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## Stephen C. Levinson

 A GRAMMAR OF YÉLí DNYETHE PAPUAN LANGUAGE OF ROSSEL ISLAND

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Stephen C. Levinson
A Grammar of Yélî Dnye

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# Stephen C. Levinson A Grammar of Yélî Dnye 

The Papuan Language of Rossel Island

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Dedicated to the memory of Isidore Yidika Wombodo tp:oo


The late Yidika Wombodo tp:oo, principal consultant, with the author, Christmas 2001

## Preface

Rossel Island has a certain fame despite its small size, small population and remote location. First, in anthropology it is well known as the home of an indigenous money system of unrivalled complexity. Malinowksi had hoped to work there, but the First World War put him under closer observation on the Trobriands. How different the history of anthropology might have been had he been placed amongst the Rossels, puritans, economists and philosophers of the Louisiades, instead of among the light-hearted, competitive, hierarchical Trobrianders. His linguistic gifts would certainly have put the language on the map. Instead, a remarkable ethnographer, later to be a professor of economics, Wallace E. Armstrong worked there in 1921, and published an ethnography which is quite extraordinary given the three odd months of fieldwork on which it was based. This highlighted the highly-developed indigenous shell-money system - since then a Danish anthropologist John Liep (2009) has corrected the record with a full-length monograph of his own. Neither of these anthropologists broke the language code. For the island has a second claim to fame: the Rossel language Yélî Dnye is renowned throughout Milne Bay Province as bizarre and unlearnable, so that it already attracted curious glances from a number of early New Guinea pioneers in linguistics like the Reverend Baldwin, although they left nothing but notes (see e.g. Capell n.d.; see also Capell 1969). The difficulties in reaching Rossel, 250 reef-strewn nautical miles off the mainland, have kept generations of the curious from its shores.

This is not the first grammar of Yélî Dnye - that honour belongs to Jim Henderson's (1995) Phonology and Grammar of Yele, Papua New Guinea, a work of a hundred pages packed with information. ${ }^{1}$ It is based on thirty years of experience that Jim and Anne Henderson have had translating the Bible into Yélî Dnye and promoting literacy in the language. It has proved a solid foundation on which to build, and I have been able to take over lock, stock and barrel the two most essential parts of that analysis - the phoneme inventory (with minor modifications) and the analysis of the verb complex. These are the two most complex parts of the language, and without that work, this one would not have been possible on any

[^0]reasonable timescale, if at all. This grammar absorbs most of the information in the earlier one, while being more explicit about many details and adding much richer information on sentence structure. I have tried to keep the terminology the same or similar to make it easy to compare the two works.

I have benefited in other ways too from the Hendersons' work. First, Jim shared with me his accumulation of handwritten verbal paradigms, which gave me a framework for later elicitation and saved years of fumbling in the dark. Secondly, I took over the first edition of the dictionary the Hendersons published, which allowed me to rapidly set up a glossing system for texts - since then I was able to contribute many hundreds of words to their second edition (Henderson \& Henderson 1999), partly I hope repaying the debt. Thirdly, I inherited some skilled collaborators, whom the Hendersons had trained to write and think about the language. Most important of these was Isidore Yidika, who served me, and this project, with extraordinary loyalty for more than 20 years, dropping all his other obligations at short notice to work with me whenever I was on Rossel. He was a man with only a few years' formal education who had that extraordinary and rare ability to examine a language inside his own head. He died before this grammar was quite complete, and it is dedicated to him. His son Ghaalyu helped in the final stages of its completion.

This work, which has been two decades in the making, would not have happened without the initial support and help of the Catholic Church and its MSC Missionaries (as I was privileged to be able to tell His Holiness the late John Paul in 1998). Bishop Desmond Moore arranged my first and many subsequent trips to Rossel. The late Brother Colin Milne was the essential facilitator in Alotau, arranging boats to my remote destination. Father Ensing based halfway at Nimowa helped me on my way many times, and we spent Cyclone Justin together in 1997, when the mission at Nimowa was almost totally destroyed and the mission on Rossel severely damaged, so that I spent a field season as an aid worker. The late Father Kevin English was my first host on Rossel, a man whose dedication to the people of Rossel is still legendary, and whose prowess on the steep and narrow paths of Rossel in his 80s I could not rival in my 40s. Following him, Father Michael Sims (the last Australian resident) likewise put all the resources of his mission at Jinjo at my service - without his radio, boats and generator, supplies and such, the logistics of work on Rossel would have been much more difficult for my first few fieldtrips. The dedication of the Catholic Mission to the peoples of the outer islands of the province was inspirational. In the last decade its material arm has been severely retrenched, with the loss of much infrastructure and regular shipping, but it continues to run the primary school and clinic in difficult circumstances.

In all the later years, I lived in the village of Wâpuchêdê, in the hamlet of Isidore Yidika Wombodo tp:oo, my principal consultant. He and his brothers provided land, built bush-material houses for myself and my wife Penelope Brown, maintained them, guarded our stockpile of solar panels and the like, and in general made work on Rossel possible. I owe a huge debt to his extended family for their generosity and their thoughtful hospitality.

Working on Rossel Island has been for me a wonderful experience - I mention this in the hope of inspiring other fieldworkers to work in the Papuan world, where a large proportion of the world's remaining language diversity now resides. As an undergraduate, I vividly recollect hearing Meyer Fortes, the great British anthropologist, telling of his wonder at first moving amongst the Tallensi: "Here was the Old Testament come alive". And so I felt on Rossel, in a fully functional 'tribal' society miraculously preserved into the $21^{\text {st }}$ century, where kinship and clanship are the backbone of the social system, where people routinely reckon ten generations back in genealogy, where there is little effective government presence, where subsistence methods are unchanged for millennia, and the things of the West have little importance. And what a rich world it is, in every way. A vast wealth of traditional knowledge, from fishing techniques to medicinal plants, from a huge mythology to a complex bilineal kinship system, from the intricacies of the shell money system to the complex beliefs behind the myriad sacred places on the island. And then there is the language, woven into all of this, constitutive of it in part, and flowing like a lifeblood into all these intricate social institutions. Here is a society of orators, with a rich ethnomusicology, native poetry, taboo vocabularies, divination sessions and enough complexity to fill the lives of many ethnographers of speaking. No one with a background in anthropology or linguistics could step on this enchanted island and not be in thrall for life.

I should say something about the aims of this grammar. In some ways it is a byproduct of work on particular aspects of the language motivated by cross-linguistic comparison in my research group at the Max Planck Institute for Psycholinguistics. Many of the finer analytical points made below would not have emerged without the use of detailed elicitation techniques developed for the study of semantic typology, and I owe a big debt to all my colleagues, past and present, who helped develop those techniques. For a number of good reasons this is not, or not only, a text-based grammar. It is informed by a very large corpus of spoken Yélî Dnye, including records of every language genre (from conversation to poetry to song to village courts to sorcery inquisitions) I have been able to record, but it is a language with both huge and systematic paradigms and nooks of horrible irregularity. A text-based approach would give one only fragments of this, and not allow one to get an overall picture of the maximal structure of the language - many aspects of that structure are arcane, or vanishingly rare in
production. I plan to make my text corpus available in some form in the future. But for comparative purposes we want a record of the maximal structure, what is grammatically possible and how it would be said, and for this language that means extensive reliance on informant work. Consequently, the reader will find tables of paradigm after paradigm - it is simply that kind of language. I have tried to be generous in exemplification (though it would be impossible in reasonable bounds to exemplify each of the interacting myriad forms), in part because there are so many distinctions it would be hard for the reader to compute even the simplest sentence correctly. Further the examples make clear the distributed nature of grammatical coding in this language - a paradigm is reflected not in the morphology of one part of a sentence but distributed throughout it. Because of the extraordinary complexity of the language and the huge paradigms, this record must be assumed to be flawed and incomplete - it will take a native-speaker linguist to finish the job, and for that we may have to wait a generation or two.

I should record that this grammar reflects a remarkable partnership between me and Yidika Wombodo tp:oo. The last white missionary, Father Michael Sims, seeing us hard at work for 10 hour days in a very un-Melanesian fashion, used to joke that I was downloading Yidika's mind, and who was to say whether his Yélî Dnye was representative. Yidika developed a quite remarkable ability to rattle off paradigms, though checking them was more painful. It could take a week or more to be confident that a single paradigm was basically sound, and then the collection of plenty of textual exemplification (the control on Yidika's representativeness) before I felt sure we had cracked it. Few people in any world would have had the patience and intellectual stamina for this. Really, this grammar is at least as much his as mine, but because he would not have been able to follow what I have made of his material, I alone must take the blame for all the inevitable mistakes. So it appears under my name, but with a dedication to him.

I have not included more than a small sample (Appendix II) of the customary sample glossed texts (except passim as illustrations of points of grammar), nor a word list, for reasons of space and cost, but glossed samples and a working Toolbox lexicon will be found archived under a persistent identifier. ${ }^{2}$

Finally, a number of colleagues have read this grammar and given me helpful hints and corrections. I am grateful to Gunter Senft, Ger Reesink, Penelope Brown and Harald Hammarström for extensive comments. I was fortunate to have reviewers steeped in both the area and the typological literature: Nick Evans, Bernard Comrie, and Bruno Olsson. I had early help on the formatting from Edith Sjo-

[^1]erdsma and Ludy Cilissen. Last, I was lucky enough to have Angela Terrill, both an expert in off-shore Papuan languages and typology, help in the final preparation of the MS for the press. They all hugely improved the manuscript - remaining faults are mine.

The research was funded by the Max Planck Society and facilitated by the National Research Institute, Port Moresby, and I am particularly grateful to Jim Robins and Georgia Kaipu at the NRI for organizing visas and permissions over many years.

## Note to the Reader

A basic typological outline can be found in Chapter 2. Topics of special interest for typologists include the phonology (Ch. 3), ergativity (Ch. 9), negation (Ch. 10) and semantic fields (Ch. 11), while the rest of the grammar will provide the normal grist for the typological mill. Discussion of the extensive morphology - or rather the clitic-like equivalent - will be found in Chapters 6-8. Throughout, I have tried to provide copious examples, partly so that readers can check the analysis themselves, partly because in a language of this complexity the possibility of re-analysis has to be allowed for. Impatient readers can just examine the first examples of a construction or paradigm and pass on. What this grammar does not capture at all is the very special character of verbal interaction on Rossel, with its intensive use of gesture and facial expresssion (see Levinson 2005, 2007b, 2015, Levinson \& Majid 2013). A single short text will be found in Appendix II. Extensive video and text collections will be made available at The Language Archive, Max Planck Institute for Psycholinguistics, Nijmegen, The Netherlands. ${ }^{3}$

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## Conventions

Apart from the orthography which is described in Chapter 3, the following are the main conventions employed. Although I have employed an automatic glossing program (Shoebox 5.0) for the preparation of texts, I have in the end here used a sentence by sentence annotation system. This is to reduce the clutter on the page, and highlight just the relevant points. Many forms, especially inflectional clitics, have dense and polysemous meanings, each requiring almost a line of gloss, of the kind:
(1) pênmî
$1^{\text {st }}$ Person Plural Present or Immediate Past Continuous Aspect Indicative Mood Counterfactual Conditional Consequent

A few of these quickly reduce readability to zero. Thus I have used a reduced system of the kind illustrated here,
(2) ma wunê dpodo, pênmî
yesterday CFAnt1plNrPSTCI working CFCons1plNrPSTCI
mbwaa ndanî
water drinking
'If we3 (yesterday) had been working, we3 would have been drinking beer (yesterday)' (Near Past)
often ignoring polysemous meanings irrelevant to the context - all the meanings of various morphemes would take lines of gloss.

The glosses involved are a compromise between those used in Henderson (1995) and the Leipzig Glossing Rules. Clitics in the practical orthography are written as separate words, and I have followed that convention to make the grammar readable for native speakers. The glosses are concatenated, so that e.g. MFS3sO should be read 'Monofocal Subject with a $3{ }^{\text {rd }}$ singular Object', with periods inserted only where ambiguity might arise.

In addition to these concatenated abbreviated glosses, I have sometimes used fuller glosses where I think it will be hard for the reader to recollect the abbreviations given the context. Thus I give here just the reduced system, itself used judiciously, trusting that the adhoc extensions of it will be transparent. Incidentally, I have not always used the same order of elements within portmanteau morphs - but have ordered the glosses as relevant for the discussion in hand. Note too that there are sometimes mismatches between the number of items on the Yélî Dnye line and the gloss line - this is because Yélî has many idioms, or
strings of words that have a single fixed meaning (e.g. mu ntoo, 'enough'). I have grouped the gloss keys here thematically rather than alphabetically to make the relevant contrasts clear.

## PERSON/NUMBER

| $1,2,3$ | Person (e.g. 3REM, $3^{\text {rd }}$ person subject, any number, Remote Past tense) |
| :--- | :--- |
| $\mathrm{N}+$ | $2^{\text {nd }}$ person singular possessive, homorganic initial nasal |
| $\mathrm{s}, \mathrm{d}, \mathrm{pl} ;$ | Number in verbal inflections |
| Sing, Dual, PL | Number in nominal determiners |
| Any | Any person/number |
| MF, MonoF | Monofocal (singular or $1^{\text {st }}$ person) |
| PF, PolyF | Polyfocal ( $2^{\text {nd }}$ and $3^{\text {rd }}$ persons dual and plural) |
| We2,You3, etc. | Person/number in free translation: We2 = we dual, you3 = you three or more, etc. |

## VERBAL COMPLEX

| S | Subject |
| :--- | :--- |
| O | Object |
| P | Punctual (Punctiliar) aspect |
| PI | Punctual Indicative |
| C | Continuous aspect |
| CI | Continuous Indicative |
| REM | Remote Past tense - day before yesterday or before |
| IMM | Immediate Past tense - earlier today |
| NrPST | Near Past tense - yesterday |
| PAST | Past of any remoteness |
| PRS | Present tense |
| FUT | Future tense |
| ImmFUT | Proximal or Immediate Future tense (today - Continuous aspect only) |
| DistFUT | Distal Future tense (tomorrow or beyond - Continuous aspect only) |
| PROX | Proximal tenses, the three closest to coding time (for the punctual aspect: Fu- <br> ture, Immediate Past, Near Past, for the Continuous aspect: Immediate Future, |
| Present and Immediate Past) |  |
| DIST | Distal tenses |
| IND | Indicative mood |
| IMP | Imperative mood |
| IMPDef | Imperative deferred - 'do it later' <br> HAB |
| Habitual mood |  |
| PreN | Preverbal nucleus or inflectional proclitic (position usually self-evident and |
| POND | unmarked) <br> Postverbal nucleus or inflectional enclitic (position usually self-evident and |
|  | unmarked) <br> Conditional marker (verbal enclitic) in antecedent (indicative only, not coun- <br> terfactual) |
|  |  |


| CF | Counterfactual marker (verbal proclitic) in antecedent and consequent |
| :--- | :--- |
| CFAnt | Antecedent counterfactual marker |
| CFCons | Consequent counterfactual marker |
| (Equ) | Equative, e.g. special type of Counterfactual |
| Trans; Intrans | Transitivity |
| TV/IV | Transitive/Intransitive verb (not marked where self-evident) |
| $\emptyset$ | Zero morph; especially pre- and post-verbal enclitics (note: this is only marked |
|  | where pertinent to the discussion) |
| N- | Homorganic nasal archiphoneme used to mark 2 ${ }^{\text {nd }}$ person possession - it as- |
|  | similates to the succeeding stop position, as described in Chapter 3 |
| RES | Resultative |
| FOL | Followed verb, a form of some verb roots occurring with a non-null postverbal |
|  | enclitic |
| CERT | Epistemic marker (certain or visible), usually $k$ - |
| UNCERT | Epistemic marker (uncertain or invisible), usually wu |
| IRR | Irrealis (usually w-) |
| YI | yi construction of temporal subordination (§8.5.3) |
| FOC | Focus construction, e.g. yinê and vyîlo constructions (§8.6) |
| CLS | 'Close', i.e. Deictic marker 'hither' (towards ego) |
| MOT | Associated Motion marker |
| REP | Repetition of action marker ('again') |
| ALSO | Marker meaning 'also', 'as well', 'repeated with same result' |
| TAM | Tense, Aspect, Mood |
| TAMP | Tense, Aspect, Mood and Person/Number |
| REFL | Reflexive pronoun ('Self') |
| WEAK | Special form of inflection for 'weak verbs' |
| STRONG | Special form of inflection for 'strong verbs' |

## NOMINAL CATEGORIES

| ERG | Ergative case |
| :--- | :--- |
| ABS | Absolutive case (this zero-morph is unmarked except where the discussion |
|  | warrants it) |
| DAT | Dative |
| LOC | Locative |
| INST | Instrumental |
| EXP | Experiencer |
| NOM | Nominative |
| ACC | Accusative |
| VOC | Vocative |
| Poss | Possessive |
| PP | Post-position |
| INDF | Indefinite |
| DEF | Definite |
| ANAPH | Anaphoric |
| ADJ | Adjective (derived) |
| Dual, Sing, PL | Dual, Singular, Plural (in inflections $s / d / \mathrm{pl}$ ) |


| (Hum) | Human (of plural category) |
| :--- | :--- |
| AUG | Augmentative pluralizer knî |
| Pro | Nonpersonal Pronoun (e.g. n:ii 'the one'), sometimes relative (REL) |
| REL | Relative pronoun and clause marker |
| DEIC | Deictic pronoun or category |
| TOPIC | NP marked with ngê for topic, 'as for X...' |
| SPEC | Specified root, specialized form of a definite noun |
| RECP | Reciprocal pronoun (numo, noko) |

## MISCELLANEOUS

QUOT Quotation particle, specific for person/number of speaker and addressee, tense and mood. e.g. nganê, $1 \mathrm{~s}>2 \mathrm{sFUT}$.QUOT 'I will say to you'
NEG Negative marker
NegPol Negative polarity item
QUANT Quantifier
CLF Classifier
ADV Adverbializer (e.g. mostly ngê)
TAG Tag question marker (e.g. apii?)
N - or_ $\quad$ Nasalization of an initial segment to indicate $2^{\text {nd }}$ person possession; where the segment is already a nasal, the present but invisible morpheme is marked with an underscore
/ either/or (e.g. 2s/1d 'second singular or first person dual')

## 1 Introduction: The language and its speakers

The language and culture of Rossel Island are quite unlike any of those on surrounding islands, and they may offer important clues to the prehistory of this part of the Pacific (see Figures 1.1 and 1.2 for location). There is every reason to think that the inhabitants are a relict population of the peoples who seem to have inhabited many of the eastern off-shore islands of New Guinea ten millennia or more before the Austronesian peoples sailed through. They were peoples who were probably connected to the peoples of mainland New Guinea, and just possibly may have had some connection to earlier Australian peoples, for example the 'negrito' populations of the Queensland coast, no further away than the Highlands of New Guinea. It is not impossible however that, as indicated in Rossel myths, they back-migrated from the Solomons at a time when Pocklington Reef was a full-scale island prior to the rising waters of the Holocene, and would thus have provided a natural half way stepping stone (see Dunn et al. 2005). For that reason alone, the language deserves intensive study. In addition, isolated from its neighbours, the language offers a Galapagos-style experiment in isolated evolution over deep time. Loans from the surrounding Oceanic languages are absolutely minimal, restricted to technology and counting. What we find is an enormously complex system, suggesting that in the absence of the levelling effects of communication with neighbours, languages may just accumulate complexity and idiosyncrasy. Finally, the language has many unusual typological properties, from phonetics to the lexicon, which challenge the easy generalizations of modern linguistic theory.

### 1.1 Geography, ecology, prehistory and population

The central peak of Rossel Island ( 838 m ) is located at longitude 154.14' E, latitude 11.22 ' S. It has been variously known as Yela (from the native name Yélî), Rua or Rova (as the Sudest people call it) and Duba. (A number of linguistic surveys confuse it with Russell Islands in the Solomons where another Papuan language, Lavukaleve, is spoken.) It is an island of about 265 square kilometres, being 34 kilometres long in an east-west direction and 14 kilometres across from north to south, with a shoreline of c .120 km and a population density of c .15 .3 persons per square kilometre (cf. 2.3 on neighbouring Sudest island). It is the most easterly island in the Louisiades, lying just 20 nautical miles (or 33 km ) off Sudest (otherwise known as Tagula or Vanatinai), but separated by a difficult sea, and bounded by almost uninterrupted reefs (extending 40 kilometres out to the west),


Figure 1.1: Location of Louisiade Archipelago in relation to New Guinea, Solomons and Australia (Map reproduced with the permission of CartoGIS Services, ANU College of Asia and the Pacific, The Australian National University).
with the small openings subject to tidal rips of 3 or more knots. From main population centre on Rossel to main centre on Sudest is about 60 nautical miles, about 100 to Misima, and about 250 to the mainland of Papua New Guinea. As the easternmost landfall, it gets three to five metres of rainfall unpredictably distributed throughout the year, and suffers strong winds from the east from approximately May to October, with winds from the northwest during January to March. A major cyclone breeding ground lies about 60 nautical miles to the east, and the island gets enough severe cyclones to have cultural adaptations specific to cyclone survival. ${ }^{4}$ With a high central range (c. 800 metres) attracting cloud cover, it has a high humidity with temperatures in the range 25-33 Centigrade throughout the year. Although the geology is not thoroughly researched, it consists largely of metamorphic schists with intrusive gabro. ${ }^{5}$ Recent gold prospecting suggests it is apparently a continuation of the Misima range and not of the closest island, Sudest. ${ }^{6}$ The central mountain range provides steep slopes and loose clay soils on which a thick rainforest clings, cut by many rivers, restricting access to a few

[^3]

Figure 1.2: Location of Rossel Island to the East of Louisiade Archipelago (Map reproduced with the permission of CartoGIS Services, ANU College of Asia and the Pacific, The Australian National University).
narrow paths. Little systematic geological, zoological or botanical surveying has been done, although a brief visit from the Brass expedition in 1956 yielded at least one new tree species, not recognized in the botanical collections at Kew till the 1990s, and new species of frog, snake and birds were found in the 2000s (Kraus 2005, 2013). The habitats range from cloud forest at the peaks, to low rain forest with a canopy of say 20 m . around 600 metres elevation, to lowland rain forest with a much higher, denser canopy, through to the coastal forests, freshwater
swamps and mangrove swamps of the littoral. Exploitation for food occurs at all these levels, with taro gardens high in the mountains, general gardens lower, and coconut and sago plantations on the coast - and wild nuts collected at all levels. In general, Melanesia has an Indo-Malayan flora and an Australian fauna, and the further out an island is, the more impoverished both fauna and flora are, to some extent compensated for by subsequent speciation (Mayr \& Diamond 2001). Non-marine mammals on Rossel include perhaps 20 species of bats, one marsupial, a few species of rats, and wild pigs brought by human intervention, while the amphibians include frogs, and the reptiles include a dozen snakes, and many lizards (including a giant varanid endemic to the island). Birds number some 50 or more species excluding sea-birds, and include some endemic races. The sea supports a rich marine life common to the Coral Sea, with over a thousand species of fish, myriads of shellfish species, and many marine mammals including dugong, and reptiles such as the giant loggerhead turtle and the salt-water crocodile. All these ecological details are highly relevant for understanding the background to Rossel language and culture - for example, hundreds of fish have monolexemic species and sub-species level names indicating their centrality as a food source. Rossel people exploit all the niches of their habitat, hunting cuscus (Phalanger orientalis) and wild pigs in the forests, and foraging for crabs and shells in the mangroves, shellfish on exposed reefs, crayfish in the rivers, wild nuts and roots at every altitude, spearing fish in the deep sea, and they have developed elaborate technology for food collection and processing, e.g. for leaching poisons from wild nuts, preserving foods by baking, sun-drying, or for stunning fish with a number of plant poisons. Naturally, all these preoccupations are reflected in the language.

The study of the prehistory of the island has now begun with PhD work by Ben Shaw from the Australian National University, who has recovered one occupation date of around 2500 years ago, much earlier than the Austronesian migration reached surrounding islands (the pottery that is the hallmark of Austronesian contact doesn't appear regularly on Rossel until 500 years ago; Shaw 2015, 2016). Some surface finds of waisted axes of a type associated with late Pleistocene dates elsewhere hint at much earlier occupation. Although the absence of substantial caves has made it hard to probe the deep past on Rossel, on Paneati Island about 100 nautical miles away, Shaw has recently obtained dates as old as 17,000 years ago (Shaw et al. 2020). Given that the Bismarck archipelago was colonized by 40,000 years ago, it seems likely that there have been human populations on Rossel for at least the last 10,000 years.

At the glacial maximum, sea-levels were over 100 metres below the present, and at that point Rossel would have been an island twice the current size (as indicated by the extensive reef system); but it would not in human times have


Figure 1.3: Rossel Island and surrounding Massim islands during the last glacial maximum about 20,000 years ago (Dark shading indicates sea level at that date, white infill the current islands, formed in the last 10,000 years) (Reprinted from Shaw 2015:35).
been joined by a land bridge to other islands (see Figure 1.3, reprinted, from Shaw 2016). However, at these lower sea-levels there would have been narrower sea passages between islands in the archipelago towards New Guinea, and indeed stepping-stone islands between Rossel and the Solomons, and even Rossel and Cape York. Various oral traditions have an autochthonous origin for the people, or claim that they came from Pocklington Reef (now a mere sandbank half way to the Solomons), but with domesticates (dog, taro, pig) and cultural practices (like cannibalism) being imported from Sudest to the west by the culture hero Mbaati. Sudest myth has it that the god Mbasiri (Rossel Mbaati) also took the Yélî language to Rossel from Sudest, which in turn took the prior Rossel language (Lepowsky 1993:310; the current Sudest language is Oceanic - Anderson \& Ross 2002). Stone axes of no great antiquity can be found at village sites, and were made of local stone; ceremonial axes of the banded rhyolitic stone mined on Woodlark were imported (Bickler \& Turner 2002), while the very occasional obsidian blade points to early trade, presumably with New Britain.

Although Rossel Island stands out as the last major shipping hazard to the east of the New Guinea mainland, its still uncharted reefs have proved a formidable obstacle to intensive contact and commerce (for the history of contact see Armstrong 1928: Appendix 1; Shaw 2016: Ch.3). Trade with Sudest was ethno-
graphically very limited - Armstrong (1928:28) notes there were only two indigenous sailing canoes capable of the trip in 1921; and Shaw (2016) finds sparse imported pottery in the archaeological record, beginning only 500 years ago. Bougainville sailed past in about 1767, as did D'Entrecasteux in 1793 - unable to find a way through the reef, he named the island after his first officer. HMS Rattlesnake passed by in 1849, again without being able to land a party. It was not until 1858 that the island burst into history when the French ship the St Paul was wrecked on the northern reef, the gallant officers taking to the boats, leaving 327 Chinese coolies bound for Sydney marooned on the small Heron Island just offshore. When the French returned three months later, they found that all but one had been eaten by the inhabitants of Rossel (Armstrong 1928: Appendix 1), and the French destroyed a village in retaliation. ${ }^{7}$ The next landings took place in the 1880s, involving the blackbirding or capturing of indentured labourers for the Queensland plantations - but contact was rarely made with the inhabitants, who scattered when disturbed. In 1892 the murder of a French prospector motivated another expedition, and more vessels followed further reported murders, until the settlement of a white plantation owner, Frank Osborne, in 1903 on the south coast finally brought the island into regular communication with the wider world. The Osbornes ran a copra plantation with their own boats till the 1950s, and the Catholic Mission had one Australian MSC priest continuously in residence at the east end of the island from 1953 till 2003 (the Western end had a United Church mission established in the 1930s, but with non-European, indeed originally Samoan, pastors). The ethnographer Armstrong visited the island in 1921, empowered as a magistrate with armed policemen, and his brief sojourn is recorded in oral history as marking the end of cannibalism. To this day, shipping is irregular (sometimes non-existent), there are no landing strips, ${ }^{8}$ and effective government representation on the island is largely through a system of locally appointed councillors who have contact with the government station on Sudest island.

The population of the island stood at 3,884 according to the 2000 census, although probably another 600 Rossels live on the mainland, Misima or other islands (the 2011 census apparently tallied some 5000 individuals). The population in 2000 had doubled since the 1960s with the introduction of primary health care, the population through much of prehistory probably having been stable at around 1000-1500. The table below gives census statistics, which do not take

[^4]into account migrant labourers away from home (hence, probably, the imbalance of the sexes). The current population (2018) is probably well over 5000. Malaria and TB continue to contribute to short life expectancy, which is probably under 50 years. Recent DNA evidence shows the current population is of mixed origin, with substantial Asian genes in both male and female lines (van Oven et al. 2014), possibly due to slow gene trickle over millenia (Hunley et al. 2007).

Table 1.1: Census figures from various sources. ${ }^{9}$

| Year | Total Population | male | female |
| :--- | :--- | ---: | ---: |
| 1920 | 1415 | 718 | 697 |
| 1957 | 1568 |  |  |
| 1960 | 1695 |  |  |
| 1969 | 2285 |  |  |
| 1980 | 2685 | 1499 | 1634 |
| 1990 | 3133 | 1899 | 1985 |
| 2000 | 3884 |  |  |
| 2010 | 5000 (estimate) |  |  |

Only a handful of outsiders reside on the island, mostly married-in women from other islands, a few teachers from other places in the province, and between 1953-2000 an Australian Catholic missionary (none of these learn much of the language unless they came as children, for reasons that will become clear). There are no roads and no general electrical supply on the island (although the Mission at Jinjo sometimes runs a local generator for two or three hours a day when fuel allows), and it remains badly serviced by boats, except during the occasional bêche-de-mer open season.

### 1.2 Some basic properties of Yélî Dnye

The language of Rossel Island, properly YélîDnye or 'Rossel-Island words/sounds', is otherwise known as Yele, Yela, Yeletnye, or simply Rossel. I will occasionally use the term Yélî for short. It is not definitely known to be related to any other language, but possible affiliations will be discussed below. The language has a huge phoneme inventory - 90 distinctive segments - almost certainly the largest

[^5]in the Pacific. Some of these sounds are very exotic double articulations, some of them unique in the languages of the world. Yélî Dnye has predominantly SOV phrase order, although all orders of major phrases are possible, word order within phrases, however, being strict. Adjectives and relative clauses follow the noun, but demonstratives precede it. The language is ergative-absolutive in type, but with partially nominative cross-referencing. (Many Papuan languages have optional or loose ergative marking, but Yélî Dnye has obligatory marking of overt NP agents of transitive verbs, and a number of syntactic constructions like vyîlo-clefts select Absolutive arguments, whether subjects of intransitive verbs or objects of transitive ones - the language could thus be said to be 'deeply' ergative; see Chapter 9.) Cross-referencing on the verb is done by clitics to both left and right of the verb root, which constitute a huge inventory of portmanteau morphemes subsuming tense, aspect, mood, and person/number of subject and object in largely unanalysable, or at least unpredictable, particles. While subject clitics precede the verb, the postverbal clitics mark both subject and object information. Information is distributed across the verb and its clitics, so that for example verb root suppletion combined with particles will indicate a specific tense and aspect. The language thus resists an analysis in terms of morphemes and their combinatorial meanings - it is the gestalt assemblage that carries the message. There are many irregular paradigms, and the general style of the language is not rule but rote. Basic words, especially verbs, usually have suppletive roots, but the suppletions are not predictable, in the sense that they may be triggered by a number of different grammatical categories. Thus even the simplest sentence has considerable unpredictability. The language also has a rich set of complex constructions, with nominalizations, conditionals, elaborate counterfactual conditional paradigms, temporal subordinations, and extraction phenomena. Constructional elements are however hard to spot, as they frequently involve homophonous particles. New texts constantly throw up new idiosyncrasies. It is the full range of complexities from huge phoneme inventory, rich grammatical categories to irregularity in paradigms - which makes this language notoriously hard to acquire after childhood. I have noticed that even children of five raised on Rossel, but in families where one spouse is an outsider and thus the working language is English (or a local Austronesian language), do not always have full speaking competence in the language despite playing with their native speaker playmates.

As mentioned in the Preface, apart from unpublished notes on the language by the Reverend Baldwin and Capell, the only prior materials on Yélî Dnye have been gathered by Jim and Anne Henderson during a stay of twenty years devoted to translating the Bible. From this work, a couple of early papers appeared (which first excited my interest in the language), together with a word list (Henderson \& Henderson 1987), and Jim Henderson’s monograph on the phonology
and grammar of 1995 (this appeared just after the present work was begun). This last is a highly compressed account that concentrates on the phoneme inventory and the verbal complex, two of the most complex areas of the language. It has proved a very reliable foundation for the present work, and I have taken over many aspects of Henderson's analysis, including the practical orthography (now entrenched in the Bible translation) and the grammatical categories expressed in the verb and its clitics. The Hendersons later published a revised dictionary, incorporating many words provided from my text collections (Henderson \& Henderson 1999). They continued to translate portions of the Old Testament, with a new edition in 2002 and a complete Testament in 2016, and have produced materials to aid the acquisition of literacy. The sheer number of phonemes and the resulting orthographic complexities have however hindered widespread literacy in Yélî Dnye.

### 1.3 Sociolinguistic situation and cultural background

Despite the small size of both the island and the population, there are substantial dialectal varieties of the language. Geography has much to do with the dialectal situation, for the island has a central ridge over 800 metres high with thick rain forest, and prevailing winds from the east make a trip to the west by canoe easy but the return hard work. The language has two main dialects, an Eastern and Western one, with many lexical differences (about 40\% of the conservative vocabulary in a Swadesh 100-word list has a distinct form) and some substantial morphosyntactic ones. In a preliminary survey, a set of common concrete nouns and action verbs showed a $18 \%$ identity of form, $67 \%$ different forms but same cognate class, and $20 \%$ different cognate classes. There is also significant simplification of the morphology in the Western dialect, especially in the transitive enclitics. There are about 100 named villages (hamlets) on the island; each village and area has its own lexical and pronunciation idiosyncrasies, and there is a cline between the dialects, and a secondary division between North Eastern and South Eastern varieties. This grammar is based on the variety spoken in the north eastern quadrant of the island, broadly from Yélí'nuwo in the east to P:uum in the west (see map in Appendix I) - the variety has come to have a centrality through the influence of the Catholic Mission based there and the translation of the Bible and other literary materials produced in that dialect by the Hendersons. It is also almost certainly the most conservative variety of the language. As with all the islands of Milne Bay Province, English is the official language, the main lingua franca, and the main language of schooling, although a recent effort has been made to start the first three years of education in the native tongue (Tok

Pisin has little currency in the province, and almost none on the island). This initiative has been surprisingly successful, thanks to the Hendersons' work on literacy and the dedication of a number of talented young men and women to the task - unfortunately it has been recently undercut by a change in government policy. Nearly all younger people, and most men, speak at least some English, and all secondary education is in that language on the mainland or elsewhere. In addition, many men go to the mainland in search of jobs and adventure, where they will mainly use English as a lingua franca. The western end of the island has always had more contact with Sudest, and the (Oceanic) Sudest language is spoken by quite a few Rossel people at that end. Traditional trade by sailing canoe is still practiced in seasons with calm seas. In addition, while the Catholic Mission was established in 1953 at the eastern end, the Methodist or United Church Mission was established before that at the western end with indigenous pastors - they have in the past used Dobu and Misima language in religious services, but today increasingly use a mix of English and Yélî Dnye and have established links to Misima for secondary education. The missions have clearly had profound effects on the language and culture, with changes in religious belief, education, health and connection to the wider world. My first fieldwork coincided with old people still conversant with traditional religion, myth and technology, but few of them now survive. With their loss has gone many of the specialist linguistic genres, song styles, poetry and taboo vocabularies (see Chapter 12) and many traditional practices. People with new roles sanctioned by government or church, like teachers, village magistrates and councillors, often code-switch between English and Yélî Dnye in public speaking to emphasize their special status. Nevertheless, Rossel Island still boasts a vibrant local culture, with scores of still respected sacred places with associated myths, and the abundant linguistic riches laid out in this grammar.

Most children are raised essentially monolingual in Yélî Dnye, and due to work by colleagues using day-long recordings we know a lot about the nature of language socialization (Casillas et al. 2020), which is remarkable for the relatively low amount of child directed speech and the relatively high amount of surrounding talk from multiple carers. But those children raised in mixed marriages with outsiders tend to be raised in English as the lingua franca, and may never master Yélî Dnye fully. Married-in spouses (mostly teachers or nurses) scarcely ever learn to speak the language, given the phonological and inflectional barriers. These mixed marriages are the main source of endangerment to the language, with the prestige of English a secondary factor - but the elementary school system may help to redress this balance. At present, one could not call the language immediately endangered, although any language with such a small number of speakers is fragile in the modern world. One possible disaster looms, however: recent
gold prospecting suggests there may be workable seams, and the rights have been acquired by RHG and Siburan Resources Ltd. If a gold mine came to pass, the fragile reef and ecosystem would likely collapse, and the language would probably be rapidly eroded by an influx of outsiders.

There are few economic opportunities on the island, which does not have a regular reliable cash economy. When the price of copra is high this is the main source of cash, and boats will come to collect the copra; when its price is down, the main items of commerce are preservable marine products like bêche-de-mer, shark fin and trochus shell. In 2002 prices for bêche-de-mer soared, with consequent depletion of the stocks; in 2018 the fisheries were opened up again for a short season, with a massive influx of cash. Rossel has always been a major producer of the kula valuable, the bagi necklace, made of ground down spondylus shell, but the island has never participated in the kula trade itself: in the past, bagi was bartered for pigs, pottery, canoes and the like in an organized trade with Sudest once or twice a year, but is now occasionally sold for cash. The cash is used to pay school fees and buy second-hand clothes, fishing gear, and tinned food or rice when available. Store owners may accumulate enough to buy a dinghy and outboard motor, although the irregular supply of petrol makes these of limited utility. The island is rich in agricultural potential and wild resources, with many nutritious bush foods, and rich fisheries, and correspondingly a wealth of ethnobiological terminology. The preferred crop is taro, an ancient cultivar here, once cultivated by specialist villages in the mountains in exchange for marine products, with sago and yams also much valued, and sweet potato, bananas and manioc available at other times - apart from sago, a swamp tree, all these are cultivated on a slash and burn basis. Colonial policy enforced during the war brought all villages down to the coastal belt, but some taro gardens are maintained high up on the mountains.

The kinship system is based on matrilineal clans, but unlike on the surrounding islands, patrilineal reckoning is also practiced, and land, religious and political office are handed down in the male line. Villages are thus essentially groups of agnatic kin, with established usufruct of surrounding lands and reefs.

The kin term system is described in §11.5 (see also Levinson 2006c). The status of women is lower than in the surrounding Massim societies, but still relatively high, with elderly women recognized as important exchange experts in their own right. Elaborate exchanges of valuables are involved in most rites of passage: the building of houses, the launching of canoes, and the eating of pigs, when the famous Rossel Island money comes into its own - the ndap type alone having more than 20 named denominations, and being exchanged in the thousands. It is no surprise then that Rossel has a base-10 number system, showing clear Austronesian roots. Death is followed by a sorcery inquisition or kpaakpaa, where
the highest forms of Rossel oratory are exhibited by both the public and by divinatory specialists, using elaborate parables and veiled allusions. Oratory plays an important part in social life, although oral performance is largely confined to males - villages and village clusters hold frequent meetings and informal legal hearings, where arguments are fiercely contested.

There are three main song types, (i) tpile we, associated with pig feasts, a secular musical form sung in falsetto by males, combining prescribed melodies and verses (associated with specific village areas) with contemporary improvisation, (ii) nt:amênt:amê, sacred chants, composed by the gods and unalterable, sung by males and associated with the launching and sailing of canoes and with trespass into sacred areas, (iii) $y a$, or laments, in which women specialize. At least two other genres, ch:aa (involving sequential solo song performance all night long) and ny: $\hat{e}$ (the only genre involving vigorous dance) have more or less died out. The language of these songs is complex, and in the case of $n t: a m e ̂ n t: a m e ̂$ sometimes quite opaque to modern Rossels, who listen attentively trying to catch the hidden meanings. In addition to many other genres, a form of poetry called wii is used amongst other things to ridicule social offenders (e.g. those ignoring clan exogamy), involving the recitation of lines at breathless speed. Legends and myths, w:êê danêmbum, are a recognized genre in which the stories of the gods who behave much like the ancient Greek pantheon - are told without interruption.

There is thus a rich ethnography of speaking. In addition, there are a number of taboo vocabularies, involving lexical replacements; see Chapter 12. Close affines may not use the ordinary body part terms and terms for clothing, which are replaced with special words. And visitors to the sacred islet of Lów:a (restricted to males) should replace many ordinary words which are associated with the half dozen sacred denizens of that isle. The religious system is closely linked to sacred places, each god or force being instantiated in a rock or other natural feature, surrounded by an area of restricted access (Levinson 2008) - only the priests or guardians of that sacred place may enter, using the replacement vocabulary appropriate to that place. A few places, like Lów: a and the slopes of Mt Mgî allow general access by males providing the taboo vocabulary is used.

### 1.4 Possible affiliations to other languages

On all available information, Yélî Dnye must be judged an isolate. As noted above, Yélî Dnye is clearly unrelated to the surrounding Austronesian languages - Henderson (1975), on the basis of short vocabulary lists, reports only 6\% cognates with the neighbouring Austronesian language on Sudest, and only 3\% with Misima, 100 nautical miles away. Using an extended Swadesh list of 330 items, I have
found at most $6 \%$ cognates between Sudest and Rossel, many of these doubtful; these figures hover at the level of background noise. Nevertheless, now that we have the first published report on Sudest language (Anderson \& Ross 2002), we can see some elements of convergence, almost certainly reflecting assimilation of Sudest to its Papuan neighbour, or more likely to a related language substrate once spoken on Sudest. Sudest boasts 36 consonantal phonemes, very unusual for an Oceanic language, including prenasalized and labialized series as on Rossel. ${ }^{10}$ The languages share verbal inflection by pre- and post-verbal clitics. There are many other detailed similarities (e.g. classifiers, tense/aspect, deictic discriminations, and a number of obvious cognates); nevertheless at base the languages are radically different: Sudest is SVO with fixed word order, non-ergative, has inclusive/exclusive pronouns, complex possession, and many other typical features of Oceanic languages. Still, the amount of borrowed structure into Sudest suggests that a language like Yélî Dnye was once spoken on Sudest, as the myth mentioned above suggests.

Wurm (1982), following in part earlier groupings by Greenberg (1971), identifies the language of Rossel as part of the East Papuan phylum, with close relatives in the Solomons (and possibly Santa Cruz islands; but see Ross \& Naess 2007). The tree in Figure 1.4 (after Dunn et al. 2002, 2008) outlines the proposal.


Figure 1.4: Wurm's (1982) East Papuan Phylum (after Dunn et al. 2008).

10 Lynch et al. (2002:63-65) suggest that Proto-Oceanic had both a prenasalized series of stops and labio-velars borrowed from surrounding Papuan languages.

These groupings really represent nothing more than a hunch at an earlier stage of our understanding of these languages; Kazukuru is now known for example to be largely Austronesian in heritage (Dunn \& Ross 2007), and further updates will be found in Stebbins et al. 2018. There is now a grammar of Lavukaleve (Terrill 2003), which concludes that connections even within the Solomons group are not yet well established (see also Stebbins et al. 2018). Lavukaleve shows little resemblance to Yélî Dnye - it has many features Yélî lacks, e.g. noun classes and gender, serial verbs, and strict word order. Yélî has a much larger phoneme inventory, with over four times as many phonemes, it has free phrase order, systematic ergativity, and a host of complex features missing from Lavukaleve. It will be very hard to establish any correspondences between these languages. Further afield, although there are some parallels to the Santa Cruz languages 1000 miles to the east, comparison of over a thousand words has failed to throw up any likely cognates, and these languages too are now known to be Austronesian in origin. In short, Wurm's suggestions are now outdated.

Meanwhile, in combination with colleagues, we have conducted a survey of all Papuan languages to the east of the mainland. Using the methods of bioinformatics, applied not to cognate sets but to grammatical features, we have been able to extract a likely ancient phylogenetic signal linking most of the Eastern offshore Papuan languages - but once again Yélî Dnye is an outlier (Dunn et al. 2005, 2007). The figure below, Figure 1.5, (from Dunn et al. 2008) gives a Bayesian consensus tree based on structural features, in which groupings partly match island chains. Yélî Dnye groups with Southern Bougainville on this analysis.

One further opinion of Wurm's is worth recording. Wurm $(1979,1983)$ suggests that similarities to the Papuan New Guinea highland languages are due to contact, not phylogenetic linkage. His proposed scenario is that "at least some East Papuan Phylum languages were driven out of the New Guinea Mainland by speakers of Trans-New Guinea Phylum languages" (see also Wurm et al. 1975, Ruhlen 1987:181). There are traces of contact between Yélî speakers and early Austronesian languages which are hard to explain (and further discussed below). The cardinal numbers are clearly borrowings from an Austronesian language or languages; for example, the number 8 is waali from proto-Oceanic < *walu, and this becomes of interest when one notes that the Papuan Tip Cluster of Oceanic languages which surround Rossel mostly share a different number system over 5, expressing eight as a compound ' $5+3$ '. Clearly the Yélî borrowing precedes the formation of the Papuan Tip Cluster, or indicates a displacement of Rossel speakers. Can this be taken as evidence for such a migration as Wurm envisages, or merely evidence of early contact with proto-Oceanic speakers in situ?

More recently, Ross $(2001,2005)$ argued that pronominal paradigms carry a great deal of genealogical information, and on that basis proposed the following


Figure 1.5: Groupings of Papuan languages of Island Melanesia (after Dunn et al. 2008).
major groupings of the East Papuan languages (only partially accepted by Stebbins et al. (2018:779) as the current state of the art):

1. Yélî Dnye-West New Britain (Anêm, Ata)
2. East New Britain (Baining, Taulil, Butam)
3. North Bougainville (Konua, Rotokas)
4. South Bougainville (Nagovisi, Nasioi, Motuna, Buin)
5. Central Solomons (Bilua, Touo (= Baniata), Lavukaleve, Savosavo) Isolates: Kol, Sulka (East New Britain); Kuot (New Ireland)

Ross suggests that, although the larger groupings suggested by Wurm are unsupported, still Yélî Dnye can be connected to the western New Britain languages Anêm and Ata (see Table 1.2). This relies entirely on parallels in the pronominals, and in fact there are also parallels between Yélî and some Eastern Highland languages in the pronouns. Still, the parallels are quite compelling (Yélî N is a nasalizing prefix).

In addition, these languages have a number of typological similarities (e.g. S-V-O marking on the verb in that order; see Reesink et al. 2009). These parallels certainly suggest that a closer look at the off-shore Papuan languages to the east of Papua New Guinea may allow us to establish at least possible prehistoric contacts.

Table 1.2: Possible correspondences between Anêm, Ata and Yélî Dnye.

|  | Anêm |  | Ata |  | possible Yélî Dnye cognates |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| subject prefixes |  | subject prefixes |  | possessive pronouns |  |  |  |
|  | sing | plural | sing | plural | sing | dual | plural |
| 1 | $a-$ | $m i ̂ / m i$ | $a$ | $t a$ | $a$ | $n y i$ | $n m i ̂$ |
| 2 | $n i ̂ / n i$ | $n g i$ | $n a$ | $n g a$ | $N$ | $d p \hat{i}$ | $n m y i$ |
| 3 | $u / i$ | $i$ | $u / i$ | $i$ | $u$ | $y i$ | $y i$ |

Two other possible connections are worth pointing out. The first is to the Trans New Guinea family of Papuan languages, e.g. some of the languages of the Eastern Highlands, especially the Gorokan sub-family of the large Trans New Guinea family (TNG). Amongst the ties which are sufficiently interesting to be worth further exploration are:

### 1.4.1 Monofocal/Polyfocal person/number conflations

This pattern conflates $1^{\text {st }}$ person singular/dual/plural with $2^{\text {nd }}$ and $3^{\text {rd }}$ singular (Monofocal) vs. $2^{\text {nd }}$ and $3^{\text {rd }}$ dual and plural (Polyfocal). It is reported from the Eastern Highland (Gorokan) languages like Benabena (as Henderson 1995 noted), and is found in the post-verbal clitics of Yélî Dnye on a partial basis. Some of the forms even look parallel (Table 1.3):

Table 1.3: Monofocal/Polyfocal distinction: Benabena compared to Yélî Dnye.

|  | e.g. Bena-Bena (same-subject marker) |  |  | Yélî (S+3s0 Cross-reference) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Young 1971:32, Haiman 1980:xxxvi |  |  |  |  |  |  |
|  | SG | DL | PL | SG | DL | PL |
| 1 | -to | -to | -to | té | té | té |
| 2 | -to | -te | -te | té | t:00 | t:00 |
| 3 | -to | -te | -te | té | t:oo | t:oo |

The pattern is a sufficiently $a d h o c$, unmotivated conflation that it is possible that this match is not entirely by chance. The Highlands connection, incidentally, is perhaps supported by the relatively high proportion in Rossels of Y-chromosome Haploype S-M254 characteristic of Highland genomes (van Oven et al. 2014; and incidentally shared with indigenous Australians).

### 1.4.2 Pronouns

Ross (2005) reconstructs the Proto-Trans-New-Guinea pronouns as follows, with the matching current Yélî Dnye pronouns for comparison (Table 1.4; see also Pawley \& Hammarström 2018:144):

Table 1.4: Pronouns in Proto-TNG and Yélî Dnye.

| Proto-TNG |  |  | Yélî Dnye |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | SG | PL | SG | DL | PL |
| 1 | ${ }^{*}$ na | ${ }^{*}$ ni/*nu | nə | $n y i$ | $n m u$ |
| 2 | ${ }^{*}$ ng | ${ }^{*}$ ngi | $n y i$ | $d p u ̃$ | $n m y o$ |
| 3 | ${ }^{* y a}$ | ${ }^{*}$ |  | (u) | (yi) |

Note too that $2 s$ *ni is the proto-Highlands reconstruction in Foley (1986).

### 1.4.3 Lexical cognates

Pawley \& Hammarström (2018:141ff) offer some proto-TNG reconstructions which again offer a few possible correspondences (Table 1.5):

Table 1.5: proto-TNG reconstructions and possible Yélî Dnye cognates.

|  | proto-TNG | Yélî Dnye |
| :--- | :--- | :--- |
| 'head' | *mVtVna | mbadə |
| 'eye' | *ng(a,u)mu | ngwolo |
| 'man' | *ambi | pi |
| 'woman' | *panV | py:a |
| 'bird' | *n[e]i | nmə |
| 'fire' | *inda | ndə |
| 'penis' | *mo | mdo |
| 'axe' | *tu | tuu |
| 'mind' | *n $(0, u) m a n$ | $n u w \tilde{~}$ |

On the basis of the Monofocal/Polyfocal distinction mentioned above, one might also look more specifically at reconstructed East Highland language vocabular-
ies. Foley (1986) provides a short list of Proto-Gorokan words that are just possibly suggestive (Table 1.6):

Table 1.6: Possible cognates shared between Proto-Gorokan and Yélî Dnye.

|  | Proto-Gorokan | Yélî Dnye |
| :--- | :--- | :--- |
| 'tree' | *ya | yi |
| 'house' | *nom | ngomo |
| 'leg' | *kia | kêê |
| 'axe' | *tu | tuu |
| 'say' | *si | vyi |

### 1.4.4 General typological similarities to other Papuan languages and beyond

According to a recent survey (Palmer 2018), setting aside the mostly coastal Austronesian languages, there are some 862 languages in the 'Papuasphere', the larger New Guinea area including outlying islands, belonging to 80 families (including 37 isolates). Half of these languages are thought to belong to the Trans New Guinea family. Yélî Dnye shares the following typological features with Eastern Highlands languages of Trans New Guinea stock: ergative marking on NPs, SOV word order, existential constructions, elaborate counterfactual paradigms, verb suppletion on person/number/tense/aspect. This is just sufficient evidence to suspect that perhaps one day clear connections will be established between Yélî Dnye and Trans New Guinea languages, perhaps through ancient contact.

In addition, the non-TNG language families of Southern New Guinea offer many closer points of typological similarity with Yélî Dnye (Evans et al. 2018). Widespread across the area are "complex verbal morphology, with both prefixes and suffixes for argument indexing; complex grammaticalised systems of both aspect and tense; complex number values indexed on the verb (with three or more number distinctions); distributed morphology with multiple exponence and unification across multiple sites before inflectional values can be determined; a lack of verb-chaining or switch-reference" (Evans et al. 2018:647). These languages have larger consonantal inventories than most Highland languages; the Yam family language Nen for example has prenasalized stops and co-articulated velar nasals like Yélî Dnye (Riantana, a possible TNG language, has, in addition, a dental/alveolar contrast with a marginal retroflex, and Idi another language of the area has an even more Australian-like inventory). Nen also has
ergative marking on NPs, elaborate cross-referencing (both prefixes and suffixes) on the verb, SOV word order, positional verbs, multiple diurnal tenses, and so on. Other languages of the Yam family have suppletive verb roots like Yélî Dnye. In addition, a peculiar property of Yélî Dnye shared with other languages of Southern New Guinea is what has been called 'distributed exponence' of morphological marking (see §2.2 \& §2.3 below). All in all, many of the features collectively peculiar to Yélî Dnye can be found distributed here and there in the languages of Southern New Guinea.

The second, much more speculative, possible connection is to the languages of Australia with similar consonantal inventories and shared tendencies to SOV with ergative-absolutive alignment. Rossel Island lies just 550 nautical miles NE off the coast of Queensland (Cape York is thus considerably closer than the Eastern Highlands of New Guinea), and the sea currents set to the west, often in a NW direction, allowing simple craft to drift in the right direction (see e.g., the nautical chart AUS 429). When sea levels were much lower before 8000 BP, New Guinea as a whole was connected to Australia, and there were stepping stone islands between the Louisiades and Cape York (which then bulged eastwards), although a crossing would still have involved many days out of sight of land. Because of their prefixing character, the non-Pama-Nyungan languages of Australia are a natural point of comparison. Currently confined to the north-west of Australia, and as the source of diversity in the continent it seems natural to suppose they are the older stocks, and Pama-Nyungan innovating (Evans 1995, 2003, 2005). If so, Pama-Nyungan has spread relatively recently and rapidly over the Australian continent, replacing older languages of the type represented by the non-Pama-Nyungan languages of north-east Australia, and the 'negrito' physical type of the Queensland rainforest people - not dissimilar from the inhabitants of Rossel - represents an earlier population which has undergone language replacement (Dixon 1977:15). There are a few, rather weak, reasons to pursue the hypothesis of such a connection in deep prehistory, with Yélî Dnye and other southern Papuan languages representing some kind of clue to ancient connections between Australia and New Guinea. First, there is of course shared population history between the two islands reflected in human genetics, but there is no particularly close relationship with Rossel Island as far as we know (Malaspinas et al. 2016; though see White 1997:66 linking non-Pama-Nyungan speakers with remnant east Papuan populations in e.g. Bougainville to the north of Rossel). Second, there are also general typological similarities between Yélî Dnye and especially the non-Pama-Nyungan languages of Australia, including: (a) head-marking tendencies, (b) prefixing with S and O cross-referencing on the verb, with ergative marking on NPs, (c) much verb suppletion, (d) positional/existential verbs or coverbs. Features shared more broadly with Australian languages
include: (a) free phrase order with SOV tendencies, (b) loose classifier systems, (c) certain nominal polysemies like 'fire’/‘wood’, (d) terms for kin dyads, (e) some exceptional syntactic ergativity. Many of these features are, though, shared with the Papuan languages of Southern New Guinea, the more probable area to look for a 'missing link' (see Evans et al. 2018). But Yélî Dnye also shows substantial overlap with a typical Australian consonantal inventory. For example Proto-Pa-ma-Nyungan reconstructions posit the following places of articulation (Alpher 2004): bilabial, alveolar, post-alveolar, retroflex and velar, with the post-alveolars being laminal, and alveolars and retroflexes apical. Yélî Dnye likewise has bilabial, alveolar, post-alveolar/retroflex and velar places of articulation, with laminal alveolars and sub-apical retroflexes; moreover a palatalized series effectively adds a place of articulation. And Yélî Dnye, like canonical Australian inventories, lacks a voiced/voiceless contrast. This is quite unlike a typical Papuan language with its usual three places of articulation (bilabial, alveolar, velar; Pawley \& Hammarström 2018:83) and voiced/voiceless contrastive series. Some Australian languages like Arrernte also share double-articulations and prenasalized stops, although prenasalization is frequent in Papuan languages too. Overall one could say that Yélî has a more Australian-like consonantal inventory, but a more Papuan vowel inventory (although Yélî has many vowel distinctions, this is not without precedent in other Papuan languages; see Ross 1980).

As more Papuan and non-Pama-Nyungan languages become more fully described and on-line dictionaries of all these languages become more generally available, these and other speculations may become testable. Meanwhile, a bioinformatics analysis of the structural features of Australian and New Guinea languages does not support any close relation of Yélî Dnye to existing Australian languages (Reesink et al. 2009).

Much more tractable are linguistic connections over the last two millennia. A number of early Oceanic loans can be detected, that is, forms cognate with Proto-Oceanic rather than with the current surrounding languages. These have considerable interest for understanding prehistoric connections. They include the number words, and words for technological imports like the sail, pottery and the like (see Ross et al. 1998). Tables 1.7 and 1.8 list some candidates, some more plausible than others. The loans suggest that contact with Proto-Oceanic speakers brought a number of basic technological items for the first time to Rossel, including pottery, 'grass' skirts and mats, sea-faring equipment (the sail) and maritime lore, and at least the lime part of the betel-chewing complex. In addition, cognitive technology, like the decimal number system, probably replaced a limited Papuan counting system, and may have been associated with the shell money that has now become a highly characteristic Rossel cultural item (which has an antiquity greater than 500 years; Shaw 2015:306).

Table 1.7: Material culture (Abbreviations are for proto- or existing groupings: POc = ProtoOceanic, PNGOc = Proto-New Guinea Oceanic; NNG = North New Guinea Oceanic; MM = Meso-Melanesian linkage, NNG = North New Guinea linkage; PWMP = Proto Western MalayoPolynesian; Pan = Proto-Austronesian; NCAL = New Caledonia, SES = South-Eastern Solomonic; see Lynch et al. 2002).

| ndipi ‘lid' | $<$ | POc *tupi ‘lid, cover' |
| :--- | :--- | :--- |
| pód:a 'bottle' $<$ | $<$ | ?PNGOc *bwadri ‘water jar', NNG bodi, etc. (possibly <br> also from English bottle). |
| pala 'woven coconut mat' | $<$ | PEOc *bola 'coconut leaves woven together for any <br>  |
| purpose, including mats' |  |  |

Table 1.8: Sea-faring and environment.

| lyé ‘sail' | $<$ | PMP *layaR, NNG lai (Papua Tip lara/naia, etc.) |
| :--- | :--- | :--- |
| podo nee 'chief's racing canoe <br> (without sail)' | $?<$ | PWMP *padaw 'kind of sailboat' |
| m:ââ 'low tide, year' | $?<$ | POc *maqati (NNG mai/mat etc.) |
| la 'branching coral (source of <br> lime)' | $<$ | POc *laje |
| koo 'lime, lime pot' | $?<$ | POc *qapu (NNG kau, etc.) |
| wuwo 'coral head' | $?<$ | POc *mwaloq (SES walo, etc.) |
| yópu 'wind' | $?<$ | POc *upi |
| nt:eemi ‘Western wind' | $?<$ | POc *timu(R) 'wind bringing light rain' (NNG tim, etc.) |
| p:aa 'village' | $?<$ | POc *panua 'village, inhabited area' |
| 'n:uu/'nuwo 'nose, point, | $?<$ | POc *ngoro(k) (SES nyora, etc.) 'nose, point, headland, |
| cape' |  | cape' |

See the section below for complete observations, but the following numbers 5-9 (Table 1.9) are interesting since in many Papuan Tip Cluster languages these have been replaced with analytic numbers of the ' $5+1$ ', ‘ $5+2$ ' kind:

Table 1.9: Numbers.

|  | Yélî Dnye | POc |
| :--- | :--- | :--- |
| 5 | limi | *limá |
| 6 | wéni $\left(6^{\text {th }}=\right.$ wono $)$ | ?*onom |
| 7 | pyuda | *pitu |
| 8 | waali | *walu |
| 9 | chu | (POc *siwa) |

In general for these loans, looking at the closest sound correspondences in current languages perhaps suggests a North New Guinea (Bismarcks) or even Solomons link, rather than borrowing through the Papuan Tip cluster languages (the local Oceanic languages). Whether the ancestors of Yélî Dnye speakers were once located elsewhere more central to the Oceanic spread, or whether early Oceanic voyagers came through the Louisiades, must await further research. Lapita pottery dated to about 2300 BP and associated with proto-Oceanic spread has been found on Nimowa island only 100 nautical miles away, but pottery only appeared sporadically on Rossel from about 500 years ago (Shaw 2015). Interestingly, recent genetic work has shown a surprising contribution of Asian genes to Rossel ancestry, with mtDNA markers not found in the surrounding islands suggesting indeed some early and separate but intense contact with Austronesian speakers (van Oven et al. 2014).

### 1.5 Checklist of typological features of Yélî Dnye

It may be useful to have a summary of the typological features of Yélî Dnye at the outset. They can be listed as follows:

1. There is a strong $\mathrm{S}-\mathrm{O}-\mathrm{V}$ major phrase order tendency, but phrase order is in fact free, while word order within phrases is strict.
2. The language is highly ergative in both nominal case-marking and in syntax, where NPs in Absolutive case undergo one set of rules, those in Ergative case another. It is not 'split ergative', although some 'nominative' behaviour is found with some uses of pronouns and with some aspects of the cross-referencing on the verb.
3. The language appears to be in the process of simplifying morphology - in the past this may have led to the loss of complex noun classes, numeral classifiers and valence-changing operations.
4. The language is in certain respects head-marking: genitives are marked on the head of the NP, on the pattern of 'John his house', and verbs carry cross-reference in the form of clitics.
5. In other respects, it is dependent marking: case is systematically marked on NPs by postpositions. Cases include Ergative/Absolutive, Experiencer, Dative/Ablative, Instrumental, Comitative. There are also large numbers of local postpositions.
6. The verb is associated with complex marking of subject/object, tense, aspect and mood properties.
7. Verbs tend to supplete on tense and aspect, and they may do so on a number of other parameters including imperative mood, person, number and even negation. Some nouns also supplete on number, and a few on possession.
8. There are very limited valence-changing operations, implying lexical proliferation of intransitive counterparts to transitive verbs.
9. There are nominal classifiers, a large inventory of local postpositions, and positional verbs used in both locatives and existentials
10. There are many features that have been thought of as 'Papuan': pronominal syncretisms of special kinds, S-O-V word order and associated features like postpositions, many tenses and two aspects, elaborate counterfactuals, singular/dual/plural distinctions in nominals and cross-referencing
11. There are many features that are not typically thought of as 'Papuan', like a huge vowel inventory, and two coronal stop positions. The language also lacks serial verbs, chaining, auxiliaries, switch reference, and dependent verbs. It has no important noun-class distinctions (although there are some possible remnants of such a system).

### 1.6 The nature of the textual base for this grammar

Although much of this grammar is based on elicitation, many constructions and observations have arisen from a large recorded corpus (c. 470 hours of video) of naturally occurring speech in many different genres: informal conversation, dispute settlements, village meetings, myth recountings, mortuary divinations, marriage speeches, song styles, child-directed speech, and so forth. In addition, there are extensive experimental recordings such as eye-tracking of language production, phonetic elicitations, systematic dialect data, staged conversations with separated channels using head-mounted microphones, recorded colour or odour classification or testing of children's lexical and kinship knowledge. Only parts of this large
corpus of material are transcribed, and less translated and aligned with the program ELAN. Contributions to this corpus have also been made by Penelope Brown and Marisa Casillas. Recordings date from 1975-2019. A lexicon in Toolbox format has been extracted from these texts and has over 7000 head entries with about 10,000 senses. The corpus is preserved in The Language Archive, Max Planck Institute for Psycholinguistics.

Part I: The grammar

## 2 The character of the language

Yélî Dnye is a language in which nothing seems to be straightforward - it is baroque at many levels, from the sound system to the marking of negation. Despite the huge phoneme inventory and words up to six or more syllables long, homonymy and polysemy needlessly abound. Most verbs have suppletive forms, and many nouns do too. Grammatical categories may be signalled, often in distributed fashion, across different constituents of the verb phrase. The inflectional particles or clitics conflate half a dozen grammatical categories into one portmanteau monosyllabic or disyllabic form. On top of all this there is a quite intricate syntax of the kind one associates with languages with strict phrase order, but Yélî has no fixed phrase order. Some of the more startling characteristics only emerge on growing familiarity with the language, and are worth pointing out in advance.

Yélî Dnye is sufficiently unusual in character to motivate a novel approach. On the analysis adopted here (and see also Henderson 1995), inflectional categories are marked by clitics or particles rather than affixes - this analysis is motivated on phonological grounds, since the inflectional clitics are not phonologically incorporated into the head words whose grammatical status they mark (but in other respects these clitics are very affix-like). It can thus be said to lack a systematic morphology, but, unlike many languages with isolating tendencies, Yélî Dnye does not express equivalent grammatical categories on the phrasal level (e.g., by using serial verb constructions to express aspectual distinctions). Instead, it uses irregular but systematic suppletion on the one hand, and massive inventories of clitics on the other, each of which tends to be a portmanteau form expressing the intersection of half a dozen grammatical categories. As a result, the underlying grammatical categories are quite opaque, and detailed reviews of the forms - which the reader will find in the following chapters - will not themselves yield immediate insight into the relevant distinctions. I have therefore taken the unusual strategy of first outlining in this chapter relevant grammatical categories divorced from the means of their expression.

### 2.1 Lexicalization vs. rule-governed productivity

Most languages are conservative with lexical proliferation - if there is a central concept, say 'to eat', they lexicalize it once and derive, say, an intransitive from the transitive, or use the same form for both transitives and intransitives, as in English. Yélî Dnye goes the other way, and lexicalizes the transitive as ma, the intransitive as kmaapî, and it is reasonable to judge them distinct lexemes, although caution
is in order: this is a language with massive suppletion, so the Remote Past of $m a$ is ntîl, and in the Continuous aspect it is pîpî. So, are all these forms one lexeme, two, or four? I will judge two (in the sense that there are two distinct sets of roots, one transitive the other intransitive), but perhaps the answer is moot. It is an interesting puzzle from the point of view of language acquisition: how does the child sort out the many distinct roots of a verb expressing a single basic concept?

Yélî Dnye has almost no derivational morphology, and this in part explains lexical proliferation - there are few valence-changing operations for verbs, for example, so intransitives can be derived only in limited ways, and appear instead as separate lexical items unrelated in form. Lexicalization thus replaces much that in other languages is done by rule and associated semantic compositionality. Take for example reported speech, rendered in English by a clause of saying with an embedded clause. In Yélî Dnye, for each possible kind of telling event (as multiplied out by person and number of speaker and addressee, tense, etc.), there is a lexicalized quote formula. There are around 320 of these largely unpredictable forms, as illustrated in Table 2.1 (see $\S 8.4$ for the details):

Table 2.1: Example quote formulae.

| kwoch:e | 'we2 said to him today' | nyedê | 'he said to us2 today' |
| :--- | :--- | :--- | :--- |
| yich:e | 'we2 said to them today' | nyed $\hat{e}$ | 'they said to us2 today' |
| kwinye | 'we2 said to him day before yesterday' | nyepê | 'he said to us2 day before. ..' |
| yinye | 'we2 said to them day before yesterday' | nyepê | 'they said to us2 . .' |

### 2.2 Portmanteau expression of intersecting grammatical categories

In line with its lack of overt affixal morphology, Yélî Dnye expresses verbal cross referencing in clitics on either side of the verb, and these clitics non-compositionally express in one or two syllables a large range of grammatical categories. It is essential when considering such paradigms to make a distinction between the theoretical number of cells in the paradigm that come from multiplying out the grammatical categories, and the actual number of forms deployed. For example, the proclitic potentially indicates one of nine person categories for the subject, one of two aspects, one of up to five moods, one of six tenses - that is one of 540 basic cells in an inflectional paradigm. In addition, there are nine deictic/epistemic markers, negation and counterfactual markers which fuse into that same inflectional proclitic - yielding potentially over 5000 compound concepts to be expressed in the one clitic slot! In fact this matrix is simplified by the systematic
absence of certain tense distinctions in certain aspects/moods, so that instead of 540 filled basic cells we have 144 - still that leaves over 1000 potential cells in the matrix once we allow for the deictic/epistemic modulations. As in many such massive paradigms (as in the Australian prefixing languages, Evans et al. 2001, Evans 2003), partial conflations of categories - e.g. $2^{\text {nd }}$ person singular with $1^{\text {st }}$ person dual - reduce the number of forms deployed, and Rossel uses 56 distinct forms for the 144 basic cells. Thus the proclitic $d p \hat{\imath}$ ranges over the following portmanteau concepts (where $s=$ singular, $\mathrm{d}=$ dual, $\mathrm{pl}=$ plural):

$$
\begin{aligned}
d p \hat{\imath} \quad & =\text { Habitual Punctual: } 1 \mathrm{~s} \text { or } 1 \mathrm{pl} \text { (excluding } 1 \mathrm{~d} \text { ) or } 2 \mathrm{~d} \text { or } 3 \mathrm{~s} / \mathrm{d} / \mathrm{pl} \\
& =\text { Punctual Near Past or Remote Past: } 2 \mathrm{~d} \\
& =\text { Punctual Immediate Past: } 2 \mathrm{~d} \text { or } 1 \mathrm{pl} \\
& =\text { Continuous Immediate Past: } 2 \mathrm{~d} \text { or Near Past } 2 \mathrm{~d} / 3 \mathrm{~d} \\
& =\text { Deferred Punctual Imperative: } 2 / 3 \mathrm{~s} / \mathrm{d} / \mathrm{pl}
\end{aligned}
$$

It also happens to be the same form as the $2^{\text {nd }}$ person dual possessive pronoun. In contrast, the proclitic dnye has no related pronominal forms, and only two meanings:

$$
\begin{aligned}
\text { dnye } & =\text { Punctual Immediate Past: } 1 \mathrm{~d} \\
& =\text { Continuous Remote Past: } 3 \mathrm{pl}
\end{aligned}
$$

(Yes, the same form occurs in the name of the language, meaning 'sounds, words, language', but that is a typical example of the widespread homonymy.) Many of these syncretisms lack, however, the systematicity found in other languages with large paradigms of this sort - there seem to be no hard rule-bound conflations, one must just learn for each form its range of extension over the paradigm (but see §2.4.1 below on the Monofocal/Polyfocal distinction, which groups singular and first person of all numbers).

The enclitics after transitive verbs indicate person/number properties of both subject and object, as well as tense, mood, and aspect, so in principle vast numbers of distinctions. But here we find we need to distinguish a third level of analysis, between the combinatorial matrix of grammatical categories on the one hand, and the forms on the other: This is a systematic reconceptualization of the categories, so they fall into a smaller number of cells. So instead of 81 person categories ( 9 for subject and 9 for object), for example, we end up with a reduction of the subject categories to one or two categories in all but the imperatives: typically, $1^{\text {st }}$ person in all three numbers and singular forms of all other persons conflate in one category, and $2^{\text {nd }}$ and $3^{\text {rd }}$ persons dual and plural conflate in another. In the end 60 forms suffice.

The quotative particles mentioned in §2.1 indicate the sort of tolerance the language has for large paradigms of at least partially unpredictable forms. These particles conflate categories, but unpredictably, e.g. dpópu 'he/they2/they3 used to say to us2 but no longer do so'. Some of the quotative particles are partially retrospectively analysable: thus kwod:a '1s.to.3s.IMM' can be seen to be constructed from the dative pronoun kwo 'to him/her' plus dî '1sIMMPI verbal proclitic' plus some modulation. There is thus a large gap between what a speaker has to know to produce the right form (from the speaker's point of view it is a fixed expression - nothing else will do) and what the addressee has to know to understand it (the meaning is, on production, quite largely compositional or transparent).

### 2.3 Triality of patterning: Gestalt vs. discrete morpheme signalling

Here is a point that linguists think little about: compositionality is semiotically expensive. That is, much of the signalling power of morphemes is lost once their combinatorial collocations are restricted either by syntax or semantics. Consider a semiotic analogy based on traffic lights. Green means go, red means stop, and yellow means prepare to stop. From three lights in two possible states each (on/ off) we could get $2^{3}=8$ signals:

| red | green | yellow |
| :--- | :--- | :--- |
| + | - | - |
| - | + | - |
| - | - | + |
| - | - | - |
| + | + | - |
| - | + | + |
| + | - | + |
| + | + | + |

But to get 8 signals we have to give up on the simple meaning of e.g. 'stop' for red and 'go' for green (because the combination 'stop'+'go' would be a contradiction) - instead we can let the whole gestalt of three lights stand for an arbitrary meaning. Yélî Dnye often seems to follow such a strategy, and in doing so it appears to be minimizing the already formidable number of elements it uses to signal grammatical categories (quite why there is a pressure for minimization of forms at the expense of ambiguity is less clear - but quite a lot of the signalling burden for verbal inflection is carried by unstressed clitics of one or two syllables).

Consider the following extracts from both positive and negative paradigms (where --- indicates a zero verbal proclitic):

| (i) | doo pîp̂̂ | 'He was eating it the day before yesterday or before' |
| :--- | :--- | :--- |
| (ii) | doo ndî̀ | 'He did not eat it yesterday' |
| (iii) | $----n d \hat{\imath}$ | 'He did eat it the day before yesterday or before' |
| (iv) | daa ndî̂ | 'He did not eat it the day before yesterday' |
| (v) | ---- ma doo | 'He did eat two of them the day before yesterday' |
| (vi) | --- ma ngópu | 'They2 did eat it the day before yesterday' |
| (vii) | daa ma ngópu | 'They2 did not eat it the day before yesterday' |

Following the glossing tradition that stems from American structuralist linguistics, one may try to analyse the first three of these sentences in a way that makes them compositionally the sum of their morphemes:

| doo | pîp̂̂ |
| :--- | :--- |
| 3s.RemotePast.Positive.ContinuousAspect | eat.transitive.ContinuousAspect |
| doo | $n d \hat{\imath} \hat{\imath}$ |
| 3s.NrPST.Negative.PunctualAspect | eat.transitive.PunctualAspect. <br>  <br> Negative.NrPST |
| -.--- | $n d \hat{\imath}$ |
| 3sRemotePast.PunctualAspect | eat.transitive.PunctualAspect. <br> Positive.RemotePast |

Here we have selected quite different glosses for doo and ndî̀ according to the collocational context, each having different polarity in different contexts! Such an analysis imposes ambiguities such that doo is a clitic that means either positive or negative third singular depending on aspect, and ndî̀ is a verb root which signals negative in the Near Past (yesterday) or positive in the Remote Past (the day before yesterday or before). The disambiguation comes from the whole assemblage, and this suggests another kind of analysis in terms of gestalts - no parts have meanings independent of the whole: it is the whole that conveys the meaning. Thus doo ndî̀ cannot be Remote Past, because doo only combines with a Continuous aspect verb root ( $p \hat{\imath} p \hat{\imath}$ ) in that tense, when it means 3s.positive, nor can it be positive here because ndî̀ would then need to be a Continuous root. The whole assemblage forces a negative Near Past reading. A gestalt analysis of this sort suggests that Rossel has partially lexicalized its syntax, by letting strings of words convey arbitrary meanings, a bit as if the 'duality of patterning' in language was jacked
up one notch to create a triality of patterning. In some ways such an analysis is thoroughly in line with the tendency of the language throughout to lexicalize what other languages tend to express as combinable morphemes or derivable words. The languages of Southern New Guinea have also forced a re-think along these lines, discussed under the rubric of distributed exponence - see Carroll (2017), and Evans (2019).

We can extend the analysis a bit as in sentences (iv) and (v) above. The Remote Past and negative sense can be restored by shifting to an overtly negative preverbal clitic as in (iv). But in (v) we see the verb root change again to what we will call the 'followed root' - this time not to mark Continuous vs. Punctual aspect in Remote Past (pîpî vs. ndî̀) but now to indicate Punctual aspect with a following enclitic ( $n d \hat{\imath} \rightarrow m a$ ). This change has lost the marking of Remote Past tense in the verb root, which is now shifted to the post-verbal clitic doo ( $1^{\text {st }}$ person or singular subject, $3^{\text {rd }}$ person dual object, transitive indicative Punctual Remote Past OR Continuous aspect Proximal Habitual mood). Note that post-verbal doo has little in common with pre-verbal doo.

If we take the simple utterance ndîn, 'he ate it the day before yesterday (or before)', and change the subject number as in (vi), we get the followed root form again, now with a post-verbal clitic signalling dual $3^{\text {rd }}$ subject and singular object. This can mercifully be overtly negated as in (vii). Note that although the pre-verbal clitic normally carries the most subject information, here it is the post-verbal clitic which carries the subject information.

The language is rife with such gestalt encodings. Here is another example, where a complex proclitic changes its meaning radically in collocation with different root forms of the same verb:
(3) choo n:aa loo

2sIMM.PI.MOT go.REM
'You1 didn't go (today)?'
(4) choo n:aa lêpı̂

2DualC.IMP going
'You2 go now!'

To summarize this set of examples, we have seen that the verb root can carry information about tense, aspect, polarity and subject number (indirectly), and so can the pre- and post-verbal clitics. Which element carries which burden varies across the tense/aspect/person paradigm.

A similar issue has arisen in the history of morphological studies, where morphemic analysis is often opposed to the word and paradigm model. More recently,
systematic deviations from morphological compositionality have been the object of extensive study (see e.g. Evans 2019). In what follows, I will gloss examples with the appropriate one of the many competing meanings, but this can be very misleading for it suggests of course that there is only one such meaning, but the disjunctive list of glosses would be extremely hard to read or process. The implicit analysis then is of disjunctive lexical entries, combined with a unification procedure that combines all the senses that fit together, discarding the rest. This is in fact to depart from a strictly gestalt analysis, suggesting a partial decomposition of gestalt meaning - I am far from sure that this is correct, but it certainly will be more familiar to the reader.

Here is another example of gestalt signalling of grammatical categories. Henderson (1995:26) correctly isolates six tenses in the language. These tenses are absolute (tied strictly to diurnal spans hooked to the time of speaking), and refer to events that happened earlier today, yesterday, or before yesterday in the past, and events that are happening now, later today versus tomorrow or later. These six tenses are only fully coded in the TAM particles in one aspect and mood, namely the Continuous indicative, and even here there are many specific conflations or homonyms, so that e.g. nê covers ' 1 st person singular subject EITHER Continuous aspect tense 3 (earlier today) or tense 4 (yesterday) OR punctual aspect tense 4 (yesterday) or tense 5 (day before yesterday)'. Now, Henderson (1995:102) recognizes a Remote Past (day before yesterday) vs. a Recent Past (yesterday) tense in the Punctual aspect - but it is not coded in the pre-verbal TAM particle at all (his table has identical forms in both tenses). He maintains the distinction because it is displayed in the verb root, which typically (but not always) suppletes in the remote past. In addition, there is a post-verbal clitic which marks some aspects of the subject and some TAM properties, and this makes some systematic distinctions between the Remote Past and the Near Past in the Punctual aspect. Here are some examples to make the point - as noted, the pre-verbal TAM particle for $1^{\text {st }}$ person singular stays identical across the Remote and Near Past, but the verb root - here 'to hit' - changes from vy: a (Proximal tenses) to vyâ (Remote Past), providing it is followed by a zero morph for $3^{\text {rd }}$ person singular object, Monofocal subject, Remote Past. If there is e.g. a $2^{\text {nd }}$ person object, the object-indicating post-verbal particle is non-null, and picks up the burden of indicating the tense:

Punctual
nê vy: a nyoo
nê vyâ
nê vy: a ngi
nê vy:a
dîvy: a ngi
'I hit him yesterday
'I hit you today’

Continuous
noo vyee ngi
noo vyee
nê vyee ngi
nê vyee
nê vyee ngi

Dissecting the first example, we could gloss it as follows:

| $n \hat{e}$ |  |  |
| :--- | :--- | :--- |
| 1sSubj | vy:a | nyoo |
| $\begin{cases}\text { Cont.(Today/ } & \underline{\text { hit.Punct(Today/ }} \\ \text { Yest/Tom) } & \text { Yest) }\end{cases}$ |  |  |
| Punct(Yest/ (Followed) <br> BeforeYest)  | $\left\{\begin{array}{l}\text { Cont.Hab.(Today/ } \\ \text { Yest/Tom) } \\ \text { Punct (BeforeYest) }\end{array}\right.$ |  |

The only possible unification is underlined. As noted above, such an analysis posits multiple homonyms, and a mechanism for selecting 'all the news that fits'. The alternative, perhaps psycholinguistically more plausible account, is simply that the whole assemblage is recognized as a gestalt, much in the way in which we visually recognize common words on the page without processing each grapheme.

This is a kind of distributed marking of the grammatical category of tense, whereby the marking can get shifted onto another part of the verb complex, according perhaps to some preference hierarchy (see Evans et al. 2018 on 'circumfixal morphology'):


### 2.4 Grammatical categories of Yélî Dnye

It is unusual for a grammar to outline the set of grammatical categories exhibited in the morphosyntax of a language independently of the formal expression of them. But for Yélî Dnye this will prove helpful because many of these categories are immanent, and are clearly expressed only indirectly or through the collocation of forms that may be independently described elsewhere in passing - this follows from the gestalt marking properties noted above. In addition, when searching for related languages, such deeply ensconced distinctions may be important stigmata, and a number of parallel patterns will be pointed out in passing. These parallels, in addition to the portmanteau marking of verbal parameters and the suppletion of verb roots already mentioned, all help to relate Yélî Dnye to the highland Papuan languages of New Guinea. Some of the most prominent domains of grammatical categories are as follows.

### 2.4.1 Person and number

As we will see passim, the language motivates a paradigm of nine person/numbers as follows:

|  | Singular | Dual | Plural |
| :--- | :--- | :--- | :--- |
| $\mathbf{1}^{\text {st }}$ person |  |  |  |
| $2^{\text {nd }}$ person |  |  |  |
| $3^{\text {rd }}$ person |  |  |  |

This paradigm is not fully explicit in independent pronouns (e.g. there are no third person 'nominative' or unmarked pronouns), and all nine forms are never fully distinguished in the pre-verbal inflectional clitic marking subject number. But cross-cutting realizations together fully exemplify the pattern, and the full nine cells are distinguished by the intersection of pre- and post-verbal clitics, the latter encoding inter alia properties of the object, conflated with subject and tense/aspect.

A number of conflations on this matrix are recurrent. For example, third person forms are never distinguished by number in the inflectional preverbal particles specialized for punctual aspect. Quite typically, $2^{\text {nd }}$ person singular (2s) is conflated with first person dual (1d), in a pattern reminiscent of East Highland languages like Gahuku, Hua and Benabena (see Foley 1986:134-135). Sometimes in Yélî paradigms there is also conflation of $2^{\text {nd }}$ person dual and $3^{\text {rd }}$ person dual ( $2 \mathrm{~d}=3 \mathrm{~d}$ ). These conflations can be found in preverbal inflectional particles marking the subject, tense, aspect and mood in portmanteau fashion.

A special pattern of conflation is found in the post-verbal enclitics marking both subject and object properties for transitive verbs - a pattern special enough to constitute a grammatical category in its own right. Here the subject properties are grouped, so that $1^{\text {st }}$ person OR singular persons are grouped into one category, Monofocal, and the $2^{\text {nd }}$ and $3^{\text {rd }}$ person non-singular persons are grouped in another, Polyfocal, category (the terminology comes from the study of other Papuan languages, e.g. Young (1971), Crysmann (2018), and is used by Henderson 1995:39). Languages exhibiting this category are found amongst the Gorokan family (Young 1971). Henderson 1995 noted the pattern in Yélî Dnye verbal enclitics, although in fact his version of the paradigms underplays its significance - see §6.1.2 for the details.

|  | Singular | Dual | Plural |
| :---: | :---: | :---: | :---: |
| $1^{\text {st }}$ person | MONOFOCAL |  |  |
| $2^{\text {nd }}$ person |  | POLYFOCAL |  |
| $3^{\text {rd }}$ person |  |  |  |

The monofocal/polyfocal distinction is covertly present in a number of other paradigms. For example, the Remote Past suppletive form of the verb root of many verbs is used with monofocal subjects only - this is because an alternative root is triggered by a non-zero post-verbal clitic which is bound to occur with polyfocal subjects.

### 2.4.2 Tense, aspect and mood

Henderson (1995) isolates 6 tenses, 2 aspects and 3 moods. These are variously and partially expressed in pre-verbal and post-verbal clitics and suppletive verb roots. Tense is absolute - that is, always anchored in the time of speaking, not relativized to points in the discourse (as in the English pluperfect He had already gone). Further, tense is metrical (as opposed to vectorial), based on diurnal units as indicated in Table 2.2 (see Frawley 1992; Comrie 1985, for comparative typology). Yélî Dnye is amongst the few languages in the world with six such tense distinctions (see Foley 1986:159-60, Stebbins et al. 2018, Foley 2018:917 for other Papuan languages with diurnal tenses). Since the Yélî tenses indicate the number of diurnal spans away from today, they may be lexically expressed by the Rossel words for 'today', 'day before yesterday', etc. which closely match the tense distinctions (see Levinson \& Majid 2013 for Rossel conceptions of time).

