though they may apparently yield non-marked versions of more than one verb stem type, the semantics of these resulting verb stems does not allow us to consider their roots as having the same origin. This is the case of the pair *kuu* ‘to say’ (dynamic) and *kua* ‘to exist, to be’ (positional) in (50). Moreover, we can be sure that they do not have the same root because the derived dynamic version of *kua* ‘to exist, to be’ is *kuai* ‘to behave’ (50c), which does share some semantic features with its source verb.

(50) a. *kuu* ‘to say’

b. *kua* ‘to exist’

c. *kuai* ‘to behave’

In (51) and (52), I present two other examples of what I consider to be ‘pseudo’-flexible roots or simply homophones.

(51) a. *thai* ‘to do, to make’

b. *thaa* ‘to be placed’

c. *thaa* ‘to place, to put’

(52) a. *wāĩ* ‘to be spoiled’

b. *wāĩ* / *wāĩai* ‘to spoil’

c. *wāĩ* ‘to ask’

In the next section, I will introduce the consonantal roots, many of which also display word class flexibility.

5.4.5. Consonantal roots

Most consonantal roots are trisyllabic or longer. There is a handful of disyllabic items, but no monosyllabic consonantal roots. The term was coined by Ramirez (1994: 230), who found similar forms in Yānomami, and makes reference to the fact that these roots seem to end in a consonant and not in a vowel, which is unusual in the language⁶. Let's take for instance the consonantal verbs in (53) and (54). In Ramirez' interpretation, the roots of these forms are *xerek-* and *torok-* (in bold) and they require the thematic vowels =*e* and =*o*, respectively, to occur as attributive stems, as in (53a) and (54a), or positional stems, as in (53b) and (54b). The thematic vowel often has the same qualities of the vowel preceding the last consonant of the root. In order for the root to become a dynamic stem, there are two possibilities in Ramirez' analysis. The intransitive dynamic stem is derived with the help of the stative =*o*⁷ replacing the thematic vowel, while the transitive counterpart is formed with the dynamizer =*a*⁸ also attaching directly to the consonant.

(53) a. *xereke* 'to be apart, split'

b. *xerekea* 'to be apart, split'

c. *xerekuu* 'to split' (intr)

d. *xerekai* 'to split' (tr)

(54) a. *toroko* 'to be crooked'

b. *torokoa* 'to be crooked'

c. *torokuu* 'to crook' (intr)

⁶ In §2.4, we saw that there is no consonant in coda position in YMA.

⁷ Which in Ramirez terminology is the intransitive morpheme.

⁸ Ramirez (1994:238) says that in Yānomami this marker is associated with transitive dynamic stems. I will show in §5.6.4 that, at least in YMA, this morpheme can also generate intransitive dynamic stems, the reason why it is glossed as a dynamizer morpheme here.

Despite adopting Ramirez' terminology, I suggest a more economic analysis of the phenomenon. The root in (53) is *xereke* and in (54) is *toroko*. I do not postulate the existence of thematic vowels in YMA, but propose that the last vowel of the root 1) is elided when the form is derived with the dynamizer =*a*, as is (53d); and 2) undergoes harmonization when in direct contact with dynamic =*i*, as (53c) and (54c). This interpretation is more adequate for the YMA data because the morpheme =*o* does not create dynamic stems in YMA, as it seems to be the case in Yānomami.

There is still an issue with my hypothesis, as we still have to account for the harmonization between the vowel of the root/stem and the dynamic morpheme =*i*. On the one hand, we could easily explain what happens in (54c) with two phonological processes. In the first, the dynamic vowel =*i* assimilates the backness of the last vowel of the root, which in turn absorbs the height of the dynamic vowel. Both sounds thus become [u]. On the other hand, these two processes cannot explain (53c), because the last vowel of *xereke* is not a back vowel and would not make the dynamic vowel turn to [u]. As a provisory and *ad hoc* solution, I will postulate that, when attaching directly to a stem formed with a consonantal root, the dynamic vowel is always =*u*, with which the last vowel of the root/stem gets harmonized. It is clear that we need more study on this topic, which may eventually speak against this solution.

In support of my analysis, this variation in the form of the root of the dynamic stems, (53c), (53d) and (54c), is attested only in imperfective contexts or when the stems are not further derived with causative =*ma* or the intransitivizer =*mu*. That is, when the clause is marked for perfectiveness, as in (55a), or has its valency altered by =*ma* or =*mu*, as in (55b), the root acquires the same form it displays in the attributive and positional versions. This piece of evidence seems to confirm that the root does not end in a consonant.

- (55) a *thěpě* *xerekerarioma* .
 thě= *pě*= *xereke* =*ra* =*rio* =*ma*
 CLN.GNR= 3PL= split =DISTR =PFV1 =PST
 ‘They split up.’ (i.e. ‘They are living in separate houses’)

b. *ya poko torokomorayoma* .
ya= =poko toroko =mu =rayu =ma
 1SG= =arm be_crooked =INTRZ =PFV1 =PST
 ‘I crooked my arm.’

In any event, the examples in (53) and (54) inform us about another property often observed with consonantal roots, which is their flexibility. If my analysis is correct and we consider that the stems in (53c) and (54c) are indeed simple stems, there are several other cases of consonantal roots that produce more than one simple verb stem type, such as the words presented in Table 5.18. It is worth noting that many of the forms below also have a transitive dynamic version, which is, nonetheless, derived with dynamizer *=a*.

Table 5.18 - Consonantal roots that are also flexible roots

Dynamic	Gloss	Positional	Gloss	Attributive	Gloss
<i>xoketuu</i>	to move making a curve	<i>xoketea</i>	to be curved	<i>xokete</i>	to be curved
<i>torekuu</i>	to clamber	<i>torekea</i>	to be very sloping	<i>toreke</i>	to be very sloping
<i>ahatuu</i>	to get near	<i>ahatea</i>	to be near	<i>ahate</i>	to be near
<i>harōkuu</i>	to hug (intr) (to grasp something to avoid falling)	<i>hārokoa</i>	to be hugging	---	---
<i>nikeruu</i>	to mix (intr)	<i>nikerea</i>	to be mixed	<i>nikere</i>	to be mixed
<i>wēkēkuu</i>	to swing (intr)	<i>wēkēkea</i>	to be swinging	---	---
<i>raekuu</i>	to shake (intr)	<i>raekea</i>	to be shaking, fluttering	<i>raeke</i>	to be shaking, fluttering
<i>parotuu</i>	to bend	<i>parotoa</i>	to be bent	<i>paroto</i>	to be bent
<i>tikukuu</i>	to move away	<i>tikukua</i>	to be away, apart	<i>tikuku</i>	to be away, apart
<i>heruruu</i>	to pile up (intr)	<i>herurua</i>	to be piled up	---	---
<i>horekuu</i>	to spout	<i>horekea</i>	to be spouting out	---	---

However, this is not an inherent property of the consonantal roots, since we also find a lot of examples in the dictionary YMA of consonantal roots with very rigid behavior, only producing either transitive or intransitive dynamic stems. Interestingly, the number of consonantal roots that produce only transitive dynamic stems is much higher than those that produce intransitive ones. Table 5.19 presents the few examples of the latter type.

Table 5.19 – Consonantal roots resulting intransitive stems

Form	Gloss
<i>hiriruu</i>	to creep in
<i>herekuu</i>	to breath
<i>rerekuu</i>	to walk on (fallen tree, bridge)
<i>tururuu</i>	to perform shamanism
<i>xurukuu</i>	to leave with the hammock

In Table 5.20, I offer a sample of the transitive dynamic stems. It worth mentioning that all the verbs below are not simple but rather stems derived with the dynamizer =*a*.

Table 5.20 – Consonantal roots resulting transitive stems

Form	Gloss	Form	Gloss	Form	Gloss
<i>hamixai</i>	to soak sbd	<i>hupai</i>	to touch	<i>tepai</i>	to taste; to find out
<i>harikai</i>	to fry	<i>hururai</i>	to push; to shove	<i>thēthai</i>	to dig; to hoe
<i>hasikai</i>	to scrape	<i>ikokai</i>	to pull down	<i>tipai</i>	to jacklight
<i>hāxērai</i>	to peek	<i>kaithai</i>	to move sth with the foot	<i>tisikai</i>	to scratch
<i>hikōrai</i>	to wrap	<i>kuxai</i>	to spit (trans); to throw sth out of the mouth	<i>ukai</i>	to pull out
<i>himai</i>	to point; to press	<i>pakēkai</i>	to chop	<i>ukukai</i>	to inhale
<i>hirikai</i>	to rub; to grate	<i>pakihai</i>	to dab	<i>watētai</i>	to suck
<i>hīsīkai</i>	to spotlight (flashlight)	<i>patētai</i>	to hide in the hand	<i>waxai</i>	to peel
<i>hithai</i>	to dig; to hoe	<i>patikai</i>	to crush	<i>wāxikiai</i>	to suck
<i>hukai</i>	to pick (fruit)	<i>paxai</i>	to drill	<i>xakōkai</i>	to roll up (cotton yarn)
<i>hukukai</i>	to pluck	<i>rēkai</i>	to pull	<i>yahuhei</i>	to fan

We close this overview on the simple verb stems of YMA reiterating the necessity of more investigation to clarify several components of this description, particularly with regard to flexible and consonantal roots. We will now turn the discussion to morphologically complex stems, beginning in the next section with compound verbs.

5.5. Compound verb stems

YMA has four types of compound verbs, illustrated in (56).

(56) a. *pihi* = *oke* ‘to be displeased’ (lit. ‘to think “savorlessly”’)

b. *nēhē* = *wāriai* ‘to be hostile’

c. *yopi hai* ‘to sweat’ (lit. ‘to hot-exit’)

d. *tēatēamai* ‘to take regularly’ (lit. ‘to take-take’)

The first two types of compound verb stems (56a-b) involve the combination of a proclitic from Cluster A and a stem of any verbal subclass. They differ from each other in the type of clitics that they combine with. While the first type (56a) takes a body part term as its compositional element, the second one (56b) takes a semantically opaque verbal particle. For this reason, the meaning of the first construction, described in §5.5.1, tends to be more predictable than the second, discussed in §5.5.2. The third type, illustrated in (56c), is formed by the juxtaposition of two free morphemes, one of which is always an attributive stem; it is discussed in §5.5.3. Finally, the fourth type, illustrated by the example (56d), is a reduplication. It is thus also made up of two free words, but they must be the same. They lose their morphological freedom once they take part in the construction, forming a single and morphologically complex word. It is detailed in §5.5.4.

5.5.1. Body-part + verb

The composition between a noun Type 2 and a verb stem is a very productive pattern in the formation of new verb stems in the language. Any verb stem can take part in this composition, as the examples in (57) illustrate.

BODY-PART + DYNAMIC

(57) a. [*wai* *pēha*] *thēpē* *he* *hāyōai*
 wai =*pē* =*ha* *thē*= *pē*= *he*= *hāyō* =*a* =*i*
 enemy =PL =OBL CLN.GNR= 3PL= V.PTC= wrap =DRV =DYN
tēhē [...]
 =*tēhē*
 =REL.PRS

‘When they encircled [the enemies] [...]’ (n034_oeke) (lit. ‘When they head-wrapped’)

BODY-PART + POSITIONAL

b. *educação a yai ha ya pihi xatia* .
educação a= yai =ha ya= pihi= xati =a
 education SG= true =OBL 1SG= thought= stick =POST

‘I think a lot about education.’ (lit. ‘My thought is stuck on education’)
 (m007_geni_kona)

BODY-PART + ATTRIBUTIVE

c. *ya maka rasi* .
ya= maka rasi
 1SG= stomach be_flat
 ‘I am hungry.’ (lit. ‘my stomach is flat’).

BODY-PART + IRREGULAR

d. *uhuru a moxi tuo tēhē* [...] .
uhuru a= moxi= tu =o =tēhē
 child 3SG= throat (arch)= climb =STV =REL.PRS

‘When a child chokes [...]’ (obscure literal meaning, but **moxi** ‘throat’ (archaism) and **tuo** ‘to climb’)

This compound verbs resemble the regular incorporation of a body-part term in the predicate in several aspects when its related holonym is in the absolutive position in the clause (see §4.2.5 and §7.5.2 for this property of the nouns of Type 2), as in the examples in (58).

(58) a. *kama he nini* .
kama he= nini
 3 head= fell_hurting
 ‘His head hurts.’

- b. *ya imi ixirayoma*
ya= imi= ixi =rayu =ma
 1SG= finger= burn =PFV1 =PST
 ‘I burned my fingers.’

Even though the constructions in (58) are probably the source context from which the structures in (57) have developed, the constructions in (57) and (58) differ in two ways. The first difference concerns their semantics. While in (58) both verb and body-part term retain their literal meaning, in (57) they act together to form a new and idiomatic meaning. Compare, for instance, the examples (58a) and (57a). In both sentences the meronym is *he=* ‘head’ and it is inside the verbal phrase, but it clearly refers to the body-part itself in (58a), while it does not in (57a). Moreover, the attributive verb *nini* ‘to hurt’/‘to fell pain’ in (58a) is being used in its literal meaning, while *hãyoai* ‘to wrap’ in (57a) appears with its extended and modified semantics: *he=* ‘head’ and *hãyoai* ‘to wrap’ form one single compound verb with the idiomatic meaning of ‘to encircle’.

The second difference concerns their formal properties. As we saw in §4.2.3, the nouns of Type 2 are not compatible with the singular morpheme *=a/a=*. For instance, the absolutive argument in (58a) is a 3rd person singular which is not indexed on the verb with *a=*. Instead, the meronym *he=* ‘head’ is present. By contrast, the absolutive argument in (57d) is also a 3rd person singular, and the singular morpheme *a=* is realized in the predicate before the body-part term. This is not related to the fact the *moxi* is an obsolete term to refer to ‘throat’. The proclitic is present even with body-part terms synchronically productive in the language, such as *pihi=* ‘thought’ and *he=* ‘head’. As long as they are in a compound verb, as in (59), the singular marker (in bold) occurs.

- (59) a. [*inaha*] *Howarinari* ***a*** *pihi* *kurayoma* .
inaha *Howarinari* ***a=*** *pihi=* *ku* *=rayu* *=ma*
 thereby *Howarinari* **3SG=** thought= say =PFV1 =PST
 ‘Howarinari thought like that.’ (n024_howari)

b. *kiha proro a he tore kema* .
kiha proro a= he= tore =ki =ma
 there miner 3SG= V.PTC= ? =PFV2 =PST

‘The miner crossed that way.’ (he tore ‘to be on the other side [of a mountain])

Example (59b) shows another particularity of this type of compound verbs: the verbal element of the compound tends to be opaque. Indeed, as in (59b), it is not possible to recover the literal meaning of the verb in all cases since some of these verb stems synchronically appear only in such compounds. The frequent semantic opacity suggests some temporal depth for this phenomenon.

The most productive body-part term in this construction is certainly *pihi*= ‘thought’. The resulting compound verbs with this noun of Type 2 generally refer to mental states or activities. In Table 5.21, I present several examples of dynamic stems in composition with *pihi*=, followed by the meaning of the compound verb and the literal sense of the dynamic stem.

Table 5.21 – Compound verbs with *pihi*= ‘thought’ + V_{DYN}

Form	Meaning of the compound	Literal meaning of V _{DYN}
<i>pihi kuu</i>	to think	to say
<i>pihi thamai</i>	to persuade	to make sb do sth
<i>pihi rāmai</i>	to incentivize	to wake sb up
<i>pihi tēprai</i>	to get an idea	to catch
<i>pihi horipruu</i>	to despair; to get distressed	to run out of sth
<i>pihi wasuu</i>	to dissuade sb from doing sth	to forbid
<i>pihi ni òhòtaai</i>	to suffer (psychologically)	to suffer (physically)
<i>pihi homopruu</i>	to understand; to have a eureka moment	to explode
<i>pihi yapai</i>	to change oneself’s mind	to return
<i>pihi rēkēi</i>	to be hurt about sb’s words	to pull
<i>pihi yaimuu</i>	to make one’s mind up	to choose
<i>pihi hētēmuu</i>	to be doubtful about sth	to be in the search of
<i>pihi haimuu</i>	to understand; to get an idea	to exit; to appear
<i>pihi tharisimuu</i>	to think like a son-in-law	to act like a son-in-law
<i>pihi topraruu</i>	to be happy	?

Positional and attributive stems can also appear in composition with *pihi*= ‘thought’, as Table 5.22 and Table 5.23 show.

Table 5.22 – Compound stems with *pihi*= ‘thought’ + V_{POST}

Form	Meaning of the compound	Literal meaning of V _{POST}
<i>pihi xatia</i>	to be thinking firmly of something	to be stuck
<i>pihi wāyāa</i>	to be angry	to be angry
<i>pihi yawēa</i>	to know less than sb	to not be tall enough
<i>pihi maa</i>	to be out of ideas/thoughts	to not exist
<i>pihi hawēa</i>	to be out of ideas/thoughts	to be on the other side of a mountain

Table 5.23 – Compound stems with *pihi*= ‘thought’ + V_{ATTR}

Form	Meaning of the compound	Literal meaning of V _{ATTR}
<i>pihi horihi</i>	to be desperate; to be distressed	to lack sth
<i>pihi totihi</i>	to approve of or like sth	to be good
<i>pihi moyami</i>	to think smartly	to be smart
<i>pihi mohōti</i>	to be forgetful; to be ignorant or stupid	to be ignorant
<i>pihi āsēke</i>	to be displeased	to be sour
<i>pihi oke</i>	to be displeased	to be tasteless
<i>pihi yakēhē</i>	to think mistakenly	to make a mistake
<i>pihi kiri</i>	to get terrified	to fear
<i>pihi waiyo</i>	to be jealous	?
<i>pihi wāri(hi)</i>	to miss someone (intr)	to be spoiled
<i>pihi yaia</i>	to think of something different	to be different
<i>pihi xereke</i>	to think disorderly	to be apart
<i>pihi yāniki</i>	to be patient	to be slow
<i>pihi piyēku</i>	to think exclusively of sth or sb	to be everywhere

Finally, there are some compound verbs with *pihi*= in which this form has apparently lost its compositional meaning and clearly does not refer to a state of mind. This seems to be the case of the verbs in Table 5.24, two of which express colors and the other one, a physical property.

Table 5.24 – Compound stems with *pihi*= ‘thought’ that do not convey mind state or activity

Form	Meaning of the compound	Literal meaning of V
<i>pihi krokehe</i>	to be dusty in color	to be cloudy (<i>krokekroke</i> – ‘cloud’ (n))
<i>pihi wehe</i>	to be gray; grayish	to be dry
<i>pihi wehehe</i>	to be pale in color, discolored	to be dryish
<i>pihi riyē</i>	to be healthily fat	to be raw

Interestingly, ‘to be blue’ and ‘to be bluish’ are also expressed by compound verbs with a body-part term. In this case, the meronym of the composition is *xi*= ‘intestine’, as shown in Table 5.25.

Table 5.25 – Compound attributive stems with *xi*= ‘intestine’ (1) - colors

Form	Gloss	Literal meaning of V
<i>xi teērē</i>	to be blue	?
<i>xi prērē</i>	to be blue	?
<i>xi prērēhē</i>	to be bluish	?
<i>xi tēērēhē</i>	to be bluish	?

Other compound verbs with *xi*= ‘intestine’ are presented in Table 5.26. The meaning of the compound verbs with this meronym is highly idiomatic, much more so than the compounds with *pihi*= ‘thought’ (see Table 5.21, Table 5.22 and Table 5.23), which produces verbs of the same semantic domain, with a few exceptions (Table 5.24).

Table 5.26 – Compound attributive stems with *xi*= ‘intestine’ (2)

Form	Gloss	Literal meaning of V
<i>xi titihi</i>	to be a mess	?
<i>xi wāri</i>	to be entangled	to be spoiled
<i>xi wārii</i>	to entangle	to spoil (tr)
<i>xi wāripruu</i>	always	to spoil (intr)
<i>xi ēhēte</i>	to be generous	to be a good hunter
<i>xi imi</i>	to be avaricious	not to exist
<i>xi hari</i>	to be hurried	to cook
<i>xi haripruu</i>	to hurry up	to cook

Another meronym that produces verbs whose meaning displays very low compositionality is *he*= ‘head’. It is particularly significant that very few verbs stems that take part in compounds with this body part term can be used meaningfully by themselves, as Table 5.27 shows. This bit of evidence supports the hypothesis that this compound type is relatively old in YMA history.

Table 5.27 – Compound attributive stems with *he*= ‘head’

Form	Gloss	Literal meaning of V
<i>he ou</i>	to challenge	to multiply
<i>he wēa</i>	to measure (intr)	<i>wēai</i> - to explain
<i>he wēai</i>	to measure (tr)	to explain
<i>he hārōprai</i>	to encircle; to surround	to wrap
<i>he ihoā</i>	to be submersed	?
<i>he ihoāmai</i>	to submerge (tr)	?
<i>he ihoāpruu</i>	to submerge (intr)	?
<i>he itihai</i>	to count	?
<i>he itihia</i>	to be enough; to have equal quantities	?
<i>he mathēamai</i>	to stick deeply (knife)	?
<i>he tatou</i>	to retreat	?
<i>he titii</i>	to nightfall	?
<i>he toreai</i>	to pass (pass)	?
<i>he toremaī</i>	to pass to another person	?
<i>he utuhai</i>	to figure out	?
<i>he utuhua</i>	to be equivalent; be equal (in value, size ...)	?
<i>he yaremai</i>	to set fire (to make an animal abandon its cave/hole)	?
<i>he yathēprai</i>	to challenge	?
<i>he yatio</i>	to persist, to continue	?

In some cases, two meronyms can combine with a verb stem, as illustrated in (60). In these cases, there are two compositional processes. In the first, the verb stem and a body part term (always the one on the right) come together to form a compound verb stem (in this case, *xi*= *titihi* ‘to be messy’). This new verb stem then enters in composition with the remaining meronym (the one on the left) to create a second compound stem, which is actually the final complex compound verb.

- (60) *pihi* *xi* *titihi*
pihi= *xi*= *titihi*
 thought= V.PTC= be_messy
 ‘to think disorderly’

As a final comment, there are several other body-part terms that take part in this composition process, such as *mamo*= ‘eye’, *si*= ‘skin’, *yamaka*= ‘ear’ and *makasi*= ‘navel’ and others. For the sake of brevity and since key aspects of this composition process were already illustrated by the examples above, I will leave the documentation of these compound verbs to the YMA dictionary (in preparation).

5.5.2. Clitic + verb

The clitic-verb compound verb is very similar to the body-part-verb compound described in §5.5.1. The difference between the two types resides on the proclitic attached to the verb stem. While in the latter type, the clitic is a body-part noun (Type 2), in the former case, the clitic is a verbal particle with no lexical meaning. Interestingly, despite the lack of semantic content of these verbal particles, a few of them yield compound verbs of the same semantic domain, suggesting that those forms were semantically transparent at an older stage of the language. I will illustrate the clitic + verb compounds with four clitics.

The *nēhē*= compounds are very idiomatic and belong to several different semantic domains. In most cases, the original meaning of the verb stem share very few semantic features with the resulting compound verb.

Table 5.28 – Compound verbs with *něhě=*

Form	Meaning of the compound	Meaning of the bare stem
<i>něhě hěpai</i>	to harass (sexually)	to touch
<i>něhě hōrĩ</i>	to hate	to need
<i>něhě ĩkāai</i>	to be funny	to laugh
<i>něhě mapruu</i>	to die out	to disappear
<i>něhě mohōti</i>	to be difficult	to be ignorant
<i>něhě ohote pou</i>	to respect	<i>ohote</i> ‘to be hard worker’, <i>pou</i> ‘to have’
<i>něhě ruě</i>	to be disorganized; messy	to be green
<i>něhě thai</i>	to have an affair with	to do, to make
<i>něhě wārii</i>	to hostileize	to spoil
<i>něhě yaipuu</i>	to prefer; to be faithful to someone; to like sbd or sth a lot	to keep a choice
<i>něhě rěa</i>	to guard	to wait

The proclitic *noã=* is also very productive in compound verbs of this type. In the first eight instances of the *noã=* compounds (Table 5.29), this morpheme may be translated as ‘value’. In the remaining compounds, this meaning is hardly recoverable, but most of them convey an act of communication. The nasal vowel *ã* in *noã=* may thus have its origins in the body-part term *wã=* ‘sound, voice’. However, I cannot explain the origin of the preceding syllable *no=*.