Table 2.2: Main tense distinctions in Yélî Dnye.

| Tenses: Henderson's (1995) labels | Semantic extension | Parallel lexical adverbial |
| :--- | :--- | :--- |
| Future Distal | Tomorrow or later | mââ 'tomorrow', <br> m:ii 'day after tomorrow' |
| Immediate Future | Later today | awêde 'today' |
| Present | Now | ala ngwo 'right now' |
| Immediate Past | Earlier today | awêde 'today' |
| Near Past | Yesterday | ma 'yesterday' |
| Remote Past | Day before yesterday <br> (or before) | m:iituwo 'day before <br> yesterday or before' |

Tense systems of this kind seem common in many Papuan languages, although in this case not the Gorokan ones (Foley 1986:160); they are found both in Trans New Guinea languages and in other languages of Southern New Guinea (Evans et al. 2018). Henderson (1995:23) notes that in inflectional paradigms the tenses are often functionally grouped into proximal and distal tenses, where the proximal tenses are those three tenses nearest to coding time as available in the relevant aspect, a point returned to below.

Henderson isolates two aspects, the continuous and the punctiliar (these terms are standard in Papuan linguistics, but 'punctiliar' is not distinct in connotation from the more usual term 'punctual', which I have therefore used instead). These aspects are marked not only in the preverbal and postverbal clitics, but also by suppletion or reduplication of the verb root, and it is one of the most far-reaching grammatical distinctions in the language. Papuan languages with aspectual marking of this type are found especially in the Western province of Papua New Guinea (Foley 1986:146) and in the languages of Southern New Guinea like Marind (Olsson 2017; Evans et al. 2018), but can also be found in Trans-NewGuinea languages like Mian (Fedden 2011). The punctual aspect is perfective, and the continuous aspect is imperfective - the continuous is used e.g. in a 'while'clause, and it is the continuous form that provides nominalized gerunds 'doing X'. The two aspects form a fundamental distinction which plays a crucial role in the organization of the grammar and morphology.

The two aspects run through three moods. There is the indicative, imperative and what Henderson (1995:16) calls the habitual mood. Imperatives occurs in two tenses and 9 person/number combinations, and are one of the main ways of expressing deontic modality. As for the habitual, Henderson claims that the habitual cannot be a type of imperfective aspect, as Comrie (1976:26) appears to suggest in general discussion of such oppositions, because habituals occur in both the punctual and continuous aspects in Yélî, whereas Comrie's Table 1 (1976: 25) portrayed the habitual and continuous as two contrasting types of the imperfective, both opposed to the perfective. This, Comrie (pers. comm.) points out to me is incorrect, since although that is a typical configuration (opposing perfective to either habitual or continuous), other languages do combine a perfective aspect with the habitual. In this regard, Yélî parallels Bulgarian, so that the Perfective Imperfect (denoting iterative perfective events) in that language corresponds to Yélî’s Punctual Habitual in the terminology used here (see Comrie 1976:31-32). In Yélî Dnye, the habitual indicates an action normally or regularly done, either punctual or imperfective in character, and it comes in two tenses (in the continuous aspect but only one in the punctual) indicating that the action is still so done, or was formerly so done. Treating it as a mood, Henderson argued, allows these intersections with tense and aspect to be portrayed paradigmatically. I retain his termi-
nology here for clarity and consistency. The imperative mood occurs in all persons and two tenses (Present and Future), and is one of the more complex corners of Yélî syntax and semantics, forming part of a complex system for the expression of deontic modality. There are a number of other mood-like distinctions which might be treated as moods: conditionals, counterfactuals, and subjunctive-like forms of the verbal complex based on using parts of the counterfactual marking.

Henderson (1995:26) provides the following table illustrating the interaction of tense distinctions with mood and aspect (note that this table implies, amongst other details, that the Habitual Past tense has a Remote Past semantics - which is correct). I have marked the tenses which are differentially treated as proximal (vs. 'distal') in the two aspects with 'prox' - these groupings determine shared marking in the post-verbal clitics.

Table 2.3: Cross-cutting categories of tense, mood and aspect in Yélî Dnye (after Henderson 1995: 26) $\mathrm{V} / \emptyset$ indicate, respectively, that the category is, or is not, operative in that intersection of categories by row/column.

| TENSE | MOOD |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | INDICATIVE |  | HABITUAL |  | IMPERATIVE |  |
|  | CONT | PUNCT | CONT | PUNCT | CONT | PUNCT |
| FUTURE | $\checkmark$ distal | $\checkmark$ prox |  |  |  |  |
| IMMED. FUTURE | $\checkmark$ prox |  | $\emptyset$ | $\emptyset$ | $\checkmark$ | $\checkmark$ |
| PRESENT | $\checkmark$ prox | $\emptyset$ | V |  |  | $\checkmark$ |
| IMMED. PAST | $\checkmark$ prox | $\checkmark$ prox |  |  |  |  |
| NEAR PAST | $\checkmark$ distal | $\checkmark$ prox |  |  |  |  |
| REMOTE PAST | $\checkmark$ distal | $\checkmark$ distal | $\checkmark$ | $\checkmark$ | $\emptyset$ | $\emptyset$ |

### 2.4.3 Transitivity

Transitivity is marked largely in the post-verbal clitic: one cannot determine transitivity by the form of the pre-verbal clitic or the verb stem itself, although many verbal notions (e.g., betel-chewing, eating, grating coconuts, etc.) have distinct roots for transitive and intransitive counterparts (which one might treat as suppletion, except that these counterpart roots themselves supplete on other dimensions). Post-verbal intransitive clitics mark the number of the subject together with various collapsed categories of tenses and aspects, following the monofocal/polyfocal distinction mentioned above. Different clitics encode subject, object and tense/aspect/mood in portmanteau form.

Since the language is both morphologically and syntactically ergative, transitivity of the clause is also marked indirectly by the presence of an ergative NP, or an absolutive NP which is not a subject, or by syntactic processes restricted to clauses with ergative NPs (see e.g. §8.6.2). Some degree of interstitial transitive status occurs with some kinds of object incorporation (§7.9.4) and with reciprocals (§7.8).

### 2.4.4 Definiteness and epistemic status

The marking of definiteness and associated notions is distributed. Definiteness itself is not directly expressed, but the deictic and anaphoric status of NPs are marked in various ways. First, deictic and anaphoric determiners may precede the noun. Second, many nouns take a suffix -ni, while others have a suppletive form, collocating with such individuating determiners, as in ló pi-ni 'which man?’. Third, indefinite status may be marked by an indefinite singular quantifier, which may migrate (by quantifier-floating) into pre-verbal position only if the NP is in the absolutive case. Fourth, plural quantified noun phrases can occur with knî, a definite plural/'augmented' postpositional clitic.

The anaphoricity of the subject, as well as its epistemic certainty or uncertainty, or the deictic direction or uniqueness of actions (as opposed to their repetition by same or different actors), and so on, are marked in or on the preverbal clitic. The notions expressed are subtle, and my treatment in §6.1.3.1-§6.1.3.6 probably fails to catch many of the subtleties. Some of the distinctions here are also found in the demonstratives (§4.2.2.3).

### 2.4.5 Case

Ergative and Absolutive case are marked by postpositions on NPs, as well as in some subtle determiner movements (indefinite absolute determiners ending up in the pre-verbal nucleus). 'Ergative' implies the agent (A role in Dixon's (1994) terminology), and 'Absolutive' both the patient (or O role) in a transitive clause and the subject ( S role) of an intransitive clause. In equatives both NPs are Absolutive (actually unmarked). Both Instrumental NPs and the Experiencer subjects of special experiencer constructions look superficially similar to Ergative NPs, but are distinguished in the dual or plural, so must be recognized as distinct cases on this and on syntactic grounds. In a curious pattern, both the Dative and Ablative (as in source or goal of giving) are conflated in a single case, and Locative source/ goal are also systematically undistinguished (with zero case marking, and e.g. the same interrogative forms; §11.2).

Cross-referencing on inflectional clitics is nominative-accusative in pattern. Overt pronouns rarely co-occur with verbal cross-referencing - if they do, they can be marked on a 'nominative' pattern (shared form for intransitive and transitive subjects) or an ergative/absolutive one (especially in quotation contexts). There is an oblique case marker used to mark non-locative source/goal (or dative, ablative notions), which also sometimes occurs marking Experiencer subjects. There are also Comitative and Sociative postpositions, and a special form of the Ergative used for Experiencer NPs. Case postpositions often supplete to indicate the number of the NP (singular, dual or plural). The Locative case, along with the Absolutive, is unmarked. The Absolutive, however, may be indirectly marked by the lowering of indefinite quantifiers into the pre-verbal slot. Independent pronouns come in four paradigms, three associated with the unmarked or 'nominative', the experiencer and the oblique (source/goal) case and a fourth with the possessive.

There are important syntactic correlates of ergativity (Chapter 9) with e.g. (1) two kinds of clefts according to A vs. S/O role of the focal NP, (2) indefinite marker lowering on absolutive NPs only (whether in O or S function), (3) preservation of only absolutive (S or O) arguments in nominalizations.

### 2.4.6 Possession

Possession is normally marked by a possessive pronoun preceding the head noun, on the pattern 'John his house': [Mwonî [u ngomo]], which should be understood as bracketed in the manner shown (i.e. as a head-marking pattern). The possessive pronouns may of course be used without a preceding noun. The second person singular form of all nominals is formed by nasalizing the initial stop of a word, and altering other initial segments according to rules discussed under phonology below. Possession is asserted with a locative construction (on the lines of 'it is sitting in his possession'). Body part terms and a few kinterms have special forms for $3^{\text {rd }}$ person possession - e.g. kêê 'arm' has the form kóó 'his arm', perhaps remnants of a more systematic category of inalienable possession.

As in many languages, possession plays an important role in NP-building, allowing the construction of complex NPs expressing, e.g., abstract time concepts (see §5.3).

### 2.4.7 Temporal subordination

Temporal subordination (see §8.5), as in 'While/when/during . . .' can be expressed in a number of distinct ways, for example by special forms of the pre-
verbal clitic incorporating yi, adverbial phrases of the kind dini ghi n:ii ngê ('at the time when') in the continuous aspect, and by nominal gerunds followed by têdê. In addition, there are 'When'-subordinators.

### 2.4.8 Conditionals and counterfactuals

Conditionals (§8.2) are expressed by special verbal enclitics on the antecedent; they are infrequently used. In comparison, the counterfactual conditionals (§8.3) are frequently used, and are expressed by special proclitics on both antecedent and consequent in a total paradigm of 252 cells! Both antecedent and consequent can be used alone to express deontic modality.

In addition to these domains of grammatical categories, Yélî Dnye has a number of themes that run through the grammar. One is the underlying theme of syntactic ergativity, with observations gathered together in Chapter 9. Remarkable is the small role that a subject category (uniting agents of transitives and subjects of intransitives) plays in the grammar. Another is the complexity and irregularity of negation, with an overview provided in Chapter 10. Many other remarkable features will be met in passing - this is an unusual language.

## 3 Phonology

Yélî Dnye almost certainly has, with 90 distinctive segments, the largest phoneme inventory in the Pacific. Many of these are exotic sounds, and some of them are unique in the languages of the world, as far as we know. It is the only known language with systematic labial-coronal double-articulations (labial-dental, labial post-alveolar, as well as labial-velar), which occur in both stops and nasals. It is also the only known language combining prenasalized stops, nasally-released stops and a contrast between oral and nasalized vowels, requiring extremely fine control of the oral/nasal contrast. Given the scientific importance of these rare sound contrasts, the system has been investigated in collaboration with Ian Maddieson, and the following remarks are informed by this collaborative work (Maddieson \& Levinson, nd). Ongoing work with Marisa Casillas investigates the order of acquisition of these complex sounds by children (see Casillas et al. 2020).

### 3.1 The phoneme inventory

We can think of the huge consonantal array as built up in the following way. There are four basic points of articulation, from bilabial stop, alveolar stop, post-alveolar stop to velar stop (Table 3.1). In addition, each of these positions can be prenasalized, and post-alveolar or velar stops nasally released. The 'dentals' range from dental to alveolar, while the post-alveolars may not always reach real retroflex positions (following Ladefoged \& Maddieson 1996, we represent this as e.g. /t/ vs. /t /, not /t/ vs. /t/ as in Henderson 1995). However, ultrasound recordings of a single speaker performed in 2009 show that some articulations at least are full sub-apical retroflexes. This contrast is reinforced in various ways, e.g. in /nm/ vs. /ṇm/ the release is primarily labial vs. coronal respectively, and intervocally the post-alveolar stop /t/ becomes a retroflex flap [r]. Incidentally, linguography on the same single speaker shows the alveolar stops are laminal, at least on the four tokens collected.

Table 3.1: Stops and nasals - 1 Single articulations.

|  | Bilabial | Alveolar | Post-alveolar | Velar |
| :--- | :--- | :--- | :--- | :--- |
| Voiceless plosives | p | t | $\mathrm{t}[\mathrm{r}]^{\star}$ | k |
| Prenasalized plosives | mp | nt | $\mathrm{n}!̣$ | $\eta \mathrm{k}$ |
| Nasally-released plosives |  |  | $\underline{n} \mathrm{n}$ | $\mathrm{k} \mathrm{\eta}$ |
| Nasals | m | n | n | $\mathrm{\eta}$ |

*(ṭ is realized as [r] intervocalically)

Onto this basic array are mapped double articulations, involving a full bilabial release over the primary articulation shown in Table 3.2:

Table 3.2: Stops and nasals - 1 Double articulations.

|  | Labial-Alveolar | Labial-Post-alveolar | Labial-Velar |
| :--- | :--- | :--- | :--- |
| Voiceless plosives | tp | tp | kp |
| Prenasalized plosives | nmtp | $n ̣ \mathrm{~m} \mathrm{p} \mathrm{p}$ | $\mathrm{\eta mkp}$ |
| Nasally-released plosives |  | $t ̣ p ̣ m$ | $\mathrm{kp} \mathrm{\eta m}$ |
| Nasals | nm | n m | $\eta \mathrm{m}$ |

This series of contrasts is unique in the languages of the world. Maddieson (pers. comm.) suggests that historically the alveolar and post-alveolar double articulations may have arisen from secondary labialization of the coronal stops, since secondary labialization remains a feature of the language (with e.g. velar and bilabial stops) but is now absent from the coronals (i.e., the alveolars and postalveolars).

The rest of the massive consonant series is built up by additional labialization of bilabial and velar stops, palatalization right across the positions of articulation, or combinations of these. In addition, there is a series of non-nasal continuants.

In order to introduce the practical orthography devised by the Hendersons, I will now revert to the way in which James Henderson (1995) presented the consonantal array. He isolated the four basic points of articulation, and then considered the double articulations with bilabial closure (which he called 'simultaneous bilabial closure') to form, as it were, an additional three places of articulation (see Henderson 1995:10-11). These seven consonants can then be palatalized, labialized, or both. Further, the seven basic consonants can be prenasalized (as in mb ) or post-nasalized (as in $t n$ ), and these in turn can be further palatalized (as in $m b^{\prime}$ ) or labialized ( $m b^{w}$ ) or both $\left(m b^{j w}\right)$. Although not all of these possibilities are realized, this offers a huge array of possible stops, and the same positions together with palatalizations and labializations are extended to the nasals. Finally there are non-nasal continuants, yielding an overall inventory of 56 distinctive consonantal segments for which good or near minimal pairs can be found. ${ }^{11}$ Tables 3.3 to

11 As shown in Table 3.3, four additional stop segments ( $k p y$, $k n w, d n, m d y$ ) have only a few attestations in a 6000 word lexicon: of these, kpy and $k n w$ (with three and seven attestations respectively) probably should be admitted on the grounds of minimal pairs, but we will stick here with the conservative count.
3.5 give the consonantal segments recognized in this study in an IPA representation preceded in bold by the practical orthography developed by the Hendersons (there are a few changes from Henderson's (1995) analysis mentioned in passing). Forms in brackets have earlier been used in transcriptions by Henderson or myself, but are now thought dubious.

The practical orthography stays reasonably close to the IPA rendition, except where consonants exhibit both simultaneous bilabial closure and either pre- or post-nasalization. In that case, in order to avoid tetragraphs, Henderson has used arbitrary conventions (e.g. $m g$ is used to represent / $\mathbf{\eta m k p}$ / instead of e.g. the more transparent ngmb). Other arbitrary conventions include writing the alveolar stops (Henderson's "dental" series) with /t/, the post-alveolar ones with /d/, while the corresponding nasals are written with /n/ (alveolar) vs. /n/ (post-alveolar). The digraph /nt/ is not used, since the orthographic /t/ signals alveolar - in what follows I have for practical reasons used the digraph ' $n$ for ń.

Henderson's practical orthography is used in the 1987 New Testament and 2002 Old Testament translations, a dictionary and other pedagogical publications, and is accepted by the community, so will be maintained here: unfortunately, there is no elegant solution to writing a language with so many contrasts.

The stops in Yélî Dnye are basically unvoiced, except in medial position, where all but the alveolar stops are lightly voiced preceding a short vowel: thus orthographic pêpê, 'lying down', phonemic /рәрә/ $\rightarrow$ [pəbə], or tââkî 'turtle' /ta:ku/ $\rightarrow$ [ta:gu] (Henderson 1995:6). In the same environment, post-alveolar
 in medial positionfollowedbyalongvowel:paapaa'pulling' isrealizedas[pæ:pæ:], or daad $\hat{\imath}$ 'long' as [ṭæ:ṭu:] (Henderson 1995). Prenasalized consonants (such as $/ \mathrm{mb} /$ ) are however voiced, but post-nasalized stops are initially voiceless, and are discussed in §3.2.

Table 3.3: Stops in practical orthography, with IPA counterparts beneath in slashes (SBC = 'simultaneous bilabial closure').

|  | Bilabial | Alveolar | Alv+SBC | Post-Alv. | Post-Alv+SBC | Velar | Velar+SBC |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (a) Core |  |  |  |  |  |  |  |
|  | p | t | tp | d | dp | k | kp |
|  | /p/ | /t/ | /tp/ | /t/ | /ṭp/ | /k/ | /kp/ |
| +Palatalized | py | ch | tpy | dy | dpy | ky | (kpy)* |
|  | /p/ | /ts/ | $/ \mathrm{tp}^{\text {i/ }}$ | /ți $/$ | /ṭp ${ }^{\text {/ }}$ | /k/ | (/kp $/$ ) |
| +Labialized | pw |  |  |  |  | kw |  |
|  | $/ \mathrm{p}^{\mathrm{w}} /$ |  |  |  |  | /kw/ |  |

Table 3.3 (continued)

|  | Bilabial | Alveolar | Alv+SBC | Post-Alv. | Post-Alv+SBC | Velar | Velar+SBC |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| +Both | pyw |  |  |  |  |  |  |
|  | $/ \mathrm{p}^{\mathrm{jw}} /$ |  |  |  |  |  |  |

*This segment is attested in only four certain words, kpyopwo 'shell-money purse', kpyipi 'tree sp.', Kpyipikîgha ‘old village name’, Kpyoo kn:ââ ‘reef passage name’, all native.
(b) Prenasalized

|  | mb | nt | mt | nd | md | nk | mg |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | /mb/ | /nd/ | /nmdb/ | /ṇ̣/ | /ṇmḍb/ | /ng/ | /nmgb/ |
| +Palatalized | mby | nj | mty | ndy | (mdy)* |  |  |
|  | /mb ${ }^{\text {/ }}$ | /nd3/ | /nmdb ${ }^{\text {/ }}$ | /ṇ̣̣ ${ }^{\text {/ }}$ | (/ṇmḅbi/) |  |  |
| +Labialized | mbw |  |  |  |  | nkw |  |
|  | $/ \mathrm{mb}^{\mathrm{w}}$ / |  |  |  |  | $/ \mathrm{gg}^{\mathrm{w}}$ / |  |
| +Both | mbyw |  |  |  |  |  |  |
|  | /mbiw/ |  |  |  |  |  |  |

*No attestations - possibly non-existent.
(c) Nasally-released

|  | (dn)* | dm | kn | km |
| :---: | :---: | :---: | :---: | :---: |
|  | /ṭ̣/ | /ṭp̣m/ | /kn/ | /kpım/ |
| +Palatalized | dny | dmy |  |  |
|  | /ṭ̣ ${ }^{\text {/ }}$ | /tpṇm ${ }^{\text {/ }}$ |  |  |
| +Labialized |  |  | (knw) $\dagger$ |  |
|  |  |  | /knw/ |  |

${ }^{\dagger}$ Seven attestations, only two in initial position (knwede, 'tree species', knwi ‘unburnt garden') but these are all genuine native words.
*Only one attestation, in post-verbal inflectional clitic dniye - not clear that this is really distinctive from dnyiye

Table 3.4: Nasals in practical orthography, with IPA counterparts beneath in slashes (SBC = 'simultaneous bilabial closure').

|  | Bilabial | Alveolar | Alv+SBC | Post-Alv. | Post-Alv+SBC | Velar | Velar+SBC |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Base | m | ń | ńm | n | nm | ng | ngm |
|  | /m/ | /n/ | /nm/ | /n/ | /ṇm/ | /n/ | / $\mathrm{mm} /$ |
| +Palatalized | my | (ńy)* | (ńmy)* | ny | nmy |  |  |
|  | /mi/ | (/n'/) | (/nmi/) | $/ \mathrm{n}^{\mathrm{j}} /$ | $/ \mathrm{nm}{ }^{\text {i }}$ |  |  |

Table 3.4 (continued)

|  | Bilabial | Alveolar | Alv+SBC | Post-Alv. | Post-Alv+SBC | Velar |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Velar+SBC |  |  |  |  |  |  |
| +Labialized | mw |  |  |  |  | ngw |
|  | $/ \mathrm{m}^{\mathrm{w}} /$ |  |  |  | $/ \mathrm{m}^{\mathrm{w}} /$ |  |
| +Both | myw |  |  |  |  |  |
|  | $/ \mathrm{m}^{\mathrm{w}} /$ |  |  |  |  |  |

*Not attested at all, seem not to exist.

Table 3.5: Non-nasal continuants in practical orthography, with IPA counterparts beneath in slashes (SBC = 'simultaneous bilabial closure').

|  | Bilabial | Alveolar | Alv+SBC | Post-Alv. | Post-Alv+SBC | Velar | Velar+SBC |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | w |  |  | $y$ |  |  | gh |
|  | /w/ ~/ $\beta$ / |  |  | /j/ |  |  | /8/ |
|  |  |  |  | 1 |  |  |  |
|  |  |  |  | // |  |  |  |
| +Palatalized | vy |  |  | ly | Iv |  |  |
|  | $/ \beta^{i} /$ |  |  | /i/ | // $\beta^{\mathbf{i}}$ |  |  |

The vowels of Yélî Dnye have four distinct levels of closure, make (minimal) use of a rounded/unrounded contrast in back vowels, and use one central position. Of these ten basic oral vowels, seven offer distinctively nasalized counterparts. These seventeen vowels have distinctively lengthened counterparts, yielding 34 vowel segments in total, as shown in Tables 3.6 to 3.9.

Table 3.6: The oral short vowels in practical orthography with IPA counterparts beneath in slashes.


Acoustic measurements show that orthographic $\hat{\imath}$ is an unrounded back vowel / $\mathrm{m} /$, not the high mid-vowel /i/ Henderson (1995) presumed. Earlier transcriptions by Henderson (1974, 1975, 1986; Henderson \& Henderson 1974a) had an additional segment $a ́$ (a higher /æ/), but if there was a basis for it, it seems no longer to be distinctive, being assimilated either to /æ/ or $/ \varepsilon /-$ Henderson always considered it marginal (see his 1995:2), and has now abandoned the letter in the practical orthography (this alone accounts for the difference in the number of vowels in his account, namely 38, and the present one with 34 , since he assumed $a ́$ had lengthened, nasalized, and nasal+lengthened forms). Acoustic measurements do not support its distinctiveness among current speakers. In the practical orthography, nasalization is marked with a preceding colon, perhaps an unfortunate choice given that in IPA it signals length; instead, in the practical orthography length is represented by gemination. The practical orthography is retained here for consistency with earlier publications and to make this text more accessible to Rossel people.

Table 3.7: Nasalized short vowels in practical orthography with IPA counterparts beneath in slashes.


These short nasalized vowels are mostly non-distinctive after a nasal continuant - e.g, there is no contrast / mo/vs. / mũ/ - since the vowel is always then nasalized except where there is a following non-nasal syllable (Henderson 1995:3). ${ }^{12}$ Note that three segments from the non-nasal vowels are missing:

[^6](1) The segments / $\mathrm{m} /$ (practical orthographic î) and /w:/ (orthographic îil) are never distinctively nasalized
(2) The close/open opposition between /e/ (orthographic é) vs. / $\varepsilon /$ (orthographic e), and /o/ (orthographic ó) vs. /o/ (orthographic o), is lost in nasalized vowels.

Distinctive length can be applied to all of the above vowels - that is to the 10 oral short vowels, and the seven nasalized short vowels:

Table 3.8: Lengthened oral vowels.


Table 3.9: Lengthened nasal vowels.


In this way, we end up with total inventory of 34 total distinctive vowel segments.
Reviewing the phoneme inventory, then, we thus have 56 consonants and 34 vowels, making a total of 90 distinctive segments ( 93 if one counts exceed-
ingly rare consonants). ${ }^{13}$ Henderson (1995) gives minimal pairs for most of these, which are therefore not repeated here. Some segments in this inventory are very unusual, especially those with double articulations and post-nasalization. As mentioned, Yélî Dnye is the only known language in the world with contrastive labial-coronal stops, as in the segments /tp/ vs. /ṭp/. Some initial measurements are reported in Ladefoged and Maddieson (1996), together with remarks on why these segments were not expected to occur, and additional measurements are reported in Maddieson and Levinson (nd). The post-nasalized stops, involving de-voiced nasal plosion after a stop, are also very rare, occurring in less than half a dozen languages in the world (e.g. in Arrernte, Central Australia, Wilkins 1989) on current evidence. Another unusual feature of the overall inventory is the very complex contrastive use of nasalization in both consonants (with preand post-nasalization and real nasals) and vowels. Using air-flow measuring equipment we have been able to study the time course of nasalization in these complex conditions (illustrated below, Figures 3.7, 3.8). Other unusual features of the inventory involve the use of both palatalization and labialization superimposed to construct additional segments, and some additional unusual segments amongst the continuants, as with the palatalized and labialized laterals. Finally, by any standards the vowel inventory at 34 segments is large, but by the standards of the Papuan languages it is extreme - as Foley (1986) remarks, otherwise "[Papuan] languages with more than eight distinctive vowels are unattested". ${ }^{14}$ There is also nothing like the Rossel consonantal inventory to be found amongst other reported Papuan languages. Foley (1986) in his survey found no dental/ alveolar or alveolar/retroflex contrasts, but the recent surveys in Palmer (2018) show occurrence in a few Papuan languages in the Sepik-Ramu Basin (p. 272), North Halmahera (p. 584), and in the Pahoturi River languages in Southern New Guinea, where quite exceptionally Idi has both an alveolar/retroflex stop contrast and an $/ \mathrm{y} /(\mathrm{p} .644,699)$. These distinctively Australian features are shared with Yélî Dnye and contrast with nearly all the other Papuan languages known. Moreover although prenasalization is found on the Papuan mainland, no post-nasalization has been reported as in Yélî. We can conclude that the Rossel system whatever its origin, as a relic of earlier languages, or a baroque development of simpler Papuan patterns - has no similar counterparts in this part of the world.

13 As mentioned, three other stop segments have a few attestations, of which knw is the best candidate.
14 Imonda, however, has 10 distinctive vowels (Seiler 1985), as Harald Hammerström (pers. comm.) points out to me.

### 3.2 Phonetics

The complexity of the phoneme inventory raises many detailed questions about the underlying phonetics of the distinctions, how they are maintained, distinguished, and produced in connected speech. A great deal of phonetic information on these consonantal and vowel segments has been collected, including acoustic, aerodynamic and video data of lip movements, and the details are (or will be) reported in specialized papers co-authored with Ian Maddieson, who has undertaken the measurements. Here we report a few highlights.

## (1) The nature of the vowel space

Figure 3.1 shows the ten long oral vowels in acoustic space defined by the first two formants (one speaker Y). Note the location of orthographic $\mathfrak{n}$, IPA /w:/, which Henderson (1995) identified as a high central vowel - instrumental work shows it in fact to be a back unrounded high vowel: it falls between two allophones of orthographic $u u$, IPA /u:/, which has a fronted rounded allophone overlapping it in acoustic space. For contrast, note the location of the central vowel $\hat{e}$, IPA / $/$ /, which is widely separated in acoustic space.


Figure 3.1: The vowel space as defined by the first two formants - the 10 lengthened oral vowels.

Note the fronted allophone of $/ \mathrm{u} /$; also that orthographic $\hat{\imath}$ is an unrounded back vowel / $/ \mathrm{m} /$, not a high central vowel as previously supposed. Note also the central V/ə/.

## (2) The coarticulated consonants as single segments

The reader may naturally wonder whether a complex consonant like /ṭpṇm/ (as in the first two letters of orthographic dmaadî 'girl') is not in fact a complex consonant cluster. Timing facts support the notion that these complex coarticulations are nevertheless single segments. The total duration of the average non-doubly articulated stop vs. the doubly articulated stops involving simultaneous bilabial closure is negligibly different. Figure 3.2 gives the mean duration for single vs. double-articulated stops - although there is some durational difference here in the expected direction, voice onset times are notably shorter for the double-articulated stops, as shown in Figure 3.3. Allowing for this, total consonant duration is only slightly different, namely 157 vs .164 ms .


Figure 3.2: Average duration of singly vs. doubly articulated stops.

The shorter VOTs for doublearticulated consonants gives the total consonant durations:
single: 157 ms
double: 164 ms


Figure 3.3: Voice onset times (VOT) for singly-vs. doubly-articulated consonants.

Figures 3.4 and 3.5 show a similar picture for the doubly-articulated nasals - in this case we have not only acoustic information, but also air-flow measurements.


Figure 3.4: Mean durations of singly- vs. doubly-articulated nasals (acoustic duration of wordinitial nasals after clitic $a$ - 'my', from 6 speakers).


Figure 3.5: Mean durations of singly-vs. doubly-articulated nasals: aerodynamic recordings from two speakers.

## (3) Doubly-articulated consonants - the relative timing of the two articulations

The doubly-articulated consonants can sound rather variable in different positions, and as articulated by different speakers - sometimes the labial element is phenomenologically dominant, sometimes the other articulation (cf. Evans \& Miller 2016 on Nen). The key to recognition is that the timing of the two articulations tends to be offset. In African languages / kp/ is normally realized so that the velar closure precedes the labial gesture, and is released before the labial release, so that when preceded by a vowel the velar is audible alone at the beginning of
the segment, and the labial at the end (Ladefoged \& Maddieson 1996). Essentially the same pattern is found in Yélî Dnye /kp/ as diagrammed in Figure 3.6, where the timing off-set is probably c. $15-20 \mathrm{~ms}$. The same pattern also seems to hold for the labial-alveolars and labial-post-alveolars; that is, that the coronal stop articulation precedes the labial - however, the timing shows more variation than with labial-velars. With labial-velar nasal $/ \mathrm{ym} /$ it is possible in the acoustic record to detect the end of the velar-closure, and the following bilabial release c. 30 ms later. This timing off-set explains how these complex sounds can be 'parsed' in speech recognition - the two components are separated, if only for a matter of milliseconds, so that the onset of vowel $+/ \mathrm{kp} /$ has a dominantly velar sound, and the offset $/ \mathrm{kp} /+$ vowel has a dominantly labial sound.


Figure 3.6: Timing off-set in the two articulations of $/ \mathrm{kp} /$ preceded by a vowel.

## (4) Nasally-released stops

As mentioned, nasally-released stops are also typologically rare (analogous to the pre-stopped nasals in Arrernte and other Australian languages, but in this case perhaps with more evenly weighted components). In these segments, like /ṭ̣/, $/$ ṭp̣m/, /kn/, /kpŋm/, the oral closure is made, and then there is a sharp voiceless release through the nose, and while the oral closure is still maintained, voicing begins, to be followed by release of the oral closure. This produces a nasal plosion (as Henderson 1995:7 puts it), which in citation forms at least may perhaps be produced initially by a non-pulmonic (glottalic) air-stream mechanism. There are a number of words either consisting of /ky/ alone or ending in it - here the voiceless syllabic nasal carries the syllable (Henderson 1995:7 writes this as knî in the practical orthography for symmetry with the rest of the phonotactics). Analysis shows the following timing patterns (average of 31 tokens by 3 speakers):


Figure 3.7: Timing of voicing in relation to nasal release in nasally-released stops.
The combination of such sounds with the voiceless/voiced contrasts in following vowels raises interesting questions about the fine control of nasal production and recognition. The following figure shows the acoustic signal combined with two air-flow measurements (oral vs. nasal) in a complex nasally released consonant followed by a long voiceless vowel, in the word [ṭpṇa:ru] dmââdî 'girl'. One can clearly see here early nasal release, followed by nasal release with voicing (see audio trace), followed by oral release and oral airflow, followed by the sharp end of the nasal release c. 45 ms or $\mathrm{c} .1 / 3^{\text {rd }}$ into the long vowel. The maintenance of the oral/nasal vowel contrast must rely on this sharp cessation of nasality.


Figure 3.8: Aerodynamic record of the first syllable of [ṭp̣̣ma:cu].

### 3.3 Phonotactics

This huge phoneme inventory is not equally deployed in all positions in the word, and there are a number of generalizations to be made. Yélî Dnye words are about half bi-syllabic, about one third monosyllabic, the rest with three or more syllables (words with four or more syllables are largely reduplications or place names). For example, in a text-based Shoebox lexicon ${ }^{15}$ with 5809 distinct lexemes, we find the proportion of syllable-lengths as shown in Table 3.10:

Table 3.10: Syllable lengths.

|  | N | Percent of Words |
| :--- | :---: | ---: |
| Bisyllabic | 2810 | $51 \%$ |
| Monosyllabic | 2175 | $40 \%$ |
| Trisyllabic or more | 520 | $9 \%$ |
| (trisyllabic | 225 |  |
| quadrisyllabic) | 295 |  |
| Total | 5505* |  |

(*Remainder 5\% or 304 items are multiple word entries, with some possible slippage of categories due to computational techniques.) ${ }^{16}$

Derivational processes are very restricted, a major process being reduplication (e.g. of verb roots to form continuous aspect, of nouns to form adjectives) - but, as noted by Henderson (1995:5), reduplicated words remain phonologically two words, with for example no voicing in the repeated initial consonant. Most words longer than four syllables are either reduplications or names of places.

Nearly all words are composed of open syllables, on a CV+CV pattern. The exception is some 70 -odd words ending in orthographic $-m,-p$, and $-y$; words ending in $-m$ and $-p$ are also often spelt with a final $-\hat{\imath}$, which is optionally pronounced - one may therefore hold that there is either an underlying $\hat{\imath}$ in these words to preserve the CV generalization, or that $-\hat{i}$ is euphonically introduced (again, to preserve the CV pattern of word formation). Another exception is the small class of words (c. 50) beginning with a vowel: initial vowels are restricted

[^7]to $a$ (c. 50 words in the corpus, both lexical and grammatical), except for single segment grammatical morphemes in $u$ and $o$ or ó.

Monosyllabic roots form a large part ( $40 \%$ ) of the lexicon, and many further Yélî Dnye expressions are formed by a combination of such roots in fixed (idiomatic) phrases. All consonantal phonemes may occur in initial position in such roots, but they do not occur with equal frequency. If we define 'simplex' consonants as the set: - \{p,t,d,k,m,n, 'n,ng,w,y,l,gh\},
and 'complex' ones as the set:

- \{py pw pyw mb mby mbw mbyw ch nt nj tp tpy mt mty dy nd ndy dp dpy md mdy dn dny dm dmy ky kw nk nkw kp mg kn knw km, my mw myw 'n ‘ny ‘nm 'nmy n ny nm nmy ng ngw ngm vy ly lv\}
then the monosyllabic roots are split about equally between the two sets. The counts are complicated by the occurrence of monosyllabic word forms in multiword entries in the lexicon, but the proportions are stable over different samples as shown in Tables 3.11 and 3.12:

Table 3.11: Monosyllabic roots - values of initial consonants.

|  | simplex | complex |
| :--- | ---: | ---: |
| including multiple word entries $(\mathrm{N}=2895)$ | $1481(51 \%)$ | $1414(49 \%)$ |
| excluding overlapping entries $(\mathrm{N}=1455)$ | $761(52 \%)$ | $694(48 \%)$ |

One may also examine the proportion of monosyllabic words with all kinds of nasal consonants, i.e.

- \{m my mw myw , n, ny ,nm ,nmy n ny nm nmy ng ngw ngm mb mby mbw mbyw nt nj mt mty nd ndy md mdy dn dny dm dmy nk nkw mg kn knw km\}
or just with secondary nasalization, i.e.
- $\quad$ \{mb mby mbw mbyw nt nj mt mty nd ndy md mdy dn dny dm dmy nk nkw mg kn knw km\}.

Table 3.12: Monosyllabic roots ( $\mathrm{N}=2175$ ) - different
kinds of nasal consonants.

| all nasals | 949 | $(44 \%)$ |
| :--- | :--- | :--- |
| secondary nasalization | 437 | $(20 \%)$ |

Turning to the vowel distributions in monosyllabic roots, Table 3.13 gives vowel frequencies in monoysllabic roots including those in fixed expressions with more than one root (a total sample of 2766). Recollect that nasalized vowels have a smaller inventory of vowel qualities (there is no :é, :éé, :ó, :óó), so the gaps below are systematic.

Table 3.13: Vowel quality frequencies in monosyllabic roots.

| Oral vowels |  |  |  | Nasal vowels |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Short |  | Long |  | Short |  | Long |  |
| i | 293 | ii | 74 | :i | 6 | :ii | 74 |
| é | 109 | éé | 41 |  |  |  |  |
| e | 132 | ee | 141 | :e | 21 | :ee | 83 |
| a | 144 | aa | 201 | :a | 30 | :aa | 150 |
| â | 22 | ââ | 158 | :â | 7 | :ââ | 109 |
| 0 | 233 | 00 | 109 | :0 | 39 | :00 | 89 |
| ó | 89 | óó | 70 |  |  |  |  |
| u | 157 | uu | 74 | :u | 5 | :uu | 106 |
| Totals | 1179 (43\%) |  | 868 (31\%) |  | 108 (4\%) |  | 611 (22\%) |

Table 3.13 shows that nearly $75 \%$ of vowels are oral vowels, and of the nasal vowels, long ones are much more frequent. The small frequency (4\%) of short contrastively nasal vowels is partly due to the fact that nasalization is not contrastive in short vowels after a nasal consonant (which account for $44 \%$ of all consonants in these roots). Nasalization no doubt occurs in these environments but is not encoded in the lexicon on which these computations are done.

In non-derived words, that is monomorphemic words, there are phonotactic constraints that only become clear if one inspects bi-syllabic roots. In such roots, schematically C1-V1-C2-V2, C1 may be drawn from the full range of over 50 consonantal segments. But C 2 comes from a much smaller class. The most frequent are 'simplex' consonants, not including complex double articulations, superimposed nasalizations or secondary palatalization. In fact, $98 \%$ of bi-syllabic words are accounted for by words that have just the C2 (orthographic) segments indicated in Table 3.14:

Table 3.14: C2 in bi-syllabic roots.

| C2-value | No. of bi-syllabic roots with <br> C2 shown in row (out of <br> 2810 total bi-syllabic roots) |
| :--- | ---: |
| m | 473 |
| d | 474 |
| n | 372 |
| p | 420 |
| l | 369 |
| w | 161 |
| $\mathrm{~g}[\mathrm{j}]$ | 119 |
| pw | 83 |
| $\mathrm{ng}[\mathrm{N}]$ | 83 |
| k | 81 |
| $\mathrm{t}[\mathrm{t}]$ | 78 |
| $\mathrm{gh}[\mathrm{V}]$ | 47 |
| mw | 20 |

The remaining C 2 s are drawn from 24 other largely coarticulated consonants (apart from simple dental /n/), specifically orthographic $k p$, myw, ch, $t p$, ' $n, m b w$, $l v, k w, n g m, n t, c h, n d, m d, n k, l y, t p, k n, n k, n g w, d y, m b, k m, p y, m d, m t, l y, p y, m y w$. Despite these occasional complex consonants in C2 position, the great majority of complex consonants occur in word-initial position.

Bi-syllabic roots display other statistically restricted patterns. In a pattern probably true throughout the lexicon, V1 vowels are mostly simplex - that is, neither lengthened nor nasalized. Thus the simplex (short oral) vowels (orthographic $i, e ́$, $e, a, ~ e ̂, ~ \hat{l}, o ́, u$ ) account for about $74 \%$ of V1 vowels in bi-syllabic roots (2081/2810), long oral vowels for about $15 \%$ (421/2810), nasal vowels both long and short for another $12 \%$. Despite the tilted distribution, all vowels occur in this position. (Note that nasalized :î and :îl are not phonemic, and indeed not written, occurring only after nasal consonants, and there are no nasalized vowels :é vs. :éé and :ó vs. :óó, for as Henderson (1995:4) points out, the close-open distinction, between $e$ vs. $\dot{e}$ and $o$ vs. $o$, is lost in nasalization). The same kind of asymmetric distribution occurs in V2, but there are further constraints: there seems to be a restricted set of syllables $\mathrm{C} 2+\mathrm{V} 2$, and in addition possibly some kind of preference for 'harmony' in rounding across V1 and V2.

Tables 3.15 and 3.16 provide further details of the restrictions on second syllables. Ian Maddieson (pers. comm.) suggests that most C2 consonants are simplex,
specifically $m, d, n, p, l, y, w, k, p w, n g, t, g h, m w$ (I will denote this list as 'IM’s C2 criteria'):

Table 3.15: Consonants in bi-syllabic roots.

| in SCL database (Sh5Ross4_Phonetics) of |  | $\mathbf{5 8 0 9}$ total entries: |
| :--- | :--- | :--- |
| Bi-syllabic roots: | 2810 | (48\% of total) |
| Bi-syllabic roots meeting IM's C2 criteria: | 2622 | (93\% of bi-syllabic roots) |
| (C2 = m, d, n, p, l, y, w, k, pw, ng, t, gh, mw) |  |  |

Consonants very infrequent or unattested in C2:
py pyw mb mby mbw mbyw ch nt nj tp tpy mt mty nd ndy dy dp dpy md mdy dn dny dm dmy ky kw nk nkw kp mg kn knw km my myw 'n 'ny 'nm 'nmy ny nm nmy ngw ngm
vy ly lv

Bi-syllabic roots which do not meet IM's C2 criteria were only $\mathbf{1 8 8}$ or $7 \%$ of the sample lexical database. Of these, many were bimorphemic, or reduplications or names. Excluding reduplications and bimorphemic words, but including names, these rare and exceptional C2s include:
kp, myw, ch, tp, ' $n, m b w, l v, k w, n g m, n t, c h, n d, m d$, $n k, l y, t p, k n, n k, n g w, d y, m b, k m, p y, m d, m t, l y, p y, m y w$

Another way to gauge the constraints on C 2 in bi-syllabic words is to count the number of C2 consonants that are 'simplex' (not doubly articulated) vs. 'complex' (doubly articulated, or nasalized in some way):

Bi-syllabic roots where C2 is 'simplex',
i.e. $/ p, t, d, k, m, n, ‘ n, n g, w, y, l, g h /: 2065(73 \%)$

Bis-yllabic roots where C2 is 'complex',
i.e. not simplex, and contains one of the following: 252 (9\%)
/ py pw pyw mb mby mbw mbyw ch nt nj tp
tpy mt mty dy nd ndy dp dpy md mdy dn dny dm

## dmy ky kw nk nkw kp mg kn knw km

my mw myw ,n ,ny,nm,nmy n ny nm nmy ng ngw ngm
vy ly lv/
Bisyllabic roots where C2 is a nasal number 964 (34\%). Nasal Cs are defined as one of the following:
/m my mw myw, n,ny ,nm ,nmy n ny nm nmy ng ngw ngm/ and exclude nasalized Cs, i.e. not any of the following: /mb mby mbw mbyw nt nj mt mty nd ndy md mdy dn dny dm dmy nk nkw mg kn knw km/

Table 3.16: Bi-syllabic roots: characteristics of 2nd syllables. Regular morphological reduplications have been excluded (but unpredictable types of reduplication are included).

| C2 | attested syllables | notes |
| :---: | :---: | :---: |
| m | mi, ma, me mê mu mo mî ??m:ee | no long vowels except in reduplications |
| d | da, dâ, de, dê, di, dî, do, dó, du, |  |
|  | dââ, dî̃, dêê |  |
|  | d:u, d:a, d:o, d:oo, d:e, d:ee, d:ââ, d:êê |  |
| $n$ | na, ne, nê, ni, no, nu, noo, naa, n:aa, nee, nuu |  |
| $p$ | pa, pe, pé, pê, pi, pî, po, pu, |  |
|  | poo | 1 token in unanalysable reduplication |
| $l$ | la, lâ, le, lê, li, lî, lo, lu |  |
|  | l:a, l:o, l:â, l:ââ, l:aa |  |
| $y$ | ya, ye, yé, yê, yi, ya, yo, |  |
|  | yoo, yaa, yââ |  |
|  | y:a, y:aa, y:e, y:o, yââ, yoo |  |
| w | wa, we, wê, wó, wo, |  |
|  | w:o, w:e, w:a |  |
| k | ka, ke, kê, ki, kî, ko, kó, ku |  |
|  | kóó, ?kîi, kââ, kaa | no nasals |
| pw | pwe, pwo, pwi, pwó, |  |
|  | pwee, pwii, pwoo |  |
|  | pw:a, pw:e | nasals - 2 tokens each |
| $n g$ | nga, nge, ngê, ngi, ngî, ngo, ngu | no long or nasalized vowels |
| $t$ | ta, te, té, ti |  |
|  | too, tii, taa |  |
| $\boldsymbol{g h}$ | gha, ghâ, ghe, ghê, ghi, gho |  |
| mw | mwe, mwi, mwo, mw:a, mw:i |  |

## Bi-syllabic roots: V1 to V2 correlations

Tables 3.17 to 3.20 show patterns of association between the first and second vowels in bi-syllabic roots, together with the number ( N ) of each type of V1 in the database.
? = dubious attestation (e.g. in reduplication)

Table 3.17: (a) Short oral vowels in V1.

| N | V1 | V2 |
| :---: | :---: | :---: |
| 363 | i | a, e, é, ê, i, î, o, ó, u |
|  |  | 00, ii |
|  |  | :a, :aa, :e, :ee, |
| 172 | é | a, e, i, î, o, ?é |
|  |  | :o, :aa |
| 182 | e | e, a, ê, i, î, o, ó |
|  |  | :a, :0, :00, :e |
| 163 | a | a, ê, é, i, î, u |
| 219 | ê | a, e, ê, i, î, o, |
|  |  | aa, oo |
|  |  | :a, :e, : aâ, :ê, :o |
| 270 | $\hat{\imath}$ | a, e, é, ê, i, î, o, ó, u |
|  |  | ââ, aa |
|  |  | :a, :aa, :e, :ee, :o, :ê |
| 193 | ó | a, o, i, î, ó, u |
|  |  | ? 00 |
|  |  | :a |
| 300 | u | e, a, â, ê, î, i, o, ó, u |
|  |  | :e, :o, :a, :â |

Table 3.18: (b) Long vowels in V1. Note that after a long vowel in V 1 , vowels are mostly short in V 2 , many of the exceptional long V 2 vowels occurring in names or frozen reduplications.

| $\mathbf{N}$ | V1 | V2 |  |
| :--- | :--- | :--- | :--- |
| 23 | ii | i, ee, aa, ii |  |
| 40 | éé | i, o, u |  |
| 77 | ee | a, e, é, i, î | aa, ee, $:$ ee |

Table 3.18 (continued)

| $\mathbf{N}$ | V1 | V2 |  |
| :--- | :--- | :--- | :--- |
| 69 | aa | a, é, ê, i, î, o | aa |
| 110 | êê | î,a,é,ê | ââ |
| 6 | Î | ê, :i | (îi redup) |
| 17 | óó | (?é), î,o | aa, (óó redup) |
| 14 | uu | e, ê, o, :e, :u | ee, (uu redup) |

Table 3.19: (c) Nasal vowels in V1. In the database, there were a total of 324 bi-syllabic words with a nasalized first vowel, of which 102 follow a nasal/nasalized C1 consonant. The initial nasalized vowels were roughly $60 \%$ long (186) and $40 \%$ short (138).

| Short (contrastively) nasal vowels in V1 position: |  |  |  |
| :---: | :---: | :---: | :---: |
| N | V1 | V2 |  |
| 4 | :i | :e, i |  |
| 0 | :é |  |  |
| 39 | :e | e, ê, i, î, :e |  |
| 39 | :a | a, e, ê, i, î | (:a in reduplication) |
| 33 | :â | $\mathrm{o}, \mathrm{î}, \mathrm{u}$ |  |
| 0 | :î |  |  |
| 17 | :ê | $\mathrm{a}, \mathrm{e}, \hat{\mathrm{i}}$ |  |
| 31 | :0 | i, o, u, ââ |  |
| 0 | :ó |  |  |
| 8 | :u | o, u |  |
| (total: 171) |  |  |  |
| Long nasal vowels in V1 |  |  |  |
| 7 | :ii | ee, :ii | (all reduplications) |
| 0 | :éé |  |  |
| 53 | :ee | e, i, î, u, a | (:ee only in reduplications) |
| 30 | :aa | a, e, ê, i, î, ó, aa | (:aa only in reduplications) |
| 17 | :ââ | a, ê, o, ó, u | (:ââ only in reduplications) |
| 0 | :介̂̃ |  |  |
| 35 | :êê | é, ê, î, ?ee | (many reduplications in :êê) |
| 4 | :00 | u, | (:oo in 1 reduplication) |
| 0 | :óó |  |  |
| 9 | :uu | 00, aa | (2 bimorphemic in -î, -:ee) |
| (total: 104) |  |  |  |

Table 3.20: (d) Numbers of bi-syllabic roots, sorting by V2 (out of a total 1985 roots).

| V2 | N of roots ending in V2 |
| :--- | :---: |
| $i$ | 273 |
| é | 52 |
| e | 231 |
| a | 117 |
| a | 13 |
| $\hat{\mathrm{a}}$ | 281 |
| $\hat{\mathrm{e}}$ | 273 |
| ó | 44 |
| o | 330 |
| u | 181 |


| ii | 11 | (including 7 reduplications) |
| :--- | ---: | :--- |
| éé | 3 | (all reduplications) |
| ee | 15 | (9 reduplications) |
| aa | 27 | (11 reduplications) |
| ââ | 11 | (6 reduplications) |
| đ̂ | 4 | (2 reduplications, 1 bimorphemic) |
| êê | 3 | (all reduplications) |
| óó | 5 | (all reduplications) |
| oo | 11 | (4 reduplications, and some bimorphemic) |
| uu | 3 | (2 reduplications) |


| $:$ i | 1 |  |
| :--- | ---: | :--- |
| $:$ é | 0 |  |
| $: \mathrm{e}$ | 30 |  |
| $: \mathrm{a}$ | 30 |  |
| $: \hat{\text { à }}$ | 2 | (both names) |
| $: 0$ | 33 |  |
| $:$ ó | 0 |  |
| u | 3 |  |


| :ii | 6 | (all reduplications) |
| :--- | ---: | :--- |
| $:$ éé | 0 |  |
| :ee | 16 | (mostly reduplications) |
| $:$ aa | 9 | (5 reduplications) |
| $:$ ââ | 8 | (5 reduplications) |

Table 3.20 (continued)

| V2 | N of roots ending in V2 |  |
| :--- | :--- | :--- |
| $:$ î̀ | 0 |  |
| $:$ êê | 8 | (all reduplications) |
| $:$ oo | 4 | (1 reduplication) |
| $: o ́ o ́ ~$ | 0 |  |
| uu | 3 | (all reduplications) |

Turning to other more general constraints, frequent words at first suggest that palatalization might be restricted to syllables with high front vowels, but this proves to be only a tendency as Tables 3.21 and 3.22 show. The one opposition which is feebly attested is that between $d n$ and $d n y$, since words beginning with the segment $d n$ are few, but one minimal set of oppositions is frequent:
dniye $=$ postverbal clitic encoding $3^{\text {rd }}$ person dual/plural intransitive imperatives, and $3^{\text {rd }}$ plural Remote Past intransitive
$d n y i=$ preverbal inflectional clitic encoding $3{ }^{\text {rd }}$ plural Near Past Continuous aspect
dnye $=$ preverbal inflectional clitic encoding $3^{\text {rd }}$ plural Remote Past Continuous aspect

## Palatalized consonants

Defining these as any of:
py ch tpy dy dpy ky mby nj mty ndy mdy pyw mbyw dny dmy my 'ny 'nmy ny nmy myw
there are 998 words with such consonants out of 5809 total lexemes.

Table 3.21: Combinations with vowels.

| Palatalized consonant+ |  |  |  |
| :--- | :--- | :--- | ---: |
| Oral vowel | N | Nasal vowel | N |
| $\mathbf{i}$ | 169 | :i | 1 |
| ii | 18 | :ii | 15 |
| e | 54 |  |  |

Table 3.21 (continued)

| Palatalized consonant+ |  |  |  |
| :--- | ---: | :--- | ---: |
| Oral vowel | N | Nasal vowel | N |
| éé | 3 |  |  |
| e | 138 | :e | 15 |
| ee | 12 | :ee | 24 |
| ê | 25 | :ê | 4 |
| êê | 22 | :êê | 12 |
| $\mathbf{a}$ | 53 | :a | 17 |
| aa | 44 | :aa | 28 |
| â | 15 | :â | 2 |
| ââ | 52 | :ââ | 20 |
| $\mathbf{o}$ | 34 | :o | 12 |
| oo | 16 | :oo | 23 |
| ó | 45 |  |  |
| óó | 29 |  | 0 |
| u | 54 | :u | 0 |
| uu | 21 | :uu | 8 |

What the figures do show is that there is a much higher frequency of palatalized consonants and high front vowels, although back vowels do account for c. $30 \%$ of the relevant syllables. The same sort of weighted occurrence with high front vowels can be found in $y$-initial words, as the distribution in Table 3.22 shows (which demonstrates the consonantal nature of $y$ in Yélî Dnye, since many languages avoid $y+i$ combinations).

Table 3.22: Y -initial words.

| y-initial words (N=251): |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Oral vowels |  |  |  |  |  |  |  |  | Nasal vowels |  |  |  |  |
| yi | 83 | yii | 2 | y:i | 1 | y:ii | 1 |  |  |  |  |  |  |
| ye | 29 | yee | 2 | y:e | 7 | y:ee | 6 |  |  |  |  |  |  |
| yé | 28 | yéé | 2 |  |  |  |  |  |  |  |  |  |  |
| ya | 13 | yaa | 5 | y:a | 1 | y:aa | 2 |  |  |  |  |  |  |
| yâ | 11 | yââ | 3 | y:â | 0 | y:ââ | 1 |  |  |  |  |  |  |
| yo | 12 | yoo | 1 | y:o | 0 | y:oo | 10 |  |  |  |  |  |  |
| yó | 13 | yóó | 0 |  |  |  |  |  |  |  |  |  |  |
| yu | 17 | yuu | 2 | y:u | 0 | y:uu | 1 |  |  |  |  |  |  |

In summary, we have the following phonotactic constraints. First, absolute or categorical are:
(i) There is no contrastive nasalization of short vowels after nasal consonants.
(ii) All syllables are CV, except a few of the form CVm, CVn, CVp, CVy.
(iii) Words are of one, two or three syllables except for those derived by reduplication or compounding. In addition, there are many statistical tendencies, and especially:
(iv) Although all Cs may occur word initially, in subsequent syllables complex Cs with multiple articulations or secondary features become very rare. Thus most of the highly complex sounds in the language occur word initially, which may provide a clue to their origin though syllable reduction.
(v) Oral vowels are much more frequent than nasal vowels. In first syllables, short oral vowels only slightly outnumber long oral vowels, but in second syllables short oral vowels are much more frequent than long ones.
(vi) Nasal vowels account for about a quarter of first syllables, but become much rarer in second syllables.
(vii) In palatal and palatalized environments, high front vowels are especially frequent.

These statistical patterns place the burden of distinguishing between the elements of the full complex phoneme inventory firmly on the first syllable of words.

### 3.4 Stress patterns

Henderson (1995:5) gives the basic stress rules of Yélî Dnye as follows (underlining here marks stress, because of the use of accents in the practical orthography):
(i) On two-syllable words the stress falls on the first syllable (C’VCV): Weta (man's name), pala (mat), pipi (pouring).
(ii) On four-syllable words the stress falls on the first and third syllables, with a slightly stronger stress on the first syllable (C"VCVC’VCV): popokéni, tópukada
(iii) On three-syllable words, stress falls either on the first syllable, or on the second syllable depending on vowel height or vowel-initial words: if the word starts with a vowel, or if the second vowel is more open than the first, the stress moves to the second syllable (i.e. $\mathrm{C}^{\prime} \mathrm{V}_{1} \mathrm{CV}_{2} \mathrm{CV}_{3}$ unless $\mathrm{V}_{2}$ is lower than $\mathrm{V}_{1}$ ): kédikââa 'type of in-law' but dîdyénî ‘very many’.

These rules seem essentially correct, but one may add a number of observations. First, stress on four syllable words, though pretty evenly matched on first and
third syllables, may also vary slightly according to vowel height: thus in dîdîpwódu 'quarrel' the third syllable with its lower vowel seems to attract slightly greater stress than the first syllable. Secondly, the stress movement in three syllable words is probably conditioned by somewhat more complex rules. For example, in kumbwada 'woman' the stress remains on the first syllable despite the low second vowel, and the same is true on m:iitówo 'day before yesterday'. Combinations between front and back vowels seem to need to be specified. What is clearly true is that low front vowels in the first syllable will force stress onto that syllable. In addition, when vowels of the same quality occur in the first and in EITHER the second OR third syllable, this seems to induce an even stress on both first and last syllables, as in kinití, kîdîkpó, padada. Finally, there are a number of case clitics that induce changes of stress which seem unrelated to the number of syllables in the word. For example, the ergative clitic or postposition (and its instrumental homonym) is itself an unstressed syllable, but induces stress and lengthening in the prior syllable, regardless of how many syllables there are in the prior word:

2 syllables: Wéta $\rightarrow$ Wétaa ngê
3 syllables: Yídika $\quad \rightarrow$ Yidikaa ngê
4 syllables: Pwiliyópu $\rightarrow$ Pwiliyópuu ngê

This is not merely a case of resyllabification (i.e. the union of lexeme and case particle into a single phonological word), for then the regular stress assignment rules noted above would produce a different result. Other case particles with similar effects are: y:oo (plural ergative), $k a$ (oblique, source/goal), and $k: i i$ (comitative). In addition, the particle $k n \hat{\imath}$ ('augmented'), with unvoiced syllabic nasal (the orthographic vowel is usually silent), has the same effect, as in:
mupwó (Parent \& Child) $\rightarrow$ mupwó knî (Parent \& Child augmented, i.e. F, M \& S or F \& S \& S, etc.).

One may conclude that more research is needed into the stress rules of the language.

### 3.5 Phonological processes

There are naturally a number of phonological rules operating on lexical material. A few notes follow.

### 3.5.1 Euphonic final vowels

Given the open syllable structure of the language, where words end in final - $m$ or $-p$ they are often (as mentioned above in $\S 3.3$ and sometimes represented in the practical orthography) pronounced with a euphonic central or back unrounded vowel, /ə/, / $\mathrm{m} /$ or $/ \mathrm{u} /$ (orthographic $\hat{e}$ or $\hat{\imath}, u$ ). This euphonic final vowel is more or less obligatory in English loan words ending in other consonants such as book or table or ball, realized as puku, tépilî, pólî, and so on.

Despite the widespread use of clitics and postpositions, most of these resist phonological assimilation to preceding or following words. A systematic exception is the pre-verbal inflectional clitic which sometimes fuses with material to its left and right. Much of this fusion is lexicalized, that is, has arbitrary, specified phonological form, and the details will be discussed in §6.1.1.

### 3.5.2 Second person singular possessive forms

A very interesting phonological process concerns $2^{\text {nd }}$ person singular possessive forms of nominals (nouns and verbal nouns). In the Eastern dialect (the dialect described in this book, see §1.3), but not in the Western dialect (where $2^{\text {nd }}$ person singular possession is expressed by the independent pronoun nyi), $2^{\text {nd }}$ person possession is expressed by the nasalization of the first segment of the word. That is, $2^{\text {nd }} \mathrm{sg}$. possession is expressed as a floating nasal which displaces the original manner of the initial consonant, but keeps its place characteristics including secondary articulations. Maddieson and Levinson (nd) checked whether the resulting nasal has the same acoustic characteristics as a lexical nasal of the same type, comparing e.g. maa 'path', with maa -> N+paa 'your side'. The answer is yes - the derived nasal is not a geminate nasal for example, and is not predictably longer than its lexical counterpart. ${ }^{17}$

Given that the language has a large range of complex multiple-articulated stops, this process has considerable phonological interest. Table 3.25 at the end of this section presents an extended list of unpossessed nominals with different initial segments, together with their possessed forms in the practical orthography. I give an extended list because the rules are not entirely straightforward. Essentially, though,

17 The measurements show some deviation in both directions, e.g. derived / $\mathrm{m} /$ is longer in duration than lexical /m/ ( 150 vs. 194 ms .), but lexical /ng/ is longer than derived /ng/ (199 vs. 180 ms .).
(i) Oral stops are converted into the corresponding nasals at the same point of articulation - thus /k/ becomes /ng/, dental /t/ becomes dental /n/, etc. Palatalized or labialized consonants retain these features.
(ii) Stops with multiple articulations are nasalized at each point of articulation, thus /kp/ becomes /ngm/, /tp/ becomes /ńm/, and so forth.
(iii) True nasals (/m/, /n/ etc.) remain unchanged.
(iv) Prenasalized consonants lose their stops, so that e.g. /nt/ becomes /n/, /mb/ becomes /m/, etc. In this case, a following short vowel may be lengthened (e.g. ndê dmi $\rightarrow n$ :êê dmi ‘your bundle of firewood').
(v) Post-nasalized consonants have the initial consonant nasalized, so e.g. km:ii $\rightarrow$ ngm:ii ('your coconut'). Where this is at the same point of articulation as the nasal, the stop is effectively dropped, e.g. /dn/ $\rightarrow / \mathrm{n} /$.
(vi) Non-nasal continuants, laterals and glides behave variously:

| /y/ | $\rightarrow / \mathrm{ny} /$ |  |
| :--- | :--- | :--- |
| $/ \mathrm{w} /$ | $\rightarrow$ | $/ \mathrm{ngw} /$ |
| $/ \mathrm{vy} /$ | $\rightarrow$ | $/ \mathrm{nmy} /$ |
| $/ \mathrm{l} /$ | $\rightarrow$ | $/ \mathrm{l} /$ (no change) |
| $/ \mathrm{ly} /$ | $\rightarrow$ | $/ \mathrm{ly} /$ (no change) |
| $/ \mathrm{lv} /$ | $\rightarrow$ | $/ \mathrm{nm} /$ |
| $/ \mathrm{gh} /$ (velar fricative) | $\rightarrow / \mathrm{ng} /$ |  |

(vii) Vowel initial words (all begin with /a/) lose the initial/a/, which is replaced with /n/ as in Amdondi $\rightarrow$ Nmondi ('your (man) Amdondi')

There are a few unpredictable changes. For example, labialization is not preserved after a labial stop, so $/ \mathrm{pw} / / \mathrm{m} /$ not $/ \mathrm{mw} /$, /tp/ is palatalized and loses its dental place of articulation, becoming /nmy/, and in addition vowel quality may change. Because of these small adaptations, I give below the list that was collected in full, to allow a fuller analysis.

This process reveals a number of things. First, it is further evidence that the double articulations are treated as one phonological segment, since both components are nasalized, but not for example a following long vowel. Second, it shows an interesting interaction between the conceptual/lexical level and the phonological levels of language, since it is not entirely restricted to possession, and it occurs only with the $2^{\text {nd }}$ person singular: for example, what is realized in the Western dialect as nyi k:ii 'you Associative, i.e. with you', becomes in the Eastern dialect $n g: i i$. This $2^{\text {nd }}$ person singular conceptual component, realized as a nasal feature, is combined on-line with the lexical head to yield a nasalized version, revealing a fine meta-sense of the structure of the phonological inventory. Third, in a phonological system already showing elaborately delicate control of nasalization (with oral vs. nasal vowels in the context of pre- vs. post-nasalized conso-
nants), this use of a nasal morphological feature is a rather extraordinary added complexity.

I list body parts separately (Tables 3.23 and 3.24), as they behave specially under possession (see §4.2.1.4):

Table 3.23: Body parts which are unchanged under $2^{\text {nd }}$ person possession.
mbodo, ngwolo, n':uu, ngwene, nkene kn:ââ 'shoulder' ngmo 'breast'
ngmo 'breast'
nyóó 'teeth'

Table 3.24: Body parts changed under $2^{\text {nd }}$ person possession.

| Gloss | Citation form | $\mathbf{2}^{\text {nd }}$ person possessive form |
| :--- | :--- | :--- |
| forehead | kwódo | ngwódo |
| forehead | kîpa | ngîpa |
| hair | a gh:aa | ng:aa |
| head hair | mbodo gh:aa | modo gh:aa |
| mouth | komo | ngomo |
| lips | kwete pee dê | ngwete pee dê |
| arm/hand | kêê (u kóó) | ngêê |
| palm of hand | kêê yodo | ngêê yodo |
| back of hand | kêê kpâpu | ngê̂ê kpâpu |
| elbow | kêê dópó | ngêê dópó |
| finger | kêê pyâ̂â (dmi) | ngê̂ê pyââa |
| finger nail | kêê ndipi | ngêê ndipi |
| neck | mbwamê | mwamê |
| back | kpada ma | ngmada ma |
| chest | yodo | nyodo |
| stomach | kmo. | ngmo |
| navel | n:iima | n:iima |
| bottom | kneedi tpi | ngeedi tpi |
| leg/foot | kpâlî | ngmâlî |
| lower leg | yi (u yu) | nyi |
| top of foot | yi kpâpu | nyi kpâpu |
| knee | yi (yu) mbodo | nyimbodo |
| penis | mdî | nmê (note change of vowel - nmî would mean 'we') |
| vagina | tpe | nme |

In Table 3.25 there follow many further examples of the effect of $2^{\text {nd }}$ person possession on the form of the nominal root, organized under the initial consonant of the root:

Table 3.25: $2^{\text {nd }}$ person posssessive forms by initial consonant of root.


Table 3.25 (continued)
\(\left.\begin{array}{ll}\hline MB \& <br>
\hline neck \& mbwamê - mwamê (mw:amê) <br>
sister-in-law \& mbwanko - mwanko <br>
mangrove-species \& mbw:ee - mw:ee <br>
betel nut (native) \& mbwo - mwo <br>
brother \& mbwó - mwó <br>
parrot-fish \& mbyéém - myéém <br>
meat \& mbyuu - myuu <br>
bamboo <br>
shell-fish, for white paint \& mbywuu - mywuu (also = your pay!) <br>

mbyw:oo - myw:oo\end{array}\right]\)| MT |  |
| :--- | :--- |
| report | mt:ene - ńm:ene |
| parrot | mtye - ńmye |

## Table 3.25 (continued)

| MG |  |
| :---: | :---: |
| sardines centipede ridgepole | $\begin{aligned} & \text { mgomo - ngmomo } \\ & \text { mg:ee - ngm:ee } \\ & \text { mgópu - ngто́pu } \end{aligned}$ |
| DN |  |
| language, noise stirrer | dnye - nye dnyepi - nyepi |
| DM |  |
| girl sponge | dmââdî - ngmââdî <br> tpênê n:êê - ńm:êênê n:êê |
| KN |  |
| rump <br> base kê shell faeces | ```kn:eedi tpi - ng:eedi tpi kn:ââ - ng:âa knê-ngê``` |
| KM |  |
| coconut <br> frog <br> stomoach <br> left-overs | km:ii - ngm:ii <br> kma-ngma <br> km:oo - ngm:oo <br> kmono - ngmono |
| M |  |
| clam <br> husband second time ebony | $\begin{aligned} & \text { modo - modo } \\ & \text { moo - moo } \\ & \text { myombó - myombó } \\ & \text { mywapê - mywapê } \end{aligned}$ |
| ' N |  |
| small breadfruit widow nose pin nose tooth | $\begin{aligned} & \text { ńó - ńó } \\ & \text { ńeknwe -ńeknwe } \\ & \text { ń:ii - ń:ii } \\ & \text { ń:uu - ń:uu } \\ & \text { nyóó - nyóó } \end{aligned}$ |
| N |  |
| mum | niye - mye |
| N'M |  |
| bird | ńmo - ńmo |
| NM |  |
| dish | nmoko - nmoko |
| NG |  |
| armpit <br> surety for shell money | ngmââ -ngmââ ngm:aa - ngm:aa |

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Table 3.25 (continued)

| NG |  |
| :---: | :---: |
| spy for sorcery | ngete - ngete |
| shell | $n g: a a-n g: a a$ |
| eye | ngwolo - ngwolo |
| CH |  |
| nephew | chêne - nyêne |
| W |  |
| light | wuu - ngwuu |
| juice | wulu - ngwulu |
| VY |  |
| lap | vyââ - nmyââ |
| black palm | vyâm-nmyâm |
| urine | vye-nmye |
| Y |  |
| floor | ya-nya |
| outrigger side | yaa pee - nyaa pee |
| garden | yâpwo têdê - nyâpwo têdê |
| GH |  |
| heart | gha-nga |
| soul | ghê dmi -ngêê dmi |
| eagle | ghêmê- ngêmê |
| stone axe | ghêêpî-ngêêpî |
| sea urchin | gh:ee-ng:ee |
| L |  |
| soldier | lede -lede |
| big man | léma - léma |
| pool | lêê - lêê |
| LY |  |
| sail | lyé- lyé |
| canoe type | lyémlyém-lyémlyém |
| landing place | lyoko - lyoko |
| LV |  |
| cane | Ivamê-nmama |
| man's name | Lv:ââ - Nm:ââ ('your Lv:ââ' - if two people with same name) |
| A |  |
| man's name | Amdondi-Nmondi |

### 3.5.3 Elision and resyllabification in fast speech

There are a number of processes that restructure the syllabification of phrases and especially compound words in fast speech. Two successive vowels in adjacent words or morphemes are likely to collapse into one lengthened one, as shown below:
(5) a. kî pi knî ngma a m:ii those people PL INDF CI.3PROX walk 'Some of those people are wandering'
b. k̂̂ pi knı̂ ngmaa m:ii

No systematic study of these fast speech processes has been undertaken. But as illustration, consider the adjectival phrase in (6)a. below - it is resyllabified as shown in b, because the two adjacent vowels collapse. In c., the vowel ending the first word acquires the nasal of the prenasalized consonant of the second word, as shown in d., and similarly for the penultimate word of e.
(6) a. daa até nté kéni
not just like kê.specified
'An especially big kê (shell coin)'
b. daa nté kéni
c. yenê nd:î̀ kn:ââ dî l:uu
I.said.to.them big base.kê 1sPastPI got
'I said to them, I got that big base kê'
d. yenên d:î̀ kn:ââ dî l:uu
e. kponî $y: i \quad m u$ vyi ngópu

Song.name there Deict. say PF3sgObjPIPast
'They sang Kponî there’
f. kponî y:i mu vying ngópu

In the same way, in fast speech from some speakers ala kéni 'this kê' may resyllabify as alak éni, but this sort of pattern does not seem to be a wholly regular, predictable process.

### 3.6 Prosody

A proper study of prosody has yet to be undertaken, but some remarks, sharpened by instrumental analysis, are possible. The intonation contour (at least as shown by a pitch trace in Praat (Boersma \&Weenink 2021) on default intonation settings)
is nearly always falling, regardless of illocutionary force - accent seems to be done mainly through intensity. On declaratives a gently falling pitch is normal, but the intensity variation carries a great deal of the emphasis and accent, as shown in the following trace (Figure 3.9) of the utterance in (7).

| (7) | yi | n:ii | tp:oo | mu | ngmidi | ten kina | u | kwo |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| that | REL | little | that one | ten | kina | to him |  |  |
| y:ee | ngópu |  |  |  |  |  |  |  |



Figure 3.9: Declarative pitch and intensity.
There is some special interest in Yes-No Questions, since these are unmarked by syntax or question particle. This type of question also typically occurs with a falling pitch contour, as shown in Figure 3.10, the trace of utterance (8).
(8) éé mê dnyimo n:aa mumu dé
oh again 3pl.MOT Motion see PFS3plO ' Oh , they went again and saw them?'

Here the accent is on the mê and mumu, but the pitch (lower trace) falls as shown in Fig. 3.10.

How then are polar questions recognized? The answer seems to be largely pragmatically, in terms of who would be in expected possession of the information - if the speaker, the utterance is declarative, if the addressee, it can be assumed to be 'interrogative' although unmarked. A tag question particle (e.g. apii?) may be appended, often after a short pause, but this too is likely to carry falling intonation: see Levinson (2010).


Figure 3.10: Polar interrogative pitch and intensity.

WH-Questions also usually lack rising intonation, as shown in Figure 3.11.

```
(9) ló tpile?
    Which thing?
```

The pitch trace (bottom) is pretty much level.


Figure 3.11: Content interrogative pitch and intensity.
The expected rise in pitch does however occur regularly in next-turn-repairinitiators (as in English "eh?"; Levinson 2015). In general, though, pitch seems to play a much less prominent role than intensity in the signalling of accent or emphasis.

To conclude this chapter, it will be evident that, firstly, the phonology of this language is so unusual that it deserves intense study, and secondly, that here the surface has hardly been scratched. It is clear for example that there are many phonological processes involved in cliticization, compounding and so on, that have simply not been investigated.

## 4 The lexicon: Morphemes, lexemes and parts of speech

To an extent greater than in many other languages, the lexicon is the heart of the grammar of Yélî Dnye. This is because many alternations that in other languages are handled morphologically or syntactically are simply lexicalized in Yélî Dnye. The morphology is atrophied; instead much use is made of clitics. The status of these clitics as free or bound may be partially moot - they may for instance influence the stress of their host word (but not according to word-internal rules), while they resist the phonological assimilations typical of clearly morphological processes.

The language has a large number of distinct word classes, with numerous subclasses. The major parts of speech can be isolated on distributional and notional grounds as in Table 4.1. Note that cross-cutting categories make such a table merely heuristic - form classes distinguished on narrow morphological/ lexical grounds (such as verb suppletion patterns or nominal morphology) crosscut form classes distinguished on broader syntactic grounds (such as transitive/ intransitive verbs, or common/proper nouns).

Table 4.1: The major parts of speech.

| Major parts of speech | Main subtypes | Minor subtypes |
| :---: | :---: | :---: |
| Nominals | Nouns (4 classes) | Place names |
|  |  | Person names |
|  |  | Classifiers |
|  |  | Compounds |
|  | Pronouns | Personal |
|  |  | Possessive |
|  |  | Interrogative |
|  |  | Relative |
|  |  | Reflexive |
|  | Deverbal |  |
| Determiners | Deictics | Demonstratives |
|  |  | Anaphorics |
| Quantifiers |  |  |
| Nominal enclitics | Specifier |  |
|  | Plurals |  |
|  | Indefinites |  |

Table 4.1 (continued)

| Major parts of speech | Main subtypes | Minor subtypes |
| :--- | :--- | :--- |
| Postpositions | Cliticized | Case markers |
|  | Local | Possessed <br> Verbs <br> (various suppletion classes) |
|  | Transitive | Continuous |
|  | Intransitive | Continuous |
|  |  | Punctual |


| Adverbs | Positional |  |
| :--- | :--- | :--- |
|  | Deictic | Manner |
| Adjectives | Primary |  |
|  | Derived | Punctual |
| Verbal Proclitics | Core TAMP |  |


|  | Deictic, Evidential |  |  |
| :--- | :--- | :--- | :---: |
|  | Negative  <br>  Counterfactual <br>   <br> Verbal Enclitics Core TAMP <br>  Conditional <br> Connectives Conjunctions |  |  |

Quote Particles
Interjections etc.

### 4.1 Affixes

As earlier mentioned, inflectional categories on the verb are coded as clitics, i.e. as separate phonological words, rather than affixes. For example, in the following sentence, the initial stop of the verb piyé is unvoiced - if the inflectional clitic kêdê were a prefix and fused with the verb, the $/ p /$ would be word-internal and voiced by the rules described above. In contrast, the evidential /kê/ preceding the inflectional clitic /dê/ is fused with it, as evidenced by the fact that the / $d /$ is realized as a word-internal retroflex flap. The practical orthography reflects this, representing the sentence as two words:

| (10) | kêdê | piyé |
| :--- | :--- | :--- |
|  | CERT.3sIMMPI | recover |
|  | 'He recovered (earlier today)' |  |

Many functions performed by affixes in other languages are performed by clitics, postpositions or separate phonological words in Yélî Dnye. In addition, roots (especially verbs) supplete under different grammatical categories, rather than inflecting. There are very few derivational processes, the most important being reduplication. There is thus very little affixal morphology. The exceptions, which will be further discussed under the various relevant grammatical headings, are as follows:
i. -ni, a nominal suffix or 'specifier' suffixed to regular nouns only, and to a very limited set of adjectival modifiers, to indicate deictic or anaphoric definite determiner before a noun phrase. Adjectives suffixed with -ni form derived nouns, as in ndî̀-ni 'the big one’ (Henderson 1995: 76) (§4.2.1.1)
ii. -pi, a non-productive suffix deriving the 'doer' from a noun or verb, thus nté-pi $\rightarrow$ ntipi ‘food-performer, i.e. good farmer’ (Henderson 1995: 77).
iii. Homorganic nasalization of the first segment of a nominal to indicate $2^{\text {nd }}$ person singular possession. (§3.5.2)

### 4.2 Nominals

### 4.2.1 The noun

I distinguish below (§4.2.1.1) three main classes of noun according to how they indicate definite specification. However, other classes might be recognized. For example, two additional classes of noun might be distinguished according to the expression of possession (corresponding roughly to what is often called the 'alienable/inalienable’ distinction):
(a) Nouns with normal possession: marked by possessive pronouns, $2^{\text {nd }}$ person nasal assimilation or by $u N P$ (where $u$ is the $3^{\text {rd }}$ person singular possessive pronoun and the NP expresses the possessum):
a p:aa 'my village', m:aa 'your village', u p:aa 'his village'
(b) Possession with special form of the possessed N :

For example, tp:ee '(male) child' has optional possessive form tp:oo 'his/her son': Yidika Wombodo tp:oo 'Yidika son of Wombodo'
*Yidika Wombodo u tp:oo
Yidika Wombodo u tp:ee 'Yidika, child of Wombodo’

Similarly, there are a number of body-part nouns that obligatorily take a special (suppletive) possessive form with a $3^{\text {rd }}$ person possessor (see §4.2.1.4): a kêê 'my arm'
Yidika kóó/*Yidika u kêê 'Yidika his arm'

The facts above may suggest some remnant of a special class of nouns with inalienable possession. But only a few kin terms have possessive suppletion like tp:ee/tp:oo. Others are:
(11) a kââpyââ, 'my grandmother'
u kêpyââ 'his grandmother’
ngêpyââ 'your grandmother'
(12) m:aa 'my dad'
u mî 'his dad'
nmî 'your father'

While the body parts are more systematic (see §4.2.1.4; kin terms are dealt with in Part II §11.5).

A third additional class of nouns that might be recognized are those which have a special suppletive form for the locative (including allative sense), for example body parts as described below (e.g. 'n:uu ~ 'nuwo 'nose, on the nose'), but also a number of ordinary nouns, e.g. ntii ‘sea, salt-water' (word used by both sexes) ~ nt:ee ('sea-LOCATIVE, at sea' used by men)/~tpyele 'sea-LOCATIVE’ (used by women - the different vocabularies for men and women are described in Part II §12.1 of the grammar):
(13) péé ‘basket' $\sim$ piy:e 'in a basket',
ndê 'fire' $\quad \sim$ ndiya 'in the fire',
chii 'the bush' ~ dny:ii 'in the bush',
p:aa 'village' $\quad$ p:o 'in the village, home',
ngomo 'house' ~ ngomwa' in the house',
dyaa 'basket-hook' ~ dyêêli '(hanging) on the basket hook'.

The forms in (13) then occur without a locative postposition, and can be possessed and so on in the normal way (e.g. a piy:e 'in my basket', miy:e 'in your basket').

### 4.2.1.1 Forms of the noun

Nouns occur in potentially two forms, unspecified and specified (this is Henderson's 1995 terminology, which does not correlate with the semantic distinction
specific/non-specific). The specified form co-occurs with the deictic and anaphoric determiners and a few other determiners, namely with what I will call the specifiers: demonstratives ala, kî, $m u$, wu, anaphoric $y i$, and mê ('the other. . .'). It is also triggered by a proper noun in apposition acting as a determiner or by a relative clause: thus for pi 'man/god' with specified form pini, we have Tââ pini 'man/god of the place Tââ', and pini n:ii ' the man who. . $\therefore$ ' Although this suggests that the specified form is definite in meaning, this is not sufficient: possessed forms, like a pi 'my name/person', occur in the non-specified form (rather than the specified form *a pini), and quantified nouns, as in Yélî pi yintómu 'all the people of Rossel', occur only in the non-specified form (*yélî pini yintómu), ${ }^{18}$ unless preceded by a determiner as in: kî pini limoni 'that fifth man', mu pini limi $k n \hat{\imath}$ 'those five men'. Only with some adjectives is the specifier possible in another position, after the modifier: pi limo-ni, 'man fifth-SPEC, i.e. the fifth man', pyââ limo-ni 'woman fifth-SPEC' (also possible are pini limo-ni 'the fifth man', pyópu limo-ni 'woman-SPEC fifth-SPEC', but not *pi-ni limo), also pi pââ ntî̀-ni 'man bigSPEC’ (but not *pini pââ ntî̀ ni), nee têdê-ni ‘canoe small-SPEC’. Thus one can say: pi mb:amb:aa-ni ka chi vyuwo 'You look for a good person!'.

The unspecified form is basic (many nouns having no special specified form), and is often associated with indefiniteness or non-specificness, but as noted is a wider residual category. Collocations with the two forms can be summed up in Table 4.2:

Table 4.2: Collocations of specified and unspecified forms.

| Collocations with N | Unspecified form of N | Specified form of N |
| :--- | :--- | :--- |
| deictic/anaphoric determiners | - | + |
| quantifiers \& numerals | + | - |
| possession | + | - |
| proper name as determiner | - | + |
| indefinite $n g m \hat{e}$ | + | - |
| augmentative $\boldsymbol{k n i ̂}$ | + | + |
| questioned with ló 'which?’ | - | + |

The specified form in the unmarked case, as just illustrated, involves the addition of the suffix -ni, with or without vowel raising in the prior syllable. Other nouns

18 Interestingly, yélî tpémi yintómu is grammatical, where tpémi is the specified form of tp:ee, child, which has lexicalized with a new sense 'people, inhabitants'.
have suppletive specified forms: although there is some phonological conditioning, homonymic counterparts may or may not undergo the changes, showing that these are conventional. On this basis we might suggest three classes of noun.

- Class 1: no change to unspecified form (no addition of -ni)
- Class 2: addition of -ni, with or without raised/fronted vowel, and other phonological changes
- Class 3: irregular


## Class 1: no change to nominal root with e.g. deictic determiners

Examples: kópu 'matter’, yââ ‘leaf’, nkwépi ‘sorceror', tuu ‘axe’, têpê ‘earth’, pwono 'man's traditional pubic leaf'

## Class 2: addition of -ni with or without other changes

Here we can distinguish two major subclasses: those with no changes of vowel height (Class 2a), and those with internal changes in the nominal root including raising of vowels (Class 2b). After examples of Class 2a, examples of Class 2 b follow, showing how front vowels are raised and back vowels fronted and raised, in a process similar to irregular imperative formation from verb roots. Note however that these processes are not entirely predictable, /ê/ sometimes raising to /e/ but sometimes to /é/, a short vowel after a nasal lengthening (as in ' $n$ mo - ' $n$ meeni 'bird'), but a long nasalized vowel after a nasal shortening (as in km:ii - kmini 'coconut'). Sometimes, as in kpé - kpéni 'reef entrance', raising fails to take place.

## Class 2(a) No raising with -ni

(For completeness I include here forms with high vowels that cannot raise further, and forms that undergo loss of nasalization and length.)

```
yi - yini 'tree, leg'
pi - pini 'man'
lyé - lyéni `sail'
mbee - mbeeni 'throwing sticks for boys'
'ne - 'neeni 'grass skirt'
kpé - kpéni 'reef entrance’
p:aa - p:aani `village’(optionally raised to p:eeni)
km:ii - kmini 'coconut' (note loss of length and distinctive nasalization)
k:ii - kini `banana` (note loss of nasalization and length)
```


## Class 2(b): Raising with -ni

(15) mbwaa - mbweeni 'water'
p:êê - p:eeni 'story’
kê - kééni 'money type; punting pole’
nté - ntini (food)
te - téni (fish)
p:êê - p:eeni (talk)
p:aa - p:aani/p:eeni (village)
mbwaa - mbweeni ‘river’
'nmo - 'nmeeni ‘bird'
wo - weni ‘day’
pee - pééni 'basket’
ndê - ndéni ‘fire; firewood’
ya - yééni 'verandah’
k:aa - k:eeni 'taro'
t:aa-t:eeni ‘betel’
mbwo - mbwéni 'local betel’
nyóó - nyini ‘tooth’
mtye - mtyééni 'parrot'
mbwa - mbweeni 'fence’
ngmo - ngméni ‘breast’
ch:aa - ch:eeni ‘limestick’
liy:aa - liy:eeni ‘boundary sticks in garden’

Class 3: Irregular - additions of -li or -pi/pu or -mi/mu or labialization (-w-)
(16) maa - meeli (or regular meedi) 'path'
kpaa - kpeeli ‘fire in garden’
a kêê - ala kééli 'my arm'
chaa - cheeli 'reef'
taa - teeli 'bush knife’
daa - deeli ‘outrigger’
kaa - keeli ‘spear’
nee - neepi 'canoe’
pyââ - pyópu/pywópu/kyîmwi 'woman’
tp:ee - tpémi ‘child; people’
$d: a ̂ a ̂-d: a ̂ a ̂ m u ~ ' p o t ; ~ m o o n ' ~$
w:ââ - w:âm ‘dog’
with inserted $/ w /$ :
mbu - mbwini 'mountain'
p:uu - pwini 'clan'
ngomo - ngwéni ‘house’
mbóó - mbwini ‘sky’
koo - kwini ‘lime pot’
without inserted /w/:
$n t: i i-n j i n i ~ ‘ s e a ; ~ s a l t ~ w a t e r ’ ~$
wuwo - wééni 'coral head'
kmo - kmini ('stomach' - but Specified form seems obligatory only in the $2^{\text {nd }}$ person possessed form)

A number of further remarks need to be made:
(i) Homonyms often share the same specified form, as in mgî - mgééni ‘hole; Mt Rossel', but this is not always the case: pye 'mother' (no specified form) vs. pye - pyééni 'river' (not 'mother)'.
(ii) Verbal nouns may also have special specified forms - since these too can be unpredictable, they should be added to the inventory of suppletive forms for each verb, but my records are woefully deficient here: paa - peeli 'walking'; mbê - mbééni 'crying'.
(iii) Yélî Dnye makes much use of compound nouns with idiosyncratic meanings. In these compounds it is the first noun, not the head noun, which receives the specified form after a specifier: mbwaa lêê - (yi) mbw:eeni lêê '(that) pool'; l:êê ghi - l:emi ghi ‘custom'; kêê pyââ - kééli pyââ 'finger'.

Some compounds however are now fused to the extent that they are no longer perceived as two nouns - in this case they may occur frozen in the specified form only: ndeepi 'man rich in ndap' from ndapî pi.

### 4.2.1.2 Nominal compounds

Nominal compounds are formed by adjunction (without intervening material), with the modifying noun to the left and head to the right, thus: ngomo k:ââ 'house post' rather than ?k:ââ ngomo '?post house'. Nominal compounding is a productive process, but there are also probably thousands of fixed phrases of this type in the lexicon. Place names are often of this kind, e.g. Keedi vyuwo 'woman's.name
hill.bottom'. In an interesting pattern, many binomials exist for natural species, where animals of one domain (e.g. sea vs. land, insect order vs. vertebrates, etc.) are analogically named for those in another: dada yimê, lit. '?dada rat', i.e. 'bed bug'. Note that, as mentioned in the preceding paragraph, compound nouns take specification (e.g. with -ni suffix) on the first nominal to the left, so this is not a head-marking strategy.

Another form of compounding is by reduplication, as in kpaapîtp:oo-kpaapîtp:oo 'fish. species', where kpaapîtp:oo itself is a compound (lit. 'whiteness little/ child', i.e. 'a bit white’). However, this is neither productive nor common.

### 4.2.1.3 Classifiers

Classifiers are a class of c .50 nominals which semantically modify a noun but, unlike the modifying nouns in compounds (which occur before the head noun), are placed after the head noun and may therefore head a nominal phrase. They have a number of other formal properties:
(i) They are not possessable: e.g. dmi 'bundle’ cannot be possessed: *a dmi 'my bundle'. (Some of these forms, though, have an independent existence as full nouns, from whence the classifiers presumably derive: these of course, like pââ 'body' can be possessed in that nominal usage.)
(ii) They are not pluralizable with augmentative $k n \hat{i}$ : mbwóó ngomo dmi (*knî).
'ground house bundle (together)' - i.e. a cluster of traditional cyclone shelters.
(iii) Many occur in fixed compounds, or in frequent collocations with head nouns:
puku dmi 'book bundle’ (fixed)
too pee 'skin piece' i.e. 'skin' (fixed)
tpile pê lit. 'thing long.thing', now fixed 'snake' (lexicalized)
$p \hat{e ̂} p \hat{e} \quad$ lit. 'long.thing-long.thing', now 'millipede sp.' (lexicalized)
$k$ :anê pê lit. 'door long.thing’ i.e. 'stairs, ladder’ (houses are entered via ladder)
yi mbwii 'tree spine/long.thing' i.e. 'stick' (fixed for that reference) wédi w:uu 'sago balls' (fixed for referring to large dried balls of sago flour)
(iv) They are likely to occur with numerals or other quantifiers, but are not obligatory in that context. For example, rather than say nee limi 'five canoes' (which is possible), one is more likely to say nee pââ limi 'five canoe sides/ hulls'.
(v) They, or at least some of them, can concatenate, e.g. yi pââ dyuu 'tree body small.pile, i.e. a pile of logs', yi pââ dmi 'bundle of logs', yedê w:uu dmi 'string round.things bundle, i.e. widow's necklace of multiple strands'.
(vi) There is some evidence that they form the syntactic head of nominals in which they occur (this would be consistent with the nominal compound rule that the last nominal is the head), even though semantically they play a modifying role. The evidence is that agreement rules prefer agreement with the classifier rather than the nominal where these conflict (e.g., in 'a pile of logs' the preference is for singular agreement), although agreement both ways occurs in texts.

Although distinguishable in these ways, classifiers are nominals that perhaps grade into normal nouns at the one end and into fixed compounds at the other (generic nouns in Australian languages offer a parallel, see Dixon 2002:449f; on the typology of classifiers see Grinevald 2000:64ff, who might assign the Yélî system to the category of noun classifiers). They may represent the remnants of a true numeral classifier system, eroded as the language moves towards an isolating type. The neighbouring Austronesian language on Sudest has numeral classifiers which make a number of the same distinctions - these are presumably relicts of a Papuan language substrate there too (Anderson \& Ross 2002:327-328).

Classifiers for discrete objects mostly have a shape-specifying semantics. Classifiers for masses mostly denote vessels, which can also measure particulate entities. For discrete objects the following is a list of the commoner classifiers:


| mbwii | 'stick, spine' |  |
| :--- | :--- | :--- |
| pââa | 'body, trunk' |  |
| kn:ââa | 'base' |  |
| kpââa | 'flat thing' | e.g. chêêpî kpââ 'flat stone' |
| m:a | 'round thing' (of stones) | e.g. chêêp̂̂ m:a 'round stones' <br> dumu |
| 'roll, full container' | e.g. têpwâ dumu 'tobacco roll, cigarette', <br> mbwaa dumu 'full water (bottle)' |  |
| ghi | 'part' |  |

For measuring masses or particles:
(18) kuи 'dish'
péé 'basket'
nee 'trough, canoe hull'

These could be used for example to describe quantities of sago balls:
(19) wédi w:uu péé 'basket of'
wédi w: uu kuu 'dish of'
wédi w:uu nee 'canoe of'

And if one was asking for the sugar, one might get the following answer:

| (20) | mbwaa | kuu ngma a | kwo |
| :--- | :--- | :--- | :--- | :--- |
| sugar dish Indef | DEIC.PROX.S | stand(s/d) |  |
|  | 'There's (a dish of) sugar there' |  |  |

Here mbwaa kuu if understood as a compound noun would mean 'sugar dish' (lit. 'fresh.water dish'), but understood as a classifier construction it means 'the (dish of) sugar'.

Perhaps the main use of classifiers outside of measuring contexts is to delimit the reference of semantically general nouns (a similar function is performed by the positional verbs, q.v. §4.5.3). So k:ii 'banana’ can mean the tree, the fruit, or the leaf, and is usually classified to disambiguate - when not so classified the 'tree' reading is implicated:

| (21) k:ii miyó | 'two banana plants' |
| :--- | :--- |
| k:ii nt:uu miyó | 'two unripe banana fruits' |
| k:ii kigha nt:uu miyó | 'two ripe banana fruits' |
| k:ii ch:ênî miyó | 'two hands of bananas' |

Most terms for natural kinds have this kind of semantic generality, and thus often occur with classifiers, e.g. chikini w:uu 'pawpaw seeds’, chikini kighê 'pawpaw fruits', chipa w:uu 'pepper seeds, i.e. edible part'.

Similarly the word $y i$ is semantically general over 'tree, wood, logs', hence the normal collocations:

| (22) yi mbwii (not *yi pê) | 'tree-spine', i.e. stick |
| :--- | :--- |
| yi ghi | 'tree-part', i.e. medium sized log |
| yi pââ | 'tree-body', i.e. large logs |
| yi pââ dyuu | 'tree-body small.heap' i.e. a heap of logs |

Another usage is more genuinely concerned with shape distinctions for their own sake - for example stones, building materials and the like may be classified with an eye to function ('iron' is a compound from 'boat-stone', based on the fact that Westerners are called 'boat people'):

```
(23) nkéli chêêpî pââ lit. 'boat-stone body', i.e. chunk of iron
    nkéli chêêpî pee lit. 'boat-stone piece', a flat iron piece
    chêêpî kpââ miyó 'stone flat.piece two', i.e. two flat stones
    mgaa chêêpî m:a 'spherical(ADJ) stone round(CLF)' 'round stones'
    chêêpî w:uu limi 'five round stones'
    chêêpî mbwii limi 'five thin.long stones'
```

Another function is for talking about physical clusters of things, like herds of animals, or schools of fish. Thus, where tpile tp:oo lit. 'thing child' is the normal compound for 'animal', tpile tp:oo w:uu lit. 'thing-small herd' can denote any collection of animals, including a school of fish. Thus one can also talk about 'nmo w:uu 'bird flock', tpile we w:uu 'insect cluster', etc. (Note that tp:oo itself acts as a classifier for smaller birds, so that one says e.g. vy:êmê tp:oo, mb:êê tp:oo, tâ tp:oo wunté tpile dé, 'Ducula.sp. birds, Ptilinopus.sp birds, Zosterop.sp. birds and that kind of thing'.)

It should be clear that classifiers play an important part in forming new compound lexemes other than through normal nominal compounding; for example the expression for 'beard' is chópu gh:aa mtyé 'chin hair cluster', where the first two lexemes form a compound 'chin hair' and the last morpheme is a classifier. Similarly, ghîpe dmi 'branch bundle, i.e. broom', kpîdê dmî 'cloth bundle, i.e. uniform, clerical garb', ngmîté dmi 'bed bundle, i.e. swag/sleeping roll', ghê dmi 'breath bundle, i.e. soul', kópu dyии 'word pile, i.e. speech, dictionary' (24). Classifiers often accompany loan words, perhaps because they implicitly gloss them, as in pwolî w:uu 'ball round.thing'.

| (24) ala p:eeni kópu | dyuu | doo | n:aa |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| this word.SPEC | word/matter | small_pile | 3sREM.C | MOTION |
| tpapê |  |  |  |  |
| saying/telling |  |  |  |  |
| 'She was saying these words.' |  |  |  |  |

Similarly, the classifier ghi 'part' plays an important role in time expressions, collocating with dini ghi 'time part' in e.g. dini ghi n:ii ngê lit. 'at that time part, i.e. when'.

### 4.2.1.4 Body part nouns

Although synchronically there is no general distinction between alienable and inalienable possession, the body part terms do have special possessive characteristics, and so belong to a minor form class, distinguished by special $3^{\text {rd }}$ person possessive forms or an exceptional unmarked or zero-possessor form in $1^{\text {st }}$ and $3^{\text {rd }}$ person. A number of them also have special locative forms, meaning 'in/on body part' (although the terms u kada 'in front of', u kuwó 'behind' may be independent spatial terms).

Table 4.3 lists the main body part terms: the first column lists the $1^{\text {st }}$ person or unmarked form, next the $2^{\text {nd }}$ person forms formed by general rule of assimilating nasal, then the $3^{\text {rd }}$ person forms which are sometimes suppletive and sometimes allow an optional $3^{\text {rd }}$ person possessor (shown in brackets), and finally the special locative form if any. Note that the locative forms may themselves be possessed, so that a kêpa 'on my forehead' becomes ngêpa 'on your forehead'. The body as a whole can be called pââ, and the parts of the body are pââ p:uu ghi dé. The whole system is of sufficient interest that it is the subject of a separate publication (Levinson 2006d).

Note incidentally that all body parts are said to 'stand', i.e. use the positional $k w o$, as in the example below:

| (25) kî pini kóó | ngmidi | a | kwo |
| :--- | :--- | :--- | :--- |
| that man hand(3sPOSS) | one | 3CI | standing |
| 'That man has only one hand' |  |  |  |

There is one exception, tpe 'vagina', which takes the positional $t$ : $a$ 'hang'.
The English glosses are misleading in a number of respects, for the Rossel system of segmentation of body parts has some unusual features (see Figure 4.1). For example, it has no single lexeme for 'leg', distinguishing instead between $y u$ ('lower leg and foot', with no separate term for 'foot') and kpââlî ('upper leg'). It

Table 4.3: Body part terms, with suppletive forms.

| English gloss | $1^{\text {st }}$ person <br> (preceded by a)/ Unmarked form | $2^{\text {nd }}$ person <br> 'your X' | $3^{\text {rd }}$ person <br> 'his X' | Locative form** |
| :---: | :---: | :---: | :---: | :---: |
| Simplex terms |  |  |  |  |
| body | pââ | mââ | $u$ pââ | mbwo 'on his body' |
| head | mbodo | modo | (u) mbodo | mbêmê, mbêdêma, mêmê'on your head' |
| bald spot | kpêmî |  |  |  |
| arm+hand | kêê | ngêe | kóó | kwulo 'on open hand', kumu 'in closed hand' kîlî 'with the hands' |
| shoulder | kîgha, nkono, nkene kn:ââ |  |  | kîgha 'on shoulder' |
| lower leg + foot | yi | nyi | yu | yuwo |
| upper leg | kpââlî | ngmââlî | (u) kpââlî | kpââlî |
| chest+stomach | yodo* <br> yodo pee dê = chest <br> or breast | nyodo | yodo | (yodo p:uu) |
| breast | ngmo | ngmo | ngmo | - |
| stomach/belly | km:oo | ngm:oo | (u) km:oo |  |
| back | kpadama | ngmadama | kpadama | u mbwiye |
| temple (incl. sideburn area, side of cheek bone) | te knâpwo | 'ne knâpwo | u te knâpwo |  |
| clavicle | 'nt:oo | 'n:oo | u 'nt:oo |  |
| cheek hollows | kpââ pee dê | ngmââ pee dê | u kpââ pee dê |  |
| jaw (incl. chin) | chópu | nуópu | u chópu |  |
| neck | mbwamê | mwamê | mbwamê | nódo |
| Throat | nuи | nuи | (u) nuu | nódo |
| eye | ngwolo | ngwolo | ngwolo | ngîma 'in eye, in sight' |
| eyelash | ngwolo pyipi dmi | ngwolo pyipi dmi |  |  |
| ear | ngwene/ngwene yââ dê | ngwene | ngwene | (ngwene u mênê) |
| mouth | komo | ngomo | komo | u kwo |
| lip | kwete lips= kwete pee dî | ngwete | (u) kwete |  |

Table 4.3 (continued)

| English gloss | $1^{\text {st }}$ person (preceded by $a$ )/ Unmarked form | $2^{\text {nd }}$ person 'your X' | $3^{\text {rd }}$ person 'his X' | Locative form** |
| :---: | :---: | :---: | :---: | :---: |
| tooth | nyóó/ <br> nyóó tii dmi $=$ <br> whole set | nyóó | u nyóó |  |
| nose | 'n:uu | 'n:uu | u'n:uu | 'nuwo |
| nostril | 'n:uu puи |  |  |  |
| hair | gh:aa | $n g: a a$ | u gh:aa |  |
| vagina | tpe | 'nmoo | u tpoo |  |
| penis | $m d i ̂$ | $n m e ̂$ | u mdî |  |
| forehead | kwódo | ngwódo | (u) kwodo | kêpa |
| tongue | dêê | nêê | dóó |  |
| navel | n:iima | n:iima | u niima |  |
| armpit | ngmââ | ngmââ | u ngmââ |  |
| ear drum | $n k e ̂$ | $n g e ̂$ | $u$ nkê |  |
| hip (with extension to waist) | $p a$ | $m a$ | u pa | paa |
| Compound terms |  |  |  |  |
| elbow 'arm cover' | kêê dópó(kn:âa) | ngêê dópó | kóó dópó |  |
| upper <br> arm+shoulder | 'n:uu kn:ââ (lit. 'nose butt', the term for wings) | 'n:uu kn:ââ | u 'n:uu kn:ââ |  |
| nipple | ngmo kââ |  |  |  |
| lower stomach (from navel to, \& including pubis) | m:êê yu (or m:êê vyuwo) | $m: e ̂ e ̂ ~ y u ~$ | $u$ m:êê yu |  |
| shoulder '?? butt’ | nkene kn:ââ <br> 'n:uu kn:ââ (lit. ‘nose <br> butt' or 'wings') | ngene kn:ââ | u nkene kn:ââ | nkêlê |
| back of hand 'arm hill' | kêê kpâpu | ngêê <br> kpâpu | kóó kpâpu |  |
| fingers 'arm women bundle' | kêê pyââ dmi | ngêê pyââ dmi | kóó pyââ dmi |  |
| finger nail 'finger lid' | kêê ndipi | ngêê ndipi | kóó ndipi |  |
| palm 'hand chest' | kêê yodo | ngêê yodo | kóó yodo |  |
| upper leg ‘leg butt' | kpâlî kn:ââ | ngmâlî kn:ââ | kpâlî kn:ââ |  |

Table 4.3 (continued)

| English gloss | $1^{\text {st }}$ person <br> (preceded by a)/ Unmarked form | $2^{\text {nd }}$ person <br> 'your X' | $3^{\text {rd }}$ person 'his X' | Locative form** |
| :---: | :---: | :---: | :---: | :---: |
| uvula (?also voice box) | nkêmîtp:oo | ngêmî tp:oo | u nkêmî tp:oo |  |
| knee 'lower-leg head' | yi mbodo | nyimbodo | yu mbodo |  |
| sole 'lower-leg chest' | yi yodo | nyi yodo | yu yodo |  |
| top of foot 'foot hill' | yi kpâpu | nyi kpâpu | yu kpâpu |  |
| toes 'leg women bundle’ | yi pyââ dmi | nyi pyââ dmi | yu pyââ dmi |  |
| face 'forehead ?hole bundle' | kwódo ng:oo dmi | ??ngwodo ng:oo dmi | ?kwodo $n g: o o ~ d m i$ |  |
| buttock 'butt piece’ | kn:ââ, knââ pee dê |  |  |  |
| (head) hair | (mbodo) gh:aa | (modo) ng:aa | (mbodo) gh:aa |  |
| anus | kn:ââ puu | $n g: a ̂ a ̂ ~ p u u ~$ | u kn:ââ puu |  |
| thumb 'arm taro woman' | kêê k:aa pyââ | ngêê $k: a a$ <br> pyââ | kóó k:aa <br> pyââ |  |
| big toe | yi k:aa pyââ | nyi k:aa <br> pyââ | yu k:aa pyââ |  |
| small finger | kêê tpuu pyââ | ngêê tpuu pyââ | u kêê tpuu pyââ |  |
| bottom/rump | kn:aadi tpi | ng:aaditpi | u kn:aadi pi |  |
| ankle (bumps) | yi nd:oo dê | nyi nd:oo dê | yu nd:oo dê |  |
| calf | yi m:êê | nyi | yu m:êê |  |
| shin | yi dêma | nyi dêma | yu dêma |  |
| beard | chópu gh:aa |  |  |  |
| pubic hair: male female | mdîgh:aa tpoo gh:aa |  |  |  |
| testicle (dual) | vyóóma (dê) | nmyóóma <br> (dê) | u vyóóma (dê) |  |
| labia | tpoo pee dê | 'nmoo pee dê | tpoo pee dê |  |
| back of head | mbodo kn:ââ vyuwo |  |  |  |
| eye ball | ngwolo w:uu | ngwolo w:uu | u ngwolo w:uu |  |

Table 4.3 (continued)

| English gloss | $\mathbf{1}^{\text {st }}$ person <br> (preceded by a)/ <br> Unmarked form | $\mathbf{2}^{\text {nd }}$ person <br> 'your X ' | $\mathbf{3}^{\text {rd }}$ person <br> 'his $\mathbf{X}$ | Locative form** |
| :--- | :--- | :--- | :--- | :--- |
| back of sole, ball <br> of foot and heel | yi kn:ââ | nyi kn:ââa | yu kn:ââa |  |
| clavicle hollows | 'nt:oo vyuwo | 'n:oo <br> vyuwo | u'nt:oo <br> vyuwo |  |

*yodo is polysemous, or variable in extension, between 'chest+stomach', i.e. whole stomach area beneath ribs (in opposition to yodo pee dê) and area beneath ribs to navel (in opposition to $m$ :êê $y u$ )
**These also have $2^{\text {nd }}$ person forms formed in the usual way with initial homorganic nasal
also segments the trunk into yodo ('chest and upper belly till navel') and m:êe yu ('lower belly beneath navel down to pubis'). It has no simplex term for, and no clear concept of, 'face’ (instead using kwódo ng:oo dmi ‘forehead ?hole bundle’, which does not function as a part in the partonymy). In a more common pattern (shared with e.g. Tzeltal, Levinson 1994), the term kóó for 'arm' includes 'hand', for which there is no separate term. However, the special locative forms for kóó are understood to have reference to the hand in particular.

Some evidence about whether e.g. the notion 'leg' is really deeply alien to Rossel islanders comes from the in-law taboo language (see Part II Chapter 12): both kpââlî 'upper leg' and yu '(his) lower leg' are labelled (u) péépi '(his) leg' in the respect vocabulary, following the pattern reported from Australia where taboo vocabularies have general terms which cover a number of ordinary language terms (see e.g. Haviland 1979a).

Animals essentially have the same body parts, front legs being kóó 'arms', and back legs being kpââlî 'whole animal leg'. Special terms for animal parts include dp:anê 'tusk', tpuu 'tail', 'nuupee 'wing'. Fish essentially inherit animal body parts, with tpuu 'tail-fin', ngwene 'ear' for pectoral fin, too 'skin' for scales, dêê 'tongue’ for dorsal/anal fin, etc.

Unlike in many languages, the body part terms play no extended role in spatial description. Only one body part term has uses as a locative adposition, and although there is an extended parallel between, e.g. the parts of a tree and the parts of a human body (yi 'lower leg/tree(trunk), kpââlî ‘upper leg/branch’, kóó 'arms/twigs'), it is not clear in which direction the metaphor runs! A few of the body part terms ('neck/throat' especially) play a special role in descriptions of emotion (see §7.5) (see Figure 4.1).


- dots indicate prototype loci, as ascertained in response to questions of the sort "If Tili
had a boil on his $y u$, show me where it would be"
segmentation lines

Figure 4.1: Yélî Dnye body part terminology (after Levinson 2006d).

The only other nouns with special possessive forms are a few of the kin terms. Thus we have (in Table 4.4):

Table 4.4: Special kin possessive forms.

| English gloss | $\mathbf{1}^{\text {st }}$ person/Unmarked form | $\mathbf{2}^{\text {nd }}$ person 'your X' | 3 $^{\text {rd }}$ person 'his X' |
| :--- | :--- | :--- | :--- |
| son | a tp:ee | 'nm:ee | tp:oo |
| daughter | a tp:ee módu | 'nm:ee módu | tp:oo módó |
| father | m:aa | mî | u mî |
| mother | niye | niye | u pye |

However, most of the kin terms have normal possessives. Another special feature of kin terms is that they include a set of terms that indicate a kin dyad, e.g. chimi 'a man with his nephew', which are described in Part II §11.5 of this grammar, where the kin term system is laid out. The point here is that these forms too have special, covert possession.

### 4.2.1.5 Proper names

For completeness, something should be said about proper names. The main name for a person is given by the father, drawing on the set of names (say 20 for each sex) associated with the father's clan - when one hears a person's name one thus knows the matriclan of the father, not of course the matriclan of the bearer of the name (membership being inherited from the mother). There are about a dozen clans, depending on what one counts as a subclan. These names seem to meet the word structure of normal Rossel words, being 1-4 syllables in length. Apart from occasional homophony, they do not have other meanings. It is not clear whether personal names form a real word class. They do not have specified forms, but many nouns (of Class I) do not. They may occur with demonstratives, as in kî N:iidee, 'this N:iidee'. Boats also are thought of as possessing personal names, given by their owners: one asks n:uu u pi? ‘Who is its name?’.

There are thousands of place names: each reef, sacred place, hamlet, stream, etc., has a place name. Many of these names are multimorphemic and partially analysable, as in e.g. the village name Ntono kpâpu 'nuwo 'Ntono hill headland/point', while some are clearly corrupted, still others unanalysable. In fact some of the longest words in the language are place names. Although typically compounds, these do have special distributional properties as they occur without locative postpositions, unmarked, in locative as well as allative and ablative functions. For a map of the island with major place names, see Appendix I.

### 4.2.2 Pronouns

### 4.2.2.1 Personal pronouns

Free pronouns have relatively limited uses in the language, since the same information is encoded in the pre- and post-verbal clitics of finite verbs, and pronouns do not normally occur redundantly with these clitics. In addition, there are no free $3^{\text {rd }}$ person subject pronouns. Only if the pronoun is stressed, or emphasized with an emphatic, does it co-occur with a finite verb with pronominal proclitics (in this case pronoun and proclitic happening to have the same form):

| (26) | $n m \hat{\imath}$ | mo | nmo | pyile | knîl | kî |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| our | alone | 1PL | three | AUG | CERT |  |
| nmo |  | vy:a | too |  |  |  |
|  | we3+HABPROXCI | hit+followedCI | Monof.Subj.3PlO |  |  |  |
|  | 'We three ourselves, we used to hit/kill those (animals)' |  |  |  |  |  |

I will call personal pronouns that do occur in this position the 'unmarked' forms. They might be thought of as 'nominative', since the same forms are usually employed for both intransitive and transitive subjects - but the more neutral term 'unmarked' is motivated since they are sometimes further case-marked. ${ }^{19}$ In particular, in certain cases the subject pronoun of a transitive sentence can be marked with the Ergative case, as in the following examples where the Ergative marker is attached to what I am calling the Unmarked form (hence the difficulty in treating these forms as Nominative). This exceptional case marking follows the case marking of nouns, the Ergative being marked with the enclitic ngê (singular) or $y: 00$ (dual/plural, when $3^{\text {rd }}$ person the pronoun itself is dropped). Essentially, Ergative marking of pronouns occurs in embedded, especially quotation, contexts, or when such a context is implied (see discussion in §5.2.2):
(27) pi kn̂̂ y:oo apu, nê ngê k̂̂ nténi d̂̂̀ ma
people PL PL-ERG QUOT 1s ERG that food 1sIMM.P ate
'People are saying: I ate this food'

[^8]| $n y i$ | $n g e ̂$ | chóó | dê |
| :--- | :--- | :--- | :--- |
| 2s | ERG | self | 3IMM.PI |
| hit.PI.PROX |  |  |  |
| 'You yourself hit him (I heard it from someone)' |  |  |  |

Apart from these special cases, pronominals tend to occur in equatives, or in oneword utterances (as in an answer to 'Who did it?'), as emphatic nominatives, or elsewhere as experiencer subjects or possessives. In the pre- and post-verbal clitic position (where they are fused with other TAM information), pronoun-like particles track subject and object on a partly nominative/accusative basis.

Personal pronouns follow a paradigm with three persons and three numbers. The unmarked ('Nominative') pronouns rarely occur outside equative sentences, since the same information is encoded in the preverbal clitics of finite clauses, which are clearly historically derived from pronouns (the relation between preverbal clitics and pronominals is treated below, §6.1). ${ }^{20}$ There are four main subsets of pronouns, and two minor, according to case role, as shown in Table 4.5:

Table 4.5: Yélî Dnye personal pronouns.

|  | Unmarked pronouns: (as in e.g. equatives) |  |  | Possessive pronouns |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | sing | dual | Pl |  | sing | dual | pl |
| 1 | $n \hat{e}$ | nyo | nmo | 1 | $a$ | nyi | nmî |
| 2 | nyi | $d p: o$ | nтyo | 2 | $N$ | $d p i ̂$ | nmyi |
| 3 | $\emptyset$ | $\emptyset$ | $\emptyset$ | 3 | $u$ | yi | yi |
| Source/Goal forms: (NP+ka) |  |  |  | Experiencer forms: (NP+ngê) |  |  |  |
|  | sing | dual | pl |  | sing | dual | pl |
| 1 | a ka | nye | nmo | 1 | a nga | nye | nmo |
| 2 | nga | dpo | nmye | 2 | nga | dpo | nmye |
| 3 | kwo | ye | ye | 3 | u ngwo | $y: e$ | $y: e$ |
| Ergative forms: (NP+ngê/y:00)* |  |  |  | Instrumental forms: (NP+ngê/y:e) |  |  |  |
|  | sing | dual | pl |  | sing | dual | pl |
| 1 | nê ngê | nye y:00 | nmo y:00 | 1 |  |  |  |
| 2 | nyi ngê | dpo y:oo | nmye y:oo | 2 |  |  |  |
| 3 | $n g e \hat{}$ | y:00 | y:00 | 3 | u ngwo | $y: e$ | $y: e / y: 00$ |

*exceptional uses only - see §5.2.2

20 Note that one could call this unmarked form of the pronouns Absolutive as they occur in equatives, except that in many unmarked contexts they have the same form for both transitive and intransitive subjects - see $\S 5.2$ for discussion.
(There is also a slightly irregular paradigm of pronouns in the Comitative case which takes the possessive forms, with a special form $m: u u$ in $2^{\text {nd }}$ person singular declaratives - see §5.2.1.) Note that there are no unmarked $3^{\text {rd }}$ person pronouns, but there are possessive counterparts, and these may be used to cover both animate and inanimate referents. The oblique case forms of the pronouns show some trace of historical derivation from the possessive pronouns plus the case postpositions. The source/goal forms are used e.g. with transactional predicates ('give', 'sell', etc.), and with human referents where they can indicate source and goal of motion. The Experiencer forms are used in the experiencer construction, where they are similar to the dative subjects of e.g. Tamil (§7.5). The third person Experiencer forms (bold in Table 4.5) are also used with the Instrumental case, so that $u$ ngwo means 'by means of it', and $y: e$ 'by means of them', the latter replacing the case ending ngê, thus e.g. kpele dê $y: e$, 'scissor dual Instrumental, i.e. with the scissors'. In the same way the Experiencer case marker ngê changes to $y: e$ in the plural, taking the form of the pronoun. There are only $3^{\text {rd }}$ person Instrumental case forms.

Despite the fact that case clearly determines separate pronominal paradigms, the case markers themselves draw on the pronominals. Plural oblique case markers are clearly derived pronominal forms. Consider for example the Instrumental complex NP:

```
(29) tuи taa y:e
    axe bush.knife Dual/Pl.INST
    'With an axe and knife'
```

Here $y: e$ has the same form as the Experiencer case $3{ }^{\text {rd }}$ person Dual/Plural pronoun. The Plural Ergative case marker y:oo is also related to the $3^{\text {rd }}$ Person possessive pronoun yi.

Reflexivity is expressed by possessive pronominals with nominal emphatics that in the $2^{\text {nd }}$ person singular fuse. The reflexive emphatic is chóóchóó, a full noun, not really a pronoun, and the paradigm is as in Table 4.6.

Table 4.6: Reflexive pronouns.

|  | Reflexive 'pronouns' | Accusative forms (Possessives in brackets where different) |  |
| :--- | :--- | :--- | :--- |
|  | Sing | Dual | Plural |
| 1. | a chóóchóó | nyi chóóchóó | nmîchóóchóó |
| 2. | nyóóchóó | dpî chóóchóó | nmyi chóćchóó |
| 3. | (u) chóóchóó | yi chóóchooó | yi chóóchóó |
|  |  |  |  |

The reflexive construction is dealt with below in §7.8- these 'pronouns' (actually possessed nouns) do not necessarily replace object markers. They cannot occur with ergative markers. With other cases, they may double up with the case forms above, e.g. a chóó a ka, 'to myself', chóóchóó u kwo 'to himself’ (Source/Goal).

The reciprocal (§7.8.2) is expressed by an indeclinable pronoun numo or noko (dative numo), like English 'each other'.

### 4.2.2.2 Other pronominals

There are a number of other pronominal forms. The most important is the indeclinable n:ii, unmarked for person/number, case or animacy. This occurs in two constructions:
(i) with deictic adjectives to form the six distinct deictic pronominals, e.g. kê n:ii 'that one', treated separately below in §4.2.2.3.
(ii) in relative clauses, where it follows the head noun, or can stand alone as a case-bearing pronoun meaning 'the one who'.

There are two other indeclinable relative pronouns: mwa 'who', and kwéli, 'where'. Relativization is dealt with in §8.1.

There are half a dozen interrogative pronouns including n:uu, 'who?', lukwe 'what?', ló 'which?' and so forth, described under Interrogatives (§7.2.2.2). Unlike the personal pronouns, these always take the full set of case postpositions, including Ergative, Dative/Ablative, Instrumental, etc.; examples are given in §7.2.2. It is worth noting that these also have some restricted uses as declarative quantifiers, so that ló $y: i$ 'which there, i.e. where' can also mean 'wherever' as in ló y:i wa lê (which there FUT3 go) ‘wherever she goes’; similarly ló dini ‘which time?' can mean 'whenever' or 'long ago'.

### 4.2.2.3 Demonstratives

Demonstratives are a well-defined formal word class in Yélî: they have, apart from possessive pronouns which have different properties, exclusive occurrence immediately before the nominal (modifying nominals in compounds also occur before nouns, but together they form a larger nominal of course).

There are a few special forms outside the main paradigm, which I mention here. For example, wule is a presentative, that can be used with the addressee demonstrative, as in ye wule 'that is it', said presenting something or even after delivering a story.

The basic paradigm of demonstratives is as shown in Table 4.7. The glosses 'proximal', 'medial' and 'distal' are a first approximation, to be emended rapidly below, but are the sorts of glosses that would be consistent with much functional usage.

Table 4.7: A core set of spatial demonstratives.

|  | Speaker-Based | Addressee-Based |
| :--- | :--- | :--- |
| Proximal | $a l a$ | $y e$ |
| Medial (Neutral) | $k \hat{\imath}$ | - |
| Distal | $m u$ (far from Spkr) |  |

The terms have no internal morphological structure, and are thus compositionally opaque, with the possible exception of the proximal ala, which could be diachronically related to the first person possessive (cf. $a$-la 'my-bit'). The distance metric in the speaker-based series is clearly relative: all the terms can be employed to distinguish objects on a table top (see below) but equally to refer, for example, to a string of villages along the coast. In addition to these terms, there is an anaphoric determiner $y i$, and a number of others to be mentioned below. Corresponding to these demonstrative determiners are a set of demonstrative pronouns and adverbs, as in Table 4.8. The element n:ii (as in ala n:ii 'this one') is a pronominal which also functions as the relative pronoun (see §8.1). Incidentally, it is possible to combine the pronominal n:ii and the adverbial series, as in al:ii $n$ :ii 'the here one', but such uses hardly seem to occur.

Table 4.8: Demonstrative pronouns and corresponding adverbs.

|  | Pronouns | Adverbs |  |
| :--- | :--- | :--- | :--- |
| Proximal | ala n:ii | $a l: i i$ | 'here' |
| Medial (Neutral) | kî n:ii | $k: i i$ | 'there' |
| Distal | $m u n: i i$ | $m w i$ | 'yonder' |
| Anaphoric | $y i n: i i$ | $y: i$ | 'there as mentioned' |

Intensive investigation of the system is reported elsewhere (Levinson 2018). For example, data were collected using the 'table top placement' task (Pederson \& Wilkins 1996; the Yélî Dnye results were reported briefly in de Ruiter \& Wilkins 1996:66-67). In that task, one, two or three objects (e.g. cups) were placed in various arrangements in front of a speaker, with the investigator beside him or her. The results can be illustrated diagrammatically as in Figure 4.2 through Figure 4.4.

This kind of data supports the first-order approximation mentioned above, with a series of three speaker distances distinguished, where the relevant distance



Figure 4.4: Demonstratives used (with pronoun $n: i i)$ for three objects on a table.
is partly a function of the contrasts to be made. Incidentally, these distance distinctions are neutralized for an array of three objects in transverse order across the speaker's line of gaze: then the same three terms as in Figure 4.4 are employed, arbitrarily starting to left or right. If the speaker turns his back on the array, the same three terms are employed as in Figure 4.4 (showing that visibility is not a necessary feature for these three terms). If the array is vertically arranged, with one object on the floor, another at navel height and another at head height, the system is neutralized and ala (proximal) is used for the object on the floor, kî for the object at navel height, and $m u$ (distal) for head height. If the addressee is not beside the speaker, as is presumed in Figure 4.2 through Figure 4.4, but at the other end of the table as in Figure 4.5, the same terms are employable except that the object denoted $m u$ can (but need not) be equally well designated ye 'near addressee':


The reader should now have a good idea of the basis for the generalization in Table 4.7. This pattern can be repetitively elicited, but it is not in fact an adequate analysis of the system, which actually involves additional semantic parameters. For there are in fact six, not just four demonstrative determiners - Henderson (1995) gives the following (Table 4.9):

Table 4.9: Henderson's (1995:46) analysis of the deictics.

| Deictic term | Referring use | Anaphoric use |
| :--- | :--- | :--- |
| $k \hat{\imath}$ | 'in sight' |  |
| $w u$ | 'out of sight' | anaphoric |
| $a l a$ | 'close to speaker' | cataphoric |
| $y e$ | 'close to hearer (addressee)' | anaphoric |
| $y i$ | 'previously discussed' | anaphoric |
| $m u$ | 'the other' | cataphoric |

The full adverbial paradigm is thus as in Table 4.10:

Table 4.10: Full adverbial demonstrative paradigm.

|  | Pronouns | Adverbs |  |
| :--- | :--- | :--- | :--- |
| Proximal | $a l a n: i i$ | $a l: i i$ | 'here' |
| Medial (Neutral) | $k i ̂ n: i i$ | $k: i i$ | 'there' |
| Distal | $m u n: i i$ | $m w i$ | 'yonder' |
| Anaphoric | yi n:ii | $y: i$ | 'there as mentioned' |
| Out of sight | wu n:ii | $w: i i$ | 'there, indirectly ascertained' |

It is clear from Table 4.10 that the terms have additional functions in anaphora, and also that there may be epistemic issues in play, not just distance from speaker. I will dispute some of these glosses, but the insistence on additional factors is correct. In fact, to preview some of the main results, I will argue that the correct analysis is semantically multidimensional, requiring distinctions on three dimensions: spatial distance, discourse location, and epistemic basis. The analysis can be sketched as in the following, which treats each of these dimensions as the side of a cube, as in Figure 4.6:


Figure 4.6: The three dimensions of Yélî Dnye deictic determiners (from Levinson 2018:325).

Take the spatial dimension first, shown vertically. As we have seen, ala and ye both indicate proximity (here marked ' + Close'), in the first case to the speaker, and in the second case to the addressee. At the other extreme, $m u$ indicates non-proximity (here marked ' - Close'). In the middle is kî, which will be argued below to be in fact neutral or unmarked for distance (hence marked ' $+/-$ Close'). On the horizontal dimension, we have the unfolding of discourse in time. For referents that are behind in discourse time, the special anaphoric pronoun $y i$ is mostly employed, for referents that are ahead in time cataphoric reference can be made with spatial series. The final dimension involves an evidential or epistemic parameter. On this parameter the spatial series contrasts with an additional deictic determiner wu 'that (indirectly inferred)'. The evidence for much of this analysis has been presented in Levinson (2018).

For those trying to compare the Yélî demonstratives to other systems on a distance scale, the diagram in Figure 4.7 is an attempt to squeeze a multidimensional system onto one distance scale - here closeness to speaker versus closeness to addressee are treated in parallel, and an additional column at the end picks up the epistemically marked form, which doesn't really fit on a distance scale of course.



Figure 4.7: Yélî Dnye demonstratives and distance from deictic centre (speaker in the top row, or addressee in the bottom row; arrows below show normal range of extensions of primary deictics).

The correct analysis of this pattern involves distinguishing the semantics from the pragmatics. From the details and variants of each scenario in the the demonstrative questionnaire (Wilkins 2018), it became clear that the 'medial' term kî is employable in most scenarios. Kî becomes pre-empted under specific conditions, essentially when the referent is close to or touching speaker or addressee, or when it is very far from both (a statement to be refined below). Following the analysis I first proposed for English that (Levinson 1995, 2000c:94), it seems that kî is actually unmarked for distance, a 'neutral' demonstrative. This predicts that in fact kî could logically occur for referents at any distance, and the fact that ala and $m u$ occur at close and far distances is a matter of pragmatic pre-emption. Such pre-emption would follow from Grice's first maxim of Quantity: "Make your contribution as informative as is required", which enjoins a speaker to use the most informative description that applies - with the result that the addressee interprets a less informative description (here kî) as suggesting (implicating) that the more informative description (say ala or mu ) does not apply. In this way, a division of labour between alternative forms arises, without an actual lexical specification of a contrastive meaning. The advantage of such an analysis is that it accounts for the fact that nearly everywhere kî is acceptable, although sometimes misleading in other words it accounts for the flexibility of demonstrative use.

Diagrammatically, we can represent the speaker-based series as having overlapping semantics as in Figure 4.8:


Figure 4.8: Speaker-based demonstratives.

The division of labour between the three terms then arises by pragmatic principle: where terms are in privative opposition in this way, a 'Horn-scale’ arises under which the use of an informationally weaker term systematically invites the inference that the stronger does not apply. Thus the proximal forms ala and the distal $m u$ pragmatically pre-empt kî, and the use of kî Q-implicates 'not next to S and not distant from S’ (see Levinson 2000c for the theory).

### 4.2.3 Quantifiers

Quantifiers in Yélî Dnye are complex and not fully understood. They occur towards the end of the NP, followed only by number markers and case postpositions. A few of them, notably ngmê ('a, one’) and yilî ('many') can occur alone as
pronominals. They are of different subclasses, according to position in the NP, as in the order after the nominal shown in Table 4.11.

Table 4.11: Quantifiers (ordered template).

| Indefinites | Indefinite | Quantifiers | Augmentative | Case |
| :--- | :--- | :--- | :--- | :--- |
|  | quantifiers | proper |  |  |
| ngmê | yilî 'many' | yintómu 'all' | knî 'augmented', | various cases |
| 'one, |  | dê 'dual' | 'more than two', |  |
| some' |  | limi 'five', etc. | 'some' |  |

These may occur together, despite the glosses, as in e.g. pini yil̂ yintómu 'all the many people’, or pi limi knî ‘five people together’, matters taken up in $\S 5.1$ under the description of the NP. The following is a list of some of the members of each class:

1. Indefinite markers
e.g. ngmê 'one, a, some' - an exceptional item that may stand alone with case markers like the Ergative, and may migrate via quantifier floating to the Verb Complex. It is obligatory in a number of contexts, e.g. in questions like lukwe ngmê dê pyódu? 'what INDF has happened?’.
2. Indefinite quantifiers
e.g. yilî ‘many’
3. Quantifiers proper
(a) 'Logical' quantifiers:
e.g. yintómu 'all', when used alone as an NP means 'everybody'. It takes singular verb agreement.
Some of these quantifiers are negative polarity items, e.g. mdoo 'many' occurs only with a negative: Pi mdoo daa tóó, 'There aren't many people here' (see (31) and §10.2).
(b) Dual vs. Trial nominal markers: dê 'Dual', dé ‘Three or more'
(c) Numerals, described in the following section.
4. Augmentative: knî occurs typically with numerals, but also e.g. with collective kin terms, where it augments the number of the junior kinsmen: e.g. mupwo 'man and his son', mupwo knî 'man and his sons, a whole family'. It entails three or more referents, so acts like a plural, but it has a different distribution (e.g. pi knî y:oo, 'person augmentative ERG.PL' vs. *pi dé y:oo 'person PL ERG.PL). It can stand alone as head of a noun phrase: knî mu wunê châpwo ngmê, 'some more are being cut'.

These quantifying elements occur with general nouns like pi 'person' or tpile 'thing' to construct notions like 'everybody’, 'nothing':
(30) tpile daa pyodopyodo ala $y: i$ thing not happening this here 'There's nothing happening here'

The notions on the classical square of oppositions are expressed as illustrated in (31):
(31) a. pi (yilî) yintómu/tpile yintómu 'every/all'
person (many) all/thing all
'Many/all people’; ‘Everything'
b. yilî dê kee, ngmênê daa d:uud:uu 'most'
many 3IMM.PI came.up but NEG really
mbiy:e yilî
ADV many
'Many came up, but not really many'
c. te yilî da dóó 'many'
fish many 3IMMPI.CLS catch.fish
'He caught many fish'
d. pi knî ngmê da lê 'some'
person AUG INDF 3sIMM.CLS go
'Some men came'
(Alternatives: pi ngmê da lê, pi da lê)
e. doo ngmê n:ee 'none'

NEG one/INDF go.NegPol
'Not one came' (n:ee is a negative polarity form of the verb root)
(Alternatives: pi daa n:ee, pi ngmê daa n:ee, 'no one came’)
mu ngmidi doo ngmê n:ee
'Not even one of them came'
$\begin{array}{lllll}\text { f. } & p i \quad \text { mdoo } & \text { doo } & \text { n:ee } & \text { 'few' } \\ \text { person many.NegPol } & \text { NEG } & \text { go.Neg } & \\ \text { 'Not many/few came' } & & \\ \\ \text { ( } m \text { doo is negative polarity item) } & \\ p i \quad \text { pyile njini } & \text { da } & \text { lê } \\ \text { person few } & \text { 3IMMPI.CLS } & \text { go }\end{array}$


These would form the two entailment scales, positive: <yintómu, yilî, ngmê> and negative: <doo ngmê, mdoo doo, daa yilî, daa pi>, where the negative scale is not fully lexicalized at all (with the exception of pyile njini 'few', which has restricted uses; see predictions in Levinson 2000c:80). There are a few other quantifiers, but they seem restricted in one way or another, e.g. pê 'several, a few, a cluster' applied to houses, canoes, boats, etc.

Quantifier scope ambiguities clearly exist: the sentences below are of identical structure but have the scopal reading (narrow and wide respectively) that makes most pragmatic sense:

| a. tp:eema yintómu | knî | y:oo nee |  |
| :--- | :--- | :--- | :--- | :--- |
| boy.PL all | AUG | ERG.PL canoe |  |
| pââ | da | kêêlî | ngmê |

However, proportional readings of quantifiers, as required by the theory of generalized quantifiers (Keenan \& Paperno 2012), may not exist. That is, the counterpart of e.g. 'many' does not seem to have the reading 'the greater proportion', only the reading 'a sizable number'. The following would be fine if only 25/100 children passed the exam (with or without the second clause): I have not been able to force a proportional reading.

| (33) | tp:ee | $d m a ̂ a ̂ d i ̂ ~$ | yilı̂ | $k n \hat{1}$ | $y: 00$ | exam | pass |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | boy | girl | many | AUG | ERG.PL | exam | pass |
|  | kalê | ngmê, | ngmê | yilı̂ | $k n \hat{\imath}$ | $y: 00$ | doo |
|  | cause | PFS.sO.PROXPI | but | many | AUG | ERG.PL | NEG |
|  | pass | kale | ngópu |  |  |  |  |
|  | pass | cause | PFS.sO | gPolPI |  |  |  |
|  | 'Many | children passed the | exam | y didn' |  |  |  |

There are special ways of describing distributive meanings. Reduplicated quantifiers and numerals indicate such notions as 'one by one', etc:
a. Mwonî ngê k:aa woo ngmêngmê ka kaap̂̂ Mwonî ERG taro seed one.by.one CERT3C plant (of taro) 'Mwonî is planting them one by one'
b. Mwonî ngê dee w:uu miyómiyó ka nt:ene Mwonî ERG yam seed two.by.two CERT3C plant (of yams) 'Mwonî is planting yams two in each hole'
c. yi pini yoo ngmêngmê nté yi w:ââ miyómiyó a those men PL one.by.one like their dogs two.by.two are kwo standing 'The men have two dogs each’
while the form ntémwintwémwi before the verbal proclitic indicates that the action is being done by each agent:
(35) a. Steve Yidika Chris (y:oo) k:ii nt:uu ntémwintwémwi Steve Yidika Chris (ERG.PL) banana fruit DISTRIB pîp̂̂ ngmê ka eating PFS.3sO.CI 3PRES.CI
'Steve, Yidika and Chris are each eating a banana’ (with 3 agents the ERG marker is dispensable)
b. Teacher ngê tp:ee dmââdî ma ye pen ntémwintémwi Teacher ERG boy girl PL 3PL.DAT pen DISTRIB dê y:oo
3sNrPST.PI give.to. 3
'The teacher gave a pen to each child (boy and girl)'

The two types of distributive marking can be combined: note that in (36)c. below ngmê 'one, a' could mean either some or one each - (36)d. and e. below show the disambiguated forms:
(36) a. Teacher ngê tp:ee dmââdî ma y:e pen ntémwintémwi Teacher ERG boy girl PL 3PL.DAT pen DISTRIB pyilepyile dê y:oo three.three $3 s \mathrm{NrPST} . \mathrm{PI}$ give.to. 3 'The teacher gave three to each child'
b. Teacher ngê tp:ee dmââd̂̂ ma y:e pen ntémwintémwi Teacher ERG boy girl PL 3PL.DAT pen DISTRIB yilîyilî dê y:oo many.many $3 s \mathrm{sNrPST} . \mathrm{PI}$ give.to. 3 'The teacher gave many to each child'
c. Teacher ngê tp:ee dmââd̂̂ ma y:e pen ntémwintémwi Teacher ERG boy girl PL 3PL.DAT pen DISTRIB ngmêngmê dê y:0o one.one 3 sNrPST.PI give.to. 3 'The teacher gave some to each/he gave one pen to each child'
d. Teacher ngê tp:ee dmââdî ma y:e pen Teacher ERG boy girl PL 3PL.DAT pen ntémwintémwi dê y:oo DISTRIB 3sNrPST.PI give.to. 3 'The teacher gave a pen to each child (boy and girl)
e. Teacher ngê tp:ee dmââdî ma y:e pen knî Teacher ERG boy girl PL 3PL.DAT pen AUG ntémwintémwi dê y:00 DISTRIB 3sNrPST.PI give.to. 3
'The teacher gave some pens to each child'

Quantifiers often have portmanteau forms when negated, a matter dealt with elsewhere ( $\$ 10.2$ ). Note that, in contrast to the reduplication of numerals, the reduplication of bare nouns can occasionally pluralize the verbal enclitic, as below:
(37) Kî yéli y:oo yi tpile tpile noko

Those people ERG.PL 3plPOSS thing thing RECP.DAT
kêdê y:ee t:oo
CERT3IMM give.to.3FOL PFS.3PLO
'These guys are giving their things to each other'

### 4.2.4 Numerals

The language has a regular decimal counting system, clearly borrowed from Austronesian contact, as shown by a number of Proto-Oceanic cognates listed below (from Lynch et al. 2002:72). The particular forms borrowed into Yélî Dnye (including the numerals for 7,8 and probably 6) suggest contact with early Proto-Oceanic speakers, since the majority of the surrounding ‘Papuan Tip Cluster’ Oceanic languages have now dropped the numbers 6-9 in favour of a ' $5+n$ ' or quinary system (Lynch et al. 2002:72). The neighbouring Oceanic language on Sudest has also preserved the Proto-Oceanic 6-9 (Anderson \& Ross 2002:327), so that the early contact could be indirect; however, Yélî preserves some early forms more accurately than Sudest (e.g. POc *pati ‘four’, Yélî paadi, Sudest -varì). In Table 4.12, the symbols < or > point to derivative Yélî forms, marked with a question mark if unclear.

The current system has monomorphemic cardinals 1-10, with corresponding ordinals. Higher numbers are recursively constructed using the specialized form mê 'and, with, in addition' (thus $y$ : a mê pyile ' 10 plus 3, i.e. 13 '), or by using the ordinal, as in pyolo y: a 'the third 10, i.e. 30', or yono yono y: a 'the tenth tenth-ten, i.e. $1000^{\prime}$ (note the implicit bracketing of the system: the $10^{\text {th }}$ instance of the $10^{\text {th }}$ 10 , or ( $\left.10 \star\left(10^{\star} 10\right)\right)$ ).

This number system is still fully operative, as it is used in massive shell money transactions (see Liep 1983a, 2009), where a couple of thousand valuables are often tallied in a single exchange. Ndapî shells are laid out in ten rows of ten, each row of descending magnitude of denomination of shell, each such block of 100 shells being marked off with a palm leaf tally. kê shells, which are kept threaded in rows of ten, are rethreaded into a metres-long string of descending diameter the unthreaded strings being used as tallies. This numerate culture has many monolexemic words for e.g. three people or the seventh day (a feature also of other off-shore Papuan languages like Lavukaleve, which has special nouns for 'ten dogs', etc., see Terrill 2003:56-57).

In addition to the cardinal numbers and the ordinals ('the $n$ th'), there is a fully productive system for specifying 'the $n$th time' by suffixing -mbó to the ordinal: pyolo-mbó 'for the third time', podo-mbó 'for the fourth time', etc. (Henderson 1995:76). In addition, there are words for 'twice', 'thrice', etc. as shown above.

Counting aloud is often done in twos: miyó dê, pyolo-podo, limo-wono, piiwolo, tówo-yono, etc. When one gets to 10 , one starts again with mê miyó dê, mê pyolo-podo, etc. From there, one counts the number of tens accumulated. Numerical operations can be expressed thus:

Table 4.12: Cardinal, ordinal and multiplicative numerals.

|  | Cardinals | Proto-Oceanic cognates ${ }^{21}$ | Ordinals | Number of Times |
| :---: | :---: | :---: | :---: | :---: |
| 1 | ngmê/ngmidi | ${ }^{*}$ tai, ${ }^{\text {k }}$ ai | mwiyé 'first' |  |
| 2 | miyó | *rua | my :oo/myomo 'second' | my:oontómu 'twice' |
| 3 | pyile | *tolu | pyolo(ni) 'third' | pyolontómu 'thrice' |
| 4 | paadi | <*pati | podo(ni) | podontómu |
| 5 | limi | <*limá | limo(ni) | limontómu |
| 6 | wéni | *onom ?> | wono(ni) | etc. |
| 7 | pyudu | ?< *pitu | pii(ni), pyud:o |  |
| 8 | waali | < *walu | wolo(ni) |  |
| 9 | chu | *siwa | tówo(ni) |  |
| 10 | $y: a$ | *sa/nga-puluq | yono(ni) | yonontómu |
| 11 | $y: a ~ m e ̂ ~ n g m e ̂ ~$ |  | mê ngmê (ni) |  |
| 12 | $y: a ~ m e ̂ ~ m i y o ́ ~$ |  | (cardinal + ni) |  |
| 13 | $y: a m e ̂ p y i$ | le |  |  |
| 20 |  | $\begin{aligned} & m y: o o \quad(2 \times 10) \\ & y: a \end{aligned}$ |  |  |
| 22 | my:oo y:a me miyó |  |  |  |
| 30 | pyolo y:a | ( $3^{\text {rd }} 10$ ) |  |  |
| 40 | podo y:a | $\left(4^{\text {th }} 10\right)$ |  |  |
| 50 | limo y:a |  |  |  |
| 60 | wono y:a |  |  |  |
| 70 | pyodo y:a |  |  |  |
| 80 | wolo y:a |  |  |  |
| 90 | t:ono $y$ :a |  |  |  |
| 100 | yono y:a | ( $10^{\text {th }} 10$ ) |  |  |
| 105 | yono y:a mê lîmî | ( $10^{\text {th }} 10$ plus 5) |  |  |
| 150 | yono y: a mê lumo y:a | $\begin{aligned} & \left(10^{\text {th }} 10 \text { plus } 5^{\text {th }}\right. \\ & 10) \end{aligned}$ |  |  |
| 200 | my:oo yono y:a | (2 ${ }^{\text {nd }} 10$ th 10 ) |  |  |

21 Lynch et al. (2002:72)

Table 4.12 (continued)

|  | Cardinals | Proto-Oceanic <br> cognates $^{21}$ | Ordinals | Number of Times |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{3 0 0}$ | pyolo yono y:a | $\left(3^{\text {rd }} 10\right.$ th 10$)$ |  |  |
| $\mathbf{1 0 0 0}$ | yono yono y:a | $\left(10^{\text {th }}\left(10^{\text {th }} 10\right)\right)$ |  |  |
| $\mathbf{1 0 , 0 0 0}$ | yono yono <br> yono y:a |  |  |  |

addition: pyile, pyile, yintómu wéni 'three (plus) three, all (together) six' limo y: a limo y: a yintómu yono y: a 'fifth ten, fifth ten, all (together) 10 th ten' (i.e. $50+50=100$ ) (large numbers are counted by keeping tallies for each hundred) subtraction: ndapî wéni, mê pyile d: a ngî, yintómu pyile ('6 shells, you take 3, all together 3')

There is no real name for zero, this being expressed simply by tpiipe 'none' (archaic), chêdê (short for machedê?) 'finished', or more colloquially daa tóó 'not sitting, i.e. none' (cf. also tpiipe kope, mada tóó, 'really nothing').

In addition to these systems, there are monolexemes and compounds for counting days from now (the deictic centre) which also partly draw on the ProtoOceanic numeral roots, as shown in Table 4.13:

Table 4.13: Counting diurnal spans from today.

| -2 | m:ii tuwó | (day before yesterday) |
| :--- | :--- | :--- |
| -1 | ma | (yesterday) |
| 0 | awedê | (today) |
| 1 | mâ̂a | (tomorrow) |
| 2 | m:ii | (day after tomorrow) |
| 3 | pyêmê | (day after day after tomorrow, i.e. 3 days from now, and so forth) |
| 4 | p:aamê |  |
| 5 | lyimê |  |
| 6 | wêêmê |  |
| 7 | pyimê |  |
| 8 | waamê |  |

Table 4.13 (continued)

| 9 | tómê |  |
| :--- | :--- | :--- |
| 10 | yomê |  |
| 11 | $y: 00$ mye mââ |  |
| 12 | $y: 00$ mye $m: i i$ |  |
| 13 | $y: 00$ mye pyêmê |  |
| 20 | $y: o o$ mye y:ême | (20 days from today) |

Although there is no strict numeral classifier system, enumerated entities often come with classifiers, to help restrict the noun: for example km:ii limi 'coconuts five' is semantically general over palms or coconut fruits, while km:ii kîgha limi 'coconut ripe.fruit five' denotes the ripe-fleshed fruits, while km:ii nii limi 'coconut drinking.nut five’ denotes the juvenile nuts for drinking. Note that some classifiers carry precise numerical information, e.g. ntépîn:ââ dmi 'cooked.food. basket bundle’ indicates a cluster of baskets of cooked food which must be more than three in number. See further under §4.2.1.3 above.

As in many languages with singular/dual/plural marking, this marking replaces many uses of the first three numerals. Some quantificational material is thereby lexicalized, for example, the singular/dual/plural distinction may be expressed either by enclitics $\emptyset / d e ̂ / d e ́ ~ r e s p e c t i v e l y, ~ o r ~ i n ~ m a n y ~ n o u n s ~ b y ~ s u p p l e t i o n, ~$ as shown in Table 4.14:

Table 4.14: Lower numerals and number marking.

| kîpini | 'this (one) person' |
| :--- | :--- |
| kîtpódu | 'these two people' |
| kîtpóknî̀ | 'these three-or-more people' |

### 4.3 Adjectives

Adjectives in Yélî Dnye are a small closed class, and follow the predictions made by Dixon (1977a) that such a small adjective class should be concerned with concepts like dimension, age, colour and value. However, the concepts expressed are often unusual (see Majid et al. 2018; Levinson, in press; Levinson \& Majid 2014).

Nominal and adjectival classes overlap in both semantic oppositions (the antonym of, e.g., kuu 'raw, unripe', is kîgha 'ripe fruit, ready for eating', which is a classificatory noun) and syntactic potential (e.g., both can occur as verbless pred-
ications). But adjectives have a number of special properties, which are jointly distinctive:
(i) They occur in verbless predications.
(ii) They modify nouns.
(iii) They normally follow the nominals they modify, as in ngomo tp:oo 'house small', и руwиu mb:aamb:aa 'its price good', pi kpêdêkpêdê 'man black', wo mb:aa 'day good'.
(iv) They form adverbs with enclitic adverbializer $n g \hat{e}$.
(v) They form nouns when suffixed with -ni, 'specifier', with the meaning 'the X one', as in ndî̀-ni 'the big one' (Henderson 1995:76).

Notice that criteria (i) and (ii) overlap with nouns; (ii) overlaps with deverbal nouns (gerunds); (iii) however distinguishes nominal modifiers in compounds and gerunds (both of which precede the head) from adjectives. (v) is truly distinctive. Nevertheless, there are some boundary problems with adjectives vs. nouns, for example, some words that on other grounds are clearly adjectives take possession, forcing a nominal interpretation, e.g. ka'ne u daad $\hat{\imath}$ 'door its length'. Adjectives can be used both for modification and predication, using the same surface order: e.g. koo mtyemtye 'limepot red' can either be interpreted as 'a red limepot' or as an assertion 'the lime pot is red'.

Underived adjectives are few in number. They may be semantically grouped as shown in Tables 4.15 through 4.20:

Table 4.15: Size.

| (pââ) ndîn | 'big' |
| :--- | :--- |
| ntâkopeedi | 'giant' |
| têdê | 'small' |
| tp:oo | 'small' |
| daadîn | 'long/tall' |
| dêêkwédi | 'short' |
| tââ | 'high' |

Interestingly, the language does not have a systematic set of dimensional adjectives opposing high/wide/thick, thus undermining the assumption (Bierwisch \& Lang 1989) that such a semantic field is universal and fundamental in the spatial domain. There is no distinction between 'long' and 'tall', and no word for 'wide' or 'thick'. Speakers can only make the distinctions using terms that are not (gradable) antonyms, supplemented by gesture, e.g. by opposing 'big' to 'small', or 'long' to 'short', or derived adjectives indicating e.g. flexibility, as in Table 4.16:

Table 4.16: Dimension.

| daadyî̃vs. dêêkwédi | long vs. short |
| :--- | :--- |
| pââ-ndî̃vs. têdê | big vs. small |
| nt:umu-nt:umu vs. mbiye-mbiye | thin-flexible vs. thick (of textile, bark) |

Table 4.17: Quality.

| mb:aa(mb:aa) | 'good' |
| :--- | :--- |
| dono | 'bad' |
| kamî | 'new' |
| mbwee | 'old (of things)' |
| vy:ee | 'old (of people)' |
| dîngîdîngî | 'heavy/difficult' |
| ntââ | 'light/easy' |

Table 4.17 gives the adjectives of quality. (Henderson \& Henderson 1999 list y:amê 'good' as in y:amê kópu 'a very good idea', but the pre-nominal position suggests this is not a real adjective.) Note that there are a number of adjectives with reduplicated form, but the ones listed here are not synchronically thought of as derived from roots of another word class (thus dîngîdîngî 'heavy' has more currency than the verb root dînga 'to make heavy, slow something down' from which it was presumably derived).

Table 4.18: State.

| kuu | 'raw/unripe' |
| :--- | :--- |
| kîgha | 'ripe/fruit' |
| ch:ii | 'dry/dessicated' |
| nkw:onkw:o | 'cold' |
| kîk $\hat{1} \hat{1}$ | 'hot' |

Of the state adjectives in Table 4.18 kîgha is perhaps suspect, since it seems to be (also?) a classificatory noun. It usually occurs with another adjective or classifier: k:ii kîgha nt:uu 'banana ripe fruit' but also kéme kîgha nj:iinj:ii 'mango ripe.fruit sweet' (where it indicates we are talking about the fruit, not the tree). The reduplicated forms nkw:onkw:o and kîkkî have no current unreduplicated source roots.

Most other adjectives are derived, especially by reduplication from a nominal base. In this way, the basic perception qualities are formed (Tables 4.19 and 4.20):

Table 4.19: Taste (Derived from nominals).

| mty:aamty:aa | 'sweet' | from mty:aa 'honey' |
| :--- | :--- | :--- |
| nj:iinj:ii | 'sweet, salty | perhaps from nj:ii ‘a tree species' |
|  | or spiced' | or more likely ntii 'salt water' |
| kinikini | 'greasy' | from kini 'fat' |
| 'nuwó‘nuwó | 'bitter, sour' |  |

Thus one can ask of food $u$ n:uu lónté? ‘Its taste how?’ and be told nté u n:uu nj:iinj:ii 'food its taste sweet', i.e. 'The food tastes good/sweet'.

Table 4.20: Colour, Surface property (derived).

| kpaapîkpaapî | 'white' | from kpaapî 'white cockatoo' |
| :--- | :--- | :--- |
| kpêdêkpêdê | 'black' | from kpêdê 'tree, nut' |
| mtyemtye | 'red' | from mtye 'scarlet parrot' |
| wuluwulu | 'dark-red' | from wulu '(betel) juice' or from wuluwulu 'bagi shell necklace' |
| lókólókó | 'bright, shining' | from lókó 'luminous mushroom species' |
| dnye-dnye | 'shining, burning' | from verb? |

One can talk also of 'nmo kpaapîkpaapî‘a white bird’ (Table 4.20). The colour terms of Yélî Dnye are a cause célèbre (see Levinson 2000b; Kay \& Maffi 1999). The best candidates for basic colour terms are the first three terms listed here, 'white', 'black' and 'red', but they do not exhaust or cover the domain, as would be expected for Stage II colour terms. Further, they are all derived from object names, and have little psychological salience. Additional colour terms are constructed ad hoc as required, e.g. yi kuu yâ̂a 'tree raw leaves, i.e. green'. Traditional Rossel culture made little use of paint or dye, and this perhaps explains the undeveloped nature of the colour term system.

Derived adjectives include deverbal resultatives (see §7.9.1):
(38) kpîdî pee kmongo ngmê tapil mbêmê poki k:oo yé ngmê cloth piece put.in RES table on box inside put RES 'The folded cloth has been put in the box on the table'

In this sentence, the first deverbal modifier kmongo ngmê is in a modifier position, just like an adjective, while the second yé ngmê is playing the other, predicative role that adjectives can play.

Intensification of adjectives is often by irregular means special to one adjective. For example:
a. nj:iinj:ii pónapóna
sweet sweet.intense 'really sweet'
b. kpaapîkpaapî kpaapîntó white white.intense 'really white'
c. kpêdêkpêdê kpâpkpâp black black.intense 'really black'
(Note that only the 'black' and 'white' terms have such special intensifiers.) Otherwise one can intensify with the adverbial d:uud:uu mbiy:e 'completely' as described in the next section.

### 4.4 Adverbs

Adverbs are all (or nearly all) formally derived, using four constructions:
(i) An adjective or noun can be derived into an adverb with adverbializing enclitic ngê, as in nuw:o ngê 'mind ADV' i.e. 'carefully, slowly', dini ghi ngê 'time part ADV', i.e. 'then, at that time'.
(ii) A noun can be derived into an adjective by reduplication, and the derived adjective then derived into an adverb by enclitic ngê: thus lîmî 'lightning' $\rightarrow$ lîmîlîmî $\rightarrow$ lîmîlîmî ngê 'fast'.
(iii) A noun can be followed by adverbializer k:ii ‘like’, thus lîmî k:ii ‘like lightning, i.e. fast' (Henderson 1995:67). It can also be followed by adverbializer ngê, creating a topic NP, meaning something like 'As for NP’ (see §7.3.1).
(iv) A verb can first be nominalized, then combined with particle mbiy:e, adverbializer, as in: dpodo mbiy:e 'working ADV, i.e. strongly, hard'. Some examples in use follow.

Although nearly all adverbs appear to follow these derivational patterns, many of them are clearly frozen expressions that have to be listed in the lexicon, like nuw:o ngê ‘slowly’.
(40) a. podo nee dpodo mbiy:e a mbêpê yédi racing.canoe working ADV 3sC run HABPROXContIntrans 'The racing canoe used to run like working i.e. hard and fast'
b. pyââ nee nuw:o ngê a mbêpê yédi woman canoe slow ADV 3HAB.CI running HAB.PROX.sS 'The women's canoe used to run slowly'

| c. $u$ dpodo mb:aamb:aa ngê | dî | dó |  |
| :--- | :--- | :--- | :--- | :--- |
| his work good | ADV | 3sIMMPI do |  |
| 'He did it well' |  |  |  |

d. daa d:uud:uu mbiy:e dî d:uu

NEG full-full ADV 3sIMMPI do
'He didn't really do it'

Adverbial phrases of elaborate kinds can be built with adverbializer ngê, as in the following, where the adverbial is a resultative clause:
(41) poki tapil mbêmê kpêmî ngmê ngê kwo
box table on openCI RES ADV stand
'The box was standing open on the table'

There are just a few curious candidates for underived adverbial status. These include positional notions like tââ '(from) on high', '(be/go) high', ntênê '(be, be put) upright, awake', pêpê '(be/become) prone'.

### 4.5 Verbs

Nearly all verbs in Yélî Dnye are either monosyllabic (c. 44\%) or bisyllabic (c. $53 \%$ ). Most verbs have suppletive roots. Despite the large phoneme inventory there is much homophony between parts of different verbs. I will cite the form of the verb used for the head lexical entry, which by my own arbitrary convention is the unmarked (Proximal tense, indicative) punctual root where available, otherwise the unmarked Continuous root. (Henderson \& Henderson 1999 seem to have presumed the continuous form to be the head entry, but since this is usually less frequent and often irregular in formation, I have found it less useful.)

Verbs fall into many cross-cutting classes in Yélî Dnye:
(a) A fundamental distinction is transitivity, which is fixed, and cannot be switched except by some very limited means (principally noun incorporation). Both classes, transitive and intransitive, have members which are inherently continuous or inherently punctual. Transitivity is marked by a distinctive set of Tense/Aspect/Person/Number post-verbal enclitics for each class.
(b) There is another fundamental distinction in verbs between inherent Aktionsarten, namely punctual (or punctiliar) vs. continuous. All or nearly all punctual verbs have continuous stem forms for use in the continuous aspect, but inherently continuous verbs do not have corresponding punctual forms
(partly by definition). This distinction is marked in a separate set of Tense/ Aspect/Person/Number preverbal proclitics for each class.
(c) The positional or postural verbs, which are inherently continuous, fall into a distinctive class of their own, exclusively occurring in locative and existential constructions.
(d) 'Inflectional' classes can be distinguished by certain inflectional irregularities, e.g. 'strong' vs. 'weak' verbs (a distinction relevant only for punctual roots) take different enclitics in the $3^{\text {rd }}$ singular Remote Past, and 'paranoid' (or 'followed root') verbs have a special form of the root if there is a nonzero enclitic (Henderson 1995:29-31). Some verbs take an obligatory 'hither' element in their proclitics. In addition, there are true irregular verbs, which take for example the dual enclitics instead of the singular, when only one subject is involved.
(e) One may distinguish different inflectional classes of verbs according to their suppletion patterns under tense, aspect, mood, negation, person and other properties.
(f) There are some important semantic classes: for instance statives, which are inherently continuous, actives (can be in either aspect), and causatives - thus kwo 'be standing' vs. ghê 'stand up' vs. kââ 'cause to stand up, set up'.

More information follows on each of these parameters, but the reader should appreciate that especially for the last two parameters, we must await more lexical studies for a better overall picture. A problem is that, because most verbs supplete, it is not a trivial process to decide which parts of a verb really belong together. The following generalizations are based on a medium sized database of c. 350 verbs, which can be presumed to be reasonably common verbs. This allows, for example, as shown in Table 4.21, the following generalizations for the (d) category, inflectional classes:

Table 4.21: Inflectional irregularities (sample).

| Inflectional Patterns | 'Weak' verbs | Verbs with ‘Followed' roots | Verbs with Obligatory <br> Deictic in Proclitic |
| :--- | :--- | :--- | :--- |
| $\mathrm{N}=340$ sample | $54(15 \%)$ | $40(11 \%)$ | $18(5 \%)$ |

Explanations for these categories will be given below.

### 4.5.1 Transitive vs. intransitive verbs

All verbs belong to one of these two classes. There are very few verbs that are 'labile' between these two categories - perhaps half a dozen may be so described, including those shown in Table 4.22:

Table 4.22: Labile verbs.

| t:ââ | 'wait for something' vs. 'wait' |
| :--- | :--- |
| wédi | 'chop sago' vs. 'chop (of sago)' |
| wó | 'collect things' vs. 'gather together, make pile' |

One or two verbs 'cross-dress' - for example d:êe 'mark, write something' is a transitive punctual verb with a regular continuous root formed by reduplication; however, it has an intransitive counterpart that looks identical to $d$ :êê, but which inflects only as a continuous verb (Henderson 1995:31).

In the database, 220 verbs are transitive, 122 intransitive, i.e. there are roughly twice as many transitive as intransitive verbs. There is probably not much point in trying to find semantic motivations for this distinction (or for any other classes, for that matter), for the language lacks general valence-changing operations (with the exception of object incorporation and causative formation), and thus perforce has transitive and intransitive doublets for many verbal notions. These verbal doublets may share certain suppletive parts in common, and are generally phonologically related, but not in any predictable way. Take the notion 'to break': Table 4.23 lists in two columns the transitive and intransitive root sets - first the citation forms, then the imperative roots, then the tensed root forms, lastly the forms specialized to non-null enclitics (followed root) and continuous aspect (overlapping roots are in bold):

Table 4.23: Transitive verbs with intransitive counterpart: 'break'.

| 'break something' (transitive) | 'break' (intransitive) |  |  |
| :--- | :--- | :--- | :--- |
| Tense/Aspect/Mood | Root | Tense/Aspect/Mood | Root |
| TV citation form | pwââ | IV citation form | pwópu |
| Punct. imperative | pwaa ngi | Punct. imperative | pwédi! |
| Punct.prox.past | pwââ/puwâa | Punct. prox. past | pwópu |
| Punct. rem.past | pwââ/puwâa | Punct. rem. past | pwaa wo |
| Followed root | pwaa wo | Followed root | pwaa wo |
| Continuous | pwââ | Continuous | pwópupwópu |


| (43) | a. | Trans, Punct: | $d: a ̂ a ̂ ~ d e ̂ \quad p w a ̂ a$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 3sIMMPI | PI bre |
|  |  |  | '(He) broke the pot today' |  |  |
|  |  | Intrans, Punct: | $\begin{array}{lll} d: \hat{a ̂ a} & d \hat{e} & p w o ́ p u \\ \text { pot } & \text { 3sIMMPI } & \text { breakIV.P } \end{array}$ |  |  |
|  |  |  |  |  |  |
|  |  |  | 'The pot broke today' |  |  |
|  | c. | Trans, Contin: | 3ImmFUTCI b |  | $p w a p \hat{\imath}$ |
|  |  |  |  |  | break.T |
|  |  |  | 'He's going to break them up' |  |  |
|  | d. | Intrans, Contin: |  | $a$ |  |
|  |  |  | ANAPH 3sImm |  | $m F U T C$ |
|  |  |  | 'It (th | e ladder) | is goin |

Why treat these two sets of roots as belonging to two verbs and not one? The main argument is that there are plenty of verbs without doublets of the other transitivity, suggesting that transitivity status is fixed. Nevertheless there are many such doublets. Table 4.24 shows a further example of paired verbs:

Table 4.24: Transitive verb with intransitive counterpart: 'turn over'.

| 'overturn something' (transitive) | 'overturning' (intransitive) |  |  |
| :--- | :--- | :--- | :--- |
| Tense/Aspect | Root | Tense/Aspect | Root |
| TV citation form | tpaa | IV citation form | tpââlî |
| Punct. imperative | tpaa ngi | Punct. Imperative | (gap) |
| Punct.prox.past | tpaa | Punct.prox.past | tpââlî |
| Followed | tpaa | Followed | tpalî |
| Punct. rem.past | tpólu | Punct. rem.past | tpalî |
| Continuous | tpiyé | Continuous | tpâlîtpâlî |

(43) a. Trans, Punct: Yidika ngê nee dê tpaa Yidika ERG canoe 3sIMMPI turn.TV.P 'Yidika overturned the canoe (today)'
b. Intrans, Punct: nee dê tpââlî
canoe $3 s N r P S T C I ~ t u r n . I V . P I$
'The canoe overturned (yesterday)’
c. Trans, Punct:
yópu ngê nee tpólu wind ERG canoe turned.TV.REMPI
'The wind overturned the canoe (before yesterday)'

$$
\begin{array}{lll}
\text { d. Trans, Cont: } & a & \text { tpiyé } \\
& \text { 3FUTPI } & \text { overturn.TV.C. } \\
& \text { 'He's going to overturn it, he's overturning it' } \\
\text { e. Trans, Cont: } & a \quad \text { tpiyé } & \text { ngê }
\end{array}
$$

These transitive/intransitive doublets are not just like English hear vs. listen, eat vs. dine; for many have very specific meanings (like 'chew betel nut', 'kill by sorcery'), which are exactly mirrored in the verbs of different transitivity (transitive root first, intransitive second):
(44) kpo vs. tpapê 'chew betel nut' vs. 'chew (of betel nut)'
póó vs. poo 'ask something' vs. 'ask'
t:ii vs. tiye 'grate e.g. coconuts' vs. 'grate (of coconuts)'
pyw:o vs. pyw:emî 'uproot’ vs. 'be uprooted'
talî vs. tal̂̀ ‘dry something’ vs. 'get dry’ (different verb parts, e.g. continuous talîtalî vs. teletele)
têêdî vs. têêdî ‘bring by boat' vs. 'arrive by boat' (different parts: e.g. teetee vs. todotodo)
$v y$ :ââ vs. vy:êmî 'fill something up' vs. 'be full, sink'
kada y:eemî vs. kada kuwo ny:oo 'he left (today)'/'he left us today' $m a$ vs. kmaapî 'eat something' vs. 'dine’
$n g: e ̂ e ̂ n i ̂ ~ v s . ~ n g: a a ~ ' l i s t e n ~ t o ~ s o m e t h i n g, ~ h e a r ’ ~ v s . ~ ' l i s t e n ’ ~$
mgaa vs. km:ee 'kill someone by sorcery' vs. 'kill-by-sorcery'
kédi vs. tpyîpî ‘sail a canoe’ vs 'sail (by canoe)'

Often, as mentioned, doublets share some forms and this may even be the head (unmarked, proximal tense indicative) form - but despite this, the verbs may have different parts as in Table 4.25:

Table 4.25: Transitive/intransitive doublets with shared head entry.

| 'make become' (transitive) |  |  |  |
| :--- | :--- | :--- | :--- |
| V 'become, wake up' (intransitive) |  |  |  |
| imp | pyódu | pyédi/pyódu ngi | imp |

There are just a few verbs with a 'regular' causative alternation marked by nasalization (left column in Table 4.26); however, this is a diachronic residue, no longer regularly productive (right column):

Table 4.26: Causative alternation.

| nasalized pairs | normal unpredictable pattern |
| :--- | :--- |
| pwii ‘exit, go out' $\rightarrow$ pw:ii 'get something out' | kee 'enter' $\rightarrow$ knî 'make enter' |
| ghay 'fall' $\rightarrow$ gh:ay 'make fall down' | tóó 'sit' $\rightarrow$ yé 'make sit, put' |
| mbumu 'cry' $\rightarrow$ mb:uu 'make him cry' | $t: a$ 'hang' $\rightarrow$ t:oo 'cause to hang' |
| nyââ 'wake up' $\rightarrow$ ny:ââ 'wake him up' |  |
| ghee 'be peeling (food)' $\rightarrow$ gh:ee 'peel something' |  |

### 4.5.2 Continuous vs. punctual verb roots

There are two aspects in Yélî Dnye, the Continuous and Punctual in Papuanist terms, corresponding approximately to the more normal terminology imperfective vs. perfective, although the precise semantics varies across languages. For example, in some languages of Southern New Guinea the punctual has an inceptive reading (e.g. Marind, Evans et al. 2018:662), which is absent from the Yélî Dnye punctual. In Yélî the distinction meets the prototypical semantic criteria as given by Comrie (1976:18ff), namely the punctual portrays an event as a whole, while the continuous aspect portrays the event as having internal structure: constructions glossing 'While Xing' etc., will therefore be in the continuous aspect (§8.5). Verb roots come expecting, or collocating with, just one of these two aspects. (As with transitivity, there is a small set of verbs which are labile, or do not change form across aspect, including e.g. mbêpê 'run', 'running'.) If a verb has a set of parts collocating with the Punctual or Perfective aspect, I call it an Inherently Punctual verb - it almost always also has a corresponding continuous root which, together with the other forms, constitute its suppletive set of roots. Since the continuous root is often clearly derived from the punctual by reduplication, there is some warrant for viewing such a verb as inherently punctual even if it has a continuous root. If a verb has only forms that collocate with continuous aspect, and no corresponding parts that collocate with the Punctual aspect, I shall say it is Inherently Continuous. The distinction thus amounts to a verb having only continuous roots vs. having punctual ones, usually with one continuous form too.

Following this distinction, in a database of 342 verbs, only 67 or c. $20 \%$ are inherently continuous. As with the transitivity opposition, many verbs have dou-
blets - thus the 'eat something' vs. 'eat/dine' pair mentioned above (ma vs. kmaapî) differ not only in transitivity, but also, on this analysis, in inherent aspectuality, kmaapî being inherently continuous. In addition, there is a counterpart to the punctual transitive ma 'eat something', namely inherently continuous transitive pîpî 'eating something', which can be thought of as the continuous suppletive form of the verb ma. As is mostly the case, here the inherently continuous verb does not supplete over tense or or other features, as indicated in Table 4.27.

Table 4.27: Verbs of eating.

| Some 'eat' verbs | Punctual root, <br> transitive | Continuous root, <br> intransitive | Continuous transitive <br> (part of $\boldsymbol{m a}$ ) |
| :--- | :--- | :--- | :--- |
| Imperative | $n d i i$ | (chi) kmaapî |  |
| Unmarked root | $m a$ | kmaapî | pîpî |
| Followed root | $m a$ | kmaapî | pîpî |
| Remote Past root | $n d \hat{\imath}$ | kmaapî | pîpî |
| Continuous root | (pîpî) | - | - |

Given the existence of doublets, there is again probably little motivation for seeking semantic bases to the class of inherently continuous verbs. Roughly one can say, though, that they cover experiencer verbs, expressing a subjective state (be frightened, be cold, etc.), verbs of communication (speaking, writing/ marking, preaching, crying, etc.), positional verbs, verbs of motion and many verbs of action, curious for their specificity (e.g. bailing, fishing-in-creek-by-day, fishing-with-line, scraping, grinding, weaving, etc.).

As already mentioned, most punctual verbs have a continuous form. 'Regular' verbs (c. $20 \%$ of the verbal lexicon) form their continuous roots by reduplication. This is true reduplication, the second copy retaining its phonological properties as a single word, complete with e.g. word-initial voiceless allophones (Henderson 1995:5). Some, rather fewer, verbs use the punctual root unchanged in the continuous aspect. The rest have varying degrees of irregularity, from complete suppletion to unpredictable vowel or consonant changes in the reduplication. The continuous root or stem plays a vital role in the grammar, standing unchanged as a gerund or nominalization (§7.9.3; §8.7).