Table 5.29 – Compound verbs with *noã=*

Compound verb	Meaning of the compound	Meaning of the bare stem
<i>noã kua</i>	to cost	to exist
<i>noã ěkai</i>	to cheapen	to take out
<i>noã hãtõhõpruu</i>	to cheapen	to ease
<i>noã he itihaiyuu</i>	to have equivalent value	to be equivalent
<i>noã kōamai</i>	to pay	to give back
<i>noã kohipě</i>	to be expensive	to be strong
<i>noã nakamuu</i>	to charge	to complain
<i>noã utitipramai</i>	to cheapen	to weaken
<i>noã moyãmi thai</i>	to enlighten	<i>moyãmi</i> - to be smart; <i>thai</i> - to do; to make
<i>noã rahumai</i>	to scold; to criticize	to make a mess
<i>noã rahumayuu</i>	to argue	to make a mess
<i>noã rahuu</i>	to talk angrily	to get messy
<i>noã tayomuu</i>	to shout out	---
<i>noã thai</i>	to advise, to address; to guide	to do; to make
<i>noã thamai</i>	to guide	to make sbd do sth
<i>noã thayuu</i>	to talk; discuss; counsel; plan	to make each other do sth
<i>noã waiprai</i>	to attack with words	<i>wai</i> – enemy (n)
<i>noã wawěprai</i>	to declare	to create a clearing (after slashing the forest)
<i>noã waxumuu</i>	to volunteer; to identify oneself	---
<i>noã waxuu</i>	to indicate	---
<i>noã wãyomayuu</i>	to talk to	---
<i>noã wěayuu</i>	to discuss	---
<i>noã wěyēmuu</i>	to explain oneself	---
<i>noã xaari hai</i>	to commit oneself	<i>xaari</i> – to be right; <i>hai</i> – to exit
<i>noã xaarimai</i>	to discuss; to negotiate	to straighten
<i>noã xarirayuu</i>	to discuss; to negotiate	to straighten each other

The verbal particle *riã=* produces compound verbs of a homogenous semantic domain. As we will see in Chapter 6 (§6.3.2), *riã=* is an inflectional marker that indicates volition, that is, that the predicate was or will be carried out by the participant with a specific intention. However, when this form is used as an element of compound verbs, it acquires the meaning of ‘smell’. At least it is what the glosses of the compound verbs in Table 5.30 suggest. No verb of this type conveys a meaning that does not belong to the “smell” semantic domain. All verbs in the table below are attributive stems. Note that all these forms display either *=ri* or *=piri* at their end. As we will see in §5.6.9, these latter two derivational morphemes create attributive stems specialized in conveying olfactory properties.

Table 5.30 – Compound verbs with *riã* = – smells

Form	Gloss	Form	Gloss
<i>riã hithãri</i>	to stink	<i>riã sũuturimapiri</i>	to smell like breast milk
<i>riã hoteri</i>	to smell old	<i>riã uwãsimapiri</i>	to have bad breath / to smell like a newborn
<i>riã irosipiri</i>	to smell like howler monkey	<i>riã uhurusisipiri</i>	to smell like children
<i>riã irosisipiri</i>	to smell like howler monkey	<i>riã wakixipiri</i>	to smell smoke
<i>riã iroxixipiri</i>	to smell like howler monkey's feces	<i>riã warapatasipiri</i>	to smell like an old person
<i>riã kêteri</i>	to smell sweet	<i>riã wãri</i>	to stink
<i>riã moxirĩ</i>	to smell like sex/penis	<i>riã wãrosisipiri</i>	to smell like a man
<i>riã nakĩri</i>	to smell urine	<i>riã xĩpĩri</i>	to smell like feces
<i>riã naraxinamopiri</i>	to smell like urucu	<i>riã xonayomapiri</i>	to smell like a vagina
<i>rĩyã naxiri</i>	to smell bitter/alcohol	<i>riã yopĩri</i>	to smell sweat
<i>riã patapatasipiri</i>	to smell like old person	<i>riã nẽ kirihi(ri)</i>	to stink awfully
<i>riã riyẽri</i>	to smell good	<i>riã rohore(ri)</i>	to smell old (food)
<i>riã thuwẽsipĩri</i>	to smell like a woman	<i>riã totihi(ri)</i>	to smell good
<i>riã ãpřitimasipiri</i>	to have bad breath		

One last verbal particle should be mentioned for its productivity, which is proclitic *ni=* (or *ně=* or *no=* in some dialects). In the majority of the dialects spoken in Papiu, this form and the ergative marker *=ni* are homophonous. The ergative has no proclitic counterpart because case markers are not incorporated into the predicate. One could argue that this verbal particle *ni=* is precisely the ergative morpheme counterpart in the Cluster B. However, even if one could explain how the ergative marker would occur in the verbal phrase (a difficult task in itself), one would have to explain why in some dialects this marker would acquire the form *no=* but kept the ergative marker *=ni* unchanged. In Table 5.31, I offer some instances of this compound.

Table 5.31 – Compound verbs with *nĩ=*

Compound verb	Meaning of the compound	Meaning of the bare stem
<i>nĩ paa</i>	to pass across sb	to debouch (river)
<i>nĩ aipě</i>	to fell dizzy	to be different
<i>nĩ aithěri</i>	to be different	?
<i>nĩ hetuai</i>	to tilt (head down)	<i>hetua</i> - to be tied above (hammock)
<i>nĩ hetuprai</i>	to turn over, to capsize	<i>hetua</i> - to be tied above (hammock)
<i>nĩ miai</i>	to guess	to see (arch)
<i>nĩ mii</i>	almost	to not exist
<i>nĩ õhõtaai</i>	to suffer	?
<i>nĩ ruwě</i>	to be cloudy (sky)	to be green
<i>nĩ taa</i>	to wait	?
<i>nĩ tapuu</i>	to wait	<i>tai</i> - to know
<i>nĩ tete</i>	to loiter, to last	?
<i>nĩ waiai</i>	to turn down, to refuse	<i>wai</i> – enemy (n)
<i>nĩ waroo</i>	to add up	to arrive
<i>nĩ wayãpě</i>	to be bad	?

In the next section, we will see a different type of composition, which involves not a clitic and a verb stem but two free words instead.

5.5.3. Attributive verb+ dynamic or attributive verb

As I pointed out in §5.3.9, attributive stems are the only type of stem that can take part in the canonical secondary predication (see §10.2.1 for a detailed description of

this construction). It is probably due to this property that in all compound verbs that are made out of two different lexical verbs, one of them is always an attributive stem. Indeed, there is no formal difference between an attributive stem as the head of a secondary predication and as an element of a compound verb. The difference lies in the semantics of the two constructions. In the secondary predication, the attributive verb and the main verb retain their individual meaning (and predication) in the clause⁹ while, in the verbal composition, the two verbs lose their literal meanings to create a single idiomatic one. In Table 5.32, I present some examples of compound verbs in YMA, followed by the individual meaning of the elements of the composition (V_{ATTR} and V_1) and the meaning of the whole construction.

Table 5.32 – Compound verbs - V_{ATTR} + V_1

Form	Mening of V_{attr}	Mening of V_1	Meaning of compound V
<i>yopi hai</i>	to be hot	to exit	to sweat
<i>namo thai</i>	to be sharp	to do, to make	to sharpen
<i>haro thai</i>	to be wrapped	to do, to make	to wrap
<i>hoximi himai</i>	to be bad	to indicate	to criticize
<i>nini taai</i>	to be painful	to see	to exam
<i>ohi thai</i>	to be hungry	to do, to make	to look for/get food
<i>marixi mio</i>	to be asleep	to sleep	to sleep

It is worth noting that the vast majority of the V_1 are dynamic stems in this type of composition but irregular verbs are also possible, such as the last verb in the table above. I am considering the non-attributive stem to be the V_1 because this is the verb

⁹ This is actually one of the requirements of a true secondary predication construction, as we will see in §10.2.

that determines the formal properties of the composition. In any event, most of the compound verbs behave like a dynamic stem because their V_1 is also dynamic.

As final comment, there are some few cases of this compound type in which it is not possible to assign an individual meaning to one of the stems that take part in the composition, either to the V_{ATTR} or V_1 , such as the verbs in Table 5.33.

Table 5.33 – Compound verbs (V_{ATTR} + V_1) made of one semantically opaque verb

Form	Meaning of V_{ATTR}	Meaning of V_1	Meaning of compound V
<i>rãma huu</i>	???	to go	to hunt
<i>waximi horou</i>	to be tired	???	to rest

In the next section, I will turn to the discussion on verbal reduplication.

5.5.4. Reduplication

The last type of compound verbs is the full reduplication of a verb stem. This derivation has very limited productivity and functionality in the language. The main function of verbal reduplication in YMA is to convey iteration, as in (61a), or habituality, as in (61b).

- (61) a. *wakara* *a* *ha* *yahuyahumorini*
 wakara *a*= *ha*= *yahu* *yahu* =*mu* =*ri* =*ni*
 Great Egret 3SG= REL.PST= **flap** **flap** =INTRZ =PFV1 =REL.PST
, *a* *yërayoma* .
 a= *yë* =*rayu* =*ma*
 3SG= fly PFV1 =PST
 ‘The heron flapped its wings [repeatedly] and flew away.’

b. <i>posto</i>	<i>hami</i>	<i>napë pëni</i>		<i>himini</i>
<i>posto</i>	= <i>hami</i>	<i>napë</i>	= <i>pë</i>	= <i>ni</i> <i>himini</i>
health_center	=OBL	white person	=3PL	=ERG medicine
<i>kiki</i>	<i>ximiximimaimihe</i>			
<i>kiki</i> =	<i>ximi</i>	<i>ximi</i>	= <i>ma</i>	= <i>imi</i> = <i>he</i>
CLN:collective=	send	send	=TRZ	=NEG =3PL

‘The white people are not sending medicines regularly to the health center.’

Besides the reduplicated verb stems themselves, the morphemes that most frequently take part in this morphological process are =*mu*, used with intransitive verbs, =*ma*, employed with transitive ones. In these derivations both the source and the target forms are dynamic stems. The morphological pattern observed in the derivations with =*mu* can be represented by Schema 5.1.

Schema 5.1 – Reduplication with intransitivizer =*mu*

Vstem~Vstem=INTRZ

Schema 5.2 illustrates the reduplication mechanism that creates transitive stems.

Schema 5.2 – Reduplication with transitivity marker =*ma*

Vstem~Vstem=TRZ

Note that we can be sure that this phenomenon takes place at the stem level because we find examples of reduplication with previously derived stems. In (62), we have examples of this. In (62a), the reduplicated stem is *tua* ‘to plant’, which is derived from the positional stem *tua* ‘to be planted/ under earth’ through the dynamizer =*a* (see §5.6.4), and in (62a), the source verb stem of the reduplication is *tëai* ‘to take’, which is formed by the dynamic verb stem *tëi* ‘to take’ plus the non-punctual/distributive marker =*a* (see §6.2.6).

(62) a. *koraha siki*

koraha si= ki=
 banana CLN:palm-tree= PL=
tuatua mai kōo
tu =a tu =a =ma =i kō =o
 plant =DRV plant =DRV =TRZ =DYN again =STV
pihioimi
pihi =o =imi
 will =STV =NEG

‘He does not want to keep planting banana trees again and again.’

b. *mori poripa aha 1000 heais ya siki*

mōri poripa =a =ha 1000 heais ya= si= ki=
 one moon =SG =OBL 1000 reais 1SG= CLN:small= PL=
tēatēamai
tē =a tē =a =ma =i
 take =DISTR take =DISTR =TRZ =DYN

‘I take 1000 reais every month’. (i.e. ‘My salary is 1000 per month’)

There is still a third morpheme that can appear in reduplications in YMA, which is *=pru* [*=pra*]. This marker is used to create reduplicated positional stems. The source of this reduplication can be either a positional verb, such as *nahia* ‘to be reflected’ in (63a) or, more frequently, a dynamic stem, such as *pētai* ‘to appear suddenly’ in (63b) or *matai* ‘to disappear suddenly’ in (63c)¹⁰. One should note that the vowel of *=pru* harmonizes with the positional *=a*.

(63) a. *wā nahinahipraa*

wā= nahi nahi =pra =a
 sound= reflect reflect =DRV =POST

¹⁰ Both verbs *pētai* ‘to appear suddenly’ and *matai* ‘to disappear suddenly’ display the celerative morpheme *=ta* (see §6.2.7).

‘To echo back’ (a valley, cliff...) (lit. ‘to keep reflecting the sound’)

b. *wakaraxi pětápětapraa*

wakaraxi= *pě* =*ta* *pě* =*ta* =***pra*** =*a*

CLN:light= appear =CEL appear =CEL =**DRV** =POST

‘To flicker’ (star, firefly, flashlight...) (lit. ‘to keep appearing suddenly and intermittently (light)’)

c. *wakaraxi matamatapraa*

wakaraxi= *ma* =*ta* *ma* =*ta* =***pra*** =*a*

CLN:light= not_exist =CEL not_exist =CEL =**DRV** =POST

‘To flicker’ (star, firefly, flashlight...) (lit. ‘to keep dying out quickly and intermittently (light)’)

The difference between this process and the previous ones seems to lie in how transitory the iterative predicate is in regards to its subject. That is, if it is a permanent property of this subject, the reduplication is carried out with the help of =*pru* [= *pra*] and results in a positional stem. On the other hand, if it is a circumstantial activity, the reduplication is preferably constructed with =*mu* or =*ma*. For instance, the entities that better fit the position of subject of the reduplicated stem in (63a) are inanimate entities, like a valley or a house, that will always echo back a sound. If it is a person who is repeating what another person is saying, the speakers will prefer to use the intransitivizer =*mu* instead of =*pru* [= *pra*], as in (64).

(64) *wã nahinahimuu*

wã= *nahi nahi* =***mu*** =*i*

sound= reflect reflect =**INTRZ** =DYN

‘To echo back’/ ‘to keep repeating someone else’s word’ (person)

We will now turn to the description of the derivational mechanisms that allow the verbs stems to change verbal subclass and acquire new properties.

5.6. Derived verb stems

In §5.4, I mentioned that verb stem types can be formed out of other verb stem types, i.e. an attributive stem can become dynamic. In this section, I will present the most productive morphemes to derive new verb types and discuss some of the meanings acquired by the resulting derived form. Before starting with the description of the deriving morphemes themselves, let us discuss some derivations that dispense with any extra morpheme to change the formal properties of a verb stem.

5.6.1. Zero derivation

There are three contexts in which we can systematically observe zero derivation of verb stems. The first one is in the creation of inchoative dynamic stems from attributive ones. As we saw in §5.3.1, attributive stems are zero-marked for present and have an attributive use then, but can be marked by the morphology associated to dynamic verb stems, and have a dynamic/inchoative meaning then, as in the examples in Table 5.34.

Table 5.34 – Inchoative derivation of attributive stems

V _{ATTR}	Gloss	V _{DYN}	Gloss
<i>wakē</i>	red, ripe	<i>wakēi</i>	to redden, to ripen
<i>pata</i>	old; big	<i>patai</i>	to grow
<i>yīhīti</i>	plump; brawny	<i>yīhītii</i>	to get brawnier
<i>si utiti</i>	smooth	<i>si utitii</i>	to get smoother
<i>hototi</i>	small; short	<i>hototii</i>	to get smaller
<i>toroko</i>	crooked	<i>torokou</i>	to get crooked
<i>taro</i>	deep	<i>tarou</i>	to get deeper

The ability to undergo this zero derivation is limited to the attributive stems, i.e., in theory, it can be applied to every attributive stem. Nevertheless, because of the

semantics of some attributive stems, it may be difficult to find the appropriate context in which their inchoative version can be used. Take for instance the attributive stem *tute* ‘new’ or *rië* ‘raw’. In the natural world, things and people generally do not get new or raw with the passing of time and thus the inchoative version of these verbs *tutei* ‘to get newer’ and *riëi* ‘to get rawer’ is not likely to occur. Indeed, when describing attributive verbs in Yānomami, Ramirez (1994:225) considers these type of attributive stems to be unable to undergo through an inchoative derivation. However, according to my field experience, if we provide a right context to the speakers, in which the verb ‘to get newer’ is semantically a possible choice, they accept this derivation as grammatical. Let’s say, for instance, that a scientist developed a “youth pill” or a liquid that, once spread over an object, makes it become newer; in this situation, the following construction is acceptable.

- (65) *ipa rakama thukuha* *ya thëki*
ipa rakama =thuku =ha ya= thë= ki=
 1POS hammock =CLN:hammock =OBL 1SG= CLN.GNR= PL=
thakema yaro hei tēhë thuku
tha =ki =ma =yaro hei =tēhë thuku=
 put =PFV2 =PST =CNJ.EXPLV this =REL.PRS CLN:hammock=
tutei
tute =i
be_new =DYN

‘For I pass it [the ‘restorer liquid’] on my hammock, it is now getting newer.’

The second zero coding process applies to intransitive dynamic stems: it derives them into irregular stems and adds a purpose to the predicate. When a verb of motion, for example, is derived into an irregular stem, the resulting meaning of the form is often ‘motion to a particular place and/or to do something specific’. The intransitive dynamic stem *rërëi* ‘to run’ can derive into *rërëo* ‘to run [to a definite place or to do something]’. The goal of the motion can be coded as an oblique argument, as in (66a), or be a whole subordinate clause, as in (66b). This goal is often overtly mentioned in the clause, as in (66a-b), or at least is implicit and easily recoverable in the discourse,

as in (66c). In all examples below, the intransitive vowel =*o* (in bold) is an indication that *rërëo* is derived since the dynamic vowel =*i* was expected in (66a) and (66c), instead of =*o* (see §5.3.1 and §5.3.3). In (66b) no morpheme was expected in that position if it was a dynamic verb (see §6.2.3).

- (66) a. *hei tēhē horepe hami kōmi thēpē rërëo* .
 hei =tēhē horepe =hami kōmi thē= pē= rërē =o
 this =REL.PRS highlands =OBL all CLN.GNR= 3PL= run =STV
 ‘Everybody is running to the highlands now [to fight against the people there, for instance].’

- b. *thēpē riārĩ ha iatini*
 thē= pē= riā= rĩ= ha= ia =ti =ni
 CLN.GNR= 3PL= VOL= HON= REL.PST= eat =DUR =REL.PST
thēpērĩ rërëokema
thē= pē= rĩ= rërē =o =ki =ma
 CLN.GNR= 3PL= HON= run =STV =PFV2 =PST
 ‘They (+REV) ran wanting to have a meal.’ (n027_haya)

- c. [*oxe aiha] a rërëo yapaa*
 oxe =a =i =ha a= rërē =o yapa =o
 youngster =3SG =DIM =OBL 3SG= run =STV be_back =STV
kōo tēhē [...]
kō =o =tēhē
 again =STV =REL.PRS
 ‘When he was running back again [to (catch) the child] [...]’ (s_ball_alfr)

The third systematic non-morphological (i.e., zero-coding) process derives positional stems into dynamic ones, but it is restricted to perfective clauses. That is, when a clause is being overtly marked for perfectiveness, positional stems dispense with any morpheme to acquire the semantic properties of a dynamic stem and the reading of ‘change of position’, as in the example (67a). In imperfective contexts, by contrast, the dynamic stems derived from positional stems require either the

intransitivizer =*mu* – when the change of position is self-caused, as in (67b) – or the causative =*ma*¹¹ – when it is caused by somebody else, as in (67c).

- (67) a. [*ĩhĩ tēhē*] *ipa xapuri pē pirikema* .
 ĩhĩ =*tēhē* *ipa xapuri pē*= *piri* =*ki* =*ma*
 ANA =REL.PRS 1POS shaman 3PL= lie =PFV2 =PST
 ‘Then “my” shamans lay down’ (PDYP_MIC_A_07_19)

- b. *iha wa pirimuu* *pihiono* *mai* !
 iha wa= *piri* =*mu* =*i* *pihi* =*o* =*no* *mai*
 there 2SG= lie =INTRZ =DYN want =STV =RESULT NEG
 ‘For you don’t want to move in there’ (n045_xuwe) (note; ‘to lie in the
 hammock’ = ‘to live (somewhere)’)

- c. *uhuru yaa* *pirimai* *tēhē* [...]
 uhuru ya= *a*= *piri* =*ma* =*i* =*tēhē*
 child 1SG= 3SG= lie =CAUS =DYN =REL.PRS
 ‘When I was laying the child down [in the hammock] [...]’

Interestingly, the causative version of a positional stem (i.e. to make someone or something change her/its position) can either appear in perfective contexts with or without the causative morpheme =*ma*. In (68), I offer two examples that illustrate this possibility.

- (68) a. *hi* *pirimapikini* .
 hi= *piri* =*ma* =*pi* =*ki* =*ni*
 CLN:tree= lie =CAUS =3DU =PFV2 =REL.PST
 ‘They two laid down [in the hammock] the piece of wood.’
 (n035_kotoporisih)

¹¹ Or the dynamizer =*a*, when it is the case (see §5.6.4).

- b. *hi* *piripikini* .
hi= *piri* =*pi* =*ki* =*ni*
 CLN:tree= lie =3DU =PFV2 =REL.PST
 ‘They two laid down [in the hammock] the piece of wood.’

As a final note, we will see in §5.6.8 that positional stems do not require an extra marker to have access to the conservative morpheme =*pu*, which only derives dynamic stems. That is, in this double derivation (positional stem > dynamic stem > dynamic stem (+conservative)), only one derivational morpheme is required, which is precisely the conservative =*pu* of the second derivational process, while the first derivation (positional stem > dynamic stem) is a zero coding mechanism.

5.6.2. Resultative =*no*: DYN > ATTR

The enclitic =*no* is a multifunctional morpheme found in several domains of the grammar and with different meanings. It can be used, for instance, as an inferential marker, as described in Chapter 11 (§11.3.2), and is also present in prohibitive constructions, as we will see in Chapter 12 (§12.2.2). Another function of this morpheme is to derive dynamic verbs in attributive stems. This derivation can be applied only to transitive dynamic stems (i.e. it does not work with anticausative verbs) that allow a resultative reading, i.e. it requires a source verb that produces a change in the state of the patient argument. The derived form is intransitive, though, as a regular attributive stem (see §5.3.4), and gives no syntactic or semantic indication of the original agent responsible for the resulting state of the affected participant. This feature prevents us from considering =*no* a passivizer morpheme. In Table 5.35, I offer some examples of this derivation.

Table 5.35 - Attributive stems derived from dynamic ones with =no

Dynamic stem	Gloss	Attributive stem	Gloss
<i>harii</i>	to cook	<i>harino</i>	to be cooked
<i>krëai</i>	to break	<i>krëano</i>	to be broken
<i>tikai</i>	to pound	<i>tikano</i>	to be pounded, ground
<i>hrikikai</i>	to grind	<i>hrikikano</i>	to be ground (cassava)
<i>yăikai</i>	to draw	<i>yăikano</i>	to be striped
<i>tipikai</i>	to paint with dots	<i>tipikano</i>	to be dotted
<i>hëpai</i>	to touch, to use	<i>hëpano</i>	to have marks of use
<i>hoximai</i>	to spoil	<i>hoximano</i>	to be spoiled
<i>totihai</i>	to repair	<i>totihano</i>	to be repaired

It is worth underlining that the original form has to be a transitive dynamic stem for the derivation to occur. Positional and attributive stems, for instance, have to undergo a previous derivation either with the dynamizer =*a*, as in *yaano* and *tuano* in the Table 5.36, or the causativizer =*ma*, as in *aramano* or *iximano*, in order to appear with this morpheme.