Since not all inherently continuous verbs have a punctual form (unlike inherently punctual roots with their continuous forms), there is a construction that converts intransitive continuous verbs, such as in example (45)a. below, into punctual intransitive verbs, such as (45)b. The construction uses the inceptive verbal auxiliary mb:anê with punctual enclitics:

| a. Mwonî a | nkîngê |
| :--- | :--- | :--- |
| Mwonî 3PROX.CI | fearing |
| 'Mwonî is frightened' |  |

b. Mwonî dê nkîngê mb:anê Mwonî 3IMMPI fearing cause.be 'Mwonî got frightened (just now)'

This auxiliary is a verb, with followed root mbê, and Remote Past mbê wo. The main verb is an incorporated gerund, the whole forming a compound verb flanked by inflectional clitics in the normal way.

### 4.5.3 Positional verbs

A special subset of inherently continuous verbs are the positionals (on the typology of positionals see Ameka \& Levinson 2007; they are also a feature of some of the South New Guinea languages, Evans et al. 2018). Positional verbs form a small set of verbs that are distinguished by playing an exclusive role in the locative and existential constructions (see §7.4; §11.2). The core set is kwo ‘stand’, tóó 'sit’, and $t$ :a 'hang', supplemented by $m: i i$ 'inhabit, move in'. The first two are distinguished by suppleting on the number of the subject just in proximal tenses (no other verbs do this), the other two are invariant like about 30 other continuous verbs but are still distinctive by virtue of their role in the locative and existential constructions. All four verbs lack imperatives, although they have causative counterparts which do have them.

### 4.5.4 Inflectional classes

There are at least three different parameters on which inflectional classes might be distinguished:
(a) the possession or absence of a special suppletive root where the post-verbal inflectional clitic is non-zero, (b) verbs taking or not taking a special irregular form for the $3^{\text {rd }}$ person singular Remote Past inflectional enclitic, (c) verbs with deponent (or 'shifted') inflection. We take them in turn.

### 4.5.4.1 'Paranoid' verbs with 'followed' roots

The terminology comes from Henderson (1995:29-30), who noted that certain verbs have a special suppletive form of the root (here called 'followed') whenever
an inflectional enclitic follows them. Such enclitics are zero just under certain circumstances: for the most part, when transitive verbs in proximal tenses (and Punctual aspect Remote Past) have a monofocal subject ( $1^{\text {st }}$ person or singular) and $3^{\text {rd }}$ person singular object; and when intransitive verbs have a singular subject, or are in distal tenses. Thus, under these special circumstances we note alternations like the following in the form of the verb 'to go':

$$
\begin{array}{llll}
\text { a. } & d \hat{e} \quad l \hat{e} \quad \emptyset  \tag{46}\\
& \text { 3sIMM.PI } & \text { go.PI } & \text { 3sPROX } \\
& \text { 'He went (earlier today)' } \\
\text { b. } & \text { dêe lee } \quad \text { knî } \\
& \text { 3sIMM.PI } & \text { go.PI.FOL } & \text { DS.Intrans.PROX } \\
& \text { 'They two went (earlier today)' }
\end{array}
$$

This property seems to be independent of other suppletion classes, but only occurs in inherently punctual roots. About $10 \%$ of verbs have such followed roots (in a database of 342 verbs, 40 verbs had followed roots).

### 4.5.4.2 'Strong' vs. 'weak' verbs: $\mathbf{3}^{\text {rd }}$ singular Remote Past

Again, following Henderson's (1995:30) observations and terminology, some punctual verbs behave in a special way in the $3^{\text {rd }}$ person singular Remote Past: these 'strong' verbs have a special root. For example, first looking at intransitives, compare the roots of the verb 'die' in a. and b. in example (47) below. In contrast, 'weak' intransitive verbs use the normal root (unmarked or followed, as befits the verb) but have the special inflectional enclitic wo for $3^{\text {rd }}$ singular Remote Past, as in $\mathbf{c}$.

```
    a. dê pw:onu
    3sIMM.PI die.PI
    'He died (earlier today)'
    b. Ø pwene Ø
    3sREM.PI die.PI.REM.STRONG 3sREMIntrans.STRONG
    'He died (before yesterday)'
    c. dê diye wo
    3sIMM.PI return.PI 3sREMIntrans.WEAK
    'He returned (before yesterday)'
```

In a similar way, transitive roots differ in their behaviour in the Remote Past tense, according to whether they are 'Strong' (as are the majority) - in which case, under special circumstances, they take the strong root with a zero Post-nucleus inflec-
tional clitic, in contrast to 'Weak' verbs which take the normal or followed root plus enclitic ngê. The special circumstances are: the subject is monofocal ( $1^{\text {st }}$ person or singular) and the object is $3^{\text {rd }}$ person singular (so for strong verb vy:a 'to kill' we have Remote Past vyâ 'he killed it', but for weak verb kââ 'to stand up', we have Remote Past kaa ngê 'he stood it up'). Table 4.28 summarizes the pattern:

Table 4.28: Strong and weak verbs in Remote Past.

| Transitivity | Relevant context | Strong form | Weak form | Example |
| :---: | :---: | :---: | :---: | :---: |
| Intransitive | Remote Past, Singular Subject | strong root $+\varnothing$ |  | pwene $+\varnothing$ |
|  |  |  | normal/followed root + wo | lee wo |
| Transitive | Remote Past, <br> Monofocal <br> Subject, <br> $3^{\text {rd }}$ Sing Object | strong root $+\varnothing$ |  | $v y a ̂+\emptyset$ |
|  |  |  | normal/followed | kaa ngê |
|  |  |  | root $+n g \hat{e}^{22}$ |  |

Incidentally, these patterns are extended out of the Remote Past into the Proximate Past by a special feature of negation, which systematically shifts remote inflections/roots into proximal tenses in negative contexts - see $\S 6.2 .3$ below. Thus we have not only the expected 'weak' enclitic wo in the negative Remote Past in (48)a., but also the same enclitic in the negative Immediate Past (where it would never occur in the positive):
a. daa
kpêê
wo
NEG3sPI.REM wash.self.FOL sS.REM.Intrans
'He did not wash himself (before yesterday)'
$\begin{array}{lll}\text { b. doo } & \text { kpêê } & \text { wo } \\ \text { NEG3sPI.IMM } & \text { wash.self.FOL } & \text { sS.IMM.NEG.Intrans }\end{array}$
'He did not wash himself (earlier today)'

[^9]
### 4.5.4.3 Inflectional irregularities

(a) Verbs with deponent inflection - taking the 'wrong' inflections

A few verbs simply take unexpected inflectional clitics. For example the verb pwiyé: 'come, go towards’ systematically uses the dual enclitic marker knî, normally restricted to proximal tenses, for $2^{\text {nd }}$ and $3^{\text {rd }}$ person singulars also in remote tenses:
(49) kê doo a pwiyé knı̂

CERT 3REMCI Deict come dS.IV.PROX/HAB
'He came (remote past) here'

The same is true of, for example, 'nuw:o, 'to follow down a river'.

## (b) Verbs with obligatory 'extras' in pre-nuclear particle

Some verbs require the Proximal Deictic pre-verbal clitic (with two basic forms $a-/-n e ̂)$ to be merged in the proclitic verbal inflection: there is sometimes some obvious semantic motivation for this, but sometimes not - e.g. verbs for 'adopt a child', 'accompany someone', 'fill a hole', 'get', and so forth all take this feature. In the database, 18 verbs (or $5 \%$ ) out of 340 take this particular feature.

### 4.5.4.4 Suppletion classes

Verb stem alternation is a well-known Papuan feature, exhibiting typological patterns rare elsewhere, for example suppletion on person (Foley 1986:128ff; Evans et al 2018:713-716). Suppletion in Yélî Dnye verbs is the norm rather than the exception - out of 340 verbs (i.e. bundles of roots associated with one meaning and transitivity status), $61 \%$ supplete on at least one grammatical category, and $77 \%$ have roots which are in some way unpredictable. Table 4.29 shows the number of verbs in the sample with their different numbers of roots.

Table 4.29: Verb Suppletion - numbers of verbs with multiple roots (coded database, March 5, 2000).

| Number of roots |  | "Regular" | "Uniform" | "Irregular" | "No Rule" |
| :--- | ---: | :--- | :--- | :--- | :--- |
| $\mathbf{1 + r e d u p ~}$ | 79 | $79=\mathbf{2 3 \%}$ |  |  |  |
| $\mathbf{1}$ | 54 | $54=16 \%$ |  |  |  |
| $\mathbf{2}$ | 73 |  |  |  |  |
| $\mathbf{3}$ | 58 |  |  | $262=77 \%$ |  |
| $\mathbf{4}$ | 42 |  |  |  |  |
| $\mathbf{5 +}$ | 35 |  |  |  |  |
| $\mathbf{N}$ | $\mathbf{3 4 1}$ |  |  |  |  |

Following the terminology in Henderson (1995), punctual verbs are said to be 'regular' if they form a continuous Aktionsart counterpart by reduplication (about $1 / 5$ do this), and 'uniform' if they do this by just using the punctual counterpart without change in the continuous aspect (about $1 / 7$ do this). All other verbs ( $61 \%$ ), here labelled 'irregular', do this by suppletion.

Yélî Dnye is no doubt typologically unusual in both the amount of suppletion and the grammatical categories it distinguishes. For comparison, the familiar Germanic languages of course have suppletion in their 'strong' and 'weak' verbs (distinguishing past from other tenses), so that English has c. 14\% and German c. $50 \%$ of irregular verbs in their commonest 35 or so verbs (Clahsen 1999:1012). But Yélî Dnye has suppletion in many relatively infrequent verbs ('kill by sorcery', etc.), and over $10 \%$ of verbs have five or more roots! The grammatical categories over which Yélî Dnye verbs supplete are apparently very unusual typologically. Thus Bybee (1985:22) suggests that "mood-like distinctions are rare or nonexistent", while Yélî verbs frequently have special imperative forms (restricted to $2^{\text {nd }}$ person singular), while she also states that the Perfective/Imperfective distinction is rarely expressed lexically, more often by derivation or inflection (ibid., 102, Table 6), while in Yélî Dnye this is one of the most frequent dimensions for suppletion.

At the top of the league is the verb 'to give' which has the nine forms shown in Table 4.30 ('give' is known to supplete on the person of the recipient in a number of unrelated languages around the world - see Comrie 2003 - and this is the only verb in Yélî Dnye that does so: ngee 'to receive' does not).

Table 4.30: Suppletive roots for the verb 'to give'.

| Recipient Person | Tense/Mood etc. | Punctual | Continuous |
| :--- | :--- | :--- | :--- |
| $\mathbf{3}^{\text {rd }}$ Person | Imperative | yéni | yémi |
| Recipient | Unmarked (prox. tense) | y:oo | yémi |
|  | Followed root | y:ee | - |
|  | Remote Past | y:ângo | yémi |
| $\mathbf{1}^{\text {st }}$ or 2 $^{\text {nd }}$ | Imperative | ki | kuwo |
| Person Recipient | Unmarked | kê | kuwo |
|  | Followed | - | - |
|  | Remote Past | kpo | kuwo |

We have now introduced a number of distinctions in types of verbs, and it is possible to ask what kinds of suppletion classes emerge. The following figure shows the major patterns, where a 'tick' indicates that suppletion can occur for a particular kind of verb along a number of grammatical categorical distinctions. There
seems to be no way from knowing one part of the verb to being able to predict what suppletive class it will belong to.


Figure 4.9: Suppletion classes in Yélî Dnye verbs ( $V$ = can supplete).
In overview, it can be said that suppletion is most common on mood (imperatives), aspect (Continuous aspect of Punctual verbs), tense (Remote Past), and with respect to 'followed' roots (non-zero enclitic). Suppletion is far more common in punctual verbs than continuous ones, and somewhat more frequent for transitive than intransitive verbs, as Tables 4.31 and 4.32, and Figures 4.10 and 4.11 make clear for the sample database:

Table 4.31: Summary of verb suppletion tendencies by default aspect of root.

| No of Roots | All parts | 1 root | 1+redup | 2 roots | 3 roots | 4 roots | 5+ roots |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Continuous roots | 67 | 39 | 10 | 12 | 5 | 0 | 0 |
| Punctual roots | 255 | 19 | 58 | 42 | 40 | 31 | 34 |
| $\mathbf{N}$ | 322 |  |  |  |  |  |  |



Figure 4.10: Suppletion in continuous and punctiliar roots in graph form.

Table 4.32: Suppletion by transitivity of root.

|  | Total | $\mathbf{1}$ | $\mathbf{1 +}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5 +}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Intransitives | 122 | 34 | 22 | 31 | 15 | 9 | 9 |
| Transitives | 220 | 19 | 58 | 42 | 40 | 31 | 25 |
| $\mathbf{N}$ | 342 |  |  |  |  |  |  |



Figure 4.11: Suppletion by transitivity of root in graph form.

### 4.5.4.5 Semantic classes

Syntactico-semantic classes (of the unergative/unaccusative sort) are relatively hard to detect in Yélî Dnye due to the paucity of syntactic alternations and valence-changing operations. The most important classification is the punctual/ continuous distinction already mentioned. The positional roots are organized as in Table 4.33 (see §11.2 for extended discussion):

Table 4.33: Positional roots and causative counterparts.

| Stative Positionals <br> (intransitive) | Active <br> (intransitive) | Do Causative <br> (transitive) | Undo Causative <br> (transitive) |
| :--- | :--- | :--- | :--- |
| kwo 'be standing' | ghê 'stand up' | $k a ̂ a ̂ ~ ' s t a n d ~$ <br> something up' | y:oo 'take something <br> which stands' |
| tóó 'be sitting' | yââ 'sit down' | yé 'put something <br> down' | $n g \hat{g}$ 'take something <br> which sits' |
| t:a 'be hanging' | kaalî 'make oneself hang' <br> (e.g. flying fox) | t:oo 'hang <br> something up' | ngee 'take something <br> which hangs' |

There has been much theoretical interest in intransitive subclasses. In Yélî Dnye, however, many verbs have doublets of the opposite transitivity (e.g. tele/tolo
'throw intransitive', d:ii/dy:ee/dy:ungo 'throw transitive'), so that the semantic significance of syntactic classes is reduced. However, there are some interesting subsets of intransitive verbs. For example, verbs that take the Resultative construction (§7.9.1) are mostly transitive, but a good subset of intransitives also take this construction, the unifying principle being, it seems, that they are inchoative in meaning. More lexical work is required before much more can be said.

### 4.5.4.6 Additional minor verb types: Subcategorization for dative, incorporation, etc.

We have now covered the main formal subclasses of verbs - transitive/intransitive, continuous/punctual, inflectional classes and suppletion classes. There remain a few minor subclasses:
(i) Intransitive verbs which obligatorily subcategorize for dative complements: e.g. vyuwo 'look after' (from Henderson 1995:63):
(50) tp:oo ka n:aa vyuwo yédi
his.son DAT 1sHAB.PROX.CI look.after sSHAB.PROX.CI.Intrans 'I am looking after his son’
(ii) Such verbs may optionally incorporate their PPs - this statement will be clarified in the section below on nominal incorporation §7.9.4).
(iii) Intransitive verbs subcategorizing for $k a$ PPs which obligatorily incorporate their PPs. Again see under nominal incorporation §7.9.4.
(iv) Intransitive verbs that incorporate 'objects'. A verb like tpapê 'chew betel (intransitive)' allows the incorporation of an object, e.g. mbwo 'native betel', in the sense that the 'object' comes between proclitic and verb just like transitive incorporation - except in this case there is no change in valency of the verb.
(v) Another example is nmyii 'to husk coconuts' which can take only km:ii 'coconut' as incorporated noun.
(vi) A few intransitive verbs (e.g. chópu 'to need', kaal̂̂ 'to happen to one') which subcategorize for an Experiencer 'subject' and an Absolutive 'theme' (or surface subject - see §7.5).
(vii) A few verbs have inflectional irregularities, e.g. pwiyé 'come, go’ takes a dual enclitic even with singular subjects in most tenses (§4.5.4.3).

### 4.6 Minor parts of speech: Discourse and interaction particles, expletives, and fixed expressions

### 4.6.1 Quotation particles

Quotation particles, rather than full verbs of saying, tend to precede any quoted clause. These have a curious status from the point of view of parts of speech. They are fairly clearly derived from pronominal clitics, e.g. ye-nê 'to.them-I', i.e. 'I will say to them'. But they carry no explicit tense/aspect markers, instead using separate paradigms for different tenses and aspects, with some 320 form-function pairings. Nevertheless, they are in other respects fully verbal, having transitive sentence syntax, e.g., with Ergative marking of the sayer. In addition to describing acts of saying, they are also used to report inner mental states, and are amongst the most frequently employed elements in the language. They are thus of considerable theoretical interest, and are treated at length in §8.4.

### 4.6.2 Discourse particles

Discussion of interactive language use, discourse particles and the role of gesture and facial expression on Rossel island can be found in Levinson $(2010,2015)$ and Majid \& Levinson (2013). Here are a few of the more prominent discourse particles.

### 4.6.2.1 Responses

Full responses can be constituted by the following, among other particles:
i. nyââ 'yes'. This term might be better glossed 'the proposition expressed is correct', since after a negative question like 'He didn't come?', nyâ̂â means 'Correct, he did not come'. Raised eyebrows have the same interpretation and can constitute a full response. kêle 'No' has the complementary interpretation.
ii. $k a$ ' OK , agreed'
iii. éé (low-rise intonation) 'that's right', 'yes indeed!'
iv. ndê kópu 'true', 'yes indeed'
v. ó , : aa, aa, :ee are all receipt markers
vi. u p:o 'alright, agreed, that's it'
vii. many fixed expressions like ndê kópu 'true’ (lit. 'true words'), u kópu daa tóó 'never mind' (lit. 'its words/affair not sitting'), komo tpile 'never mind' (also means 'although'), mw:aa dî ya 'never mind'.
viii. mw:ââkó 'thanks', particle used reciprocally on handshake in greetings, or to express thanks or congratulations

### 4.6.2.2 Tags

Particles or fixed expressions that request responses:
(i) apii? ‘You understand?' (probably from 2sImperative quote particle api ‘You say!’, §8.4.1)
(ii) cha w:ee? ‘Did you understand?', chi ny:oo 'Did you hear?'
(iii) lama (=N+lama, 2sPoss+knowledge) 'you know?’
(iv) kwi! OK? (lit. ‘say!’)
(v) :ââ?, :êê? ‘huh?’ - marker of other-initiation of repair, request for repeat or clarification (Levinson 2015)

### 4.6.2.3 Expletives and exclamations

The language is not rich on metalanguage, but it does have a number of expressions (liya 'to exclaim', nkêpa 'a gulped appreciation') to describe the use of expletives. The main expletive is a sharp vocalized in-breath, orthographically vyuwâ, expressing surprise and admiration. In reported speech the word apu! is used to signal 'He was surprised/He said to himself $v y u w a ̂$ ', and quotative particle apê can mean 'He said to himself, let me see'. (Quotation particles are sufficiently important to be treated at length below, §8.4). Other expletives include:
(i) m:aa wê, niye wó, niye wê indicating shock or concern
(ii) apuu! indicating the breaking of a taboo, connoting 'One should never do that!'
(iii) ó, é, a with various intonations
(iv) many fixed expressions like yimi km:a yi nté dé 'what a hell of a lot!', kînê km:oo cha 'Wow! (expression of surprise)', mââ u wa! ‘Wow!', nyêmê mwuyó (swear word), kêmê a ka a ki 'Say that again! (expletive) lit. 'Give me your pearl shell' (if said on seeing e.g. someone's new house, in principle the recipient must give some approximation to a pearl shell, e.g. a shiny fork!).

### 4.6.2.4 Conjunctions and continuers

Many discourse conjunctions such as temporal adverbials are multi-word fixed phrases like $u$ kuwó dini ghi n:ii ngê (lit. 'its behind time part that.one adverbializer') 'Some time later, afterwards, next'. Also:
(i) yed:oo, wod:oo 'Then'.
(ii) dîyo 'Later'.
(iii) ó, ó, ó (after verb, with rise from low to very high intonation) 'They went on doing that for a long time'.
(iv) machedê 'OK, next (lit. finished)', nyââ, 'well then', ka, 'OK then'.

### 4.6.2.5 Hesitation markers

Continuers like machedê are often used to fill pauses; mo 'well' signals continuation in progress. There is a special expression used to signal a word-search in progress, 'nâpwo 'The what-do-you-call-it?'.

### 4.6.3 Greetings

Greetings depend on the time of day, are reciprocal, and can be used only once on first sighting during the relevant part of the day, normally followed by the name, kinterm or title of the addressee. They are dyadic and should be addressed to each person in a group:
(51) mw:aandiye '(good) morning'
kââdî mââ kêlê 'noon (12.00-2.00)'
ntómukwodo 'afternoon /evening’
mgîdî vy:o 'night'

Partings indicate when a re-meeting is expected:
(52) awêde '(see you later) today'
mââ '(see you) tomorrow'
awêde mââ 'see you later today or if not tomorrow'
mââ m:ii '(see you) day after tomorrow or afterwards sometime'

They are not necessarily dyadic, that is one can part from a group with the appropriate form:
(53) nê mââ 'I (will see) (you1) tomorrow’
dpînê mââ '(see) you2 tomorrow'
nmyinê mââ '(see) you3 tomorrow’

### 4.6.4 Address forms and vocatives

Names and kin terms (§11.5) provide the main vocative forms. People with the same name can address each other as a pénta 'my namesake' (having the same name indicates that the fathers of the two are of the same matriclan, although the
two namesakes are unlikely to be of the same clan themselves). Other address forms include:

```
kî pini `guys` (lit. 'that person')
mââwe 'big man (chief, elder)', pyââwe 'big lady (elder)'.
```

Further details on address forms can be found in Levinson (2007b, 2006c).

## 5 The noun phrase

In the description of the parts of speech inventory (§4.2), we have already reviewed the different sub-types of nominals, namely four noun classes according to specifier root change, classifiers, and pronominals (unmarked, possessive and relative). An NP can consist of any of these alone (although often classifiers occur with an associated noun). Nouns and full NPs attract case in the form of postpositions, marking grammatical relations and oblique status (Ergative, Experiencer, Instrumental, Comitative, Sociative, Dative/Ablative, with Absolutive/Locative unmarked). As mentioned, pronouns rarely co-occur with verbal cross-referencing: where they do, they normally follow a 'Nominative' case marking pattern (i.e. are unmarked as both intransitive and transitive subjects), except in quotation contexts where they follow an Ergative/Absolutive marking pattern (more detail below, §5.2). They take special forms in the Dative/Ablative and Experiencer cases. NPs can also be built up into complex wholes, complete with relative clauses which can be attached to NPs in most case roles. Here we set aside relativization for later review (\$8.1) and concentrate on the core NP.

### 5.1 The structure of the NP

### 5.1.1 Plurals, definites and indefinites

Nouns form plurals in a number of ways, respecting the distinction between dual and plural categories, which are usually marked distinctly, depending in part on animacy.

For inanimate nouns, the bare noun can be interpreted as a plural: nkéli k:oo tpile ka tóó 'boat inside thing is/are sitting', i.e., 'there are things on the boat', while the singular may need to be marked: tpile ngmê ka tóó 'thing singular is sitting', i.e., 'a thing is sitting'. Hence the bare noun can collocate with a plural verb: tpile ka pyede 'thing(s) are sitting-pl'. However, dual and plural marking are also possible: tpile dê ka tóó mo 'thing dual are sitting dual', tpile dé ka pyede 'thing plural are sitting plural'.

For animate nouns, the bare noun can have singular reference, but is likely to be interpreted as 'one or more': pi ka tóó 'There's a man/there are people there'.

Explicit marking of plurality involves the use of the enclitics ngmê (one), dê (two), dé (three or more), e.g. tpile ngmê 'one thing', tpile dê 'two things', tpile dé 'three or more things'. But there are classes of animate nouns that optionally form plurals in special ways:
(i) Some nouns denoting humans can take plurals (three or more) in -ma, e.g. dmââdîma ‘girls’, tp:eema 'boys’, léma ‘big men’ (but not e.g. kinterms like *a kênêma, 'my uncles', but rather a kênê dé/yoo). Many human nouns lack this possibility (e.g. *pyââma, rather pyââ yoo 'women').
(ii) Some human nouns have suppletive forms for plurals, e.g. pi 'man, human' has the optional dual (specified, definite) tpódu, plural tpóknî (in these cases no extra marking is possible).
(iii) Human nouns also optionally take enclitic yoo, '(human) plural', e.g. kî pini yoo 'those men' as equivalent of kî pini dé. However, it is Absolutive in case, and contrasts with y:oo, Ergative Plural, which then replaces it, but is not restricted to humans.
(iv) There are special collective forms for human nouns, e.g. Ghaapwé p:uu 'Ghaapwé and others’, Ghaapwé mupwo ‘Ghaapwé and family’ - see Part II, §11.5.
(v) Animals can take collective plurals with enclitic w:uu 'group of 3 or more animals’ (includes e.g. dogs, fish, birds), e.g. w:ââ w:uu, ‘some (3 or more) dogs, a pack of dogs'. Countable time units may take plurals in pê, e.g. m:ââ pê '(many) years'.
(vi) Animate and inanimate nouns can form plurals with enclitic knî, which has an augmentative function (see §4.2.3; §5.1.2). It can co-occur with other plural markers as in kî pini knî yoo 'Those men', but alone can co-occur with singular forms of case markers (§5.2.1), so is not a normal plural marker.
(vii) Some case postpositions build in dual/plural marking, e.g. y:oo 'Ergative/ Instrumental Dual/Plural'.

Definite marking is by use of a determiner or deictic specifier (see §4.2.2.3), or a possessor, which comes before the noun, triggering the specified form of the noun §4.2.1.1): cf. pyââ dé 'women (3 or more, indefinite)' with kî pyópu dé/yoo 'these plural (3 or more) women'. Indefinites are often expressed by the bare noun, but singular indefinites by the clitic ngmê which comes after the noun (this however is subject to quantifier floating into preverbal position). More details follow in the next sections.

### 5.1.2 The template for the simplex NP

The simplex (non-clausal, non-compound) noun phrase is built on the following ordered template:

## Det/Possessor-(Noun)-Noun-SPECifier-Adjective-Classifier-Indefinite-Quantifier-PL-CASE.

Cases like the Ergative are obligatory, not optional (in an experimental picturedescription task, in 1417 transitive clauses, there were just 37 missing or wrongly produced ergative cases, almost certainly production errors). The head noun (in bold in the template above) in the phrase usually occurs in second position after a determiner or possessor, if any, and nearly all other elements follow it in strict order. Only nominal modifiers, as in compound nouns, precede the head - in this case the specified form occurs not on the head but on the first nominal to the left (see §4.2.1.2). The head noun may appear alone, and if it is a common noun it is read as indefinite, or has a generic or universally quantified reading:

```
a. awêde pi u ngwo daa tóó
    today person/man its account not sitting/being(s/d)
    'For that reason today there are few people (on Sudest)'
b. pi ka lêpı̂ (té)
    person CERT3CI.PRS go.C. (3+)
    'Someone is going' (or: 'Some people are going')
c. pi daa lêpî
    person NEG go.C.
    'Nobody is going’
```

Interestingly, the head noun is not obligatory, and a noun phrase can consist solely of a case marker, or a classifier - indeed, apart from some dependencies between e.g. determiner and specifiers, and the obligatory occurrence of case markers, any part of the template above can be unrealized. Table 5.1 gives some examples of different possible selections from the template. For example, in row 9 is given the phrase:

| (55) $k \hat{\imath} \quad$ yi mbwi pââ ndî̀ limi $k n \hat{\imath}$ | y:oo |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| That tree spine body big | five | augmented | INST.Plural |  |
|  | 'With those five big sticks' |  |  |  |

We can consider yi mbwi a compound noun, with the classifier head mbwi followed by an adjectival phrase. ${ }^{23}$ The adjectival phrase pââ ntî̀ is complex - pâ̂a

23 mbwi is a classificatory noun, but in fact yi mbwi is a frozen compound, and this is shown by the fact that the determiner does not trigger the expected specifier -ni on the noun yi. See below.
Table 5.1: Template for the NP with examples.

Table 5.1 (continued)


| 13 | $n: i i$ |  | $n g e \hat{}$ |
| :---: | :---: | :---: | :---: |
|  | indeclinable pronoun |  | ERG |
|  | 'The one (or who)' (did it) |  |  |
| 14 | nyi |  | $n g e \hat{}$ |
|  | 2 s |  | ERG |
|  | 'You (did it)' |  |  |
| 15 | Yidika Stephen |  | y:00 |
|  | name name |  | ERG.PL |
|  | 'Yidika and Stephen (did it)' |  |  |
| 16 |  | yoo knî | y:00 |
|  |  | humans AUG | ERG.PL |
| 'People (did it)' |  |  |  |

is a nominal meaning something like 'body, volume' and normally accompanies the adjective 'big'. (Pââ has classifier uses, but the example in row 1 of Table 5.1 shows that this adjectival phrase occurs when the classifier slot is already filled here pââ is clearly part of the adjectival phrase.) There follows a quantifying phrase, with the numeral 'five', which obligatorily takes a somewhat mysterious augmentative particle knî, which only occurs with plural nouns (3 or more referents) but does not perhaps itself have the primary job of signalling plurality. (This is shown by the example in row 16, yoo knî y:oo 'PL.Animate AUG ERG.PL' or 'Some (people) (did it)', where yoo is a plural marker for animates.) In final position comes the case marker, here the plural Ergative/Instrumental marker.

As mentioned, one of the most surprising properties of the NP is that it can be represented by a case marker alone (as with ERG y:oo 'They (did it)'), but this must then occur immediately before a verbal proclitic. Equally surprising perhaps is that an indefinite marker like ngmê can occur with the ergative marker alone as in ngmê ngê a péé dpî nya ngê 'INDF ERG my basket 2/3IMP fetch 3MFS.3OIMP', i.e.'Someone should get my basket'. The ergative marker with personal pronouns is restricted to explicit or implicit quotation contexts (see below, §5.2.2).

Determiners are essentially deictic or anaphoric markers, as listed in §4.2.2; possessors are in complementary distribution. The lack of a determiner or the specifier suffix on the noun (triggered by the deictic determiners), or possessor, implies indefiniteness. For example:
kî pi-ni 'that man there', yi pi-ni 'that mentioned man', or Cheme pi-ni 'the (chief) man of Cheme village' contrasts with pi ngmê 'some/a man', or pi ka lêpî 'Someone is going'.

One of the more surprising things about Yélî NPs is that they can consist of quantificational clitics alone, as in (56)a. below, where the initial NP might gloss in English 'some plural', or in (56)b. where it might gloss ' $a$ ':
(56) a. knî ngmê, wunê $a$

AUG some/one of several long_ago 3snear/REM.PI.CLS
yéé dnye,
marry (get married) plSPI(PostN)
'Some people have married long ago,
yi naa daa kuwo t:oo
their bride_price not have feast PF3plO.PI.PROX/HAB(PostN) but haven't yet had a (marriage) feast'
b. ngmê ngê timber pee dyuu adê chap̂̂ Indef ERG timber piece pile FUT3CI cutting 'One of them will be cutting a pile of timber pieces'

The following examples show systematic reductions of complex NPs, with impermissible patterns asterisked. In different cases, NPs have slightly different ranges of complexity. First, consider a large and complex NP in Instrumental case and its successive simplifications exemplifying some of the patterns in Table 5.1 above.
a. yi ngomo k:ââ ghi dyuu pââ ndîl limi those house post part pile large five $k n \imath ̂ \quad y: e, \quad$ ngomo dê wó AUG INST.PL house 3IMMPI built 'With those five big piles of house posts, he built the house'
b. yi ngomo k:ââ ghi pâândî̀ limi kn̂̂ y:e, those house post part large five AUG INST.PL ngomo dê wó
house 3IMMPI built
'With those five big house posts, he built the house'
c. yi ngomo k:âa ghi pââ ndîl limi y:e, ngomo those house post part large five INST.PL house dê wó
3IMMPI built
'With those five big house posts, he built the house'
d. yi ngomo k:ââ ghi pââ ndî̀ knî y:e, ngomo those house post part large AUG INST.PL house
dê wó
3IMMPI built
e. yi ngomo k:ââ ghi pââ ndî̀ ngê, ngomo dê wó that house post part large INST house 3IMMPI built 'With that (single) large house post he built the house'
f. yi ngomo k:ââ ghi knî ngê, ngomo dê wó those house post part AUG INST house 3IMMPI built 'With those house posts, he built the house'
g. yi k:ââ ghi kn̂̂ ngê, ngomo dê wó those post part AUG INST house 3IMMPI built 'With those posts he built the house'
h. *yi ghi knî ngê, ngomo dê wó those part AUG INST house 3IMMPI built
*‘With those parts he built the house’ (classifier-like ghi requires nominal)
i. k:ââa ghi knî ngê, ngomo dê wó post part AUG INST house 3IMMPI built 'With house posts, he built the house'
j. *knî ngê, ngomo dê wó AUG INST house 3IMMPI built *'With them, he built the house
k. yi ngê, ngomo dê wó tree INST house 3IMMPI built 'With a tree, he built the house'

The following show possible and impermissible reductions of an NP in Ergative case, with meaning changes, and some effects of word order changes:
a. pi pââ ndî̀ ngmê kn̂̂ y:oo a chênê dê person big INDF AUG ERG.PL my nephew 3IMMPI
vya ngmê
hit.FOL PFS3sO.PROX.PI
'Some big people (more than three) hit my nephew'
b. pi pâândî̀ knî ngmê y:oo a chênê dê
person big AUG INDF ERG.PL my nephew 3IMMPI
vya ngmê
hit.FOL PFS3sO.PROX.PI
(different word order, same meaning)
c. pi pâândî̀ knı̂ y:oo a chênê dê
person big AUG ERG.PL my nephew 3IMMPI
vya ngmê
hit.FOL PFS3sO.PROX.PI
(same meaning without INDF marker)
d. pi pâândîl ngmê y:oo a chênê
person big INDF ERG.PL my nephew
dê vya ngmê
3IMMPI hit.FOL PFS3sO.PROX.PI
(same meaning without AUG)

| e. ${ }^{*} p i$ | $p a ̂ a ̂ ~ n d \hat{\imath}$ | $y: o o$ | $a$ | chênê | $d \hat{e}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| person | big | ERG.PL my | nephew | 3IMMPI |  |
| vya | ngmê |  |  |  |  |
| hit.FOL | PFS3sO.PROX.PI |  |  |  |  |
|  | (unacceptable without either AUG or INDF) |  |  |  |  |

f. pi ngmê knî y:oo a chênê dê
person INDF AUG ERG.PL my nephew 3IMMPI
vya ngmê
hit.FOL PFS3sO.PROX.PI
'Some people (3 or more) hit my nephew'
g. pi $\mathrm{pn} \hat{\imath}$ :oo a chênê dê
person AUG ERG.PL my nephew 3IMMPI
vya ngmê
hit.FOL PFS3sO.PROX.PI
(same meaning as above, without INDF)
h. *pi ngmê y:0o a chênê dê
person INDF ERG.PL my nephew 3IMMPI
vya ngmê
hit.FOL PFS3sO.PROX.PI
(unacceptable without AUG)
i. ngmê knî y:00 a chênê dê

INDF AUG ERG.PL my nephew 3IMMPI
vya ngmê
hit.FOL PFS3sO.PROX.PI
'Some people hit my nephew'
j. knî ngmê y:oo a chênê dê

AUG INDF ERG.PL my nephew 3IMMPI
vya ngmê
hit.FOL PFS3sO.PROX.PI
'Some people hit my nephew'
k. *knî y:oo a chênê dê vya ngmê

AUG ERG.PL my nephew 3IMMPI hit.FOL PFS3sO.PROX.PI (unacceptable without INDF)

1. *ngmê y:oo a chênê dê vya ngmê

INDF ERG.PL my nephew 3IMMPI hit.FOL PFS3sO.PROX.PI (unacceptable without AUG)
m. *pi y:oo a chênê dê vya ngmê person ERG.PL my nephew 3IMMPI hit.FOL PFS3sO.PROX.PI (unacceptable without either AUG or INDF)
n. y:oo dê vya ngmê, a chênê

ERG.PL 3IMMPI hit.FOL PFS3sO.PROX.PI my nephew
'They are the ones who hit my nephew'
(Note: y:oo ERG.PL in pre-verb-complex position seems to have a special focus meaning)


The following show some successive reductions of an Absolutive NP in object function:

$\begin{array}{llllll}\text { d. } & p i & n g m e ̂ & n g e ̂ & t p: e e & k n \hat{\imath} \\ \text { person } & \text { INDF } & \text { ERG boy } & \text { AUG } & \text { 3IMMPI }\end{array}$
vya té
hit.FOL MFS.3plOprox
'Someone hit the (three or more) boys'
e. *pi ngmê ngê knî dê vya té
person INDF ERG AUG 3IMMPI hit.FOL MFS.3plOprox (unacceptable with AUG alone)
f. pi ngmê ngê tp:ee dê vya té
person INDF ERG boy 3IMMPI hit.FOL MFS.3plOprox
'Someone hit the (three or more) boys' (plurality coded in verbal enclitic)
g. pi ngmê ngê tp:ee ngmê knî dê
person INDF ERG boy INDF AUG 3IMMPI
vya té
hit.FOL MFS.3plOprox
'Someone hit (three or more indefinite) boys’
h. pi ngmê ngê ngmê knî dê
person INDF ERG INDF AUG 3IMMPI
vya té
hit.FOL MFS.3plOprox
'Someone hit them (three or more indefinite)'
i. *pi ngmê ngê ngmê dê vya té
person INDF ERG INDF 3IMMPI hit.FOL MFS.3plOprox
(unacceptable INDF with plural verbal enclitic)
j. pi ngmê ngê ngmê dê vy:a
person INDF ERG INDF 3IMMPI hit
'Someone hit him (singular indefinite)'
k . pi ngmê ngê dê vy:a
person INDF ERG 3IMMPI hit
'Someone hit him (singular)'

Notice in the above examples how the indefinite marker ngmê can occur happily with plural augmentative knî (as in (59)g.), but when it occurs alone, as in (59)j. it must have a singular reading (hence (59)i. with plural verb agreement is illformed).

Quantification presents special difficulties. Here are some of the wrinkles:
(i) NPs with numerals take plurals in knî ('augmented'), not yoo ('animate plural'): e.g. yi pini limi knî 'those people five augmented'
(ii) humans take plurals (3 or more) in yoo - but yoo can be extended to artifacts and things when they can inflict injury - e.g. snakes, burning houses, falling coconuts or trees
(iii) humans alone can take (irregular) plurals in -ma (as in dmââdî-ma 'girl-s')
(iv) yilî ('many') and classifiers like dyuu ('pile') often force singular verb agreement. Consider the following pair of utterances:
(60) a. pi pyââ miyó kiyedê p:êê nj:ii (*mo)
man woman two CERTCI.PROX story telling *dS.Intrans 'A man and woman the two of them are telling stories'
b. pi pyââ kiyedê p:êê nj:ii mo
man woman CERTCI.PROX story telling dS.Intrans
'A man and woman are telling stories'

The sentence in (60)a. above with an explicit quantifier does not take dual agreement on the verb, while an implicit quantification in the verbal enclitic occurs when the quantifier is missing.

The particle knî presents special puzzles. It is obligatory in specified plural NPs (with deictics) followed by numerals, thus in ki pini limi knî ('those people five $k n \imath ̂$ '), but not in other quantified phrases like kî pini yintómu ('those people all’), pi yilî ('people many’), and not in the unspecified *pi limi knî despite the numeral, except in a question. It is not obligatory in unspecified NPs with numerals like pi limi ('people five'). It can (but need not) occur with the indefinite ngmê 'some, one', as in pi ngmê knî 'some people', where it pluralizes (three or more), contrasting with singular pi ngmê 'one person'. Yet it can co-occur with other plural markers, as in tp:ee ma (knî) y:oo 'boy PL knî ERG+PL', although not with plural marker yoo (*tp:ee knî yoo). Its position is to the right of all quantifiers which it may occur with (the numbers in particular). It is a possible candidate for some kind of definiteness marker. Knî however raises many puzzles, since it can also occur alone with a case marker.

The Indefinite marker ngmê is not an indefinite article, since, as mentioned, it occurs happily with plural nouns - it must be thought of rather as a quantifier, with the gloss ' $a$, some'.

### 5.1.3 Structural properties of the simplex NP

From what has been said, it is clear that one cannot use substitution tests to establish the head of a nominal phrase: just about any element other than modifying adjectives or nominals can stand alone for the whole phrase (thus, determiner,
classifier, indefinite marker, quantifier, human-plural marker yoo, augmentative plural, or even just the case marker!). There are some marked dependencies, with a determiner governing the specified form of the noun, but this doesn't work as a test of headship because it attaches to the first N rather than the head N . Classifiers and quantifiers may cancel plural marking indicating other governing relations, but these don't pick out the head either.

Nevertheless, given that there is a (more or less fixed) ordered template for the noun phrase, and using semantic intuitions about what must be understood despite widescale ellipsis, some kind of constituent structure seems evident. A basic fact is that in a sequence of Ns, the last is the head, the others modifiers: where the last element is a classifier, it may also be construed as the head. It seems reasonable to suppose that the NP has a phrase structure of the X-bar kind, but it is clearly quite complex. Consider for example that Ns can modify Ns in compounds such as the following ( $\mathrm{HN}=$ Head Noun):

ngomo $k: a ̂ a ̂ ~$ house post
'house post'
and this is recursive:


We have already noted that the presence of a determiner (or specifier) plays an important role, forcing the specified form of the noun (see §4.2.1.1), which might be thought of as a kind of concord, as in:


But where the N is compound, the specified-marking occurs not on the head N but on the first N , as in:
(63)

(realized as kî mbwéni l:êê, 'this river pool').

Consider again the example in row 9 of Table 5.1 in the prior section. Such a phrase might have a structure of the following kind - such a suggestion is tentative, but it is clear that, whatever the exact optimal analysis, the noun phrase has a precise constituent structure.
(64) Cased-NP


The discussion of the NP so far has been restricted to simplex NPs, without recursion. The structure of complex NPs based on various kinds of recursion is introduced in §5.3.

NPs (together with their case or local adpositions) are major constituents which, despite their internal rigidity, can be freely moved with little innuendo or shifts of pragmatic effect - for example the following locations for an Instrumen-tal-case-marked NP (in bold) with an Ergative and Absolutive NP are all natural enough:
a. pi ngmê ngê a chênê dê vy:a yi
person INDF ERG my nephew 3IMMPI hit tree
mbwi ngê
spine INST
'Someone hit my nephew with a stick'
b. yi mbwii ngê pi ngmê ngê a chênê dê vy:a
c. pi ngmê ngê yi mbwii ngê a chênê dê vy:a
d. a chênê pi ngmê ngê yi mbwii ngê dê vy:a
e. a chênê pi ngmê ngê dê vy:a yi mbwii ngê
f. a chênê dê vy: a yi mbwii ngê pi ngmê ngê
g. a chênê dê vy: a pi ngmê ngê yi mbwii ngê

### 5.2 Postpositional cases on NPs and the marking of grammatical relations

As already noted (§4.2.2), some pronouns (the Unmarked personal ones) in Yélî Dnye basically function on a 'Nominative' basis as free pronouns (except in embedded contexts considered below); cross-referencing clitics flanking the verb also function on a partially Nominative basis. However, full lexical NPs are marked strictly on an Ergative/Absolutive basis. The Ergative marking of NPs seems to be exceptional for an outlier Papuan language in the Island Melanesia area, however it is a common feature of Highland Papuan languages, where the Ergative marker is typically the same as the Instrumental (Foley 1986:107; see e.g. Suter 2010). But in the Highland languages, the Ergative is typically optional (Foley 2000), and seems to serve various pragmatic functions, e.g. to foreground or background a participant (see McGregor 2010, Rumsey 2010), while in Yélî Dnye it is essentially obligatory, apart from some pronominal subjects mentioned below. ${ }^{24}$ Although the Ergative and Instrumental postpositions (in a typical cross-linguistic pattern) may appear to be homophonous, they are not formally identical in Yélî Dnye, since the forms differ in the plural. Nevertheless, an utterance like kî pini chêêp̂̂ ngê ka vyee (the man-ABS stone-INST/ERG is hitting) is ambiguous between '(someone) hit the man with a stone' and 'the stone struck the man'.

### 5.2.1 Case marking of lexical NPs

Case markers on NPs are treated here as either postpositions or clitics rather than suffixes, on the grounds that they can alter the stress pattern of the NPs to which they are attached (e.g. Yidika $\rightarrow$ Yidikaa ngê) but not in accord with word-internal stress rules (see §3.4). Such stress marking should be considered part of the case-marking system, as e.g. in Australian languages like Guugu Yimidhirr (Haviland 1979b:48ff). The basic forms of case markers are given in Table 5.2:

24 The one other place where Ergative marking can be relaxed is where a list of more than two names occurs in the agent role, as in ' X and Y and Z did it':
(i) Steve Yidika Chris k:ii nt:uu ntémwintwémi ka Steve Yidika Chris banana ripe.fruit DISTRIB 3CIprox
pîpî ngmê
eating PolyfocalS3sOCIProx
'Steve, Yidika and Chris are each eating a banana’

Table 5.2: Case-marking postpositions.

| NP+ngê |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | ERGATIVE | INSTRUMENTAL | EXPERIENCER | TOPIC |
|  | NP+ngê | NP+ngê | NP+ngê/ka | NP+ngê |
| Dual | $N P+y: 00$ | NP+y:oo/y:e | NP+y:e |  |
| Plural forms | NP+y:00 | NP + y:e | $N P+y: e$ | (none?) |
|  | ABSOLUTIVE | LOCATIVE |  |  |
|  | $N P+\emptyset$ | $N P+\emptyset$ |  |  |
| Dual/Plural | NP+dê/dé | $N P+\varnothing$ |  |  |
| NP+ka | SOURCE/GOAL(non-Locative Dative/Ablative) |  |  |  |
| Plural form | NP + ye |  |  |  |
| NP+k:ii | COMITATIVE |  |  |  |
| $\mathrm{NP}+\boldsymbol{k} \hat{\mathbf{e}}$ | SOCIATIVE (with a person) |  |  |  |

(Note that 'to you', 2 ${ }^{\text {nd }}$ person singular plus the experiencer or source/goal marker $k a$ becomes nga, underlyingly N+ka.)

Arguably, there may be other cases. For example, it might be possible to recognize a Benefactive case, marked by the expression $u(/ y i)$ l:ee dîy:o - this phrase, acting like a postposition, introduces an additional benefactive participant:
(66) a. Ngmidimuwó ngê nté dê chono
(Woman's name) ERG food 3IMMPI cook
u moo u l:êê dîy:o
3Poss husband 3Poss reason
'Ngmidimuwó cooked for her husband'
b. Kakan Ghaalyu y:oo nté numo u l:êê dîy:o dê

Kakan Ghaalyu ERG+PL food RECP its reason 3IMM
ch:ee ngmê
cook PFS_3sOPROX(tvPostN)
'Kakan and Ghaalyu cooked for each other'
Note that in (66)b. the phrase introduces a reciprocal, which makes it look less like a periphrastic adjunct.

But the main cases are those listed above. Despite the many roles that the clitic ngê plays, these roles are formally distinguishable in the dual/plural forms as shown, which in turn derive from the special forms of the pronouns in these functions (e.g. ye 'plural source/goal' also means 'from/to them', $y: e$ 'Instrumental dual/plural' also means 'Experiencer dual/plural'). For example:
(67) a. Yidika Weta y:oo dê d:uu ngmê Yidika Weta ERG.PL 3IMMPI do PFS3sO.PROX 'Yidika and Weta did it'
b. tuu dê $y: e ~ d e ̂ ~ d: u u$ axe DUAL INST.Dual/Pl 3IMMPI do 'He did it with two axes'

There is no case stacking, e.g. no Ergative + Comitative - under these circumstances the Comitative takes precedence (see Henderson 1995:62). The constructions taking particular cases are further described below, but some brief notes (labelled A-G) may be helpful here:
(A) Both animate and inanimate subject NPs of transitive verbs must be marked with the Ergative. Example (68) shows an inanimate Ergative NP.
(68) yópu ngê kpââlî Ø ngma a
wind ERG branch ABS INDF.CLS PI.PST3.CLS
y:ângo $\varnothing$
take+REM 3s3sREM
'The wind took off a large bough'

The only exceptions to the marking of transitive subjects with the Ergative case are personal pronouns, which are left unmarked unless they are in quotation or embedded contexts, or are understood that way:

| (69) | apu, | nyi | ngê | Muwó | dî |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3QUOT | 2s | ERG | Muwó(ABS) | 3IMM | hit |
| 'It is said that you hit Muwó' |  |  |  |  |  |


| (70) | $a$ | lama | ka | tóó, | $n y i$ | $n g \hat{e}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1sPoss | knowledge | CERT.3PRSCI | sitting | 2 s | ERG |  |
| $p i$ | $k a$ | pîpi |  |  |  |  |
|  | person | CERT.3PRSCI | eating |  |  |  |
|  | 'I know that you are still eating people’ (said by colonial official) |  |  |  |  |  |

The exact contexts under which such Ergative marking is possible on pronouns are discussed below. Note for example (71)a. and b., where the question excludes Ergative marking and the statement encourages it:
(71)
a. u yi nga a kwo (*nyingê) wa its desire 2s.EXP 3sCI standing (*you ERG) IRR nyi d:uu? 2s do 'Do you want to do it?' (lit. 'Is its desire to you standing: you will do it?')
b. u yi a nga a kwo nyi
its desire 1s. EXP 3sCI standing you
ngê wa d:uu
ERG IRR do
'I want you to do it' (lit. 'Its desire to me is standing: you do it')
(B) Intransitive subjects and transitive objects are in Absolutive case. The Absolutive NP is unmarked, as in the example below, but as illustrated there the marking is further indicated by the attraction of an indefinite determiner of an Absolutive NP into the pre-verbal clitic of the verb complex. Thus ngma (ngme $+a$ ) indicates that there is an indefinite Absolutive NP which may be elsewhere in the sentence (recall that phrase order is free, and adverbs are likely to occur before the pre-verbal clitic):
(72) yópu ngê kpââlı̂ Ø lîmîlîmı̂ ngê
wind ERG branch ABS quickly ADV
ngma a y:ângo
INDF.CLS PI.PST3.CLS take.REM
'The wind quickly took off a large bough'
(C) The Instrumental case marks inanimate instruments. Note that more than one NP can occur with a single dual/plural Instrumental marker (for which there are special forms, $y: 0 o$ or $y: e$ for dual, $y: e$ for plural):
(73) Mwonî tuu taa y:e dî vy:a

Mwonî axe bushknife INST-PL PI.IMM3s.hit kill 'He killed Mwonî with an axe and with a knife'

The unambiguously Dual form of the Instrumental is more likely to be used where the instruments are of the same type:
(74) a. tuu dê y:oo dnye kpono Ø
axe DUAL INST.dl 1pl.PI.IMM cutIMM MFS.3sO
'We3 cut it with these two axes'

The notion 'Instrument' is broad, the case need not mark a tool or anything so restricted:
b. taa wêê ngê a ndê too sword blood INST Close paint.REM MF3plOREM.PI 'They painted the swords with blood'
(D) The Experiencer case marks the subjects of experiencer clauses, e.g. constructions of fearing, wanting, being hungry, etc.

```
(75) Stephen Yidika y:e dómu a t:a
    Stephen Yidika EXP.d/pl hunger Close3sPROXCI is hanging
    'To Stephen and Yidika hunger is located - i.e. they are hungry'
```

Experiencer case in the singular may be marked either by ngê (like the Ergative/ Instrumental) or by ka (like the Dative/Ablative), while the dual/plural form is $y: e$, as here illustrated. There are special forms of (some of) the pronouns, as in the paradigm given above in §4.2.2. The main uses of the Experiencer case are described in §7.5.
(E) Locative NPs, e.g. place names, are unmarked for source or goal of motion, or location.

$$
\begin{array}{lllll}
\text { (76) } & \text { nimowa } & \text { kêdê } & \text { ndê, } & \text { misima } \\
\text { Nimowa } & \text { def.3sIMMPI } & \text { leave } & \text { Misima } & \text { 3sIMMPI } \\
\text { go } \\
\text { 'He's just left Nimowa and gone to Misima' } &
\end{array}
$$

Recollect though that many nouns have suppletive forms indicating locative marking, e.g. ndê 'fire' ~ ndiya 'in the fire'.
(F) Non-spatial Sources or Goals - which might be labelled 'Datives' or 'Ablatives' - are not differentiated, both being marked with $k a$, as in clauses of giving, saying, taking. Motion to a person may also take $k a$, but not motion to a place.

```
(77) ndap̂̂ Ø Yidika Kpââmwele ye k̂̂
    shell.money ABS Yidika Kpââmwêlê GOAL-PL CERT
    \(N \hat{\imath} \quad y: a ̂ n g o\)
    IsPI.PST gave.to3rd.REM
    'I gave the money to Yidika and Kpââmwêlê'
```

(78) Peter ka n̂ pwila ngê

Peter SOURCE 1sPPast buyPast MFS.3sO.WEAK
'I bought it from Peter'
(79) Mboo ka n:aa danêmbum

Mboo GOAL 1sCIImmFUT talking.
'I am talking to Mboo' (from Henderson 1995:63)
(G) Comitative is the case marking for animate companions, as in 'go with so-and-so'.
(80) John Njó k:ii lee knî

John Joe COM go.FOL dS.Intrans.NrPAST.PI
'The two of them, John and Joe, went (yesterday)'
(81) nyi, ng:ii

2s $\mathrm{N}(2 \mathrm{~s})+k: i i$
'You, you are one of them'
(82) ye nyi ngmê, _ng:ii nmye

DEM(near2) 2 s one $2 \mathrm{~s}+$ COM 2 pl
$n t: a m e ̂ n t: a m e ̂ ~ n y e ́ d i ~$
song.type PFS.3plO.CIHAB
'You are one of them, you all habitually sing nt:amê with you (singular)'
(83) Tili m:aa k:ii ka lêpı̂ mo

Tili my.father COM 3CI.PROX going CI.PROX.d
'Tilly is going with my father'

Note that the NP+k:ii construction, where Comitative occurs with the subject, includes the oblique NP in the number of the verb agreement.

The Comitative is restricted to humans, gods and animate companions (dogs are the only normal non-human candidates). The just slightly irregular paradigm for pronouns with the Comitative is as follows:

Table 5.3: Comitative pronouns.

|  | Sing | Dual | Plural |
| :---: | :---: | :---: | :---: |
| $1^{\text {st }}$ | a k:ii | nyi k:ii | nmî k:ii |
| $2^{\text {nd }}$ | $n g: i i$ (in Imperatives) <br> m:uu (in Declaratives) | dpî k:ii | nmyi k:ii |
| $3^{\text {rd }}$ | u k:ii | yi k:ii | yi k:ii |

(84) a. a k:ii lee knı̂
'Let's go with me' i.e. 'Let us2 go'
b. a k:ii lee kmîle 'You2 or more come with me'
c. dpî k:ii lee kmîle 'Let’s go with you2’
d. ng:ii nyi k:ii

N+k:ii nyi k:ii
2sPOSS dual COM
'Are you (with) (coming) with us2?'

The postposition p:uu, 'attached to', is used in a comitative sense with verbs of accompanying as below (it takes pronouns in the normal Absolutive form):
a. a p:uu keeli

1s attached.to accompany.IMP
‘Accompany me!’
b. m:uu n:aa kelekele
$\mathrm{N}(2 \mathrm{sPOSS})+\mathrm{p}: \mathrm{uu}$ 1sCIPROX.MOT accompanying.CI
'I am accompanying you'

### 5.2.2 Case marking of pronouns

As described in §4.2.2, there are distinct personal pronouns for the Unmarked ('Nominative'), Genitive (Possessive), Dative/Ablative, and Experiencer cases. Most other pronouns, like interrogative, reflexive, reciprocal and relative pronouns, take the standard case marking as for nominals, except that there are special forms for the Dative/Ablative reciprocal (noko) and the Ergative interrogative personal pronoun (nanê ‘Who-ERG?’).

The case marking of personal pronouns is in fact a matter of some complexity. Many ergative languages, like the Australian ones, mark lexical NPs on an ergative/absolutive basis, and pronouns on a nominative/accusative basis,
exhibiting one common enough kind of 'split ergativity'. But in Yélî Dnye, while interrogative, relative and other pronouns are always marked with the Ergative case, personal pronouns may or may not be, according to context. The essential rules seem to be:
(i) Personal pronouns in A-function (subjects of transitive verbs) are not marked with the Ergative case unless they are embedded or in an implicit quotation context,
(ii) All other pronouns in A-function (including demonstrative, relative and Wh- pronouns) are marked with the Ergative case (unless they have a special Ergative form of their own).

As an example of a context where personal pronouns would likely be marked with the Ergative, consider:

c. Yidika ka dp̂̂ vyi-kwi, nê ngê Ghaalyu Yidika DAT 2IMP.Defd say-say.IMP 1s ERG Ghaalyu wa vy:a 3FUT hit 'Tell Yidika, say: I (Ergative) will beat Ghaalyu'

Here I instruct an intermediary with sentence (86)a. and he delivers the message to Yidika with sentence $b$. (note that in $b$. the explicit personal pronoun with its Ergative marking could be omitted). An interesting feature of these sentences is that the verb agreeing with the Ergative pronoun does not agree in person - it takes $3^{\text {rd }}$ person agreement. Although the phonetic difference between $1^{\text {st }}$ and $3^{\text {rd }}$ person agreement is slight in a . and b . (dî vs. dê), in c. the $3^{\text {rd }}$ person proclitic $w a$ would be anî in the $1^{\text {st }}$ person future.

Or, in another context where I have heard that you hit Ghaalyu:
a. Apu, nyi ngê Ghaalyu dê vy:a QUOT3.PROX 2s ERG Ghaalyu 3IMMPI hit 'They say you (Ergative) are the one who hit Ghaalyu'
b. nyi ngê chóó dê vy:a

2s ERG self 3IMMPI hit '(they say) You (Ergative) yourself hit him'

Here again the Ergative marking is licensed, even if, as in (87)a, the quotation is not really embedded but merely follows a quotation particle, or as in b., the quotation context is entirely implicit. Thus the Ergative marking is not really syntactically conditioned, but is perhaps related to an external point of view. ${ }^{25}$

Nevertheless, other embedding contexts also seem to permit Ergative marking of pronouns, for example under predicates of knowing and wanting:

| a. a lama | ka tóó, | nyi | ngê |
| :--- | :--- | :--- | :--- |
| my knowledge | 3. PROXCI sitting, | 2 s | ERG |
| $p i$ | $k a$ | pîpî |  |
| person | 3.PROXCI | eating |  |
| 'I know you (Ergative) are eating people' |  |  |  |

b. u yi anga a kwo nyi
its desire 1sEXP 3.PROXCI standing 2 s
ngê d:uu ngê
ERG do MFS3sO
'I want you (Ergative) to do it'

25 It is interesting in this regard to note that explicit, stressed pronouns themselves seem to presuppose quotation contexts - thus while either a. or b. below can occur outside quotation contexts, c . with a pronoun plus emphatic seems to require such a context implictly:
(i) a. chóó dî vy:a my self 1sIMM hit 'I myself hit him’
b. nê dî vy:a 1s 1sIMM Hit 'I hit him'
c. nê a chóó dî vy:a
1s my self 1sIMM hit
'I myself, I hit him'
c. u yi a nga a kwo nê (*ngê)

Its desire 1sEXP 3.PROXCI standing 1s ERG
d:uu (*ngê)
do (MFS3sO)
'I want to do it' (*‘I want I-ergative do it')
d. u yi nga a kwo (*nyi ngê)
its desire 2sEXP 3.PROXCI standing 2s ERG
wa nyi d:uu
FUT 2s do
'Do you want to do it?' (lit. 'Its desire to you is standing that you (not youErgative) do it')

Note though how, in (88)c. and d., where only one person's point of view is expressed, Ergative marking seems to be ruled out.

### 5.3 Recursion in the noun phrase: Conjunction, compounds, possession, and relativization

Conjunction is achieved either by apposition, with case marking and verbal agreement reflecting the plurality, or with one NP in Comitative case, also with plural agreement:
(89) a. Yidika Mwonı̂ y:oo dê vy:a ngmê
Yidika Mwonî ERG.PL 3IMMPI hit PFS3sOPI.PROX
'Yidika (and) Mwonî hit something'
b. Yidika Mwonî Pikuwa y:oo dê vy:a ngmê
Yidika Mwonî Pikuwa ERG.PL 3IMM.PI hit PFS3sOPI.PROX
'Yidika, Mwonî and Pikuwa hit something'
c. Yidika Mwonı̂ dê lee knı̂
Yidika Mwonî 3IMM.PI go dPI.Intrans
'Yidika and Mwonî went'
d. Yidika Mwonî k:ii dê lee knî
Yidika Mwonî COM 3IMM.PI go dPI.Intrans
'Yidika and Mwonî went'
e. (*Yidika ngê) Mwonî k:ii dê
(*Yidika ERG) Mwonî COM 3IMM.PI
vya ngmê
hit.FOL PF3sOProx
'They killed that thing with Mwonî'
(singular ERG NP clashes with PF enclitic)
f. tuu kaa y:e dê vy:a ngmê axe spear INSTRpl 3IMM.PI hit PFS3sOPI.PROX 'They hit it with a spear and an axe'
g. Yidika ngê ó apê Mwonî ngê dê

Yidika ERG or perhaps Mwonî ERG 3sIMM.PI
vy: $a \varnothing$
hit (MFS3sOPI.PROX)
'Either Yidika or Mwonî hit it'

Note that in (89)d. above, the Comitative case-marked NP is counted with the subject for the purposes of number agreement in the verb, suggesting that it is structurally linked to the subject NP ((89)e. shows that the same is true with Comitatives associated with Ergative subjects, but in this case the subject NP cannot be overt). NPs conjoined with the Comitative case also agree in person with the head noun (so one says 'I with Yidika we. . . .'). Disjunctions as in (89)g. have a different structure, with separate case-marking on each disjunct and agreement consistent with only one disjunct.

An alternative strategy for conjunction is to indicate the number with the first conjunct and add the second conjunct after, as in Taapwé pini dê Ghaalyu 'Taapwé person two Ghaalyu i.e. Taapwé and Ghaalyu'.

Noun phrases of arbitrary complexity can be built by compounding, possession, relativization and nominalization of verbs. The latter two topics are dealt with extensively below ( $\$ 8.1$ and §8.7), but here are initial examples:
(90) a. pi pîpî dono
person eating bad
'Eating people is bad'
b. pini $\quad$ n:ii dê t:a] a mbwêmê
person-SPEC REL 3IMM.PI arrive my pig
dê t:âmo
3IMM.PI stole
'The man who came stole my pig'

As can be seen in (90)a. above, nominalized verbs, which are formed from the continuous aspect root, can carry some of their arguments with them. Relative clauses, as in (90)b., normally follow the head noun, and the relative pronoun carries the case marking appropriate to the embedded clause.

The possessive can be used to build NPs of arbitrary size:
(91) a. Kakan $u$ m̂̂ u kêpyââ u kênê

Kakan 3Poss father 3Poss grandmother 3Poss uncle
'Kakan's father's grandmother's uncle'
b. nee $u$ pyoo $u \quad n k o o$ ghi pwaa ngmê canoe 3Poss mast 3Poss top part broken RES 'The canoe's mast's top part is broken'
c. nee pyoo nkwodo ghi pwaa ngmê
canoe mast top part broken RES
'The canoe mast top part is broken'

However for inanimate possessors, nominal compounding as in (91)c. above is the preferred structure. Compounding can be recursive, but in practice the limit is about four or five Ns forming one compound nominal with head to the right. Many place names are built on compounding (e.g. Ntono kpâpu 'nuwo 'village name, lit. Ntono hill point', or K:aa mbwee vyilêvyilê têdê lit. 'taro old reheating place'), as are technical terms like those used in house or canoe building (e.g. ghêêdî mbw:ee pââ, 'joists, cross-bearers'), and a few species terms (njini kpiyé 'tree type, lit. njini large.tree').

The possessor, if explicit, must precede the possessive pronoun. The possessor need not be explicit, in which case it is usually understood anaphorically or deictically, not normally cataphorically. Thus the normal expression for 'afterwards' is u kuwó dini ghi ngê, lit. 'It's following time part ADVERBIALIZER' where the possessive is anaphoric to the preceding mentioned event. Quite a number of conjunctive phrases are built on this principle.

An exception to anaphoric interpretation is the role of possession in complex 'wanting' constructions (see §7.5.1), where an embedded clause (below shown in square brackets) is the object of desire, and the possessive cataphorically refers to this clause. Here, as shown in (92)b. below, the cataphoric possessive pronoun fails to agree with the number of desired events, unlike the anaphoric agreement with the number of desired objects in c.
(92) a. u yi anga a kwo [Abeleti nê lê]

3Poss desire 1sEXP 3CIPROX standing [Abeleti 1s go]
'I want to go to Abeleti', lit. 'It's desire to me is standing, I go to Abeleti'

```
b. u ye ye a kwo
3Poss desire to.them 3CIPROX standing
[Abeleti nmî lee dmi, yed:oo Tam
[Abeleti 1Pl go PI.PROXplS then Tam
nm:uu lee dmi]
1pl.MOT go PI.PROXplS]
'They want to go to Abeleti and then to Tam',
lit. 'It's desire to them is standing, we go first to Abeleti and then to Tam'
c. nee dê yi yi dê a nga a
canoe Dual 3d/plPOSS desire Dual 1sEXP 3CI.PROX
kwo mo
stand 1/2/3d
'I want two canoes', lit. 'Two canoes their desire is standing-dual to me'
```


## 6 The verb complex

The verbal complex is the most complicated part of the syntax of the simplex sentence - indeed every verb complex constitutes a minimal tensed sentence. Here I shall build on the initial analysis sketched by Henderson (1995), which seems to be essentially correct. The verb complex is made up of the verb root, one or more proclitics and an enclitic (Henderson's Pre-Nucleus and Post-Nucleus respectively). The clitics mark tense, aspect, mood, subject person/number in portmanteau form - a typical Papuan feature (Foley 1986:137, 2018:910). Proclitics and enclitics carry partly redundant (overlapping) information.

Both clitic positions may be null (i.e. contrastively zero). The pre-verbal clitics attract and normally fuse with many other elements, such as those indicating negation, deictic/anaphoric properties of the subject, epistemic status, indefinite markers associated with the object, lowered quantifiers, etc., and Henderson's concept of a core inflectional 'nucleus' attracting other elements seems most appropriate.

The following exemplifies the basic verb complex (sans complicating additional fused elements):
(93) Verb Complex - the basic pattern:

| Pre-Nucleus <br> (Proclitic $+/-$ <br> other features) <br> nyi | Verb-Stem | Post-Nucleus <br> (Enclitic) |
| :--- | :--- | :--- |
| ma |  | té |
| 2s/lpl.S.P.IND.NrPST | ate.PROX | MonoF.S.3plO.IND.PROX <br> Subject: Person/Number <br> Mood, Tense, Aspect |

Gloss: ‘We two ate three-or-more things yesterday’

As emphasised in bold in (93) above, the proclitics encode precise subject properties along with TAM properties, while the enclitics do all this plus indicate transitivity, and where transitive, they encode object properties.

Additional elements within the verb complex are restricted to the following: (a) grammatical features like negation, deixis, repetition, associated motion which are fused into the pre-verbal nucleus, (b) incorporated objects which are the only additional elements which may occur between clitics (here proclitics) and verb (since they make a complex verb, as it were), (c) satellite-like floated quantifiers which are attached to the proclitics. These elements occur in the ordered template in Table 6.1:

Table 6.1: Template of 'slots' in the Verb Complex.

| (Quantifier) $\left\{\begin{array}{l}\text { Epistemic } \\ \text { Repetition } \\ \text { Deictic } \\ \text { Negation } \\ \text { Anaphoric }\end{array}\right\}$ Proclitic $\left\{\begin{array}{l}\text { Motion } \\ \text { Deixis }\}\end{array} \begin{array}{lll}\text { Incorp. } & \text { Verb } & \text { Enclitic } \\ \hline\end{array}\right.$ |
| :--- |

(Obligatory elements in bold - note though that both Proclitic and Enclitic can have zero-morph forms)

The clitics have a curious status between agreement features and full nominals. For example, an independent pronoun does not generally co-occur with the obligatory proclitic - they would redundantly mark the same information while lexical NPs with case marking do of course co-occur with the proclitics. The pre-verbal clitic is concerned (in addition to tense/aspect/mood) with subject properties (person/number) of both transitive and intransitive subjects, while the post-verbal clitic marks transitivity, subject properties, mood/tense/aspect and carries additional information about specific properties (person/number) of the object (if any). The post-verbal enclitic marks subject properties in a special way, often collapsed into broad categories like Monofocal/Polyfocal to be described below (§6.1.2). Sometimes, as in imperatives and in the $3^{\text {rd }}$ person Remote Past Punctual aspect, the post-verbal clitic is the only place where the subject properties are marked. Thus we cannot view the clitics as just the remnants of an SVO syntax - the post-verbal enclitics mark tense/aspect/mood and subject properties too, and there is a full range also marking intransitive subjects. In addition, it is important to note that there are a number of verbs and constructions that take oblique subjects which are not then cross-referenced in the clitics at all.

To summarize: both proclitics and enclitics inflect for subject properties, and the proclitics do so on a Nominative basis rather than an Ergative/Absolutive one. The proclitics are the same for transitive and intransitive verbs, but the enclitics are entirely distinct for intransitives (where they mark only subject properties) and transitives (where they also mark object properties in portmanteau form). It is thus possible to see the enclitics as more attuned to the Ergative/Absolutive basis of the language: their primary function is to mark the character of intransitive (Absolutive) subjects and transitive (Absolutive) objects, although they do so in different ways.

The following two sections detail the inflectional clitics. It should however be borne in mind that some of the tense/aspect - and occasionally mood and subject type - marking is (non-redundantly) signalled by verb-root suppletion, as described in $\S 4.5$.

### 6.1 Proclitics: Inflectional pre-verbal particles

### 6.1.1 The pre-verbal clitic position

The pre-verbal position of finite clauses is a crucial locus: here are obligatorily coded subject, tense, aspect and mood (even when marked by a zero form), together with a range of optional features with wide semantic scope over the clause, e.g. negation, counterfactuality, temporal dependency. The verbal proclitics have a bewildering number of forms, but a crucial set of 56 forms is used to fill a matrix of 144 combined properties of the subject (which is marked in a nominative manner, i.e. indifferently as to the transitivity of the verb), tense, aspect, and mood. I will distinguish between the basic set of proclitics indicating just those former grammatical categories, which I will call the basic proclitic or TAMP inflectional particle, and a much larger set formed by irregular fusions of these core proclitics with deictic/anaphoric/epistemic and other categories. We will start with this larger set, to give an idea of the other parameters. The analysis follows closely that of Henderson (1995).

In certain circumstances, the other particles may fail to fuse with the proclitic, and this allows one to isolate them, and suggest that they fill ordered slots in the pre-verbal nucleus, on both sides of the basic proclitic carrying the information about subject and tense/aspect/mood properties, as in Table 6.2:

Table 6.2: The pre-verbal nucleus.

| Epistemic | Addition 'also' | Distal Deictic | Anaphoric | Repetition | Negation | Basic <br> Proclitic | Motion | Proximal Deictic |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| kî | mye | $m u$ | $y i$ | mê | daa |  | mî | $a$ |
|  |  |  |  |  |  |  | n:aa | $n \hat{e}$ |
| $w u^{26}$ |  |  |  |  |  |  |  |  |

In (94) are some examples of ordered strings of proclitic elements with the verb lê/loo 'go/went', exemplifying the template above (the elements may take on altered phonological form due to fusion with the basic proclitic, even when zero):
(94) a. kîlê 'he left (yesterday)'
b. kî mye lê 'he also left (yesterday in addition to others)'
c. yi mê lê 'that fellow left again'

26 The position of $w u$ is a bit problematic: it seems to occur after the negative in negative sentences as in daa-w-a nî ‘They won’t be going’ (Henderson 1995:49).
d. mye yi lê 'that fellow also went (yesterday)'
e. ти mê lê 'he went again that way (yesterday)'
f. kê mye mêlê 'he also left again (yesterday)'
g. mye doo loo 'he also didn't come (day before yesterday)'
h. mye mîlê 'he also went and left (yesterday)'
i. mya n:aa lê 'he also went and left (today)'
j. mêda loo 'he came again this way (day before yesterday)'

However, in most cases these elements are likely to fuse with the basic proclitic in unpredictable ways. Take for example the basic proclitic nyi, which can mean either 1dual or 2 s subject, punctual aspect, indicative, proximate tense (yesterday). The two senses fuse differently in a number of cases, as illustrated in Table 6.3, and in this way the learner of Yélî Dnye must learn all these forms and their functions by rote:

Table 6.3: Examples of portmanteau fusion of grammatical categories in Pre-Nucleus.

|  | BASE | +NEG | +ALSO \& | +ANAPH | +MOT | +MOT | +CERT |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | CLITIC |  | CLS |  |  | \& CLS | \& ALSO |
| 1dual+Punct+Indic+Yester: | nyi | dîp:e | mye-nyi-nêe | y:ee | ny:uu | nyumo | kîmyiy: $e$ |
| 2s+Punct+Indic+Yester: | nyi | dipi | mye-nyi-nê | y:ii | ny:uu | nyumo | myiy:e |

Thus dîp:e encodes 'NEG+1dual+Punct+Indic+Yesterday’, while y:ee encodes 'Anaphoric subject+1dual+Punct+Indic+Yesterday', and so forth.

The full inflectional tables will be given for a number of these fusing elements, including negation (see §6.1.4). In addition to these eight semantic functions, a number of other semantic and syntactic functions are fused with the verbal proclitic, for example counterfactuals have their own huge paradigm of proclitics, subsuming the functions of the basic proclitic (see §8.3). As a result there are well over a thousand distinct proclitics that must be learnt.

Before proceeding, a little should be said about the syntax of the verbal complex. First, the clitics are independent phonological words, which respect various word boundary phenomena (e.g. the initial /p/ of verb roots remains devoiced, while word internal /p/ is voiced; the initial /d/ of verb roots remain post-alveolar stops, while word-internal /d/ is realized as a retroflex flap; §3.1). Second, they are syntactic words in the sense that a few designated elements may intrude between them and the verb. For proclitics, these intruding elements are those Associated Motion and Proximal Deixis elements (§6.1.3) which may not always fuse as indicated (by MOT and CLS) in the slots above, and, most impor-
tantly, incorporated objects and prepositional phrases (which can be full phrases as detailed in §7.9.3). The enclitics however always rigidly follow the verb, with no intrusive elements. Third, the verb may be complex, for example with a causative verb after a verbal noun, in which case the clitics may flank the whole complex, not the head verb alone.

### 6.1.2 The core proclitic paradigms

Let us return to the core inflectional clitic that precedes the verb. It marks tense, aspect, mood and person/number of the subject in portmanteau form as, for the most part, a single syllable. The dimensions coded are shown in Table 6.4:

Table 6.4: Grammatical Categories coded in the core proclitic.

| $\mathbf{6}$ tenses: | Present (Now) |
| :--- | :--- |
|  | Futures: Immediate Future (later Today), Distal Future (Tomorrow or later) |
|  | Past: Immediate (earlier Today), Near (Yesterday), Remote (Day before Yesterday) |
| $\mathbf{2}$ aspects: | Continuous |
|  | Punctual |
| $\mathbf{3}$ persons, | $\mathbf{3}$ numbers (sing, dual, plural) of Subject |
| $\mathbf{5}$ moods: | $\mathbf{1}$ Indicative |
|  | $\mathbf{2}$ Imperative/Deontic Moods in all persons: Immediate vs. Deferred |
|  | $\mathbf{2}$ Habituals: Continued ("always Vs") vs. Discontinued ("used to V") |

All the combinations of these categories would yield a matrix of 540 cells ( $6^{\star} 2^{\star}$ $3 * 3 * 5=540$ ). However, there are systematic reductions of the combinatorial possibilities:
(1) There is a systematic absence of many tense distinctions in particular aspects and moods, and in fact we get only the following distinctions in Table 6.5 in each aspect and mood:

Table 6.5: Number of tense distinctions in each aspect and mood.

| Continuous aspect: | Indicative: | 6 tenses | $=6 * 9$ persons | $=54$ |
| :--- | :--- | :--- | :--- | ---: |
|  | Habitual: | 2 tenses | $=2 * 9$ | $=18$ |
|  | Imperative: | 1 tense | $=1 * 9$ | $=9$ |
| Punctual aspect: | Indicative: | 4 tense | $=4 * 9$ | $=36$ |
|  | Habitual: | 1 tense | $=1 * 9$ | $=9$ |
|  | Imperative: | 2 tenses | $=2 * 9$ | $=18$ |

This gives us a matrix of 144 cells - that is, 144 grammatical distinctions to be made by the core proclitics. (In the tables below I will distinguish an extra tense in the Punctual, but this is motivated by distinctions carried elsewhere in the verb complex.)
(2) Some of these 144 cells are filled by regular re-use of the same proclitics - in other words there is syncretism. For example, the Near Past ('yesterday') is conflated with the Remote Past in Punctual Aspect - that is, the same clitics are used in both tenses. However, we have to continue to recognize this tense distinction in the Punctual series because it is independently signalled by verb root suppletion. Thus some of these collapses of the paradigm in one part of the system are compensated for by marking elsewhere in the verb complex. Another example of systematic economy would be that, in all tenses, Punctual Aspect forms don't distinguish $3^{\text {rd }}$ person sing/dual/plural.
(3) Others of these 144 cells are filled by irregular borrowing of forms used elsewhere in the same matrix. These irregular conflations are unreliable tendencies of varying strength, for example:
(95) 2 Sing $=1$ Dual (frequent)

2Dual = 3Dual (occasional), and more generally:
non-1 ${ }^{\text {st }}$ person Duals tend to conflate (a partial 'Polyfocal Pattern')
$3^{\text {rd }}$ person Sing/Dual/Plural tend to conflate
Some conflations across Punctual and Continuous Aspects

The end result is that we have 144 cells occupied by only 56 different basic forms (there are over 1000 forms altogether if one also takes into account irregular fusions with other grammatical categories like deixis, counterfactuality or negation). These forms must be learnt, complete with their complex syncretism or polysemy.

Such conflations yield the kinds of syncretisms (distinct senses separated by 'or’) shown in (96) and (97):
(96) $d p \hat{\imath}=$ Habitual Punctual: 1s or 1plural (not 1dual) or 2 dual or $3 \mathrm{sg} / \mathrm{dual} /$ plural
= Punctual Near Past or Remote Past: 2dual
$=$ Punctual Immediate Past: 2 dual or 1 plural
= Continuous Immediate Past 2dual or Near Past 2dual or 3 dual
= Deferred Punctual Imperative: 2 or $3 \mathrm{sg} /$ dual/plural

$$
\begin{align*}
d n y e & =\text { Punctual Immediate Past } 1 \text { dual }  \tag{97}\\
& =\text { Continuous Remote Past } 3 \text { plural }
\end{align*}
$$

Authors examining other languages with complex inflectional paradigms have suggested that such syncretisms can aid language acquisition. For example, Evans, Brown \& Corbett (2001) writing on Dalabon find systematic syncretisms, allowing Optimality Theory formulations of the kind "person is preserved before number", "object before subject attributes except for first person". However, in the Yélî case, such generalizations seem harder to find. For example, take $d p \hat{\imath}$ above: it shows that in some conflations number overrides person (e.g. conflating 2Dual and 3Dual), but in other conflations person comes before number (e.g. conflating 1Singular and 1Plural).

The core proclitics are fairly clearly modelled on the independent pronouns to at least some extent. For example, compare the pronouns and one part of the inflectional matrix in Table 6.6:

Table 6.6: Pronouns and sample proclitics (Remote Past, Continuous aspect).

| Pronouns: | (a) | Independent (c) Proclitics: |  |  | Remote Past Continuous Aspect: |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | sing | dual | pl |  | sing | dual | pl |
| 1 | nê | nyo | nmo |  | noo | nyipu | nmee |
| 2 | nyi | dp:o | nmyo |  | nyoo | dpîmo | nmyee |
| 3 | $\emptyset$ | $\emptyset$ | $\emptyset$ |  | doo | dpîmo | dnye |
|  | (b) | Poss | ssive |  |  |  |  |
| 1 | $a$ | nyi | nmî |  |  |  |  |
| 2 | $N$ - | $d p \hat{\imath}$ | $n m y i$ |  |  |  |  |
| 3 | $u$ | yi | yi |  |  |  |  |

The full set of 144 cells, 81 for the continuous aspect, and 63 for the punctual aspect, are presented in the following tables (Table 6.7 and 6.8), after Henderson (1995:102103). Note that the pronominal sources are mostly evident, but then become assigned to other cells, so that e.g. $d p \hat{\imath}$ ( $2^{\text {nd }}$ person Dual, Possessive Pronoun) can end up as e.g. $3^{\text {rd }}$ person all numbers and $3^{\text {rd }}$ Person Sing in the Punctual Habitual proclitics. Note too that there are two compositional elements discernable: preposed $a$-indicates most distant future in both aspects (there is only one future in the punctual aspect), and is reused for the Continuous Present; the suffix -mo indicates Continuous Habitual Distal. Otherwise all the forms are monomorphemic.

A reminder of the meaning of the tense distinctions: all indicative tenses have a strictly diurnal basis, as indicated in the charts. In narratives set in the Remote Past, however, a sort of 'vivid present' can be invoked by using the Immediate Past (Henderson 1995:22-23). The lack of a Present in the Punctual aspect is
solved by using the Immediate Past for events already happening or even about to happen. The Habitual Proximal indicates the action is still habitually carried out, the Habitual Distal that it is discontinued, no longer carried out. The Imperative Immediate means 'do it now', the Imperative Deferred 'do it later'. Tenses can be grouped into proximal (the three tenses closest to coding time in each aspect) vs. distal tenses, a distinction playing an important role in the enclitic tables. Here, and throughout the grammar, tables of inflectional clitics are presented separately for punctual and continuous aspects, as this fundamental contrast coincides with different distinctions of tense in each aspect (Tables 6.7 and 6.8).

Table 6.7: Punctual Aspect: Core Inflectional Proclitics (Henderson 1995:102).

| Mood | Tense | Person of Subject | Number of Subject |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Singular | Dual | Plural |
| Indicative | Future* (today or later) | 1 | $a n i ̂$ | anyi | anmî |
|  |  | 2 | anyi | adpî | anmyi |
|  |  | 3 | $a$ |  |  |
|  | Immed. Past* (today) | 1 | dî | dnye | $d p i ̂$ |
|  |  | 2 | chi | $d p i ̂$ | dmye |
|  |  | 3 | dê |  |  |
|  | Near Past* (yesterday) $t$ | 1 | nî | nyi | $n m i ̂$ |
|  |  | 2 | nyi | $d p i ̂$ | nmyi |
|  |  | 3 | $\emptyset$ |  |  |
|  | Remote Past $t$ (before yesterday) | 1 | nî | nyi | nmî |
|  |  | 2 | nyi | $d p i ̂$ | nmyi |
|  |  | 3 | $\emptyset$ |  |  |
| Habitual |  | 1 | $d p i ̂$ | dmye | $d p \hat{\imath}$ |
|  |  | 2 | dpyi | $d p i ̂$ | dmye |
|  |  | 3 | $d p i ̂$ |  |  |
| Imperative | Immed. (now) | (all) | $\emptyset$ |  |  |
|  | Deferred (later) | 1 | (gap) | paa |  |
|  |  | 2/3 | $d p i ̂$ |  |  |

* These three Proximal tenses are conflated in categories of post-verbal enclitics
$t$ Identical sets of proclitics, with tense differentiated by verb stem suppletion

Note that the Habitual Proximal proclitics are identical to the Immediate Future Indicative ones: the Habitual is disambiguated by distinctive post-verbal enclitics (and incidentally the Habitual Proximal does not have future readings that exclude the present). So $n$ :aa lêp̂̂‘I will be going' contrasts with $n$ :aa lêp̂̀ yédi 'I

Table 6.8: Continuous Aspect: Core Inflectional Proclitics (Henderson 1995:103).

| Mood | Tense | Person of Subject | Number of Subject |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Singular | Dual | Plural |
| Indicative | Distal Future (tomorrow) | 1 | $a n i ̂$ | any:oo | anmî |
|  |  | 2 | anyi | adpî | anmyi |
|  |  | 3 | adî | adpî | adnyi |
|  | Imm.Future* (today) | 1 | n:aa | nye | nmo |
|  |  | 2 | nye | dpo | nmye |
|  |  | 3 | $a$ |  |  |
|  | Present* | 1 | $a n i ̂$ | anye | anmî |
|  |  | 2 | anyi | adpî | anmye |
|  |  | 3 | $a$ |  |  |
|  | Immed.Past* <br> (Earlier today) | 1 | nî | nyi | $n m i ̂$ |
|  |  | 2 | nyi | $d p \hat{\imath}$ | nmyi |
|  |  | 3 | $\emptyset$ |  |  |
|  | Near Past (yesterday) | 1 | $n \hat{1}$ | ny:0o | nmî |
|  |  | 2 | nyi | $d p \hat{\imath}$ | nmyi |
|  |  | 3 | dî | $d p i ̂$ | dnyi |
|  | Remote Past (before yesterday) | 1 | noo | пуіри | nmee |
|  |  | 2 | nyoo | dpîmo | nmyee |
|  |  | 3 | doo | dpîmo | dnye |
| Habitual | Prox <br> (still continues) | 1 | n:aa | nye | nmo |
|  |  | 2 | nye | dpo | nmye |
|  |  | 3 | $a$ |  |  |
|  | Distal <br> (discontinued action) | 1 | nîmo | nyimo | nmîmo |
|  |  | 2 | nyimo | dpîmo | nmyimo |
|  |  | 3 | dpîmo |  | dnyimo |
| Imperative | (now or later) | 1 | (gap) | $\emptyset$ |  |
|  |  | 2 | chi | choo | dmyinê |
|  |  | 3 | choo | dny:0o |  |

* Tenses grouped as 'Proximal' tenses in post-verbal enclitics
go habitually' (Henderson 1995:25-26; see below §6.2.1 for intransitive enclitics, §6.2.2 for transitive ones).

Because it is hard to compare the two tables for Punctual and Continuous aspect visually, I combine them in Table 6.9 below by assimilating mismatching tense categories to the nearest relevant category. There is clearly much overlap in forms, and many further cases of minimal difference. Note however that the third persons systematically behave differently. Note that a form like $d p \hat{\imath}$ which has much use in both the continuous and punctual paradigms only overlaps in usage in two cells (Immediate and Near Past 2Dual).

Table 6.9: Continuous (italics) vs. Punctual (roman in parentheses) aspect proclitics compared.

| Mood | Continuous Tense (Punctual tense) | Person of Subject | Number of Subject |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Singular | Dual | Plural |
| Indicative | Future Distal (Future Prox) | 1 | $a n i ̂(a n i ̂) ~$ | any:oo (anyi) | anmî (anmî) |
|  |  | 2 | anyi (anyi) | adpî (adpî) | anmyi (anmyi) |
|  |  | 3 | adî (a) | adpî (a) | adnyi (a) |
|  | Immed.Future (none) | 1 | n:aa | nye | nmo |
|  |  | 2 | nye | dpo | nmye |
|  |  | 3 | $a$ |  |  |
|  | Present (none) | 1 | $a n i ̂$ | anye | anmî |
|  |  | 2 | anyi | adpî | anmye |
|  |  | 3 | $a$ |  |  |
|  | Immed.Past (Imm Past) | 1 | $n i ̂$ (dî) | nyi (dnye) | $n m i ̂ ~(d p i ̂) ~$ |
|  |  | 2 | nyi (chi) | $d p \hat{i}(\mathrm{dpî})$ | nmyi (dmye) |
|  |  | 3 | $\emptyset$ (dê) |  |  |
|  | Near Past <br> (Near Past) | 1 | $n i ̂$ (nî) | $n y: o o$ (nyi) | $n m i ̂(n m i ̂) ~$ |
|  |  | 2 | nyi (nyi) | $d p i ̂(\mathrm{dpî})$ | nmyi (nmyi) |
|  |  | 3 | dî(Ø) | $d p i ̂(\emptyset)$ | dnyi (Ø) |
|  | Remote Past <br> (Remote Past) | 1 | noo (nî) | nyipu (nyi) | nmee (nmî) |
|  |  | 2 | nyoo (nyi) | dpîmo (dpî) | nmyee (nmyi) |
|  |  | 3 | doo (Ø) | dpîmo (Ø) | dnye (Ø) |
| Habitual | Habitual Prox (Habitual) | 1 | n:aa (dpî) | nye (dmye) | nmo (dpî) |
|  |  | 2 | nye (dpyi) | dpo (dpî) | nmye |
|  |  | 3 | $a$ (dpî) |  |  |
|  | Distal (none) | 1 | nîmo | nyimo | nmîmo |
|  |  | 2 | nyimo | dpîmo | nmyimo |
|  |  | 3 | dpîmo |  | dnyimo |
| Imperative | Imperative <br> (Imm. Imperative) | 1 | - | Ø (Ø) |  |
|  |  | 2 | chi (Ø) | choo (Ø) | dmyinê (Ø) |
|  |  | 3 | choo (Ø) | dny:oo (Ø) |  |
|  | None (Deferred Imperative) | 1 | - | (paa) |  |
|  |  | 2 | (dpî) |  |  |
|  |  | 3 |  |  |  |

Some frequent conflations in the person/number paradigm have already been mentioned. When we come to review the post-verbal clitics, we will see that the Monofocal/Polyfocal conflation pattern will be important. The distinction between Monofocal and Polyfocal subjects can be represented thus (Table 6.10),
where Polyfocal subjects are $2^{\text {nd }}$ or $3^{\text {rd }}$ person dual and plural, and the rest are Monofocal ( $1^{\text {st }}$ person all numbers and singular $2^{\text {nd }} / 3^{\text {rd }}$ ):

Table 6.10: Monofocal/Polyfocal marking pattern.

| Number |  | Person |  |
| :--- | :--- | :--- | :--- |
|  | Sing | Dual | Plural |
| $\frac{1}{2}$ |  | Monofocal | Monofocal |
|  |  | Polyfocal |  |

In the proclitic paradigms we can find partial elements of this, as in Table 6.11 ( $2 \mathrm{~s}=1 \mathrm{~d}$; $2 \mathrm{~d}=3 \mathrm{~d}$ ), suggesting that we may have remnants of a more widespread Monofocal/Polyfocal marking now preserved only in the post-verbal clitics.

Table 6.11: Partial Monofocal/Polyfocal patterns in the proclitics (some Continuous forms illustrative of conflation patterns).

| Number |  | Person |  |
| :--- | :--- | :--- | :--- |
|  | Sing | Dual | Plural |
| $\mathbf{1}$ |  | nyi (IMM) |  |
| $\mathbf{2}$ |  | nyi (IMM) | dpî (NrPST) |
|  |  | dpî (NrPST) |  |

The core proclitics are merely the heart of a complex story. We have already mentioned in §6.1.1 that they combine with epistemic, deictic, repetition, and motion information to form new portmanteau morphs. Any two of these features may also combine with partially unpredictable forms of their own. They also combine with negation to form new, unpredictable forms. These negative forms themselves combine with the epistemic, deictic, repetition and motion categories to form yet further unpredictable forms. In addition, there are special modal forms, special cleft-sentence forms, and a large array of special forms for both antecedent and consequent of counter-factual conditionals. A computation of the resulting set of matrices would suggest that altogether there are on the order of 8,000 intersecting grammatical distinctions which in principle could be signalled by special proclitic forms:

144 (core TAMP distinctions) * 7 (epistemic/deictic, etc. distinctions) * 2 (combinations of the latter) * 2 (negative vs. positive) * $2($ both counterfactual clauses $)=$ 8064 cells to be filled by special forms!

In practice, through conflations, there will be far fewer forms, but certainly there will be something like 1000 distinct proclitic forms. A full description of all of this will await a native-speaker linguist; meanwhile, we will proceed to document some of the major alternations.

### 6.1.3 Deixis, evidentiality, motion, repetition and other grammatical features in the proclitics

We return now to some of the grammatical features mentioned earlier which get fused with the basic TAMP proclitic. Tables 6.12 and 6.13 below repeat information largely provided in Henderson (1995:104-7). As can be seen by inspection, there are no obvious rules here - each of the cells must be learnt: even though sometimes the added information has the reflex of a separate clitic, this is often unpredictable, and other times it is incorporated in portmanteau form in the one clitic. The degree of synthesis vs. analyticity varies somewhat over these incorporated grammatical features - roughly, the order in which they are discussed is towards greater transparency and analyticity.

### 6.1.3.1 Deixis

There is only one spatial deictic incorporated into the proclitic, namely a 'hither' particle. The absence of the particle pragmatically implicates 'thither', in a manner similar to English come (deictically marked) and go (unmarked). The 'thither' interpretation can be reinforced in various ways, including the use of the motion marker (see below).

The irregularity of the fusion of particles into the proclitic can be well illustrated by the case of the deictic particle. Deictic 'hither' has two basic reflexes $a$ and -nê, but which is operative in any one cell is not predictable: e.g. in the Punctual paradigm, 'hither' $+d p \hat{\imath}$ '1Plural Immediate Past' $\rightarrow d p: o$, but 'hither' + the very same $d p \hat{\imath}$ when meaning ' 2 Dual Immediate Past' $\rightarrow d p o$, or 'hither' $+d p \hat{\imath}$ '1PluralHabitual' $\rightarrow$ dpîno. Similarly 'hither' + dmye has the realization dmyinê when it means ' 2 Plural Immediate Past' and dmyino when it means ' 1 Dual/2Plural Habitual'. Incidentally, the $a$ morpheme when written as a separate succeeding form is auditorily distinct as a separate syllable. The two deictic tables, one for each aspect, follow:

Table 6.12: Punctual Aspect: Deictic 'hither' ( $a /-n \hat{e}$ ) plus core proclitics (basic non-deictic forms in parentheses for comparison) (after Henderson 1995:106).

| Mood | Tense | Person of Subject | Number of Subject |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Singular | Dual | Plural |
| Indicative | Future (today or later) | 1 | anê (anî) | anyinê (anyi) | anmo (anmî) |
|  |  | 2 | anyinê (anyi) | adpo (adpî) | anmyi nê (anmyi) |
|  |  | 3 | $a-a$ (a) |  |  |
|  | Immed. Past (today) | 1 | $d: a(d i)$ | dnyinê (dnye) | $d p: o$ (dpî) |
|  |  | 2 | cha (chi) | $d p o$ (dpî) | dmyinê (dmye) |
|  |  | 3 | $d a(d \hat{e})$ |  |  |
|  | Near Past $\dagger$ (yesterday) | 1 | $n \hat{e}$ (nî) | nyinê (nyi) | nmo (nmî) |
|  |  | 2 | nyinê (nyi) | dpo (dpî) | nmyinê (nmyi) |
|  |  | 3 | $a(\emptyset)$ |  |  |
|  | Remote Past $t$ (before yesterday) | 1 | $n \hat{e}$ (nî) | nyinê (nyi) | nmo (nmî) |
|  |  | 2 | nyinê (nyi) | dpo (dpî) | nmyinê (nmyi) |
|  |  | 3 | $a(\emptyset)$ |  |  |
| Habitual |  | 1 | $d p: o$ (dpî) | dmyino (dmye) | dpîno (dpî) |
|  |  | 2 | dpye (dpyi) | dpyo (dpî) | dmyino (dmye) |
|  |  | 3 | dpo (dpî) |  |  |
| Imperative | Immed. (now) | (all) | $\emptyset$ |  |  |
|  | Deferred (later) | 1 | - | pidê (paa) |  |
|  |  | 2/3 | dpo (dpî) |  |  |

$t$ Identical sets of proclitics in these two tenses are differentiated by tense suppletions in the verb root

Table 6.13: Continuous Aspect: Deictic ‘hither’ (a/-nê) plus core proclitics (basic non-deictic forms in parentheses for comparison) (after Henderson 1995:107).

| Mood | Tense | Person of Subject | Number of Subject |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Singular | Dual | Plural |
| Indicative | Distal Future (tomorrow) | 1 | anaa (anyi) | $\begin{aligned} & \text { any:oo a } \\ & \text { (anyi) } \end{aligned}$ | anmo a (anmî) |
|  |  | 2 | anya a (anyi) | adp:o* (adpî) | anmya a (anmyi) |
|  |  | 3 | ada a (adî) | adp:o* (adpî) | a dnya a (adnyi) |
|  | Imm.Future (today) | 1 | nînê (n:aa) | nyinê (nye) | $n m i ̂-n e ̂ ~(n m o) ~$ |
|  |  | 2 | nyinê (nye) | dpîdê (dpo) | nmyinê (nmye) |
|  |  | 3 | wunê (a) |  |  |

Table 6.13 (continued)

| Mood | Tense | Person of Subject | Number of Subject |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Singular | Dual | Plural |
|  | Present $\dagger$ | 1 | nînê (anî) | nyinê (anye) |  |
|  |  | 2 | nyinê (anyi) | dpîdê (adpî) | nmyinê (anmye) |
|  |  | 3 | wunê (a) |  |  |
|  | Immed.Past | 1 | $n e \hat{(n i ̂)}$ | nyinê (nyi) | nmo (nmî) |
|  | (Earlier today) | 2 | nyinê (nyi) | dpo (dpî) | nmyinê (nmyi) |
|  |  | 3 | $a(Ø)$ |  |  |
|  | Near Past | 1 | na a (nî) | ny:oo a (ny:oo) | $n m o$ ( $n m i ̂)$ |
|  | (yesterday) | 2 | nya a (nyi) | dpo a (dpî) | nmya a (nmyi) |
|  |  | 3 | da a (dî) | dpo a (dpî) | dnya a (dnyi) |
|  | Remote Past | 1 | noo a (noo) | nyipu a (nyipu) | nmee a (nmee) |
|  | (before yesterday) | 2 | nyoo a | dpîmo a | nmyee a (nmyee) |
|  |  |  | (nyoo) | (dpîmo) |  |
|  |  | 3 | doo a (doo) | dpîmo a <br> (dpîmo) | dnya a (dnye) |
| Habitual | Prox $\ddagger$ <br> (still continues) | 1 | nînê (n:aa) | nyinê (nye) | nmînê (nmo) |
|  |  | 2 | nyinê (nye) | dpîdê (dpo) | nmyinê (nmye) |
|  |  | 3 | wunê (a) |  |  |
|  | Distal (discontinued action) | 1 | nîmo a <br> (nîmo) | nyimo a <br> (nyimo) | nmîmo a <br> (nmîmo) |
|  |  | 2 | nyimo a <br> (nyimo) | dpîmo a <br> (dpîmo) | nтуіто a <br> (nmyimo) |
|  |  | 3 | dpîmo a <br> (dpîmo) |  | dnyimo a <br> (dnyimo) |
| Imperative | (now or later) | 1 | - | pîdê (Ø) |  |
|  |  | 2 | cha a (chi) | choo a (choo) | dmyina a <br> (dmyinê) |
|  |  | 3 | choo a (choo) | dny:oo a (dny:o |  |

* adpo a without the nasal is also acceptable
$\dagger$ With deictic 'hither' the Present tense is collapsed with the Immediate Future, and takes the same proclitics.
$\ddagger$ Note that the Habitual Proximal is now collapsed with the Immediate Future forms.

The 'hither' particle is, for some verbs, obligatorily required: 66 verbs in a lexical database of 340 take the 'hither' particle obligatorily, thus acquiring irregular inflection. These include verbs which have no obvious motion component. When motion verbs require this marking, like pwiyé 'move, go, come', the 'hither'
interpretation is in fact not fixed. Note below how the 'come/go' opposition can be coded with 'hither' plus lê/lêpî 'go/going', or by opposing lê to pwiyé. Finally, note how statives like $d p \hat{\imath}$ 'sleep' with 'hither' have a 'here' interpretation:
a. da lê
b. dêlê
c. (k) a pwiyé knî
d. al:ii kî yedê pwiyé knî
'he came here (today)'
'he went (today)'
'he's coming'
e. al:ii wunê lêpî 'he’s coming here' (= al:ii wunê pwiyé knî)
f. (k)a lêpî
'he's going'
g. Yidika wunê dpî 'Yidika's sleeping (here)'

### 6.1.3.2 Evidentials

There are two evidential markers kî and $w u$ which, in a similar way to $a / n \hat{e}$ 'hither', get incorporated into the proclitics in a haphazard manner. Henderson (1995:48-49) provides the examples in Table 6.14, and implies that fusion only takes place in these forms (I interpret his remarks on $n m o$ as in fact applying to non-past tenses), but there are other, more regular (or phonologically predictable) conflations, e.g. $k \hat{\imath}+d \hat{e} \rightarrow k e ̂ d e ̂$ where the intervocal $d$ becomes a retroflex flap. These fusions are optional, not obligatory.

Table 6.14: $K \uparrow$ ‘'Evidential - certain’: some examples of incorporation into the core proclitic (These conflations are optional).

| Core TAMP | elements fused | fused result |
| :--- | :--- | :--- |
| Contin. 3.Present | $k \hat{\imath}+a$ | $k a$ |
| 1PI. | $k \hat{\imath}+n m \hat{\imath}$ | $k u n u$ |
| Contin. Imm.Past \& Near Past |  |  |
| Punct. Near Past \& Remote Past |  | $k u d u$ |
| Contin. $\quad$ 2Pl.IMM/ | $k \hat{\imath}+d p \hat{\imath}$ |  |
|  | 2Pl/DualNear.Past |  |
| Punct. $\quad$ 1PL/2DualıMM |  |  |
|  | 2/3Dual.NrPST |  |
| 1PL.Cont.Imm.Future/Prox.Hab | $k \hat{\imath}+n m o$ | $k u n o$ |

These fusions seem to be form-based rather than meaning-based, as shown e.g. by the following, where $k \hat{\imath}+d p \hat{\imath}$ is fused to $k u d u$ regardless of the many meanings of $d p \hat{i}$ :
(99) kudu lee dmi 'they3/we3 went earlier today'
kudu lepî mo 'you2 were going earlier today'
kudu lee knî 'you2 already went there today?'

The following examples give some idea of the contexts of use of these evidentials. Essentially, the speaker asserts that they have certain knowledge that the proposition holds (in many cases this will amount to having witnessed the event). The form is thus not usable in e.g. future or imperative contexts.
a. Yidika $a \quad d p \hat{\imath}$ ?

Yidika 3CIPROX sleeping 'Is Yidika asleep?'
b. $K a d p \hat{\imath}$

CERT.3CIPROX sleeping
'Yes he's asleep'
a. Aani Dâmu'nuwo doo n:ee

Aani Damenu NEG.3PI.IMM go.NEGpolarity
'(The boat) Aani hasn't left (earlier today) for Damenu'
b. kêle, kêle, kêdê lê

No, no, CERT.3PI.IMM go
'No, you are wrong, it has definitely gone already’
(102) kudu lêp̂̂ mo maa p:uu

CERT.2d/pl.CI.NrPST going dCI.PROX.Intrans road ON
$a$ péé dpî
my basket 2dPINrPST
m:uu ngmê
see PFS.3OPI.PROX
'While you2 were walking on the road, you2 saw my basket'

The kî element itself fuses with other elements. The following tables (Tables 6.15 and 6.16) give the full analytic (non-fused) forms of $k \hat{\imath}+$ proclitic in bold, contrasted to $k \hat{\imath}+$ CLOSE, the 'hither' or deictic proximal element (mostly $-a$ ) in roman (nonbold), illustrated with two intransitive verbs, lê 'go' and kudu 'wash self'. Because of this possible contrast, kî alone implicates a 'thither' directionality.

Table 6.15: Kî ('Certain') with Punctual Proclitic Paradigm, 'hither’(CLS) forms compared. Bold indicates kî fused only with basic TAM marker, implying 'away' movement (illustrated with verb lê 'go'). Non-bold indicates kî +CLS, i.e. fused with 'hither' marker (illustrated with another intransitive verb kudu/kpêe 'wash oneself'), except where kî is not usable (Future and Imperative) when 'hither' alone is coded.

|  | SING | DUAL | PLURAL |
| :---: | :---: | :---: | :---: |
| Future (Tomorrow) <br> (kî not usable) |  |  |  |
| 1 <br> (non-bold forms are +CLS) | (*kî wanê lê) wanê kudu | wa nyinê kpêê knî | wa nmo kpêê dmi |
| 2 | wanyinê kudu | wa dpo kpêê knî | wa nyinê kpêê dmi |
| 3 | wa a kudu | wa a kpêê knî | wa a kpêê dmi |
| Imm Past (Today) |  |  |  |
| 1 | kîdî lê kîd:a kudu | kî dnye lee knî kîdnyinê kpêê knî | kî dpî lee dmi kîd:o kpêê dmi |
| 2 | kichi lê ché kudu | kî dpî lee knî = kudu dpoo kpêê knî | kî dmye lee dmi dmyinê kpêê dmi |
| 3 | kêdê lê <br> kêda kudu | kê dê lee knî kedâ kpêê knî | kê dê lee dmi kêda kpêê dmi |
| Near Past (Yesterday) |  |  |  |
| 1 | kî nê lê = <br> kunu lê <br> kînî kudu | kî nyi lee knî kînyinê kpêê knî | kî nmî lee dmi = kunu kî nmo kpêê dmi |
| 2 | kî nyi lê nyinê kudu | kî dpî lee knî = kudu lee knî dpo kpêê knî | kî nmyi lee dmi nmyinê kpêê dmi |
| 3 | kî lê <br> ka a kudu | kî lee knî ka a kpêê knî | kî lee dmi ka a kpêê dmi |
| Rem. Past (day before yesterday and before) |  |  |  |
| 1 NB nî vs. nê is distinctive here for +/-CLS* | kî nî loo <br> kî nê kpêê wo | kî nyi lee knâpwo kî nyinê kpêê knopwo | kî nmî lee dniye kînmo kpêê dniye |
| 2 | kî nyi loo <br> (ki) nyinê kpêê wo | kî dpî lee knâpwo = kudu lee knâpwo dpo kpêê knopwo | kî nmyi lee dniye nmyi nê kpêê dniye |
| 3 | kî loo <br> ka a kpêê wo | kî lee knâpwo ka a kpêê knopwo | kî lee dniye ka a kpêê dniye |

Table 6.15 (continued)

|  | SING | DUAL | PLURAL |
| :---: | :---: | :---: | :---: |
| Imperative <br> (kî not usable) |  |  |  |
| 1 |  | a pîdê kpêê knî | a pîdê kpêê <br> kmêle |
| 2 | dpo kwidi | dpo kpêê cho | dpo kpêê, dmyeno |
| 3 | dpî lee wee 'he should go' dpo kpêê we | dpo kpêê dniye | dpo kpêê dniye |
| Habitual |  |  |  |
| 1 | kî dpî lê <br> dp:o kudu | kî dpye lee knî dmyino kpêê knî | kî dpy:e lee dmi dpîno kpêê dmi |
| 2 | kî dpye lê <br> dpye kudu | kî dpyo lee knî dpyo kpêê knî | kî dmye lee dmi dmyino kpêê dmi |
| 3 | kî dpî lê dpo kudu | kî dpî lee knî = kudu dpo kpêê knî | kî dpî lee dmi dpo kpêê dmi |

* kî nî loo ‘I went there’ vs. kî nê loo 'I came here’ (+CLS)

Table 6.16: $K \hat{\imath}$ ('certain’) + Continuous proclitic paradigm, and kî with Motion. Bold indicates kî fused only with core proclitic, implying 'away' movement (illustrated with verb lêpî 'going'). Non-bold indicates kî +MOTION (MOT) with core proclitic, i.e. fused with 'going to' marker (illustrated with another intransitive continuous verb kuku 'wash oneself', with kê forms where available (not in FUT or IMP)).

|  | SING | DUAL | PLURAL |
| :---: | :---: | :---: | :---: |
| Distal Future (tomorrow) (kê not usable) |  |  |  |
| 1 | wanî n:aa kuku | wa ny:oo n:aa kuku | wa nmî n:aa kuku |
| 2 | wa nyi n:aa kuku | wa dpî n:aa kuku | wa nmyi n:aa kuku |
| 3 | wadî n:aa kuku | wa dpî n:aa kuku | wa dnyi n:aa kuku |
| Imm. Future (today) (kê not usable here) |  |  |  |
| 1 | numo kuku | nyumo kuku mo | nmumo kuku té |
| 2 | nyumo kuku | dpumo kuku mo | nmy:umo kuku té |
| 3 | wumê kuku | wumê kuku mo | wumê kuku té |

Table 6.16 (continued)

|  | SING | DUAL | PLURAL |
| :---: | :---: | :---: | :---: |
| earlier today |  |  |  |
|  | kî nî kuku <br> kî n:uu kuku | kî nyi kuku mo kî ny:uu kuku mo | kî nmî kuku té kînm:uu kuku té |
|  | kî nyi kuku kî ny:uu kuku | kî dpî kuku mo kî dp:uu kuku mo | kî nmyi kuku té kî nmy:uu kuku té |
|  | kî kuku <br> kîmî kuku | kî kuku mo kîmî kuku mo | kî kuku té kîmî kuku té |
| yesterday |  |  |  |
| 1 | kî nî lêpî kînî n:aa kuku | kî ny:oo lêpî <br> kî ny:oo n:aa kuku | kî nmî lêpî nmîn:aa kuku |
| 2 | kî nyi lêpî nyi n:aa kuku | kî dpî lêpî dpî n:aa kuku | kî nmyi lêpî nmyi n:aa kuku |
| 3 | kêdê lêpî <br> kîdî n:aa kuku | kê dpî lêpî kuku/dpî n:aa kuku | kê dnyi lêpî <br> kîdnyi n:aa kuku |
| rempast |  |  |  |
| 1 | kî n:oo lêpî kî n:oo n:aa kuku | kî nyipu lêpî <br> kînyipu n:aa kuku | kî nmee lêpî <br> kî nmee n:aa kuku |
| 2 | kî nyoo lêpî nyoo n:aa kuku | kî dpîmo lêpî dpîmo n:aa kuku | kî nmyee lêpî <br> nmyee n:aa kuku |
| 3 | kê doo lêpî kîdoo n:aa kuku | kê dpîmo lêpî <br> kî dpîmo n:aa kuku | kê dnye lêpî <br> kî dnye n:aa kuku |
| Habitual Proximal (still continuing) |  |  |  |
| 1 | kî n:aa lêpî yédi <br> kî numo kuku yédi | kî nye lêpî nódó <br> kî nyumo kuku nódó | kî nmo lêpî nyédi =kuno kî nmîmo kuku nyédi |
| 2 | kî nye lêpî yédi kî nyimo kuku yédi | kî dpo lêpî nódó <br> kî dpîmo kuku nódó | kî nmye lêpî nyédi kî nmyimo kuku nyédi |
| 3 | ka lêpî yédi kî wumê kuku yédi | ka lêpî nódó <br> kî wumê kuku nódó | ka lêpî nyédi kî wumê kuku nyédi |

Table 6.16 (continued)

|  | SING | DUAL | PLURAL |
| :--- | :--- | :--- | :--- |
| Habitual Distal <br> (discontinued action) |  |  |  |
| $\mathbf{1}$ | kî nîmo lêpî <br> kîmo n:aa kuku | kî nyipu lêpî nyipu n:aa kuku <br>  | kî nyimo lêpî <br> kî nyimo n:aa $n m i ̂ m o ~ l e ̂ p i ̂ ~$ <br> nî |
|  | kuku | kî dpîmo lêpî | kî dpîmo n:aa kuku |

Imperative:
(No use of kê)

|  | numo kuku | nye kuku knî | nye kuku kmêle |
| :--- | :--- | :--- | :--- |
|  | chi n:aa kuku | choo n:aa kuku | dmyinê n:aa kuku |
| choo n:aa kuku | dny:oo n:aa kuku | dny:oo n:aa kuku |  |

The evidential element contrastive to kî is $w u$. The $w u$ evidential seems to mean 'indirectly ascertained, uncertain', in line with its use as a demonstrative (see §4.2.2.3); this analysis differs from Henderson's (1995:49). Not surprisingly, it regularly occurs with use of the Future tenses (and there especially with the Punctual aspect), especially in questions, but not in the first person, where speakers would be expected to know their own intentions (example from Henderson 1995:49):

| a. | Naa têdê w-anyi |
| :--- | :--- |
|  | Feast place UNCERT-2sFUTPI |
|  | 'Are you going to the feast?' |
| b. | Kêle, daa-n̂̀ nê |
|  | No, NEG-1sFUTPI go.NegPol |
|  | 'No, I'm not going' |

The question naturally arises whether wu can be taken to be an irrealis marker, common in Papuan languages (Foley 1986:159ff). However, its optionality in future statements suggests that it is indeed an evidential, or a marker of the degree of uncertainty associated with the relevant facts.

I do not provide a full paradigm here in Tables 6.17 and 6.18, because the forms are largely compositional. It is easy to confuse the evidential $w u$ with the counterfactual antecedent clauses with proclitics based on $w$ - (there may well be a diachronic
relation between the paradigms), which have deontic force if used alone. Further, the future tenses tend to use $w u$ since the evidence for most such events is indirect. For example, wa lê 'he will go' fuses wu with a 'Future marker', but waa lê 'he should have gone', is the counterfactual form. The counterfactuals are dealt with extensively in §8.3.

Table 6.17: $W u+$ Punctual Future forms (with PI verb kudu 'wash yourself'). bold_= wu + core proclitic and lê 'go', non-bold forms forms show wu+CLS+core proclitic, i.e. fused with 'hither' marker, with kudu/kpêê 'wash'.

| Future (today or later) | SING | DUAL | PLURAL |
| :--- | :--- | :--- | :--- |
| $\mathbf{1}$ | wa nê lê | wa nyi lee knî | wa nmî lee dmi |
|  | wanê kudu | wa nyinê kpêê knî | wa nmo kpêê dmi |
| $\mathbf{2}$ | wa nyi lê | wa dpî lee knî | wa nmyi |
|  | wanyinê kudu | wa dpo kpêê knî | wa nyinê kpêe dmi |
| $\mathbf{3}$ | wa lê (will) | wa lee knî | wa lee dmi |
|  | wa a kudu | wa a kpêê knî | wa a kpêê dmi |

Proclitics with $w u$ are used to indicate inferred actions or states, as illustrated below:

```
(104)
a. m:ââ pâândîl, Mundi wu doo n:ee
Low.tide big Mundi UNCERT 3NEG.IMM.PI go.NEG
'It was a big low tide, Mundi didn’t go (I suppose, his boat could not leave)'
b. m:iituwo yópu pââ ndîn, Diakonos wu
day.before.yesterday wind big Diakonos UNCERT dêpê n:ee
3IMM.PI.CLS go.NEG
'The day before yesterday there was a big wind, MV Diakonos surely didn't set off'
c. tpii ghay ma, wu daa lóó
rain fell yesterday UNCERT 3NEG.NrPST cross.over 'Yesterday it rained, he would not have crossed (over the mountains)'
d. wo mb:aa Pikuwa Ghaalyu Tââchó wu dî
day good Pikuwa Ghaalyu Tââchó UNCERT 3sIMM.PI
lee knî
go.FOL 3dS.Intrans
'It's clear weather, Pikuwa and Ghaalyu will have gone to Tââchó pass today (up the mountain as planned)'
```

Table 6.18: $W u+$ Continuous Aspect forms (with kuku 'washing (oneself)'. Bold forms are $w u+$ base proclitic, roman forms are $w u+$ MOT (associated motion 'on the way to', see 6.1.3.3).

|  | SING | DUAL | PLURAL |
| :---: | :---: | :---: | :---: |
| Distal Future (Tomorrow) |  |  |  |
| 1 | wanî kuku wanî n:aa kuku | wa ny:oo kuku wa ny:oo n:aa kuku | wa nmî kuku wa nmî n:aa kuku |
| 2 | wa nyi n:aa kuku | wa dpî n:aa kuku | wa nmyi n:aa kuku |
| 3 | wadî n:aa kuku | wa dpî n:aa kuku | wa dnyi n:aa kuku |
| Present (Now) |  |  |  |
| ```1 (wu inconsistent with 1 'st Person)``` | (*wu) n:aa kuku (*wu) numo kuku | (*wu) nye kuku mo (*wu) nyimo kuku mo | (*wu) nmo kuku té (*wu) nmîmo kuku té |
| 2 | wu nye kuku wu nyimo kuku | wu dpo kuku mo wu dpîmo kuku mo | wu nmye kuku té wu nmyimo kuku té |
| 3 | wu a kuku wu wumê kuku | wu a kuku mo wu wumê kuku mo | wu a kuku té wu wumê kuku té |


| a.mbwaa Nimowa $k a$ tóó, wu |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| fresh.water | Nimowa | CERT3s.CI | sitting | UNCERT |
| nye | $k u k u$ |  |  |  |
| 2sPRES | bathing |  |  |  |
|  | 'There's water at Nimowa, you will be bathing there' |  |  |  |

b. u mî pyââ dê pw:onu, 3sPOSS father woman 3sIMM.PI die.PROX, wu wumê lêpî UNCERT 3FUT.CI.MOT going
'His aunt died, so he'll be going'
c. Ghaapwé mbii, ngomo k:oo wu wunê

Ghaapwé ill house inside UNCERT 3PRES.CI.CLS
tóó
sitting
'Ghaapwé is ill, he'll be in his house'

Notice that there are proclitic forms like wumê and wunê which appear to incorporate wu but are actually forms indicating motion towards or away - they may occur with or without wu:
(106) a. wumê lêpî

3FUT.CI.MOT going
'He’s going away’


### 6.1.3.3 Associated motion

There is a motion element, vaguely reminiscent of the Central Australian 'associated motion' systems (except that those constitute elaborate paradigms; Guillaume \& Koch 2021), which can occur with any non-motion verb V, meaning 'go and V', or 'go-in-order-to V'. This element can also occur with basic motion verbs, unlike the Australian counterparts.

The basic forms are given in Tables 6.19 and 6.20 below, from Henderson (1995). Note once again, that although there are regularities, with replacement of the final vowel of the core proclitic with nasal -: uu for example, or use of $m \hat{l}$ in $3^{\text {rd }}$ person forms, or frequent affixation of -n:aa elsewhere, the occurrence of these realizations is not fully predictable. Typically, but again unpredictably, parts of the paradigm are borrowed from elsewhere - e.g. the Continuous Immediate Future + Motion proclitics are the same as the Habitual Proximal ones.

Table 6.19: Punctual Aspect: Associated motion ( $n: a a / m i ̂)$ plus core proclitics (basic non-deictic forms in brackets for comparison) (after Henderson 1995:104).

| Mood | Tense | Person of Subject | Number of Subject |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Singular | Dual | Plural |
| Indicative | Future <br> (today or later) | 1 | an:uu (anî) | any:uu (anyi) | anm:u (anmî) |
|  |  | 2 | any:uu (anyi) | adp:uu (adpî) | anmy:uu (anmyi) |
|  |  | 3 | $a-m i ̂(a)$ |  |  |
|  | Immed. <br> Past <br> (today) | 1 | dî-n:aa (dî) | dnyi-n:aa (dnye) | $d p \hat{i}-n: a a(d p \hat{)}$ |
|  |  | 2 | chi-n:aa (chi) cho-n:aa* | dpî-n:aa (dpî) | dmye-n:aa (dmye) |
|  |  | 3 | d:uu (dê) |  |  |
|  | Near Past $\dagger$ (yesterday) | 1 | n:uu (nî) | ny:uu (nyi) | nm:uu (nmî) |
|  |  | 2 | ny:uu (nyi) | dp:uu (dpî) | nmy:uu (nmyi) |
|  |  | 3 | mî (Ø) |  |  |

Table 6.19 (continued)

| Mood | Tense | Person of Subject | Number of Subject |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Singular | Dual | Plural |
|  | Remote | 1 | n:uu (nî) | ny:uu (nyi) | nm:uu (nmî) |
|  | Past $t$ | 2 | ny:uu (nyi) | dp:uu (dpî) | nmy:uu (nmyi) |
|  | (before yesterday) | 3 | mî(Ø) |  |  |
| Habitual |  | 1 | $d p i ̂-n: a a ~(d p \hat{)}$ | dmye-n:aa (dmye) | $d p i ̂-n: a a(d p \hat{1})$ |
|  |  | 2 | dpyi-n:aa (dpyi) | $d p i ̂-n: a a(d p \hat{)}$ | dmye-n:aa (dmye) |
|  |  | 3 | dp:uu (dpî) |  |  |
| Imperative | immed. (now) | (all) | nyi (Ø) |  |  |
|  | Deferred | 1 | - | paa-n:aa (paa) |  |
|  | (later) | 2/3 | $d p: u u$ (dpî) |  |  |

$t$ Identical sets of proclitics in these two tenses are differentiated by tense suppletions in the verb root

* takes different verb form - chi-n:aa lê (Immediate Future, 'are you going now?'), choo-n:aa loo ('you didn't go?')
a. d:uu lê
MOT.3IMM go
(lit. 'went and went') 'He went and departed’
b. nkéli kee. dî-n:aa m:uu
boat ascended. 1sIMM.MOT see
'The boat came. I went to see it'

Table 6.20: Continuous Aspect: Associated motion ( $n: a a / m i ̂)$ plus core proclitics (basic non-deictic forms in brackets for comparison) (after Henderson 1995:105).

| Mood | Tense | Person of Subject | Number of Subject |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Singular | Dual | Plural |
| Indicative | Distal Future (tommorow) | 1 | anî-n:aa (anyi) | any:oo-n:aa (anyi) | anmî-n:aa (anmî) |
|  |  | 2 | anyi-n:aa (anyi) | adpî-n:aa (adpî) | anmyi n:aa (anmyi) |
|  |  | 3 | adî a (adî) | adpî-n:aa (adpî) | adnyi-n:aa(adnyi) |
|  | Imm.Future (today)* | 1 | nîmo (n:aa) | nyimo (nye) | nmîmo (nmo) |
|  |  | 2 | nyimo (nye) | dpîmo (dpo) | nmyimo (nmye) |
|  |  | 3 | wumê (a) |  |  |

Table 6.20 (continued)

| Mood | Tense | Person of Subject | Number of Subject |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Singular | Dual | Plural |
|  | Present | 1 | (apparently not used) |  |  |
|  |  | 2 |  |  |  |
|  |  | 3 | minê (a) |  |  |
|  | Immed.Past (earlier today) | 1 | n:uu (nî) | ny:uu (nyi) | nm:uu (nmî) |
|  |  | 2 | ny:uu (nyi) | dp:uu (dpî) | nmy:uu (nmyi) |
|  |  | 3 | mî (Ø) |  |  |
|  | Near Past (yesterday) | 1 | nî-n:aa (nî) | ny:oo-n:aa (ny:oo) | $n m i ̂-n: a a(n m i ̂) ~$ |
|  |  | 2 | nyi-n:aa (nyi) | dpî-n:aa (dpî) | nmyi-n:aa (nmyi) |
|  |  | 3 | dî-n:aa (dî) | dpî-n:aa (dpî) | dnyi-n:aa (dnyi) |
|  | Remote Past (before yesterday) | 1 | noo-n:aa (noo) | nyipu-n:aa (nyipu) | nmee-n:aa (nmee) |
|  |  | 2 | $\begin{aligned} & \text { nyoo-n:aa } \\ & \text { (nyoo) } \end{aligned}$ | dpîmo-n:aa <br> (dpîmo) | nтуеe-n:aa <br> (nmyee) |
|  |  | 3 | doo-n:aa (doo) | dpîmo-n:aa <br> (dpîmo) | dnye-n:aa (dnye) |
| Habitual | Prox (still continues) | 1 | nîmo (n:aa) | nyimo (nye) | nmîmo (nmo) |
|  |  | 2 | nyimo (nye) | dpîmo (dpo) | nmyimo (nmye) |
|  |  | 3 | wumê (a) |  |  |
|  | Distal (discontinued action) | 1 | $\begin{aligned} & \text { nîmo- n:aa } \\ & \text { (nîmo) } \end{aligned}$ | nyimo-n:aa <br> (nyimo) | nmîmo-n:aa <br> (nmîmo) |
|  |  | 2 | nyimo-n:aa <br> (nyimo) | dpîmo-n:aa <br> (dpîmo) | nmyimo n:aa (nmyimo) |
|  |  | 3 | dpîmo n:aa (dp | mo) | dnyimo n:aa (dnyimo) |
| Imperative | (now or later) | 1 | - | nyi (Ø) |  |
|  |  | 2 | $\begin{aligned} & \text { chi-n:aa } \\ & \text { (chi) } \end{aligned}$ | choo-n:aa (choo) | dmyinê-n:aa <br> (dmyinê) |
|  |  | 3 | choo-n:aa (choo) | dny:oo-n:aa (dny:o |  |

*Same forms as Habitual Proximal + Motion, which are in turn nearly the same as the Habitual Distal without Motion (except for $3^{\text {rd }}$ person).
a. rice wumê pywupwi
rice 3ImmFUT.CI.MOT buying
'He's going to go and buy rice'
b. mî paambwi

3IMM.MOT wandering
'He's gone for a spin'

```
c. yâpwo têdê m\hat{\imath}}\mathrm{ dpodo
garden 3IMM.MOT working
'He's gone to work in the garden'
```


### 6.1.3.4 Associated motion combined with other features in the proclitics

Associated motion combines with the other features already mentioned, to form new portmanteau clitics. There are thus full paradigms for, e.g., Negation+Motion, Close+Motion, etc. A partial paradigm is shown here to demonstrate the nature of the alternations - the table shows Motion+Close, the deictic 'hither' element in the Punctual Aspect. These forms are quite difficult to elicit due to the subtle meaning alternations - Table 6.21 shows forms that occur with the verb pyw:oo 'to find something', which obligatorily takes+Close, while with other kinds of verbs elicitation is less certain. Negative forms also interact to make special Negative+Motion forms see the sections concerning negation.

Table 6.21: Punctual Aspect: Motion + Deictic 'hither' ( $a /-n \hat{e}$ ) proclitics (basic non-deictic forms in brackets for comparison).

| Mood | Tense | Person of Subject | Number of Subject |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Singular | Dual | Plural |
| Indicative | Future (today or later) | 1 | wa nîmo (anî) | wa nyimo (anyi) | a nmîmo (anmî) |
|  |  | 2 | wa nyimo (anyi) | wa dpumo (adpî) | wa nmyimo (anmyi) |
|  |  | 3 | wa mînê (a) |  |  |
|  | Immed. Past (today) | 1 | $a$ dî n:aa (dî) | a dnye-n:aa (dnye) | $a \mathrm{dpî}$ n:aa (dpî) |
|  |  | 2 | $a$ ? chi-n:aa (chi) | dpî n:aa (dpî) | dmye n:aa (dmye) |
|  |  | 3 | yeda (dê) | dumo (dê) |  |
|  | Near Past $\dagger$ (yesterday) | 1 | kî numo (nî) | (nyi) | (nmi) |
|  |  | 2 | nyumo (nyi) | (dpî) | nmyumo (nmyi) |
|  |  | 3 | minê ( $\varnothing$ ) |  |  |
|  | Remote | 1 | mînîmo (nî) | mînyumo (nyi) | mînmumo (nmî) |
|  | Past $t$ | 2 | nyumo (nyi) | dpumo (dpî) | nmyumo (nmyi) |
|  | (before yesterday) | 3 | kîminê ( $\varnothing$ ) |  |  |
| Habitual |  | 1 | dpî n:aa (dpî) | dmye n:aa (dmye) | dpî n:aa (dpî) |
|  |  | 2 | $\begin{aligned} & \text { mî dpyi n:aa } \\ & \text { (dpyi) } \end{aligned}$ | dpî n:aa (dpî) | dmye n:aa (dmye) |
|  |  | 3 | dpumo (dpî) |  |  |

Table 6.20 (continued)

| Mood | Tense | Person of <br> Subject | Number of Subject |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Singular | Dual | Plural |  |
| Imperative | Immed. <br> (now) | (all) | nyinê |  |  |
|  | Deferred <br> (later) | $\mathbf{1}$ | paa n:aa/pêdê n:aa (paa) |  |  |

$\dagger$ Note how these fused proclitics make the distinction Near/Remote Past which the basic nondeictic proclitics do not (the distinction is made also by tense suppletions in the verb root)
a. mââ al:ii wa nîmo pyw:ee ngi
tomorrow here IRR.FUT MOT.1sFUT find 2 sO
'Tomorrow, I will come and find you here'
b. yeda lê

MOT.3IMM go
'He came here'

The following forms both contain a deictic 'hither' meaning and a repetition meaning which is the subject of the next section.
a. wa mênê
diyé
1s.IMMFUT.PI.REP.CLS return
'I will come back here again'
b. wa mênê lê

1s.IMMFUT.PI.REP.CLS go
'I will go and come back here'
c. wa mênê m:uu

1s.IMMFUT.PI.REP.CLS see
'I will see him on the way and on the way back here'

### 6.1.3.5 Repetition feature (mê - 'again', REP) in the proclitics

This feature signals that the action was or is repeated, as in English 'He dived again', or that it restores a prior state, as in English 'He threw the fish back again' (Henderson 1995:43). The basic paradigm is illustrated below (Tables 6.22 to 6.24) for the punctual verb root diyé (so the first cell glosses 'I will return again (there) tomorrow', and for the continuous verb root lepî 'going' or d:uud:u 'trying'. Gaps in the paradigm or question marks indicate where the forms were hard to elicit.

In addition to these basic paradigms, the feature Repetition can be combined with others like Deictic Close, which is illustrated in the third paradigm in this
section (Table 6.24) with forms combining $m e ̂$ and $a$ in the punctual aspect. These forms thus mean 'do again hither', and they contrast pragmatically with the plain 'do again' forms which are taken to have a 'thither' meaning.

Table 6.22: Incorporation of mê REP ('again') PUNCTUAL Aspect (with verbs diyé ' return' or lê 'go').

|  | SING | DUAL | PLURAL |
| :---: | :---: | :---: | :---: |
| Future (today, or later) |  |  |  |
| 1 | a m:aa diyé 'I will return again tomorrow' | a m:ii diyé knî a mo diyé dmi |  |
| 2 | a m:ii diyé | a mo diyê knî | a m:ii diyé dmi |
| 3 | a mê diyé | a mê diyê knî | a mê diyé dmi |
| Imm. Past (Today) |  |  |  |
| 1 | mê dê diyé | mê dnye diyé knî | mê dpî diyé dmi |
| 2 | mê chi diyé | mê dpî diyé knî | mê dmye diyé dmi |
| 3 | maa diyé/lê | maa diyé knî | maa diyê dmi |
| Near Past (Yesterday) |  |  |  |
| 1 | m:aa diyé | m:ii diyé knî | mo diyé dmi |
| 2 | mê diyé | mê diyé knî | mê diyê dmi |
| 3 | mê diyé | mê diyé knî | mê diyé dmi |
| Remote Past <br> (day before yesterday or before) |  |  |  |
| 1 | m:aa diyé wo | m:ee diyé knâpwo | m:oo diyé dniye |
| 2 | m:ii diyé wo | moo diyé knâpwo | m:ii diyé dniye |
| 3 | mê diyê wo | mê diyé knâpwo | mê diyé dniye |
| Habitual |  |  |  |
| 1 | mê dpî diyé | mê dnye diyé knî | mê dpî diyé dmi |
| 2 | mê dpyi diyé | $m e ̂ d p i ̂ ~ d i y e ́ ~ k n i ̂ ~$ | mê dmyi diyé dmi |
| 3 | moo diyé | moo diyé knî | moo diyé dmi |
| Imperative |  |  |  |
| 1 | (counterfactual: w:aa diyé I should have returned) | mê diyé knî | mê diyé kmîle |
| 2 | mê diyé/mê dini | mê diyé choo | mê diyé dmyino |
| 3 | moo diyé we | moo diyé dniye | moo diyé dniye |
| 3 <br> (as in 'he should have returned') | wa mê diyé | wa mê diyé knî | wa mê diyé dmi |

Some glossed examples:
a. m:ii diyé kn̂̂

1Dl.PI.NrPast.REP return dS.Intrans.PROX
'We2 went back again yesterday'
b. moo diyé dmi

3HAB.PI.REP return 3Pl.Intrans.HAB/PROX
'They3 used to go back again'
c. school têdê mgîdî vy:o moo diyé kn̂̂
school place night in 3d.HAB.PI.REP return dS.Intrans 'They2 used to go back to school in the night'
d. mââa yi pââ knî m:uu a m:ii
tomorrow tree log AUG more 2plFUT.PI.REP
kp:anê t:oo?
fell FUTPI.PFS.3PlO
'Tomorrow will you3 cut more logs again?’

Table 6.23: Incorporation of mê REP ('again') in CONTINUOUS ASPECT illustrated with verb lêpî 'going' (with some additional CLOSE or 'hither' forms in brackets).

|  | SING | DUAL | PLURAL |
| :---: | :---: | :---: | :---: |
| Distal Future (tomorrow) |  |  |  |
| 1 | a m:aa lêpî'l will go again’ | a mê ny:oo lêpî | $a \mathrm{mê}$ nmîlêpî |
| 2 | a m:ii (a) lêpî/ <br> a m:ee lêpî | $a \mathrm{mê} d p \hat{l}$ lêpî | a mê nmyi lêpî |
| 3 | $a \mathrm{mê}$ lêpî | $a \mathrm{mêdpî} \mathrm{lêpî}$ | a mê dnyi lêpî |
| Present (now) |  |  |  |
| 1 | mênî lêpî | m:iil lêpî mo | mono lêpîté |
| 2 | m:ii lêpî ‘you are going back again' | modo lêpî mo | m:ee lêpîté |
| 3 | mê (ka) lêpî | mê (ka) lêpî mo | mê (ka) lêpîté |
| Immediate Past (earlier today) |  |  |  |
| 1 | m: aa lêpî | m:ii lêpî mo | m:oo lêpîté |
| 2 | m:iil lêpî | moo lêpîmo | m:iil lêpîté |
| 3 | mê lêpî | mê lêpî mo | mêl lêpîté |
| Near Past (Yesterday) |  |  |  |
| 1 | m: aa lêpî | mê ny:oo lêp | mênmîlêpî |
| 2 | m:ii/ mê nyi lêpî | mudu/mê dpî lêp | mênmyi lêpî |
| 3 | mêdê lêpî | mudu/mê dpî lêpî | mêdnyi lêpî |

Table 6.23 (continued)

|  | SING | DUAL | PLURAL |
| :---: | :---: | :---: | :---: |
| Remote past (the days before yesterday) |  |  |  |
| 1 | mê noo lêpî | mê nyipu lêpî | mê nmee lêpî |
| 2 | mê nyoo lêpî | mê dpîmo lêpî | mê nmyee lêpî |
| 3 | mê doo lêpî | mê dpîmo lêpî | mê dnye lêpî |
| Habitual |  |  |  |
| 1 | n:aa lêpî yédi | m:ii lêpî nódó | nmo lêpî nyédi |
| 2 | m:ii lêpî yédi | dpo lêpî nódó | nmyo lêpî nyédi |
| 3 | mê lêpî yédi | mê lêpî nódó | mê lêpî nyédi |
| Imperative |  |  |  |
| 1 | - | mê lee knî | mê lee dmyino |
| 2 | mê chi lêpî | mê choo lêpî | mê dmyinê lêpî |
| 3 | mê choo lêpî | mê dny:oo lêpî | mê dny:oo lêpî |

Some glossed examples:
a. m:ii lepî

REP2sPROXPastCI. going
'You are going again (today)?'
b. mê dpîmo d:uud:uu

REP 2/3dREMCI doing
'They were doing it again (the day before yesterday or before)'
c. mêdê diyé dmyino, al:ii mê

REP.CLS returning IMP.REP.1pl.CI, here REP
dmyinê dpodo
IMP.REP.2pl.CI working
'We must come back again, you3 must work again here'

Table 6.24: REPETITION + CLOSE Punctual Aspect (with verb diyé 'return').

| Future <br> (Today, Tomorrow or later) | SING | DUAL | PLURAL |
| :--- | :--- | :--- | :--- |
| $\mathbf{1}$ | a mênê diyé | a mênyinê diyé knî | a mono diyé dmi |
| $\mathbf{2}$ | a mênyinê diyé | a modo diyê knî | a mê nmyinê diyé <br> dmi |
| $\mathbf{3}$ | a mêda diyé | a mêda diyê knî | a mêda diyé dmi |

Table 6.24 (continued)

| Future <br> (Today, Tomorrow or later) | SING | DUAL | PLURAL |
| :---: | :---: | :---: | :---: |
| Imm. Past (Today) |  |  |  |
| 1 | mêd: a diyé | mê dnyinê diyé knî | mod:oo diyé dmi |
| 2 | mê cha diyé | mê dpo diyé knî | mê dmyinê diyé dmi |
| 3 | mêda diyé | mêda diyé knî | mêda diyê dmi |
| Near Past (Yesterday) |  |  |  |
| 1 | mênê diyé | mê nyinê diyé knî | mono diyé dmi |
| 2 | mê nyinê diyé | mê modo diyé knî | mê nmyinê diyê dmi |
| 3 | mêda diyé | mê mêda diyé knî | mêda diyé dmi |
| Remote past (before yesterday) |  |  |  |
| 1 | mênê diyé wo | mê nyinê diyé knâpwo | mono diyé dniye |
| 2 | mê nyinê diyé wo | modo diyé knâpwo | mê nmyiné diyé dniye |
| 3 | mêda diyê wo | mêda diyé knâpwo | mêda diyé dniye |
| Habitual |  |  |  |
| 1 | mê dp:o diyé | mê dmy:ee diyé knî | mê dp:o diyé dmi |
| 2 | mê dpy:ee diyé | mê dp:o diyé knî | mê dmy:ee diyé dmi |
| 3 | mê dpo diyé/modo diyé | mê dpo diyé knî | mê dpo diyé dmi |
| Imperative |  |  |  |
| 1 | - | mê pêdê diyé knî | mê pêdê diyé kmîle |
| 2 | modo dini/diyé | modo diyé choo | modo diyé dmyino |
| 3 | modo diyé we | modo diyé dniye | modo diyé dniye |

Some glossed examples:
a. modo
pwiyé
REP.2IMP.PI come
'You must come back again'
b. mw:aandiye $d p \hat{\imath}$ lee $d m i$, morning 1pl.IMM.PI go IntransPI.plS
al:ii mod:oo diyé dmi
here1 1pl.REP.IMM.PI return plS.PROX.PI.Intrans
'This morning we3 went, and we3 came back again here'

### 6.1.3.6 Commonality feature (mye - 'also') in the proclitics

This feature indicates some parallel between actions as with English 'also', but it may in addition indicate an action repeated with similar result (as in 'He still didn't see it' - see Henderson 1995:42-3). Tables 6.25 and 6.26 illustrate some of the options: the first gives the Punctual aspect proclitics + 'also' combined with deictic 'hither', the second the core Continuous aspect proclitics + 'also'.

Table 6.25: 'Also' with and without CLS 'Hither' - PUNCTUAL forms (incorporation of mye in Pre-N).

|  | SING | + CLOSE | DUAL | + CLOSE | PLURAL | + CLOSE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Future (today, tomorrow) |  |  |  |  |  |  |
| 1 | a mya | (w) a my:enê | wa myiy:e | (w)amyenyinê | wamy:oo | wamyeno |
| 2 | a myiy:e | amy:eny:inê | amyoo | amyedo | amy:ee | amyenmyinê |
| 3 | amy:e | amy:edê | amy:e | amy:edê | amy:e | amy:edê |
| Today |  |  |  |  |  |  |
| 1 | myide | myed:a | myednye | kî mye dnyinê | kî myidu | kî myid:o |
| 2 | myechi | myecha | myidu | myedpo | myedmye | myedmyinê |
| 3 | kî mya | myeda | myaa | myedê | myaa | kî myedê |
| Yesterday |  |  |  |  |  |  |
| 1 | kî mya | kî myenê | kî myiy:e | kî myenyinê | kîmy:oo | kîmyeno |
| 2 | myiy:e | my:ennyinê | myoo | myedo | my:ii | myenmyinê |
| 3 | kî mye | myedê | kî mye | kî myedê | kî mye | kî myedê |
| Rempast (same as yesterday) |  |  |  |  |  |  |
| 1 | kî mya | kî myenê | kî myiy:e | kî myenyinê | kîmy:oo | kîmyeno |
| 2 | myiy:e | my:ennyinê | myoo | myedo | my:ii | myenmyinê |
| 3 | kî mye | kî myedê | kî mye | kî myedê | kî mye | kî myedê |
| Habitual |  |  |  |  |  |  |
| 1 | myidu | myed:oo | myednye | myednyimo | myidu | myed:oo |
| 2 | myedpyi | myedpye | myoo | myedpye | myedmye | myedmyino |
| 3 | myoo | myedo | myoo | myoo | myoo | Myoo |
| Imperative (add following paa for Deferred Imperative) |  |  |  |  |  |  |
| 1 | paa |  | mye mye paa | myepîdê <br> myedê | mye mye paa | myepîdê <br> myedê |

Table 6.25 (continued)

|  | SING | +CLOSE | DUAL | +CLOSE | PLURAL | +CLOSE |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{2}$ | myoo (def) <br> mye (now) | myedo | myedê |  |  |  |


| a. Kââti | da | lê. | Myedpo |
| :--- | :--- | :--- | :--- |
| Kââti | 3sIMM.PI.CLS | go. | 2d.ALSO.ImmFut.PI |
| lee | knî? |  |  |
| go.FOL | 3d.sS.IV |  |  |
| 'Kââti came. Did you2 also come here earlier today?' |  |  |  |

b. Misima dp̂̂ lê, Alotau myoo lê,

Misima 3HAB.PI go, Alotau 3HAB.PI.ALSO go,
Njinjópu modo lê
Njinjópu 3HAB.PI.REP.CLS go
'He used to go to Misima, also to Alotau (not just Misima), and then come back again to Njinjópu'
c. naa têdê myedo lili
feast time/place 2sIMP.PI.ALSO go.2sIMP
'You also must come for the feast'
d. Mwonî dpî lê Yélî 'nuwo meeting têdê,

Mwonî 3sHAB.PI go Rossel point meeting time/place,
myidu lê
1sHAB.PI.ALSO go
'Mwonî used to go to East Point for meetings, and I also used to go'

Table 6.26: CONTINUOUS ASPECT + mye 'Also’.

|  | SING | DUAL | PLURAL |
| :--- | :--- | :--- | :--- |
| Distal Future (tomorrow) |  |  |  |
| $\mathbf{1}$ | amyenî | amyeny:oo | amyenmî |
| $\mathbf{2}$ | amyinyi | amyedpî | amyenmyi |
| $\mathbf{3}$ | amyidî | amyeepî | amyidnyi |
| Imm. Future (today) |  |  |  |
| $\mathbf{1}$ | myinî | myenye | myenmo |
| $\mathbf{2}$ | myenye | myedpo | myenmye |
| $\mathbf{3}$ | mye | mye | mye |

Table 6.26 (continued)

|  | SING | DUAL | PLURAL |
| :---: | :---: | :---: | :---: |
| Present |  |  |  |
| 1 | myinî | myenge | myenmê |
| 2 | my:ii | myedpo | myemye |
| 3 | mye | mye | mye |
| Imm. Past (earlier today) |  |  |  |
| 1 | my:aa | my:ii | myenmî |
| 2 | my:ii | myedpî | myinmyi |
| 3 | kî mye/ mye kî | mye kî | mye kî |
| Near Past (yesterday) |  |  |  |
| 1 | myinî | myeny:oo | myenmî |
| 2 | myinyi | myedpî | myinmyi |
| 3 | myidî | myedpî | myidnyi |
| Rem. Past (days before yesterday) |  |  |  |
| 1 | myenoo | kî mye nyipu | mye nmee |
| 2 | myenyoo | myedpîmo | mye nmyee |
| 3 | myedoo | myedpîmo | mye dnye |
| Habitual Proximal |  |  |  |
| 1 | myinî | myenye | myenmî |
| 2 | my:ii | myedo/ myedpo | mye nmye |
| 3 | mye | mye | mye |
| Habitual Distal |  |  |  |
| 1 | mye nîmo | mye nyimo | myenmîmo |
| 2 | mye nyimo | myedpîmo | mye nmyimo |
| 3 | mye dpîmo | mye dpîmo | mye dnyimo |
| Imperative |  |  |  |
| 1 |  | mye (paa) | mye (paa) |
| 2 | myichi | myechoo | myedmyinê |
| 3 | myechoo | mye dny:oo | myedny:oo |

$\begin{array}{lll}\text { a. } & \text { Hospital myedpîmo } & \text { lêp̂̂ } \\ \text { Hospital } & \text { 3dHAB.DIST.CONT.ALSO } & \text { going }\end{array}$
'They2 also used to go/they2 were going (day before yesterday) to the Hospital'
b. myenté Father ngê mass Hospital also priest ERG mass Hospital myedpîmo dóódóó
3sHAB.DIST.CONT.ALSO doing
'Father also takes mass to the hospital (not just the church)'

| c. Yidika ka | lêpî. | Monkî | mye | lêpî? |
| :--- | :--- | :--- | :--- | :--- |
| Yidika 3PRES.CI.CERT | going. | Monkî | 3IMMFUT.CI.ALSO | going |
| 'Yidika is going. Is Monkî too?' |  |  |  |  |

d. Hospital p:uu n:aa dpodo,

Hospital attached 1sIMM.FUT.CI working,
Yélingep p:uu myinî dpodo
Yélingep attached 1sPRES.CI.ALSO working
'I am working for the hospital, but also for the Yélingep boat'

### 6.1.4 Negation and the proclitics

Negation is one of the more complex aspects of Yélî Dnye syntax, the marking being distributed throughout the verbal complex. Negation is marked first and most directly in the proclitics, but indirectly by shifting the tense of some of the enclitics, and also by using Remote Past suppletive stems of the verb, or where available, special suppletive verbal stems. Here we deal just with the proclitic marking (see also $\S 6.2 .3$ for the enclitics - the two interact in particularly elaborate ways in the case of negative imperatives). Chapter 10 reviews how all the marking of negation combines.

### 6.1.4.1 The core negative proclitics

The negative particles for verbless clauses - nominal equatives or adjectival predications - are stand-alone particles without fusion to any TAMP elements. (Given the constructions they occur in, statements of absence of state, they could be said to have an inherently stative aspect, pragmatically presuming the present.) Table 6.27 gives these equative forms (after Henderson 1995:61) for comparison to their fused forms in TAMP proclitics. Further details of their use can be found in §7.3 on verbless clauses.

Table 6.27: Negative stand-alone particles in verbless sentences.

| Person |  | Sing | Dual | Plural |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1}^{\text {st }}$ | unmarked | $d: a a$ | $d a a$ | $d p: o o$ |
|  | before $/ \mathbf{u} /$ | $d: o o$ | $d: e e$ | $d p: o o$ |
| $\mathbf{2}^{\text {nd }}$ | unmarked | $d: i i$ | $d p o o$ | $d p: e e$ |
|  | before $/ \mathbf{u} /$ | $d: i i$ | $d p o o$ | $d p: e e$ |
| $\mathbf{3}^{\text {rd }}$ | unmarked | $d a a$ | $d a a$ | $d a a$ |
|  | before $/ \mathbf{u} /$ | $d o o$ | $d o o$ | $d o o$ |

a. d:aa Kââtiu kee

NEG1s Kââti 3Poss grandchild 'I am not Kââti’s grandson'
b. daa Kââtiu kee

NEG3s Kââti 3Poss grandson
'He is not Kââti’s grandson’
c. d:ii u w:ââ

NEG2s 3Poss MBS
'You are not his mother's brother's son'

In contrast to the stand-alone negative particles, most negative sentences are formed by selecting a portmanteau verbal proclitic that incorporates the negative meaning. These forms sometimes have an analysable compositionality involving one of the stand-alone morphemes, but mostly the forms are fairly opaque, and even homophonous with positive elements elsewhere in a paradigm. Even where they are recognizably negative in form, the actual form is not predictable from first principles - they are thus always opaque from a production point of view. Moreover, negation is so distributed in marking throughout the clause, that I devote Chapter 10 to the subject. Here in Table 6.28 and 6.29 I present just the basic punctual and continuous negative paradigms of verbal proclitics.

Table 6.28: Negative Inflectional Proclitics: Punctual Aspect only. ${ }^{27}$

| Mood | Tense | Person of Subject | Number of Subject |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Singular | Dual | Plural |
| Indicative Negative | Future (today or later) | 1 | daa nê | daa nyi | daa nmî |
|  |  | 2 | daa nyi | daa dpî | daa nmyi |
|  |  | 3 | daa wa | daa wa | daa wa |
|  | Immed. Past (today) | 1 | d:oo | dny:oo | dp:oo |
|  |  | 2 | choo | dpoo | dmy:oo |
|  |  | 3 | doo | doo | doo |
|  | Near Past (yesterday) | 1 | dîpî/dîp:a | dip:ee | dpîpî |
|  |  | 2 | dipi | dpîpî | dpîp:ee |
|  |  | 3 | daa | daa | daa |
|  | Remote Past (before | 1 | dîpî | dip:ee | dpîpî |
|  |  | 2 | dipi | dpîpî | dpîp:ee |
|  |  | 3 | daa/dêpê* | daa/dêpê* | daa/dêpê* |

27 This table is derived from Jim Henderson's fieldnotes, kindly made available by him, and checked and where necessary corrected by myself in the field.

Table 6.28 (continued)

| Mood | Tense | Person of Subject | Number of Subject |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Singular | Dual | Plural |
| Habitual |  | 1 | d:uuw:oo/d:uuw:ee | d:uuw:ee | dp:uuw:ee |
|  |  | 2 | d:uuw:ee | d:uuwo | d:uuw:ee |
|  |  | 3 | d:uudpî | d:uudpî | d:uudpî |
| Imperative | Immed. (now) | 1 | daa n:uu | daa nyi | daa nmî |
|  |  | 2 | n:uu ngmê/ nuku | kudu ngê | kî dmyengê |
|  |  | 3 | kîngî | kîngî | kîngî |
|  | Deferred (later) | 1 | kîdîngê | kidingê | kudungê |
|  |  | 2/3** | kidingê | kudungê | kî dmyengê |
|  |  |  | kîngê | kî ngê | kî ngê |

* Apparently, daa carries evidential certainty, dêpê is weaker
** i.e. The two persons either make 3 number distinctions or just one

a. Y:amî d:ââ dîp
îpı̂
Sudest pot NEG1sNrPastPI break.trans
'I didn't break the ceramic pot (yesterday)'
b. dpîp:ee ngmê loo
NEG2pl.REM.PI NEG_POL go.REM
'Not one of you3 went (day before yesterday)?'
c. skul̂̂ têdê d:uuw:ee lê
school place NEG1/2sHABP go
'I do not go to school habitually' $p w a ̂ a ̂$
d. Yópuи l:êê dîy:o, kîdîngê lê
wind 3POSS reason NEG1sDefdIMP.P go
'I must not go (later), on account of the wind (too strong)'
e. n:uu ngmê d:uu=n:aa ngê d:uu = nuku d:uu

NEG2sIMP do
'Don't do it!' (there may be subtle meaning differences between the three forms here)
f. dmy:oo ma ngópu

NEG3plIMMPI eat.TV NEGPFS3sOIMM.PI
'You3 didn't eat this food?'

A few observations:
(i) The negative is only analytic in the first tense, the Future, but even here it is not entirely regularly formed from daa plus the normal punctual forms: e.g. $d a a+a n y i \rightarrow$ daa nê; daa $+\emptyset \rightarrow$ daa wo.
(ii) There are no systematic morphophonological rules here to account for the way in which daa assimilates to the TAMP clitic. Consider the various different realizations of:

$$
\begin{array}{rll}
d a a+d p \hat{\imath} \rightarrow & \text { 1. dpoo } & \text { (2Dual Immediate Past) } \\
& \text { 2. dpîp̂̀ } & \text { (2Dual Near Past) } \\
\text { 3. d:uuwo } & \text { (2Dual Habitual) }
\end{array}
$$

(iii) Forms that conflate person/number categories are likely to be disambiguated by the post-verbal clitics - so that daa wa kudu 'he won't wash', is distinct from daa wa kpêê knî, 'they dual won't wash' (with verb root kudu becoming kpêê with a following enclitic), and so forth.
(iv) Note that not only the clitics but also the structure of the negative paradigm is different from the positive one: the Immediate Imperative in the positive paradigm is undifferentiated for person/number, while it is differentiated by seven forms in the negative.

Table 6.29: Negative Proclitics: Continuous Aspect. ${ }^{28}$

| Mood | Tense | Person of Subject | Number of Subject |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Singular | Dual | Plural |
| Indicative | Distal Future (tommorow) | 1 | daa nê | daa ny:oo | daa nmî |
|  |  | 2 | daa nyi | daa dpî | daa nmyi |
|  |  | 3 | daa dî | daa dpî | daa dnyi |
|  | Imm.Future (today) | 1 | same as Distal Future |  |  |
|  |  | 2 |  |  |  |
|  |  | 3 |  |  |  |
|  | Present | 1 | dînî | d:ee | dpînê |
|  |  | 2 | d:ee | dpîdê | dp:ee |
|  |  | 3 | daa |  |  |
|  | Immed.Past (earlier today) | 1 | dîpî | dip:e | dpîpî |
|  |  | 2 | dipi | dpîpî | dîpî |
|  |  | 3 | dî |  |  |
|  | Near Past (yesterday) | 1 | dê $n \hat{e}$ | dê ny:oo | dê $n m i ̂$ |
|  |  | 2 | dê nyi | dê dpî | dê nmyi |
|  |  | 3 | dê dî | dê dpî | dê dnyi |
|  | Remote Past (before yesterday) | 1 | dê noo | dê nyipu | dê nmee |
|  |  | 2 | dê nyoo | dê dpîmo | dê nmyee |
|  |  | 3 | dê doo | dê dpîmo | dê dnye |

[^10]Table 6.29 (continued)

| Mood | Tense | Person of Subject | Number of Subject |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Singular | Dual | Plural |
| Habitual | Prox <br> (still continues) | 1 | dê nê | d:ee | dpînê/dpîn:oo |
|  |  | 2 | d:ee | dpîda | dp:ee |
|  |  | 3 | daa |  |  |
|  | Distal <br> (discontinued action) | 1 | Same as Prox (but with zero enclitic) |  |  |
|  |  | $2$ |  |  |  |
|  |  | $3$ |  |  |  |
| Imperative | (now or later) | 1 | daa nê | daa ny:oo | daa nmî |
|  |  | 2 | kidimê/kidingê/ kichingê/namê | kudu mê / namê | kî dmyêmê / <br> kî dmyengê / namê |
|  |  | 3 | kîngê/kîmê | kîdpîngê / <br> kudu mê | kî dnyingê / <br> kî dnyemê |

(117)
a. dini ghi n:ii ngê tp:ee
time part Pro ADV child
noo ya school tedê
1sREMCI sitting school time/place
dê noo lêpî
NEG 1sREMCI going
'When I was a boy, I never used to go to school'
b. rice dpîdê pîp̂̂ ngmê
rice NEG2dPRSCI eating. PFS.3sO.PROX
'Are you 2 not going to eat the rice?'
c. naa têdê daadpî lee kn̂̂
feast place NEG2d.IMM go.FOL dS.IMM.IV
'You2 are not going to the feast?'
d. sku dê nê lêpî yédi
school NEG1sgHAB.CI going sS.HAB.PROX.CI.IV
'I never used to go to school'
e. têpwâ dpîda pîp̂̂ ngópu
tobacco 2dHAB.CI eating $\operatorname{PFS}(2 / 3 . d / \mathrm{pl}) .3 \mathrm{sO}$
'You2 never used to chew'
f. wunê rice dê nmee pîp̂̂
long.ago rice NEG 1plREMCI eating
'Long ago, we weren't eating rice (but now we do)'

A few notes:
(i) Again there is some analyticity, but of an unpredictable kind: the distal future is made up of $d a a+$ the positive proximal future. The Near Past and Remote Past retain the positive proclitics, but the negative prefixes them with dê not daa. In these analytic forms, the stress falls on the second (positive) element.
(ii) Although the reflex of the negative daa is mostly preposed/prefixed to the positive clitic, it is sometimes suffixed as in the 2Dual Habitual where positive $d p o+d a a \rightarrow d p i ̂ d a$.
(iii) Note the many alternate forms for the negative imperative. There are some meaning differences here, and there may be some confusion with a modal paradigm yet to be elucidated (thus the first person imperative, not elicitable in the positive, here means 'I must not. . .'). The following examples were given to me to illustrate the different uses of $2^{\text {nd }}$ Person Sing forms (with kuku 'washing, bathing', Intransitive Continuous verb):

| kidimê kuku | ('get out, too late to wash') |
| :--- | :--- |
| kidingê kuku | ('stop washing, river not clean') |
| kichingê kuku | ('never wash here') |
| namê kuku | ('get out fast, crocodiles here') |

Similarly the difference between the $2^{\text {nd }}$ Person Plural forms was explained thus:

```
kî dmyêmê kuku ('you all stop washing')
kî dmyengê kuku ('you all, never wash there')
```

For more on imperatives, see §7.2.1.
As so often in the language, there are further irregular wrinkles. The Negative $1^{\text {st }}$ person plural Habitual has an alternative form with pyi daa instead of dpîn:oo, but in this case the verb now takes a singular enclitic (despite the fact that the form must be understood to be $1^{\text {st }}$ person plural):
(118) a. Church k:oo dye ghi yintómu Yélî dnye ngê pyi daa church inside time part all Yélî dnye ADV NEG.HAB.1PL wéti yédi
sing HABPROX.CI.sing
'In church we do not always sing in Yélî Dnye' (note enclitic change to singular with pyi)
$\begin{array}{lllllll}\text { (119) b. Church } & \text { k:oo dye ghi yintómu Yélî dnye } & \text { ngê } \\ \text { church } & \text { inside time part all } & \text { Yélî dnye } & \text { ADV }\end{array}$

| dpîn:oo | wéti nyédi |  |
| :--- | :--- | :--- |
| NEG.HAB.1PL | sing | HABPROX.CI.PL |
| 'In church we do not always sing in Yélî Dnye' |  |  |

This alternate seems to presuppose slightly different pragmatic conditions, the a. special form being used e.g. to contradict an assumption, the normal b. form e.g. to wonder why the situation obtains.

Negation has an effect on other forms of the proclitic, e.g. the Counterfactual (§8.3.2) and Imperative forms (§7.2.1), and these are treated in the relevant sections (see also §6.1.4.2 immediately below). Negation also introduces a number of changes elsewhere in the Verb Complex. The most important of these are regular shifts in the post-verbal inflectional enclitics §6.2.3), which introduces extraordinary complexity into even the simplest negative inflected verb: for example, the Immediate Past Punctual aspect forms are replaced with the Remote Past forms. Wherever there are special forms of the enclitics - e.g. in conditionals - there are likely to be special negative forms (see §8.2.1).

However these two changes - with special proclitics and systematically shifted enclitics - are not the only complexities in negative sentences. For example, some irregular verbs supplete on negation, like lê 'go':

Table 6.30: Irregular verb lê 'go’.

| Tense/Aspect | Positive root | Negative Root |
| :--- | :--- | :--- |
| Proximal | $l \hat{e}$ | $n \hat{e}$ |
| Rem.Past | loo | $n: e e$ |
| Continuous | $l \hat{e} p \hat{\imath}$ | (lêpî) |

In this case, the marking in the clause is doubled:

| a. | $m: a$ | dîpê | $n \hat{1}$ |
| :---: | :---: | :---: | :---: |
|  | yesterday | IsIMM.NEG | go.NegPol |

'I didn't go yesterday’ (lit. 'yesterday I did-today go.not')
b. mii tuwó nî n:ee
day before yesterday 1sREM.NEG go.REM.NegPol
'I didn't go the day before yesterday (or before)'

These special forms of roots can be considered negative polarity items, and like such items in general they may also optionally occur in positive questions:
c. awedê dî nê/lê? 'He went today?'
d. ma nê/lê 'He went yesterday?'
e. m:iituwó n:ee/loo ‘Did he go the day before yesterday?’

A more regular tense shift occurs in the roots associated with negative proclitics: verb roots which supplete on Remote Past (as many punctual roots do), use the Remote Past verb root in the Immediate Past ('today') tense when in the negative (cf. the pattern in shifted enclitics in §6.2.3). 'Weak’ verbs which use the singular Remote Past enclitic wo instead of a Strong Remote Past root, also use wo in the Immediate Past with the negative proclitic.

| a. d:oo ndî̀ |  |
| :--- | :--- |
|  | NEG1sIMM eat.REM |
|  | 'I did not eat earlier today' |
|  | lit. ‘I-not-today eat.day-before-yesterday' |
| b. | d:oo kpêê wo |
|  | NEG1sIMM wash.self $\quad$ 3s.REM.WEAK |
|  | 'I didn't wash myself earlier today' |
|  | lit. ‘I not-today wash.self.-day-before-yesterday' |

An additional wrinkle here is that whereas these root changes in the Remote Past tense are normally confined to singular persons, they generalize a bit in the negative, so that d:oo nd $\hat{\imath}$ can be understood as $1^{\text {st }}$ person dual and plural (i.e. it now has Monofocal coverage).

### 6.1.4.2 Interaction of negation with other factors in the verbal proclitic

There are unpredictable results of compounding negation with a number of the deictic, eptistemic and motion elements that can fuse with the positive proclitic. I will illustrate some of these here. In addition, there are negative counterfactuals, with another 144 cells of possible distinctions: these are dealt with in the section on counterfactuals, but just to indicate the nature of the beast, consider the following positive/negative counterparts. Note the special form of the negative antecedent, and the shift of the verb root into the Remote Past:
(122) a. positive:

| wudîlê, | pîdî | m:uu |
| :--- | :--- | :--- |
| 1sIMM.PI.CFAnt | 1sIMM.PI.CFCons | see |

'If I were to go today, I would see it'
b. negative:
$\begin{array}{lll}\text { wud:oo } & \text { loo, } & \text { daa } \\ \text { NEG1sIMM.PI.CFAnt } & \text { go.REM(neg) } & \text { NEG }\end{array}$
pîdî m:uu
1sIMM.PI.CFCons see
'If I were not to go today, I would not see it'

There are also special forms for negative conditionals, but these are marked on the post-verbal clitic, and will be discussed under that rubric - see §6.2.3) We saw in $\S 6.1 .3$ that the positive proclitics fuse in unpredictable ways with deixis, evidentiality, repetition, etc. The same happens with the negative proclitics, but we restrict ourselves here to the associated motion element (MOT). The following tables (Tables 6.31 and 6.32) give whole verb complexes, since the verb roots show tense shifts under negation. Note that although a proclitic string like dê-nyi-n:aa might be segmented as NEG-2s-MOT this does not capture the tense/aspect/mood constraints special to the string as a whole, and therefore the whole chunk is glossed as NEG2sNrPast.CI.MOT below.

Table 6.31: NEG + MOTION: Punctual transitive verb ‘see’ TV ( $m: u u ;$ módu = Remote Past root), 3s Object held constant.

|  | SING | DUAL | PLURAL |
| :--- | :--- | :--- | :--- |
| Future (today, <br> tomorrow) |  |  |  |
| $\mathbf{1}$ | daa n:uu m:uu | daa ny:uu m:uu | daa nm:uu m:uu |
| $\mathbf{2}$ | daa ny:uu m:uu | daa dp:uu m:uu ngmê | daa nmy:uu m:uu |
| ngmê |  |  |  |

Table 6.31 (continued)

|  | SING | DUAL | PLURAL |
| :--- | :--- | :--- | :--- |
| Remote Past (before <br> yesterday) |  |  |  |
| $\mathbf{1}$ | dîpî n:aa módu | dîp:en:aa módu | dpîpî n:aa módu |
| $\mathbf{2}$ | dipi n:aa módu | dpîpî n:aa m:uu ngópu | dpîp:e n:aa m:uu |
|  |  |  | ngópu |

* Meaning 'Don't ever go and see it again' (one can omit the mu 'again')
** Alternatively: daa mu n:uu m:uu, meaning 'I must not go and see it again'
***Meaning 'We2 must not go and see it again'

| a. dpoo n:aa |  |
| :---: | :---: |
|  | NEG2d.IMM.PI.MO |
|  | 'You2 did not see her?' |
|  | mbwaa lêê u kwo water pool inside |
|  | 'We2 don't stand in th |
|  | dîmîn:aa m: |
|  | G3sIMM. |
|  | 'He didn't see |

Table 6.32: NEG + MOTION: Continuous intransitive verb root 'wash' ( kuku).

|  | SING | DUAL | PLURAL |
| :---: | :---: | :---: | :---: |
| Distal Future (tomorrow) |  |  |  |
| 1 | daa nî n:aa kuku | daa ny:oo n:aa kuku | daa nmî n:aa kuku |
| 2 | daa nyi n:aa kuku | daa dpî n:aa kuku | daa nmyi n:aa kuku |
| 3 | daa dî n:aa kuku | daa dpî n:aa kuku | daa dnyi n:aa kuku |
| Imm. Future (today) |  |  |  |
| 1 | dînî n:aa kuku | d:ee n:aa kuku mo | dpînê n:aa kuku té |
| 2 | d:ee n:aa kuku | dpîda n:aa kuku mo | dp:ee n:aa kuku té |
| 3 | dê wumê kuku | dê wumê kuku | dê wumê kuku |
| Imm Past (earlier today) |  |  |  |
| 1 | dîpî n:aa kuku | dip:e n:aa kuku mo | dpîpî n:aa kuku té |
| 2 | dipi n:aa kuku | dpîpî n:aa kuku mo | dpîp:e n:aa kuku té |
| 3 | dîmî kuku | dîmî kuku | dîmîkuku |
| Near Past (yesterday) |  |  |  |
| 1 | dînî n:aa mumu | dê ny:oo n:aa kuku | dê nmî n:aa kuku |
| 2 | dê nyi n:aa mumu | dê dpî n:aa kuku | dê nmyi n:aa kuku |
| 3 | dê dî n:aa kuku | dê dpiî n:aa kuku | dê dnyi n:aa kuku |
| Rem.Past (before yesterday) |  |  |  |
| 1 | dê noo n:aa kuku | dê nyipu n:aa kuku | dê nmee n:aa kuku |
| 2 | dê nyoo n:aa kuku | dê dpîmo n:aa kuku | dê nmyee n:aa kuku |
| 3 | dê doo n:aa kuku | dê dpîmo n:aa kuku | dê dnye n:aa kuku |
| Habitual Proximal |  |  |  |
| 1 | same as Present |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| Habitual Distal | (dê + Positive Habitual Continuous forms in Table 6.30) |  |  |

(124)

| a. dpîpî n:aa | kuku té |
| :--- | :--- |
| NEG1plIMM.CI.MOT bathe plS.Intrans |  |
| 'We3 didn't go and bathe today' |  |


| b. dê nyi $n: a a$ | mumu |
| :--- | :--- | :--- |
| NEG2sNrPast.CI.MOT | seeing |
| 'You were not seeing it yesterday' |  |

### 6.2 The post-verbal inflectional clitics (enclitics)

The inflectional enclitics are in some ways simpler than the pre-verbal clitics, because they mercifully fuse with fewer additional grammatical features beyond the core TAMP features - conditionals alone are the main complicating feature. The enclitics follow directly on the verb - nothing may intervene between them and the verb. Forms that appear to have two enclitics are mostly distinct constructions - see e.g. §7.9.1 where the Resultative construction is described, which takes enclitic ngmê followed by dê/dé dual/plural agreement. Thus example (125) would be misanalysed as a., for it should have the analysis in b.:


Conditionals, however, in proximate tenses do allow, for example, an additional Dual or Habitual enclitic after the main conditional enclitic, see §8.2. In general, the post-verbal clitics redundantly mark much of the same information as the proclitics, namely subject person/number, tense, mood, aspect. However they do so using a cross-cutting classification of those properties. Moreover, they add crucial additional information about transitivity - there being a distinct set each for transitive and intransitive verbs - and in the case of transitives they also mark the person/number of the object. All this information is carried in portmanteau form, permitting no breakdown into component morphemes.

The ways in which the grammatical information is cross-classified with the information in the proclitics is especially obvious with respect to two features. First, tenses are grouped into Proximal and Distal. Proximal tenses are those three tenses closest to coding time ('now'): in the punctual aspect, future, immediate past (today) and near past (yesterday), and in the continuous aspect imme-
diate future (today), present (now) and immediate past (today). Second, subject person/number is classified in a special manner in some of the enclitic paradigms, using the previously mentioned Monofocal/Polyfocal distinction (Table 6.33) found in Highland languages (Henderson 1995:39):

Table 6.33: The Monofocal/Polyfocal distinction.

|  | Singular | Dual |
| :--- | :---: | :---: |
| $\mathbf{1}^{\text {st }}$ person | MONOFOCAL |  |
| $\mathbf{2}^{\text {nd }}$ person |  |  |
| $3^{\text {rd }}$ person |  |  |

For intransitive enclitics, subject person is not marked in enclitics at all except in Imperatives, while number follows a simple singular/dual/plural marking. Thus the Monofocal/Polyfocal distinction is only relevant for the transitive set of enclitics. For transitive enclitics, the Monofocal/Polyfocal distinction is generally relevant only for $3^{\text {rd }}$ person objects (except in the imperative, where only $1^{\text {st }}$ person objects are relevant). Table 6.34 illustrates how subjects which are $1^{\text {st }}$ person or singular have collapsed marking along with $3^{\text {rd }}$ person objects - these forms are for the proximate tenses, indicative mood, both aspects (also the Punctual Habitual mood):

Table 6.34: Example of Monofocal/Polyfocal marking: transitive enclitics, proximal tenses, indicative mood.

| SUBJECT PERSON | SUBJECT NUMBER |  | OBJECT NUMBER |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 3Sing | 3Dual | 3Plural |
| 1 | Sing/Dual/Plural |  | $\varnothing$ | dê | té |
| 2 | Sing | Monofocal | $\varnothing$ | $d \hat{e}$ | té |
| 3 | Sing |  | $\emptyset$ | $d \hat{e}$ | té |
| 2 | Dual/Plural $\}$ | Polyfocal | ngmê | d:oo | t:00 |
| 3 | Dual/Plural $\}$ |  | ngmê | d:oo | t:00 |

Foley (1986:137) suggests that object-marking in Papuan languages never has the complex portmanteau coding associated with subject inflections: "the corresponding morpheme is always simple, never a portmanteau expressing tense or mood as well", but this is clearly false for Yélî Dnye.