Table 5.36 – Deriving dynamic stem of positional origin ones with =no

Dynamic stem	Gloss	Attributive stem	Gloss
<i>yaai</i>	to roast	<i>yaano</i>	to be roasted
<i>tuai</i>	to plant	<i>tuano</i>	to be planted
<i>aramai</i>	to place over something	<i>aramano</i>	to be placed over something
<i>iximai</i>	to burn (tr)	<i>iximano</i>	to be burned

5.6.3. Attenuative =h/[V] : ATTR > (attenuated) ATTR

This morpheme derives new attributive stems from morphologically simple ones, attenuating the original lexical meaning of the form. It is equivalent to the English suffix *-ish*. In Table 5.37, I present some attributive verbs conveying colors which were derived with this morpheme.

Table 5.37 – Attributive stems derived with attenuative =h/[V] – colors

Form	Gloss	Form	Gloss
<i>auhu</i>	whitish	<i>wahëhë</i>	grayish
<i>axihi</i>	yellowish	<i>uxihi</i>	blackish
<i>hrârëhë</i>	orangish	<i>wakëhë</i>	reddish
<i>ruwëhë</i>	greenish	<i>riyëhë</i>	greenish

This morpheme triggers harmonization with the last vowel of the attributive stem. Table 5.38 shows that the vowel of the morpheme =h/[V] fully assimilates all qualities of the final vowel of the source verb stem, including nasality.

Table 5.38 - Vowel harmonization of the attenuative =h[V]

Simple form	Gloss	Derived form	Gloss
<i>hotaka</i>	to be small	<i>hotakaha</i>	to be smallish
<i>wīte</i>	greasy	<i>wītēhē</i>	greasyish
<i>hututu</i>	to be tight	<i>hututuhu</i>	to be tightish
<i>sāi</i>	to be cold	<i>sāihī</i>	to be coldish
<i>yīhīti</i>	to be brawny	<i>yīhītīhī</i>	to be brawnyish
<i>prokoko</i>	to be baggy	<i>prokokoho</i>	to be baggyish
<i>ruwēhē</i>	to be raw	<i>ruwēhē</i>	to be rawish

5.6.4. Dynamizer =a: POST/ATTR > DYN

The dynamizer =a creates dynamic verbs from positional and attributive stems. Not every positional or attributive stem can take this morpheme, and it is not always possible to predict the compatibility on semantic criteria. This possibility seems thus to be lexically constrained. For instance, some verbs presented in Table 5.9, such as *araa* ‘to be placed on sth or above the floor’ and *praa* ‘to be lying on the floor’, can take part in this derivation, but others, such as *piria* ‘to be lying in the hammock’ or *yakaa* ‘to be lying in the hammock with someone’, cannot.

When derived with =a, the first two verbs result in transitive dynamic stems very much like the causative derivation with =ma. The pair of examples in (69) illustrate this similarity. The construction with causative =ma has two possible meanings, nevertheless, depending on the context. It can be read as a simple transitive predicate – with only an agent and an patient argument, as in (69b) – or as causative derivation of a transitive verb – with a causer, a causee and a patient, as in (69c). In any event, the form derived with =a cannot convey the meaning expressed in (69c). For more on causative constructions, refer to §9.5.1.

- (69) a. *ipa pẽe ya nehe araaĩ*
ipa pẽe ya= nehe= ara =a =i
 1POS tobacco 1SG= CLN:tobacco= be_on_sth =DRV =DYN
pario .
pari =o
 first =STV
 ‘I will first place my tobacco roll [on the table].’

- b. *ipa pẽe ya nehe aramai*
ipa pẽe ya= nehe= ara =ma =i
 1POS tobacco 1SG= CLN:tobacco= be_on_sth =CAUS =DYN
pario .
pari =o
 first =STV
 ‘I will first place my tobacco roll [on the table].’

- c. [*ipa thuẽpẽ ha*] *ipa pẽe ya nehe*
ipa thuẽ =pẽ =ha ipa pẽe ya= nehe=
 1POS woman =VBLZ =OBL 1POS tobacco 1SG= CLN:tobacco=
aramai pario .
ara =ma =i pari =o
 be_on_sth =CAUS =DYN first =STV
 ‘I will first make my wife place my tobacco roll [on the table].’

It is difficult to predict not only the availability of a given positional verb stem but also its resulting valency. For instance, the derivation of the verbs *horea* ‘to be on all fours’ and *rãa* ‘to be awake’ yield intransitive dynamic stems. The transitive version of these verbs is only obtained through the causative derivation with *=ma*.

Table 5.39 - Positional stems derived with =a resulting intransitive verbs

Positional stem	Gloss	Derived form	Gloss
<i>upraa</i>	to be upstanding	<i>upraai</i>	to stand up
<i>horea</i>	to be on all fours	<i>horeai</i>	to crawl
<i>rāa</i>	to be awake	<i>rāai</i>	to wake up
<i>kua</i>	to exist	<i>kuai</i>	to behave

Furthermore, some stem verbs can be derived with the dynamizer =a only in their extended meaning. The verbs *roa* ‘to be squatting’, *tēkēa* ‘to be sitting’ and *hakoā* ‘to be joined to’ illustrate this point. Only the causative derivation with =ma creates transitive stems with the literal meaning of these positional stems.

Table 5.40 - Positional stems derived with =a in their extended meaning

Positional stem	Gloss	Derived form	Gloss
<i>roa</i>	1) to be squatting	<i>roai</i>	to hide in the forest with a sexual partner
	2) to be hidden in the forest with a sexual partner		
<i>tēkēa</i>	1) to be sitting	<i>tēkēai</i>	to splice (rope)
	2) to be spliced		
<i>hakoā</i>	to be joined to	<i>hakoai</i>	to share (a tobacco roll)

Only the positional stems that express resultative state (particularly those present in Table 5.10) display some regularity in this derivation, even though there are some exceptions in this domain as well. In any event, the majority of the positional roots of Table 5.10 yields a transitive dynamic stem (in its literal meaning) when derived with the dynamizer =a. In Table 5.41 and Table 5.42, I present the instances of this more predictable derivation. It is worth noting that, similarly to what happens with *araa* ‘to

be on something’ of the example in (69), the transitive version of these stems can also be expressed by the causative =*ma*, while the causative construction with =*ma* can convey a simple transitive event or an actual causative construction (with causer, causee and patient), as in (69c).

Table 5.41 – Transitive stems derived from positional roots using =*a* (I)

Positional	Gloss	Transitive dynamic	Gloss
<i>harea</i>	to be hanging (around someones’s neck or shoulder)	<i>hareai</i>	to put arround the neck or shoulder
<i>hatětěa</i>	to be in a pocket or under the armpit	<i>hatětěai</i>	to put sth in a pocket or under the axilla
<i>hehua</i>	to be shut, to be closed	<i>hehuai</i>	to shut, to close
<i>hĩãa</i>	to be at the end of a stick	<i>hĩãai</i>	to put sth at the end of a stick
<i>hirea</i>	to be held above the floor	<i>hireai</i>	to lift sth
<i>hooa</i>	to be inserted (piercing...)	<i>hooai</i>	to insert
<i>hoyãa</i>	to be hidden	<i>hoyãai</i>	to hide
<i>ithãa</i>	to be placed on the floor (pot)	<i>ithãai</i>	to place on the floor
<i>karea</i>	to be in somenone’s lips (tobacco)	<i>kareai</i>	to put in the lip (tobacco)
<i>karoa</i>	to be open	<i>karoai</i>	to open (trans) door, path
<i>kokãa</i>	to be together	<i>kokãai</i>	to gather
<i>makea</i>	to be placed	<i>makeai</i>	to place sth on sht else
<i>ni hetua</i>	to be on the hammock above someone’s	<i>ni hetuai</i>	to put upside down

Table 5.42 – Transitive stems derived from positional roots using =a (II)

Positional	Gloss	Transitive dynamic	Gloss
<i>ōkaa</i>	to be tied	<i>ōkaai</i>	to tie
<i>rakia</i>	to be leaning	<i>rakiai</i>	to lean
<i>rēa</i>	to be spilled out; to be poured	<i>rēai</i>	to pour
<i>rēkēa</i>	to be on someone's shoulder	<i>rēkēai</i>	to put on the shoulder
<i>titia</i>	to be inside sth	<i>titiai</i>	to put inside; to insert
<i>tua</i>	to be under the earth	<i>tuai</i>	to plant; to bury
<i>utua</i>	to be hold by the hand	<i>utuai</i>	to hold someone's hand
<i>weia</i>	to be hold by someone's teeth	<i>weiai</i>	to hold with the teeth
<i>xakōa</i>	to be fold	<i>xakōai</i>	to fold
<i>xoaa</i>	to continue	<i>xoai</i>	to invite (to stay)
<i>yaa</i>	to be tied	<i>yai</i>	to tie
<i>yāa</i>	to be over the fireplace	<i>yāai</i>	to roast
<i>yarea</i>	to be hanging (arrond someones's neck or shoulder)	<i>yareai</i>	to put arround the neck or shoulder
<i>yarukua</i>	to be on someone's shoulder	<i>yarukuai</i>	to put on the shoulder
<i>yipia</i>	to be hanging on someone's hand or claw	<i>yipiai</i>	to carry
<i>yohoa</i>	to be covered	<i>yohoi</i>	to cover
<i>youa</i>	to be hanging	<i>youai</i>	to hang

Interestingly, some positional stems cannot be derived with the dynamizer =*a*, only accepting the intransitivizer =*mu* or the transitive =*ma* as their deriving morphemes to dynamic stem.

Table 5.43 - Positional stems that cannot be derived with =*a*

Positional	Gloss	Intransitive dynamic	Transitive dynamic
<i>piria</i>	to be lying (on a hammock); to live	<i>pirimuu</i>	<i>pirimai</i>
<i>roa</i>	to be squatting	<i>romuu</i>	<i>romai</i>
<i>praa</i>	to be lying (on the floor)	<i>pramuu</i>	<i>pramai</i>
<i>tëkëa</i>	to be sitting (on a stool)	<i>tëkëmuu</i>	<i>tëkëmai</i>
<i>tëpëa</i>	to be sitting (on the hammock)	<i>tëpëmuu</i>	<i>tëpëmai</i>
<i>xatia</i>	to be stuck	---	<i>xatimai</i>

It is worth underlining that when the dynamic stems derived from positional ones are used with perfective morphemes, the dynamizer is elided, that is, in perfective clauses the dynamic version of positional stems are formed by a zero derivation process, as described in §5.6.1.

As we also saw in §5.6.1, all attributive stems can be derived into a dynamic stem (their inchoative version) dispensing with a derivational morpheme, as in the examples in (70).

- (70) a. *wamotima thëki sãii* .
 wamotima thë= ki= sãi =i
 food CLN.GNR= 3PL= be cold =DYN
 ‘The food is getting cold.’

- b. *uhuru a yopii* .
uhuru a= yopi =i
 child 3SG= be_hot =DYN
 ‘The child is getting hot (fever).’

- c. *ipa kamixa kiki wehei xoa*
ipa kamixa kiki= wehe =i xoa =a
 1POS cloth CLN:fabric= be_dry =DYN continue =POST
 ‘My clothes are still drying up.’

Contrastingly, very few attributive stems can take the dynamizer *=a* and, when they take it, the resulting form always conveys a more specific meaning than the simple inchoative version. The verb *saiiai*, for instance, specifically means ‘to cool down (a little bit)/to refresh oneself’ and cannot be used in the sentence (70a). The derived form *yopiai* ‘to heat/warm up’ is used only to refer to the weather while *weheai* can only refer to a drought of a river. In (71), I present examples of this derivation.

- (71) a. *pata u ha ya sāiai pario* .
pata =i =ha ya= sāi =a =i pari =o
 big =DYN =OBL 1SG= be_cold =DRV =DYN first =STV
 ‘I will cool down (little bit) in the water.’

- b. *thë yopiai*
thë= yopi =a =i
 CLN.GNR= hot =DRV =DYN
 ‘It is getting hot (the weather).’

- c. *Mahara u weheai* .
mahara u= wehe =a =i
 Maharau CLN:liquid= be_dry =DRV =DYN
 ‘The river is drying out.’

As I mentioned above, very few attributive stems can take part in this derivation and this ability is lexically determined. An extended investigation of the behavior of this morpheme with other attributive (and also positional) stems is still needed and will possibly provide more elements for a better and more precise generalization of its properties.

5.6.5. Intransitive derivational morpheme =*pru* (=pra): > POST/DYN

This morpheme creates positional and dynamic stems. In the YMA dictionary, the latter type is much more frequent. The meaning associated with this derivation is not univocal, varying according to the verb stem type that is the source of the process (and its valency). When this morpheme derives transitive dynamic stems, it adds an anticausative meaning to the resulting form, which is thus an intransitive dynamic stem. This derivation is only possible with transitive verbs stems whose semantics allow an anticausative reading of the event. Verbs such as *wai* ‘to eat’ or *tiyëi* ‘to weave’ cannot take part in this construction.

Table 5.44 - Transitive stems derived with =*pru* (=pra)

Transitive	Gloss	Derived intransitive	Gloss
<i>hëhãi</i>	to sew	<i>hëhãpruu</i>	to cicatrize
<i>hanii</i>	to cut	<i>hanipruu</i>	to cut (anticaus)
<i>këi</i>	to break	<i>këpruu</i>	to break (anticaus)
<i>niai</i>	to shoot (an arrow)	<i>niapruu</i>	to spring

Some intransitive dynamic stems can also be derived with =*pru* (=pra), resulting in new intransitive dynamic stems. In several instances, the core meaning of the derived form seems to be the same as the original one. The speakers do not report any semantic contrast between the simple intransitive predicate in (72a) and the derived one in (72b). However, it should be mentioned that this morpheme is not compatible in predicates carried out by multiple participants. For instance, the construction in

(72c) is not grammatical because there are multiple subjects. My working analysis is that this form has a grammatical meaning in this context; it is a punctual marker and contrasts with the distributive/non-punctual marker *=ra (=a)*, which is used in predicates with plural subjects or patients, or that imply a repetitive action (such as ‘to distribute’) (see §6.2.6 and also §5.6.6 below).

- (72) a. *moto a homopruu pihio* .
moto a= homo =pru =i pihi =o
 motor 3SG= explode =DRV =DYN will =STV
 ‘The motor will explode.’

- b. *moto a homou pihio* .
moto a= homo =i pihi =o
 motor 3SG= explode =DYN will =STV
 ‘The motor will explode.’

- c. * *moto pē homopruu pihio* .
moto pē= homo =pru =i pihi =o
 motor 3PL= explode =DRV =DYN will =STV
 ‘The motors will explode.’

The same pattern of semantic change is observed when this morpheme derives attributive stems. In this case, the resulting (73a) form displays the same basic meaning of an inchoative derivation (73b), which is zero coded in the language, as we saw in §5.6.1. The construction in (73c) is not grammatical either, for the same reason explained above.

- (73) a. *thē titi hikirayoma* , *ipa uhuru a*
thē= titi hiki =rayu =ma ipa uhuru a=
 CLN.GNR= night already =PFV1 =PST 1POS child 3SG=
ohipruu .
ohi =pru =i
 be_hungry =DRV =DYN

‘It is already dark; my son is getting hungry.’

- b. *thě* *titi* *hikio* , *ipa* *uhuru* *a* *ohii*
thě= *titi* *hiki* =*o* *ipa* *uhuru* *a=* *ohi* =*i*
 CLN.GNR= night already =STV 1POS child 3SG= be_hungry =DYN
 ‘It is already dark; my son is getting hungry.’

- c. * *thě* *titi* *hikirayoma* , *ipa* *uhuru* *pě*
thě= *titi* *hiki* =*rayu* =*ma* *ipa* *uhuru* *pě=*
 CLN.GNR= night already =PFV1 =PST 1POS child 3PL=
ohipruu
ohi =*pru* =*i*
 be_hungry =DRV =DYN
 ‘It is already dark; my sons are getting hungry.’

It is worth noting that not every attributive or intransitive dynamic stem can be derived with this morpheme. Manner of motion verbs, for instance, cannot. I do not have an explanation for that. Moreover, there is probably a subtle difference between the constructions (72a) and (72b), and (73a) and (73b), either pragmatic or even still semantic, which I am not able to capture with my current knowledge of the language. More careful investigation on the semantics and pragmatic use of this morpheme with attributive and intransitive dynamic stems is called for.

This morpheme can also derive some positional stems into new positional stems. As we saw in §5.3.4, positional stems always project an intransitive argument structure to the clause, even when the semantics of the verb is obviously resultative, such as *tua* ‘to be planted’ and *yāa* ‘to be tied’. That is, the entity that was implicitly responsible for the position expressed by the verb stem cannot be realized in the clause, either as a core or as an oblique argument. In this sense, positional stems are always anticausative. The derivation with =*pru* [= *pra*] underlines this anticausative nature of the resultative state (the final position) and the resulting verb describes situations in which the semantic causer of that position is unknown. Consider, for instance, the context of a person who finds an arrow stuck on an tree and cannot

figure out who left it there. When reporting the event to others, she will prefer the construction in (74a). The sentence in (74b) would imply that she knows who did that or that its authorship (known or unknown) does not matter to the subject of the conversation.

- (74) a. *kiha ai xaraka xatipraa* .
kiha ai xaraka xati =pra =a
there other arrow stick =DRV =PFV.VWL
‘An arrow is stuck over there.’ (+unknown authorship)
- b. *kiha ai xaraka xatia* .
kiha ai xaraka xati =a
there other arrow stick =POST
‘An arrow is stuck over there.’

Table 5.45 present other examples of this derivation. Note that the vowel of the enclitic *=pru* harmonizes with the positional vowel *=a* in all examples.

Table 5.45 - Positional stems derived with *=pru* (*=pra*) - (+unknown authorship)

Source form	Derived form	Gloss
<i>araa</i>	<i>arapraa</i>	to be placed
<i>kuyëa</i>	<i>kuyëpra</i>	to be coiled up
<i>pooyoa</i>	<i>pooyopraa</i>	to be pilld
<i>rakia</i>	<i>rakipraa</i>	to be leaned
<i>titia</i>	<i>titipraa</i>	to be inside something
<i>roa</i>	<i>ropraa</i>	to be placed (candle)

This morpheme also appears in some reduplicated verbs stems, as we saw in §5.5.4.

5.6.6. Transitive derivational morpheme =*pra*

This morpheme can derive transitive dynamic stems into new ones. The resulting form frequently displays a lexical meaning related to but slightly different from the one of the source, but it is difficult to find a univocal pattern in this semantic change. The words in Table 5.46 illustrate the diversity of meanings this derivation can produce on transitive stems.

Table 5.46 – Transitive stems derived with =*pra*

Source form	Gloss	Derived form	Gloss
<i>wai</i>	to eat	<i>waprai</i>	to bite (snake, dog)
<i>hĩrĩi</i>	to hear	<i>hĩrĩprai</i>	to understand
<i>niai</i>	to shoot (an arrow)	<i>niaprai</i>	to shoot (an animal)
<i>xěi</i>	to beat	<i>xěprai</i>	to kill
<i>hoyai</i>	to throw away	<i>hoyaprai</i>	to expel (smoke), to leak (water)
<i>hanii</i>	to cut	<i>haniprai</i>	to cut (with one single thrust)
<i>tai</i>	to know	<i>taprai</i>	to encounter, to find
<i>taai</i>	to see	<i>taaprai</i>	to be able to see sth in particular
<i>hěhěi</i>	to sew	<i>hěhěprai</i>	to sew up a hole
<i>thai</i>	to do, to build	<i>thaprai</i>	to build

Analyzing the meanings provided in the fourth column one could argue that the same [+punctual] or [+more specific] features observed with the intransitive morpheme =*pru* [= *pra*] are being activated with this derivation. This may be true for at least the last five words of the list, but these features alone do not explain the change from *xěi* ‘to beat’ into *xěprai* ‘to kill’ and *niai* ‘to shoot (an arrow)’ into *niaprai* ‘to

shoot (an animal)’. Those last examples suggest that there is some idiomaticity in the meaning of the derived form. The sentences in (75) illustrate this derivation.

- (75) a. *xaraka ya a niarema* .
xaraka ya= a= nia =ri =ma
 arrow 1SG= 3SG= shoot_arrow =PFV1 =PST
 ‘I shot an arrow.’
- b. *warë ya a niaprarema* .
warë ya= a= nia =pra =ri =ma
 peccary 1SG= 3SG= shoot_arrow =DRV =PFV1 =PST
 ‘I shot the peccary.’

On the other hand, and similarly to what occurs with its intransitive counterpart, it is true that the morpheme *=pra* is not compatible in predicates with plural patients, in which case it is replaced by the non-punctual/distributive morpheme *=ra*. When it occurs, the lexical contrast presented in (75) is morphologically neutralized, as the pair of examples in (76) shows.

- (76) a. *xaraka ya pë niararema* .
xaraka ya= pë= nia =ra =ri =ma
 arrow 1SG= 3PL= shoot_arrow =DISTR =PFV1 =PST
 ‘I shot several arrows.’
- b. *warë ya pë niararema* .
warë ya= pë= nia =ra =ri =ma
 peccary 1SG= 3PL= shoot_arrow =DISTR =PFV1 =PST
 ‘I shot several peccaries.’

The transitive morpheme *=pra* can also be employed with positional and attributive stems. In both cases, the resulting form is an alternative to a causative derivation with *=ma* (see §9.5.1), but has a more specific meaning. Here there is also some deal of idiomaticity, but two frequent patterns can be pointed out. With positional stems, this derivation often indicates a quick, sometimes sudden change of

position (77a), while with attributive stems, this morpheme express completeness, i.e. that the change of state affected the whole entity (77b).

- (77) a. *uhuru a piri**pr**akema* .
 *uhuru a= piri =**pra** =ki =ma*
 child 3SG= lie =**DRV** =PFV2 =PST
 ‘He dropped the child on the hammock.’
- b. *thuë thëpëni ya*
 thuë =thë =pë =ni ya=
 woman =CLN.GNR =PL =ERG 1SG=
 *wakë**pr**aremahe* .
 *wakë =**pra** =ri =ma =he*
 red =**DRV** =PFV1 =PST =3PL
 ‘The women painted me completely.’

Similarly to what was said about the intransitive morpheme *=pru* [= *pra*], we still need to carry out more investigation on this morpheme. In any event, I will comment more on this derivation in the chapter on valency and voice changing mechanisms (see §9.5.3). See also §5.6.10 for the use of this morphemes as a denominalizer.

5.6.7. Intransitivizer *=mu* and the transitivizer *=ma*: POST>DYN

The intransitivizer *=mu* and the transitivizer *=ma* are multifunctional and very productive derivational morphemes in the language. We will see in §5.6.10 that these morphemes can create verbs from nouns and in §9.5 and §9.6 that they take part in several valency-changing mechanisms. In this section, I will not comment on these cases and will be exclusively concerned with another context in which these morphemes occur, which is the derivation of positional into dynamic stems. As their names suggest, the intransitivizer *=mu* is used create a dynamic intransitive stem, and *=ma* a transitive one.

The forms produced with the derivational morpheme *=mu* refer to events of changing to or putting into a specific position with an inchoative reading (self-caused) ('to be seated' → 'to sit down', 'to be lying in the hammock' → 'to lie down'...). The second morpheme yields derived forms with the same meaning of changing to a position but with a causative reading (caused by others).

- (78) a. *pixata aha uhuru yaa pramai*
pixata =a =ha uhuru ya= a= pra =ma =i
 ground =SG =OBL child 1SG= 3SG= lie =CAUS =DYN
tēhē , hāhā ya a taarema .
=tēhē hāhā ya a= taa =ri =ma
 =REL.PRS spider 1SG 3SG= see =PFV1 =PST
 'When I was laying the child on the floor, I saw a spider.'

- b. *pixata aha ya pramuu tēhē , hāhā*
pixata =a =ha ya= pra =mu =i =tēhē hāhā
 ground =SG =OBL 1SG= lie =INTRZ =DYN =REL.PRS spider
yaa taarema .
ya= a= taa =ri =ma
 1SG= 3SG= see =PFV1 =PST
 'When I was lying on the floor, I saw a spider.'

These derivative morphemes *=ma* and *=mu* are obligatory in imperfective predicates. Interestingly, the perfective version of those verbs may display either an inchoative (self-caused) or a causative (caused by other) reading, without any derivation. To those readings, correspond either intransitive or transitive argument structures.

- (79) a. *uhuru a prakema* .
uhuru a= pra =ki =ma
 child 3SG= lie =PFV2 =PST
 'The child lay down on the floor.'

- b. *uhuru ya a prakema* .
uhuru y= a= pra =ki =ma
 child 1SG 3SG= lie =PFV2 =PST
 ‘I laid the child down on the floor.’

Nevertheless, for both sentences in (79) there are alternative constructions with intransitivizer/reflexive marker *=mu* and the morphological causative (*=ma*). These alternative sentences are presented in (80).

- (80) a. *uhuru a pramokema* .
uhuru a= pra =mu =ki =ma
 child 3SG= lie =INTRZ =PFV2 =PST
 ‘The child lay down on the floor.’
 b. *uhuru a pramakema* .
uhuru a= pra =ma =ki =ma
 child 3SG= lie =CAUS =PFV2 =PST
 ‘I laid the child on the floor.’

Those two constructions seem to have identical meanings, but we will see in Chapter 6 (§6.2.3), that in some syntactic contexts (especially with an imperfective reading) only the constructions with the intransitivizer/reflexive and the morphological causative are grammatical.

5.6.8. Conservative (to have, to keep, to possess) *=pu*

This morpheme can be employed with transitive dynamic stems to create new transitive dynamic stems, adding the meaning of ‘to conserve, to protect, to watch over, to keep under guard’ to the original verb, as in the examples in (81).

- (81) a. *wakē hōyapu pihoma yaro* [...] .
wakē hōya =pu =i pihio =ma =yaro
 fire hide =CSVT =DYN want =PST =CNJ.EXPLV

‘For he wanted to keep hidden the fire [...]’ (wtx_iwa)

b. *kōmi yamakini ihĩ yama wã hĩrĩpuu* .
kōmi =yamaki =ni ihĩ yama= wã= hĩrĩ =**pu** =i
 all =1PL =ERG ANA 1PL= sound= hear =CSVT =DYN

‘We listen-guard these words.’ (i.e. ‘We all know these words.’)

(PDYP_MIC_A_13_07)

In some cases, the derivation only adds a durative or, more precisely, continuative (i.e. +duration +volitionality/agentivity) meaning to the resulting construction, as in (82).

(82) *rata wa he hĩsĩkipuu toko*
rata wa= he= hĩsĩki =pu =i toko
 lata 2SG= CLN:round= shoot_light =CSVT =DYN unfortunately
no mai !
 =no mai
 =RESULT NEG

‘Damn, don’t keep shooting the flashlight [on my face]!’ (s_chk_marc)

This derivation is particularly frequent with the transitive version of positional ones. The transitive version of these stems is like those presented in Table 5.41 and Table 5.42, i.e. formed with the dynamizer =*a*. However, this latter morpheme is omitted in the derivation with =*pu*, as in the example (83a). However, there are still the causative of the transitive version of the positional stem (to make someone change the position of something), which is formed with causative =*ma* and sometimes with the combination of dynamizer =*a* and causative =*ma*. In this case, the dynamizer morpheme =*a* is also elided, as in (83b-c). Note that the resulting verb of this derivation always is a transitive dynamic stem.

- (83) a. *ĩhĩ kama kikii harepuu*
ĩhĩ kama kiki= i hare =pu =i
 ANA 3 CLN:serpentiform= DIM hang =CSVT =DYN
xoahuru [...] *xa* =*huru*
 afterwards =DIR.AND

‘They keep wearing it [the magic necklace] [...]’ (PDYP_MIC_A_01_24)

- b. *haro wama kiki*
haro wama= kiki=
 magical necklace 2PL= CLN:serpentiform=
haremapuu tēhē [...] *hare =ma =pu =i =tēhē*
 hang =CAUS =CSVT =DYN =REL.PRS

‘We keep making them wear it [the magic necklace]’

(PDYP_MIC_A_01_24)

- c. [*ĩhĩ thēha*] *kōmi oxe yama thēpē*
ĩhĩ =thē =ha kōmi oxe yama= thē= pē=
 ANA =CLN.GNR =OBL all youngster 1PL= CLN.GNR= 3PL=
mamo xaari xatimapuu .
mamo xaari xati =ma =pu =i
 eye straight stick =CAUS =CSVT =DYN

‘We keep making all children pay attention [on that].’

(PDYP_MIC_B_06_04)

Table 5.47 shows the same positional stems presented in Table 5.10 now derived with the conservative =*pu*.

Table 5.47 - Positional stems derived with conservative =*pu*

Form	Gloss	Form	Gloss
<i>arapuu</i>	to keep/stow sth on the ground	<i>titipuu</i>	to keep sth inserted
<i>harepuu</i>	to keep sth hanging	<i>xatipuu</i>	to keep sth stuck
<i>hatētēpuu</i>	to keep sth tangled	<i>yakapuu</i>	to keep sth laying in the same hammock
<i>hāyōkopuu</i>	to keep sth clinged	<i>yarepuu</i>	to keep sth hanging
<i>hoopuu</i>	to keep sth inserted	<i>yauwapuu</i>	to keep sth blowing (smoke)
<i>ithāpuu</i>	to keep sth on the floor (pot)	<i>yētēpuu</i>	to keep sth stuck, to keep sth glued
<i>karopuu</i>	to keep sth open	<i>yīpipuu</i>	to keep sth hanging (from one's arm)
<i>ōkāpuu</i>	to keep sth tied	<i>yohopuu</i>	to keep sth covered
<i>pīripuu</i>	to keep sth lying in the hammock	<i>utupuu</i>	to keep sbd held by the hand
<i>prapuu</i>	to keep sth lying on the floor	<i>weipuu</i>	to keep sth held by the teeth
<i>rakipuu</i>	to keep sth leaning on the wall		

It is worth underlining that the derived form with =*pu* has intrinsic durative (thus imperfective) aspect and cannot co-occur with any perfective marker.

As a final comment, this morpheme probably has grammaticalized from the dynamic stem *pou* ‘to possess’. My current hypothesis is that the serial verb construction (SVC) was the original syntactic context that allowed this grammaticalization process to occur (please refer to §10.4 for a full account of SVCs in YMA). Following this interpretation, *pou* ‘to possess’ once was used as a minor verb in SVCs and then it was eventually reanalyzed as a bound morpheme. The form

po thus lost its status of lexical root which allowed it to be subject to phonological processes that are typical of bound morphemes in the language, such as the vowel height assimilation that changed [*po*] to [*pu*].

5.6.9. Attributivizer *=ri* (used with smells)

As we saw in §5.5.2, the words that convey smells form a subclass of attributive stems. These words not only have this meaning in common, but all of them also display a similar morphological make up. This paradigm comprises only compound verbs with the proclitic *riã=* and an attributive verb. However, this attributive stem is not morphologically simple either, but made of another attributive stem derived with *=rĩ*. That is, this morpheme derives a “general” attributive stem into a more specific one, used only to qualify smells. For the sake of economy of space, I will not present these words here again. Please refer to Table 5.30 above for examples of this type of attributive verb stem.

Note that several forms in Table 5.30 also display a *=pi* before the morpheme *=ri*. This is the harmonized version of verbalizer *=pě*, which derives nouns in attributive stems. I will discuss the attributivizer *=pě* in §5.6.10.

As final comment, given the similarity between the forms *riã=* and *=rĩ* and considering that they act together to create words of the same semantic domain, one could plausibly argue that they share a common origin as well. I would not have an explanation, however, on how these morphemes acquired their current position in the word structure.

5.6.10. Derivation: from nouns to verbs

In YMA, verbs can be formed from nouns by overt morphological derivation. There are four morphemes that can take part in this process: *=mu*, *=ma*, *=pro* and *=pě*, each of them yielding different types of verb stems and different meanings.

The intransitivizer *=mu*, which is the most productive morpheme for this kind of derivation (N>V) in the dictionary, makes nouns into intransitive dynamic stems. There are several semantic patterns associated with this derivation. In one of this

patterns, the resulting verb stem conveys the meaning of 'to act like N', or 'to perform an activity prototypically associated with N'.

Table 5.48 – Verbs derived from a noun with =mu ('to act like N')

Source noun	Gloss	Derived verb	Gloss
<i>thomi</i>	agouti	<i>thomimuu</i>	to steal (intransitive)
<i>pata</i>	elder, adult	<i>patamuu</i>	to be a leader, to coordinate
<i>xapori</i>	shaman	<i>xaporimuu</i>	to perform shamanism
<i>āyōkora kosi</i>	bird (Cacicus cela)	<i>ayōkoramuu</i>	to sing like the bird (shamanism)
<i>hama</i>	visitor, guest	<i>hamamuu</i>	to visit
<i>nohi</i>	friend	<i>nohimuu</i>	to be friendly, to act like a friend

This derivation is available to kinship terms and the resulting verb is frequently used to describe classificatory kinship relations, that is, those relations that are not based on the genetic closeness of the people involved but on other pre-established relations. For instance, if I marry a woman outside the village, all my male siblings will automatically become her classificatory husband as well, and all my classificatory wives in the village will treat her as their classificatory sisters. One way of expressing this classificatory relation is through an intransitive predicate with a verb derived from a kinship term through the intransitivizer =*mu*. In (84), I present an illustrative example.

- (84) *Ararima eha ya hiimu*
Ararima =e =ha ya= hii =mu =i
 Ararima =DIF.PART =OBL 1SG= father =INTRZ =DYN
 ‘I act like a father to Ararima.’ (i.e. ‘I treat him like a son’)

We saw in Chapter 4 (§4.2.9), that kinship terms may vary their form according to the grammatical person in relation to them. Interestingly, many of these terms take a still different form when being derived with the intransitivizer =*mu*, as the comparison between the first and the third column of the Table 5.49 tells us.

Table 5.49 – Verbs derived from kinship terms with =*mu* (‘to act like a N’)

Source noun	Gloss	Derived verb	Gloss
<i>hēe e</i>	his father	<i>hīimuu</i>	to act like a father
<i>hāa ari</i>	my father		
<i>nee e</i>	his mother	<i>niimuu</i>	to act like a mother
<i>nāa ari</i>	my mother		
<i>xēe e</i>	his father-in-law	<i>xīimuu</i>	to act like a father-in-law
<i>xāa ari</i>	my father-in-law		
<i>yēe e</i>	his mother-in-law	<i>yīimuu</i> / <i>yēesimuu</i>	to act like mother-in-law
<i>yāa ari</i>	my mother-in-law		
<i>thārisi e</i>	his son-in-law	<i>thārisimuu</i>	to act like a son-in-law
<i>thathē e</i>	his son-in-law	<i>thathēmuu</i>	to act like a daughter-in-law
<i>hepara e</i>	his brother	<i>heparamuu</i>	to act like a brother
<i>ami e</i>	his sister (of ego ♂)	<i>amimuu</i>	to act like a sister
<i>you e</i>	her brother (of ego ♀)	<i>youmuu</i>	to act like a brother
<i>uhuru e</i>	his son	<i>uhurumu</i>	to act like a son
<i>thee e</i>	his daughter	<i>theemu</i>	to act like a daughter
<i>thathe e</i>	his daughter-in-law	<i>thathemu</i>	to act like a daughter-in-law
<i>heri e</i>	his brother-in-law	<i>herimu</i>	to act like a brother-in-law

However, ‘to act like N’ is not the only semantic pattern found in derived verbs with =*mu*. Another possible meaning of this construction is ‘to collect N’, as the words in Table 5.50 show.

Table 5.50 – Verbs derived from a noun with =mu (‘to collect N’)

Source noun	Gloss	Derived verb	Gloss
<i>yuri</i>	fish	<i>yurimuu</i>	to fish
<i>oko</i>	crab	<i>okomuu</i>	to collect crabs
<i>xũu hu</i>	river shrimp	<i>xũuhumuu</i>	to collect shrimps

The resulting form of this derivation can mean ‘to use N’ as well, as in the words in Table 5.51.

Table 5.51 – Verbs derived from a noun with =mu (‘to use N’)

Source noun	Gloss	Derived verb	Gloss
<i>ãrihi uku</i>	alcoholic beverage	<i>ãrihimuu</i>	to drink (alcoholic beverage)
<i>nãra nakĩ</i>	drawings/body paint	<i>nãranamuu</i>	to paint the body
<i>patixi</i>	ornament	<i>patiximuu</i>	to dress oneself up with ornaments
<i>õrõmaxi</i>	small white feathers of some birds	<i>õrõmaximuu</i>	to cover oneself (especially the head) with small white feathers

The source noun can also be the product of the action described by the derived verb, as in Table 5.52.

Table 5.52 – Verbs derived from a noun with =mu ('to produce N')

Source noun	Gloss	Derived verb	Gloss
<i>amoã thãa</i>	song	<i>amoãmuu</i>	to sing
<i>reahu</i>	festival	<i>reahumu</i>	to make a festival
<i>hore</i>	lie (n)	<i>horemuu</i>	to lie
<i>mahari</i>	dream	<i>maharimuu</i>	to dream

One final semantic pattern found in this derivation is the creation of verbs from nouns of diseases. The derived form can be translated as ‘to suffer from N’. Table 5.53 shows some of these words.

Table 5.53 – Verbs derived from a noun with =mu ('to suffer from N')

Source noun	Gloss	Derived verb	Gloss
<i>xawara</i>	disease, epidemics	<i>xawaramuu</i>	to have a disease
<i>thoko</i>	cough	<i>thokomu</i>	to cough
<i>heasi</i>	sneeze	<i>heasimuu</i>	to sneeze
<i>hura</i>	liver swelling	<i>huramuu</i>	to have malaria
<i>xuhuri</i>	sorrow	<i>xuhurimuu</i>	to be sad

Note that the semantics of the noun that is the source of the derivation plays a major role in determining the meaning that the derived form will acquire. This meaning is often predictable from some prototypical action humans can perform upon or similar to the entity that is the referent of the noun. That is, humans collect [and eat] crabs (Table 5.50), [produce and] drink alcoholic beverages (Table 5.51), produce songs (Table 5.52), suffer from cough (Table 5.53), and act friendly or like fathers (Table 5.48 and Table 5.49).

The morpheme *=ma* can also produce dynamic verb stems from nouns, but in this case with a transitive argument structure. The literal meaning of resulting verb is can be translated as ‘to do what N usually does’. This derivational process is, nevertheless, much less productive than the previous one. There is only a handful of these derivations in the YMA dictionary. In (46), I present two of them.

(85) a. *thomimai*

thomi **=ma** =i

agouti **=TRZ** =DYN

‘To steal’ (tr) (note: Agoutis are known for their stealing habits).

b. *nohimai*

nohi **=ma** =i

friend **=TRZ** =DYN

‘To treat friendly’

The morpheme *=pro* [*=pra*] also creates intransitive dynamic stems from nouns. The resulting form conveys the meaning of ‘to become N’ or ‘to transform into N’. One should note that with perfective markers, the morpheme takes its allomorph *=rio*, in bold in (86b).

(86) a. *yutuha*

pata thëpë

yaroproma

yutuha *pata thë=* *pë= yaro* **=pro** **=ma**

a_long_time_ago elder CLN.GNR= 3PL= animal =INTRZ =PST

‘In the past, the ancestral people became animals.’

b. *hei yanomama thë*

uhurupë makii a

hei yanomama thë= *uhurupë =makii a=*

this yanomami CLN.GNR= son =CONCS 3SG=

napëprarioma

napë =pra **=rio** =ma

foreigner =DRV =PFV =PST

‘Although this one is son of a Yanomama, he became a white person.’

To arrive at a transitive version of the verbs in (86), further derivation with causative =*ma* is necessary. Note that the vowel in =*pro* harmonizes with the vowel of causative =*ma* (87), something which does not occur with the homophonous past marker =*ma*, as in (86a).

- (87) *yutuha* *Titikikini* *pata thēpē*
yutuha *Titikiki* =*ni* *pata thē=* *pē=*
a_long_time_ago Titikiki =REL.PST elder CLN.GNR= 3PL=
yaropramarema
yaro =*pra* =*ma* =*ri* =*ma*
animal =**DRV** =CAUS =PFV1 =PST

‘In the past, [the spirit] Titikiki transformed the ancestral in animals.’

The transitive morpheme =*pra* can also potentially derive nouns into verbs, even though the productivity of this morpheme is much more limited than its intransitive counterpart. Indeed, I have report of only one derivation of this type, which is compound verb *wā napēprai* ‘to translate (to Portuguese)’, with *wā* ‘voice, sound’ and *napē* ‘foreign, non Yanomami’.

The last morpheme that derives verbs from nouns is =*pē*. The form resulting from the derivation with this morpheme has the same formal properties of an attributive stem, displaying a stative, (88a-b), or a dynamic reading, (88c-d) without the need of an additional deriving morpheme. The meaning of the resulting form can often be translated as “to be attacked by N” or “to be infested by N”, where N refers to a pathogenic or undesired entity.

- (88) a. *Ararima a* *horemapē*
Ararima a= *horema* =*pē*
Ararima 3SG= earthworm =**VBLZ**

‘Ararima has a lot of worms.’

- b. *aho wamotima thēki* *kaxipē*
aho wamotima thē= *ki= kaxi* =*pē*
2POS food CLN.GNR= PL= esp._of_ant =**VBLZ**

‘Your food is full of fire-ants.’

c. (*warokoxi*) *una* *hëpai* *xoakema*
warokoxi *una*= *hëpa* =*i* *xoa* =*ki* =*ma*
 sp._of_fruit CLN:???= touch =DYN afterwards =PFV2 =PST
*makii imiki misiki***përayoma** .
 =*makii imiki*= =*misiki* =**pë** =*rayu* =*ma*
 =CONCS hand= =thorn =**VBLZ** =PFV =PST

‘[...] He had touched (the fruit), and his hands got full of thorns.’

(s_ms10_arok).

d. *ya he nomapërayoma* .
ya= *he*= *noma* =**pë** =*rayu* =*ma*
 1SG= head= louse =**VBLZ** =PFV =PST

‘I have got lice on my head.’

The denominal form can still be further derived back in noun with the nominalizer *-rima*, in bold in the example in (89), which is exclusively employed with attributive stems, as we saw in §5.3.7.

(89) *kaho horemapërima* *wamakini* *hei himini*
kaho horema =**pë** -*rima* =*wamaki* =*ni* *hei himini*
 2 threadworm =**VBLZ** -NMLZ =2PL =REL.PST this medicine
wama kiki wari .
wama= *kiki*= *wa* =*ri*
 2PL= CLN:collective= eat =PFV1

‘You that have worms, you take these medicines.’

Another meaning that this derivation often gets is ‘to have acquired N’ or ‘to have a lot of N’ in a more neutral and sometimes positive manner, as in (90).

(90) a. *horepe thëri pë mokaapërayoma* .
horepe thëri *pë*= *mokaa* =**pë** =*rayu* =*ma*
 highlands inhabitant 3PL= rifle =**VBLZ** =PFV =PST

‘The people from the highlands have acquired rifles.’

- b. *hei tēhē kami yamaki tēpēpē mahi* .
hei =tēhē kami yamaki= tēpē =pē mahi
 this =REL.PRS 1 1PL= glass bead =VBLZ much
 ‘We have now a lot of glass beads.’

In this type of construction, when the subject of the attribution is not an entity but a place (forest, river, house...) or the weather (with the expression *thē urihi*), the derived form takes the verbal particle *ni=* forming a compound verb with the derived stem, as in (91a) (see §5.5.2 for more on this type of compound verb). It is worth mentioning that this phenomenon is observed not only with derived attributive stems but with simple ones too (91b). I do not have an explanation for this.

- (91) a. *hei pata u ni yuripē mahi* .
hei pata u= ni= yuri =pē mahi
 this big CLN:liquid= V.PTC= fish =VBLZ much
 ‘This river is full of fishes.’

- b. *ihĩ urihi ni temi* .
ihĩ urihi= ni= temi
 ANA CLN:forest= V.PTC= healthy
 ‘That forest is healthy.’

Table 5.54 summarizes the morphological mechanisms that allow a noun to acquire the formal properties of a verb in YMA.

Table 5.54 – Derivational morphemes (N>V)¹²

Morpheme	Derived stem	Meaning	Example
=mu	intransitive dynamic	to act like N	<i>hamamuu</i> ‘to visit’ (‘to act like a guest’), <i>heparamuu</i> ‘to act like a brother’
		to collect N	<i>yurimuu</i> ‘to fish’, <i>okomuu</i> ‘to collect crabs’
		to use N	<i>arĩhimuu</i> ‘to drink’ (alcohol), <i>patiximuu</i>
		to produce N	‘ <i>amoãmuu</i> ’ to sing, <i>reahumuu</i> ‘to make a festival’
=ma	transitive dynamic	to suffer from N	<i>xawaramuu</i> ‘to have an epidemic disease’, <i>huramuu</i> ‘to have malaria’
		to do what N does	<i>thomimai</i> ‘to steal’ (trans)
=pru[=pra]	intransitive dynamic	to become N	<i>yanomamapruu</i> ‘to become a Yanomama’
		to be transformed in N	<i>hayapruu</i> ‘to transform into a deer’
		to be attacked by N	<i>horemapě</i> ‘to have worms’
=pě	attributive	to have N/to have acquired N	<i>mokawapě</i> ‘to have rifles’
		to have a lot of N	<i>těpěpě</i> ‘to have a lot of glass beads’

¹² I did not include transitive morpheme =pra given it occurs in only one example.

5.7. Final discussion

This chapter provided the elements that allow us to make sense of the internal diversity of the major classes of verbs in YMA. We saw that the language has three main verb stem types (and one more peripheral) that differ from each other on semantic grounds, but most importantly, in the formal properties they display in several syntactic contexts. These differences are not restricted to the contexts studied here, though, but will still show up in other grammatical domains that will be investigated later in this book.

We also saw that verb stems can be classified according to the complexity of their morphological make up. Many of them are simple stems, i.e. they are formed by one bare verbal root, while others are morphologically complex, resulting from the compounding of two verb stems (either by reduplication or juxtaposition) or a verb stem and a clitic. Complex stems can also be the result of the derivation from nouns or other verbs stems, using one of the several deriving mechanisms available in the language. The description of these mechanisms is not complete yet since we did not touch upon the valency and voice changing morphology, which will be dealt with in Chapter 9, and the morphemes that some multiverbal clauses require from particular verbs stems types, described in Chapter 10. Moreover, there are probably some derivational morphemes and processes that were left out from this chapter and, given the complexity of this domain of the YMA grammar, it is safe to say that more investigation on this topic will probably yield better analyses and shed light on issues that have remained unexplained or confusing so far.

In the next chapter, I will deal with other aspects of the verbal morphology, namely the expression of the TAM categories.

6. Verb Morphology

6.1. Introduction

In contrast with what the title may suggest, this chapter does not intend to give an exhaustive account of the entire YMA verb morphology but only deals with the categories of tense, aspect and mood. It would be just impossible to fit the whole morphology into one single chapter. As I pointed out in Chapter 3 (§3.4.1.2), the verb can host two clitic clusters, one from its left side with twelve slots and the other from its right side with nineteen positions¹. Considering all the morphemes that can occupy those 27 slots, more than 80 different forms can appear inside the predicate. It is not practical to deal with all of them in the same chapter and, for this reason, I decided to describe each class of morphemes in separate chapters, according to the domain of the grammar they belong to.

I have already presented most of the derivational morphemes of Cluster C (sub-Cluster CA), which are responsible for creating the new verbs of the language, either from nouns or other verbs, and the verbal particles and body-part terms (both from Cluster B) that take part in compounding verbs. Moreover, most of the other clitics of Cluster B are person indexes on the verb, which I will describe in Chapter 7 (§7.5) when dealing with the argument marking strategies of the language. I will not deal here with the deriving morphemes that affect the valence or the voice of the predicate; Chapter 9 focuses on this. And the same can be said about the evidential markers (from Clusters B and C), which will be described only in Chapter 11. Finally, conjunctions in YMA are also clitics. Except the proclitic *ha=* that appears in subordinate clauses of time (sequential), all conjunctions of the language are enclitics that occupy either the last or the penultimate position in the Cluster C (sub-Cluster CC). Since we will not deal with multiclausal constructions in this study, we will also leave the description of the conjunctions aside.