Naturally enough, the subject information in the proclitic or subject NP and in the enclitic normally agrees. There are some systematic exceptions however.

One exception is found in $3^{\text {rd }}$ person Imperatives (see $\S 7.2 .1$ ), which presuppose two communication events - the addressee is being told to go and tell the subject to do something. In this case the proclitic - or perhaps this is just a subject pronoun - can (but need not) be $2^{\text {nd }}$ person and the enclitic $3^{\text {rd }}$ person, as in:
(126) Tili mwi nyi lee we

Tili there 2s go.FOL 3IMP.Intrans
'You tell Tilly to go there' lit. 'You (make it known) he is to go there'

Other cases of unexpected agreement principles - that is, where the enclitic does not agree with the subject person/number - include:
(i) Where personal pronouns exceptionally take ergative case marking (§5.2.2), the enclitic is always third person regardless of a $1^{\text {st }}$ or $2^{\text {nd }}$ person pronoun.
(ii) A subject with another person in comitative case is always counted in the dual/plural, with the person of the main subject being marked in the enclitic (§5.3).
(iii) Quantified NPs (with yintómu 'all' or yilı̂ ‘many') take singular agreement.
(iv) Both reflexives (optionally) and reciprocal sentences (obligatorily) take $3^{\text {rd }}$ person enclitics, even with $1^{\text {st }}$ and $2^{\text {nd }}$ person subjects (§7.8). Reciprocal sentences in addition always inflect as if for Monofocal subjects, whereas except for $1^{\text {st }}$ person subjects the actual subjects are necessarily Polyfocal.

The core enclitics come in two main series, transitive and intransitive, which we will discuss in turn. In negative clauses, the enclitics have shifted values in some tense/aspects - these are outlined in $\S 6.2 .3$, where compact paradigm tables can be found that compare negative and positive enclitics. However, there is one other major grammatical feature that gets fused into the enclitics, namely indicative conditionals (not counter-factual conditionals, which are marked on the proclitic, and are described in §8.3). These conditional enclitics are described in §6.3.

### 6.2.1 The intransitive enclitics

The following table (derived from Henderson 1995:37 with emendations) provides the paradigm for intransitive verbal enclitics. These are selected by inherently intransitive verbs, and by transitive verbs with incorporated objects (the main kind of grammatical valence-shifting operation in the language, other kinds of shift being done lexically). Inspection of the table (Table 6.35) shows that these forms essentially code Subject Number, disregarding Person except in the Imper-
ative, combining this with tense/mood/aspect categories. Beyond that, Punctual vs. Continuous aspect and mood are the main features marked (see Table 6.35).

Table 6.35: Intransitive Enclitics.

| Tense, Mood, Aspect | SUBJECT NUMBER |  |  |
| :--- | :--- | :--- | :--- |
|  | Sing | Dual | Plural |
| Punctual Indicative: | $\emptyset$ (strong roots) | knâpwo | dniye |
| Remote Past, Habitual | wo (weak roots) |  |  |
| Punctual Indicative FUT/IMM/NrPST | $\emptyset$ | $k n i ̂$ | $d m i$ |
| Punctual Imperative:Person |  |  |  |
| $\mathbf{1}$ | - | $k n \hat{\imath}$ | kmîle |
| $\mathbf{2}$ | $\emptyset$ | choo | $d m y i n o$ |
| $\mathbf{3}$ | wee /we | $d n i y e$ | $d n i y e$ |
| Cont.Indic. Present \& IMM | $\emptyset$ | mo | té |
| Proximal (Fut,Pres,Past) | $n e ̂$ (optional) |  |  |
| Cont.Indic. Distal tenses (Yester/Rem/Tomorrow), | $\emptyset$ | $\emptyset$ | $\emptyset$ |
| Cont.Indic. Habitual Distal |  |  |  |
| Cont. Indic. Habitual Proximal | yédi | nódó | nyédi |
| Cont. Indic. IMP | $\emptyset$ | $\emptyset$ | $\emptyset$ |

Incidentally, the optional use of enclitic nê instead of zero for singular, intransitive subjects of continuous verbs, as in the following sentences, does not seem to carry any meaning difference:


Note that, despite redundant marking of various features, there is a systematic play-off between marking in the proclitics and the enclitics. For example, the Immediate Imperative in the Punctual aspect is unmarked for person/number in the proclitics, but marked for person/number in the enclitics. Correspondingly, in the Continuous aspect, person/number is marked in imperatives in the proclitics, but unmarked in the enclitics.

To allow the reader to check further such correspondences, in Tables 6.36 and 6.37 I provide some sample paradigms for two verbs, one (paa 'walk') inherently continuous, the other (lê 'go') inherently punctual.

Table 6.36: Intransitive enclitics with an Inherently Continuous verb: paa 'walk, go down' (enclitics in bold).

|  | Sing | Dual | Plural |
| :---: | :---: | :---: | :---: |
| FUTURE DISTAL CONTINUOUS (Day after tomorrow) |  |  |  |
| 1 | wa nê paa | wa ny:oo paa | wa nmî paa |
| 2 | wa nyi paa | wa dpî paa | wa nmyi paa |
| 3 | wa dî paa | wa dpî paa | wa dnyi paa |
| FUT PROX CI (Tomorrow) |  |  |  |
| 1 | $a \mathrm{nê} p a a(n \hat{e})$ | a ny:oo paa | a nmîpaa |
| 2 | a nyi paa (nê) | a dpî paa | a nmyi paa |
| 3 | a dîpaa (nê) | a dpîpaa | a dnye paa |
| PRESENT (Today) |  |  |  |
| 1 | n:aa paa (nê) | nye paa mo | nmo paa té |
| 2 | nye paa (nê) | dpo paa mo | nmye paa té |
| 3 | a paa (nê) | a paa mo | a paa té |
| PROXPAST (Earlier today) |  |  |  |
| 1 | nê paa (nê) | nyi paa mo | nmîpaa té |
| 2 | nyi paa (nê) | dpî paa mo | nmyi paa té |
| 3 | paa nê/paa (nê) | paa mo | paa té |
| NRPST Yesterday |  |  |  |
| 1 | nê paa | nyipu paa | nmîpaa |
| 2 | nyi paa | dpîpaa | nmyi paa |
| 3 | dê paa | dpîpaa | dnye paa |
| REMPAST Day before yesterday |  |  |  |
| 1 | noo paa | nyipu paa | nтее раа |
| 2 | nyoo paa | dpumo paa | nтyee paa |
| 3 | doo paa | dpumo paa | dnyimo paa |
| HAB PROX paa ('Still today doing X') |  |  |  |
| 1 | n:aa paa yédi | nye paa nódó | nmo paa nyédi |
| 2 | nye paa yédi | dpo paa nódó | nmye paa nyédi |
| 3 | a paa yédi | a paa nódó | a paa nyédi |

Table 6.36 (continued)

|  | Sing | Dual | Plural |
| :--- | :--- | :--- | :--- |
| IMP 'You be going down' |  |  |  |
| $\mathbf{1}$ | - | - | - |
| $\mathbf{2}$ | chipaa | choo paa | dmyinê paa |
| $\mathbf{3}$ | choo paa | dny:oo paa | dny:oo paa |

Table 6.37: Intransitive enclitics with an Inherently Punctual verb: lê 'go' (with Remote Past root loo, followed root lee, imperative lili).

|  | Sing | Dual | Plural |
| :---: | :---: | :---: | :---: |
| FUTURE |  |  |  |
| 1 | wa nê lê | wa nyi lee knî | wa nmî lee dmi |
| 2 | wa nyi lê | wa dpî lee knî | wa nmyi lee dmi |
| 3 | wa lê Ø | wa lee knî | wa lee dmi |
| PI IMM PAST today |  |  |  |
| 1 | dîlê | dnye lee knî | dpîlee dmi |
| 2 | chi lê | dpî lee knî | dmye lee dmi |
| 3 | dê lê | dê lee knî | dê lee dmi |
| PI PROXPAST yesterday |  |  |  |
| 1 | $n e ̂ l e ̂$ | nyi lee knî | nmî lee dmi |
| 2 | nyi lê | dpî lee knî | nmyi lee dmi |
| 3 | $l e$ | lee knî | lee dmi |
| PI REMPAST |  |  |  |
| 1 | nê loo/nê lee wo* | nyi lee knâpwo | nmî lee dniye |
| 2 | nyi loo/lee wo | dpîlee knâpwo | nmyi lee dniye |
| 3 | loo/lee wo | lee knâpwo | lee dniye |
| IMPERATIVE ((double brackets show continuous forms ~no punctual forms here)) |  |  |  |
| 1 | ((n:aa lêpî)) | (nyi) lee knî! | (nyi) lee kmîle (we have to go) |
| 2 | ((lili)) (regular V: (nyi) kee!) | (nyi) lee choo! | (nyi) lee dmyino |
| 3 | (nyi) lee wee! | (nyi) lee dniye! | (nyi) lee dniye! |

Table 6.37 (continued)

|  | Sing | Dual | Plural |
| :--- | :--- | :--- | :--- |
| IMP PI DEFERRED |  |  |  |
| $\mathbf{1}$ | ((dîyo n:aa lêpî)) | paa n:aa lee <br> knî! | paa n:aa lee <br> kmîle (we3 have <br> to go later) |
| $\mathbf{2}$ |  |  | dp:uu lili! (regular | | dp:uu lee choo! | dp:uu lee |  |
| :--- | :--- | :--- |
|  | V:dp:uu kee!) |  |
| $\mathbf{3}$ | dp:uu lee wee! | dp:uu lee <br> dniye! |

*wo here is optional, but obligatory with weak verbs, e.g. kee wo 'He came up'. With verbs like lê and taa 'arrive', wo is optional.

For negative sentences, the entire paradigm changes - see §6.2.3 (for negative imperatives see §7.2.1.2).

### 6.2.2 The transitive enclitics

As mentioned, the transitive enclitics mark both subject properties and object properties, together with tense, aspect, mood, in portmanteau form - an unusual feature since object properties are not usually conflated with other grammatical features in Papuan languages (Foley 1986:137). In principle, given that there are 144 cells in the basic tense/aspect/mood/person/number matrix, and given that there are nine possible person/number (three persons, three numbers) combinations of objects, there are 1296 cells to be covered by the transitive enclitics! This vast array is collapsed by: (a) grouping tenses into proximal vs. distal, (b) neutralizing all person/number subject distinctions in many tense/aspect/mood combinations, and (c) using the Monofocal/Polyfocal collapse of subject categories elsewhere. The resulting distinctions serve to highlight the person/number of the object in specific tense/mood/aspect combinations, as in Table 6.38. This table supplants that in Henderson (1995:38) (from which it was originally derived, with corrections) - all 1296 cells have been checked by direct elicitation and compact exemplifying tables of paradigms can be found below, and negative versions (often distinct) in §6.2.3.

Naturally enough, the transitive enclitics normally track both subjects and direct objects. But there are a number of exceptional constructions (including quantified subjects, reflexives and reciprocals) where the expected enclitics are supplanted by others (e.g. $3^{\text {rd }}$ person for $1^{\text {st }}$ or $2^{\text {nd }}$ person), as mentioned in §6.2.1.

In addition, there are constructions where Absolutive (and thus intransitive) subjects take transitive enclitics (see §7.8.2 on reciprocals), others like noun-incorporation where transitive verbs take intransitive enclitics (see §7.9.4), and cases of noun-incorporation (as in causativization) where nevertheless the verb takes transitive enclitics §7.9.2). Thus the transitive enclitics are sensitive to degrees of gradient transitivity.

Table 6.38 works in the following way: for each tense/mood/aspect combination at the left, select a Subject Person/Number; now select an Object Person/ Number - the intersection of row and column gives the relevant form.

Table 6.38: Transitive Enclitics (Post-verbal Nuclei for Transitive Verbs).

| TENSE/ ASPECT/MOOD | SUBJECT <br> Person, <br> Number | OBJECT |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Person | Sing | Dual | Plural |
| Punctual \& Continuous Indicative, Proximal tenses only; Also, Punctual Habitual | all | 1 | $n \hat{e}$ | nyo | nmo |
|  | all | 2 | $n g i$ | $d p: o$ | nmyo |
|  | MF: (1/SG) | 3 | $\varnothing$ | dê | té |
|  | PF: ( $2 / 3 / \mathrm{PL}$ ) |  | ngmê | d:oo | t:0o |
| Punctual and Indicative Remote Past; Also: <br> Continuous Habitual Proximal | all | 1 | noo | nуópu | nтoo |
|  | all | 2 | nyo | dpo | nmyoo |
|  | MF: 1/SG | 3† | $n g e ̂ / \varnothing$ | doo | too |
|  | PF: 2/3/PL |  | ngópu | dumo | tumo |
| Continuous Non-Proximal tenses | all | 1 | $n \hat{e}$ | nyo | nmo |
|  | all | 2 | $n g i$ | $d p: o$ | nmyo |
|  | all | 3 | $\emptyset$ | dê | dé |
| Imperatives - Punctual | MF: 1/SG | 1 | nédi * | nyédi | nmédi |
|  | PF: 2/3/pl |  | nódó | nyédi | nyédi |
|  | $3 \mathrm{~s} / \mathrm{d} / \mathrm{pl}$ | 2 | nyédi | dpédi | nmyédi |
|  | 1sing | 3 |  |  | - |
|  | 1 dual |  | ngmê | déme | téme |
|  | 1 plural |  | koo | déme | téme |
|  | 2sing | 3 | ngi | dé | té |
|  | 2dual |  | nyoo | dóó | tóó |
|  | 2plural |  | yó | dóó | dóó |
|  | 3sing | 3 | $n g e ̂$ | déne | téne |
|  | 3dual/pl |  | $y: e$ | déne | téne |

[^11]To see how this works out, complete with corresponding proclitics, the following tables (Tables 6.39 to 6.41) give most of the inflectional particles for Past Tense combinations of both subject and object for the single transitive verb vy:a 'hit', concentrating on the Punctual Aspect. Each table holds constant ONE object person-specification (e.g. $1^{\text {st }}$ person Object), and varies the nine Subject properties. It also holds constant the tense - we thus need three tables per tense.

These exemplifications are not only checks on the generalizations made in the enclitics table above, they also reveal exceptions. For example, reflexive sentences do not always have the expected enclitics:

| (128) | $n m \hat{\imath}$ | numo vy:a té | (*nmo) |
| :--- | :--- | :--- | :--- | :--- |
| 1plNrPST REFL hit MFS3plO | 1plO |  |  |
|  | 'We3 hit us3 (each other)' |  |  |

Here the reflexive element numo takes a $3^{\text {rd }}$ person plural enclitic with a $1^{\text {st }}$ person plural proclitic, while in contrast the reflexive element chóóchóó in the first example in the table below takes the expected person agreement, but with $2^{\text {nd }}$ person Dual it takes the $3^{\text {rd }}$ person, and so forth.

In Table 6.39 through Table 6.41 note that the Monofocal/Polyfocal conflation pattern only emerges in the $3^{\text {rd }}$ person Object series, which I have emphasized by marking the Polyfocal enclitics in bold. Mismatched reflexives of the sort 'You2 hit You3' (where one set of referents is properly included in another) do not in general seem to be realizable and are marked by question marks.

Table 6.39: Punctual Near Past ('yesterday'): Transitive enclitics FIRST PERSON OBJECT (cells with ? do not seem to make conceptual sense to consultants).

| Subject <br> Properties | Sing | Dual | Plural |
| :--- | :--- | :--- | :--- |
| First Person <br> Object: Singular |  |  |  |
| $\mathbf{1}$ | chóóchóó nê vy:a nê <br> 'I hit myself yesterday' | $?$ | $?$ |
| $\mathbf{2}$ | nyi vy:a nê <br> 'You1 hit me yesterday' | dpî vy:a nê <br> 'You2 hit me yesterday' | 'Ymyi vy:a nôe hit me yesterday' |
| $\mathbf{3}$ | vy:a nê <br> 'He hit me yesterday' | vy:a nê <br> 'They2 hit me yesterday' | vy:a nê <br> 'They3 hit me yesterday' |

Table 6.39 (continued)

| Subject <br> Properties | Sing | Dual | Plural |
| :---: | :---: | :---: | :---: |
| $1^{\text {st }}$ Person Object: Dual |  |  |  |
| 1 | ? | nyi numo vy: a dê 'We2 hit us2' | ? |
| 2 | nyi vy: a nyo 'You1 hit us2' | dpî vy: a nyo <br> 'You2 hit us2' | nmyi vy: a nyo <br> 'You3 hit us 2' |
| 3 | vy: a nyo <br> 'He hit us2' | vy:a nyo <br> 'They2 hit us2' | vy:a nyo <br> 'They3 hit us2' |
| ${ }^{\text {st }}$ Person Object: Plural |  |  |  |
| 1 | ? | ? | nmî numo vy: a té (*nmo) <br> 'We3 hit us3 (each other)' |
| 2 | nyi vy: a mmo 'You hit us3' | dpî vy: a nmo <br> 'You2 hit us3' | nmyi vy: a nmo 'You3 hit us3' |
| 3 | vy: a nmo <br> 'He hit us3' | dpî vy:a nmo <br> 'They2 hit us3' | vy: a nmo <br> 'They3 hit us3' |

Table 6.40: Punctual Near Past ('yesterday'): Transitive enclitics SECOND PERSON OBJECT.

| Subject <br> Properties | Sing | Dual | Plural |
| :---: | :---: | :---: | :---: |
| $2^{\text {nd }}$ Person <br> Object: Singular |  |  |  |
| 1 | nî vy: a ngi <br> 'I hit you1’ | nyi vy: a ngi 'We2 hit you1' | nmî vy: a ngi 'We3 hit you1' |
| 2 | nyóóchóó nyi vy:a (ngi) <br> 'You1 hit yourself1' | ?? | ?? |
| 3 | vy:a ngi <br> 'He hit you1' | vy:a ngi <br> 'They2 hit you1' | vy: a ngi <br> 'They3 hit you1' |
| $2^{\text {nd }}$ Person <br> Object: Dual |  |  |  |
| 1 | nê vy: a dp:o 'I hit you2' | nyi vy:a dp:o <br> 'We2 hit you2' | nmî vy: a dp:o 'We3 hit you2' |
| 2 | ??you hit you2 | dpî vy:a dp:o <br> 'You2 hit you2' <br> dpî chóochóó vy:a d:oo 'You2 hit each other' (reciprocal) | ?? |

Table 6.40 (continued)

| Subject <br> Properties | Sing | Dual | Plural |
| :---: | :---: | :---: | :---: |
| 3 | vy: a dp:o | vy:a dp:o | vy:a dp:o |
|  | 'He hit you2' | 'They2 hit you2' | 'They3 hit you2' |
| $2^{\text {nd }}$ Person |  |  |  |
| Object: Plural |  |  |  |
| 1 | nê vy: a nmyo | nye vy: a nmyo | nmî vy: a nmyo |
|  | 'I hit you3' | 'We2 hit you3' | 'We3 hit you3' |
| 2 |  |  | nmo numo vy:a té |
|  | ? you 1 hit you3 | ?? | 'You3 hit you3 (each other)' |
| 3 | vy: a nmyo | vy: a nmyo | vy: a nmyo |
|  | 'He1 hit you3' | 'They2 hit you3' | 'They3 hit you3' |

Table 6.41: Punctual Near Past ('yesterday'): Transitive enclitics THIRD PERSON OBJECT.

| Subject <br> Properties | Sing | Dual | Plural |
| :---: | :---: | :---: | :---: |
| $3{ }^{\text {rd }}$ Person <br> Object - Singular |  |  |  |
| 1 | nê vy:a <br> 'I hit him' | nyi vy:a <br> 'We2 hit him' | nmî vy: a <br> 'We3 hit him' |
| 2 | nyi vy:a <br> 'You hit him' | dpî vy: a ngmê 'You2 hit him' | nmyi vy:a ngmê 'You3 hit him' |
| 3 | vy: a <br> 'He hit him' <br> chóóchóó vy:a <br> 'He hit himself' | vy: a ngmê 'They2 hit him' | vy: a ngmê 'They3 hit him' |

## $3^{\text {rd }}$ Person

Object - Dual

| 1 | nê vy:a dê 'I him them2’ | nyi vy: a dê 'We2 hit them2, we2 hit ourselves' | nmî vy: $a$ dê 'We3 hit them2' |
| :---: | :---: | :---: | :---: |
| 2 | nyi vy: a dê <br> 'You hit them2' | dpî vy:a d:oo <br> 'You2 hit them2' <br> dpî, chóóchóó dpî vy:a <br> d:oo <br> 'You2 hit you2selves' | nmyi vy:a d:oo <br> 'You3 hit them2' |
| 3 | vy: a dê <br> 'He hit them2' | vy:a d:oo <br> 'They2 hit them2' | vy:a d:oo <br> 'They3 hit them2' |

Table 6.41 (continued)

| Subject <br> Properties | Sing | Dual | Plural |
| :---: | :---: | :---: | :---: |
| $3^{\text {rd }}$ Person <br> Object - Plural |  |  |  |
| 1 | nê vy:a té 'I hit them3' | nyi vy:a té <br> 'We hit them3' | nmî vy: a té 'We3 hit them3' |
| 2 | nyi vy:a té <br> 'You hit them3' | dpî vy:a t:oo <br> 'You2 hit them3' | nmyi vy:a t:oo <br> 'You3 hit them3' |
| 3 | vy: a té <br> 'He hit them3' | vy:a t:oo <br> 'They2 hit them3' | vy: at:oo <br> 'They3 hit them3' yi chóóchóó vy: a t:oo <br> 'They3 hit themselves' |

Table 6.42 through Table 6.44 do the same exercise for the Remote Past tense, Punctual aspect. Note that the verb stem here alternates between the Remote Past root $v y \hat{a}$ and the followed root $v y: a$ (or $v y a$ ) when the enclitic is non-null.

Table 6.42: Punctual Remote Past ('before yesterday'): Transitive enclitics FIRST PERSON OBJECT.

| Subject <br> Properties | Sing | Dual | Plural |
| :--- | :--- | :--- | :--- |
| $\mathbf{1}^{\text {st }}$ Person <br> Object - Singular |  |  |  |
| $\mathbf{1}$ | nê vy:a noo <br> 'I hit me' <br> a chóóchóó nê vy:a noo | ?? | ?? |
|  | 'I hit myself' |  |  |

## $1{ }^{\text {st }}$ Person

Object - Dual

| 1 | ?? | (nyi chóóchóó) nyi vy:a <br> nyópu <br> 'We2 hit us2' <br> (Reflexive is optional) | ?? |
| :---: | :---: | :---: | :---: |
| 2 | nyi vy: a nyópu | dpî vy: a nyópu | nmyi vy: a nyópu |
|  | 'You1 hit us2' | 'You2 hit us2' | 'You3 hit us2' |
| 3 | vy: a nyópu | vy: a nyópu | vy: a nyópu |
|  | 'He hit us2' | 'They2 hit us2' | 'They3 hit us2' |

Table 6.42 (continued)

| Subject <br> Properties | Sing | Dual | Plural |
| :---: | :---: | :---: | :---: |
| $1{ }^{\text {st }}$ Person <br> Object - Plural |  |  |  |
| 1 | ? | ? | nmî chóóchóó nmî vy: a nmoo 'We3 hit us3' |
| 2 | nyi vy: a nmoo 'You1 hit us3' | dpî vy:a nmoo <br> 'You2 hit us3' | nmyi vy: nmoo 'You3 hit us3' |
| 3 | vy: a nmoo <br> 'He hit us3' | vy: a nmoo <br> 'They2 hit us3' | vy: a nmoo <br> 'They3 hit us3' |

Table 6.43: Punctual Remote Past ('before yesterday'): Transitive enclitics SECOND PERSON OBJECT.

$2^{\text {nd }}$ Person
Object - Dual

| 1 | nê vy:a dpo <br> 'I hit you2' | nyi vy:a dpo <br> 'We2 hit you2' | nmî vy: a dpo <br> 'We3 hit you2' |
| :---: | :---: | :---: | :---: |
| 2 | (see reflexives) | dpî chóóchóó dpî vy:a <br> d:oo <br> 'You2 hit you2' <br> ( $3^{\text {rd }}$ person agreement) | (see reflexives) |
| 3 | vy: a dpo <br> 'He hit you2' | vy:a dpo <br> 'They2 hit you2' | vy: a dpo <br> 'They3 hit you2' |
| $2^{\text {nd }}$ Person <br> Object - Plural |  |  |  |
| 1 | nê vy:a nmyoo 'I hit you3' | nyi vy: a nmyoo <br> 'We2 hit you3' | nmî vy: a nmyoo 'We3 hit you3' |

Table 6.43 (continued)

| Subject <br> Properties | Sing | Dual | Plural |
| :--- | :--- | :--- | :--- |
| $\mathbf{2}$ | (see reflexives) | (see reflexives) | nmyi chóchóó $n m y i$ vy:a <br> tumo |
|  |  |  | 'You3 hit you3' |

Table 6.44: Punctual Remote Past ('before yesterday'): Transitive enclitics THIRD PERSON OBJECT.

$3^{\text {rd }}$ Person
Object - Dual

| 1 | nê vy: a doo | nye vy: a doo | nmî vy: a doo |
| :---: | :---: | :---: | :---: |
|  | 'I hit them2' | 'We2 hit them2' | 'We3 hit them2' |
| 2 | nyi vy: a doo | dpî vy: a dumo | nmyi vy: a dumo |
|  | 'You hit them2' | 'You2 hit them2' | 'You3 hit them2' |
| 3 | vy: a doo | vy: a dumo | vy:a dumo |
|  | 'He hit them2' | 'They2 hit them2' reciprocal: <br> yi chóóchóó vy:a dum | 'They3 hit them2' |

$3^{\text {rd }}$ Person
Object - Plural

| $\mathbf{1}$ | nê vy: too <br> 'I hit them3' | nyi vy: too <br> 'We2 them3' | $n m i ̂ ~ v y: a ~ t o o ~$ <br> 'We3 hit them3' |
| :--- | :--- | :--- | :--- |
| $\mathbf{2}$ | nyi vy: too | dpî vy: a tumo | nmyi vy:a tumo |
|  | 'You hit them3' | 'You2 hit them3' | 'You3 hit them3' |
| $\mathbf{3}$ | vy:a too | vy:a tumo | vy:a tumo |
|  | 'He hit them3' | 'They2 hit them3' | 'They3 hit them3' |

From these examples, the reader should be able to work out the rest of the paradigm using the proclitic and enclitic tables. The imperatives however are a
bit complex, and need some exemplification, shown in Table 6.45. (here, punctual aspect only, transitive verbs). These have also proved quite hard to elicit, because of a number of different ways to encode obligation (see under Counterfactuals §8.3). In addition, realistic scenarios with e.g. $2^{\text {nd }}$ person objects are hard to set up.

Table 6.45: Transitive Punctual Imperatives.

| Imperative Type | Subject <br> Properties | Object Properties |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Person | Singular | Dual | Plural |
| Immediate (now)! <br> (e.g. 'You2 hit me now!') | $\begin{aligned} & \text { MF: } 1 / \mathrm{SG} \\ & \text { PF: } 2 / 3 / \mathrm{pl} \end{aligned}$ | 1 | vy:a nédi vy:a nódó | dpî vy: a nyédi <br> dpî vy:a nyédi | vy:a nmédi dpî vy:a nyédi |
| Deferred (e.g. 'later he should hit you') | 3 S/D/PL | 2 | vy:a nyédit/ vy:a nyine | vy:a dpédi $+/$ vy:a dpinê | vy:a nmyédi t/ vy:a nmyinê |
| Immediate/Deferred $\ddagger$ (e.g. 'Let us2 hit him') | 1sing <br> 1dual <br> 1plural | 3 | vy:a ngmê vy:a koo | vy:a dê <br> vy:a déme <br> vy:a déme | vyee té vy: a téme vy:a téme |
| (e.g. 'You2 hit him') | 2sing <br> 2dual <br> 2plural | 3 | vy: a ngi <br> vy: a nyoo <br> vy:a yó | vy:a dé <br> vy:a dóó <br> vy:a dóó | vy: a té <br> vy:a tóó <br> vy:a tóó |
| (e.g. 'Let them2 hit him') | $\begin{aligned} & \text { 3sing } \\ & \text { 3dual/pl } \end{aligned}$ | 3 | vy:a ngê vy:a y:e | vy:a déne vy: a déne | vy:a téne vy:a téne |

$\dagger$ These forms seem to be going out of use, and being replaced by the forms underneath
$\ddagger$ Note these forms can be disambiguated by the use of proclitics in addition to enclitics.
a. $d p \hat{\imath} \quad v y: a$ nyédi
2/3IMPDef.P hit PFSdOIMP
'You (1 or more) should punish us2 later'
b. $d p \hat{\imath} \quad v y: a ~ n m e ́ d i$

2/3IMPDef.P hit MFSplOIMP
'He/you should punish us3 later'

A textual example of a $1^{\text {st }}$ person Imperative with enclitic is as follows (r99_v7_s1):

| (130) | Wodokpê | ngê | yepê |
| :--- | :--- | :--- | :--- |$\quad$ mââ $\quad$ paa $\quad$.

For the continuous aspect, Tables 6.46 to 6.48 give illustrative inflections for transitive verbal complexes for the Remote Past only. For the complete series see Tables 6.50 to 6.63 under §6.2.3.2, where positive and negative enclitics are compared in more compact form.

Table 6.46: Continuous Remote Past ('before yesterday'): Transitive enclitics FIRST PERSON OBJECT.

| Subject: | Sing | Dual | Plural |
| :--- | :--- | :--- | :--- |
| $\mathbf{1}^{\text {st }}$ Person <br> Object $\mathbf{- S i n g u l a r ~}$ |  |  |  |
| $\mathbf{1}$ | (see reflexives) | (see reflexives) | (see reflexives) |
| $\mathbf{2}$ | nyoo vyee nê | dpîmo vyee nê | nmyee vyee nê |
|  | 'You are hitting me' | 'You2 are hitting me' | 'You are hitting me' |
| $\mathbf{3}$ | doo vyee nê | dpîmo vyee nê <br> 'He was hitting me' | 'Thyey2 were hitting me' |
|  | 'They3 were hitting me' |  |  |

$1{ }^{\text {st }}$ Person
Object - Dual

| $\mathbf{1}$ | (see reflexives) | (see reflexives) | (see reflexives) |
| :--- | :--- | :--- | :--- |
| $\mathbf{2}$ | nyoo vyee nyo | dpîmo vyee nyo | nmyee vyee nyo |
|  | 'You1 were hitting us2' | 'You2 were hitting us2' | 'You3 were hitting us2' |
| $\mathbf{3}$ | doo vyee nyo | dpîmo vyee nyo | dnye vyee nyo |
|  | 'He was hitting us2' | 'They2 were hitting us2' | 'They3 were hitting us2' |

$1{ }^{\text {st }}$ Person
Object - Plural

| $\mathbf{1}$ | (see reflexives) | (see reflexives) | (see reflexives) |
| :--- | :--- | :--- | :--- |
| $\mathbf{2}$ | nyoo vyee nmo | dpîmo vyee nmo | nmyee vyee nmo |
|  | 'You1 were hitting us3' | 'You2 were hitting us3' | 'You3 were hitting us3' |
| $\mathbf{3}$ | doo vyee nmo | dpîmo vyee nmo | dnye vyee nmo |
|  | 'He was hitting us3' | 'They2 were hitting us3' | 'They3 were hitting us3' |

Table 6.47: Continuous Remote Past ('before yesterday'): Transitive enclitics SECOND PERSON OBJECT.


Table 6.47 (continued)

| Subject: | Sing | Dual | Plural |
| :---: | :---: | :---: | :---: |
| $2{ }^{\text {nd }}$ Person <br> Object - Dual |  |  |  |
| 1 | noo vyee dp:o <br> 'I was hitting you 2 before yesterday’ | nyipu vyee dp:o 'We2 were hitting you2' | nmee vyee dp:o <br> 'We3 were hitting you2' |
| 2 | (see reflexives) | (see reflexives) | (see reflexives) |
| 3 | doo vyee dp:o 'He was hitting you2' | dpîmo vyee dp:o 'They2 were hitting you2' | dnye vyee dp:o 'They3 were hitting you2' |
| $\begin{aligned} & 2^{\text {nd }} \text { Person } \\ & \text { Object - Plural } \end{aligned}$ |  |  |  |
| 1 | noo vyee nmyo <br> 'I was hitting you3 before yesterday’ | nyipu vyee nmyo 'We2 were hitting you3' | nmee vyee nmyo 'We3 were hitting you3' |
| 2 | (see reflexives) | (see reflexives) | (see reflexives) |
| 3 | doo vyee nmyo 'He was hitting you3 before yesterday' | dpîmo vyee nmyo 'They 2 were hitting you3' | dnye vyee nmyo 'They3 were hitting you3’ |

Table 6.48: Continuous Remote Past ('before yesterday'): Transitive enclitics THIRD PERSON OBJECT.

| Subject: | Sing | Dual | Plural |
| :---: | :---: | :---: | :---: |
| $3^{\text {rd }}$ Person <br> Object - Singular <br> (zero morph) |  |  |  |
|  |  |  |  |
| 1 | noo vyee | nyipu vyee | nmee vyee |
|  | 'I was hitting him' | 'We2 were hitting him' | 'We3 were hitting him' |
| 2 | nyoo vyee | dpîmo vyee | nmyee vyee |
|  |  | 'You2 were hitting him' | 'You3 were hitting him' |
| 3 | doo vyee | dpîmo vyee | dnye vyee |
|  | 'He was hitting him' | 'They2 were hitting him' | 'They3 were hitting him' |
| $\begin{aligned} & \text { 3rd Person } \\ & \text { Object - Dual } \end{aligned}$ |  |  |  |
|  |  |  |  |  |
| 1 | noo vyee dê | nyipu vyee dê | nmee vyee dê |
|  | 'I was hitting them2' | 'We2 were hitting them2' | We3 were hitting them2' |
| 2 | nyoo vyee dê | dpîmo vyee dê | nmyee vyee dê |
|  | 'You1 was hitting them2' | 'You2 were hitting them 2' | 'You3 was hitting them2' |

Table 6.48 (continued)

| Subject: | Sing | Dual | Plural |
| :---: | :---: | :---: | :---: |
| 3 | doo vyee dê 'He was hitting them2' | dpîmo vyee dê 'They2 were hitting them2' | dnye vyee dê 'They3 were hitting them2' |
| $3^{\text {rd }}$ Person <br> Object - Plural |  |  |  |
| 1 | noo vyee té 'I was hitting them 3 ' | nyipu vyee té 'We2 were hitting them3' | nmee vyee té 'We3 were hitting them3' |
| 2 | nyoo vyee té 'You1 was hitting them3' | dpîmo vyee té 'You2 were hitting them3' | nmyee vyee té <br> 'You3 was hitting them3' |
| 3 | doo vyee té 'He was hitting them3' | dpîmo vyee té 'They2 were hitting them ${ }^{\prime}$ | dnye vyee té 'They3 were hitting them3' |

### 6.2.3 Negation and verbal enclitics

As part of the pattern of distributed marking of negation (see §2.3 and specifically Chapter 10), some parts of the enclitic paradigms change in the negative. One of the more obvious and striking elements is that, in both the intransitive and transitive paradigm, there is a tense shift in the Punctual Aspect: the Remote Past forms are used in the Immediate Past (cf. English Had I gone, I would have seen it). Other changes occur in the Habitual and Imperative moods.

### 6.2.3.1 Intransitive negative enclitics

The main change here from the positive enclitics is that Punctual verbs behave differently especially in the Immediate Past (today) and the Imperative as shown in Table 6.49 (special negative clitics underlined).

Note that what happens in the negative is the re-use of some of the Punctual positive enclitics with shifted tense or mood: so Remote Past positive enclitics are also used in the Present Indicative, while positive Proximal tense enclitics are re-used in negative Imperatives. This is a methodical strategy in the language: verb roots which change in the Remote Past are also used for the Proximal negative tenses. Note the following positive Remote Past sentences with the verb 'go' which has three alternative roots in this tense (it can be treated as a weak verb requiring wo, in which case it takes the followed root lee, or it can be treated as a

Table 6.49: Intransitive Positive and Negative enclitics compared: Positive in italics, Punctual negative enclitics in bold, forms special to the negative underlined.

| Tense, Mood, Aspect | SUBJECT NUMBER |  |  |
| :---: | :---: | :---: | :---: |
|  | Sing | Dual | Plural |
| Punctual Indicative: Remote Past | $\emptyset$ (strong roots) $\varnothing$ wo (weak roots) wo | knâpwo knâpwo | dniye dniye |
| Punctual Habitual | $\emptyset$ (strong roots) $\varnothing$ wo (weak roots) | knâpwo knî | dniye dmi |
| Punctual Indicative- <br> - Future <br> - Today (Imm.Past) <br> - Yesterday (Near Past) | $\begin{aligned} & \varnothing \emptyset \\ & \varnothing \underline{\mathbf{w o}} \\ & \varnothing \emptyset \end{aligned}$ | knî knî <br> knî knâpwo <br> kni knî | $d m i \mathbf{d m i}$ <br> $d m i$ dniye <br> $d m i \operatorname{dmi}$ |
| Punctual Imperative: <br> Person <br> 1 <br> 2 <br> 3 | Ø wee /we | knî knî choo knî dniye knî | kmîle dmi <br> dmyino dmi <br> dniye dmi |
| Cont.Indicative Present \& Future Proximal | $\varnothing \varnothing$ <br> nê (optional) | mo mo | tété |
| Cont.Indic. Distal tenses (Yester/ <br> Rem/Tomorrow), <br> Cont.Indic. Habitual Distal | Øø | $\emptyset \mathrm{mo}$ | $\varnothing$ té |
| Cont. Indic. Habitual Proximal | yédi yédi | nódó nódo | nyédi nyédi |
| Cont. Indic. IMP | $\emptyset \emptyset$ | $\emptyset \emptyset$ | $\emptyset \emptyset$ |

strong verb with its own Remote Past root loo (alternate n:ee is preferred in negative and questioning contexts):
a. Yidika
lee
wo
Yidika
went.FOL REM.WEAK
'Yidika went the day before yesterday’
b. Yidika loo/n:ee?

Yidika went.REM/went.REM(Question/Neg.context)
'Yidika went the day before yesterday?'

Now compare the negative Proximal Past, and note that the same three Remote Past root forms can be used in the negative Proximal Past (earlier today), although when loo is followed, the followed root lee is preferred, and the alternate Remote Past form n:oo (nê when followed) favouring negative polarity contexts is also possible:

| (132) | a. | Yidika doo lee wo |
| :---: | :---: | :---: |
|  |  | Yidika NEG.3IMMPI go.FOL REM.WEAK |
|  |  | 'Yidika did not go earlier today' |
|  | b. | Yidika doo loo/doo n:ee |
|  |  | Yidika NEG.3IMMPI go.REM/go.REM(Q/NEG.context) |
|  |  | 'Yidika did not go earlier today' |
|  | c. | Yidika Pikuwa doo lee knâpwo |
|  |  | Yidika Pikuwa NEG.3IMMPI go.FOL dSREMP.IV/NegPolPRS |
|  |  | 'Yidika and Pikuwa did not go earlier today' |
|  | d. | Yidika Pikuwa doo nê |
|  |  | Yidika Pikuwa NEG.3IMMPI go.NEG |
|  |  | knâpwo /*loo knâpwo |
|  |  | dSREM.P.IV/NegPolPRS go.REM dSREM.P.IV |
|  |  | 'Yidika and Pikuwa did not go earlier today' |
|  | e. | Yidika Pikuwa Ń:aamono doo lee dniye |
|  |  | Yidika Pikuwa Ń:aamono NEG.3IMMPI go.FOL |
|  |  | /doo nê dniye |
|  |  | NEG.3IMMPI go.NEG plSREM.IV |
|  |  | 'Yidika Pikuwa and Ń:aamono did not go earlier today’ |

### 6.2.3.2 Transitive negative clitics

As with the intransitive enclitics, the main change from the positive inflectional pattern is that in the negative there is a re-use of the positive Punctual Remote Past enclitics in other tenses/moods. Altogether, there are special forms for the negative verb enclitics in the following tense/aspect/mood categories:
(i) In the Punctual Immediate Past tense, the negative verb is inflected with the positive Remote Past forms,
(ii) In the Punctual Habitual mood, the negative verb is also inflected with the positive Remote Past forms,
(iii) In the Imperative, the negative verb employs different enclitics.
(iv) Weak verbs, which in the positive Punctual may take a special non-zero enclitic form with Monofocal subjects, in the negative behave like strong verbs and take a zero enclitic.
(v) In the Continuous aspect, the same enclitics are employed as in the positive throughout the paradigm, except that $3^{\text {rd }}$ person object Immediate Future enclitics are not sensitive to the Monofocal/Polyfocal subject conditioning as the positive ones are.

It is difficult to represent the positive vs. negative enclitics in the same table (as we could do for the intransitive enclitics) because they make different tense/aspect groupings. In Table 6.50, I have separated out just those tense/mood combinations where the positive and negative enclitics are different, and have then shown the negative enclitics in bold. Wherever there is no negative enclitic information provided, that indicates that the positive and negative enclitics are the same.

Table 6.50: Transitive enclitics, showing NEGATIVE ENCLITICS IN BOLD only where different from the positive ones.

| TENSE/ASPECT/MOOD | SUBJECT <br> Person, <br> Number | OBJECT |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Person | SING | DUAL | PLURAL |
| Continuous Indicative Present and Immediate Past (today) only; Also, Punctual Future and Near Past | all | 1 | $n e \hat{}$ | nyo | nmo |
|  | all | 2 | $n g i$ | dp:o | птуo |
|  | MF: (1/SG) | 3 | $\varnothing$ | dê | té |
|  | PF: (2/3/PL) |  | $n g m e ̂$ | d:oo | t:0o |
| Punctual Immediate Past (today) Positive in italics, NEG in bold | all | 1 | nê | ny:o | nmo |
|  |  |  | noo | nyópu | nmoo |
|  | all | 2 | $n g i$ | dp:o | nmyo |
|  |  |  | nyoo | dp:o | nmyoo |
|  | MF | 3 | $\varnothing$ |  |  |
|  |  |  |  | doo | too |
|  | PF |  | $n g m e ̂$ | d:oo | t:oo |
|  |  |  | ngópu | dumo | tumo |
| Punctual Habitual Positive in italics, NEG in bold | all | 1 | nê | nyo | nmo |
|  |  |  | noo | nyópu | nmoo |
|  | all | 2 | ngi | $d p: o$ | nmyo |
|  |  |  | nyoo | dpo | nmyo |
|  | MF: (1/SG) | 3 | $\varnothing$ | dê | té |
|  |  |  | ngê | doo | too |
|  | PF: ( $2 / 3 / \mathrm{PL}$ ) |  | ngmê | $d: o o$ | t:00 |
|  |  |  | ngópu | dumo | tumo |
| Continuous Immediate Future (today) - Positive and Negative the same except for $3^{\text {rd }}$ Person Polyfocal subjects | all | 1 | $n \hat{}$ | ny:o | nmo |
|  |  |  | nê | ny:o | nmo |
|  |  | 2 | $n g i$ | dp:o | nmyo |
|  |  |  | $n g i$ | dp:o | nmo |
|  | MF | 3 | $\varnothing$ | dê | té |
|  |  |  |  | dê | té |
|  | PF |  | ngmê | d:oo | t:oo |
|  |  |  | $\varnothing$ | dê | té |

Table 6.50 (continued)

| TENSE/ASPECT/MOOD | SUBJECT <br> Person, <br> Number | OBJECT |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Person | SING | DUAL | PLURAL |
| Continuous Indicative - Near Past (yesterday) and Remote Past (day before yesterday), Pos \& Neg. | all | 1 | nê | nyo | nmo |
|  | all | 2 | $n g i$ | dp:o | nmyo |
|  | MF \& PF | 3 | $\emptyset$ | dê | té |
| Continuous Imperative (both present and deferred) |  | 3 | $\emptyset$ | dê | té |
| Punctual Indicative Remote Past (Positive \& Negative); <br> Also: <br> Continuous Habitual Proximal (Pos \& Neg) | all | 1 | noo | пуо́pu | nтoo |
|  | all | 2 | nyoo | dpo | nтyoo |
|  | MF: 1/SG | 3† | $n g e ̂ / \varnothing$ | doo | too/tee* |
|  | PF: 2/3/PL |  | ngópu | dumo | tumo |
| Continuous Non-Proximal tenses: <br> Yesterday, REM <br> Same in NEG | all | 1 | $n \hat{e}$ | nyo | nmo |
|  | all | 2 | $n g i$ | $d p: o$ | nmyo |
|  | all | 3 | $\emptyset$ | dê | dé |
| Imperatives - Punctual | MF: 1/SG | 1 | nédi | nyédi | nmédi |
|  | PF: 2/3/pl |  | nódó | nyédi | nyédi |
|  | 2s/d/pl | 1 | nê | ny:00 | nmo |
|  | 3s/d/pl | 1 | nê | ny:00 | nmo |
|  | $3 \mathrm{~s} / \mathrm{d} / \mathrm{pl}$ | 2 | nyédi | dpédi | nmyédi |
|  | 1sing (MF) | 3 | $\bar{\varnothing}$ | déme dê | téme té |
|  | 1dual (MF) |  | $n g m e ̂$ | déme? <br> dê | téme té |
|  | 1plural (MF) |  | koo <br> $\varnothing$ | déme? <br> dê | téme té |
|  | 2sing (MF) | 3 | $n g i$ $\varnothing$ | dé <br> dê | té té |
|  | 2dual (PF) |  | nyoo ngmê | $\begin{aligned} & \text { dóó } \\ & \text { d:oo } \end{aligned}$ | $\begin{aligned} & \text { tóó } \\ & \text { t:oo } \end{aligned}$ |
|  | 2plural (PF) |  | yó ngmê | $\begin{aligned} & \text { dóó } \\ & \text { d:oo } \end{aligned}$ | $\begin{aligned} & \text { dóó } \\ & \text { t:ooo } \end{aligned}$ |
|  | 3sing (MF) | 3 | $n g \hat{e}$ $\varnothing$ | déne dê | téne té |
|  | 3dual (PF) |  | $y: e$ ngmê | déne d:00 | téne t:00 |
|  | 3pl (PF) |  | $y: e$ ngmê | déne <br> d:oo | $\begin{aligned} & \text { téne } \\ & \text { t:ooo } \end{aligned}$ |

[^12]Because of the complexity of these patterns, and in order to allow the reader to check my generalizations, I include here a full set of paradigms in a compact form, showing both positive and negative forms of enclitics for all person/number combinations in the basic non-imperative aspect/moods (Tables 6.51 to 6.63). I start with the Punctual aspect, and then run through the tenses, within each tense providing the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ person object forms with object-number as a sequence Singular/Dual/Object, with the subject explicitly represented as columns (number) and rows (persons).

## A. TRANSITIVES - PUNCTUAL SERIES

Table 6.51: Transitive PI Future Positive = non-bold, Negative = bold, Object number marked by slashes: Sing/Dual/Pl Objects.

| Subject Properties | Sing | Dual | Plural |
| :---: | :---: | :---: | :---: |
| Ist Person Object |  |  |  |
| 1 | ?? |  |  |
| 2 | anyi vy: a nê/ny:o/nmo daa nyi vy:a nê/ny: o/nmo | adpî vy:a nê/ny:o/nmo daa dpî vy:a nê/ny: <br> o/nmo | anmyi vy: a nê/ny:o/nmo daa nmyi vy: a nê/ny: o/nmo |
| 3 | wa vy:a nê/ny:o/nmo daa wa vy:a nê/ny: o/nmo | wa ma ngmê/d:oo/t:oo daa wa vy:a nê/ny: o/nmo | wa vy:a nê/ny:o/nmo daa wa vy:a nê/ny: o/nmo |
| 2 ${ }^{\text {nd }}$ Person Object |  |  |  |
| 1 | anî vy: a ngi/dp: <br> o/nmyo <br> daa nê vy:a ngi/dp: <br> o/nmyo | anyi vy: a ngi/dp: <br> o/nmyo <br> daa nyi vy:a ngi/dp: <br> o/nmyo | anmî vy: a ngi/dp: <br> o/nmyo <br> daa nmî vy:a ngi/dp: <br> o/nmyo |
| 2 | ?? |  |  |
| 3 | wa vy:a ngi/dp:o/nmyo daa wa vy:a ngi/dp: o/nmyo | wa vy: a ngi/dp:o/nmyo daa wa vy:a ngi/dp: o/nmyo | wa vy:a ngi/dp:o/nmyo daa wa vy:a ngi/dp: o/nmyo |
| $3{ }^{\text {rd }}$ Person Object |  |  |  |
| 1 | $\begin{aligned} & \text { anî ma 0/dê/té } \\ & \text { daa nê ma (dêe - } 2 \\ & \text { objects té }-3 \text { ) } \end{aligned}$ | anyi ma 0/dê/té daa nyi ma (dê-té) | anmî ma 0/dê/té daa nmî ma (dê/té) |
| 2 | anyi ma 0/dê/té <br> daa nyi ma (dê -té) | adpî ma ngmê/d:oo/ <br> t:oo <br> daa dpî ma ngmê <br> (d:oo/t:00) | anmyi ma ngmê/d:oo/ <br> t:oo <br> daa nmyi ma ngmê <br> (d:oo/t:oo) |
| 3 | wa ma 0/dê/té daa wa ma (dê -té) | wa ma ngmê/d:oo/t:oo daa wa ma ngmê (d:oo/t:oo) | wa ma ngmê/d:oo/t:oo daa wa ma ngmê (d:oo/t:oo) |

Table 6.52: Transitive PI Today.

| Subject Properties | Sing | Dual | Plural |
| :---: | :---: | :---: | :---: |
| First Person Object: |  |  |  |
| Sing/dual/pl NEG |  |  |  |
| IN BOLD |  |  |  |
| 1 | ??dî vy: a ? | ??dnye vy:a | ??dpî vy:a |
| 2 | chi vy:a nê/ny:o/nmo choo vy:a noo/nyópu/ nmoo | dpî vy:a nê/ny:o/nmo dpo vy:a noo/nyópu/ nmoo | dmyi vy:a nê/ny:o/nmo dmy:oo vy:a noo/ nyópu/nmoo |
| 3 | dê vy:a nê/ny:o/nmo doo vy:a noo/nyópu/ nmoo | dê vy:a nê/ny:o/nmo doo vy:a noo/nyópu/ nmoo | dê vy:a nê/ny:o/nmo doo vy:a noo/nyópu/ nmoo |
| $2{ }^{\text {nd }}$ Person Object |  |  |  |
| 1 | dî vy:a ngi/dp:o/nmyo d:oo vy:a nyoo/dp:o/ nmyoo | dnye vy:a ngi/dp:o/ <br> nтyo <br> dny:oo vy:a nyoo/ <br> dp:o/nmyoo | dpî vy:a ngi/dp:o/nmyo dp:oo vy:a nyoo/dp: o/nmyoo |
| 2 | ??chi vy: a (ngi) | ?? | ??dmyi vy:a |
| 3 | dê vy: a ngi/dp: <br> o/nmyo <br> doo vy:a nyoo/dp: <br> o/nmyoo | dê vy:a ngi/dp: <br> o/nmyo <br> doo vy: a nyoo/dp: <br> o/nmyoo | dê vy:a ngi/dp:o/nmyo doo vy:a nyoo/dp: o/nmyoo |

$3^{\text {rd }}$ Person Object
Note Verb Root
REM vs. Followed

| 1 | dî vy:a 0/dê/té d:oo vyâ 0 d:oo vy:a doo/too | dnye vy:a 0/dê/té dny:oo vyâ 0/vy:a doo/too | dpî vy:a 0/dê/té dp:o vyâ 0/vy:a doo/ too |
| :---: | :---: | :---: | :---: |
| 2 | chi vy:a 0/dê/té choo vyâ 0/vy:a doo/ too | dpî vy:a ngmê/d:oo/ <br> t:oo <br> dp:oo vy:a ngópu/ <br> dumo/tumo | dmyi vy: a ngmê/d:oo/ t:oo <br> dny:oo vy:a ngópu/ dumo/tumo |
| 3 | ```dê vy:a 0/dê/té doo vyâ 0/ vy:a doo/ too``` | dê vy: a ngmê/d:oo/ <br> t:oo <br> doo vy:a ngópu/ <br> dumo/tumo | dê y:a ngmê/d:oo/t:oo doo vy:a ngópu/dumo/ tumo |

Table 6.53: PI Near Past Yesterday PI (Negatives in bold).

| Subject: | Sing | Dual | Plural |
| :--- | :--- | :--- | :--- |
| Ist Person Object |  |  |  |
| (Sing/Dual/Plural) |  |  |  |
| $\mathbf{1}$ | a chóóchóó nê vy:a nê | nye chóóchóó nyi vy:a | nmî chóóchóó nmî vy:a |
|  |  | nyo | nmo |
|  | nêóóchóó dîpî vy:a | nye chóóchóó dîp:e | nmî chóóchóó dpîpî |
|  | nyi vy:a nê/ny:o/nmo | dpî vy:a nê/ny:o/nmo | vmyi vy:a nê/ny:o/nmo |
|  | dipi vy:a nê/ny:o/nmo | dpîpî vy:a nê/ny: | dpîp:e vy:a nê/ny: |
|  |  | o/nmo | o/nmo |
| $\mathbf{2}$ | vy:a nê/ny:o/nmo | vy:a nê/ny:o/nmo | vy:a nê/ny:o/nmo |
|  | daa vy:a nê/ny:o/nmo | daa vy:a nê/ny:o/nmo | daa vy:a nê/ny:o/nmo |

2 ${ }^{\text {nd }}$ Person Object
(Sing/Dual/Plural)

| 1 | nê vy:a ngi/dp: | nyi vy:a ngi/dp: | nmî vy:a ngi/dp: |
| :--- | :--- | :--- | :--- |
|  | o/nmyo | o/nmyo | o/nmyo |
|  | dîpî vy:a ngi/dp: | dip:ee vy:a ngi/dp: | dpîpî vy:a ngi/dp: |
|  | o/nmyo | o/nmyo | o/nmyo |
| $\mathbf{2}$ | nyóóchóó nyi vy:a ngi | dpî chóóchóó dpî vy:a | nmyi chóóchóó nmyi |
|  | nyóóchóó dipi vy:a | dp:o | vy:a nmyo |
|  | (ngi) | dpî chóóchóó dpîpî | nmyi chóóchóó dpîp:e |
|  |  | vy:a dp:o/d:oo | vy:a nmyo/t:oo |
|  | vy:a ngi/dp:o/nmyo | vy:a ngi/dp:o/nmyo | vy:a ngi/dp:o/nmyo |
|  | daa vy:a ngi/dp: | daa vy:a ngi/dp: | daa vy:a ngi/dp: |
|  | o/nmyo | o/nmyo | o/nmyo |
|  |  |  |  |

$3^{\text {rd }}$ Person Object -
Sing/dual/plural

| 1 | nê vy:a o/dê/té <br> (I hit him, them2, <br> them3) <br> dîpî vy:a (dê/té) | nyi vy:a 0/dê/té <br> (we2 hit him, them2, <br> them3) <br> dip:ee vy:a (dê/té) | nmî vy:a o/dê/té (we3 hit him...) dpîpî vy:a (dê/té) |
| :---: | :---: | :---: | :---: |
| 2 | nyi vy:a o/dê/té (you hit him...) dipi vy:a (dê/té) | dpî vy:a ngmê/d:oo/ <br> t:oo <br> (you2 hit him. . .) <br> dpîpî vy:a ngmê <br> (d:oo/t:oo) | nmyi vy:a ngmê/d:oo/ <br> t:oo <br> (you3 hit him. . .) <br> dpîp:e vy:a ngmê <br> (d:oo/t:oo) |
| 3 | vy:a 0/dê/té <br> he hit him <br> daa vy:a (dê /té) <br> (chóóchóó vy:a <br> he hit himself <br> chóóchóó daa vy:a) | vy:a ngmê/d:oo/t:oo they2 hit him daa vy:a ngmê (d:oo/t:oo) | vy:a ngmê/d:oo/t:oo they3 hit him daa vy:a ngmê (d:oo/t:oo) |

Table 6.54: Remote Past.

| Subject: | Sing | Dual | Plural |
| :---: | :---: | :---: | :---: |
| Ist Person Object |  |  |  |
| 1 | ?? |  |  |
| 2 | nyi vy:a noo/nyópu/ <br> nтоo <br> dipi vy:a noo/nyópu/ <br> nmoo | dpî vy:a noo/nyópu/ <br> nmoo <br> dpîpî vy:a noo/nyópu/ <br> nmoo | nmyi vy:a nê/ny:o/nmo dpîp:ee vy:a noo/ nyópu/nmoo |
| 3 | vy:a noo/nyópu/nmoo daa vy:a noo/nyópu/ nmoo | vy:a noo/nyópu/nmoo daa vy:a noo/nyópu/ nmoo | vy:a noo/nyópu/nтoo daa vy:a noo/nyópu/ nmoo |
| 2 ${ }^{\text {nd }}$ Person Object |  |  |  |
| 1 | nê vy:a nyoo/dpo/ <br> nтyoo <br> dîpî vy:a nyoo/dpo/ <br> nmyoo | nyi vy: a nyoo/dpo/ <br> nтуоo <br> dip:ee vy:a nyoo/dpo/ <br> nmyoo | nmî vy:a yoo/dpo/ <br> nmyoo <br> dpîpî vy:a nyoo/dpo/ <br> nmyoo |
| 2 | nyóóchóó nyi vyâ nyóóchóó dipi vy:a nyoo | dpî chóóchóó dpî vy:a dpo/dumo dpî chóóchóó dpîpî vy:a dpo/dumo | nmyi chóóchóó nmyi vy: a nmyo/tumo nmyi chóóchóó dpîp:e vy: a nmyo/tumo |
| 3 | vy:a nyoo/dpo/nmyoo daa vy:a nyoo/dpo/ nmyoo | vy:a nyoo/dpo/nmyoo daa vy:a nyoo/dpo/ nmyoo | vy:a nyoo/dpo/nmyoo daa vy:a nyoo/dpo/ nmyoo |

$3^{\text {rd }}$ Person Object -
Sing/dual/pl (note
verb root changes:
REM vs. Followed)

| 1 | (I hit him, them2, <br> them3) <br> nê vyâ/ <br> nê vy: a ngê/doo/too <br> dîpî vyât $\dagger$ <br> (dîpi vy:a doo/too) | (we2 hit him, them2...) <br> nyi vyâ/ <br> nyi vy: a ngê/doo/too <br> dip:ee vyâ <br> (dip:ee vy:a doo/too) | (we3 hit him. . .) <br> nmî vyâ/ <br> nmî vy: a ngê/doo/too <br> dpîpî vyâ <br> (dpîpî vy:a doo/too) |
| :---: | :---: | :---: | :---: |
| 2 | (you hit him. . .) <br> nyi vyâ/ <br> nyi vy: a ngê/doo/too <br> dipi vyâ <br> (dipi vy:a doo/too) | (you2 hit him. ..) <br> dpî vy:a ngópu/dumo/ <br> tumo <br> dpîpîma ngópu <br> (dpîpî ma dumo/tumo) | (you3 hit him. ..) nmyi vy:a ngópu/ dumo/tumo dpîp:ee vy:a ngópu $\qquad$ vy:a dumo/ tumo) |
| 3 | (he hit him. . .) <br> vyâ/ <br> vy: a ngê/doo/too <br> daa vyâ <br> (daa vy:a doo/too) | (they2 hit him. . .) <br> vy: a ngópu <br> daa vy: a ngópu <br> (daa vy:a dumo/tumo) | (they3 hit him. . .) <br> vy:a ngópu/dumo/ <br> tumo <br> daa vy:a ngópu <br> (daa vy:a dumo/tumo) |

$\dagger$ Weak verbs in the negative appear to act like strong verbs.

Table 6.55: Habitual PI (Negatives in bold).
(Negatives are difficult to elicit, as they have rarified uses, e.g. the following gloss like "you never used to hit me/us2/us3", etc.)

| Subject | Sing | Dual | Plural |
| :--- | :--- | :--- | :--- |
| Ist Person Object |  |  |  |
| Habitual PI |  |  |  |
| $\mathbf{1}$ | a chóóchóó dpî vy:a | nye chóóchóó dnye | nmî chóóchóó dmye |
|  | a chóóchóó d:uu w:ee | vy:a nyo | nye chóóchóó d:uu |
|  | vy:a nê | vm:a nmo chóóchóó d:uu |  |
|  | dpyi vy:a nê/nyo/nmo | dpî vy:a nê/nyo/nmo | dmye vy:a nê/nyo/nmo |
|  | d:uu w:ee vy:a nê/ | dp:uu w:ee vy:a nê/ | dp:uu w:ee vy:a nê/ |
|  | nyo/nmo | nyo/nmo | nyo/nmo |
| $\mathbf{2}$ | dpî vy:a nê/nyo/nmo | dpî vy:a nê/nyo/nmo | dpî vy:a nê/nyo/nmo |
|  | d:uu dpî vy:a nê/nyo/ | d:uu dpî vy:a nê/nyo/ | d:uu dpî vy:a nê/nyo/ |
|  | nmo | nmo | nmo |


| $2{ }^{\text {rd }}$ Person Object Habitual PI |  |  |  |
| :---: | :---: | :---: | :---: |
| 1 | dpî vy:a ngi/dp:o/ nmyo <br> d:uu w:ee vy:a ngi/ dp:o/nmyo | dmye vy:a ngi/dp:o/ nтyo <br> dp:uu w:ee vy:a ngi/ dp:o/nmyo | dpî vy:a ngi/dp:o/nmyo dp:uu w:ee vy:a ngi/ dp:o/nmyo |
| 2 | nyóóchóó dpyi vy:a ngi nyóóchóó d:uu w:ee v:a ngi | dpî chóóchóó dpyi vy:a dê dpî óóchóó d:uu w:ee vy:a dp:o | nmyi chóóchóó dpyi vy:a t:oo nmyi chóóchóó d:uu w:ee vy:a t:oo |
| 3 | dpî vy:a ngi/dp:o/ nmyo d:uu dpî vy:a ngi/ dp:o/nmyo | dpî vy:a ngi/dp:o/ nmyo <br> d:uu dpî vy:a ngi/ dp:o/nmyo | dpî vy:a ngi/dp:o/nmyo d:uu dpî vy:a ngi/dp:o/ nmyo |

## $3^{\text {rd }}$ Person Object

Habitual PI - this
may conflate two
closely related
paradigms

| 1 | dpî vy:a 0/dê/té <br> d:uu w:ee vy:a 0/dê/ <br> té* | dmye vy:a 0/dê/té <br> d:ee vyee ngê/doo/ <br> too | dpî vy:a 0/dê/té <br> dpîno vyee ngê/doo/ <br> too |
| :--- | :--- | :--- | :--- |
| 2 | dpyi vy:a 0/dê/té | dpî vy:a ngmê/d:oo/ | dmye vy:a ngmê/d:oo/ |
|  | d:uu w:ee vy:a 0/dê/té | t:oo | t:oo |
|  |  | d:uu w:ee vy:a 0/dê/té | d:uu w:ee vy:a 0/dê/té |

Table 6.55 (continued)

| Subject | Sing | Dual | Plural |
| :--- | :--- | :--- | :--- |
| 3 | $d p i ̂ ~ v y: a ~ 0 / d \hat{e ̂ / t e ́ ~}$ | $d p i ̂ ~ v y: a ~ n g m e ̂ / d: o o / ~$ | $d p i ̂ ~ v y: a ~ n g m e ̂ / d: o o / ~$ |
|  | $d: u u d p i ̂ ~ v y: a ~ 0 / d \hat{e} /$ | t:oo | t:oo |
|  | té** | d:uu dpî vy:a ngmê/ | d:uu dpî vy:a ngmê/ |
|  |  | $d: o o / t: o o ~$ | $d: o o / t: o o ~$ |
|  |  |  |  |

* glosses 'I never hit him'
** not e.g. ngê/doo/too
(133) dini ghi ngê n:aa dpodo yédi, time part ADV 1sHABPROX work sS.HAB.PROX, yi pini ngê wédi d:uu dp̂̂ ma that person ERG sago NOT_HAB eat
'While I work on a person (with intestinal troubles), that person will never eat sago’
(Native healer, 2011 August 9 film)


## B. CONTINUOUS ASPECT - various verbs: pîpî ‘eating’, kpîdîkpîdî ‘washing someone'

Table 6.56: Future (DISTAL - tomorrow, always).

| Subject | Sing | Dual | Plural |
| :---: | :---: | :---: | :---: |
| with $1^{\text {st }}$ person Object (sing/dual/ plural in slashes) |  |  |  |
| 1 | a chóóchóó a nê kpîdîkpîdî nê a chóóchóó daa nê kpîdîkpîdî nê | nye chóóchóó a nye kpîdîkpîdî ny:o nye chóóchóó daa ny:o kpîdîkpîdî ny:o | nmî chóóchóó a nmî <br> kpîdîkpîdî nmo nmî chóóchóó daa nmî kpîdîkpîdî nmo |
| 2 | a nyi kpîdîkpîdî nê/ ny:o/nmo daa nyi kpîdîkpîdî nê/ nyo/nmo | a dpî kpîdîkpîdî nê/ ny:o/nmo daa dpî kpîdîkpîdî ny:o/nyo/nmo | a nmyi kpîdîkpîdî nê/ ny:o/nmo <br> daa nmyi kpîdîkpîdî nmo/ nyo/nmo |
| 3 | wa dê kpîdîkpîdî nê/ ny:o/nmo <br> daa dî kpîdîkpîdî nê/ nyo/nmo | wa dpî kpîdîkpîdî nê/ ny:o/nmo <br> daa dpî kpîdîkpîdî nê/ nyo/nmo | wa dnyi kpîdîkpîdî nê/ ny:o/nmo <br> daa dnyi kpîdîkpîdî nê/ nyo/nmo |

Table 6.56 (continued)

| Subject | Sing | Dual | Plural |
| :--- | :--- | :--- | :--- |
| (NB above is same as |  |  |  |
| Immediate Future) |  |  |  |
| with $\mathbf{2}^{\text {nd }}$ person |  |  |  |
| Object | a nê kpîdîkpîdî | a ny:o kpîdîkpîdî | a nmî kpîdîkpîdî |
| $\mathbf{1}$ | ngi/dp:o/nmyo | ngi/dp:o/nmyo | ngi/dp:o/nmyo |
|  | daa nê kpîdîkpîdî | daa ny:oo kpîdîkpîdî | daa nmî kpîdîkpîdî |
|  | ngi/dp:o/nmyo | ngi/dp:o/nmyo | ngi/dp:o/nmyo |
|  | nyóóchóó a nyi | dpî chóóchóó a dpî | nmyi chóóchóó a nmyi |
|  | kpîdîkpîdî nyi (*ngi) | kpîdîkpîdî dp:o | kpîdîkpîdî nmy:o |
|  | nyóóchóó daa nyi | dpî chóóchóó daa dpî | nmyi chóóchóó daa |
|  | kpîdîkpîdî nyi (*ngi) | kpîdîkpîdî dp:o | nmyi kpîdîkpîdî nmyo |
|  | a dî kpîdîkpîdî | a dpî kpîdîkpîdî | a dnye kpîdîkpîdî |
|  | ngi/dp:o/nmyo | ngi/dp:o/nmyo | ngi/dp:o/nmyo |
|  | daa dî kpîdîkpîdî | daa dpî kpîdîkpîdî | daa dnyi kpîdîkpîdî |
|  | ngi/dp:o/nmyo | ngi/dp:o/nmyo | ngi/dp:o/nmyo |
|  |  |  |  |

(NB above is same as
Immediate Future)
with $3^{\text {rd }}$ person
Object: 3s (with
3Dual/3Plural in
brackets)

| 1 | a nê kpîdîkpîdî (dê/dé) daa nê kpîdîkpîdî (dê/dé) | a ny:o kpîdîkpîdî (dê/dé) <br> daa ny:o kpîdîkpîdî (dê/dé) | a nmî kpîdîkpîdî (dê/dé) <br> daa nmî kpîdîkpîdî (dê/dé) |
| :---: | :---: | :---: | :---: |
| 2 | a nyi kpîdîkpîdî <br> (dê/dé) <br> daa nyi kpîdîkpîdî <br> (dê/dé) | a dpî kpîdîkpîdî <br> (dê/dé) <br> daa dpî kpîdîkpîdî <br> (dê/dé) | a nmyi kpîdîkpîdî (dê/dé) daa nmyi kpîdîkpîdî (dê/dé) |
| 3 | a dê kpîdîkpîdî (dê/dé) <br> daa dî kpîdîkpîdî <br> (dê/dé) | a dpî kpîdîkpîdî <br> (dê/dé) <br> daa dpî kpîdîkpîdî <br> (dê/dé) | a dnyi kpîdîkpîdî <br> (dê/dé) <br> daa dnyi kpîdîkpîdî <br> (dê/dé) |

(NB above is same as
Immediate Future)
this Near Past (distal) tense has same enclitics as positive

Table 6.57: Immediate Future (later today).

| Today IMMED. FUT | Sing | Dual | Plural |
| :---: | :---: | :---: | :---: |
| $1{ }^{\text {st }}$ person Object |  |  |  |
| 1 | a chóóchóó daa nê kpîdîkpîdî nê | nye chóóchóó daa ny:o kpîdîkpîdî ny:o | nmî chóóchóó daa nmî kpîdîkpîdî nmo |
| 2 | nye kpîdîkpîdî (nê/ ny:o/nmo) daa nyi kpîdîkpîdî (nê/ny:o/nmo) | dpo kpîdîkpîdî (nê/ ny:o/nmo) daa dpî kpîdîkpîdî (nê/ny:o/nmo) | nmye kpîdîkpîdî ngmê (nê/ny:o/nmo) daa nmyi kpîdîkpîdî (nê/ny:o/nmo) |
| 3 | a kpîdîkpîdî (nê/ny: <br> o/nmo) <br> daa dî kpîdîkpîdî <br> (nê/ny:o/nmo) | a kpîdîkpîdî (nê/ny: <br> o/nmo) <br> daa dpî kpîdîkpîdî <br> ((nê/ny:o/nmo) | a kpîdîkpîdî (nê/ny: <br> o/nmo) <br> daa dnyi kpîdîkpîdî <br> (nê/ny:o/nmo) |
| 2 ${ }^{\text {nd }}$ person Object |  |  |  |
| 1 | n:aa kpîdîkpîdî (ngi/dp:o/nmyo) daa nê kpîdîkpîdî (ngi/dp:o/nmyo) | nye kpîdîkpîdî (ngi/dp:o/nmyo) daa ny:oo kpîdîkpîdî (ngi/dp:o/nmyo) | nmo kpîdîkpîdî (ngi/dp:o/nmyo) daa nmî kpîdîkpîdî (ngi/dp:o/nmyo) |
| 2 | ?? |  |  |
| 3 | a kpîdîkpîdî <br> (ngi/dp:o/nmyo) daa dî kpîdîkpîdî (ngi/dp:o/nmyo) | a kpîdîkpîdî (ngi/dp:o/nmyo) daa dpî kpîdîkpîdî (ngi/dp:o/nmyo) | a kpîdîkpîdî (ngi/dp: <br> o/nmyo) <br> daa dnyi kpîdîkpîdî <br> (ngi/dp:o/nmyo) |
| $3{ }^{\text {rd }}$ person Object |  |  |  |
| 1 | n:aa kpîdîkpîdî (dê/dé) daa nê kpîdîkpîdî (dê/dé)* | nye kpîlîkpîdî (dê/dé)* daa ny:oo kpîdîkpîdî (dê/dé)* | nmo kpîdîkpîdî (dê/dé)* <br> daa nmî kpîdîkpî̀î (dê) déé* |
| 2 | nye kpîdîkpîdî (dê/dé)* <br> daa nyi kpîdîkpîdî (dê/dé)* | dpo kpîdîkpîdî ngmê (d:oo/t:oo) daa dpî kpîdîkpîdî (dê/dé)* | nmye kpîdîkpîdî ngmê (d:oo/t:oo) daa nmyi kpîdîkpîdî (dê/dé)* |
| 3 | a kpîdîkpîdî (dê/dé)* daa dî kpîdîkpîdî (dê/dé)* | a kpîdîkpîdì ngmê (d:oo/t:oo) daa dpî kpîdîkpîdî (dê/dé)* | kpîdîkpîdî ngmê (d:oo/t:oo) <br> daa dnyi kpîdîkpîdî (dê/déé* |

[^13]Table 6.58: Present.

| Now | Sing | Dual | Plural |
| :---: | :---: | :---: | :---: |
| ${ }^{\text {st }}$ person Object |  |  |  |
| 1 | ?? |  |  |
| 2 | anyi kpîdîkpîdî nê/ny:o/nmo d:ee kpîdîkpîdî nê/ny:o/nmo | a dpî kpîdîkpîdî nê/ny:o/nmo dpîdê kpîdîkpîdî nê/ny:o/nmo | a nmye kpîdîkpîdî nê/ny:o/nmo dp:ee kpîdîkpîdî nê/ny:o/nmo |
| 3 | a kpîdîkpîdî nê/ny: <br> o/nmo <br> daa kpîdîkpîdî <br> nê/ny:o/nmo | a kpîdîkpîdî nê/ny: <br> o/nmo <br> daa kpîdîkpîdî <br> nê/ny:o/nmo | a kpîdîkpîdî nê/ny: <br> o/nmo <br> daa kpîdîkpîdî <br> nê/ny:o/nmo |
| $2^{\text {nd }}$ person Object |  |  |  |
| 1 | a nî kpîdîkpîdî ngi/dp:o/nmyo dînê kpîdîkpîdî ngi/dp:o/nmyo | a nyi kpîdîkpîdî ngi/dp:o/nmyo d:ee kpîdîkpîdî ngi/dp:o/nmyo | a nmî kpîdîkpîdî ngi/dp:o/nmyo dpînê kpîdîkpîdî ngi/dp:o/nmyo |
| 2 |  |  |  |
| 3 | a kpîdîkpîdî ngi/dp: <br> o/nmyo <br> daa kpîdîkpîdî <br> ngi/dp:o/nmyo | a kpîlîkpîdîngi/dp: <br> o/nmyo <br> daa kpîdîkpîdî <br> ngi/dp:o/nmyo | a kpîdîkpîdî ngi/dp: <br> o/nmyo <br> daa kpîdîkpîdî <br> ngi/dp:o/nmyo |
| $3{ }^{\text {rd }}$ person Object |  |  |  |
| 1 | a nî kpîdîkpîdî <br> (dê/té) <br> dînê kpîdîkpîdî <br> (dê/té) | anyi kpîdîkpîdî <br> (dê/té) <br> d:ee kpîdîkpîdî <br> (dê/té) | a nmî kpîdîkpîdî <br> (dê/té) <br> dpînê kpîdîkpîdî <br> (dê/té) |
| 2 | a nyi kpîdîkpîdî <br> (dê/té) <br> d:ee kpîdîkpîdî (dê/té) | a dpî kpîdîkpîdî ngmê <br> (d:oo /t:oo) <br> dpîda kpîdîkpîdì ngmê <br> (d:oo /t:oo) | a nmye kpîdîkpîdî <br> ngmê (d:oo /t:oo) <br> dp:ee kpîdîkpîdî ngmê <br> (d:oo /t:oo) |
| 3 | a kpîdîkpîdî <br> (dê/té) <br> daa kpîdîkpîdî <br> (dê/té) | a kpîdîkpîdî ngmê <br> (d:oo /t:oo) <br> daa kpîdîkpîdî ngmê <br> (d:oo /t:oo) | kpîdîkpîdî ngmê <br> (d:oo /t:oo) <br> daa pîpî ngmê <br> (d:oo /t:oo) |

Table 6.59: Immediate Past (earlier today).

| Today | Sing | Dual | Plural |
| :---: | :---: | :---: | :---: |
| ${ }^{\text {st }}$ person Object |  |  |  |
| 1 |  |  |  |
| 2 | (kê) nyi kpîdîkpîdî nê/ny:o/nmo dipi kpîdîkpîdî nê/ny:o/nmo | (kê) dpî kpîdîkpîdî nê/ny:o/nmo dpîpî kpîdîkpîdî nê/ny:o/nmo | (kê) nmyi kpîdîkpîdî nê/ny:o/nmo dpîp:e kpîdîkpîdî nê/ny:o/nmo |
| 3 | kpîdîkpîdî nê/ny: <br> o/nmo <br> dî kpîdîkpîdî nê/ny: <br> o/nmo | kpîdîkpîdî nê/ny: <br> o/nmo <br> dî kpîdîkpîdî nê/ny: <br> o/nmo | kpîdîkpîdî nê/ny: <br> o/nmo <br> dî kpîdîkpîdî nê/ny: <br> o/nmo |
| $2^{\text {nd }}$ person Object |  |  |  |
| 1 | (kê) nê kpîdîkpîdî ngi/dp:o/nmyo dîpî kpîdîkpîdî ngi/dp:o/nmyo | (kê) nyi kpîdîkpîdî ngi/dp:o/nmyo dîp:e kpîdîkpîdî ngi/dp:o/nmyo | nmî kpîdîkpîdî ngi/dp:o/nmyo dpîpî kpîdîkpîdî ngi/dp:o/nmyo |
| 2 | ?? |  |  |
| 3 | kpîdîkpîdî ngi/dp: <br> o/nmyo <br> dî kpîdîkpîdî <br> ngi/dp:o/nmyo | kpîdîkpîdî ngi/dp: <br> o/nmyo <br> dî kpîdîkpîdî <br> ngi/dp:o/nmyo | kpîdîkpîdî ngi/dp: <br> o/nmyo <br> dî kpîdîkpîdî ngi/dp: <br> o/nmyo |
| $3{ }^{\text {rd }}$ person Object |  |  |  |
| 1 | (kê) nê pîpî (dê/té) dîpî pîpî (dê/té) | (kê) nyi pîpî (dê/té) dîp:e pîpî (dê/té) | (kê) nmî pîpî (dê/té) dpîpî pîpî (dê/té) |
| 2 | (kê) nyi pîpî (dê/té) dipi pîpî (dê/té) | (kê) dpî pîpî <br> (ngmê/d:oo/t:oo) <br> dpîpî pîpî ngmê <br> (d:00 /t:00) | (kê) nmyi pîpî (ngmê/d:oo/t:oo) dpîp:e pîpî ngmê (d:00 /t:00) |
| 3 | $\begin{aligned} & \text { pîpî (dê/té) } \\ & \text { dî pîpî (dê/té) } \end{aligned}$ | pîpî ngmê (d:oo /t:oo) <br> dî pîpî ngmê <br> (d:00 /t:00) | pîpîngmê (d:oo /t:oo) <br> dî pîpî ngmê <br> (d:oo /t:oo) |

Table 6.60: Yesterday - Near Past CI (Negatives in bold).

| Subject Properties | Sing | Dual | Plural |
| :---: | :---: | :---: | :---: |
| First Person Object: <br> Sing/dual/pl |  |  |  |
| 1 | (*nê chooó kpîdîkpîdî) | ? | ? |
| 2 | nyi kpîdîkpîdî nê/nyo/ <br> nmo <br> dipi kpîdîkpîdî nê/ <br> nyo/nmo | dpî kpîdîkpîdî nê/nyo/ <br> nmo <br> dpîîî kpîdîkpîdî nê/ nyo/nmo | nmyi kpîdîkpîdî nê/nyo/nmo da nmyi kpîdîkpîdî nê/nyo/nmo |
| 3 | dê kpîdîkpîdî nê/nyo/nmo da dê kpîdîkpîdî nê/nyo/nmo | dpî kpîdîkpîdî nê/nyo/ nmo <br> da dpî kpîdîkpîdî nê/ nyo/nmo | dnye kpîdîkpîdî nê/nyo/nmo da dnyi kpîdîkpîdî nê/nyo/nmo |
| $2^{\text {nd }}$ person Object <br> Sing/dual/pl |  |  |  |
| 1 | nê kpîdîkpîdî ngi/ dp:o/nmyo da nê kpîdîkpîdî ngi/ dp:o/nmyo | ny:oo kpîdîkpîdî ngi/ <br> dp:o/nmyo <br> dpîpî kpîdîkpîdî ngi/ <br> dp:o/nmyo | nmîvy:a ngi/dp:o/ nmyo da nmî kpîdîkpîdî ngi/ dp:o/nmyo |
| 2 |  | ?? | ?? |
| 3 | dî kpîdîkpîdî ngi/dp:o/nmyo da dê kpîdîkpîdî ngi/dp:o/nmyo | dpî kpîdìkpîdî ngi/dp:o/nmyo da dpî kpîdîkpîdî ngi/dp:o/nmyo | dnye kpîdîkpîdî ngi/dp:o/nmyo da dnye kpîdîkpîdî ngi/dp:o/nmyo |
| $\begin{aligned} & 3^{\text {rd }} \text { person Object } \\ & \text { Sing/dual/pl } \end{aligned}$ |  |  |  |
| 1 | nê kpîdîkpîdî 0/dê/dé <br> I was washing him <br> da nê kpîdîkpîdî 0/ <br> dê/dé | ny:oo kpîdîkpîdî <br> o/dê/dé <br> we2 him <br> d a ny:oo kpîdîkpîdî <br> o/dê/dé | nmî kpîdìkpîdîo/dê/dé we3 him |
| 2 | nyi kpîdîkpîdî 0/dê/dé you hit him | dpî kpîdîkpîlî o/dê/dé you2 him | nmyi kpîdîkpîdî o/dê/ dé you3 him |
| 3 | dî kpîdîkpîdî o/dê/dé | dpî kpîdîkpîdî o/dê/dé <br> they2 him <br> da dpîmo kpîdîkpîdî <br> o/dê/dé | dnye kpîdîkpîdî <br> o/dê/dé <br> they 3 were washing <br> him |

Table 6.61: Remote Past m:iituwó.

| Subject: | Sing | Dual | Plural |
| :---: | :---: | :---: | :---: |
| $1^{\text {st }}$ person Object (Singular/dual/ plural) |  |  |  |
| 1 |  | ?? | ?? |
| 2 | nyoo a kpîdîkpîdî nê/nyo/nmo da nyoo a kpîdîkpîdî nê/nyo/nmo | dpîmo a kpîdîkpîdî nê/nyo/nmo <br> da dpîmo a kpîdîkpîdî nê/nyo/nmo | nmyee a kpîdîkpîdî <br> nê/nyo/nmo <br> da nmyee a kpîdîkpîdî <br> nê/nyo/nmo |
| 3 | doo a kpîdîkpîdî nê/nyo/nmo dêpwo a kpîdîkpîdî nê/nyo/nmo | dpîmo a kpîdîkpîdî nê/nyo/nmo da dpîmo a kpîdîkpîdî nê/nyo/nmo | dnye a kpîdîkpîdî nê/nyo/nmo da dnye a kpîdîkpîdî nê/nyo/nmo |

## $2^{\text {nd }}$ person Object

(Singular/dual/
plural)

| 1 | noo a kpîdîkpîdî ngi/dp:o/nmyo da noo a kpîdîkpîdî ngi/dp:o/nmyo | nyipu a kpîdîkpîdî ngi/dp:o/nmyo da nyipu a kpîdîkpîdî ngi/dp:o/nmyo | nmee a kpîdîkpîdî ngi/dp:o/nmyo da nmee a kpîdîkpîdî ngi/dp:o/nmyo |
| :---: | :---: | :---: | :---: |
| 2 | ? | ? |  |
| 3 | doo a kpîdîkpîdî ngi/dp:o/nmyo dêpwo a kpîdîkpîdî ngi/dp:o/nmyo | dpîmo a kpîdîkpîdî ngi/dp:o/nmyo da dpîmo a kpîdîkpîdî ngi/dp:o/nmyo | dnye a kpîdîkpîdî ngi/dp:o/nmyo da dnye a kpîdîkpîdî ngi/dp:o/nmyo |
| $3^{\text {rd }}$ person Object <br> (Singular/dual/ plural) |  |  |  |
| 1 | noo a kpîdîkpîdî (dê/té) <br> dênoo (a) kpîdîkpîdî (dê/té) | nyipu a kpîdîkpîdî <br> (dê/té) <br> dê nyipu (a) kpîdîkpîdî <br> (dê/té) | nmee a kpîdîkpîdî <br> (dê/té) <br> dê nmee (a) kpîdîkpîdî <br> (dê/té) |
| 2 | nyoo a kpîdîkpîdî <br> (dê/té) <br> dênyoo (a) kpîdîkpîdî <br> (dê/té) | dpîmo a kpîdîkpîdî <br> (dê/té) <br> dê dpîmo (a) <br> kpîdîkpîdî dê/té) | nmyee a kpîdîkpîdî <br> (dê/té) <br> de nmyee (a) kpîdîkpîdî <br> (dê/té) |
| 3 | doo a kpîdîkpîdî (dê/té) <br> dêpwo (a) kpîdîkpîdî <br> (dê/té) | dpîmo a kpîdîkpîdî <br> (dê/té) <br> dê dpîmo (a) <br> kpîdîkpîdî (dê/té) | dnye a kpîdîkpîdî (dê/té) dê dnye (a) kpîdîkpîdî (dê/té) |

Table 6.62: Habitual Continuous.

| Hab Proximal | Sing | Dual | Plural |
| :---: | :---: | :---: | :---: |
| $\mathbf{1}^{\text {st }}$ person Object |  |  |  |
| 1 | ?? |  |  |
| 2 'You used to wash us everyday...' | nye kpîdîkpîdî noo/nyópu/nтоo d:ee kpîdîkpîdî noo/nyópu/nmoo | dpo kpîlìkpîdî noo/nyópu/nтоo dpîdê kpîdîkpîdî noo/nyópu/nmoo | nmye kpîdîkpîdî noo/nyópu/nтоo dp:ee kpîdîkpîdî noo/nyópu/nmoo |
| 3 | a kpîdîkpîdî noo/nyópu/nmoo daa kpîdîkpîdî noo/nyópu/nmoo | a kpîdîkpîdî noo/nyópu/nmoo daa kpîdîkpîdî noo/nyópu/nmoo | a kpîdîkpîdî noo/nyópu/nтoo daa kpîdîkpîdî noo/nyópu/nmoo |
| $\underline{2^{\text {nd }} \text { person Object }}$ |  |  |  |
| 1 | n:aa kpîdîkpîdî nyoo/dpo/nmyoo dînê kpîdîkpîdî nyoo/dpo/nmyoo | nye kpîdîkpîdî nyoo/dpo/nmyoo d:ee kpîdîkpîdî nyoo/dpo/nmyoo | nmo kpîdîkpîdî nyoo/dpo/nmyoo dpîn:oo kpîdîkpîdî nyoo/dpo/nmyoo |
| 2 | ?? |  |  |
| 3 | a kpîdîkpîdî nyoo/dpo/nmyoo daa kpîdîkpîdî nyoo/dpo/nmyoo | a kpîdîkpîdî nyoo/dpo/nmyoo daa kpîdîkpìdî nyoo/dpo/nmyoo | a kpîdîkpîdî nyoo/dpo/nmyoo daa kpîdîkpîdî nyoo/dpo/nmyoo |
| $3^{\text {rd }}$ person Object |  |  |  |
| 1 | n:aa kpîdîkpîdî ngê <br> (doo/too) <br> dînê kpîdîkpîdi ngê <br> (doo/too) | nye kpîdîkpîdî ngê <br> (doo/too) <br> d:ee kpîtîkpîdi ngê <br> (doo/too) | nmo kpîdîkpîdî ngê <br> (doo/too) <br> dpîn:oo kpîdîkpîdi ngê <br> (doo/too) |
| 2 | nye kpîlîkpîdî ngê (doo/too) d:ee kpîdîkpîdi ngê (doo/too) | dpo kpîdîkpîdî ngópu <br> (dumo/tumo) <br> dpîdê kpîdîkpîdi <br> ngópu (dumo/tumo) | nmye kpîdìkpîdî ngópu (dumo/tumo) dp:ee kpîdîkpîdi ngópu (dumo/tumo) |
| 3 | a kpîdîkpîdî ngê <br> (doo/too) <br> daa kpîdîkpîdi ngê <br> (doo/too) | a kpîdîkpîdî ngópu <br> (dumo/tumo) <br> daa kpîdîkpîdî ngópu <br> (dumo/tumo) | a kpîdîkpîdî ngópu <br> (dumo/tumo) <br> daa kpîdîkpîdi ngópu <br> (dumo/tumo) |
| Habitual Distal (discontinued action) Positive in roman Negative in bold $3^{\text {rd }}$ person Object |  |  |  |
| 1 | nîmo kpîdîkpîdî <br> (dê/dé*) <br> dê nîmo kpîdîkpîdî <br> (dê /té) | nyimo kpîdîkpîdî <br> (dê /dé) <br> dê nyipu kpîdîkpîdî <br> (dê/té) | nmîmo kpîdîkpîdî <br> (dê /dé) <br> dê nmîmo kpîdîkpîdî (dê/té) |

Table 6.62 (continued)

| Hab Proximal | Sing | Dual | Plural |
| :--- | :--- | :--- | :--- |
| 2 | nyimo kpîdîkpîdî | dpîmo kpîdîkpîdî | nmyimo kpîdîkpîdî |
|  | (dê/dé) | (dê/dé) | (dê/dé) |
|  | dê nyimo kpîdîkpîdî | dêdpîmo kpîdîkpîdî | dê nmyimo kpîdîkpîdî |
|  | (dê /té) | (dê /té) | (dê /té) |
| $\mathbf{3}$ | dpîmo kpîdîkpîdî | dpîmo kpîdîkpîdî | dnyimo kpîdîkpîdî |
|  | (dê/dé) | (dê/dé) | (dê/dé) |
|  | dê dpîmo kpîdîkpîdî | dê dpîmo kpîdîkpîdî | dê nyimo kpîdîkpîdî |
|  | (dê /té) | (dê /té) | (dê /té) |

*both té and dé seem OK here

Table 6.63: Imperatives Continuous Aspect (Negative in bold).

| Imp | Sing | Dual | Plural |
| :---: | :---: | :---: | :---: |
| $3^{\text {rd }}$ person Object, Continuous Aspect, Imperatives |  |  |  |
| 1 | (future forms here)* a nê pîpî (dê/té) daa nê pîpî (dê/té) | (future forms here) a ny:oo pîpî (dê/té) daa ny:oo pîpî (dê/té) | (future forms here) a nmî pîpî (dê/té) daa nmî pîpî (dê/té) |
| 2 | chi pîpî (dê/té) <br> namê pîpî(dê/té) <br> $=$ kidimê pîpî | choo pîpî <br> namê pîpî(dê/té) <br> $=$ kudumê pîpî(dê/té) | dmyinê pîpî <br> namê pîpî(dê/té) <br> kî dmyemê pîpî(dê/té) |
| 3 | choo pîpî (dê/té) <br> kîmê pîpî(dê/té) | dny:o pîpî (dê/té) kîdpîmê pîpî(dê/té) | dny:o pîpî (dê/té) kî dnyimê pîpî(dê/té) |

* The $1^{\text {st }}$ person has no real imperative forms - the future is used instead

| Imp - alternative <br> forms* | Sing | Dual | Plural |
| :--- | :--- | :--- | :--- |
| $\mathbf{1}$ |  |  |  |
| $\mathbf{2}$ | chi pîpî (dê/té) <br> kichingê pîpî (dê/té) | choo pîpî <br> kudungê pîpî(dê/té) | dmyinê pîpî <br> kîdmyengê pîpî(dê/té) |
| $\mathbf{3}$ | choo pîpî (dê/té) | dny:o pîpî (dê/té) <br> kîmê pîpî(dê/té) | dny:o pîpî (dê/té) <br> kidngê pîpî(dê/té) |
|  | kidnyengê pîpî (dê/té) |  |  |

* Just the $2^{\text {nd }}$ person negative offers 3 distinct alternate forms.