¹ I will be using the terms “slot” and “position” as synonyms.

In this chapter, I will be chiefly concerned with the clitics of the sub-Cluster CB with the morphemes that express the inflectional categories most often associated with the verbal domain, namely tense, aspect and mood. I will start in §6.2.1 and §6.2.2 explaining how the present and past tenses are morphologically expressed in the language. Then I will turn into the description of the morphemes that convey aspectual categories in the sections §6.2.3 to §6.2.7. In §6.3, I will deal with the morphemes used to indicate that the clause has an irrealis mood.

I also included in this chapter the description of the locational (§6.4) and directional (§6.5) morphemes that appear in the predicate (also in sub-Cluster CB) and a discussion on how motionless verbs can be marked to express predicates with associated motion (§6.6).

Finally, I will describe the use of the negation morpheme *=imi* (§6.7) and dispense some final remarks (§6.8).

6.2. Tense and aspect

In the following sections discuss the tense and aspect categories expressed in the YMA main clause. The expression of these categories in subordinate clauses is significantly different and will not be the focus here. I will make some brief remarks on the expression of tense categories in clauses that are marked for some evidentiality categories, and I will describe them in detail in Chapter 11 (§11.3.1.1). I will discuss only the tense categories of present and past. The future tense will be described in §6.3.1 in the section on irrealis mood markers.

6.2.1. Present

The present is not a morphologically overt category in simple declarative clauses that are not marked for evidentiality. In other words, present tense is the default or non-marked tense category in this context. When there is no tense or irrealis mood in the clause, it tends to have a present reading. Except for the indexing markers that are common to all types of verbal predicates, the only morphemes that obligatorily appear

in simple sentences with present readings are the verbal class morphemes – *=i* with dynamic stems, *=a* with positional ones, and *=o* with irregular verbs.

- (1) a. *Ararima a heri* .
Ararima a= heri =i
 Ararima 3SG= chant =DYN
 ‘Ararima is singing.’

- b. *Ararima a roa* .
Ararima a= ro =a
 Ararima SG= squat =POST
 ‘Ararima is squatting.’

- c. *huu tihia Ararima a tuo* .
huu =tihi =ha Ararima a= tu =o
 tree =CLN:tree =OBL Ararima 3SG= climb =STV
 ‘Ararima is climbing the tree.’

It is important to underline that these verbal class morphemes should not be considered tense markers. The stative morpheme *=o*, for instance, is even obligatory in non-perfective past clauses with positional, irregular and attributive stems, as illustrated in (2). (See §5.3.2 for more examples).

- (2) *hapa Xokotha ha ya pirioma* .
hapa Xokotha =ha ya= piri =o =ma
 before Xokotha =OBL 1SG= lie =STV =PST
 ‘I first lived in Xokotha (village).’ (PDYP_MIC_A_13_07).

The marker *=i* is also used in other syntactic contexts with different time readings, such as subordinate clauses with *=tēhē* ‘when, if’, which may have a future irrealis reading, like in (3a), or a past reading (3b). Note that main clause in both constructions is co-temporal to the subordinate clause with *=tēhē*, the reason why I

am glossing this connective as “relative present” (REL.PRS), i.e. it indicates not an “absolute present” but only co-temporality with the main clause.

- (3) a. *wama uku koai tēhē wama thē*
wama= uku= koa =i =tēhē wama= thē=
 2PL= CLN:porridge= drink =DYN =REL.PRS 2PL= CLN.GNR=
koai henano mai [...]
koa =i hena =no mai
 drink =DYN in the morning =RESULT NEG

‘When you [eventually] drink the porridge, don’t drink it in the morning [...]’
 (m011_joan_tihi)

- b. *u koai tēhē , napē kipē rērēi*
u= koa =i =tēhē napē kipē= rērē =i
 CLN:liquid= drink =DYN =REL.PRS white person 3DU= run =DYN
hēimama .
hē =ima =ma
 remain =DIR.VEN =PST

‘When he was drinking, the two white people came running.’ (s_ball_alfr)

Among the verbal class morphemes, only the positional *=a* appears exclusively in present readings. I do not gloss it as a present tense morpheme, nevertheless, for considering that its gloss as a positional morpheme is more meaningful and useful for our description. Moreover, had I glossed it as a present marker, I would immediately have to postulate several exceptions to the use of this morpheme since it does not appear with dynamic, attributive and irregular stems.

We saw in Chapter 5 (§5.3.1) that in attributive predicates with adjective verbs (‘he is tall’), there is no extra morpheme (even verbal class morphemes) in the present. In (4), I offer another example of this construction.

- (4) *saia kiki xami .*
saia kiki= xami
 skirt CLN:collective= dirty

‘Skirts are dirty.’ (PDYP_MIC_A_05_82)

In Chapter 8, I will describe nominal predicates or predicates that do not have a verbal element as a head, such as equative predicates (‘he is a Yanomama’). For our discussion here, I would like to mention that present tense is also the default non-marked tense in this context since no tense morpheme is required. In (5), we can see an example of this type of construction.

- (5) *Ararima Yanomama a* .
Ararima Yanomama =a
 Ararima yanomami =SG
 ‘Ararima is a Yanomama.’

As a final note, we will see in Chapter 11 that there are two sets of words (the *k*- and *m*-words), used in constructions marked for evidentiality, that do express present overtly. The morphology that makes this indication, is different from the one found in the main predicate. I will move now to the discussion of the past categories in YMA.

6.2.2. Past categories

In YMA, a main declarative clause can be marked for three types of past tense: hodiernal past, pre-hodiernal past and past non-marked for hodiernality. The expression of the first two types (hodiernal and pre-hodiernal) is intertwined with the marking of the evidentiality categories since it also relies on the *k*- and *m*-words. The examples in (6) with such words tell us that the hodiernal marker is *=ni* and the prehodiernal one *=re*. We will discuss more the *k*- and *m*-words in Chapter 11 (see §11.2.1.1 and §11.3.5), where we will see that the hodiernal morpheme *=ni* actually overlaps with the present.

- (6) a. *Ararima ani xama a xëprari kani*
Ararima =a =ni xama a= xë =pra =ri ku =ni
 Ararima =SG =ERG tapir 3SG= beat; kill =DRV =PFV COP =HOD
 ‘Ararima killed a tapir (today +witnessed).’

b *Ararima ani xama a xëprari*
Ararima =a =ni xama a= xë =pra =ri
 Ararima =SG =ERG tapir 3SG= beat; kill =DRV =PFV
kure .
ku =re
 COP =PRE.HOD
 ‘Ararima killed a tapir (yesterday or before +witnessed).’

In clauses not marked for the evidentiality categories that make use of the *k-* or *m-*words, past tense is expressed with the enclitic *=ma* and its allomorph *=n*, employed in clauses with negation morpheme *=imi*. Clauses marked with this morpheme can refer to either hodiernal (7a) or pre-hodiernal events (7b).

(7) a. *utupë taamotima aha hiima yaa*
utupë taa =mu =tima =a =ha hiima ya= a=
 image see =INTRZ =NMLZ =SG =OBL dog 1SG= 3SG=
taarema .
taa =ri =ma
 see =PFV1 =PST

‘I saw a dog on the television.’ (s_ms01_arok) (Note: the speaker is retelling the story that he had just watched on video)

b. *yutuha wa noa thama* .
yutuha wa= noa= tha =ma
 a_long_time_ago 2SG= V.PTC= do; make =PST
 ‘I warned you a long time ago.’ (m006_arok_mari)

This marker can coexist with both imperfective (8a) and perfective markers (8b), always occupying the last position in the string of tense-aspectual markers in the verbal phrase.

(8) a. *ihĩ tēhē rēa si miotima* .
ihĩ =tēhē rēa si= mi =o =ti =ma
 ANA =REL.PRS mouse CLN:small= sleep =STV =DUR =PST

‘Then the mouse sleeps for some time.’ (s_m10_alfr)

- b. *kiha wamaki taarema* .
kiha wamaki= taa =ri =ma
 there 2PL= see =PFV1 =PST
 ‘I saw you there.’ (m011_joan_tih)

The index for 3rd person dual agent =*pi* also goes before =*ma*, as shown in (9).

- (9) *pora a xeeapima* .
pora a= xee =a =pi =ma
 ball 3SG= throw =DISTR =3DU =PST
 ‘They two kept throwing the ball.’ (s_ball_cesa)

Only a few morphemes such as conjunctions (=yaro and =kutayoni) (10a), the index for the 3rd person plural agent (=he) (10b) and the negation morpheme can appear after the past morpheme =*ma*.

- (10) a. *ya thãa pree hĩirema kutayoni*
ya= thã= ã= pree hĩri =ri =ma =kutayo =ni
 1SG= CLN.GNR= sound= also hear =PFV1 =PST =REAS =REAS
 [...]

‘For I have also heard that story [...] (m011_joan_tih).’

- b. *wakē a taaremahe* .
wakē a= taa =ri =ma =he
 fire 3SG= see =PFV1 =PST =3PL
 ‘They saw the fire.’ (n001_iwa)

The past marker =*ma* can appear in independent clauses and in many types of dependent clauses, such as subordinate clauses of concession (11a) and reason (11b) and (10a).

- (11) a. *inaha thëpë kuma makii* [...]

inaha thë= pë= ku =ma =makii

 thereby CLN.GNR= 3PL= say =PST =CONCS

 ‘Even though they had said that [...]’ (PDYP_MIC_B_08_01)

- b. *yutuha pë kiāma yaro* [...]

yutuha pë= kiā =ma =yaro

 a_long_time_ago 3PL= work =PST =CNJ.EXPLV

 ‘For they had worked [here] a long time ago [...]’ (m004_paya_gari)

However, this morpheme does not occur in subordinate clauses of time, with the connectives *=tëhë* (‘when’, ‘if’/ ‘relative present’) and *=ni* (‘after’/ ‘relative past’), and relative clauses, which have an entirely different set of tense markers. I will not deal with the tense paradigm used in relative clauses in this study, and only briefly mention this system in Chapter 11 when discussing the *k*- and *m*-words, which inherited the markers from the relative clause. Below we have two multiclausal constructions that explicitly refer to events in the past. In (12a) the event of the subordinate clause is cotemporal (‘when he was drinking’) with the event in the main clause (‘the two white people came running’), while in (12b) the event of the subordinate clause (‘after it failed’) is prior to the main event (‘the chicken fell’). In none of these subordinate clause types, the past morpheme *=ma* can appear.

- (12) a. *u koai tëhë , napë kipë rërei*

u= koa =i =tëhë napë kipë= rëre =i

 CLN:liquid= drink =DYN =REL.PRS white person 3DU= run =DYN

hëimama .

hë =ima =ma

 remain =DIR.VEN =PST

‘When he was drinking, the two white people came running.’ (s_ball_alfr)

b. *karaka a ha hukëriⁿi*

karaka a= ha= hukë -ri =ni

chicken 3SG= REL.PST= flail PFV1 =REL.PST

a kerayoma .

a= ke =rayu =ma

3SG= fall =PFV1 =PST

‘The chicken fell after it flailed.’ (s_chck_cesa).

The past marker has an allomorphic form, which is *=n*. This allomorph is required when the negation morpheme *=imi* is present in the clause. The negation morpheme *=imi* goes after the past marker. In (13), I give two instances of this allomorph in use. As I will discuss in §6.7, the negation morpheme is only compatible with imperfective morphemes, not with perfective ones.

(13) a. *haru tēhë thë titionimi* .

haru =tēhë thë= titi =o =n =imi

dawn =REL.PRS CLN.GNR= night =STV =PST =NEG

‘At night, it was not dark.’ (n002_titikiki)

b. *kami yamakī koraha yama si tanimi* .

kami yamakī= koraha yama= si= ta =n =imi

1 1PL= banana 1PL= CLN:palm_tree= know =PST =NEG

‘We did not know the banana tree [before]’ (n011_yoasiyaxuru)

6.2.3. Perfective markers

There are four series of perfective markers in YMA., as shown in Table 6.1. We will see later in this section that these morphemes are not only aspectual markers but they also convey spatial information.

Table 6.1 - Perfective morphemes

	Intransitive	Transitive
Series I	= <i>rayu</i> /= <i>rio</i>	= <i>re</i>
Series II		= <i>ki</i>
Series III		= <i>pi</i>
Series IV		= <i>a</i>

Series IV appears exclusively in serial verbs constructions. In perfective predicates of this type, every non-final verb of the string has to take this morpheme while the last verb takes one of the morphemes of the series I, II or III, according to its lexical context. In (14), I present two examples of a serial verbs construction where we can observe the perfective vowel (in bold) in use. I will not further comment on this marker since I discuss serial verbs construction in detail in Chapter 10 (§10.4).

- (14) a. *a* *tua* *yapaa*
 a= *tu* =***a*** *yapa* =***a***
 3SG= climb =PRF.VWL go_back =PRF.VWL
kōpohuru *wei* [...]
kō =*pi* =*huru* =*wei*
again =PFV3 =DIR.AND =NMLZ
 ‘He climbed back the tree again [...]’ (s_pear_alfr)
- b. *ai* *ahāsiki* *këa* *he*
 ai *ahāsi*= *ki*= *kë* =***a*** *he*=
 other CLN:kindling wood= 3PL= break =PRF.VWL V.PTC=
yatia *kōrari* *wei* [...]
yati =***a*** *kō* =*ra* =*ri* =*wei*
persist =PRF.VWL again =DISTR =PFV1 =NMLZ
 ‘[She] continued breaking the firewood again [...]’ (s_chck_niki)

In this section, I will be concerned with the first three series. But before I start, let me clarify. In Chapter 5 (§5.2), when I was presenting the four basic types of verb stems in YMA, I mentioned that only predicates with dynamic and irregular stems convey doings, activities, and processes. Positional and attributive stems always project a stative aspect to the clause. Those stems do not express themselves the events of changing position or acquiring a property unless they are derived before in dynamic stems. Some of these “dynamizing” derivations dispense with overt morphology—such as the derivation of most attributive stems in inchoative dynamic stems – but many of them do need these extra morphemes. In any event, according to my analyses and to how the language has been described so far, the only aspectual morphemes truly compatible with attributive and positional stems are the imperfective ones, while only dynamic and irregular stems can take the perfective markers. In this section, I will refer to the inchoative version of the attributive stem or the dynamic version of the positional one. These versions of the stative stems are dynamic stems. The origin of the dynamic stem – whether a native dynamic stem or a derivation from a positional or attributive stem – will have a significant influence, nevertheless, on the choice of the preferred (i.e. less marked) perfective morpheme series and the meaning that the other series give to the predicate with that verb stem.

The first series of perfective markers, PFV1, is the non-marked series for most dynamic stems. Verbs from different semantic domains and morphological outfits preferably take this series. It is used, for instance, with motion verbs (15a-b), inchoative (dynamic) versions of attributive stems (15c), and causative verbs, (15d).

- (15) a. *hei tëhë proro pë rukërayoma* .
 hei =tëhë proro pë= rukë =rayu =ma
 this =REL.PRS miner 3PL= enter =PFV1 =PST
 ‘Now the miners have entered/invaded.’ (m002_cesa_gari)

- b. *ĩhĩ tëhë arĩ tukurayoma* .
 ĩhĩ =tëhë a= rĩ= tuku =rayu =ma
 ANA =REL.PRS 3SG= HON= flee =PFV1 =PST
 ‘Then she [+REV] ran away.’ (s_chck_hoax)

c. *mau u uxixirayoma* .
mau u= uxixi =rayu =ma
 water CLN:liquid= muddy =PFV1 =PST
 ‘The water got muddy.’ (m005_wawa_gari)

d. *ĩhĩ tēhē pora a kemarema* .
ĩhĩ =tēhē pora a= ke =ma =ri =ma
 ANA =REL.PRS ball 3SG= fall =CAUS =PFV1 =PST
 ‘Then he dropped the ball.’ (s_ball_tome)

Series I is sensitive to the valence of the verb: there are two morphemes in the series, *=rayu* [=rio] [=raa] used exclusively with intransitive stems (16), and *=ri* [=re] [=ru] [=ra] with transitive stems (17).

INTRANSITIVE

(16) a. “ *wāi wāi* ” *e kurayoma* .
wāi wāi e= ku =rayu =ma
 IDEO IDEO DIF.PART= say =PFV1 =PST
 “‘wāi wāi,’ he said.’ (s_ms09_alfr)

b. *kami yanomama yamakĩ pihi*
kami yanomama yamakĩ= pihi=
 1 yanomami 1PL= V.PTC:thought=
xuhuriprarioma .
xuhuri =pra =rio =ma
 sadness =DRV =PFV1 =PST
 ‘We Yanomama people became sad.’

TRANSITIVE

(17) a. *aho ya thāa hĩrĩrema* .
aho ya= thā= ã= hĩrĩ =ri =ma
 2POS 1SG= CLN.GNR= sound= hear =PFV1 =PST
 ‘I heard your words.’ (m006_arok_mari)

- b. *koã ayõki manirarema* .
koã ayõ= ki= mani =ra =ri =ma
 firewood CLN:firewood= 3PL= cut =DISTR =PFV1 =PST
 ‘[He] cut the firewood into pieces.’ (s_chk_alfr)

Those dynamic stems (including the inchoative and causative versions of attributive stems) may still take the morphemes of other series, but only in some more marked contexts and with different semantic and pragmatic uses. The meaning of the form inflected with series II and III is not entirely predictable for all types of stems, but some recurrent patterns can still be pointed out.

When the series II inflects the inchoative version of an attributive stem, for instance, the construction often gets an inceptive meaning, (18a), refers to a process that did not reach its final stage, (18b), or refers to a change of state that took place at the beginning or before the end of a period of reference, (18c).

- (18) a. *ipa koraha kiki wakëkema* .
ipa koraha kiki= wakë =ki =ma
 1POS banana CLN:collective= ripe =PFV2 =PST
 ‘My bananas started ripening/had partially ripened.’

- b. *wamotima thëki ripikema* .
wamotima thë= ki= ripi =ki =ma
 food CLN.GNR= PL= cooked =PFV2 =PST
 ‘The food started to get cooked (it is still being cooked).’

- c. *Nasarana hami yamaki ta hupii tēhē , ya*
Nasarana =hami yamaki= ta= hu =pi =i =tēhē ya=
 Venezuela =OBL 1PL= FOC= go =WTNS =REL =REL.PRS 1SG=
kirikema yaro , ya yaparayoma .
kiri =ki =ma =yaro ya= yapa =rayu =ma
 be_scared =PFV2 =PST =CNJ.EXPLV 1SG= go_back =PFV1 =PST

‘When we were going to Venezuela, because I got scared [during the trip], I went back.’

With some dynamic stems, the inflection with the series II may result in polysemous constructions. With verbs of cutting [*hani* ‘cut’ *mani* ‘cut’, *kakai* ‘tear’, *ēekai*, ‘tear’, *pakokai* ‘cut in the middle (fruit)’, *poai* ‘chop’, *tiyēi* ‘to cut down (a tree)...], for instance, adding the morpheme *=ki* can yield the same inceptive or “only partially finished” meaning also attested with inchoative attributive stems (19a). However, in some constructions, this morpheme adds the sense of “giving” to the lexical semantics of the verb, (19b) and a recipient or beneficiary-like participant is often introduced in the predicate by an oblique argument, (19c).

- (19) a. *uti ani ipa rasa si*
uti =a =ni ipa rasa si=
 INT.PRO =SG =ERG 1POS peach-palm CLN:palm_tree=
tiyēkema tha ?
tiyē =ki =ma =tha
 cut_down =PFV2 =PST =PTC.INT

‘Who has almost cut down my peach-palm? (It has not fallen yet, but the bark is cracked).’

- b. *Kunatoi ani Ararima eha yaro*
Kunatoi =a =ni Ararima =e =ha =yaro
 Kunatoi =SG =ERG Ararima =DIF.PART =OBL =CNJ.EXPLV
yāhiki hanikema .
yāhi ki= hani =ki =ma
 meat PL= cut =PFV2 =PST

‘Kunatoi cut a piece of meat [and gave it] to Ararima.’

- c. *Okori eha papeo ya siki*
Okori =e =ha papeo ya= si= ki=
 Okori =DIF.PART =OBL paper 1SG= CLN:small= 3PL=
ēekekema .
ēeke =ki =ma
 tear =PFV2 =PST

‘I tore a paper sheet to Okori.’

When the direction of the transfer is ego-centripetal (i.e. 1st person is the recipient), and the speaker wants to mark this, those verbs take the series III, as the example in (20) shows.

- (20) *Kunatoi ani yaro yāhiki hanipema* .
Kunatoi =a =ni yaro yāhi ki= hani =pi =ma
 Kunatoi =SG =ERG animal meat PL= cut =PFV3 =PST
 ‘Kunatoi cut a piece of meat [and gave it] to me.’

If the recipient and the agent is the same participant (21a), or when there is no transfer involved in the event, the verb takes the marker of the series I (21b).

- (21) a. *ya riā ha turumani , papeo ya*
ya= riā= ha= turuma =ni papeo ya=
 1SG= VOL= REL.PST= write =REL.PST paper 1SG=
si ēkerema .
si= ēke =ri =ma
 CLN:large_surface= tear =PFV1 =PST
 ‘I tore a paper sheet to write.’

- b. *oxe thēpēni ipa ripro*
oxe =thē =pē =ni ipa ripro
 youngster =CLN.GNR =PL =ERG 1POS book
sipē ēkeraremahe .
si= pē= ēke =ra =ri =ma =he
 CLN:large_surface= PL= tear =DISTR =PFV1 =PST =3PL
 ‘The children tore my book.’

Other verbs that convey transfer can also codify the directionality of the exchange by the alternation=*ki* and =*pi*, including the verbs *hipii* ‘to give’ and *he torema* ‘to pass on’. In (22), we have two examples of the verb *mahi* ‘to lend’ being inflected with different perfective series.

- (22) a. *kama eha ya thē mahikema*
kama =e =ha ya= thē= mahi =ki =ma
 3 =DIF.PART =OBL 1SG= CLN.GNR= lend/borrow =PFV2 =PST

‘I lent it to him.’

- b. *wa thē mahipema* .
wa= thē= mahi =pi =ma
 2SG= CLN.GNR= lend/borrow =PFV3 =PST
 ‘You lent it to me.’

This alternation between the perfective markers to indicate the recipient of the exchange can still be observed with verbs that convey an immaterial transfer, like some verbs of communication, such as *noa thai* ‘to advise,’ *wěai* ‘explain, expound’ (23a), *hīrīmai* ‘to tell’ [lit. ‘to make listen’] (23b), and *thāa he toremai* ‘relay’ (23c).

- (23) a. *pei nee e waximipruu wei Okori*
pei nee e= waximi =pru =i =wei Okori
 INDEF his_mother DIF.PART= tired =DRV =DYN =NMLZ Okori
eha Ararima ani thāa
=e =ha Ararima =a =ni thā= ā=
 =DIF.PART =OBL Ararima =SG =ERG CLN.GNR= sound=
hīrimakema .
hīri =ma =ki =ma
 hear =CAUS =PFV2 =PST

‘Ararima told Okori (made her listen) that her mother fainted.’

- b. *nāa ari waximipruu wei Ararima*
nāa a= rĩ= waximi =pru =i =wei Ararima
 my_mother SG= HON= tired =DRV =DYN =NMLZ Ararima
ani thāa hīrimapema .
=a =ni thē= ā hīri =ma =pi =ma
 =SG =ERG CLN.GNR= sound hear =CAUS =PFV3 =PST

‘Ararima told me (made me listen) that my mother fainted.’

c. <i>ĩhĩ</i>	<i>thãaha</i>		<i>pata</i>	<i>thëpëni</i>		<i>ya</i>
<i>ĩhĩ</i>	= <i>thë</i>	= <i>ã</i>	= <i>ha</i>	<i>pata</i>	= <i>thë</i>	= <i>pë</i> = <i>ni</i> <i>ya</i> =
ANA	=CLN.GNR	=sound	=OBL	elder	=CLN.GNR	=PL =ERG 1SG=
<i>noa</i>	<i>thapema</i>		<i>he</i>			.
<i>noa</i> =	<i>tha</i>	= <i>pi</i>	= <i>ma</i>	= <i>he</i>		
V.PTC=	do; make	=PFV3	=PST	=3PL		

‘The elders of the village advised me about it.’