The meaning differences between the 3 alternate continuous $2^{\text {nd }}$ person imperatives are subtle. The ones listed in the box "alternative forms" seem to suggest universal quantification over times:
(134) a. namê pîp̂ - you should not be eating this now (maybe later)
b. kidimê pîpî - you should not be eating this now (maybe later)
c. kichingê pîpî - you should never eat it

### 6.3 Conditional enclitics

Indicative conditionals are formed by replacing the above enclitics, on the antecedent only, with two separate paradigms, one for intransitives and one for transitives. This is the only major independent grammatical category, beyond basic tense/aspect/mood/person/number information, which is fused with the postverbal clitics. In contrast the pre-verbal clitics, as we have seen, code for many additional features, including Counterfactual conditionals, which thus have a quite unrelated structure to Indicative Conditionals. Both types of conditional sentence are treated under complex sentences in Chapter 8, and the paradigms for conditional enclitics will be found there (§8.2). Here I simply demonstrate that the conditional enclitics replace the normal ones in the antecedent only:


Here wo gets replaced with knomomê which is indifferent to different tenses and persons in the punctual indicative. There is less neutralization in the transitive conditional enclitics, but a lot of tense/aspect/number information is also collapsed there. Both conditionals and especially counterfactuals have uses as independent main clauses, described for convenience under their complex sentence uses.

### 6.4 Complex verb phrases

There is no evidence for a VP in the sense of a constituent that binds a transitive verb to its object NP, since objects are freely placed. But the verb complex itself forms a tight unit, and this can include complex verbs and other elements.

Among these are incorporated objects including gerunds (treated in §7.9.3), a few compound verbs and a few special constructions.

Consider for example the construction in example (136), built on the template: yida Verb ala Verb 'keep on doing something' (the construction takes both PI and CI verbs). In this construction, the whole verbal complex takes just one proclitic, as appropriate to tense/aspect/mood, but each of the repeated verbs takes its own enclitic (this is further evidence of the tighter connection between verb and enclitic than verb and proclitic, the latter allowing intrusive intervening elements). The proclitic dê in the a. sentence below indicates Punctual Aspect. In b., the Continuous Aspect is signalled by a zero-proclitic, and the dual object is reflected in the dual enclitic dê in bold (châpwo is an irregular verb with same form in the PI and CI aspects). In b., the object is marked dual (dê) both in the noun phrase and the enclitic, while in c. the noun is quantifed with limi 'five' and the plural is marked in the enclitics. The other examples just show that, in other respects, the construction inflects as expected: d. and e. are parallel to b., but with dual and plural subjects respectively, f. is parallel to d. but with plural object, g. is the Remote Past version of c., and h. the Near Past version of f.

e. pi limi knî y:oo yi ghi
man five AUG ERG.PL tree part
dê dê yida châpwo d:oo
Dual 3IMM yida cut PFS.3dO
ala châpwo d:oo
ala cutting PFS.3dO
'Five men kept on cutting two pieces of wood (today)'
f. pi dê y:oo yi ghi limi dê
man Dual ERG.PL tree part five 3IMM
yida châpwo t:oo ala châpwo t:oo
yida cut PFS.3plO ala cutting PFS.3plO
'Two men kept on cutting five pieces of wood (today)'
g. pi ngê yi ghi limi yida châpwo
man ERG tree part five yida cut
too ala châpwo too
MFS.3plO.Rem ala cutting MFS.3plO.Rem
'A man kept on cutting five pieces of wood (day before yesterday or before)'
h. pi dê y:oo yi ghi limi yida
man Dual ERG.PL tree part five yida
châpwo t:oo, ala châpwo t:oo
cut PFS.3plO ala cutting MFS.3plO
'Two men kept on cutting five pieces of wood (yesterday)'

The yida element is not itself a proclitic, since the normal proclitic precedes it, and when a proclitic is regularly missing as in Punctual Imperatives yida remains:

| a. yida châpwo ngi, | ala châpwo ngi! |  |  |
| :--- | :--- | :--- | :--- | :--- |
| yida cut | 2sS3sOIMPP | ala cut | 2sS3sOIMPP |
| 'Keep on cutting it' |  |  |  |

b. yida châpwo nyoo, ala châpwo nyoo
yida cut 2dS3sOIMPP ala cut 2dS3sOIMPP
'You2 keep on cutting it'
c. yeda châpwo koo, ala châpwo koo yida cut 1 plS3sOIMPP ala cut 1plS3sOIMPP 'We3 should keeping on cutting one thing'
d. yeda châpwo ngmê, ala châpwo ngmê
yida cut 1dS3sOIMPP ala cut 1dS3sOIMPP
'We2 should keep on cutting one thing'

| e. yeda châpwo nyoo, | ala châpwo nyoo |  |  |
| :--- | :--- | :--- | :--- | :--- |
| yida cut | 2dS3sOIMPP | ala cut | 2dS3sOIMPP |
| 'You2 should be cutting it' |  |  |  |

f. yeda châpwo yó, ala châpwo yó yida cut 2plS3sOIMPP ala cut 2plS3sOIMPP 'You3 should be cutting it'
g. yeda châpwo $y: e, \quad$ ala châpwo $y: e$
yida cut 3d/plS3sOIMPP ala cut 3d/plS3sOIMPP 'They2/3 should be cutting it'

Many other complex verbal constructions, which would for example express English infinitival clauses (like the English phase-verbs 'start to V', 'continue to V' or the attempt-verbs like 'fail to V', 'manage to V'), are done with non-incorporated gerunds (e.g. 'fail to V' is expressed as gerund + dêê 'fail to') which have no tight connection at all to the verb complex. For example:
(138) te yâmuyâmu ngê nî dêê wo
fish hunting ADV 1s fail.to MF.REM.PI
'I failed to catch any fish' (lit. ‘fish hunting-wise I failed')

The phase-verbs have some additional constructional complexities, e.g. 'to start' is expressed (with or without an explicit gerund describing the activity) with the nominal kn:ââ 'base, origin, cause' plus the verb chaa/chópu/chapî 'to split something':
a. tpilewee kn:ââ wunê dê chaa ngmê?
dance source already 3IMMPI split PFSubjPROX3sObj
'Has the sing-sing already started?'
b. Pule ngê ka'ne pê vyómuvyómu kn:ââ

Pule ERG door.steps fixing source
kêdê chaa, ngmênê neli daa tóó
CERT3CloseIMM split but nails NEG sitting
'Pule started to fix the steps but there were no nails (today)'

Stopping is expressed with the transitive verbs yé 'put down' or $p w a ̂ \hat{a}$ 'break' with the gerund (if there is one) as direct object:

| a.tpilewee dê yé <br> dance 3IMMPI ngmê? <br>  put.down PFSubjProx3sObj |  |  |
| :--- | :--- | :--- | :--- |
|  | 'Has the sing-sing already stopped?' |  |

b. Pule ngê ka'ne pê vyómuvyómu dê

Pule ERG door.steps fixing 3sIMM
yé, neli daa tóó
put.down nail not sitting
'Pule stopped fixing the steps - there were no nails'
c. Nkéli mbêpê da puwâ
boat running 3IMM.CLS break
'The boat stopped running'

Constructions involving gerunds or nominalized verbs are further dealt with in §8.7, the point here being that these and the associated notions do not involve the formation of a complex verb or verb phrase.

## 7 The simple clause

### 7.1 Word and phrase order

In Yélî Dnye, major phrases like the NP and the immediate projection of the verb (a verb plus its obligatory clitics) have rigidly fixed internal order. These major phrases are usually aligned in an $\mathrm{A}-\mathrm{O}-\mathrm{V}$ or $\mathrm{S}-\mathrm{V}$ order, although the subject is often omitted. However, this is only a tendency, as can be seen from the fact that a simple locative sentence like the following permits all the listed phrase orders, where the subject can be postposed or the verbal complex fronted.


There is apparently no meaning difference at a referential (or truth-conditional) level among these variants, although they no doubt occur in different usage contexts. The following example is a full transitive clause with overt arguments and an instrumental phrase, and at least the four indicated orders are possible, although the last, with preposed verb and both ergative (A) and instrumental (I) phrases postposed, is somewhat awkward (although possible). Note that in the singular the ergative case is the same as the instrumental, and potential ambiguity is here resolved by the expectation that the ergative NP will come first.
a. tp:ee ngê yedê kpê dê châpwo,
boy ERG vine string 3IMMPI cut
nkéli chêêpı̂ pee ngê
ship stone piece INST
'The boy cut the string with a piece of metal' A-O-V-I

| b. tp:ee ngê nkéli chêêpî pee ngê yedê kpê dê châpwo | A-I-O-V |
| :--- | :--- | :--- |
| c. yede kpê dê châpwo tp:ee ngê, nkéli chêêpî pee ngê | O-V-A-I |
| d. dê châpwo yedê kpê, tp:ee ngê, nkéli chêêpî pee ngê | V-O-A-I |

Setting aside argument and adjunct NPs, which generally have freedom of placement, the verb itself comes obligatorily sandwiched between proclitics and enclitics (in the above example, dê is the proclitic and the enclitic is null). As we have seen in Chapter 6, the proclitics, for both transitive and intransitive verbs, carry information about the subject - three persons and three numbers - as well as portmanteau information about tense, aspect and mood. The proclitics, recollect, are indifferent to transitivity, in a Nominative pattern. The enclitics come in two series: for intransitives they mark subject (S) properties combined with tense/aspect/mood, while for transitives they combine subject (A) and object (O) information, as well as tense, aspect and mood. Thus one could think of the verbal complex (as opposed to the sentential order) as itself ordered as $\mathrm{S}-\mathrm{V}-(\mathrm{O}+) \mathrm{S}$. The enclitics cannot be separated from the verb; the proclitics can combine with additional clitics, and they also allow incorporated objects to come between themselves and the verb.

With these caveats, we can say that the predominant word order is $\mathrm{A}-\mathrm{O}-\mathrm{V}$ or S-V, or more properly V-final (meaning verb-complex final), since the subject of a verb, whether ergative or absolutive, can be freely omitted, so transitive clauses statistically tend to be O-V. Out of 1259 three participant transitive sentences freely produced by 60 consultants in a picture-describing experiment (where each participant in the event was new and therefore tended to be expressed), 1235 were in $\mathrm{A}-\mathrm{O}-\mathrm{V}$ order, and just 24 ( $2 \%$ ) in $\mathrm{O}-\mathrm{A}-\mathrm{V}$ order (see Table 7.1). This strong tendency is consistent with the existence of postpositions rather than prepositions, and preposed possessives (on the pattern 'John his house'), i.e. with a head-final phrase order. However, inside NPs adjectives follow the head noun (actually the majority strategy for OV languages, Dryer 2013a), only modifying nominals in compounds preceding the head. Further, the language is not left-branching as might be expected on the basis of A-O-V ordering: relative clauses are superficially to the right of the head noun (a minority but common enough pattern, Dryer 2013b), although in $\S 8.1$ it will be argued that in fact Yélî relative clauses are internally headed.

Table 7.1: Order of phrases in three and four participant clauses (picture description data; A agent, O object, V verb, D dative phrase, L locative phrase, I instrumental phrase).

| N | 3 Argument |  | +Instrumental |  |  | +Locative |  |  | +Dative |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AOV | OAV | AOVI | AOIV | AIOV | AOVL | AOLV | ALOV | AOVD | ADOV | AODV |
| 1417 | 1235 | 24 | 43 | 29 | 8 | 36 | 63 | 27 | 19 | 17 | 4 |

Henderson (1995:59) gives the following phrase order tendencies based on texts:
(143) Time(day) > Subject > Dat/Abl/ INST/Com > Object > Location/Manner > Experiencer $>$ Time(relative) $>$ Quantifier $>$ Predicate

He also notes that most clauses have only one or two major phrases beyond the verb complex, with less than $10 \%$ having three or more. In the data from the pic-ture-describing experiment (Table 7.1 above), in just $12 \%$ of clauses were additional participants mentioned beyond $\mathrm{A}-\mathrm{O}-\mathrm{V}$.

### 7.2 Sentence types, mood and illocutionary force

As mentioned, the language cross-cuts tense with aspect and mood. Since aspect cross-cuts Habitual marking, Henderson (1995:19) argued that the Habitual should be considered a mood (but see discussion in §2.4 and see Comrie 1976:31-32), contrasting with the specificity of the Indicative: there are thus three moods, Indicative, Imperative and Habitual. The Indicative has maximally six tenses, the Imperative and the Habitual maximally two (the Habitual has two tenses in the continuous aspect, the Imperative two in the punctual aspect). The actual marking of such distinctions is distributed across three main markers, the form of the proclitics, the enclitics and the verb-root, as shown in the following table. As Table 7.2 makes clear, counterfactuals are treated like a distinct mood, as are conditionals - although marked in different loci, both have a full range of forms for different tense/aspect/ person configurations.

Table 7.2: Marking of Tense/Mood/Aspect/Force.

| Pre-verbal clitic | Post-verbal clitic | Verb-root suppletion | See section |
| :--- | :--- | :--- | :--- |
| Subject | Subject and Object | (occasional) | Chapter 6, §7.4 |
|  | Transitivity | (Transitivity)* | $\S 6.2, \S 4.5$ |
| Tense | Tense | Tense (in Punct. Aspect) | $\S 4.5 .4 .4$ |
| Aspect | Aspect | Aspect | $\S 4.5 .2$ |
| Habitual vs. | Habitual vs. Indicative |  | $\S 6.1, \S 6.2$ |
| Indicative |  |  |  |
| Imperative | Imperative | Imperative | $\S 7.2 .1$ |
| Counterfactuals |  |  | $\S 8.3$ |

Table 7.2 (continued)

| Pre-verbal clitic | Post-verbal clitic | Verb-root suppletion | See section |
| :--- | :--- | :--- | :--- |
|  | Conditionals |  | $\S 8.2$ |
| Negation | (shifted values in <br> negative sentences) | (occasional) | Chapter 10 |
|  |  |  |  |

*Whether transitivity is marked by suppletion, or the verbs are unrelated, is a moot point. I will assume unrelated.

### 7.2.1 Imperatives

Imperative forms exist for all three persons, distinguishing most of the nine person/number combinations in proclitic paradigms. They also come in two tenses, Present (now) and Future (deferred). The Imperative mood is functionally important, as it is the main way to express deontic modality in the language. The following examples illustrate the range of usage of imperatives of different persons, numbers and tenses (action to be carried out now vs. deferred till later):
(144) a. dye ghi yintómu Sunday têdê church time part every Sunday place church
k:oo chi koko
inside 2sIMPC ascending
'Every Sunday you must go to church'
b. dye ghi yintómu tp:ee dmââdî ma Sunday têdê
time part every boy girl PL Sunday place
church k:oo dny:oo koko
church inside 3plIMPC ascending
'Every Sunday the children must go to church'
c. dini ghi n:ii ngê Bishop wa t:aa, time part REL ADV bishop 3FUTP arrive
$d p \hat{\imath}$ lili $d p: u u \quad m w i n i$
2sIMPDef go.IMP 2sIMPDef.MOT see.IMP
'When Bishop comes, you (one) must go and see him (deferred imperative)'
d. dini ghi n:ii ngê Bishop wa t:aa, dp̂̂ lee, time part REL ADV bishop 3FUTP arrive 2dIMPDef go.FOL choo dp:uu m:uu nyoo
2dIMPDef.MOT see 2dS3sOIMP
'When Bishop comes, you two must go and see him (deferred imperative)'
e. dini ghi n:ii ngê Bishop wa t:aa, dp̂̂ lee, time part REL ADV bishop 3FUTP arrive 2dIMPDef go.FOL dmyino dp:uи m:uи yó
2plIMPDef.MOT see 2plS3sOIMP
'When Bishop comes, you three or more must go and see him (deferred imperative)'
f. dini ghi n:ii ngê Bishop wa t:aa, dp̂̂ lee, time part REL ADV bishop 3FUTP arrive 2dIMPDef go.FOL we dp:uu m:uu ngê 3sSIMP.IV 3sIMPDef.MOT see 3sS3sOIMP 'When Bishop comes, he must go and see him (deferred imperative)'
g. dini ghi n:ii ngê Bishop wa t:aa, dp̂̂ lee, time part REL ADV bishop 3FUTP arrive 2dIMPDef go.FOL dniye dp:uu m:uи y:ee 3d/pl.lIMPDef.MOT see 3d/plS3sOIMP
'When Bishop comes, they two or more must go and see him (deferred imperative),
h. mî ngê kópuni choo tpapê, dye ghi yintómu father ERG word.spec 3sIMPC saying time part all chi d:uud:uu
2sIMPC doing
'You must always do what your father (imperatively) says'
i. tp:ee dmââdî ma yi m̂̂ kn̂̂ y:oo kópuni boy girl PL their father AUG ERG.PL word.spec dny:oo Tpapê, dye ghi yintómu dny:oo d:uud:uu 3plIMPC saying time part all 3plIMPC doing 'Children must always do what their fathers say'
j. mt:enge n:aangmê ma
puffer.fish 2sNEVER.IMP eat
'Never eat $m t$ :enge fish (Arothron sp., poison fish)'
k. pyââ ngê lvéé d:uu dpî ma
woman ERG fish.sp 3NEVER.IMP eat
'Woman must never eat lvéé fish (Symphorichthys sp., reserved for men)'

### 7.2.1.1 Positive imperatives

The Imperative mood is expressed, as mentioned, in three persons, two aspects and two tenses, but with specific gaps in this paradigm. The pre-verbal clitics mark the distinctions as follows (Table 7.3, after Henderson 1995:102-103, note that
further distinctions are made when the proclitic combines with other features see e.g. Henderson 1995:107, and §6.1):

Table 7.3: Imperative Pre-nuclear Clitics - Subject properties, Tense, Aspect (Positive only - negatives treated later).

| Punctual Aspect; Present <br> tense | Person | Singular | Dual | Plural |
| :--- | :--- | :--- | :--- | :--- |
|  | $\frac{1^{\text {st }}}{}$ |  |  |  |
|  | $\frac{2^{\text {nd }}}{3^{\text {rd }}}$ |  | $\emptyset$ |  |


| Punctual Aspect; Future tense | Person | Singular | Dual Plural |
| :--- | :--- | :--- | :--- | :--- |
| - i.e. Deferred Imperative | $1^{\text {st }}$ | (none) | paa |
|  | $\frac{2^{\text {nd }}}{}$ |  | $d p \hat{\imath}$ |
|  | $3^{\text {rd }}$ |  |  |


| Continuous Aspect; | Person | Singular | Dual | Plural |
| :--- | :--- | :--- | :--- | :---: |
| Present OR Deferred tense | $1^{\text {st }}$ | (none) | $\varnothing$ |  |
|  | $2^{\text {nd }}$ | chi | choo | dmyinê |
|  | $3^{\text {rd }}$ | choo | dny:oo |  |

As can be seen, only the Punctual Aspect has a deferred or future imperative, meaning 'Do it later’. As noted in §6.1, there are also many additional forms of these proclitics, according e.g. to deictic and negative status. For example, the following examples differ in that $d p \hat{\imath}$ has incorporated an associated motion marker in the second version (the resultant form is unpredictable, but is formed analogously to the motion forms in the indicative series):
(145) $d p \hat{\imath} \quad$ lili

2/3S.IMPDefd go.IMP.P
'You/he/they go later'
(146) $d p: u u$
lili
2/3S.IMPDefd.MOT go.IMP.P
'You have to go and leave later'

In addition to this marking in the pre-verbal clitic, there is also marking in the verb root: following the tendency for suppletion in verbs, many punctual roots have a suppletive form for the punctual singular imperative (as well as for 'followed' roots, that is, roots with a non-zero post-verbal clitic), as Table 7.4 shows:

Table 7.4: Verb root suppletion in Imperatives: Some examples.

| verb meaning | unmarked form of <br> Punctual Indicative | unmarked form of <br> Continuous Indicative | Imperative <br> singular form | Followed <br> root |
| :--- | :--- | :--- | :--- | :--- |
| 'go' | lê | lêpî | lili | lee |
| 'give to 3 ${ }^{\text {rd }}$ person' | $y: 00$ | y:eemî | yéni | y:ee |
| 'change something' | ngmêê | ngmêêpî | ngmépi | ngmêe |
| 'break something' | pwââ | pwap̂̂̀ | pwédi | pwaa |

This special imperative form of the verb root is only used in the $2^{\text {nd }}$ person, and when the verb is not followed by an imperative post-verbal clitic (i.e., when it is zero, e.g. $2^{\text {nd }}$ person singular) - where it is so followed, the 'followed root' (as in Table 7.4) is used if there is one, or if not, the unmarked form of the relevant aspect is used. This brings us to the Imperative forms of the post-verbal clitics: in the intransitive case (Table 7.5), these post-verbal clitics serve to indicate person/ number (only in the Punctual aspect), in the transitive case (Table 7.6) they serve to cross-index both the person/number of the subject and the person/number of the object in portmanteau form in the Imperative mood as in the Indicative.

Table 7.5: Imperative intransitive post-verbal clitics, punctual aspect (positive only).

| Transitivity, Aspect | Person | Sing | Dual | Plural |
| :--- | ---: | :--- | :---: | :--- |
| Intransitive Punctual | 1 | - | knî | kmîle |
|  | 2 | $\varnothing$ | choo | dmyino |
|  | 3 | wee | dniye | dniye |

Intransitive Continuous $\varnothing$ throughout

Table 7.6: Imperative transitive post-verbal clitics, punctual aspect (positive only). ${ }^{29}$

| TENSE | SUBJECT Person/ <br> Number | OBJECT <br> Person | OBJECT <br> Number |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Sing | Dual | Plural |
| Immediate or Deferred | MonoFocal: 1/SG | 1 | nédi | nyédi | nmédi |
|  | PolyFocal: 2/3/pl |  | nódó | nyédi | nyédi |
| Deferred | 3 sing/dual/plural | 2 | nyédi | dpédi | nmyédi |

29 This material was hard to elicit, and it may be that the table underplays the Monofocal/Polyfocal collapse of person/number in some cells.

Table 7.6 (continued)

| TENSE | SUBJECT Person/ <br> Number | OBJECT <br> Person | OBJECT <br> Number |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Sing | Dual | Plural |
| Immediate or Deferred | 1sing | 3 |  | déme | téme |
|  | 1 dual |  | ngmê | déme? | téme? |
|  | 1plural |  | koo | déme? | téme? |
|  | 2sing | 3 | $n g i$ | dé | té |
|  | 2dual |  | nyoo | dóó | tóó |
|  | 2plural |  | yó | dóó | dóó |
|  | 3sing | 3 | $n g e \hat{}$ | déne | téne |
|  | 3dual/pl |  | $y: e$ | déne | téne |

Note that the tables above are restricted to positive punctual verbs - continuous verbs take special proclitics, but with no special enclitics: intransitive continuous verbs take no imperative enclitics, but transitive verbs take indicative enclitics as if for non-proximal tenses, as in Table 7.7:

Table 7.7: Imperative Transitive Post-Verbal Clitics, Continuous aspect (positive only).

| SUBJECT | OBJECT |  |  |  |
| :--- | ---: | :--- | :--- | :--- |
| Person, number | Person | SING | DUAL | PLURAL |
| all | $\mathbf{1}$ | $n \hat{e}$ | nyo | $n m o$ |
| all | $\mathbf{2}$ | $n g i$ | $d p: o$ | $n m y o$ |
| all | $\mathbf{3}$ | $\emptyset$ | $d e ̂$ | $d e ́$ |

The interactions between these three kinds of markings of the Imperative (proclitic, root, enclitic) can best be appreciated by some examples:
(147) chi lêpî!

2sIMP.PRS.PI go.Continuous
'You be going' (normal way to say 'Buzz off!' to troublesome child)
(148) lili
go.IMP.P
'Go off' (normal way to say e.g. 'You set off (and deliver that message)')

(151) choo lêpî

2d.C.IMP going
'You two be going off'
(152) choo pîpî dê

2d.C.IMP eating C.3dO.Distal/IMP
'You two should eat the two of them'

There is as shown a suppletive form of the verb 'go' for the 'let's go' meaning ( $1^{\text {st }}$ dual/plural Immediate imperative), namely pala or paa, which may have derived from a polite use of the following:

```
(153) paa lee knî
    d/pl.IMPDefd go.FOL 1d.Intrans
    'Let's go later'
```

The meaning distinctions in these paradigms need a little explication. For example, the aspectual distinction in simple imperatives serves to indicate whether an extended process is to be begun or not:

```
(154) mbii ngi!
    punt.IMP 2sS.3sO
    'Punt it now'
(155) chi mbiye!
    2sS.C.IMP punt.C
    `Be punting now/start punting'
```

The tense distinction 'Present' vs. 'Future or Deferred' makes a distinction between an action to be done right now and some time in the future:

```
(156) kwidi Ø
    wash.IMP 2sS.Intrans
    'Wash (yourself) now!'
(157) dp\hat{\imath}}\mathrm{ kwidi
    2/3IMPDefd.P wash.IMP
    `Wash (later)!'
```

The interpretation of first and third person imperatives also needs explanation. First person imperatives have the expected 'Let us do it' sense. Third person imperatives have a 'Let him do it' sense. This clearly presupposes a second communication event, e.g., I tell you that you should go and tell him to do it. Because of this, these forms peculiarly allow an extra (2 ${ }^{\text {nd }}$ person) argument, nyi:
(158) Tili mwi nyi lee wee

Tili there 2 s go.FOL 3sS.IMP
'You (say to) Tilly is to go over there'

This extra argument can take the deictic $a$, 'hither', usually reserved for pre-verbal position, which modifies the main verb (so suggesting that the nyi has a sort of incorporated status):
(159) Tili a nyi lee wee Father ka

Tili hither you go.FOL 3sS.IMP Priest Dative/Ablative 'You (go to and tell) Tilly he is to come hither to the Priest'

It is interesting to find a construction like this which builds the actors in two sequential communication events into a single clause.

All of the imperative forms can be read as deontic modals, especially (but not exclusively) if they are in the continuous aspect form. For example:
(160) pi yintómu chuchu k:oo dny:oo koko person all church inside 3d/pl.C.IMP ascending 'Everybody should go to church'
$v y: a \quad$ nédi
hit.FOL.P.MFS 1sOTransitiveIMP
'You should hit me (because I did a bad thing)'

```
(162) ngî dp:uu m:uu yó mââm:ii kî tpóknî
IMP 2plIMP see 2plS3sO later DEIC guys
'You3 must go and see it sometime, guys'
(Here, the ng\imatĥ is an optional additional imperative preverbal marker.)
```

An alternative way of expressing obligation or 'should'/'ought' is to use the counterfactual paradigm, taking the protasis forms (also, with negative connotations the apodasis) as independent clauses (see counterfactuals below). Imperatives are often reinforced by the preverbal item $d$ : $\hat{a} \hat{a}$ :

```
(163) d:ââa mê péé, d:ââ mê póó cho,
    IMP.EMPH again ask.IMP IMP.EMPH again ask 2dSIMP.P.IV,
    d:ââ mê póó dmyino
    IMP.EMPH again ask 2plS.IMP.P.IV
    'You1 ask again, or you2 ask again, or you3 ask again'
```


### 7.2.1.2 Negative imperatives

Negative imperatives introduce an entirely different paradigm. There is a special set of pre-verbal proclitics indicating negative imperative status, and the imperative post-verbal enclitics are also distinct (for intransitives, they are borrowed from the positive habitual series, see §6.2.3.1, and for transitives they are distinct, see §6.2.3.2). These pre-verbal clitics incorporate or attract the basic negative marker daa, or a special negative imperative marker ngê or mê and also attract the definite epistemic marker kî and a negative polarity item $n: u u$ (of uncertain meaning) - all these elements may or may not be fused in portmanteau form. For example, the following sentence is the form of a basic injunction to the clumsy foreigner:

| (164) | kid:a | ngê | ghay |
| :--- | :--- | :--- | :--- |
|  | kî+daa | ngê | ghay |
|  | CERT.Neg | NEG.IMP | fall.P |
|  | 'Don't fall down.' |  |  |

Or in reported speech:

| (165) vyi ngmê | yepê | awêde |
| :--- | :--- | :--- |
| st:ay $\hat{a} \hat{p}: o$ |  |  |
| sFS_3sOPROX(tvPostN) | QUOT.3S.3OREM today village_site |  |
| 'Then the women said to them: To the village of Nt:ââp:o, |  |  |


| kudu | ngmê | n:aa | t: $a a$ |
| :--- | :--- | :--- | :--- |
| CERT.NEG? | NEG.IMP | NegPol? | arrive |
| don't go today.' |  |  |  |

The following tables ( 7.9 to 7.11 ) give the negative imperative paradigms for the intransitive continuous verb kuku meaning 'to wash oneself'. This verb has the following suppletions (Table 7.8):

Table 7.8: Suppletive forms of $k u k u$ 'to wash oneself'.

| Inherently Punctual root: | kudu |
| :--- | :--- |
| Imperative: | (Punctual suppletive form) kwidi/ <br> (Continuous form) chi kudu |
| Proximate Past (unmarked) form: | kudu |
| Remote Past and Followed suppletive form: | kpêê |
| Continuous Aspect form: | kuku |

Table 7.9: Negative Imperatives - Continuous Aspect, Intransitive (illustrated with kuku, 'wash oneself, continuous aspect').

| Person | Singular | Dual | Plural |
| :---: | :---: | :---: | :---: |
| $1^{\text {st }}$ | daa nê kuku (I must not wash) | daa ny:oo kuku ('we2 are not allowed to wash') | daa nmî kuku |
| $2^{\text {nd }}$ | kidimê kuku (get out, too late to wash) | kudu mê kuku | kî dmyemê kuku |
|  | kidingê kuku (river not clean) |  | kî dmyengê kuku ('never |
|  | kichingê kuku (never |  | wash there, you1-3') |
|  | wash here) |  |  |
|  | n:aamê kuku (get out, crocodiles) |  | n:aamê kuku |
| $3^{\text {rd }}$ | kîngî kuku (he must not wash) | kîdpî ngê kuku | kî dnyingê kuku |
|  | = kîmê kuku | (or kudu mê kuku) | kî dnyemê kuku |

Table 7.10: Negative Imperatives - Punctual Aspect, Present Tense, Intransitive (with kudu/kpêê 'wash oneself, Punctual'), Future Tense (Deferred) Forms Only.

| Person | Singular | Dual | Plural |
| :--- | :--- | :--- | :--- |
| $\mathbf{1}^{\text {st }}$ | daa n:uu kudu (over there | daa nyi kpêê knî | daa nmî kpêê dmi |
|  | + Motion?) | ('we must not |  |
|  | daa nê kudu | wash') |  |

Table 7.10 (continued)

| Person | Singular | Dual | Plural |
| :--- | :--- | :--- | :--- |
| $\mathbf{2}^{\text {nd }}$ | n:uu ngmê kudu (* <br> $=$ <br> $=$ nukidi) | kudu ngê̂ kpê̂ê knî | kî dmyengê kpêê dmi |
| $\mathbf{3}^{\text {rd }}$ | kî ngî kudu | kî ngî kpêê knî | kî ngî kpêê dmi |

(It should be noted that, as explained in §8.3, use of a single counterfactual clause can have some of the same force. For example, daa pîdê kudu 'I should not have washed (the water was unclean)', daa pîdnye kpêê knî, 'We two should not have washed', etc., can mean 'I must not. . .', 'we must not. . .').

Table 7.11: Negative Imperatives - Punctual Aspect, Future/Deferred tense, Intransitive (with kudu/kpêê 'wash oneself, Punctual').

|  | Sing | Dual | Plural |
| :--- | :--- | :--- | :--- |
| $\mathbf{1}^{\text {st }}$ | kîdîngê $k u d u$ <br> 'later I must not. .. | kidingê kpêê knî | kudungê kpêê dmi |
| $\mathbf{2}^{\text {nd }}$ | kidingê kudu <br> $n: a a ~ n g m e ̂ ~ k u d u ~$ | kudungê kpêê knî | kî dmyengê kpêê dmi |
| $\mathbf{3}^{\text {rd }}$ | kîngê $k u d u$ <br> 'he should not wash' | kî ngê kpêê knî | kî ngê kpêê dmi |

Negative imperatives with intransitive verbs seem sometimes to motivate the use of other verbs as auxiliaries (although direct imperatives are possible here also, as in namê dpî ‘Don’t sleep!’):


The changes in the enclitics in negative clauses are laid out in tabular form in §6.2.3 but it is useful to see them exemplified. The following tables ( 7.12 to 7.13) illustrate with transitive verbs pîpî 'eating (Continuous)', vyee 'hitting (Continuous)' and ma 'eat (Punctual)'. The subject person/number is given in the rows/columns, while object person is given at the head of the table, with number indicated by the alternates in brackets (Sing/Dual/Plural) - thus n:aa mê pîp̂̂(Ø/ dê/té) is to be read as 'You sing. may not eat $\mathrm{it} /$ those2/those3'. Note that the full paradigm is much larger, intersecting nine subject person/numbers with nine object person/numbers. The difference between the straight Imperative and the Generalized Imperative is difficult to pin down, but is perhaps that the straight Imperative forbids the action on specific objects, while the Generalized Imperative forbids the action on all objects of that type.

Table 7.12: Negative Imperatives - Continuous Transitive root pîpî ‘eating something’.

| $3{ }^{\text {rd }}$ Person Object: Singular/Dual/Plural |  |  |  |
| :---: | :---: | :---: | :---: |
| Imperative |  |  |  |
| Subject Person | Subject Number (3 ${ }^{\text {rd }}$ person Object Sing/Dual/Plural in brackets) |  |  |
| Subject | Sing | Dual | Plural |
| 1 | (future forms here) | (future forms here) | (future forms here) |
| 2 | n:aamê pîpî (Ø/dê/té) | kudumê pîpî (Ø/dê/té) | kî dmyemê pîpî (Ø/dê/té) |
| 3 | kîmê pîpî (ø/dê/té) | kîdpîmê pîpî (Ø/dê/té) | kî dnyimê pîpî ( $\varnothing /$ dê/té) |
| $33^{\text {rd }}$ Person Object: Singular/Dual/Plural |  |  |  |
| Generalized Imperative |  |  |  |
| Subject Person | Subject Number (3 ${ }^{\text {rd }}$ person Object Sing/Dual/Plural in brackets) |  |  |
|  | Sing | Dual | Plural |
| 1 | ? | ? | ? |
| 2 | kichingê pîpî (Ø/dê/té) | kudungê pîpî (Ø/dê/té) | kîdmyengê pîpî ( $\varnothing / d \hat{e} /$ té) |
| 3 | kîmê pîpî (Ø/dê/té) | kîdpîngê pîpî (Ø/dê/té) | kidnyengê pîpî (Ø/dê/té) |
| $1^{\text {st }}$ Person Object: Singular/Dual/Plural |  |  |  |
| Imperative |  |  |  |
| Subject Person | Subject Number (1 ${ }^{\text {st }}$ person Object Sing/Dual/Plural in brackets) |  |  |
|  | Sing | Dual | Plural |
| 1 | ? | ? | ? |
| 2 | kichingê vyee (nê/nyo/ nmo) | kudumê vyee (nê/nyo/ nmo) | kî dmyemê vyee (nê/nyo) nmo) |
| 3 | kîmî vyee (nê/nyo/ nmo) | kîdpîmê vyee (nê/nyo/ nmo) | kî dnyimê vyee (nê/nyo/ nmo) |

Table 7.13: Negative Imperatives - Punctual Transitive Root ma 'eat something'.

| $3{ }^{\text {rd }}$ Person Object: Singular/Dual/Plural |  |  |  |
| :---: | :---: | :---: | :---: |
| Immediate Imperative |  |  |  |
| Subject Person | Subject Number ( ${ }^{\text {rd }}$ person Object Dual/Plural in brackets) |  |  |
|  | Sing | Dual | Plural |
| 1 | daa nê ma (dê/té)* <br> kîdî ngê ma (dê/té) | daa nyi ma (dê/té) <br> kî dnye ngê ma (dê/té) | daa nmîma (dê/té) <br> kudungê ma (dê/té) |
| 2 | nangê ma (dê/té) <br> n:uu ngmê ma <br> /nakî $m a=n u k u$ ma | kudungê ma ngmê (d:oo/t:oo) /nakî ma (dê/té) | kî dmyengê ma ngmê (d:oo/t:oo) /nakîma (dê/té) |
| 3 | kî ngê ma (dê/té) | kî ngê ma ngmê (d:oo/t:oo) | kî ngê ma ngmê (d:oo/t:oo) |

* 'I should not to eat it/those2/those3 things'

| $\mathbf{1}^{\text {st }}$ Person Object: Singular/Dual/Plural |  |  |  |
| :--- | :--- | :--- | :--- |
| Immediate Imperative |  |  |  |
| Subject Person | Subject Number (1 $1^{\text {st }}$ person Object Sing/Dual/Plural in brackets) |  |  |
|  | Sing | Dual | Plural |
| $\mathbf{1}$ |  |  |  |
| $\mathbf{2}$ | $n a n g e \hat{e ̂ ~ v y: a ~(n e ̂ / n y: o o / ~}$ | kudungê vy:a (nê/ny:oo/ | kî dmyengê vy:a (nê/ |
|  | $n m o)$ | $n m o)$ | $n y: o o / n m o)$ |
| $\mathbf{3}$ | kî ngê vy:a (nê/ny:oo/ | kî ngê vy:a (nê/ny:oo/nmo) | kî ngê vy:a (nê/ny:oo/ |
|  | $n m o)$ |  | $n m o)$ |

## $3{ }^{\text {rd }}$ Person Object: Singular/Dual/Plural

Deferred Imperative
Subject Person Subject Number ( $3^{\text {rd }}$ person Object Sing/Dual/Plural in brackets)

| (positive in roman for comparison) | Sing | Dual | Plural |
| :---: | :---: | :---: | :---: |
| 1 | (no form) kîdîngê ma (Ø/dê/té) | paa ma (ngmê/déme/téme) <br> kî dnye ngê ma (Ø/dê/té) | paa ma (koo/ déme/ <br> téme) <br> kudungê ma (Ø/dê/té) |
| 2 | dpî ma (ngi/dé/té) <br> kidingê ma (Ø/dê/té) | dpî ma (nyo/dóó/tóó) <br> kudungê ma (ngmê/d:oo/ $t: 00)$ | dpî ma (yó/dóó/tóó) <br> kî dmyengê ma (ngmê/d:oo/t:oo) |
| 3 | dpî ma (ngê/déne/ <br> téne) <br> kî ngî ma (Ø/dê/té) | dpî ma (y:e/déne/téne) kîngîma (ngmê/d:oo/t:oo) | ```dpîma (y:e/déne/ téne) kîngîma (ngmê/ d:oo/t:oo)``` |

Note that $3^{\text {rd }}$ person imperatives have distinct enclitics in positive vs. negative contexts. The following gives some examples, with negative counterparts in bold:
(167)

Positive imperatives
Lee we!
'He should go, let him go'
Mbwódo yaa we!
'Let him sit on the ground'
Mbwódo yaa dniye!
'They2should sit down'
Mbwódo yaa dniye!
'They2/3 should sit down'
Mbwódo yé ngê
'He should put it down'
Mbwódo yé y:ee
'They2/3 should put it down'
Mbwódo yé déne
'He/they2/ should put 2 things
down'
Mbwódo yé téne
'He/they2/ should put 3 things
down'

## NEG counterparts

= kî ngê lê
'He should not go'
= kî ngê yââ
'Let him not sit on the ground'
= kî ngê yaa knî
'They2 should not sit down'
= kî ngê yaa dmi
'They2/3 should not sit down'
= kî ngê yé
'He should not put it down'
= kî ngê yé ngmê
'They2/3 should not put it down'
= kî ngê yé d:oo
'He/they2/ should not put 2 things
down'
= kî ngê yé t:00
'He/they2/ should not put 3 things down'

### 7.2.2 Interrogatives

Interrogatives are marked either by question words (WH-questions) or perhaps sometimes by prosody; there are no other reflections, e.g. in obligatory change of word-order or in verbal clitics. Nevertheless, polar or yes-no questions are identifiable by virtue of their content, and in discourse they are treated specially with tokens of assent or dissent. Finally, also unmarked as interrogatives are alternative questions, delivered as declarative disjunctions. In informal interaction, roughly $60 \%$ of questions are content or WH-questions, $40 \%$ polar questions, while alternative questions at $1 \%$ are vanishingly rare (Levinson 2010). More about each of these types is given in the following three sections (see also Levinson 2010, 2012, 2015).

### 7.2.2.1 Polar or Yes-No questions

In the case of Yes-No questions, there is no morphosyntactic marking and no clear characteristic prosody either -pitch traces (see §3.6) of questions in conversation
show systematically falling intonation, mimicked in their answers, although there may be special intensity variation across the clause.

Instead, utterances like the following are understood as questions if the addressee is the one with the knowledge in question:

```
(168) yi kópu dê d:uu
ANAPH thing 3IMMPI makePI
'Did he make it?'
```

The answering system to such polar (yes-no) questions is more or less like English for the positive question:
(169) A: nyââ, yi kópu dê d:uu
yes ANAPH thing 3ImmPI make
'Yes, he made it'
B: kêle, doo d:uu ngê
No NEG3IMMPI makePI MFS.3sOPROXPI
'No, he didn’t make it'

However, for the negative question, nyââ 'yes' indicates that the negative state of affairs holds (i.e. the recipient agrees with the negative proposition expressed by the questioner):

```
(170) A: doo u ntââ, daa nye lê
    NEG 3POSS enough NEG 2sPRS go
    'It's not enough, you're not going? (the sea is too rough)'
    B: nyââ
    'Yes I am not going'
```

Responses to yes-no questions are often kinesic rather than linguistic - an eyebrow flash or a prolonged blink indicates 'yes', a head shake 'no'. These follow the same rules: an eye-brow flash response in the above context would mean 'yes you are correct, I am not going' (Levinson 2015).

There are tag-questions, e.g. using the post-sentential particle apii (see §4.6.2.2), 'is it not so?' (lit. ‘you say!'):

```
(171) A: kî ye wunê wuwó apii?
    This ANAPH 3ImmFUTCI.CLS collecting TAG
    'This thing (microphone) will be collecting all this, right?'
    B: nyââ
    'Yes'
```

These tags have clear literal meanings (e.g. chi ny:oo? ‘Did you hear?’, kwi ‘Tell him!'), and are not properly incorporated into the syntax or, often, the prosody (they may follow a slight pause). They thus do not have the clear morphosyntactic status of the sentence-final tags in many other languages. They essentially demand a response (agreement, commitment, etc., to the proposition expressed).

An expected answer can be marked by particles or negation:
(172) ndoo apê dê lê
perhaps maybe 3IMM.PI goProxPI
'He went, didn’t he?‘
(173) Q: doo loo

NEG3IMM.PI go.REM/NegPol
'He didn't go?'

| $\mathrm{A}_{1}:$ | nyââa | doo | loo |
| :--- | :--- | :--- | :--- |
|  | Yes NEG3IMM.PI | go.REM/NegPol |  |
|  | 'Yes, he didn't go' |  |  |

$\mathrm{A}_{2}$ : kêle, kêdê lê
No CERT.3IMM.PI go
'No, he did go'

Echo-questions can be marked in a similar fashion by particles, tags or prosody:
(174) ndê ndê doo d:uu ngê
truly NEG3IMMPI makePI MFS.3sOPROXPI
'He really hasn't done it?'

### 7.2.2.2 Alternative questions

Alternative questions are empirically rare in discourse, and are formed simply by a declarative disjunction uttered in a context where it is clear that the addressee may know which disjunction obtains. The examples I have are elliptical, with two NPs disjoined by ó 'or', and are clarification questions.
(175)
a. yéépî wédi ngomo ó kaa ngomo? sago.thatch house or palm.fan house? 'Sago leaf house or fan-palm leaf house?' (for thatch)
b. Moresby ó Alotau?
'(Are they going to) Moresby or Alotau?'

### 7.2.2.3 Content or Wh-questions

Wh-Questions are marked by a full range of Wh-forms, which take full nominal casemarking (although there are special forms for 'Who+ERG' and 'Where+DAT/ABL'). Since these allow movement, some aspects of Wh-formation are dealt with below, under complex sentence constructions. The following Wh-forms exist (Table 7.14):

Table 7.14: Wh-forms.

| n:uu | 'Who?' |
| :--- | :--- |
| nanê | 'Who-Ergative?' (this has Absolutive uses too in the Western dialect) |
| lukwe | 'What?' |
| ló | 'Which?' e.g. ló pini ‘which person?'' |
| angê | 'Which?' |
| angênê | 'Where?' (static location only) |
| anyi | 'Whither/Whence?'' |
| ló y:i | 'Whither/Whence?'' |
| angênté | 'How?' |
| lónté | 'How?' |
| yémi/yimi | 'How many?' |
| angêntoo | 'How big?' |
| lóntoo | 'How big?' |
| angê ndy:ââ | 'How tall/long?' |
| anté | 'When?' (angodo in P:uum dialect) |
| ló dini ghi ngê | 'When?' |

Unlike in many languages, the 'What?' interrogative cannot be used to request repair, instead the particles : $\hat{a ̂ a}$ ?, : $\hat{e} \hat{e}$ ? are used. Despite this, 'What' questions are by far the most frequent, followed by ‘Where’ and ‘Who’ forms (see Levinson 2010 for the statistics.)

Further Wh-forms can be constructed using especially ló, the interrogative adjective 'which', e.g. ló dini ghi ngê 'when', lit. 'which time part time.adverbializer'. All these forms often occur in initial position, especially in short utterances, but they often do not - the following example from conversation shows constituents in what would be unmarked declarative order:
a. ala yópu anyi ka a pwiyé dniye this wind where CERT+HAB CLOSE come/go Intrans.HAB.3pl 'Where do these cyclones come from?'
b. mu pini ngê ló kópu ngma a dy:ââ ngê DEIC man ERG which word Indef CLOSE send MFS3sOPIPast 'That man what message did he send?'

Some examples of 'Who' questions follow, which show the range of NPs in different grammatical roles (S (intransitive subject), A (transitive subject), O (object), etc.) which can be questioned (Wh-words in bold):
(177) Examples with $n: u u$ 'Who?'
a. kî n:uu u nee? Demon.unmarked who 3sPoss canoe 'Whose canoe is this?'
b. ala nee nanê ndê

Demon.Prox canoe who.ERG make.boat
ngê
MFS3sOREM
'Who made this canoe?'
c. ala nee n:uu ngê ndê Ergative A

Demon.Prox canoe who ERG make.boat
$n g e ̂$
MFS3sOREM
'Who made this canoe?' (same as b. with compositional ergative NP)
d. al:ii n:uu ngmê Council? Absolutive Equative
here Who INDF councillor
'Who is the Councillor here?'
e. n:uu nmgê chi vy:a
who INDF 2sIMM hit
'Whom did you hit?'
f. n:uu ka dê y:oo
who DAT/ABL 3IMMPI give.to. 3
'Whom did he give it to?'
g. n:uu ngê da $d y: \hat{a} \hat{a}$ Ergative A
who ERG 3IMM.CLS send 'Who sent (the letter)?'

## Case Function

Absolutive Equative

Ergative A

Absolutive 0

Dative Goal
h. n:uu ka $d a \quad$ ndê Abl/Dat Source
who DAT/ABL 3IMM.CLS arrive
'From whom did it come?
i. u pi n:uu; mi n:uи Absolutive Equative 3Poss name who? Your.name ( $\mathrm{N}+\mathrm{pi}$ ) who? 'What is his/her name? What is your name?'
j. nkéli pi n:uu? $U$ pi Âni Absolutive Equative boat name who? 3POSS name Âni 'What's the boat's name? Its name is Âni'
k. n:uu k:ii Alotau dê lee knî Comitative Adjunct who COM Alotau 3sIMMPI go.foll 3d.Intrans 'With whom did he go to Alotau?'

1. n:uu ngê dómu a t:a Experiencer Subject who EXP hunger 3sPRSCI hang 'Who is hungry?' (lit. 'To whom is hunger hanging?')
m. n:uu ngma a dómdómu Absolutive S

Who INDF.CLS 3sPRSCI be.hungry
'Who is hungry?'
n:uu nkéli k:oo ngmê dê dpî? Absolutive S
who boat inside INDF 3IMM sleep
'Who slept in the boat (last night)?'
n:uu mgîd̂̂ vy:oo ngomo k:oo ngmê Absolutive S
who night inside house inside INDF
dê lê
3IMM go
'Who went to your house in the middle of the night?'
n. n:uu ngê ala puku dmi u Experiencer S
who EXP this book CLF its
yi a kwo
desire 3PRSCI stands
'Who wants this book?'
o. n:uu ngê MorningStar ngê paa u Experiencer S
who EXP Morning Star INST going his
yi a kwo?
desire 3sPRSCI stands
'Who wants to go with the (boat) Morning Star?'

'To whom was there experience of the Osborne brothers at Abeleti (i.e. who knew them)?'
q. nté n:uu ka chi y:oo Dative Recipient
food who DAT/ABL 2sIMMPI give.to. 3
'To whom did you give the food (earlier today)?'
r. n:uu u l:êê dîy:o ala ngomo Absolutive Possessor who 3sPoss reason this house chi wó
2sIMMPI build
'For whom did you build this house?'
(lit. 'You built this house its reason who?')
s. n:uu ngmê ngê Mîknwe mgópu Ergative A
who INDF ERG Mîknwe kill.by.sorcery.REM 'Who killed Mîknwe by sorcery?'

Where the referent of $n: u u$ is plural, this is indicated by number marking inside the case expression, as in:
n:uu dé ye y:ângo
who PL to.them give.to.3rdPerson.REM
'To which 3+ people did he give it?'

Note that interrogative nominals can occur with indefinite ngmê, as in n:uu ngmê, 'Who? Which of them?'.

The examples (177)i.-j. show that $n: u u$ is not restricted to animates, but rather to things (not places) which have a name - one does not ask 'What is its name?' but 'Who is its name?' (n:uи и pi) even if the referent is a boat.

It is clear from the examples above that $n: u u$ and other $W h$-elements can come with most case markers - they are thus not restricted to specific argument positions, as the following examples further show:
(179) Questioned oblique or embedded NPs
a. k̂̂ pyópu lukwe ngê vyâ? that lady what INST kill 'With what was the lady killed?'
b. ló nkéli k:oo Yidika a wowo Which boat inside Yidika 3sFUT embark 'Inside which boat did Yidika embark?'

Other question words in a range of functions follow:
(180) Examples with lukwê 'What?', ló tpile 'Which thing'

| a. ala lukwe? ala ló tpile | Equative |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Dem.Prox what dem.Prox which thing | (Absolutive) |  |
| 'What is this? This is what thing?' |  |  |

b. kî kópu u nt:uu lukwe? Equative Dem.unmarked affair 3Poss reason what (Absolutive) 'What caused this?'
c. lukwe ngmê dî l:âmo?

Absolutive
what INDF 3IMMPI make (O-function)
'What did he make?'
d. lótpile/lukwe kiyedê pwiyé knı̂ Absolutive Which thing/what 3PRS.CI.CLS coming 3d/s (S-function) 'What is that coming?'
e. lukwe ngmê dî y:00 m:aam:aa ka Absolutive What INDF 3IMMPI give.to. 3 FZ DAT (O-function) 'What did he give to auntie?'

A curiosity of the 'Where' forms is that they strictly distinguish motion from location, while not distinguishing between source and goal of motion (this fits the general pattern in the language; §5.2.1, §11.2.2-§11.2.3; Levinson 2006b). So angenê ‘Where-located?’ contrasts with anyi ‘Whither/Whence?’. Thus *angênê a lêpî 'where.location is he going' is semantically anomalous, although it might have a rhetorical use as indicating 'He is going nowhere'.
(181) Examples with angenê, anyi, ló y:ii ‘Where, which place?’
$\begin{array}{llll}\text { a. anyi } & a & \text { lêpî } \\ \text { where.motion } & \text { 3PRS } & \text { going }\end{array}$
'From where is he coming?'
b. ló y:i nyi lêpî? (Formulaic query)

Which there 2sPRS going
'Whither are you going?'
c. anyi wunê ndiyendiye?
where.motion CLS.3PRS come.fromCI
'Where is he coming from?'
d. angênê m:aa?
angênê $\mathrm{N}+\mathrm{p}: \mathrm{aa}$
where your village
'Where's your village?'
e. pód:a angêne dê
bottle where Dual
'Where are the two bottles?'
f. ló y:i nmye mbumu té which there 2plImmFUT talking plSprox.Intrans 'Where are you talking about?' (where did those things happen) (anyi is OK here, not angênê)

Note that in the first examples in (181), the whither/whence interpretation is actually not stipulated; an interpretation can be forced by using a verb that subcategorizes for a source or goal nominal like ‘set off from’ or ‘arrive’, as in c. Note in e. the placement of the Wh-word in the middle of an NP - pód: aa dê is an NP with a dual clitic marker.
(182) 'When' expressions
a. lô
which
dini ghi ngê?
'What time is it?'
b. nkéli anté wa lê
boat when 3FUTPI go
'When will the boat go?'
c. nkéli ngê kada anté wa a y:oo
boat ERG before when Uncert.FUT CLOSE set.off.from 'When will the boat leave?'
d. Mass anté dini? ló dini ghi ngê Mass?

Mass when time. Which time part ADV Mass 'When is Mass? At which time is Mass?'
e. Armstrong ló dini ghi ngê doo n:aa ya? Armstrong which time part ADV 3sREM.I MOT staying 'When was Armstrong (coming and ) staying here?'
(183) Some other Wh-expressions in use:
a. lónté dê l:âmo
how 3sIMMPI make 'How did he make it?'
b. lónté/angênté wa nyi lee knî Kêna
how/how UNCERT.FUT 1d go.FOL 1d.Intrans Kana(Loc) 'How will we go to Kêna (Abeleti)?'
c. kêndapî ngópu yémi a tóó N+ngópu
shell.money your+possession how.much 3sPRS.CI sits
'How much shell-money have you got?'
d. pudu yémi a kwo?
stars how.many 3PRSCI standing
'How many stars are there (standing)?'
e. u nkéli angêntoo

3sPoss boat how.big
'How big is his boat?
f. u yedê angê ndy:ââ. daad̂̂̂
his string which long big/long
'How long is is his rope? It's long'
g. ló dmââdî ngmê dî kn:aa
which girl INDF 3sIMM defecate 'Which girl has defecated (here)?'
h. nté yémi knî ye dê y:00
food how.many Aug Dat/Abl.Pl 3sIMMPI give.to. 3
'To how many did he give food?'

So far, we have seen that in simple sentences there is no need to suppose that the Wh-word is systematically moved from base-position: it tends to occur in any location prior to the verb, but that is true for any NP (recollect, NP phrase order is free). And with equational sentences, it tends to occur in the last, predicating, position, where the answer-word would appear. We have seen no 'postposition stranding' - case markers have always occurred adjacent to the Wh-word. But it is clear that the Wh-constituent can move, as shown by the NP with a postposed dual-marker in example (181)e. above, pód: a angênê dê?.

Echo questions do not have a fundamentally different structure. However, double questions have a natural follow-up (repair requesting) function, and the occurrence of the anaphoric particle yi may also mark follow-up questions:
(184) a. n:uu ka ló tpilé yi chi y:oo
who DAT/ABL which thing anaph. 2sIMMPI give.to. 3
'To whom did you give which thing?'

```
b. A: Yidika ngê d\hat{\imath}}\mathrm{ d:uu
    Yidika ERG 3IMM.PI do
    'Yidika did it'
    B: lukwe Yidika ngê yi d:uu?
        what Yidika ERG ANAPH do
        'Yidika did what?'
```

Wh-movement from lower clauses has been a topic of considerable theoretical discussion. Long-range movement from lower clauses is attested in elicited (and thus rather contrived) sentences:

| John | ngêe | n:uu | $\boldsymbol{u}$ | pi | ngmê | dê | vyi |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| John | Erg | who | its | name | INDF | 3sImPst | say |  |
| apu |  | Yidika | u | kêpyââ | p:uu | dê | yéé |  |
| QUOT.3sHAB | Yidika | his | grandma | to | 3sIMM | marry |  |  |

Lit. 'Whose name did John say, they say that to Yidika’s grandma was married?'
(i.e. 'Who did John say Yidika's grandma was said to be married to?')

The 'marry' verb yéé used here is intransitive, taking a postpositional phrase to name the spouse (as in English 'be married to'), so the subject is in Absolutive case. This subject has been preposed to $2^{\text {nd }}$ position just after the ergative subject of the main clause, diagrammatically:
(186) John ngê n:uu u pi ngmê dê vyi [apu $\qquad$ Yidika u kââpyââ p:uu dî yéé]


Or consider these cases where a Wh-word is raised from a 'want'-clause. Recollect that these clauses have the structure 'To him desire is standing [I go]' meaning 'He wants to go'.
a. n:uu u yi nga ngm:a a kwo [nê vy:a] who its desire 2sExp INDF 3sPRSCI stands I hit 'Who do you want me to hit?'
b. [n:uu ngê a vyee] u yi a kwo who Exp my hitting its desire 3sPRSCI stand 'Who wants my hitting, i.e. who wants to hit me.'
c. [a vyee] u yi n:uu ngê a kwo
(same as b. with different word order)

In example (187)a. the absolutive 'hittee' of the lower clause is raised into the front of the 'wanting' clause. Another way to say this is to use a gerund or nominalization, which can carry its arguments with it (see §8.7), as in b. and c. However, I have the impression that all these complex structures are generally avoided.

The interaction between interrogatives and some other factors should be mentioned. We have already seen some interaction between indefinite ngmê and Wh-words - they often occur together with the sense of 'which one', 'who of several', etc. In addition interrogatives often co-occur with the epistemic uncertainty marker $w u$ - described in the section on demonstratives $\S 4.2 .2 .3$ ).

| (188) A: | Nimowa | wunê | lê |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | Place_name | Close.3sNrPST | go |
|  |  |  |  |  |
|  | 'I went to Nimowa yesterday' |  |  |  |
| B: | wu | Nimowa | myaa | lê |
|  |  | UNCERT | Nimowa | also+3NrPST | go

Wu occurs often after a clarification question, indicating doubt on the part of the addressee not the speaker:

| (189) A: | ala | n:ii | (pointing) |
| ---: | :--- | ---: | :--- |
|  | CLS.to.speaker | Pro |  |
|  | 'this one' |  |  |
| B: | ló | $n: i i ?$ | (B missed the gesture) |
|  | which | Pro |  |
|  | 'which one?' |  |  |
| A: | wu | n:ii | (pointing again) |
|  | This-uncertain | Pro |  |
|  | 'This one (you are uncertain about)' |  |  |

### 7.2.3 Minor sentence types

There are a number of minor sentence types, with special syntax signalling illocutionary force. The following is an example of a special form for expressing counterfactual wishes (formally unrelated to the counterfactuals, §8.3), formed with the particle lumo and and element mê or ma which fuses onto the verbal proclitic:

```
(190) a. kwo, lumo mê chi vy:a nê. kwo
    QUOT if only NEG_imp? 2sIMM.PI hit/kill 1sO QUOT
    ngmâm a lama.
    your-wife my/me knowledge
    'He said: 'If only you hadn't killed me' (nephew in a dream of his uncle's).
    He said: 'I know she was your wife"
    b. lumo michi ma
    lumo mê+2sIMM.PI eat
    'If only you hadn't eaten (that poison fish, today)'
    c. lumo mêdê ma
    lumo mê+1sIMM.PI eat
    'If only I hadn't eaten it (today)'
    d. lumo m:aa ma
    lumo mê+1sNrPST.PI eat
    'If only I hadn't eaten it (yesterday)'
e. lumo mê ma
    lumo mê+3sNrPST eat
    'If only he hadn't eaten it (yesterday)'
f. lumo mê ma ngmê
    lumo mê+3NrPST eat PFS.3sOPROX
    'If only the two of them hadn't eaten it (yesterday)'
g. lumo maa ma ngmê
    lumo mê+3dNrPST eat PFS.3sOPROX
    'If only they two hadn't eaten it today'
h. lumo m:aa ndîl
    lumo mê+1sREM eat.REM
    'If only I hadn't eaten it the day before yesterday'
i. lumo ndeepi ngê m:aa pyodo
    lumo rich.man ADV mê+1sREM become.REM
    'If only I hadn't become a rich man'
```

The force of the construction can be partially captured by a rhetorical question of the kind lukwe dîy:o nê loo 'why did I go?', but lumo ma loo 'If only I had gone' conventionalizes the rhetorical force.

A closely related construction (with ló m:ee) seems to be specifically built for rhetorical questions of the kind 'Why on earth . . .?'. Thus:
(191) Captain, ló m:ee mê kee wo, Cheme?

Captain why_on_earth REP ascend sS.Intrans.REM Place_name 'Captain, why on earth did you come up to Cheme (to unload)?'

Another construction for expressing regret uses the article naka plus the counterfactual protasis forms. Naka may be related to the evidential na-a-ka 'It seems to me that. . .', which is discussed under quotatives $\S 8.4 .1$ ), but if so, in this construction it has lost its $1^{\text {st }}$ person only character:
a. naka w:aa loo
naka 1sREM.CF.Ante.PI go.REM
'I wish I had gone (thinking back)'
b. naka wo loo
naka 3sREM.CF.Ante.PI go.REM
'He wished (remote past) he had gone'
c. naka waa lê
naka 3IMM.CF.Ante.PI go
'He wishes he had gone’
d. naka wu dnye lee knî
naka IRR 1dIMM.CF.Ante.PI go.FOL dS.PI.PROX
'We2 are wishing (today) we had gone'
e. naka w:ee lee knî
naka 1DNrPST/REM.CF.Ante.PI go.FOL dS.PI.PROX
'We2 yesterday were wishing we had gone (e.g. the boat left yesterday)'
f. naka w:ee lee knâpwo
naka 1DNrPST/REM.CF.Ante.PI go.FOL dS.PI.REM
'We2 before yesterday were wishing we had gone'

```
(Note the typical way in examples (192)e. vs. f. that the tense of the proclitic may be disambiguated by the enclitic.)

A special construction for expressing regret over an action is formed using the proclitics fused with mê 'again, repetition', as in the paradigm shown in §6.1.3.5 (the enclitics however seem to be irregular, showing shifts in tense, perhaps signalling the special sense). The literal meanings of these forms are of the kind 'I did it again'/'Did I do it again?', but the construction is clearly interpreted along the lines 'Why on earth did I do it'. A partial paradigm follows:
```

a. m:aa d:uu ngê
REP.1s.REM.PI do MFS.3sOPast
'Why (on earth) did I do it (now I am in trouble)'
b. m:ee d:uu ngê
REP.1d.REM.PI do MF.3sOPast
'Why did we2 do it (before yesterday)?'

```
c. m:oo d:uu ngê

REP.1pl.REM.PI do MFS.3sOPast
'Why (on earth) did we3 do it'
d. m:ii d:uu ngê

REP.2s.REM.PI do MFS.3sOPast
'Why (on earth) did you1 do it',
e. moo d:uu ngópu

REP.2d.REM.PI do MFS.2dOPast
'Why (on earth) did you2 do it'
f. m:ii d:uu ngópu

REP.2pl.REM.PI do MFS.3sOPast
'Why (on earth) did you3 do it'
g. mê d:uu ngê

REP.3s.REM.PI do MFS.3sOPast
'Why (on earth) did he do it'
h. mê
d:uu ngópu
REP.3d/pl.REM.PI do MFS.3d/plOPast
'Why (on earth) did they \(2 / 3\) do it'
i. mêdî \(d: u u\) ?

REP.1s.IMM.PI do
'Why did I do it (earlier today)?'
j. mê dnye d:uu

REP.1d.IMM.PI do
'Why did we2 do it (earlier today)?'
k. mê dp̂̂ d:uu

REP.1pl.IMM.PI do
'Why did we2 do it (earlier today)?'
1. maa d:uu

REP.3s.IMM.PI do
'Why did he do it (earlier today)?'
m. maa d:uu ngmê

REP.3d/pl.IMM.PI do PFS3sO.PI
'Why did they \(2 / 3\) do it (earlier today)?'
n. mîchi d:uu?

REP.2s.IMM.PI do
'Why did you1 do it (earlier today)?'
o. mê \(d p \hat{\imath}\) d:uu ngmê

REP.2d.IMM.PI do PFS3sO.PI
'Why did you2 do it (earlier today)?'
```

p. mê dmye d:uu ngmê (you3 today)
REP.2pl.IMM.PI do PFS3sO.PI
'Why did you2 do it (earlier today)?'

```

To express wishes, the apparently fixed phrase mêdaa lukwe '(I) wish’ (lit. ?‘never again what') is used, as in the following examples (194) and (195):
(194) mêdaa lukwe, mbóó p:uu nkéli k:oo ngê pîdî
I.wish sky attached ship inside INST CF.Cons.1sIMM
wópu, ngmênê ndap̂̂ a ngópu daa tóó.
embark but money my possession not sitting 'I wish I could have gone by plane, but I haven't got any money.'
```

(195) mêdaa lukwe, nkéli paa kee
I.wish boat CF3sIMMPI come.east
'If only a boat had come up our way'

```

Other minor sentences types include the following way to express 'What if X?' and 'How about if X?' (suggestion):
\begin{tabular}{lllllll} 
(196) & kwonê, & lónté & nkéli daa wa & \(a\) & \(d y: \hat{a} a ̂\), \\
QUOT1s \(>3 s\) & how & boat & NEG & 3sIMPdef & \(3 \mathrm{~s} / \mathrm{d} / \mathrm{plPRS}(\mathrm{CI})\) & send \\
Father & \(n g \hat{e}\) & & & & & \\
Priest & ERG & & & \\
& 'I said to him: What if the priest does not send the boat?'
\end{tabular}
\begin{tabular}{lllllll} 
(197) lónté & knomomê, ye Wednesday ntumokwodo, a & mê \\
how & COND & that Wednesday afternoon & PROX & REP \\
nyinê & diyé & \(k n \hat{\imath}\) & & & \\
& we2MOTION & return & dPROX.IV & & \\
& 'How about if we return on Wednesday evening?' & &
\end{tabular}

There are also a large range of fixed expressions (idioms) which cannot be fully parsed but express full propositional content. A sample follows:
```

(198) a. a kwodé
my dislike
'I don't want it [refusal]' (goes with a shoulder shrug)

```
ngwodé
'You don't want it?'
nyi kwodé, nmî kwodé, u kwodé, yi kwodé
'don't want it, we3 don't, he doesn't, they 2 don't want it'
nyi kwodé, dpî kwodé, nmyi kwodé
'You1 don't, You2 don't, You3 don't want it'
a kwodé, daa nê lê
My dislike, NEG IsIMMPI go
'I don't want to go'
b. mo yimo, a chedê nê

Not.want, 3IMM finish me
'I don't want to (go to pig feasts), they might finish me (my shell money)'
c. niye kêdê yédi
'Oh I long for it’ (Exclamation)
Njimi kêdê yédi
‘I am longing for Njimi’
niye kêdê yédi
Mum longing.for
'Oh for mum' (if only she was here)!
d. Apuu! (said with hand to mouth)
‘That's taboo, not allowed'

\subsection*{7.3 Verbless and agentless clauses}

There are a number of types of verbless clause involving nominal predication, adjectival predication and special constructions.

\subsection*{7.3.1 Nominal predication}

Nominal predication consists of two NPs in juxtaposition, where the second is understood to be the predication, normally with an equative interpretation. The first NP may be a pronoun, as in:
(199) nê mââwe; nyi mââwe, kî mââwe dé 1sNOM big.man 2 sNOM leader DEIC big man PL 'I am a big man, you are a big man, those are big men (chiefs)'

These expressions can be 'tensed' with a time adverb:
(200) wunê nyi tp:ee, awêde nyi mââwe long.ago 2sNOM boy today 2sNOM leader 'Once you were a boy, today you are a big man'

Another common form of verbless predicate uses a possessive NP as predicate:
(201) danêmbum wu dî
story 3sPoss end
'The story its end, i.e. that's the end of the story' (normal formula for 'The end')
(202) Yidika u nee

Yidika 3sPoss canoe
'Yidika, his canoe; i.e. That is Yidika’s canoe’ (demonstrativeless deictic)

Equatives have special negatives, portmanteau with person/number, which are given in Table 7.15, with the corresponding positive sentences for comparison beneath. The sentences are based on the form nê kâmo 'I am a good-fisherman', etc., and the expression doo u ntââa 'It is not enough', etc., the latter only having a negative use. Note that before \(u\) the negative has a different form (after Henderson 1995:61).

Table 7.15: Negatives of equative clauses (tenseless).
\begin{tabular}{|c|c|c|c|}
\hline Person & Sing & Dual & Plural \\
\hline \(1^{\text {st }}\) & \begin{tabular}{l}
d:aa k:âmo \\
‘I am not a good \\
fisherman' \\
d:oo u ntââ \\
'I am not up to it'
\end{tabular} & \begin{tabular}{l}
daa k:âmo dê \\
'We2are not good fisherman' \\
d:ee u ntââ dê \\
'We2 are not up to it'
\end{tabular} & \begin{tabular}{l}
dp:oo k:amo dé \\
'We3 are not good fisherman' \\
dp:oo u ntââ dé \\
'We3 are not up to it'
\end{tabular} \\
\hline \(2^{\text {nd }}\) & \begin{tabular}{l}
d:ii k:âmo \\
'You are not a good \\
fisherman' \\
d:ii u ntââ \\
'You are not up to it'
\end{tabular} & \begin{tabular}{l}
dpoo k:âmo dê \\
'You2 are not good fishermen' \\
dpoo u ntââ dê \\
'You2 are not up to it'
\end{tabular} & \begin{tabular}{l}
dp:ee k:âmo dé \\
'You3 are not good fishermen' \\
dp:ee u ntââ dé \\
'You3 are not up to it'
\end{tabular} \\
\hline \(3^{\text {rd }}\) & \begin{tabular}{l}
daa k:âmo \\
'He is not a good \\
fisherman' \\
doo u ntââ \\
'He is not up to it'
\end{tabular} & \begin{tabular}{l}
daa k:âmo dê \\
'They2 are not good \\
fishermen' \\
doo u ntââ dê \\
'They2 are not up to it'
\end{tabular} & \begin{tabular}{l}
daa k:âmo dé \\
‘They3 are not good fishermen' \\
doo u ntââ dé \\
'They3 are not up to it'
\end{tabular} \\
\hline
\end{tabular}

\section*{Positives of equative clauses for comparison}
\begin{tabular}{llll}
\hline \(\mathbf{1}^{\text {st }}\) & nê \(k: a ̂ m o ~\) & nye \(k: a ̂ m o ~ d e ̂ ~\) & \(n m o\) k:âmo dé \\
\hline \(\mathbf{2}^{\text {nd }}\) & nyi \(k: a ̂ m o ~\) & \(d p: o\) k:âmo dê & \(n m y: o\) k:âmo dé \\
\hline \(\mathbf{3}^{\text {rd }}\) & \(k: a ̂ m o ~\) & \(k: a ̂ m o ~ d e ̂ ~\) & \(k: a ̂ m o ~ d e ́ ~\) \\
\hline
\end{tabular}

There is a topic-marker, the polysemous ngê, which can also be used in equational sentences:
(203) a. ye pini ngê, mu pini Nomono anaph. person TOPIC that person Nomono 'As for this guy, he is like that fellow Nomono'
b. Daa yoo ngê yila

Daa.clan Human.Pl TOPIC PRESENTATIONAL
'The Daa clan people, this is one'

Other kinds of verbless predication may involve Experiencer NPs or 'oblique subjects'. To repeat an earlier example from (177):
(204) n:uu ngê Osborne brothers u kpêê dê kêna
who EXP Osborne brothers his experience Dual Abeleti 'To whom is there experience of the two Osborne brothers at Abeleti?'

Finally, note that questions can also be verbless, with plural expressed on the predicating element, as in:
a. a kê w:uu angênê dé?
my kê beads where PL
'Where are my kê beads (shell money coins)?
b. ala n:ii w:uu dé ( \(N+\) )nani w:uu dé?
these ones beads PL 2ndPoss.ownership beads PL
'Are these beads your ones?'

\subsection*{7.3.2 Adjectival and nominal predication}

We saw under the rubric of parts of speech (Chapter 4) that there is a range of adjectives covering size, weight, colour, moral quality and other categories. Adjectives canonically occur after the noun, both when modifying the noun and when used as predicates:
```

(206) pi kpêdêkpêdê
person black
'The man is black'

```
(207) pi kpêdêkpêdê kêdê pwiyé knî
    man black CERT-3sCI come 3dPROXIntrans
    'The black man is coming' [Note: pwiyé is an irregular verb that takes dual
    enclitics]

Nominal predications have very wide uses, translating many sentences we would not think of as equational:
```

(208) dye ghi yintómu tpii
time part all rain
'Every day, there's rain'

```
(209) Matha u pye a kpêê
    Martha 3sPoss mother my experience
    'I have met Martha's mother', lit. 'Martha's mother (is in) my experience'

The nominal subject can be of arbitrary complexity:
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline (210) & [Mod-N[Mod-N & nkéli] [Head-N & pi]] [Head-N \({ }_{\text {N }}\) & too][class.- \({ }^{\text {m }}\) & & \(e]]\}\) \\
\hline & & boat & man & skin & & iece \\
\hline
\end{tabular}
[adj kpaapîkpaapî]
white
'Europeans have white skin’

Nominalizations from verbal clauses (constructed by an untensed use of the continuous root) can continue to carry their arguments, the whole non-finite clause then occurring as subject (see §8.7):
(211) Yidika u tp:ee vyee dono
Yidika 3sPoss son hitting bad
'Yidika's hitting of his son was bad'

Adjectival predications can have general adverbial functions:
(212) u kmaapî ndî̀

3sPoss eating big
'He eats much (lit. his eating big)'

Another kind of potentially verbless construction is the Experiencer construction dealt with in §7.5, although usually these occur with a verb.

\subsection*{7.3.3 Agentless clauses and evidential nominals}

There is a range of possessed nominals expressing personal experience which take the place of English agentive and verbal expressions of the sort 'I saw him do it', which are expressed instead as '(in) my sight he did it' unmarked for case.
\begin{tabular}{lllll} 
a. & \(n m \hat{\imath}\) ngópu kî d:uu ngê \\
our experience CERT do & MFS.3sOREM \\
'We saw him do it.'
\end{tabular}
b. nmî ngópu/ngîma/lama k̂̂ d:uu
our experience/visual.presence/knowledge CERT do
\(n g e ̂\)
MFS.3sOREM
'We experienced/witnessed/know he did it'

Notice the contrasts between a purely verbal, a purely nominal and a verb plus nominal construction:
a. dê ny:oo
3IMM.PI hear
'he's heard about it'
b. k̂̂ kópu a ngêedd̂
DEIC affair 1sPOSS heard.experience
'I heard it happening'
c. kî kópu u ngêêdî dê pyódu DEIC affair 3POSS heard.experience 3IMM.PI happen 'He heard the affair happening last night'

Some of these evidential nominals can occur without verbs in an equative structure, others require a positional verb or the verb pyódu 'become'. A notable set
of these are the evidential nominals lama, ngópu, kpêê, ngêêdî, ngîma, nt:anê. Where they occur unmarked in an equative structure, they are probably to be understood as marked with the zero Locative, like place names.
```

(215) a. Tili a lama
Tili my knowledge
'I know Tilly` (lit. 'Tilly (in) my knowledge')
b. kmîmpwe a kpêê
grasshopper sp. my experience
'I have experienced (seen) that grasshopper species'
c. l:êê a ngópu
fight my sight
'I saw that fight'
d. k\hat{\imath}}\mathrm{ kópu a ngêêdî
that thing my hearing
'I've heard about that thing'

```

Examples (215)b-d. are presented in the order of strength of epistemic commitment: kpêê requires real direct visual experience for the first time, ngópu requires visual sighting, so that c. above could be said e.g. of something seen on the TV news, while ngêêdî reports hearsay, or non-visual perception. There is another nominal of perception which is cross-modal over sight, hearing, smell, etc., namely \(n t: a n e ̂\), as in:
```