Verbs of motion or (*rërëi* ‘run’, *yëi* ‘fly’, *hërëi* ‘swim’, *tukuu* ‘run away’...) can also be inflected with morphemes of the series II and III. In these cases, the construction acquires the sense of ‘reaching a specific place (with a particular purpose)’. The same andative/venitive alternation can be attested in the choice between the inflection with series II and III. The selection between series II and III is based on the path of the movement, whether it is venitive or andative. The morpheme =*pi* (series III) is used when the speaker want to mark the direction of the predicate as venitive (24a), while =*ki* (series II) is used with andative directions (24b). The use of series I with these verbs indicates that there was no specific ending point for the motion activity. In these cases, the YMA sentence is frequently translated into English with the help of the adverbial word ‘away’, as in the example (24c)

(24) a. <i>mayapa</i>	<i>ya</i>	<i>uhurupëã</i>		<i>ha</i>	<i>uwëriini</i>	
<i>mayapa</i>	<i>ya</i> =	<i>uhurupë</i> =	<i>ã</i> =	<i>ha</i> =	<i>uwë</i>	= <i>ri</i> = <i>ni</i>
toucan	1SG=	son=	sound=	REL.PST=	imitate	=PFV =REL.PST
<i>pei</i>	<i>nee</i>	<i>yëpema</i>				.
<i>pei</i>	<i>nee</i>	<i>yë</i>	= <i>pi</i>	= <i>ma</i>		
INDEF	his_mother	fly	=PFV3	=PST		

‘After I had imitated the toucan chickens, their mother came flying (to the place where I was).’

b. <i>Kunatoi</i>	<i>ani</i>	<i>mayapa</i>	<i>uhurupëã</i>		<i>ha</i>	
<i>Kunatoi</i>	= <i>a</i>	= <i>ni</i>	<i>mayapa</i>	<i>uhurupë</i> =	<i>ã</i> =	<i>ha</i> =
Kunatoi	=SG	=ERG	toucan	son=	sound=	REL.PST=
<i>uwëriini</i>		<i>pei</i>	<i>nee</i>	<i>yëkema</i>		.
<i>uwë</i>	= <i>ri</i>	= <i>ni</i>	<i>pei</i>	<i>nee</i>	<i>yë</i>	= <i>ki</i> = <i>ma</i>
imitate	=PFV	=REL.PST	INDEF	his_mother	fly	=PFV2 =PST

‘After Kunatoi had imitated the toucan chickens, their mother flew [to the place where he was].’

c. *ya ha sërāmorini mayapa a*
ya= ha= sëra =mu =ri =ni mayapa a=
 1SG= REL.PST= bad_hunter =INTRZ =PFV =REL.PST toucan 3SG=
yërayoma .
yë =rayu =ma
 fly =PFV1 =PST

‘After I had missed the shot, the toucan flew (away).’

In (25), I present another instance of the alternation between series II and III with a verb that conveys motion.

(25) a. *maa a kei ha kuikini yano*
maa a= ke =i ha= ku =(i)ki =ni yano
 rain 3SG= fall =DYN REL.PST= exist =PFV2 =REL.PST house
aha oxe thëpë rërëkema .
=a =ha oxe thë= pë= rërë =ki =ma
 =SG =OBL youngster CLN.GNR= 3PL= run =PFV2 =PST

‘When the rain started, the children ran to the house.’ (I was not inside the house)

b. *maa a kei ha kuikini yano*
maa a= ke =i ha= ku =(i)ki =ni yano
 rain 3SG= fall =DYN REL.PST= exist =PFV2 =REL.PST house
aha oxe thëpë rërepema .
=a =ha oxe thë= pë= rërë =pi =ma
 =SG =OBL youngster CLN.GNR= 3PL= run =PFV3 =PST

‘When the rain started, the children ran to the house.’ (I was inside the house)

When a verb of motion is derived with *=pra*, the resulting form implies that the distance travelled by the participant in the depicted event is short. This derived stem

can only take the morphemes of the series II and III in perfective predicates, with the same andative/venitive alternation.

- (26) a. *kanaa aha Ararima a niaprakema* .
kanaa =a =ha Ararima a= nia =pra =ki =ma
 canoe =SG =OBL Ararima 3SG= shoot =DRV =PFV2 =PST
 ‘Ararima jumped into the canoe.’

- b. *kanaa aha Ararima a niaprapema* .
kanaa =a =ha Ararima a= nia =pra =pi =ma
 canoe =SG =OBL Ararima 3SG= shoot =DRV =PFV3 =PST
 ‘Ararima jumped into the canoe (I was in the canoe).’

The dynamic version of positional stems does not take series I as the unmarked choice. This type of dynamic version (change of position) takes =*ki* (series II) as their non-marked perfective morpheme. We have seen in Chapter 5 (§5.3.4), that positional stems in their stative version have an intrinsically intransitive argument structure. Interestingly, in perfective constructions of their dynamic version, many of those verbs may display either an inchoative (self-caused) (27a) or causative (other-caused) reading (27b), without the need for an overt derivation.

- (27) a. *ihã xoko nasi prakema* .
ihã xoko nasi= pra =ki =ma
 there lesser anteater bladder= lie =PFV2 =PST
 ‘[He] laid the ball down.’ (s_ball_alfr) (anteater's bladder = ball)

- b. *ihĩ tẽhẽ thuẽ arĩ rokema* .
ihĩ =tẽhẽ thuẽ a= rĩ= ro =ki =ma
 ANA =REL.PRS woman 3SG= HON= squat =PFV2 =PST
 ‘Then the woman sat down.’ (s_chck_anto).

In the elicited examples in (28), this labile feature of the dynamic version of positional stems is even clearer.

- (28) a. *uhuru a prakema* .
uhuru a= pra =ki =ma
 child 3SG= lie =PFV2 =PST
 ‘The child lay on the floor.’

- b. *uhuru yaa prakema* .
uhuru ya= a= pra =ki =ma
 child 1SG= 3SG= lie =PFV2 =PST
 ‘I laid the child on the floor.’

In their causative version, dynamic stems derived from positional ones can still take morphemes of series I and III, also to convey directionality. The use of series III indicates that the change of position is produced nearby, in the direction of or benefiting the speaker or a topicalized participant or even that it is carried out over the speaker/participant’s body, as the example in (29) indicates.

- (29) a. *heha wa uprapi* !
heha wa= upra =pi
 here 2SG= stand up =PFV3
 ‘Stand up over here!’

- b. *Okorima aha ripro a arapema* .
Okorima =a =ha ripro a= ara =pi =ma
 Okorima =SG =OBL book 3SG= be on sth =PFV3 =PST
 ‘He put the book over Okorima’s body.’

On the other hand, the use of series I with these stems also indicates venitive directionality, but in this case, the action is perceived as being performed by the speaker/participant herself. In (30) I present a pair of examples that shows the alternation between series I and II with a dynamic version of a positional stem.

- (30) a. *hutu ya sipē tuarema* .
hutu ya= si= pē= tua =ri =ma
 cassava_tree 1SG= CLN:palm_tree= PL= plant =PFV1 =PST

‘I planted my manioc.’

- b. *hutu ya sipě tuakema* .
hutu ya= si= pě= tua =ki =ma
 cassava_tree 1SG= CLN:palm_tree= PL= plant =PFV2 =PST
 ‘I planted manioc.’

In YMA there are several verbs indicates a “manner of wearing”, e.g. wear on the head, wear shoes, wear earrings. These verbs are prototypically positional stems in the language. In their causative version, the contrast between the three series is even more evident, as we can see by the examples in (31).

- (31) a. *ĩhĩ pěni saya pě thararemahe* .
ĩhĩ =pě =ni saya pě= tha =ra =ri =ma =he
 ANA =PL =ERG skirt 3PL= put =DISTR =PFV1 =PST =3PL
 ‘They put on skirts themselves.’ (PDYP_MIC_B_06_04)
- b. *kama pěha saya ya pě thaakema* .
kama =pě =ha saya ya= pě= tha =a =ki =ma
 3 =PL =OBL skirt 1SG= 3PL= put =DISTR =PFV2 =PST
 ‘I put skirts on them.’ (i.e. ‘I gave them’) (elicited)
- c. *ĩhĩ pěni saya pě thaapemahe* .
ĩhĩ =pě =ni saya pě= tha =a =pi =ma =he
 ANA =PL =ERG skirt 3PL= put =DISTR =PFV3 =PST =3PL
 ‘They put skirts on us.’ (i.e. ‘They gave us.’) (elicited)

In this section, I introduced the perfective markers of YMA and presented an overview of the patterns of meaning that the different series of markers produce when used with various types of verbs. I did not exhaust the subject, nevertheless. A more fine-grained study among other lexical domains of the language needs still to be done. I will come back to these perfective makers later in this chapter when discussing

associated motion categories in §6.6. We will see that these markers play a major role in the expression of these categories.

6.2.4. Durative =*ti*

The morpheme =*ti* adds a durative (32a), continuative (32b), or habitual (32c) meaning to the predicate where it appears. This marker does not coexist with perfective morphemes and only appears on imperfective or static predicates.

- (32) a. *apiama a ni tapotihe* .
apiama a= ni= ta =po =ti =i =he
 airplane 3SG= V.PTC= wait =CSVT =DUR =DYN =3PL
 ‘They kept waiting for the airplane.’ (PDYP_MIC_A_13_13)

- b. *ipa ya thëpë hiramai pihioṭi* .
ipa ya= thë= pë= hiramai pihi =o =ti
 1POS 1SG= CLN.GNR= 3PL= teach want =STV =DUR
 ‘I want to keep teaching my relatives.’ (PDYP_MIC_B_01_17)

- c. [*inaha*] *kami ya kuu paxioṭi* .
inaha kami ya= ku =i paxi =o =ti
 thereby 1 1SG= say =DYN be obvious =STV =DUR
 ‘I am obviously always saying [that].’ (s_oly_2A)

The durative morpheme precedes the past markers =*ma* or =*n* (33c), the directional and locational morphemes (33c), the positional =*a* (33d), and the dynamic =*i* (33a), but goes after the stative marker =*o* (33b). Note in (33a) that dynamic =*i* fully harmonizes with the vowel of the durative when attached to it.

- (33) a. *yama pë riã thatiṭi yaro* [...] .
yama= pë= riã= tha =ti =i =yaro
 1PL= 3PL= VOL= do; make =DUR =DYN =CNJ.EXPLV
 ‘For we want to keep making them.’ (PDYP_MIC_B_01_17)

b. *si marixi rakioti tēhē* [...]

si= mārixī raki =o =ti =tēhē

 CLN:small= sleepy lean =STV =DUR =REL.PRS

 ‘When it [the mouse] was leaning back asleep.’ (s_ms10_aroK)

c. *ya yurimotitayoma makii yuri*

ya= yuri =mu =ti =tayū =ma =makii yuri

 1SG= fish =INTRZ =DUR =LOC:not_far =PST =CONCS fish

yapē rēkēpranimi .

ya= pē= rēkē =pra =n =imi

 1SG= 3PL= pull =DRV =PST =NEG

 ‘I fished for a long time over there, but I did not get any fish.’

d. *heha ya tēkētia* .

heha ya= tēkē =ti =a

 here 1SG= sit =DUR =POST

 ‘I will be sitting here.’ (lit: ‘I am sitting here (+DUR).’)

The durative *=ti* may be found in independent and subordinate clauses. In subordinate clauses of time it appears with the connective *=tēhē* (PRES.REL), together with the andative *=huru* (34a)², or alone (34b). In these cases, *=ti* does not refer necessarily to an event with a long duration, but often just underlines the imperfective nature of the predicate. The event was still being performed or had not reached its logical end when the event of the next clause took place.

(34) a. *pē omai xoiatihuru tēhē*

pē= o =ma =i xoi =ti =huru =tēhē

 3PL= multiply =CAUS =DYN continue =DUR =DIR.AND =REL.PRS

 [...]

‘Afterward when [he] was multiplying them [...]’ (PDYP_MIC_B_10_02)

² Which acquires a progressive reading in this context.

b. *heami Papiu hami proro pë kiâtii tēhë* [...]

heami Papiu =hami proro pë= kiã =ti =i =tēhë

here Papiu =OBL miner 3PL= work =DUR =DYN =REL.PRS

‘When the miners had worked [+DUR] here in Papiu [...]’

(PDYP_MIC_B_01_17)

c. *mau upërĩ koatii tēhë ai kipë*

mau upë= rĩ= koa =ti =i =tēhë ai kipë=

water CLN:liquid= HON= drink =DUR =DYN =REL.PRS other DU=

pree rërëi notiai hetuki wei .

pree rërë =i noti =a =i hetu =ki =wei

also run =DYN follow =DISTR =DYN lay_above =PFV2 =NMLZ

‘While the old person was drinking water, the other two came running [after him].’ (s_ball_cesa)

6.2.5. Progressive =*imatayu*

This is also an imperfective marker. It differs from the durative =*ti* in implying telicity, i.e. that the depicted event not only lasts but produces changes in the participants’ state or has a definite ending point or limit. Thus it is not used with activity verbs. In (35) I offer some examples of this marker found in our corpus.

(35) a. *yamaki oimatayuu yaro* [...]

yamaki= o =imatayu =i =yaro

1PL= multiply =PRG =DYN =CNJ.EXPLV

‘For we are multiplying [ourselves].’ (PDYP_MIC_A_13_13)

b. *hei tēhë thë maimatayuu* .

hei =tēhë thë= ma =imatayu =i

this =REL.PRS CLN.GNR= not_exist =PRG =DYN

‘Now it is disappearing/dying out.’ (m007_geni_kona)

c. *thě haruimatayuu* .
thě= haru =imatayu =i
 CLN.GNR= dawn =PRG =DYN
 ‘It is growing light/dawning.’ (n021_yaaremape)

d. *awei hei tēhě thāa hototiimatayuu* .
awei hei =tēhě thā= ã= hototi =imatayu =i
 yes this =REL.PRS CLN.GNR= sound= short =PRG =DYN
 ‘Yes, the story is getting short now.’ (i.e. ‘it is finishing’) (n025_wake)

e. *ei thě hoximi kuaimatayuu* .
ei thě= hoximi ku =a =imatayu =i
 this CLN.GNR= bad exist =DRV =PRG =DYN
 ‘It is becoming worst / It is turning bad.’ (PDYP_MIC_B_08_01)

Because of its meaning, this marker is not compatible with positional and attributive stems in their static version. Only dynamic stems and dynamic versions of positional and attributive stems can coexist with the progressive. Although *=imatayu* can appear in predicates that explicitly refer to an event in the past (36), this marker is not attested with past *=ma*, nor with the *k*-words (see §11.2.1.1 and §11.3.5) which is the alternative device for explicitly marking past categories in the language. Note that all the examples in (35) have a present reading.

(36) *koraha kiki wakēimatayuu tēhě*
koraha kiki= wakē =imatayu =i =tēhě
 banana CLN:collective= red =PRG =DYN =REL.PRS
amatha pēni
amatha =pē =ni
 lowland paca; spotted paca =PL =ERG
kiki witiwaremahe .
kiki= witi =ra =ri =ma =he
 CLN:collective= bite =DISTR =PFV =PST =3PL

‘When the bananas were ripening, the agoutis nibbled them.’

As a final note, the morpheme *=imatayu* is not compatible with the locational markers *=harayu*, *=tayu*, *=kiri* and *=horo*.

6.2.6. Non-punctual or distributive morpheme *=ra* / *=a*

This morpheme expresses verbal plurality, in a broad sense. Different verb stems with different semantics give particular meanings to this form. It is used, for instance with verbs of transfer (*hipi* ‘to give’, *mahi* ‘to lend’, *topi* ‘to offer as gift’) to underline that several objects were involved in the transaction or that there were several beneficiaries or donators. In (37), I present two constructions of this type.

- (37) a. *porisa pēni kami yamakiha kōmi thēpē*
porisa =pē =ni kami =yamaki =ha kōmi thē= pē=
 policeman =PL =ERG 1 =1PL =OBL all CLN.GNR= 3PL=
hipiakemahe .
hipi =a =ki =ma =he
 give =DISTR =PFV2 =PST =3PL

‘The police officers gave everything to us.’ (PDYP_MIC_A_08_01)

- b. *waika pēni tēpē kikiha yamaki*
waika =pē =ni tēpē =kiki =ha yamaki=
 Waika person =PL =ERG glass bead =PL =OBL 1PL=
topiamahe .
topi =a =ma =he
 present =DISTR =PST =3PL

‘The Waika people presented us with glass beads.’ (PDYP_MIC_B_01_17).

The examples in (37) contrast with the examples in (38) where this marker is absent. It is worth mentioning that the marker could have appeared in both examples in (38), in which case it would have stressed that there was not a single action involved but a succession of them.

- (38) a. *uhea ya pë hipikema* .
uhea ya= pë= hipi =ki =ma
 hook 1SG= 3PL= give =PFV2 =PST
 ‘I gave away hooks.’ (m009_arok_mari).

- b. *Parikiheesi ni yamaki yai topima* .
Parikiheesi =ni yamaki= yai topi =ma
 Parikiheesi =ERG 1PL= true present =PST
 ‘Parikiheesi yai presented us [with glass beads].’ (PDYP_MIC_B_02_01)

The non-punctual/distributive *=a/=ra* can still be used with verbs with very different semantics, as the examples in (39) suggest. It seems also to indicate in most cases that there are multiple entities involved in the action or that the action was carried out in a succession of repeated actions. Note that the marker *=ra* appears only in perfective contexts with the perfective markers of the series I (39a), while the marker *=a* can appear in imperfective contexts (37b), and with the perfective morphemes *=ki* (series II) (37a)(39b) and *=pi* (series III) (39c).

- (39) a. *ĩhĩ tēhē kōa ayoki*
ĩhĩ =tēhē kōa āyo= ki=
 ANA =REL.PRS firewood CLN:firewood= PL=
tixitirarema .
tixiti =ra =ri =ma
 cut in pieces =DISTR =PFV1 =PST
 ‘Then [she] chopped the firewood in pieces [one after the other].’
 (s_chck_cesa)

- b. *kaxa pë riyë waakema* .
kaxa pë= riyë wa =a =ki =ma
 caterpillar 3PL= raw eat =DISTR =PFV2 =PST
 ‘He ate the caterpillars.’ (wtx_iwa)

c. *waato mahiha yãhiki*
waato mahi =ha yãhi= ki=
 in plain sight much =OBL meat= PL=
ihiapema
ihi =a =pi =ma
 carry =DISTR =PFV3 =PST

‘She unreservedly/openly [i.e. without hiding it] carried the pieces of meat over here.’ (wtx_terema)

When used with the inchoative version of attributive stems, the non-punctual/distributive *=ra* indicates that the whole entity was affected by a change of state, as in (40).

(40) a. *ĩhĩ tẽhẽ si kirirarioma*
ĩhĩ =tẽhẽ si= kiri =ra =rio =ma
 ANA =REL.PRS CLN:small= be_scared =DISTR =PFV1 =PST
 ‘Then the mouse got scared.’ (s_ms10_arok)

b. *ipa mau upẽ aurarioma*
ipa mau au =ra =rio =ma
 1POS water CLN:liquid clean =DISTR =PFV1 =PST
 ‘My rivers got [completely] clean.’

On a final note, the non-punctual/distributive morpheme is not compatible with the derivational morpheme *=pra*. The examples in (41) show this restriction. Note that the verb *xẽprai* ‘to kill’ (41a) is derived from the verb *xẽi* ‘to beat’, but it loses the derivational morpheme in (41b) when the clause is marked with non-punctual/distributive *=ra*.

(41) a. *ipa heriya*

ipa heriya

1POS my_brother-in-law

a xēpraremahe

a= xē =pra =ri =ma =he

3SG= beat; kill =DRV =PFV1 =PST =3PL

‘They [the miners] killed my brother-in-law.’ (PDYP_MIC_B_08_01)

b. *ipa pata pē xēraremahe*

ipa pata pē= xē =ra =ri =ma =he

1POS elder 3PL= beat; kill =DISTR =PFV1 =PST =3PL

‘They [the miners] killed my ancestors.’ (PDYP_MIC_A_14_02).

In this section, I presented a basic description of the non-punctual/distributive morpheme, mostly based on the analyses of spontaneous utterances. Nevertheless, more research still needs to be done on this morpheme from both a lexical and morphological perspective to better evaluate its inflectional or derivational status and describe all the meanings that it can convey with verbs of different semantic domains. In the next section, I will take up the description of the celerative morpheme *=ta*.

6.2.7. Celerative *=ta*

When an event takes place quickly (42a) or suddenly (42b), the predicate can be marked with celerative *=ta*. This morpheme can bound to transitive (42a) and intransitive (42b) stems. All tense-aspectual and directional markers go after the celerative.

(42) a. *poo a uhurupē tētariwei* [...]

poo a= uhuru =pē tē =ta =ri =wei

knife 3SG= child =VBLZ take =CEL =PFV1 =NMLZ

‘[She] quickly taking the small knife [...]’ (s_chck_anto)

b. *yamaki iatii tēhē a aa*
yamaki= ia =ti =i =tēhē a= a =a
 1PL= eat =DUR =DYN =REL.PRS 3SG= go =PFV.VWL
xoatarioma
xa =ta =rio =ma
 continue =CEL =PFV1 =PST

‘When we were eating, he suddenly left.’

This morpheme can also indicate that the event took place immediately after another one (43a), or that it had a short duration (43b). Note in (42a) and (43b) that the perfective marker *=rayu*, regularly used with intransitive stems, takes the allomorph *=rio* when associated with *=ta*.

(43) a. *oxe thēpēni yuri pē kāyo ha*
oxe =thē =pē =ni yuri pē= kāyo= ha=
 youngster =CLN.GNR =PL =ERG fish 3PL= APPL= REL.PST=
waroikihehi , pē wataremahe
waro =(i)ki =he =ni pē= wa =ta =ri =ma =he
 arrive =PFV2 =3PL =REL.PST 3PL= eat =CEL =PFV =PST =3PL

‘The children ate the fish immediately after they had arrived with them.’

b. *wamotima thēki uprapēha , si*
wamotima thē= ki= upra =pē =ha si=
 food CLN.GNR= 3PL= stand up =NMLZ =OBL CLN:small=
mamo rōrōtarioma
mamo rōrō =ta =rio =ma
 eye put_vertically =CEL =PFV1 =PST

‘The mouse [CLN *si*=] took a quick look to where the food was ‘standing up’ [the tree with fruits].’ (s_ms01_kami).

Interestingly, the causative/transitivizer *=ma* and the reflexive/intransitivizer *=mu* have different positions in relation to the celerative. This is one of the few contexts in which *=ma* and *=mu* do not display the same properties regarding their position in the verb phrase. The reflexive/intransitivizer *=mu* goes before the

celerative while the causative/transitivizer *=ma* goes after it, as shown by the examples in (44).

- (44) a. *hama pë ha waroikini*
hama pë= ha= waro =(i)ki =ni
 guest 3PL= REL.PST= arrive =PFV2 =REL.PST
ya pë iatamarema
ya= pë= ia =ta =ma =ri =ma
 1SG= PL= eat =CEL =CAUS =PFV =PST
 ‘I fed the visitors immediately after their arrival.’

- b. *ya ha waroikini ya*
ya= ha= waro =(i)ki =ni ya=
 1SG= REL.PST= arrive =PFV2 =REL.PST 1SG=
yãrimotarioma
yãri =mu =ta =rio =ma
 wash =INTRZ =CEL =PFV1 =PST
 ‘I washed up (myself) immediately after I had arrived.’

In sentences with an imperative reading, the celerative morpheme express the urgency of the order or request (45).

- (45) a. *wa upratario !*
wa= upra =ta =rio
 2SG= stand up =CEL =PFV1
 ‘Stand up immediately!’
- b. *Ararima eha hei*
Ararima =e =ha hei
 Ararima =DIF.PART =OBL this
wa thë hipitaketayu !
wa= thë= hipi =ta =ki =tayu
 2SG= CLN.GNR= give =CEL =PFV2 =LOC: not_far
 ‘Hand it to Ararima over there now!’

When used in subordinate clauses of time with the connective *=tēhē* ‘when, if’, the marker *=ta* indicates inceptivity, i.e. that the event has just begun to take place. In (46), I present two examples of this usage.

- (46) a. *pei ya poko ha uhuru ya a yērētai*
pei =ya =poko =ha uhuru ya= a= yērē =ta =i
 INDEF =1SG =arm =OBL child 1SG= 3SG= suspend =CEL =DYN
tēhē , a iki kukema .
=tēhē a= iki =i ku =ki =ma
 =REL.PRS 3SG= cry =DYN begin =PFV2 =PST

‘As soon as I held the child in my arms, she started crying.’ (dic_verbos)

- b. *kami yani mareā ya xi yipitai*
kami =ya =ni mareā ya= xi= yipi =ta =i
 1 =1SG =ERG metal_boat 1SG= CLN:canoe= lift =CEL =DYN
tēhē , a yopi mahioma .
=tēhē a= yopi mahi =o =ma
 =REL.PRS 3SG= hot much =STV =PST

‘When I lifted the pot, [I realized that] it was very hot.’ (dic_verbos)

With celerative *=ta*, we close this section on the tense and aspectual markers found in the declarative main clauses in YMA. I showed that some of these morphemes can also appear in subordinate clauses. I did not deal with several other markers that are used exclusively in subordinate clauses, which will be the subject of a future study. In the next section, we will discuss the markers that indicate that the clause must be read as having an irrealis mood.

6.3. Irrealis mood markers

6.3.1. Future irrealis *=pē*

This morpheme can be used to express a variety of irrealis mood categories. It is used, for instance, to indicate potential mood, i.e. that an event is likely to come about in the future according to the speaker evaluation (47).

- (47) a. *heha kariperu pë kiai kōopë* .
heha kariperu pë= kia =i kō =o =pë
 here miner 3PL= work =DYN again =STV =FUT

‘The miners will end up working here again.’ (m004_paya_gari) (Note: the speaker had just said that the borders of the Yanomami territory were weakly protected)

- b. *thë titirayopë* .
thë= titi =rayu =pë
 CLN.GNR= night =PFV1 =FUT
 ‘It is going to get dark.’

This morpheme can also be found in sentences with co-hortative (48a-b) or hortative readings (48c).

- (48) a. *ei yaha thëi tihiapë*
ei yaha= thë= i= tihia =pë
 this 1DU= CLN.GNR= DIM= eat with cassava =FUT
 ‘Let’s eat it with cassava.’ (PDYP_01_53)

- b. *hena tēhë yaha hi tiyëprapë* .
hena =tēhë yaha= hi= tiyë =pra =pë
 in the morning =REL.PRS 1DU= CLN:tree= cut_down =DRV =FUT
 ‘Let’s cut down [this] tree tomorrow.’ (n007_nara)

- c. *pei nee eni a kâyō yipimopë*
pei nee =e =ni a= kâyō= yipi =mu =pë
 INDEF mother =DIF.PART =ERG 3SG= APPL= lift =INTRZ =FUT
 ‘Let her menstruate with her mother.’ (n017_thuehaiprari)

One very productive type of sentence with this morpheme is illustrated by the examples in (49), in which the event marked with *=pë* is the purpose of the event depicted in the following (49a) or previous (49b) clause. This is one of the few types

of multiclausal constructions that dispense with any extra morpheme to connect the two clauses.

- (49) a. *hei ripro pei yama kiki riã thaprapẽ*
hei ripro pei yama= kiki= riã= tha =pra =pẽ
 this book INDEF 1PL= CLN:collective= VOL= do; make =DRV =FUT
ei wamakiã hamai .
ei wamaki= ã= ha =ma =i
 this 2PL= sound= speak =CAUS =DYN

‘Because we want to produce books is that we are making you speak (i.e. tell the stories you know).’ (PDYP_MIC_A_16_01)

- b. *yãa yai hai pihio , wama thẽ*
ya= ã= yai ha =i pihi =o wama= thẽ=
 1SG= sound= true speak =DYN want =STV 2PL= CLN.GNR=
thai maapẽ
tha =i ma =o =pẽ
 do; make =DYN not_exist =STV =FUT

‘I really want to speak for you don’t do it.’ (m011_joan_tihi).

Some clauses marked with *=pẽ* can still be analyzed as subordinate clauses of result, as in (50a), or consequence, as in (50b).

- (50) a. *ei educação yama a atrpalhamai tẽhẽ ,*
ei educação yama= a= atrpalha =ma =i =tẽhẽ
 this education 1PL= 3SG= disturb =TRZ =DYN =REL.PRS
uti naha pi yamaki moyamia
uti =naha pi= yamaki= moyami =a
 INT.PRO =thereby FOC.INT= 1PL= be_smart =PFV.VWL
kurayopẽ tha ?
ku =rayu =pẽ =tha
 exist =PFV1 =FUT =PTC.INT

‘If we mess up our school/education, how will we get smarter?’
 (m007_geni_kona).

b. <i>uti</i>	<i>thëha</i>	<i>ware</i>	<i>ãha</i>	<i>thapë</i>	<i>tha</i>	,
<i>uti</i>	= <i>thë</i>	= <i>ha</i>	<i>ware</i> =	<i>ãha</i> =	<i>tha</i>	= <i>pë</i> = <i>tha</i>
INT.PRO	=CLN.GNR	=OBL	1SG=	sound=	do; make	=FUT =PTC.INT
<i>kami yani</i>	<i>kaho wa</i>	<i>ãha</i>	<i>haimaimi</i>			?
<i>kami</i>	= <i>ya</i>	= <i>ni</i>	<i>kaho wa</i> =	<i>ãha</i> =	<i>hai</i>	= <i>ma</i> = <i>imi</i>
1	=1SG	=ERG	2	2SG=	sound=	pass through =CAUS =NEG

‘Why would you ‘make my name’ (comment about me), [if] I do not say yours?’ (m006_aro_k_mari)

On a final note, Ramirez (1994: 312) gloss this marker as future tense. Maybe this is only a minor terminological disagreement. Indeed, the *irrealis* or *realis* nature of the future tense seems to rely on the perception of the speaker on whether her statement is rather an expression of a plea, wish, desire, warning or order than an actual prediction of what is going to happen (Fleischman, 1982: pp. 18-19, 86-89, and 95-97). I believe that this is very difficult to assess, though, if not impossible. I prefer to consider this marker an irrealis mood morpheme since its meanings are often more closely related to mood categories than tense ones, as the examples above showed. Its gloss as future is just for the sake of the brevity.

6.3.2. Volitional *riã*=

Differently to most of the morphemes described in this chapter, volitional *riã*= is not an enclitic from Cluster C but a proclitic from Cluster B. This morpheme is used to indicate that the event is a desire or an intention of the participant and does not imply that it took place or will take place necessarily. In (51), I present examples of this marker in use.

(51) a.	<i>kaho</i>	<i>wamaki</i>	<i>ya</i>	<i>thë</i>	<i>riã</i>	<i>hĩrĩmama</i>	.
	<i>kaho</i>	<i>wamaki</i> =	<i>ya</i> =	<i>thë</i> =	<i>riã</i> =	<i>hĩrĩ</i>	= <i>ma</i> = <i>ma</i>
	2	2PL=	1SG=	CLN.GNR=	VOL=	hear	=CAUS =PST

‘I wanted to make you hear it.’ (m003_manu_gari)

b. *inaha ya riã kuati yaro [...]*

inaha ya= riã= ku =a =ti =yaro

thereby 1SG= VOL= exist =POST =DUR =CNJ.EXPLV

‘For I want to continue to be like this [...]’ (PDYP_MIC_A_02_11)

This morpheme can appear in main clauses, as (51a), but it is more frequently observed in subordinate clauses of time in combination with the sequential (relative past) morphemes *ha=...=ni*. This construction has a purposive reading, as the example in (52) suggests.

(52) a. *ureme riã ha haniprani a*

ureme riã= ha= hani =pra =ni a=

throat VOL= REL.PST= cut =DRV =REL.PST 3SG=

huwërema [...]

huwë =ri =ma

grab =PFV1 =PST

‘[First] wanting to cut its neck [the chicken’s neck], [she] grabbed it.’

(s_chck_batm)

b. *ahõi siki riã ha hoyani kipë*

ahõi si= ki= riã= ha= hoya =ni kipë=

rice CLN:small= PL= VOL= REL.PST= throw away =REL.PST 3DU=

yërayoma .

yë =rayu =ma

fly PFV1 =PST

‘[First] wanting to drop the [bags of] rice, they two flew/took off.’

(PDYP_MIC_A_01_42)

This combination between volitional *riã=* and the relative past morphemes (*ha=...=ni*) also appears in questions about the intention of a person. The verb ‘*thai*’ is often used in these interrogative constructions, as in (54).

- (53) *ĩhĩ uti thë riã ha thaheni*
ĩhĩ uti thë= riã= ha= tha =he =ni
 ANA INT.PRO CLN.GNR= VOL= REL.PST= do; make =3PL =REL.PST
pi a hipikemahe ?
pi= a= hipi =ki =ma =he
 FOC.INT= 3SG= give =PFV2 =PST =3PL

‘They gave it waiting to do what in the first place?’ (PDYP_MIC_B_09_01)

As we saw in Chapter 5 (§5.5.2), the morpheme *riã=* appears as a verbal particle in the formation of all attributive stems that express a smell. In (54), I present a few examples of this morpheme in words that express smell. When used as a verbal particle, the morpheme occupies the same position that it does when used as a volitional marker. The data I have now do not allow me to determine which form has the original and which one has the extended meaning, nor to elaborate a hypothesis that explains the path of grammaticalization from one to another.

- (54) a. *riã= hitharĩ* ‘to stink’
 b. *riã= nãxirĩ* ‘to smell alcohol’ (lit. ‘to smell bitter’)
 c. *riã= ketetirĩ* ‘to have a good smell’ (lit. ‘to have sweet smell’)
 d. *riã= riãrĩ* ‘to smell good’

We will move on to the next section now where I will discuss the use of another irrealis mood morpheme, the conditional marker *xa=*.

6.3.3. Conditional *xa=*

Like the volitional *riã=*, the irrealis conditional mood marker *xa=* is also a proclitic from Cluster B. It is used to indicate that the realization of an event is conditioned by the occurrence of another event. This marker appears primarily in main clauses frequently preceded by subordinate clauses with *=tëhë* ‘when, if’, as shown in the examples in (55).

- (55) a. *hei tēhē yamaki noa thayuu maa*
hei =tēhē yamaki= noa= tha =yu =i ma =o
 this =REL.PRS 1PL= V.PTC= talk =RECP =DYN not_exist =STV
tēhē , yamaki xa= mohotioti .
=tēhē yamaki= xa= mohoti =o =ti
 =REL.PRS 1PL= COND= stupid =STV =DUR

‘If we do not talk to each other now, we will then continue to act like/to be ignorant.’ (m003_manu_gari)

- b. *inaha yama thē thai tēhē yamaki xa=*
inaha yama= thē= tha =i =tēhē yamaki= xa=
 thereby 1PL= CLN.GNR= do; make =DYN =REL.PRS 1PL= COND=
nomaimi .
noma =imi
 die =NEG

‘If we do like that, we will not die then.’ (m004_paya_gari)

- c. *ihĩ tēhē ya nakanoohe tēhē*
ihĩ =tēhē ya= naka =no =o =he =tēhē
 ANA =REL.PRS 1SG= call; ask =RESULT =STV =3PL =REL.PRS
ya xa= nokaa mahiã xaariki .
ya= xa= noka =a mahi =ã xaari =ki
 1SG= COND= follow =PRF.VWL much =PRF.VWL right =PFV2

‘If they invite me, only then I will certainly follow you [to your house].’
 (wtx_sinaheoma).

This morpheme is also used to corrective sentences, i.e. when the speaker wants to rectify someone else’s or her own statement, as in (56). In these cases, the correct information is the “condition” that makes the statement true and explains the use of *xa=* in the clause. In this context, the morpheme can be regarded as an expletive or assertive marker.

(56) a. *aurima upë xĩnaru aurima yama upë*
au -rima upë= xĩnaru au -rima yama= upë=
 clean NMLZ CLN:liquid= cotton clean NMLZ 1PL= CLN:liquid=
xa= rēpoma .
xa= rē =po =ma
 COND= wear =CSVT =PST

‘The white one, we did wear the white one (i.e. not of other colors).’

(PDYP_MIC_B_03_18)

b. *kami yani ya kiki xa= toanimi*
kami =ya =ni ya= kiki= xa= toa =n =imi
 1 =1SG =ERG 1SG= CLN:collective= COND= take =PST =NEG

‘I did not take them (i.e. others did, or you are saying that I did, but I did not)

(PDYP_A-03_18)

c. *ihã wa xa= nomaharayuu* .
ihã wa= xa= noma =harayu =i
 there 2SG= COND= die =LOC:upriver =DYN

‘There you can get drunk (not in another place).’ (m006_arok_mari) (note:
 ‘to die’ = ‘to get drunk’)

As a final comment, the conditional *xa=* has the same form as the interrogative permissive *=xa* (‘Can I eat this?’), even though the two markers are attached in different positions in the predicate and on different sides (one is a last-position enclitic and the other a proclitic). I am not sure whether they share a common origin, but I tend to believe that they do, given the semantic overlap between them. More research is needed before we can answer this question.

6.4. Locational markers

In YMA, there is a set of four morphemes used in independent and many dependent clauses to indicate the location where an event takes place. Table 6.2 presents these locational markers.

Table 6.2 – Locational markers

Marker	Meaning
= <i>tayu</i>	a bit far away
= <i>harayu</i>	upriver, on the other side of the river bank, or in a higher position
= <i>kiri</i>	downriver
= <i>horo</i>	in a house, at home

Three of these markers are deictic, i.e. they indicate the place in relation to the first person and have the nearby river as a parameter. These markers are =*kiri* for events that take place down the river (57a), =*harayu* for events occurring upriver or at the same level but on the other river bank (57b), =*tayu* for events that happen not too far away and on the same river bank (57c).

- (57) a. *ihã a harou kōōkirimā* .
ihã a= haro =i kō =o =kiri =ma
there 3SG= heal =DYN again =STV =LOC:downriver =PST
‘Down there he regained his health again.’ (n19_tixonari)
- b. *kiha Tērēma a hēpēpē piriāharayaa* .
kiha Tērēma a= hēpēpē piri =a =haraya =a
there Tērēma 3SG= blind lie =POST =LOC:upriver =POST
‘Tērēma lives up there blind.’ (i.e., ‘Tērēma lives up there and is aged now’)
(n012_yoteanari)
- c. *īha ipa yano a kuatayaa* .
īha ipa yano a= ku =a =taya =a
there 1POS house 3SG= exist =POST =LOC:a_bit_faraway =POST
‘There my house exists.’ (n006_masipe)

The only non-deictic locational morpheme is *=horo*, which indicates that the action takes place at home or in a building, as shown in the example in (58).

- (58) a. *ihami tēpē pē hami yamaki topiai*
ihami tēpē =pē =hami yamaki= topi =a =i
 there glass bead =PL =OBL 1PL= present =DISTR =DYN
xoahoromahe
xoa =horo =ma =he
 continue =LOC:arriving_home =PST =3PL

‘They presented us there at their house with glass beads.’

(PDYP_MIC_A_01_17)

- b. *kīpēriā iamahōrōu wei*
kīpē= riā= ia =ma =hōrō =i =wei
 3DU= VOL= eat =PST =LOC:arriving_home =DYN =NMLZ
urihi ha yaro pē ripiprai xoa
urihi= =ha yaro pē= ripi =pra =i xoa =o
 CLN:forest= =OBL animal 3PL= cooked =DRV =DYN continue =STV
wei
=wei
=NMLZ

‘Wanting to feed [at home] his two relatives, he cooked the meat in the forest.’ (wtx_iwa)

The example in (59a) shows that the place of reference can be any building. In (59b), we have a hypothetical ungrammatical example with a location of reference that is not a building.

- (59) a. *posto hami ya ha waroikini ya*
posto =hami ya= ha= waro =(i)ki =ni ya=
health_center =OBL 1SG= REL.PST= arrive =PFV2 =REL.PST 1SG=
kīa xoamarehorma
kīa =a xoa =ma =ri =horo =ma
 work =PFV.VWL continue =CAUS =PFV =LOC:arriving_home =PST

‘They made me work just after I had arrived in the health center.’

b. * *hutukana hami ya ha waroikini ya*
hutukana =hami ya= ha= waro =(i)ki =ni ya=
garden =OBL 1SG= REL.PST= arrive =PFV2 =REL.PST 1SG=
thëpë kĩa xoamare
thë= pë= kĩa =a xoa =ma =ri
 CLN.GNR= 3PL= work =PFV.VWL continue =CAUS =PFV
horoma .
 =horo =ma
 =LOC:arriving_home =PST

‘I made them work after I had arrived in the garden.’

As discussed in Section §5.3.6, only dynamic and positional stems can take the relative location markers. Attributive stems in their stative version do not co-occur with these markers (60).

(60) a. * *ipa hutukana hami ipa koraha wakëtayaa* .
ipa hutukana =hami ipa koraha wakë =**taya** =a
 1POS garden =OBL 1POS banana ripe =**LOC:not_far** =POST

‘My bananas are ripe over there in the garden.’

b. *ipa hutukana hami ipa koraha wakëtayuu* .
ipa hutukana =hami ipa koraha wakë =**tayu** =i
 1POS garden =OBL 1POS banana ripe =**LOC:not_far** =DYN

‘My bananas are ripening over there in the garden.’ (not ‘My bananas are ripe over there in the garden’)

The stative vowel =o is attached to the verbal phrase before the locational markers, as shown in the examples in (61).

(61) a. *ĩhĩ tēhē kama aha pē mamo*
ĩhĩ =tēhē kama =a =ha pē= mamo
 ANA =REL.PRS 3 =SG =OBL 3PL= eye
xatiohoro .
xati =o =horo
 stick =STV =LOC:arriving_home

‘Then [he] observed him at home.’ (PDYP_MIC_A_07_19)

- b. *pata thēpē* *piriotayu* *tēhē*
pata thē= *pē= piri =o* *=tayu* *=tēhē*
 elder CLN.GNR= 3PL= lie =STV =LOC:a_bit_faraway =REL.PRS
 ‘When the elders/ancestors were living over there [...]’ (wtx_terema)

Note in (62) that the imperfective dynamic *=i* goes after the locative markers and harmonizes with the last vowel of two of them (*=harayu* and *=tayu*).

- (62) a. *thēki* *hēkaharayu* *tēhē* [...]
thē= *ki= hēka =harayu* *=i* *=tēhē*
 CLN.GNR= PL= pick =LOC:upriver =DYN =REL.PRS
 ‘While he was picking them [the fruits] up there [...]’ (s_pear_marc)

- b. *ai ahōi kiki*
ai ahōi kiki=
 other avocado CLN:collective=
titipotayuu *wei* [...]
titi =po =tayu *=i* *=wei*
 insert =CSVT =LOC:a_bit_faraway =DYN =NMLZ
 ‘Other avocados that he was keeping inserted [...]’ (s_pear_cesa)

Quite interestingly, the positional morpheme *=a* is doubled when there is a locational marker in the phrase. This is one of only two contexts in the language where we can find such a reduplication of the positional morpheme. The other context is serial verbs constructions, as we will see in Chapter 10 (§10.4).

- (63) a. *wārapata kana* *he*
wārapata kana= *he=*
 old CLN:garden= V.PTC=
tēkēataya .
tēkē =a *=tayu* *=a*
 sit =POST =LOC:a_bit_faraway =POST

‘The old garden ‘sits’ there.’ (PDYP_MIC_A_05_22)

- b. *ai apiama a praaharaya kiha* .
ai apiama a= pra =a =harayu =a kiha
 other airplane 3SG= lie =POST =LOC:upriver =POST there
 ‘There is another plane lying up there.’ (PDYP_MIC_A_01_28)

- c. *heami napē pē piriakiria* .
heami napē pē= piri =a =kiri =a
 here white person 3PL= lie =POST =LOC:downriver =POST

‘Here the white people live down the river.’ (PDYP_MIC_B_12_05). (Note: the speaker says “here,” he is pointing to place on the map that he had drawn on the floor).

These morphemes can co-occur with perfective (64a-b), and imperfective markers (64c).

- (64) a. *rima ani wa eāha*
rima =a =ni wa= e āha=
 rasp =SG =INS 2SG= DIF.PART sound=
paxapraretayu .
paxa =pra =ri =tayu
 carve =DRV =PFV =LOC:not_far

‘Carve his name with the rasp.’ (PDYP_MIC_A_05_27).

- b. *kiha kipē rērērayotayu wei [...]*
kiha kipē= rērē =rayu =tayu =wei
 there 3DU= run =PFV1 =LOC:not_far =NMLZ

‘They two ran over there [...]’ (n008_omama).

c. *kama kariperu pë yanopëhami wamaki*
kama kariperu pë= yano =pë =hami wamaki=
3 miner 3PL= house =VBLZ =OBL 2PL=
kiãkiriĩ .
kiã =kiri =ĩ
work =LOC:downriver =DYN
‘You [should] work downriver in the house of the miners.’ (m004_paya_gari)

Finally, when used with perfective markers non-deictic locational =*horo* ‘arriving home’ conveys non-simultaneous associated motion, i.e. it indicates that something happened just after the arrival of the participant in the house, as we will discuss in §6.6.2.

6.5. Directional markers

Like locational markers, directional markers are also deictic and egocentrically oriented in YMA, i.e., they have the first person as a parameter to determine the direction of an event. In Table 6.3, I present the directional markers found in YMA.

Table 6.3 - Directional markers

Form	Meaning
= <i>huru</i>	andative
= <i>ima</i>	venitive
= <i>yu</i>	venitive or towards the place where the last event reported by the speaker was taking place
= <i>pohuru</i>	andative or towards a higher place

YMA is mostly satellite-framed as far as encoding path of motion is concerned (Talmy; 2000: 53-66). While manner of motion (run, walk, fly...) is mainly coded lexically, the direction of the motion is indicated by a set of directional enclitics (65a),

(65b) and (65c). When the verb stem appears without marking, the default direction is andative (65d).

- (65) a. *napë pë rërëimai* .
napë pë= rërë =ima =i
 white person 3PL= run =DIR.VEN =DYN
 ‘The white people are running over here?.’ [venitive]

- b. *napë pë rërëkiyoma* .
napë pë= rërë =ki =yu =ma
 white person 3PL= run =PFV2 =DIR.VEN2 =PST
 ‘The white people ran over here.’ [venitive] (with a defined objective)

- c. *napë pë rërëhuruma* .
napë pë= rërë =huru =ma
 white person 3PL= run =DIR.AND =PST
 ‘The white people ran (away from here).’ [andative]

- d. *napë pë rërëi* .
napë pë= rërë =i
 white person 3PL= run =DYN
 ‘The white people are running (away from here).’ [andative]

In their literal meaning, directional markers can only appear with some dynamic (66a-b) and a few irregular (66c) stems that refer to a manner of motion.

- (66) a. *hiima a hapa huimama* .
hiima a= hapa hu =ima =ma
 dog 3SG= before go =DIR.VEN =PST
 ‘First came a dog.’ (s_ms01_arok)

- b. *wa imimai* !
wa= imi =ima =i
 2SG= cross =DIR.VEN =DYN

‘Cross (+VEN) [the footbridge] (towards the speaker).’

(PDYP_MIC_A_18_02)

c. *thěpě* *tupohuruma* *makii* [...]
thě= *pě= tu* *=pohuru* *=ma =makii*
 CLN.GNR= 3PL= climb **=DIR.AND2** =PST =CONCS
 ‘Even though they had climbed [...]’ (n043_ware)

The two venitive markers are in complementary distribution based on the aspect of the clause. While the use of the venitive *=ima* is restricted to imperfect contexts, the directional *=yu* only appears with perfective markers, as in the examples in (67).

(67) a. [*misikreta*] *a* *pihi kăyo* *pree*
 misikreta *a=* *pihi=* *kăyo= pre*
 bicycle 3SG= APPL= APPL= also
warokiyoma .
waro *=ki* ***=yu*** *=ma*
 arrive =PFV2 **=DIR.VEN2** =PST
 ‘He also arrived here [riding a bicycle].’ (s_pear_batm2)

b. *hapaa* *těhě* *ipa* *thěpě* *yei xaari*
 hapa *=o* *=těhě* *ipa* *thě=* *pě= yei xaari*
 before =STV =REL.PRS 1POS CLN.GNR= 3PL= true straight
kukiyoma .
ku *=ki* ***=yu*** *=ma*
 exist =PFV2 **=DIR.VEN2** =PST

‘Erstwhile, my relatives rightly occupied/appeared/started to exist over here.’

(PDYP_MIC_A_MIC_17_01)

The andative *=huru* does not display such a restriction. It can be used either in imperfective predicates, as in (65c), or in perfective ones, as in (68).

- (68) *ihĩ tēhě a tukuraa**huruma*** .
*ihĩ =tēhě a= tuku =raa =**huru** =ma*
 ANA =REL.PRS 3SG= flee =PFV1 =**DIR.AND** =PST
 ‘Then [he] fled away/ran away.’ (s_chck_carl)

The directional =*huru* can still be used with a progressive meaning with verbs that express an accomplishment, such as a change of state (69).

- (69) *ihĩ tēhě ethě*
ihĩ =tēhě e= thě=
 ANA =REL.PRS DIF.PART= CLN.GNR=
*weya**huruma***
*weya =a =**huru** =ma*
 nightfall =DRV =**DIR.AND** =PST
 ‘Then it was getting dark.’ (wtx_iwa)

The directional =*pohuru* is used with a restricted set of irregular verbs that convey motion. In our corpus, this marker appears only with two verbs, *tuo* ‘to climb’ (70a) and *kōo* ‘to go back home’ (70b). This marker does not seem to be compatible with perfective markers.

- (70) a. *ihĩ tēhě a tua yapaa*
ihĩ =tēhě a= tu =a yapa =a
 ANA =REL.PRS 3SG= climb =PRF.VWL be_back =PRF.VWL
*kō**pohuruma*** [...]

*kō =**pohuru** =ma*
 again =**DIR.AND2** =PST

‘Then he climbing back again [the tree] [...]’ (s_chck_alfr)

- b. *ihĩ tēhě a kopohuruma* .
*ihĩ =tēhě a= ko =**pohuru** =ma*
 ANA =REL.PRS 3SG= go back home =**DIR.AND2** =PST
 ‘Then he went away.’ (s_chck_carl)

It is worth mentioning that the directional markers are not compatible with the locational ones, regardless whether they are being used as a directional or a progressive marker. This restriction applies to all directional markers.

On a final note, direction can also be expressed by the serial verb *yau/you*, whose literal meaning is ‘to be hanging’ or ‘to flow out’ (used with smoke, for instance). When used as a serial verb, however, the verb indicates that the event of the main predicate, which is frequently a motion verb, was carried out following or in the direction of a previously mentioned participant, as in the example (71). This verb is possibly the source of the directional enclitic with similar meaning, *=yu* of the examples (67). I am not sure, however, how this form came to be grammaticalized.

(71)	<i>a</i>	<i>rërëai</i>		<i>youkema</i>		<i>makii</i>	<i>karaka</i>
	<i>a=</i>	<i>rërë</i>	<i>=a</i>	<i>=i</i>	<i>you</i>	<i>=ki</i>	<i>=ma =makii karaka</i>
	3SG=	run	=DRV	=DYN	follow	=PFV2	=PST =CONCS chicken
	<i>ani</i>	<i>arĩ hëmakema</i>					.
	<i>=a</i>	<i>=ni</i>	<i>a=</i>	<i>rĩ=</i>	<i>hë</i>	<i>=ma</i>	<i>=ki =ma</i>
	=SG	=ERG	SG=	HON=	remain	=CAUS	=PFV2 =PST

‘(She) ran but the chicken left her behind (lit. made her remain).’

(s_chck_cesa)

I will show in the next section (§6.6) that the directional markers *=huru* (andative) and *=ima* (venitive) can also associate motion to motionless dynamic stems, i.e. behave like ‘associated motion’ markers. Furthermore, the use of the andative *=huru* with perfective markers indicates that the main event was followed by a subsequent andative movement, while the venitive *=yu* in the same context can indicate a prior movement associated to the main predicate.

6.6. Associated motion

This section describes the morphological expression of movement in predicates with non-motion verbs in Yanomama (YMA). *Associated motion* (AM), as the phenomenon has been labeled, is a feature that was first studied in some languages of Australia (Pama–Nyungan languages, see Koch, 1984; and Wilkins, 1991), and has

recently been proposed as distinctive of Western Amazonian languages (Guillaume, 2016). The feature is particularly widespread in Southwestern Amazonia, where many languages exhibit complex systems that make up to 12 distinctions of AM (Guillaume, 2011, 2016). Among the Yanomami family, spoken in the western part of the Guiana Shield (Northwestern Amazonia), simultaneous AM has already been reported in varieties of the Yanomami branch (see Ramirez, 1994:pp.288-293; and Lizot, 1996: p.136) and probably in Sanuma as well (Borgman, 1990)³. In those varieties, there are two (and up to four in Yanomami) directional morphemes that can be used with non-motion verbs to indicate both that there is AM and what the path of this motion is. YMA also displays cognate markers with similar usage as we saw in §6.5. In (72a), I present another instance of a directional marker conveying AM. However, we will see that YMA can still mark, by a combination of perfective and directional markers, AM that is prior or subsequent to the action of a non-motion verb. Moreover, I will claim that, with some verb stems, YMA allows the marking of AM that is both prior and subsequent to the action, a category rarely mentioned in the typology about AM (see Vuillermet 2012:93, Vuillermet 2013: 47 for examples in Ese'ejja). Syntactic devices, such as secondary predication (72b) and complementation (72c) can also convey similar meanings in the language, but these devices will not be subject of this chapter (see Chapter 10 for more these topics).

- (72) a. *inaha pei imini pora arĩ*
inaha pei imi =ni pora a= rĩ=
 thereby INDEF finger =ERG ball 3SG= HON=
xëimama .
xě =ima =ma
 beat; kill =DIR.VEN =PST

‘Like that, the man (+REV) came with his hand beating/bouncing the ball.’
 (s_ball_cesa) [morphological AM]

³ The data presented by Borgman is not entirely conclusive in this respect.

b. *a* *ikima* *kāyo rērēimama* *kami yahami*
a= *iki* =*ma* *kāyo*= *rērē* =*ima* =*ma* *kami* =*ya* =*hami*
 3SG= cry =LINK APPL= run =DIR.VEN =PST 1 =1SG =OBL

‘He came running towards me crying.’ (PDYP_MIC_A_05_02) [non-canonical secondary predication construction]

c. *a* *amoāmoma* *huimama* .
a= *amoāmu* =*ma* *hu* =*ima* =*ma*
 3SG= sing =LINK go =DIR.VEN =PST

‘He came to sing.’ [complementation/motion with purpose]

I will be strictly concerned with purely morphological mechanisms here and my description is organized as follows: in the next section (§6.6.1) the morphemes of simultaneous AM are presented. Non-simultaneous AM constructions are discussed in the following sections. YMA distinguishes three types of non-simultaneous AM: prior §6.6.2, subsequent §6.6.3, and both prior and subsequent to the action of the non-motion verb §6.6.4. We will see that in all constructions with the morphological marking of non-simultaneous AM, one of the perfective markers in Table 6.1 is involved. In §6.6.5, a summary of the morphology of AM in YMA is presented.

6.6.1. Simultaneous motion

We saw in §6.2.5 that both the andative morpheme =*huru* and the progressive marker =*imatayu* can be used with non-motion dynamic verbs to express progressive aspect. Nevertheless, this is not the only meaning they can convey. Indeed, both =*huru* and =*imatayu* are polysemous with non-motion verbs, possibly conveying progressive aspect or AM with andative deixis, as the examples in (73). The choice between one of the two morphemes is based on the tense-aspect markers that are present in the clause. While =*huru* appears mostly in past or perfective clauses, =*imatayu* occurs only in present ones.

- (73) a. *thuë thëpë herihuruma* .
thuë thë= pë= heri =hurū =ma
 woman CLN.GNR= 3PL= chant =DIR.AND =PST

‘The women kept singing and singing’ or ‘the women were singing (and moving away from the 1st person or a point of reference).’

- b. *thuë thëpë heriimatayuu* .
thuë thë= pë= heri =imatayū =i
 woman CLN.GNR= 3PL= chant =PRG =DYN

‘The women are singing and singing [progressively].’ or ‘Women are singing (and moving away from the 1st person or a point of reference).’

On the other hand, the use of the venitive marker =*ima* with non-motion verbs adds an unequivocal meaning of simultaneous AM to the predicate, with venitive deixis.

- (74) a. *pei thuwëpë eni kôa ayôki*
pei thuwëpë =e =ni kôa ayô= ki=
 INDEF wife =DIF.PART =ERG firewood CLN:firewood= 3PL=
yëřëpoimama .
yëřë =po =ima =ma
 suspend =CSVT =DIR.VEN =PST

‘His wife came carrying the firewood.’ (s_ckck_marc)

- b. *napë pë ã wayomayoi mai* .
napë pë= ã= wayoma =yu =ima =i
 white person 3PL= sound= talk =RECP⁴ =DIR.VEN =DYN

‘The white people are coming while talking to each other.’

⁴ The reciprocal =*yu* [=yo] and the perfective =*yu* [=yo] are homophones.

Venitive *=yu* is not attested for marking simultaneous motion in YMA. We will see in the next section, however, that this marker is used in association with perfective markers to indicate motion before the action.

6.6.2. Motion prior to the action

There are three possible ways of encoding motion before the action in YMA. With two strategies, the path of the AM is venitive.

The first strategy makes use of the perfective marker of Series III (*=pi*) alone, as in the example (25b). The prior AM meaning of this perfective marker probably came from its use as a directional marker in predicates with motion verbs. As seen in Section §6.6.1, ‘truly’ directional markers (*=huru* and *=ima*) also acquired the meaning of AM when used with some non-motion verbs. The same would have occurred with the marker *=pi*. As we discussed in §6.2.3, there are four series of perfective markers in YMA, which are used with different types of verb stems, or with the same type but yielding different meanings. The first series is the non-marked series for most verb dynamic stems, but they can still be inflected with the morphemes of the series II and III, acquiring the sense of ‘having reached a particular place (with a specific purpose)’. The choice between series II and III is based on the path of the movement, whether it is andative (series II) (25a), or venitive (series III) (25b).

I believe that the marker *=pi* has acquired its AM meaning with some stems from this use. One common type of verb stem that can get this AM reading when inflected with *=pi* is the dynamic version of positional stems. Positional stems in their dynamic version [change of position or placement] take series II (*=ki*) as their non-marked perfective morpheme. When series III inflects these stems, however, the literal meaning of the proposition implies that 1st person is the place where the object is placed by the agent. An extended (and more common) sense is that the entity is placed *nearby* 1st person, in opposition to the place where the agent was originally before having performed the action. This implicit movement conveyed by series III is often made explicit in the Portuguese translations given by the speakers to sentences with this marker.

- (75) a. *Okori ani hei mau husi papema* .
Okori =a =ni hei mau husi= pa =pi =ma
Okori =SG =ERG this bowl CLN:bowl= be on the floor =PFV3 =PST
 ‘Okori [came and] laid the gourd/bowl here on the floor.’ (Portuguese: ‘Okori veio e colocou a cuia no chão’)

- b. *Ararima ani kama rakama ethuku*
Ararima =a =ni kama rakama e= thuku=
Ararima =SG =ERG 3 hammock DIF.PART= CLN:hammock=
yãpema .
yã =pi =ma
be tied =PFV3 =PST
 ‘Ararima came, tied his hammock here.’ (Portuguese: ‘Ararima veio e amarrou sua rede aqui’)

The second strategy for marking prior AM is a combination of a perfective marker (series I or II) and venitive =*yu* (76). This construction and the construction with =*pi* produce sentences with similar meanings. The difference between the two is that there is often an implicit transfer of possession in predicates with =*pi* (X came and left Y *under the possession of* Z), while in predicates with =*ki*=*yu* this is not necessarily true.

- (76) a. *pirio wa yoka hehukiyu* .
pirio wa= yoka= hehu =ki =yu
door 2SG= CLN:door= close =PFV2 =DIR.VEN2
 ‘Come and close the door.’

- b. *Kunatoi a yurimokiyoma* .
Kunatoi a= yurimo =ki =yu =ma
Kunatoi 3SG= fish =PFV2 =DIR.VEN2 =PST
 ‘Kunatoi fished.’ (It implies that Kunatoi lives somewhere else and that he came and fished nearby)

c. *Okori ani hei mau husi*
Okori =a =ni hei mau husi=
Okori =SG =ERG this bowl CLN:bowl=

pakiyoma

pa =ki =yu =ma
 be on the floor =PFV2 =DIR.VEN2 =PST

‘Okori laid the gourd/bowl on the floor here.’ (It implies that first Okori was not there, but she came and brought the bowl)

If the agent (*Okori*) was not already nearby the speaker when she performed the action as in (76c), the sentence would be better formed with no directional, as in (77).

(77) *Okori ani hei mau husi*
Okori =a =ni hei mau husi=
Okori =SG =ERG this water CLN:bowl=

pakema

pa =ki =ma
 be on the floor =PFV2 =PST

‘Okori laid the gourd/bowl on the floor here.’

The third morphosyntactic context in which motion prior to the action is conveyed is when the locational marker *=horo* ‘at home, in a building’ appears combined with a perfective morpheme from series I or II. In these cases, the resulting construction indicates that the predicate inflected with this combination of morphemes was carried out by the participant just after he had arrived the house. In (78), I present two examples of this construction.

(78) a. *a taarohoroma*
a= taa =ro =horo =ma
 3SG= see =PFV1 =LOC:arriving_home =PST

‘[He] saw it at home [after arriving at home].’ (n035_amathayoma)

- b. *yuri hãrõ yakohoroma makii*
yuri hãrõ ya= =ko =horo =ma =makii
 fish wrapped 1SG= =PFV2 =LOC:arriving_home =PST =CONCS
 [...]

 ‘Even though he roasted the bag of fishes [just after arriving home] [...]’
 (n011_yoasiyaxuru)

In (79), I present a pair of apparently very similar constructions with actually very different meanings. The only formal difference between them is that in (79a) the predicate is inflected with the locational marker *=horo*, while in (79b) it is inflected with the directional marker *=huru*. While the clause with the locative morpheme expresses a predicate with prior motion associated with it, the clause with *=huru* (79b) conveys an AM after that predicate, as we will see in the next section.

- (79) a. “*awei ”, inaha a*
awei i =naha a=
 yes ANA =thereby 3SG=
kurayohoroma
ku =rayu =horo =ma
 exist =PFV1 =LOC:arriving_home =PST
 ‘He said “yes” after arriving home.’
- b. “*awei ”, inaha a kurayohuruma*
awei i =naha a= ku =rayu =huru =ma
 yes ANA =thereby 3SG= exist =PFV1 =DIR.AND =PST
 ‘He said “yes” and left.’

6.6.3. Motion subsequent to the action

The combination of a perfective marker of series I or II and the andative marker *=huru* yields the meaning of AM after the action depicted by the (non-motion) verb stem. As we saw, there is a general tendency for the positional stems in their dynamic version to take series II (80c-d), while the remaining dynamic stems prefer series I as their

unmarked version (80a-b). Both series combine with directional =*huru*. Note that the path of the AM is always andative.

(80) a. *a thomipirihuruma* .

a= thomi =pi =ri =huru =ma

3SG= steal =3DU =PFV1 =DIR.AND =PST

‘The two of them stole it (and went away).’ (s_ball_arir)

b. *xoko e nasi tērihuruma* .

xoko e= nasi= tē =ri =huru =ma

lesser anteater DIF.PART= bladder= take =PFV1 =DIR.AND =PST

‘Then he took his ball and went away.’ (s_ball_alfr)

c. *kama xaraka eki huhekuhuruma* .

kama xaraka e= ki= huhe =ku =huru =ma

3 arrow DIF.PART= PL= release =PFV2 =DIR.AND =PST

‘He put down his arrows and went away.’ (n_oly_02)

d. *ihĩ tēhē wakēri thakuhuruwei*

ihĩ =tēhē wakē= rĩ= tha =ku =huru =wei

ANA =REL.PRS CLN:fire= HON= put =PFV2 =DIR.AND =NMLZ

[...]

‘Then, putting the fire down and going away [...]’/‘Then, leaving the fire behind [...]’ (s_chk_anto)

6.6.4. Motion both prior and subsequent to the action

As seen in the subsection §6.2.3 the perfective marker =*pi* has a directional meaning (venitive) when inflecting motion verbs. When this inflected stem is further inflected with directional =*huru*, the proposition acquires an additional AM, which is subsequent to the action and has andative deixis. This combination (with this meaning) is only possible with some stems, being more common with positional stems in their dynamic version (change of position), as in the examples in (81).

- (81) a. *Okori ani hei mau husi*
Okori =a =ni hei mau husi=
Okori =SG =ERG this bowl CLN:bowl=

papahuruma

pa =pi =huru =ma
 be on the floor =PFV3 =DIR.AND =PST

‘Okori [came and] laid the gourd/bowl here on the floor and left.’

- b. *Ararima ani kama rakama ethuku*
Ararima =a =ni kama rakama e= thuku=
Ararima =SG =ERG 3 hammock DIF.PART= CLN:hammock=

yãpahuruma

yã =pi =huru =ma
 be tied =PFV3 =DIR.AND =PST

‘Ararima came, tied his hammock here, and left.’

6.6.5. Associated motion summary

We have seen that YMA has a reasonably sophisticated system for expressing AM morphologically. The language categorizes five basic types of AM: two distinctions are made for simultaneous motion, two distinctions for motion prior to the action (through three possible constructions), one for subsequent motion, and finally one distinction for AM that takes place before and after the action described by the non-motion verb. Simultaneous AM can be marked either as andative or venitive. While subsequent AM is always andative, AM before the action can be either venitive or non-deictic. The AM that is both prior and subsequent to the action has a venitive direction for the prior AM and a andative direction for the subsequent AM. In Table 6.4, I present a summary of the morphological mechanisms that may convey AM in the contexts described in this section.

Table 6.4 - Summary of the AM markers in YMA

Deixis	Simultaneous	Non-simultaneous		
		Prior	Subsequent	Prior and subsequent
Andative	<i>=huru</i>		<i>=rayu=huru</i>	
	<i>=imatayu</i>		<i>=ri=huru</i>	
			<i>=ki=huru</i>	
Venitive		<i>=pi</i>		
	<i>=ima</i>	<i>=ri=yu</i>		
	<i>=yu</i>	<i>=rayu=yu</i>		
		<i>=ki=yu</i>		
Venitive-andative				<i>=pa=huru</i>
Non-deictic (after arriving at home)		<i>=ri=horu</i>		
		<i>=rayu=horu</i>		
		<i>=ki=horu</i>		

6.7. Negation

In YMA, the negation morpheme is *=imi*. This marker can appear in predicates with all types of verb stems. In (82), we have predicates with negative polarity in the present with dynamic (82a), attributive (82b), positional (82c) and irregular (82d) stems. Note that, while the dynamic vowel *=i* is not compatible with *=imi* (82a), the positional and stative morphemes combine with the negation marker, which always goes after those morphemes (82c-d).

DYNAMIC

- (82) a. *inaha yama thë thaimi*
inaha yama= thë= tha =imi
 thereby 1PL= CLN.GNR= do; make =NEG
 ‘We don’t do it like that.’ (m006_geni_kona)

ATTRIBUTIVE

- b. *thãa rapaimi* .
thã= ã= rape =imi
 CLN.GNR= sound= long =NEG
 ‘The story is not long.’ (n035_amathayoma)

POSITIONAL

- c. a *tusi piriaimi* .
a= tusi= piri =a =imi
 3SG= scar= lie =POST =NEG
 ‘[He] is not alive with scars [i.e. he did not survive the accident and died].’
 (PDYP_MIC_A_13_03)

IRREGULAR

- d. *ĩhĩ tẽhẽ ya xĩro hixioimi* .
ĩhĩ =tẽhẽ ya= xĩro hixi =o =imi
 ANA =REL.PRS 1SG= single; alone angry =STV =NEG
 ‘Only then I am not angry.’ [i.e. ‘Only then will not be angry.’]
 (m006_arok_mari).

In predicates in the past, the negation marker *=imi* goes after the past marker *=ma*, which in this context take its allomorph *=n*, (83).

- (83) a. *ahõi ya siki toanimi* .
ahõi ya= si= ki= toa =n =imi
 rice 1SG= CLN:small= PL= take =PST =NEG
 ‘I did not take rice.’ (PDYP_MIC_A_03_18)

- b. *kīpē pihi kunimi* .
kīpē= pihi= ku =n =imi
 3DU= V.PTC:thought= exist =PST =NEG
 ‘The two of them did not think.’ (n032_omamayesie)

The predicates with the negation morpheme always have an imperfective aspect. The morpheme *=imi* is not compatible with any perfective marker. Only imperfective predicates can combine with *=imi*, such as the durative morpheme *=ti* in the examples in (84).

- (84) a. *yama thēki taatiimi* .
yama= thē= ki= taa =ti =imi
 1PL= CLN.GNR= PL= see =DUR =NEG
 ‘We did not see those things for a long time.’ (i.e. ‘they quickly took them away’) (PDYP_MIC_A_06_08)

- b. *kami yamaki mamō xatimapotiimi*
kami yamaki= mamō xati =ma =po =ti =imi
 1 1PL= eye stick =CAUS =CSV =DUR =NEG
 ‘[He] is not keeping his eyes on us.’ (m011_joan_tihi)

Finally, there are two strategies in YMA to negate a predicate, one by morphological means using the enclitic *=imi*, and another by lexico-syntactic means using a serial verb construction with the verb *maa* ‘NEG-EXIST’. Serial verbal constructions will be discussed in §10.4. In (85a), I present a predicate with negative polarity indicated by the morpheme *=imi*, and in (85b), the same sentence rephrased as a serial verb construction.

- (85) a. *xama ya a xēpranimi* .
xama ya= a= xē =pra =n =imi
 tapir 1SG= 3SG= beat; kill =DRV =PST =NEG
 ‘I did not kill a/the tapir.’

b. <i>xama ya a xëi</i>				<i>maama</i>			.
<i>xama</i>	<i>ya</i> =	<i>a</i> =	<i>xë</i>	= <i>i</i>	<i>ma</i>	= <i>o</i>	= <i>ma</i>
tapir	1SG=	3SG=	beat; kill	=DYN	not_exist	=STV	=PST
'I did not kill a/the tapir.'							

As the translations of the examples above suggest, there does not seem to be any semantic difference between the two constructions, even though there may be pragmatic ones yet to be investigated.

6.8. Final discussion

In this chapter, I offered an overview of the inflectional morphology that expresses tense, aspect, mood, location, direction, associated motion, and polarity in YMA predicates. We saw how the different types of verb stems of the language select different morphemes in similar contexts and how the same morpheme may have a specialized meaning with particular types of stems. This applies in particular to the aspect markers, which may add a variety of meanings to the predicate other than just perfectiveness or imperfectiveness, such as goal, purpose, or direction of exchange. We also saw how the combination of markers of different paradigms may be used to convey complex meanings, such as associated motion prior and after the primary action. However, a still more extense and fine-grained study with more verb stems of various semantic domains will certainly reveal even more complex constructions and specific meanings.

In the next chapter, I will move on to the description of a part of the inflectional morphology left out in this chapter: the person indexing system. I will deal with it alongside other morphosyntactic devices that indicate the grammatical relations of the predicate, namely word order and the case marking system.