(216) yi tpile tuu a nt:anê
that thing smell my in.perception
'I smelled that thing'

```

Other similar nominals require a supporting positional verb:
\begin{tabular}{lll} 
a. l:êê a ngîma kwo \\
fight my visual_presence & standing \\
'They fought right in front of me' (lit. a fight stood in my presence)
\end{tabular}
b. Yidika u chi daa kwo

Yidika his sign not standing
'There was no sign of Yidika'

In a. ngîma is actually a locative form of ngwolo 'eye’ (§4.2.1.4), not a special kind of nominal predicate like kpêê. The moment of apprehension can be tensed by using a finite verb, e.g. inchoative pyódu 'become':
a. kî kópu a lama dê pyódu that affair my knowledge 3IMMPI became 'I learnt about it today/in the night (e.g. someone's death)'
b. awêde l:êê a ngópu dê pyódu today fight my sight 3IMMPI became 'I saw that fight today (I was there and saw it)' Lit 'Today that fight happened in my sight'
c. awêde l:eê a kpêê ngê dê pyódu today fight my direct.experience ADV 3IMMPI became 'This is my first time to see fighting like that' Lit. 'Today the fight happened while in my experience’
d. Father ngê tpile wee u kpêê Father EXP sing.sing his direct.experience 'Father (the priest) has experienced a tpile wee (sing-sing)'
e. *anga tpile wee a kpêê
to.me sing-sing my direct.experience
*‘To me sing-sing (in) my experience’
(Experiencer case not possible here)
f. awêde l:êê a ngêêdî dê pyódu today fight 1sPOSS heard.experience 3IMM.PI happen 'Today I learnt there was a fight'

Note that the structure in examples (218)b. and c. is not exactly parallel - the ngê after kpêe is obligatory in c., and although d. suggests that this ngê could be the experiencer case, e. shows that the structure does not generalize (actually here it would be redundant) and so suggests the ngê is here in its adverbializing role. The examples incidentally bring out the meaning difference between ngópu and kpêê.

The experiencer construction (§7.5) can be used with just the kpêe and lama evidential nominals, otherwise one simply uses the possessive:
a. Father ngê tpilewee u lama
priest EXP sing.sing 3POSS knowledge
(*ngópu*/ngêêdî)
experience/heard.experience
'Father knows how a sing-sing is done (he's experienced it)'
b. Yidika u ngópu pi knî y:oo l:êê dóó

Yidika his experience people some ERG.PL fight make ngópu
PFS3sO.REM.PI/HAB.C(T.PostN)
'Yidika saw some people fighting (before yesterday)'

The evidential kpêê can be further qualified with n:uu 'taste of', to emphasize the bodily experience:
\begin{tabular}{llllll} 
(220) a. & mty:uu \(\quad\) u & \(n: u u\) & daa & a & kpêê \\
& pandanus.fruit & 3sPoss & taste & NEG & 1sPoss
\end{tabular} first.experience
b. tpete u n:uu doo u kpêê
giving.birth 3sPoss taste NEG 3sPoss first.experience 'She hasn't experienced giving birth'
c. helicopter k:oo wowo u n:uu daa a
helicopter inside embarking 3Poss taste NEG 1sPoss
kpêê, mbóó p:uu nkéli k:oo wowo
first experience sky attached ship inside embark
\(u\) n:uu a kpêê

3sPoss taste 1sPoss first.experience
'I've never experienced a helicopter ride, but I have been in an airplane’

In addition to these uses, most of the evidential nominals can occur directly (unmarked with adverbializers) as adverbs:
a. ndê ngê nmî ngópu ngomo ndîl fire ERG our experience house ate.REM 'The fire ate the house in our experience (long ago)'
b. ndê ngê nmî ngîma/ngêêdî (*kpêê) ngomo ndî̀ fire ERG our sight/hearing direct.experience house ate.REM 'The fire ate the house in our sight/hearing (long ago)'

Despite the syntactic differences between them, the following examples show the closely parallel behaviour of the evidential nominals when in an adverbial locative position in a clause:
a. A ngîma dê pyódu my in.sight 3sIMMPI happen 'It happened in my sight'
b. A ngópu dê pyódu my presence 3sIMMPI happen 'It happened in my presence'
c. A ngêêdî dé pyódu my hearing 3sIMMPI happen 'It happened in my hearing'
d. A nt:anê dê pyódu my experience 3sIMMPI happen 'It happened in my experience, visual or heard'
e. \(A\) kpêê ngê dê pyódu my first.experience ADV 3sIMMPI happen 'I experienced it for the first time today'
f. A lama dê pyódu my knowledge 3sIMMPI happen 'I know it happened/experienced it happening'

Incidentally, the evidentials do not exactly cut up the senses in the Western manner - ngêêdî 'in/by hearing, hearsay', actually covers internal proprioception, as shown by example (223):
\begin{tabular}{llllll} 
(223) & mbwili ugêêdî tp:ee a & m:ii yédi \\
Pregnant.woman her & hearing/feeling & child & 3sPRSCI moving \\
sS.CIHab & & & \\
'A baby will move in a pregnant woman's feeling (she'll feel it move)'
\end{tabular}

There are nominals of possession which have somewhat similar properties, some (e.g. nani) building equative verbless structures, others (nkwodo, and ngópu in an additional non-evidential sense) requiring positional verbs:
a. kî nee Yidika u nani this canoe Yidika his possession 'This canoe is Yidika's possession'
b. A: taa a ngópu daa tóó
bush.knife my possession not sitting
'I haven't got the knife' (lit. 'the knife is not sitting in my possession')
B: a ngópu ka tóo
my possession CERT3PRS sitting
'I've got it'
c. Yi tpile a nkwodo daa tóó

Anaph. thing my use not sitting 'I haven't got that thing.'
d. Yidika u nkwodo dyââma ntî̂ a tóó, daa Yidika Yidika his use shell.coin 3PRS sitting NEG Yidika \(u\) nani his possession 'Yidika has the chaamundu with him, but it is not his property'

\subsection*{7.4 Existential and locative sentences with positional verbs}

The basic locative construction, used e.g. in answer to Where-questions, has the following canonical form:
\begin{tabular}{llllll} 
(225) & Figure & & Ground & postposition & positional verb \\
& kéme & kîgha & kapî & k:oo & \(k a\)
\end{tabular}

In this locative construction, a locative verb is obligatory, drawn from a small set of postural or positional verbs.

Many languages have close relations between the existential and locative constructions, which may differ only by some kind of definiteness marking in the locative and a universal spatial interpretation in the existential - but these are often matters of degree. Rossel is of this type, with no obligatory definiteness marking, so that 'The pigs are in the forest' and 'There are pigs in the forest' are expressed with the same form:
```

(226) nko u mênê mbwêmê a
bush/inland area its inside pig 3s/d/plHAB.C
m:ii té
move/inhabit pl.PROX.IV

```

Both existentials and locatives require a verbal predicate, drawn from a closed set of locative verbs. These verbs draw, as in many languages, on human posture verbs, but also on a less anthropomorphic 'hang' verb. In the Rossel case, we have verbs that in their postural use would gloss 'sit/lie', \({ }^{30}\) 'stand' and 'hang'. Henderson (1995:32) gives the following paradigm (Table 7.16, where proximal tenses are the three of the six tenses nearest to coding time, which with these continuous aspect verbs means present, immediate future and immediate past):

\footnotetext{
30 The verb I will henceforth simply gloss 'sit' clearly covers both sitting and lying. Nevertheless, sitting is the prototype interpretation, and to indicate lying one has to say in effect 'sitting prone' (pîpî a tóó), or 'sleeping' (dpî). Incidentally, these verbs collocate only with continuous aspect, and tóó has punctual counterpart yââa 'sit down', kwo has the punctual counterpart ghê 'stand up', with its own continuous form wowo. There are independent roots for the causative counterparts of the main positionals: kââa 'make stand'; yé 'make sit'; t:oo, 'cause to hang'.
}

Table 7.16: Positional verbs (with inherently continuous aspect).
\begin{tabular}{lllll}
\hline & & ‘sit/lie’ & 'stand' & ‘hang' \\
\hline Indicative, Proximal tense & Sing/Dual & tóó & kwo & t:a \\
\cline { 2 - 5 } & Plural & pyede \({ }^{31}\) & wee & \(t: a\) \\
\hline Non-Indicative, or non-proximal tense & Sing/Dual/Pl & ya & kwo & \(t: a\) \\
\hline
\end{tabular}

There is however one other locative verb, m:ii, (with an invariant root like \(t\) : a above) used for animals or persons moving in their prototypical way in their normal medium (e.g. of fish in water, birds in the air, people walking), used to assert existence or location in a habitat. But it has less currency, and generally a locative verb must be selected from this set of three. \({ }^{32}\)

While suppletive roots are the norm in Rossel verbs, they do not normally split on \(+/-\) plurality of subject, but rather on such dimensions as specific tenses and aspects, or are triggered by zero-post-verbal particles. Thus tóó and kwo constitute a minor form class. (Invariant \(t: a\) and \(m\) :ii are also distinctive, belonging to a small set of invariant roots which take continuous aspect only). \({ }^{33}\)

In Yélî Dnye, a locative or existential statement must select one or other of these verbs. This is true equally for negative existentials or negative locatives, where the orientation/position of things is clearly irrelevant. Thus it is clear that the choice must be based on a notional classification of the properties of the subject, rather than its current actual orientation or disposition. These verbs thus have a sortal nature - they constitute a kind of nominal classification, but a kind which is not strictly determined by either noun or referent. I have described this system elsewhere in detail (Levinson 2000a, 2006b). Here I will simply sketch the system for completeness.

Many nominal subjects normally collocate with just one or other of these verbs. These default collocations can be clearly discerned by negative existential con-

\footnotetext{
31 Increasingly, young people are regularizing this form, and replacing it with tóó té 'sit Intransitive+ Contin.Aspect+ Prox.tense+ Plural-Subject'; similarly, wee is sometimes replaced with kwo té. Speakers who use pyede will only optionally use the plural enclitic té - marking the plurality once is sufficient.
32 There is yet another candidate, Jim Henderson points out to me, namely dpı̂‘sleep', as in \(k: \hat{a} \hat{a}\) pââ k:ii ka dpî ‘The post is lying (lit. sleeping) there'. Although the verb belongs to the same class as \(t: a\), in the sense that it is also an invariant inherently continuous root, it is vanishingly rare in this positional use with inanimate subjects, and I am inclined to treat it as here metaphorically applied.
33 My database has 27 other intransitive verbs with invariant roots. Some of these though do have probably related roots occurring with punctiliar aspect, unlike the positional verbs.
}
texts - in these contexts the actual disposition (orientation or placement) of any particular object is irrelevant, while in other contexts it can play a subsidiary role.
(227) wuluwulu kpêdêkpêdê daa tóó
bagi.valuable black NEG1/3.s/d sit.s/dCI.PROX
'Black-coloured bagi (shell valuable type) does not exist (lit. sitting)'
(228) mwi nee daa t:a
there canoes NEG1/3.s/d hang.CI.PROX
'There are no canoes (hanging) there'
(229) nkaalî too pee daa \(t: a\)
cloud skin piece NEG1/3.s/d hang.CI.PROX
'There are no clouds (lit. no skin of clouds) hanging (in the sky)'

Some of these collocations are not predictable - one simply has to learn that clouds, paths and canoes 'hang', islands and most animals 'stand', while humans, rain, and happiness 'sit'. The following table (7.17) gives a sample of such conventional collocations - note that celestial objects differ, so that the sun 'sits', the stars 'stand', while the moon 'hangs'.

Table 7.17: Some default assignments of different nominal concepts to positional predicate. \({ }^{34}\)
\begin{tabular}{llll}
\hline SIT (tóó) & STAND (kwo) & HANG (t:a) & MOVE (m:ii) \\
\hline shell money & \begin{tabular}{l} 
trees, palms, \\
houses, mountains, \\
islands,
\end{tabular} & \begin{tabular}{l} 
canoes, boats, roads, \\
clouds,
\end{tabular} & \\
darkness, light & & currents, \\
\begin{tabular}{l} 
tides \\
rain, calm-weather, mist
\end{tabular} & (calm?) & \begin{tabular}{l} 
winds, rivers \\
rain
\end{tabular} & \\
\hline
\end{tabular}

34 I have made a number of corrections here from an earlier publication (Levinson 1999), prompted by comments from Jim Henderson. Among them: the moon normally 'hangs' (I had 'sit' which implies one is talking about the moonlight on the ground); the sun can 'sit' as shown here, or 'stand'. As mentioned above, water can 'sit' or 'hang' according to whether it is still or running. I had earlier listed 'knowledge' as 'sitting', but this was a misanalysis of the construction, which Henderson correctly points out is a covert locative:
(i) ye pini a lama daa tóó that man my knowledge not sitting 'That man is not sitting in my knowledge'

Table 7.17 (continued)
\begin{tabular}{llll}
\hline SIT (tóó) & STAND (kwo) & HANG (t:a) & MOVE (m:ii) \\
\hline sun & stars & moon, red-sky (dawn) & \\
\hline \begin{tabular}{l} 
people, friends, \\
relatives, descendants, \\
wife, etc.
\end{tabular} & \begin{tabular}{l} 
chickens, dogs, \\
birds (in tree), pigs, \\
fish (or m:ii) \\
grubs (inside fruit) \\
crocodiles (in river)
\end{tabular} & & crocodiless (on bank)
\end{tabular} \begin{tabular}{l} 
crocodiles (in \\
\\
\\
\hline
\end{tabular}

However, there is both a cultural logic to some of these collocations (see Levinson 2000a) and a spatial logic to the collocation with physical objects. The shape and canonical orientation of physical objects plays a role in the following sort of way: 'hang' is assigned to things which are attached or fastened, 'stand' to
things which have a long axis canonically vertical, and otherwise 'sit' is assigned as the residual category. There are additional wrinkles, for example, a fastened object does not warrant 'hang' if it projects prominently - then it gets 'stand' (hence e.g. lightbulbs do not 'hang' but 'stand' even when hanging from the ceiling).

The choice of a posture verb can help resolve the interpretation of a semantically general noun (similar to the way Mayan positional verbs do). For example, mbw: aa covers 'fresh water, river, pool'- but the referent type is selected by the choice of posture verb:
a. Kiriwina mbwaa daa t:a
Kiriwina water NEG1/3.s/d hang.CI.PROX
'There are no rivers on Kiriwina'

Similarly, many plants and their corresponding fruits or food products are described with the same nominal, but distinguished by the collocation with the posture verb:
(231)
\begin{tabular}{lll} 
a. wédi daa kwo \\
sago NEG1/3sing/dual stand.s/d.CI.PROX \\
'There are no sago (trees) standing' \\
b. wédi daa tóó \\
& sago NEG1/3sing/dual sit.s/d.C.PROX \\
& 'There is no sago flour'
\end{tabular}

A further factor is that many nominals are associated with classifiers, and these classifiers can have an effect on the choice of posture verb. The example in (232)a. below is a description of half a dozen yams in a basket without a classifier - the yams take the plural 'sitting' verb. In the b. example, the subject has a classifier 'small pile of', and now we get singular 'stand':



This shows that semantically it is not the nominal referent that determines the positional verb, but the associated concept (the way it is construed). It also suggests that the classifier may be the head of the NP, controlling the collocation and the verb agreement for number. In fact, however, although dyuu 'small pile' normally collocates with 'stand', this is not automatic - a verb can agree with plural nominals with a singular classifier. \({ }^{35}\)

The choice of posture verbs is complicated by an additional layer of reasoning. If an object is not in the expected configuration, then that can be signalled by an appropriate shift: e.g. a bottle normally is held to 'stand', but if it is relevant that it is lying down, a locative description might specify that 'it is sitting on the table'. Less concretely, an unexpected collocation can be signalled by a strategic shift of posture verb. Consider a head band tied around a man's forehead - its normal position would be described with the 'hang' predicate since it is attached, but a switch to the 'sit' verb would suggest that it was insecurely tied, or about to fall off:
a. kpîdî pee pi kêpa ka t:a cloth piece person forehead CERT.3PRS.CI hanging 'The piece of cloth is (hanging) on the person's forehead'

35 For example, the following is possible with singular classifier and plural agreement on 'stand':
(i) pód:a dyuu têpê mbêmê ka wee bottle small_pile soil/ground/dirt on/according Def+3SPresCon stand(pl) 'The pile of bottles are standing on the ground'
and the following is also possible, with plural agreement on 'sit':
(ii) polî dyuu mbwódo ka pyede ball small_pile on_the_ground Def+3SPresCon sitting(pl) 'A pile of balls is sitting on the ground'
```

b. kpîdî pee pi kêpa ka tóó
cloth piece person forehead CERT.3PRS.CI sitting
'The piece of cloth is (sitting, i.e. perilously) on the person's forehead'
(perhaps he is lying down)

```

For a full account of these alternations, see Levinson (1999, 2006b).
The other part of the basic locative construction is a locative adjunct or postpositional phrase (PP). Place names and a number of special nominals do not require a locative postposition, and occur simply as nominal adjuncts:
(234) Njinjópu yi nkwólu tââ daa t:a

Jinjo ANAPH fornication openly NEG hang
'There is no open fornication at Jinjo' (but they do it secretly)

Exceptionally, only the place name of Rossel Island itself takes a locative postposition: one says Yélî p:uu ‘Rossel attached’ for 'on Rossel', while no other islands take such a postposition.

The language has a very rich set of locative postpositions, on the order of thirty basic forms. Some of these are hierarchically arranged, so that e.g. a general 'attachment' postposition like \(p: u u\) is in privative opposition with a more specific 'attached by spiking' postposition like 'nedê. In this sort of way there are many distinctions between different kinds of ON and IN spatial relations. See Levinson (2006b) and Levinson \& Meira (2003) for the details.

One way of stating relations of possession is using a verbless clause (of the sort kê tpile Cheme u mbw: aa 'that thing is Cheme village's sago-axe'), another is to use a locative clause with positional verb, as in:
\begin{tabular}{llll} 
(235) & a ngópu & daa tóó \\
my possession & not & sitting \\
& 'I haven't got it' & &
\end{tabular}

Since not only concrete nominal concepts but also abstract nominals collocate with positional verbs, these verbs are the key to understanding many constructions and many semantic domains. Further, since positional verbs have active, causative ('put in position') and uncausative ('take from position') counterparts as in Table 7.18 (see also §11.2), the initial assignment of nominal to positional class has far-reaching consequences.

Table 7.18: Active, causative and uncausative positional counterparts.
\begin{tabular}{llll}
\hline \begin{tabular}{l} 
Stative Positionals \\
(intransitive)
\end{tabular} & \begin{tabular}{l} 
Active \\
(intransitive)
\end{tabular} & \begin{tabular}{l} 
Do Causative \\
(transitive)
\end{tabular} & \begin{tabular}{l} 
Undo Causative \\
(transitive)
\end{tabular} \\
\hline kwo 'be standing' & ghê 'stand up' & \begin{tabular}{l} 
kâa 'stand \\
something up'
\end{tabular} & \begin{tabular}{l} 
y:oo 'take something \\
which stands'
\end{tabular} \\
\hline tóó 'be sitting' & yââ 'sit down' & \begin{tabular}{l} 
yé 'put something \\
down'
\end{tabular} & \begin{tabular}{l}
\(n g i ̂ ~ ' t a k e ~ s o m e t h i n g ~\) \\
which sits'
\end{tabular} \\
\hline t:a 'be hanging' & \begin{tabular}{l} 
kaalî ‘make oneself \\
hang' (e.g. flying fox)
\end{tabular} & \begin{tabular}{l} 
t:oo 'hang something \\
up'
\end{tabular} & \begin{tabular}{l} 
ngee 'take something \\
which hangs'
\end{tabular} \\
\hline
\end{tabular}

For example, in the next section various emotion expressions are discussed. Note here the role that positionals play, as in the opposition between the first two examples below (nódo is a special locative form of the body part throat/neck):
a. têpwâ u nuu ghi a nódo ka tóó
tobacco its throat parts my neck.LOC is sitting 'Tobacco its throat is sitting by my neck, i.e. I want it'
b. têpwâ u nuu ghi a nódo.LOC ka t:a tobacco its throat parts my neck is hanging 'Tobacco its throat is hanging on my neck - i.e. I am still angry about the tobacco'
c. yi kópu u nódo ka t:a that thing his throat.LOC is hanging 'That thing is hanging on his throat - he is angry about it'
d. yi kópu nódo ka t:êm̂̂ that thing throat.LOC CERT3CI.PRS putting (of a hanging thing) 'He's putting the problem in his throat (getting angry inside)'

In examples (236)c. and d. above, the collocation with 'hanging' carries over to its causative counterpart 'make hanging'. Similarly, because ' \(n\) :ee 'jealousy' collocates with kwo 'stand', 'to become jealous' will be expressed with the causative counterpart kââ 'make stand':
(237) a. Ghaalyu ngê 'n:ee ka kwo Ghaalyu EXP jealousy is standing 'Jealousy of Ghaalyu is standing - i.e. someone is jealous of him'
b. Kakan ngê Ghaalyu ka 'n:ee dê kââ Kakan ERG Ghaalyu DAT jealousy 3sIMM cause.to.stand 'Kakan has made stand jealousy to Ghaalyu i.e. Kakan has become jealous of Ghaalyu'

\subsection*{7.5 Experiencer construction - 'Oblique Subject’ clauses}

Yélî Dnye has an 'Oblique Subject' construction used with mental predicates such as fear and desire similar to the dative subject constructions of German or Tamil. The 'Oblique Subject', or more properly Experiencer Subject, is marked with a postposition, which in the singular is either homophonous with the Ergative ngê or the Dative/Ablative \(k a\), but in the plural is distinctive. In addition, instead of pronouns taking the postposition, there are (as Henderson 1995:65 notes) special pronominal forms for experiencer subjects (note how these are the source for the plural postposition in Table 7.19):

Table 7.19: Experiencer Subject marking.
\begin{tabular}{llllll}
\hline \multicolumn{2}{l}{ Postpositions } & & \multicolumn{3}{c}{ Special Pronominal Forms } \\
\cline { 5 - 6 } & Number & Form & & \(\mathbf{1}^{\text {st }}\) Person & \\
\(\mathbf{2}^{\text {nd }}\) Person & 3 \(^{\text {rd }}\) Person \\
\hline Singular & \(n g e \hat{e} / k a\) & & \(a n g a\) & \(n g a\) & \(u n g w o\) \\
\hline Dual & \(y: e\) & \(n y e\) & \(d p o\) & \(y: e\) \\
\hline Plural & \(y: e\) & \(n m o\) & \(n m y e\) & \(y: e\) \\
\hline
\end{tabular}

The normal form of the Experiencer Construction consists of an 'Oblique Subject', an absolutive nominal expressing the subjective state, and a positional or postural verb from the locative verb series, which collocates with the absolutive nominal:

\section*{(238) The Experiencer Construction}


Positional OR other verbs
(Positional verb)
\(t: a\)
hanging/being
'I am feeling cold - lit. coldness is hanging to me’

The following illustrates the pronominal paradigm:
```

(239) a. dómu anga a t:a
hunger 1s EXP 3presCI hangs 'I am hungry'
b. dómu nga a t:a
hunger 2sEXP 3presCI hangs 'You are hungry'
c. dómu ungwo a t:a
hunger 3s EXP 3presCI hangs 'He is hungry'
d. dómи $y: e \quad a \quad t: a$
hunger 3d/plEXP 3presCI hangs 'They (2 or more) are hungry'
e. dóти nто $a \quad t: a$
hunger 1plEXP 3presCI hangs 'We (3 or more) are hungry'
f. dómu nye a t:a
hunger 1dEXP 3presCI hangs 'We two are hungry'

```

Nominals can be stacked with a plural postposition, compare the following examples:
a. Yidika ka dómu a t:a

Yidika EXP hunger 3presCon hangs 'Yidika is hungry'
b. Stephen Yidika \(y: e\) dómu \(a \quad t: a\)

Stephen Yidika EXP.PL hunger 3presCon hangs 'Yidika and Stephen are hungry’

Other positionals collocate with other nominals of experience, for example, 'fear' and 'desire' take 'stand':
(241) a. u nkîngê Yidika Stephen y:e daa kwo 3sPoss fear Yidika Stephen EXP.Pl NEG stands 'Yidika and Stephen are not afraid of him' (lit. 'His fear to Yidika and Stephen is not standing')
b. u yi nga kwo?

3sPoss desire to.you stands
'Do you want to have it?' (lit. 'It's desire is standing to you?')

Note that the possessive here has a patient-like rather than agentive-like interpretation - 'its desire' means 'desire for it' not 'desire by it'.

A positional verb is not obligatory in this construction: verbless variants are possible, as in the example (242)b. version below, where a predicate adjective is derived from a noun by reduplication:
\begin{tabular}{rl} 
(242) a. & Yidika ka nkuwo a \\
& Yidika EXP cold 3presCI hang \\
& 'Yidika is cold' \\
b. & Yidika ka nkuwonkuwo \\
& Yidika EXP cold-ADJ \\
& 'Yidika is cold'
\end{tabular}

In addition, various other verbs may participate in this construction. A number of verbs specifically seem to subcategorize for such an experiencer subject. One of these is chópu or chipwo 'to experience’ (possibly diachronically related to chap 'strike'), used in the Punctual aspect, which collocates with many of the experiencer nouns but not all; examples (243)b. - d. show how this construction can be tensed:
(243) a. mbwaa/vye/knê/dómu/ nkuwo a nga a chópu
thirst/piss/shit/hunger/cold to.me 3PRSCI experiencing 'I am feeling (in need of) water/a piss/a shit/hunger/cold’
b. mbwaa a nga da chópu
water to.me 3IMMPI.CLS experiencing 'I was thirsty earlier today’
c. mbwaa a nga a chópu
water to.me 3PROXPast.CLS experiencing 'I was thirsty yesterday'
d. mbwaa a nga a chópu wo water to.me CLS experiencing 3sS.REM.WEAK 'I was thirsty before yesterday'

Another similar verb is kaal̂̂ 'happen to, attach', as in (from Henderson 1995:65):
\begin{tabular}{rl} 
(244) a. & m:êêmgînî a nga dê kaalî \\
& diarrhoea to.me 3sIMMPI happen \\
& 'I have got diarrhoea' \\
b. & pwopwo a nga dê \\
& birthing to.me 3sIMMPI haplî \\
& 'I'm about to give birth', lit: 'Birthing to me has come to fruition'
\end{tabular}

There are also more specific verbs that subcategorize for an experiencer subject (note in the (245)a. example that an Unmarked pronoun takes the role usually taken by an Absolutive NP):
a. nga nê ch:anêch:anê!
to+You 1sNOM evoke_pity
'To you I evoke pity' i.e. have mercy on me!
b. a kpâm ghee knî Ø a nga dî yipê dmi my wife \&kids Aug ABS to me 1sIMMPI miss IV3pl0 'I'm missing my wife and kids'

These constructions have some interest for theories of argument structure. For example, it has been supposed that "It is not possible for a verb meaning what fear means, to have its arguments realized like frighten, nor vice versa" (Grimshaw 1992:22). But in fact nkîngê 'fearing' can have the experiencer in both Experiencer and Absolutive case:
```

a. nkîngê a nga daa kwo
fearing to me not standing
'I am not frightened' (nkîngê is here a verbal gerund)

```
    b. n:aa nkîngê
    1sHabProxCI fear
    'I am fearing' (here nkîngê is an intransitive verb)

It should also be pointed out that not all emotional experiences take this construction, e.g. one 'finds' joy:
\begin{tabular}{lllll}
\(p: o \quad d p \hat{\imath} \quad t: a a, ~ w: a a\) & \(d p: o\) & \(p y w: o o\) \\
home & 1sHABPI arrive joy & 1sHABPI.CLS & find \\
'When I arrive home, I find joy'
\end{tabular}

And further that Experiencer NPs can occur outside this construction:
```

(248) a nga dp\hat{\imath d:uu ngi!}
1s.EXP IMP2/3Defd.P do 2sS.3sO.IMP.P..PostN
'Do it to me!'

```

\subsection*{7.5.1 The 'Want' Construction}

The single most important instantiation of the Experiencer Construction is the 'Want' Construction. In the simplest case, what is desired is a thing, which occurs in the Absolutive case, with the desirer in the Experiencer case, the noun 'desire' collocating with the positional verb 'stand':
```

(249) k:ii kîgha nt:uu u yi u ngwo
banana ripe single_fruit 3Poss desire 3sEXP
a kwo
3s/d/plPRS(CI) stand(s/d)

```
'He wants a banana', lit. 'Its desire a banana fruit to him is standing'

This nominal version of the construction makes it quite clear that structurally the subject of the sentence is yi 'desire', since this is the argument controlling verb agreement, as shown by the following:
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline (250) a. & Weta & \(n g e ̂\) & nee & miyó & & \(y i\) & u ngwo & \\
\hline & Weta & EXP & canoe & two & 3POSS & desire & 3sEXP & \\
\hline & \(a\) & kwo & & & & & & \\
\hline & 3s/d/plPRS(CI) & stan & (s/d) & & & & & \\
\hline & 'Weta wants two & cano & & & & & & \\
\hline b. & Weta & \(n g e ̂\) & nee & dê & \(u\) & \(y i\) & \(d e\) & u ngwo \\
\hline & Weta & EXP & canoe & Dual & 3POSS & desire & Dual & 3sEXP \\
\hline & \(a\) & kwo & mo & & & & & \\
\hline & 3s/d/plPRS(CI) & stand & dS.Intr & & & & & \\
\hline & 'Weta has two d & esires & or two c & canoes' & & & & \\
\hline
\end{tabular}

In the example above there is a single desire for two canoes, the noun \(y i\) is singular, and the verb root (though compatible with both singular and dual but not plural) has a zero enclitic indicating singular subject. In the b. sentence, there are two desires, and the verb enclitic agrees accordingly.

When what is desired is an action or state, the construction gets complex: the Experiencer Construction is followed by a direct quote always (except with \(2^{\text {nd }}\) person subjects) in the first person with adjusted tense. For example:
\begin{tabular}{lllll} 
a. & \(y i\) & ungwo & dî & kwo, \\
desire & 3sEXP & 3sNrPSTCI_NEG & stand(s/d) & 1sPast
\end{tabular} goPI
b. yi ungwo a kwo, an̂̀le lê desire 3sEXP 3s/d/plPRS(CI) stand(s/d), 1sImmFUT.PI/CI goPI 'He wants to go later today', lit. 'Desire to him is standing 'I will go"

The construction has somewhat wider uses than English 'want to': it also expresses such notions as 'try to':
(252) a. u yi nye a kwo mbwêmê nye
its desire 1d.EXP is standing pig 1d
vy:a, ngmênê dê mbêpê
hit but 3IMM.PI run
'We2 tried to catch the pig but he ran away'
b. u yi nmo doo kwo dinghy nmî
its desire 1pl.EXP 3sREMCI standing dinghy 1PlPastPI
dyé, nmgênê doo u ntââ
save but 3sNEG 3Poss sufficient
'We3 tried to save the dinghy, but we couldn't (lit. it wasn't sufficient)'
In the case of \(2^{\text {nd }}\) person subjects of the desired action, the second person pronoun is used in the embedded clause - here shown in the (optional) ergative case possible in embedded contexts:
(253) u yi anga a kwo nyi ngê wa d:uu its desire 1s.EXP 3sCI standing you ERG IRR do 'I want you to do it' (lit. 'It's desire to me is standing: you do it') [example repeated from earlier]

\subsection*{7.5.2 Body-part expressions of emotion}

As already illustrated, body-part terms are used to express emotional states these occur in a number of constructions, not only with the Experiencer Con-
struction, but are brought together here for comparison with that construction. A number of the examples here come from the second edition of the dictionary by Henderson \& Henderson (1999), where an effort was made to collect these expressions. The throat is the locus of both positive and negative emotions: nuи 'throat' is normally positive, nódo 'neck' both positive and negative:
\(\begin{array}{llll}\text { a. } & a & \text { nuи } & u \\ \text { my } & \text { throate. } & \text { his/its/her } & \text { thing }\end{array}\)
'A thing I really like', lit. 'My throat its thing'
b. a пии и kópu ngê dê pyódu
my throat its word/matter ERG 3s/plIMMP(preN) cause.become 'I am really fond of it', lit. 'Its thing has made my throat'
c. nmî tp:ee yoo yi nuu ghi dmi nmî
our3 child Pl their throat part bundle 1plPOSS
nódo a tóó
throat 3 HABC sitting
‘We love our children', lit. ‘Our children's throat bundles are sitting at our throats'

The 'neck' expressions can express 'choking’ emotions; the neck is also a seat of knowledge - the distinction can be made purely with choice of positional verbs:
a. yi kópu a nódo ka
\(t: a\)
that thing my neck CERT.3sC.HAB hanging
'That thing is hanging at my neck, i.e. I feel bitter about it'
b. yi kópu a nódo ka tóó
that thing my neck CERT.3sC.HAB sitting
'That thing is sitting at my neck, i.e. I know all about it/ I'm still thinking about it'

Other body part expressions in frequent use are mbodo 'head', gha 'core, inside' used to mean 'feelings’, ngópu ‘inner ear, possession’, kee 'spleen, fear’:
\begin{tabular}{lllllll} 
ntii & \(u\) & kee & \(u\) & mênê & daa & kwo \\
sea & its & fear & his & inside & NEG & stands
\end{tabular}
'The fear of the sea does not stand in his inside, i.e. he has no fear of the sea'

\subsection*{7.6 The basic intransitive clause}

There are a number of kinds of intransitive predication, already described in §7.3 and §7.4: nominal predication, adjectival predication and positional clauses. Here we turn to the basic, tensed intransitive clause with canonical intransitive verbs. Such a clause need not have an explicit subject (if there is one, it will be in the unmarked Absolutive case of course). It consists minimally of an intransitive verb complex: i.e. an intransitive verb flanked by pre- and post-verbal clitics, since subjects are always omissible. Verbs, as we have seen, are inherently transitive or intransitive, and inherently continuous or punctual, although punctual verbs have continuous forms. Punctual roots tend to supplete on tense, mood and according to whether the post-verbal clitics are null or not, while continuous roots are (apart from the positional roots) normally uniform across tense.

We have already described the pre-verbal (§6.1) and post-verbal (§6.2) clitics, but it is nevertheless important to see how they interact together with verb root suppletion (§4.5; §4.5.4.4) to code all the grammatical categories of tense, aspect, mood, person and number. Let us illustrate with the verb 'to go', which has the following roots (Table 7.20):

Table 7.20: Roots of the verb 'to go'.
\begin{tabular}{lll}
\hline Verb 'Go' & Punctual & Continuous \\
\hline Imperative & lili (2sing)/paa ala (1dual) & lêpî \\
\hline Proximate tense (unmarked) form & lê & lêpî \\
\hline Remote Past & loo & lêpî \\
\hline Followed form & lee & lêpî \\
\hline Negative form & nê & lêpî \\
\hline Negative remote past & n:ee & lêpî \\
\hline
\end{tabular}

It is the combination of clitics, verb root and explicit arguments (if any) that code the basic clause or simple proposition.

There follow the clitics collocated with the correct root forms of the verb 'go' for a good portion of the full ( 144 cell) tense/aspect/person array (all forms are Punctual aspect unless otherwise indicated).
(257) Imperative clauses
(a) Present tense (immediate)
lili you1 go! (Punctual aspect)
lee knî/paa ala let us2 go! (Punctual aspect)
\begin{tabular}{|c|c|}
\hline lee kmîle & let us3 (three or more) go! (Punctual aspect) \\
\hline chi lêpı̂ & you1 be going! (Continuous aspect) \\
\hline choo lêpı̂ & you2 be going! (Continuous aspect) \\
\hline dnyinê lêpı̂ & you3 be going! (Continuous aspect) \\
\hline \multicolumn{2}{|l|}{Deferred Imperative ('Do it later')} \\
\hline paa lee knı̂ & let us2 go later \\
\hline paa lee kmîle & let us3 go later \\
\hline dpî lili & you1 go later \\
\hline dpî lee cho & you2 go later \\
\hline dpîlee dmyeno & you3 go later! \\
\hline
\end{tabular}
(258) Indicative Tenses, Punctual Aspect
(a) Immediate Past (earlier today)
(nê) kêdê lê I went today
(kê) dnye lee knı̂ we2 went
dpî lee dmi we3 went
dîlee dmi they3 went
dîlee knî they2 went
dîlê he went
chilê you went
\(d p i ̂ l e e ~ k n i ̂ \quad y o u 2\) went
dmye lee dmi you3 went
(b) Near Past (yesterday)
nêlê I went yesterday
nyi lee knî we2 went yesterday
nmî lee dmi we3 went yesterday
lee dmi they3 went yesterday
lee \(k n \hat{\imath} \quad\) they2 went yesterday
lê he went yesterday
nyilê you1 went yesterday
dpîlee knî you2 went yesterday
nmyi lee dmi you3 went yesterday
(c) Future
(mââ) a nı̂lê I will go tomorrow
nyi lee knî we2 will go tomorrow
a nmîlee dmi we3 will go tomorrow
wa lee dmi they3 will go tomorrow
wa lee knî they2 will go tomorrow
walê he will go tomorrow
wa nyilê you1 will go tomorrow
wa nyi lee knî wa nmî lee dmi
(d) Remote Past
(kî) nê loo I went long ago (epistemically certain)
nyi lee knâpwo
nmî lee dniye
lee dniye
lee knâpwo
loo
nyi loo
dpîlee knâpwo
nmyi lee dniye
you2 will go tomorrow
you3 will go tomorrow
(d)
we2 went long ago
we3 went long ago
they3 went long ago
they2 went long ago
he went went long ago
you1 went long ago
you 2 went long ago
you 3 went long ago
(259) Indicative tenses, Continuous aspect
(a) Immediate Future (later today)
n:aa lêpî I am going, later today
nye lêpîmo we2 are going, later today
nmo lêpîté we3 are going, later today
a lêpîté they3 are going, later today
a lêpîmo they2 are going, later today
a lêpî he is going, later today
\(k a / a\) lêpî he is going, later today
nye lêpî youl are going, later today
dpo lêpîmo you2 are going, later today
nmye lêpîté you3 are going, later today
(b) Near Past (yesterday)
(kê) nêlêpî I was going yesterday
ny:oo lêpî we2 were going yesterday
nmîlêp̂̂ we3 were going yesterday
dniye lêpî they3 were going yesterday
dpîlêpî they2 were going yesterday
(kê)dêlêpî he was going yesterday
nyi lêp̂̂ you1 were going yesterday
\(d p i ̂ l e ̂ p \hat{\imath} \quad\) you2 were going yesterday
nmyi lêp̂̂ you3 were going yesterday
(c) Remote Past (before yesterday)
noo lêp̂̂ I was going long ago
nyipu lêpî we2 were going long ago
nmee lêp̂̂ we3 were going long ago
dnye lêp̂̂ they 3 were going long ago
```

    dpîmo lêpî they2 were going long ago
    doo lêpî he was going long ago
    nyoo lêp\hat{\imath}\quad you1 were going long ago
    dpîmo lêpî you2 were going long ago
    nmyee lêp\hat{\imath}\quad\mathrm{ you3 were going long ago}
    (d) Proximal Habitual
n:aa lêpî yédi I used to go everyday
nye lêpî nódó we2 used to go everyday
nmo lêpî nyédi we3 used to go everyday
a lêpî nyédi they3 used to go everyday
a lêpî nódó they2 used to go everyday
a lêpî yédi he used to go everyday

```

Each of these verb complexes is a fully-formed sentence, expressing a precise proposition restricted in time. Naturally, an explicit nominal subject is likely to occur (in the unmarked Absolutive case) at the outset, and then in a narrative the cross-referencing on the particles will tend to be sufficient to keep track of the participants, sometimes with the help of an anaphoric pronoun. In (260) is an example of such a transition, with the last clause (the simplex intransitive clause) without a subject NP:


Not all intransitive clauses are simple. Transitive verbs with incorporated objects are inflected (take post-verbal clitics) like Intransitive verbs; in this case the object is sandwiched between pre-verbal clitic and verb (§7.9). Further, some formally
intransitive verbs obligatorily take incorporated PPs (here in bold; example from Henderson 1995:28), again sandwiched between pre-verbal clitic and verb in a position nothing else can occur in:
```

(261) ka nté ka chaa té
CERT.3Pres food Source/Goal ground-bake plS.PROX.CI
'They are food-baking (in ground oven)'

```

And others do so optionally:
\begin{tabular}{lllll} 
(262) & wumê & nêêdî & ka & vyuwo \\
& 3a/d/pl/HABPROX.C.MOT & possum & Source/Goal & look for \\
& 'He goes looking for possum' & &
\end{tabular}

An intransitive verb like vyuwo 'look for' could be said to subcategorize for a PP and optionally incorporate it. Incorporation is described further in \(\$ 7.9 .3\) below.

Many notions that, in English, would be rendered with a transitive verb, can be expressed with intransitive verbs in Yélî. In many cases there are transitive and intransitive verb doublets (see §4.5.1; §7.9.1).

\subsection*{7.7 The simple transitive clause}

The simplex (non-subordinative) transitive clause is expressed maximally by an Ergative NP, an Absolutive NP, a verb complex with pre- and post-verbal clitics, and any adjuncts and adverbials. Where explicit noun phrases for the arguments occur, it is of course essential that the person/number marking in the NPs agrees with that in the verb complex ( \(3{ }^{\text {rd }}\) person often unmarked for number in the proclitic). Subjects are marked twice, in proclitics and enclitics, objects only in enclitics.


Yidika Mwonî ERG.pl your.dog Dual 3Rem/PROXPST hit.FOL PFS.3dO 'Yidika and Mwonî hit (before yesterday) your two dogs'

There are various agreement peculiarities - quantified NPs usually take singular agreement, subjects with NP adjuncts in Sociative or Comitative case agree as if the nominal in Sociative case were part of the subject (thus 'John with me' will take \(1^{\text {st }}\) Dual agreement), reflexives sometimes (§7.8.1) and reciprocals always (§7.8.2) agree as if they were \(3^{\text {rd }}\) person, and so forth. See §5.2; §5.3, §7.8.2.

Once the agent is set up, subsequent mentions are likely to elide the NP, as in the following extended example from a narrated myth, where the supreme deity went around the island placing all the people in their districts:


Here the first clause has the full form with Ergative and Absolutive NP, but thereafter the same agent is indicated by zero-anaphora. The Absolutive NP is cross-referenced in the post-verbal clitic except when it is \(3^{\text {rd }}\) person singular with a Monofocal subject (members of a class of 'weak' verbs substitute ngê here in the Remote Past):
\begin{tabular}{llllll} 
(265) a. & awêdê tp:ee dî & vy:a & \(\emptyset\) \\
& today boy 3sIMM & hit.PROX & MFS.3sO \\
& 'He hit a boy today' & & \\
b. & \(p i\) & ngmê dî & \(v y: a\) & \(\emptyset\) \\
& person INDF 3sIMM & hit.PROX & MFS.3sO \\
& & 'He hit someone today' & &
\end{tabular}

In example (265)b. above, the indefinite marker of Absolutive NPs is attracted to the pre-clitic position so that other constituents may intervene between noun and indefinite, this constituting part of the marking of Absolutive status (Henderson

1995:15). The clitic now forms a single phonological word (§3.5) with the Absolutive marker: ngmê=dî.

The Absolutive (object) NP can also be dropped from any clause, if it is clear from the context:
```

(266) Ngwonoch:a ngê yinê d:uu ngê
Ngwonoch:a ERG that's_the_one do MFS.3sO.WEAK
'Ngwonoch:a was the one who did (everything)'

```

Thus, as in the intransitive clause, the minimal finite transitive clause consists of a verb complex, in this case a transitive verb flanked by clitics. The nominative proclitics are the same as for the intransitive clause, but in the transitive case the enclitics carry information about the person/number of the object as well as the subject in portmanteau form. Again, it is useful to see at least a partial paradigm of the minimal transitive clause, the verb complex, in order to appreciate how the information is contributed by verb stem, proclitic and enclitic (full analytic tables for the enclitics are provided in §6.2). We will take the perhaps hackneyed example of the verb 'to hit (kill)', which is at least indubitably transitive in both form and meaning. The verb has the suppletive forms shown in Table 7.21:

Table 7.21: The verb 'to hit (kill)'.
\begin{tabular}{lll}
\hline Verb ‘hit/kill' & Punctual & Continuous \\
\hline Imperative & vya (ngi) (2sing) & (chi) vyee \\
\hline Proximate tense (unmarked) form & vy:a & \\
\hline Remote Past & vyâ & vyee \\
\hline Followed form & vya & \\
\hline
\end{tabular}

Because of the huge number of forms involved (and because proclitics are the same in the intransitive case we have just reviewed), we will hold the subject constant (even though of course variables here affect the enclitic) as \(3^{\text {rd }}\) person singular, except in the imperative.
(267) Imperative clauses (Punctual only)
vyangi you hit him
vya dé you hit them2
vya té you hit them3
vyanédi you1 hit me
vya nódó you2/3 hit me
vya nyédi you hit us2
vya nmédi you hit us3
vya ngmê let us2 hit him
vya déme let us2 hit them2
vya téme let us2 hit them3
dpî vya ngê let him hit it later (Deferred)
dpî vya ngê déne let him hit those two later
dpî vya ngê téne let him hit those three-or-more later
(268) Punctual Indicative clauses: 'He hit(s) you/they/us' etc.
(a) Immediate Past (earlier today) dî vya nê he hit me today
dî vyangi he hit you1
dî vya dp:o he hit you2
dî vya nmy:oo he hit you3
dî vya ny:oo he hit us2
dî vya nmo he hit us3
dî vy: \(a\) Ø he hit him
dî vya dê he hit them2
dî vya.té he hit them3
(b) Future
wa vya nê he will hit me
wa vya ny:oo he will hit us2
wa vya nmo he will hit us3
wa vya ngi he will hit you1
wa vya dp:o he will hit you 2
wa vya nmy:o he will hit you 3
wa vy:a Ø he will hit him
wa vya dê he will hit them2
wa vya té he will hit them3
(c) Remote Past (before yesterday)

Øvyanoo he hit me (before yesterday)
Ø vуа пуо́ри he hit us2
Ø vyanтo he hit us3
Øvyanyoo he hit you1
Øvya dpo he hit you2
Øvya nmyoo he hit you3
\(\emptyset v y a ̂ \emptyset \quad\) he hit him (note unfollowed root)
Øvyadoo he hit them2
Øvya too he hit them3
(d) Habitual

Punctual
Continuous
('sometimes') ('everyday’)
dpî vya nê he used to hit me a vyee noo
dpî vya ny:oo he used to hit us2 a vyee nyópu
dpî vya nmo he used to hit us3 a vyee nтоo
dpî vya ngi he used to hit you1 a vyee ngi
dpî vya dp:o he used to hit you2 a vyee dp:o
dpî vya nmy:o he used to hit you3 a vyee nmy:o
dpîvy: \(a\) Ø he used to hit him a vyee ngê
dpî vya dê he used to hit them2 a vyee doo
dpîvya té he used to hit them 3 a vyee too
(269) Continuous Aspect ('He (is/was/will be) hitting me/them/you, etc.')
(a) Future Distal (Tomorrow or later)
wa dî vyee nê he will be hitting me (everyday, continuously)
wa dî vyee ny:o he will be hitting us2
wa dî vyee nmo he will be hitting us3
wa dî vyee \(\emptyset \quad\) he will be hitting him
wa dî vyee dê he will be hitting them 2
wa dî vyee.té he will be hitting them3
wa dî vyee nyi he will be hitting you1
wa dî̀ vyee dp:o he will be hitting you2
wa dî̀ vyee. he will be hitting you3
nmy:o
(b) Present
a vyee noo he is hitting me (continuously)
a vyee nyópu he is hitting us2
a vyee nmoo he is hitting us3
a vyee \(\emptyset \quad\) he is hitting him
a vyee doo he is hitting them2
a vyee too he is hitting them 3
a vyee nyoo he is hitting you1
a vyee dpo he is hitting you2
a vyee nmyoo he is hitting you3
(c) Immediate Past (earlier today)
\(\emptyset\) vyee nê he was hitting me continuously today
\(\emptyset\) vyee ny:oo he was hitting us 2
\(\emptyset\) vyee nтo he was hitting us3
Ø vyee Ø he was hitting him
\(\emptyset\) vyee dê he was hitting them2
\(\emptyset\) vyee té he was hitting they3
\(\emptyset\) vyee ngi he was hitting you1
\(\emptyset\) vyee dp:o he was hitting you2
Ø vyee he was hitting you3
nmy:o
(d) Proximal Past (yesterday)
dî vyee nê he was hitting me yesterday, etc.
(e) Remote Past (before yesterday)
doo vyee nê he was hitting me (long before)
doo vyee nyo he was hitting us2
doo vyee he was hitting us3
nтo
doo vyee ngi he was hitting you1 etc.
(f) Habitual Proximal (habitual actions still occurring)
a vyee noo he used to hit me (continuously, everyday)
a vyee nyópu he used to hit us2
a vyee nтоo he used to hit us3
a vyee ngi he used to hit you1
a vyee dp:o he used to hit you2
a vyee nmy:o he used to hit you3
a vyee ngê he used to hit him
a vyee doo he used to hit them 2
a vyee too he used to hit them3
(g) Habitual Distal (habitual actions discontinued)
dpîmo vyee nê he was habitually hitting me everyday long ago etc.
(h) Imperatives - see Tables \(7.22 \& 7.23\) below, and §7.2.1 above.

Table 7.22: Transitive Imperatives: \(1^{\text {st }}\) Person Sing OBJECT held constant.
\begin{tabular}{llll}
\hline Subject properties & Sing & Dual & Plural \\
\hline \(\mathbf{1}\) & & & \\
\hline \(\mathbf{2}\) & vy:a nédi ‘you1 hit me!’ & vy:a nódó ‘you2 hit me' & vy:a nódó ' you3 hit me' \\
\hline \(\mathbf{3}\) & vy:a nédi ‘let him hit me' & \begin{tabular}{l} 
vy:a nódó 'let them2 \\
OR vy:a nene
\end{tabular} & \begin{tabular}{l} 
vy:a nódó 'let them3 \\
hit me'
\end{tabular} \\
\hline
\end{tabular}

Table 7.23: Transitive Imperatives: \(1^{\text {st }}\) Person Dual OBJECT held constant.
\begin{tabular}{|c|c|c|c|}
\hline Subject properties & Sing & Dual & Plural \\
\hline \multicolumn{4}{|l|}{1} \\
\hline 2 & vy:a nyédi ‘you hit us2!' & vy:a nyédi ‘you2 hit us2' & vy:a nyédi ‘you3 hit us2!' \\
\hline 3 & vy:a nyédi ‘let him hit us2!' & vy:a nyédi*'let them2 hit us2' & \begin{tabular}{l}
vy:a nyédi ‘let them3 \\
hit us2
\end{tabular} \\
\hline
\end{tabular}

\subsection*{7.8 Reflexive and reciprocal clauses}

Self-reference in both reciprocals and reflexives is done lexically, with a reflexive or reciprocal nominal. In the reflexive cases, these are arguably normal objects of transitive verbs (no intransitivization or middle construction is employed), but in the reciprocal case the reciprocal pronoun is incorporated into an intransitive construction. There are puzzles and complexities in both constructions: the semantic binding conditions are hard to formulate and agreement in the verb complex is irregular, but reciprocals are especially complex, and are dealt with separately below (§7.8.2) (see also Levinson 2011).

\subsection*{7.8.1 Reflexives}

The reflexive 'pronoun' is actually a noun like English 'self' preceded by a possessive pronoun (except in the \(3^{\text {rd }}\) person singular). The forms of the reflexive are repeated here (Table 7.24) from §4.2.2.1 Table 4.6; note that the unmarked form chóóchóó is interpreted strictly as \(3{ }^{\text {rd }}\) person singular (with some person switches to be described):

Table 7.24: Reflexive 'pronouns'.
\begin{tabular}{llll}
\hline & Sing & Dual & Plural \\
\hline \(\mathbf{1}\) & a chóóchóó & nyi chóóchóó & nmî chóóchóó \\
\hline \(\mathbf{2}\) & nyóóchóó & dpî chóóchóó & nmyi chóóchóó \\
\hline \(\mathbf{3}\) & chóóchóó & yi chóóchóó & yi chóóchóó \\
\hline
\end{tabular}
(The nyóóchóó form is a regular formation from the \(2^{\text {nd }}\) person possessive nasal prefix applied to the unmarked form.) The forms are identical for absolutive and
possessive uses, except that in the \(3^{\text {rd }}\) person the singular form in the possessive has a preposed possessive pronoun: u chóóchóó.

The following examples show some basic usages with the reflexive in object position and (zero) Absolutive case:
```

a. a chóóchóó dî vyee nê
my self 1sIMM hit.FOL 1sO.PROXPI
'I hit myself (earlier today)'
b. nyóóchóó nyi vy:a ngi
2s.self 2sPastPI hit 2sO.PROXPI
'You hit yourself (earlier today)'
c. Yidika Mwonî y:oo yi chóóchóó dê vy:a
Yidika Mwonî ERG-3PL 3Pl self 3IMMPI hit
d:oo
MFS.3dO.PROXPI
'Yidika and Mwonî hit themselves'

```

Other forms however are possible, for example the following, where in example (271)b. the reflexive has a \(3^{\text {rd }}\) person zero morph not in agreement with the \(2^{\text {nd }}\) person subject:
```

(271) a. a chóóchóó nî vy:a nê
1sPOSS self 1sNrPST hit 1sOPROXPI
'I hit myself (yesterday)'
b. nyóóchóó nyi vy:a Ø
2s.self 2sPastPI hit MFS3sO.PROX
'You hit yourself (yesterday)' OR `You yourself hit him'
c. nyi chóóchóó nyi vy:a ngi
2s self 2sPastPI hit 2sO.PROXPI
'You hit yourself (yesterday)' (unambiguous)

```

Notice that example (271)b. is ambiguous between an emphatic and reflexive interpretation. But construction c. (a variant of nyóóchóó nyi vy: a ngi but with the same reflexive-only interpretation) is unambiguous, and thus the binding conditions for reflexives can be ascertained. The inflectional patterns in both a . and b . can be explained by the fact that reflexives can be optionally treated as \(3^{\text {rd }}\) person nominals. In b. there is then a zero enclitic, which would encode (as shown) Monofocal Subject and \(3^{\text {rd }}\) person Singular Object - other evidence is described below. Incidentally, non-reflexive sentences with forced coreferentiality between A and O arguments are ungrammatical:
\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{3}{*}{a.} & \({ }^{*} n \hat{\imath}\) & \(v y: a\) & \(n \hat{1}\) \\
\hline & 1sPastPI & hit & 1sO.PROXPI \\
\hline & *'I hit me' & & \\
\hline \multirow[t]{3}{*}{b.} & \({ }^{*} n y i\) & \(v y: a\) & \(n g i\) \\
\hline & 2sPastPI & hit & 2sO.PROXPI \\
\hline & *`You hit y & you' & \\
\hline
\end{tabular}

The basic, \(3{ }^{\text {rd }}\) person reflexives in object position are illustrated in example (273) below. As the glosses make clear, these sentences are potentially ambiguous between a reflexive reading and a reading with a zero-anaphoric object and an emphatic subject (insertion of an unbiguous O NP will force the reflexive reading, as in b.):
(273)
a. Weta ngê chóóchóó dê vy:a

Weta ERG self 3IMM hit
'Weta killed himself', or 'Weta himself killed (that animate entity)'
b. Weta ngê Weta chóóchóó dê vy:a

Weta ERG Weta self 3IMM hit 'Weta hit Weta himself'
c. Weta ngê chóóchóó da nâko

Weta ERG self 3IMM hang.something
'Weta hung himself', or 'Weta himself hung it up'
d. Ghaalyu ngê chóóchóó dê châpwo tuu ngê

Ghaalyu ERG self 3IMM cut axe INST
'Ghaalyu cut himself with an axe' or 'Ghaalyu himself cut it with an axe’

Chóóchóó is a nominal, and can stand directly as either a subject or a nominal predicate in an equational sentence:
(274)
a. chóóchóó ngwépi

3s.self sorceror
'Himself is the sorcerer; the sorcerer is himself'
b. nyóóchóó (nyi) mââwe

2 s .self 2 s bigman
'Yourself (you) are a bigman; the bigman is yourself'
c. pini n:ii ngê dê d:uu, chóóchóó
man who ERG 3IMM do 3s.self
'The man who did it is himself'
\[
\begin{array}{lll}
\text { d. nyóóchóó } & \text { 'nm:ee? } \\
& \mathrm{N}+\text { tp:ee } \\
& \text { 2s.self } & \text { 2sPoss+son } \\
& \text { 'Is this your own son?' }
\end{array}
\]

Where the reflexive occurs alone, as in example (274)a. above, it would not seem to be an emphatic, but where there is an additional pronoun (or noun), as shown as possible in b., the reflexive pronoun may be merely emphatic.

When the reflexive stands in a possessive relation to another nominal, it is often reduced, and the reduced forms (possessive + chóó) reinforce a possessive reading:

b. kêndapî chóó u kada da yé té
shell.money 3s.self his front 3IMM.CLS put MFS3plO.PROXPI 'He put the shell money at self's front, i.e. in front of himself'

In example (275)a. above the reflexive seems to be bound from an unusual position: the object (coded in the zero enclitic) appears to be binding an adjunct to the subject ('Himself's father hit him'), contrary to some predictions in the theoretical literature. Those who think that Absolutive arguments may be underlying subjects may find this interesting.

A reflexive in this position tends to force a reading that might have come about anyway, and is thus typically optional:
(276) a. kêndapî (chóóchóó) u péé maknâpwo dê ngmo shell-money 3s.self 3sPoss basket under 3IMM.PI hide 'He hid the money under his (own) basket'
b. yu chóó da châpwo

3sPoss.leg self 3IMM.CLS cut
'He cut his own leg’

This same reduced form chóó, but also the fuller forms, can be emphatics, adjunct to the subjects which bind them:
\begin{tabular}{llll} 
a. & a chóó & dî & d:uu \\
1sPOSS self & 1sIMM.PI & do \\
& 'I myself did it'
\end{tabular}


As shown in examples (277)d. and f., these reflexive forms cannot occur marked with Ergative case, although they may seemingly occur in, or adjunct to, subject position. As emphatics, reflexives can occur in this position also in intransitive clauses:
(278) a. Kostka Father ka chóóchóó lê

Kostka Father DAT 3s.self go
'K himself went to Father yesterday'
b. Kostka chóóchóó Father ka lê = chóóchóó Kostka Father ka lê = (a.) above.
c. Kostka Father ka chóó lé

Kostka Father DAT 3s.Self go
‘Kostka went to Father himself’ (ambiguous who is being emphasized)

The full reflexive pronoun seems to pick out the subject as referent in these cases (note that the different orders in examples (278)a. and b. seem equivalent), but the reduced form has ambiguous scope as in c.

Some examples of other permissible positions follow in example (279):
\begin{tabular}{rllllll} 
(279) a. & chóó \(\quad\) u tp:ee ka puku dmi & dê & Possessive \\
& self 3sPOSS son DAT book CLF & 3sIMM & within Dative \\
& y:oo & & & & & \\
& give.to.3rd & & & \\
& 'He gave to his own son the book' & &
\end{tabular}
b. puku dmi (u) chóóchóó u kwo Adjunct to Dative
book 3sPOSS self to.him
maa y:00
REP.3IMM give.to.3rd
'He gave the book to himself'
c. chóóchóó u mgî chó Benefactive?

3s.self her hole dug.REM
'She dug herself her hole, i.e. she dug her own grave'
d. gun chóóchóó \(u\) kuwó dê Complement
gun 3.self 3sPOSS behind 3sIMM of Possessive?
ngmo
hide
'He hid the gun behind himself'
e. \(u\) yi ungwo a kwo Object
its desire 3sEXP 3sHABCon standing
chóóchóó nê vy:a
3.self 1s hit
'He wanted to kill himself', lit. 'He wanted 'I kill self'

As already mentioned, there is an important agreement fact that only becomes clear with non-third person dual or trial subjects - the verbal enclitic which tracks object person/number does not always agree with the person, optionally taking \(3^{\text {rd }}\) person in the appropriate number, except in imperatives like example (280)c.:
```

    a. dp\hat{\imath} chóóchóó dp\hat{\imath} vy:a d:oo
    2d.POSS self 2d.IMM hit PFSubject.3dO.PROXPI
    'You2 hit yourselves' OR: 'You2 yourselves hit them2 earlier today'
    (Ambiguous)
    Lit. 'You2 hit them2selves (day before yesterday/earlier today/
    yesterday)'
    dpî chóóchóó dp\hat{\imath vy:a dp:o}
    2d.POSS self 2d.IMM hit PFSubject.2dO.PROXPI
    'You2 hit yourselves (today or yesterday)' (Unambiguous)
    dpî chóóchóó dpî vy:a dpo
    2d.POSS self 2d.IMM hit PFSubject.3dO.PROXPI
    'You2 hit yourselves (the day before yesterday)' (Ambiguous)
    b. nmyi chóóchóó nmyi vy:a tumo
2PIPOSS self 2plIMM hit PFS.3plO.PROXPI
'You3 hit yourselves' OR 'You3 hit 3 others'(Ambiguous)

```
\(\left.\begin{array}{llllll} & n m y i & \text { chóóchóó } & \text { nmyi } & \text { vy:a } & \text { nmyo } \\
& \text { 2plPOSS } & \text { self } & \text { 2pl.IMM } & \text { hit } & \text { 3plO }\end{array}\right]\)\begin{tabular}{lllll} 
& 'You3 hit yourselves' (Unambiguous)
\end{tabular}

Note as another fact that both reflexives and reciprocals can occur in the same sentence with the same reference:
\begin{tabular}{lllll} 
(281) & puku & dmi yi & chóóchóó & noko
\end{tabular}\(\quad\) maa

As so often with reflexives in language, these various facts are quite hard to reconcile with a single structural analysis. One approach would take all these reflexives to actually be emphatics, with only preferred or implicated reflexive readings - hence all sentences permit a non-reflexive interpretation unless this is ruled out by other means ( \(1^{\text {st }}\) and \(2^{\text {nd }}\) person reference, or repeated names). A second approach would try to isolate the true from the pseudo-reflexive uses of the same morphemes. We might then set aside as emphatics those reflexives which occur as adjuncts to subjects, as with the intransitive cases. We would then attempt to isolate as core cases those reflexives which can be analysed as in the object position of transitive verbs, bound as expected on typological grounds by explicit or inexplicit Ergative subjects. This however would leave a number of other puzzling cases to the side: (a) the occurrence of reflexives as apparent subjects of verbless predications, (b) reflexives serving as nominal predications, (c) reflexives embedded in an ergative NP apparently bound from object position (as in 'Himself's father beat him'). A third approach would highlight the \(3^{\text {rd }}\) person agreement with \(1^{\text {st }}\) and \(2^{\text {nd }}\) person subjects - on this analysis all these 'reflexives' are adjuncts, along the lines of 'I hit someone, namely myself' (and thus none of them occupy argument positions or are anaphors in Chomsky's sense). Finally, a quite promising approach would start with the observation that reflexives are
always in Absolutive (unmarked) case, and can be bound by any pronominal or clitic element in the verb complex - this would unify the emphatic uses, and the intransitive subject uses, with those where an A-role NP appears to bind an O-role NP. In fact, on this analysis, all cases of chóóchóó are bound out of the verb complex by the verbal inflections themselves. A problem for this analysis comes from Experiencer sentences like:
\begin{tabular}{lllllllll} 
(282) nyóóchóó & kî & dmââdîl & u & yi & nga & a & kwo \\
2s.self & that & girl & 3sPoss & desire & 2sEXP & 3CI & stands \\
'You yourself want that girl (to marry)?', lit. 'To you yourself \\
the desire of that girl is standing?'
\end{tabular}

Here the reflexive is apparently bound by the Experiencer 'subject' which is not coded in the verbal inflections (the Absolutive subject is yi, 'desire').

\subsection*{7.8.2 Reflexive and reciprocal constructions}

Reciprocals are used to refer to reciprocal actions, although the usage does not exactly parallel English (see §7.8.2.5). There are two essential constructions:
i. The pronominal numo is used as if it was the direct object of a transitive verb root - but the whole construction is always intransitivized to differing degrees, as explained below, and numo may or may not be cross-referenced on the verb. In all cases the subject is marked with Absolutive case, not Ergative, and numo is incorporated into the verb complex.
ii. The pronominal noko (= numo+Dative \(k a\) ) or numo+adposition occurs in an oblique position (e.g. a PP) with both transitive and intransitive roots. It is normally not cross-referenced in the verb, but occasionally the whole PP (adpositional phrase) can be incorporated, in which case indirect crossreferencing is possible, and there may be other special cases (see below §7.8.2.6).

\subsection*{7.8.2.1 The numo construction}

The reciprocal pronoun numo when it is the patient of a transitive verb (as in 'they hit each other') is always incorporated into the verbal complex, making an intransitive construction. This is marked by (i) the position of numo between the verb and the verbal proclitic, (ii) by the fact that the subject cannot be in the ergative case, but must be absolutive, (iii) by a change of the verbal enclitic from
a transitive to an intransitive one just in case the verb is in continuous aspect. Compare:
(283) a. Kakan ngê Nganapwe-Ø wunê kpêênı̂

Kakan ERG Nganapwe-ABS 3HABCI chasing
Ø
MFS.3sOPROXTransitive
'Kakan habitually chases Nganapwe’
b. Kakan- \(\varnothing\) Nganapwe- \(\varnothing\) wunê numo kpêênî

Kakan-ABS Nganapwe-ABS 3HABCI each other chasing mo
3dS.PROXIntransCI
'Kakan and Nganapwe habitually chase each other'

Despite the incorporation of numo, the verbal enclitic is sometimes transitive and sometimes intransitive (as in example (283)b.), showing that the reciprocal exhibits intermediate degrees of transitivity. The agreement facts with numo as expressed in the enclitic are as follows:
i. The Punctual verb form takes a transitive enclitic, as for Monofocal Subject (singular or \(1^{\text {st }}\) person) even when the subject is not Monofocal. There is a neutralization of tense distinctions in the enclitic, only the Remote Past being marked distinctively for tense.
ii. Wherever there is a transitive enclitic, this enclitic codes the reciprocal as \(3^{\text {rd }}\) person object regardless of actual person.
iii. The Continuous verb form takes intransitive enclitics agreeing in number with the subject in all tenses and in the habitual as well as indicative moods.

Tables 7.25 and 7.26 show the relevant verb forms for a sentence of the form ' X hit each other' in the punctual aspect, and 'X were/are looking.at each other' for the continuous aspect, with the different possible tense, mood and person/number combinations (there are only two relevant numbers, Dual and Plural, and object person/number is the same of course as subject person/number). The intransitive enclitics are marked in bold. The forms dê/té are forms normally used with transitive verbs in the proximal tenses with Monofocal subject and \(3^{\text {rd }}\) person dual/plural objects, respectively (see §6.2.1). The forms mo/té are normally used with intransitive verbs in proximal tenses with dual/plural subjects of any person, but only in the continuous aspect. Likewise the zero suffixes indifferent to person are a unique feature of intransitive continuous aspect marking in distal tenses.

Table 7.25: Punctual aspect transitive inflectional enclitics associated with incorporated reciprocals paradigm with verb vy:a/vyee 'hit, hitting', all Subjects with coreferential Objects (annotations in left column under the tense category show normal value of the corresponding enclitics).
\begin{tabular}{llll}
\hline PUNCTUAL & Person & Dual & Plural \\
\hline Future & Person & & \\
\hline (proximal tense) & \(\mathbf{1}\) & anyi numo vy:a dê & a nmî numo vy:a té \\
\hline & \(\mathbf{2}\) & wa dpî numo vy:a dê & wa nmyi numo vy:a té \\
\hline & \(\mathbf{3}\) & wa numo vy:a dê & wa numo vy:a té \\
\hline Earlier Today - Immediate Past & \(\mathbf{1}\) & dnye numo vy:a dê & dpî numo vy:a té \\
\hline (proximal tense) & \(\mathbf{2}\) & dpî numo vy:a dê & dmye numo vy:á té \\
\hline & \(\mathbf{3}\) & dî numo vy:a dê & dê numo vy:a té \\
\hline & Person & & \\
\hline Yesterday - Near Past & \(\mathbf{1}\) & nyi numo vy:a dê & nmî numo vy:a té \\
\hline (proximal tense) & \(\mathbf{2}\) & dpî numo vy:a dê & nmyi numo vy:a té \\
\hline & \(\mathbf{3}\) & numo vy:a dê & numo vy:a té \\
\hline Day before Yesterday - Remote & Person & & \\
\hline Past & & & \\
\hline (distal tense) & \(\mathbf{1}\) & nyi numo vy:a doo & nmî numo vy:a too \\
\hline MFS 3d/plObj REM & \(\mathbf{2}\) & dpî numo vy:a doo & nmyi numo vy:a too \\
\hline & \(\mathbf{3}\) & numo vy:a doo & numo vy:a too \\
\hline Habitual & Person & & \\
\hline & \(\mathbf{1}\) & dmye numo vy:a dê & ?nmî numo vy:a té \\
\hline & \(\mathbf{2}\) & dpî numo vy:a dê & dmye numo vy:a té \\
\hline 3 & dpî numo vy:a dê & dpî numo vy:a té \\
\hline Imp 1S.3d/pl0 & \(\mathbf{1}\) & numo vy:a déme & numo vy:a téme \\
\hline \(\mathbf{2 S ~ 3 d / p l 0 ~}\) & \(\mathbf{3}\) & numo vy:a dóó! & numo vy:a tóó! \\
\hline \(\mathbf{3 S}\) 3d/pl0 & numo vy:a déne & numo vy:a téne \\
\hline
\end{tabular}

Table 7.26: Continuous aspect intransitive inflectional enclitics associated with incorporated reciprocals - paradigm with verb y:ene 'be looking at'36
(annotations in left column under the tense category show normal value of the corresponding enclitics.).
\begin{tabular}{llll}
\hline y:ene 'looking at' & & & \\
\hline CONTINUOUS ASPECT & Person & Dual & Plural \\
\hline Tomorrow - Distal Future & & & \\
\hline (distal tense) & \(\mathbf{1}\) & wa nyo numo y:enê \(\varnothing\) & wa nmî numo y:enê \(\varnothing\) \\
\hline & \(\mathbf{2}\) & wa dpî numo y:enê \(\varnothing\) & wa nmyi numo y:enê \(\varnothing\) \\
\hline & \(\mathbf{3}\) & wa dpî numo y:enê \(\varnothing\) & wa dnyi numo y:enê \(\varnothing\) \\
\hline
\end{tabular}

36 The continuous root of the verb vyee 'be hitting' is unfortunately sometimes used in the punctual aspect, and so proved an unreliable root for this elicitation.

Table 7.26 (continued)
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{4}{|l|}{y:ene 'looking at'} \\
\hline CONTINUOUS ASPECT & Person & Dual & Plural \\
\hline Today - Immediate Future & Person & & \\
\hline IV prox CI DUAL/PL & 1 & nye numo y:enê mo & nmo numo y:enê té \({ }^{37}\) \\
\hline \multirow[t]{2}{*}{(proximal tense)} & 2 & dpo numo y:enê mo & nmye numo y:enê té \\
\hline & 3 & a numo y:enê mo & a numo y:enê té \\
\hline Present & Person & & \\
\hline IV prox CI DUAL/PL & 1 & a nye numo y:enê mo & a nmî numo y:enê té \\
\hline \multirow[t]{2}{*}{(proximal tense)} & 2 & a dpî numo y:enê mo & a nmye numo y:enê té \\
\hline & 3 & a numo y:enê mo & a numo y:enê té \\
\hline Earlier Today - Immediate Past & Person & & \\
\hline IV prox CI DUAL/PL & 1 & nyi numo y:enê mo & nmî numo y:enê té \\
\hline \multirow[t]{2}{*}{(proximal tense)} & 2 & dpî numo y:enê mo & nmyi numo y:enê té \\
\hline & 3 & numo y:enê mo & numo y:enê té \\
\hline Yesterday - Near Past & Person & & \\
\hline \multirow[t]{3}{*}{(distal tense)} & 1 & ny:oo numo y:enê Ø & nmî numo y:enê Ø \\
\hline & 2 & dpî numo y:enê \(\varnothing\) & nmyi numo y:enê \(\varnothing\) \\
\hline & 3 & dpî numo y:enê \(\emptyset\) & dnyi numo y:enê Ø \\
\hline Day before Yesterday - Remote Past & Person & & \\
\hline \multirow[t]{3}{*}{(distal tense)} & 1 & nyipu numo y:enê Ø & nmee numo y:enê Ø \\
\hline & 2 & dpîmo numo y:enê Ø & nmyee numo y:enê Ø \\
\hline & 3 & dpîmo numo y:enê \(\varnothing\) & dnye numo y:enê \(\varnothing\) \\
\hline Habitual & Person & & \\
\hline (Proximal) & 1 & nye numo y:enê nódó & nmo numo y:enê nyédi \\
\hline IV - D/PL & 2 & dpo numo y:enê nódó & nmye numo y:enê nyédi \\
\hline Habitual & 3 & a numo y:enê nódó & a numo y:enê nyédi \\
\hline (Distal) & Person & & \\
\hline \multirow[t]{3}{*}{IV = zero(TV is dê/té)} & 1 & nyimo numo y:enê Ø & nmîmo numo y:enê Ø \\
\hline & 2 & dpîmo numo y:enê Ø & nmyimo numo y:enê Ø \\
\hline & 3 & dpîmo numo y:enê Ø & dnyimo numo y:enê \(\emptyset\) \\
\hline
\end{tabular}

Table 7.26 shows that the switch of transitive to intransitive clitics occurs just in the continuous aspect (indicative and habitual) - perhaps the motivation is

37 The form té is here marked bold, i.e. intransitive, although not formally distinct from a transitive form (restricted to Monofocal subjects with ÄPL objects in proximal tenses), on the basis that Yélî Dnye paradigms are always symmetrical in this way (cf. Habitual below).
that the continuous aspect has to do with continued and repeated actions, and these are especially likely to be stereotypical actions, which typologically are the actions most likely to incorporate, and thus here to fully intransitivize. In any case, the association between punctual aspect and greater transitivity is in line with Hopper and Thompson’s (1980) generalizations.

Note the systematic effects of intransitivization by contrasting, for example, two paired continuous habitual proximal-tense sentences differing only in reciprocity:
a. a vyee dumo
3HAB.C.PROX hitting PFS3.dO.HAB.C.PROX.Trans
'They-Dual \({ }_{1}\) are habitually hitting them-Dual \({ }_{2}\) '
(i.e. those two guys are habitually hitting those other two guys)
b. a numo vyee nódó
3HABC.PROX RECP hitting HAB.C.PROX.dS.Intrans
'They two are habitually hitting each other'

Note also that intransitive enclitics continue to correctly signal (dual vs. plural) subject number:
a. Yidika Weta a numo vyee nódó
Yidika Weta 3HAB.PROXCI RECP hitting dS.HABPROXC.Intrans
'Yidika and Weta are habitually hitting each other'
b. Yidika, Weta, Monki a numo vyee

Yidika Weta Monki 3HAB.PROXCI RECP hitting nyédi
PluralSubjectHABPROXC.Intrans
'Yidika, Weta and Monki are habitually hitting each other'

As mentioned, ergative case-marking of the subject with reciprocal numo is absolutely out, regardless of whether there is a transitive or intransitive enclitic:
a. Tili Monki ( \({ }^{*} y: o o\) ) ka numo vyee mo
Tili Monki ERG.PL Def3.PROXCI RECP hitting dS.PROXCIIntrans 'Tilly and Monki are hitting each other (today)'
b. Tili Monki ( \({ }^{*} y: o o\) ) k̂̂̀ numo vy:a dê

Tili Monki ERG.PL Def3PIPROX RECP hit MFS.dO.PROXTrans
'Tilly and Monki were hitting hit each other (yesterday)'
```

c. Tili Monki ( ${ }^{*} y: 00$ ) kî numo y:enê mo
Tili Monki ERG.PL Def3distCI RECP hitting 1/2/3dO.DistCITrans
'Tilly and Monki were looking at each other (today)'

```

Observe that in these structures, where the reciprocal is understood as direct object, numo is obligatorily incorporated, that is, placed between proclitic and verb. Only when a reciprocal is in an oblique phrase or is itself possessive can it occur outside this position (see §7.8.2.2). The clauses with incorporated numo thus show differing degrees of intransitivity in accord with aspect, as indicated in the verbal inflection.

Returning to the Punctual aspect, we noted that in the Punctual aspect reciprocal verbs inflect with transitive enclitics. This is of course bizarre, as the clause bears systematic marking as already intransitivized, with an absolutive subject and an incorporated object, which in other circumstances would invariably trigger intransitive inflection (with the one exception of the causativizing construction, q.v. §7.9.2). However, these transitive enclitics are peculiar in two respects. First, reciprocal numo takes \(3^{\text {rd }}\) person agreement in the enclitics - unlike with reflexives which take \(3^{\text {rd }}\) person agreement optionally, here such agreement is obligatory:
a. dnye numo vy:a dê

1d.IMMPI RECP hit MFS.3dO.PROX.PI.Trans
'We2 hit each other (this morning)', OR
Yidika k:ii dnye numo vy:a dê
Yidika COM 1d.IMMPI RECP hit MFS.3dO.PROX.PI.Trans
'We2, (I) withYidika, hit each other (this morning)'
b. nmî numo vy:a té (*nmo)
we3 RECP hit MFS.3plO.PROXPI (*1PLObject)
'We3 hit each other (yesterday)'
c. Weta Yidika yi k:ii nmî numo vy:a

Weta Yidika 3PL COM 1PLNrPastPI RECP hit
té
MFS.3plOPROXPI.Trans
'I with Weta and Yidika, we3 hit each other (yesterday)'

Second, in addition to \(3^{\text {rd }}\) person object marking regardless of actual object person, the transitive enclitics are deviant with respect to subject number: they are always marked for Monofocal subjects, and therefore systematically fail to match the number of the coreferential Subject and Object - objects of reciprocals must be semantically dual or plural, and a third person dual/plural Object nec-
essarily implies a coreferential Polyfocal Subject (3Dual or 3Plural). Once again, as with negation, we see how Yélî Dnye signals non-canonical grammatical constructions by mismatching grammatical markers. This is illustrated in Punctual aspect examples (288)a.-c. below, with Monofocal Subject marking for Polyfocal subjects. The imperative in d. however codes for a \(2^{\text {nd }}\) Dual subject (so would be Polyfocal if that category applied to imperatives), but in accord with the general pattern it still takes \(3^{\text {rd }}\) person object marking for \(2^{\text {nd }}\) person subject reciprocal objects:
a. Yidika Weta ( \({ }^{*} y: 0 o\) ) dî numo vy:a dê
Yidika Weta ERG 3IMMPI RECP hit MFS3dO
'Yidika and Weta hit each other (today)'
(NB. Enclitic correct despite mismatch with Polyfocal subject)
b. Yidika Weta numo vy:a dê
Yidika Weta RECP hit MFS3dO
'Yidika and Weta hit each other (yesterday)'
c. Yidika Weta numo vy:a doo
Yidika Weta RECP hit MFS3dOREM.PI
'Yidika and Weta hit each other (before yesterday)'
d. numo vy:a dóó!
RECP hit P.IMP.2dS.3dO.Trans
'You two hit each other! (Imperative)'
```

Table 7.27 summarizes all the special ways in which reciprocals are coded by shifted values of inflectional marking.

Table 7.27: Yélî Dnye: Shifted marking of reciprocals, with increased intransitivity in continuous aspect.

| Mood | Indicative |  |
| :--- | :--- | :---: |
| Aspect | Punctual | Continuous |
| A-NPs not Ergative | + | + |
| incorporated numo | + | + |
| Intransitive inflection | - | + |
| Transitive inflection as if singular subject and 3 ${ }^{\text {rd }}$ person object | + | - |

Summing up the numo construction, we can say that all versions of the construction share the following marking of Intransitivity: all the structures are intransitive in the sense that if the subject is explicit it must be in Absolutive case and the reciprocal numo must be incorporated between proclitic and verb just like
an intransitivizing nominal incorporation §7.9.4. But the enclitics show varying degrees of inflectional intransitivity according to aspect.

### 7.8.2.2 The noko construction - reciprocals in oblique positions

Numo has, as mentioned, a special Dative/Ablative form noko, so that optionally numo ka becomes noko, hence the metonymic name of this construction. ${ }^{38}$ Reciprocals in oblique positions can occur with both fully transitive and intransitive clauses. Thus transitive clauses occur with Ergative subjects, both implicit and explicit:
a. kópu dê noko dnye dy:ââ dê
message two RECP.DAT 1dIMMPI send MFS3.dO..PROX
'We2 sent two messages to each other (today)'
b. Pikuwa Lêmonkê y:oo Mutros noko dê y:ee Pikuwa Lêmonkê ERG+PL tobacco RECP.DAT 3IMMPI gave ngmê
PFS_3sOPROX(tvPostN)
'Pikuwa and Lêmonkê gave the tobacco to each other'
Note that in example (289)b. a Polyfocal subject receives Polyfocal marking in the enclitic, unlike in the numo construction.

Further, fully intransitive clauses with intransitive verbs can host noko:
a. yoo noko ka kwopwepe té
people each.to CERT3S.PRSCI quarrel PFS..PROX.Intrans
'The people (3+) are quarrelling with each other'
b. yoo numo $k a$ (=noko) $k a$
dnyepéli té.
people RECP DAT CERT3S.PRSCI squabbling PFS..PROX.Intrans
'The people are squabbling with each other'
c. Teacher yoo noko ka mbumu
teacher plural RECP.DAT CERT3S.PRSCI talking
té
PFS..PROX.Intrans
'The teachers are talking to each other'

38 In line with the typological aims of the volume in which it appears, Levinson (2011) unifies the numo and noko constructions, but at a finer granularity they should be treated as distinct, since the latter construction does not have the same marking complexities as the former.

Many oblique positions are introduced by postpositions, and numo (not noko) can occur as the complement of many other postpositions, in both transitive and intransitive clauses. Note that in the following examples the semantic contexts of use are familiar enough from English parallels ('sit next to/kiss/be on top of/be touching each other'):
(291) a. Yidika Mwolâ numo chedê ka tóó mo Yidika Mwolâ each near 3PRSCI sit d.CI.PROX.Intrans 'Yidika and Mwolâ are sitting next to each other'
b. Yidika Mwolâ Pikuwa numo chedê ka pyede Yidika Mwolâ Pikuwa RECP near 3PRSCI sit.pl té plCI.PROX.Intrans 'Yidika, Mwolâ and Pikuwa are sitting next to each other'
c. Cheme mââwê yoo numo chedê ka pyede Village.name bigmen PL RECP near 3PRSCI sit.pl (té) plCI.PROX.Intrans 'The Cheme bigmen sat next to each other (they all sat in a line)'
d. tp:ee yoo numo mbêmê ka pyede
child PL RECP on 3PRSCI sit.pl
'The children sat on top of each other'
e. tp:ee dmââdî numo 'nuwo ka nt:uu mo boy girl RECP nose+LOC 3PRSCI kiss S.pl 'The boy and girl are kissing each other on the nose' (lit. putting their noses together, sign of affection)
f. pileti dyuи numo u pwopwo a wee
plate pile RECP 3sPoss top 3PRSCI stand.pl 'The pile of plates are standing on top of each other' (*noko)
g. Kakan Ghaalyu y:oo nté numo u l:êê dîy:o dê ch:ee Kakan Ghaalyu ERG+PL food each its reason 3IMM cook ngmê
PFS_3sOPROX(tvPostN)
'Kakan and Ghaalyu cooked for each other'
h. kéme kîgha numo p:uu ka pyede mango fruit RECP on/against 3PRSCI sit.pl 'The mangos are touching each other'
i. tiini dyuи numo u kwo kwo a wee tin pile RECP inside stand REDUP 3PRSCI stand.pl 'The pile of tins are stacked inside one another'

Like reflexives, reciprocals can also occur as possessors of NPs. In the first example below, lama 'knowledge' is in unmarked locative case, and numo part of the complex NP expressing the possessor of the knowledge: ${ }^{39}$
(292) a. Teyoo Teluwe numo (u) lama a tóó mo.

Teyoo Teluwe RECP their knowledge 3CIPRS sits dS.Intrans
'Teyoo and Teluwe know each other (lit. they sit in each other's knowledge)'
b. Yélî p:uu pi yintómu numo yi lama

Rossel on person all each their knowledge
a pyede
3CI.PRS sits.pluralS
'On Rossel, everybody knows each other'
c. tp:ee dmââdîm:a y:oo numo kóó ka tpyé
boy girl+plural ERG+PL each 3poss.Hand 3CI.PRS hold t:00
PFS.3plO.PI\&CI.PROX/HAB(tvPostN)
'The children are holding each others' hands'

### 7.8.2.3 Third person 'agreement' with recipient - the case of verbs of 'giving' and noko

Agreement in the enclitic naturally enough ignores the person/number of the oblique reciprocal and encodes the number of the direct object, as shown in examples (293) a. and b. below. But as we have seen, reciprocals take $3^{\text {rd }}$ person Object enclitics regardless of the person of the Object (in the numo construction, but not in the noko construction, the Subject also always takes Monofocal agreement). Agreement is often quirky in languages, so this $3^{\text {rd }}$ person marking might have little significance. But there's evidence that something more fundamental is involved. Consider this interesting feature of the (293)c. example: the verbal root for 'give' is suppletive over $1^{\text {st }} / 2^{\text {nd }}$ person (the root is $k \hat{e}$ ) vs. $3^{\text {rd }}$ person recipients (where the root is $y: e e / y: o o$ depending on whether it is followed by an enclitic), but in example c. the verb with noko takes the $3^{\text {rd }}$ person form $y$ :ee (not kê as illustrated in d.) even though the subject is $1^{\text {st }}$ person and the goal is reciprocal. This shows that $3^{\text {rd }}$ person agreement with numo/noko is not a superficial agreement

[^14](i) yi kópu dyuи lama a wee té these things heap your.knowledge 3sCIprox standing.pl 3Pl.intrans 'You knew about those things', lit. 'Those things were standing in your knowledge'
rule, but a conceptual switch of person, which here affects not only the direct object but the indirect one or the recipient.


### 7.8.2.4 A note on the woni. . .woni construction

There is a totally unrelated construction that can have a systematic reciprocal interpretation. This is based on the pronoun woni: a sequence woni. . .woni has the interpretation 'the one. . .the other':

| (294) $k \hat{\imath}$ pini woni ngê woni da | mgoko |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| That man the.one ERG the.other | 3IMM.CLS | hug |
| 'The one man hugged the other' |  |  |

When however two such woni. . .woni sequences occur, they have a special reciprocal interpretation:

| (295) | $k \hat{\imath}$ | pini | woni | $n g e ̂$ | woni | $d a$ | mgoko, |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | That | man | the.one | ERG | the.other | 3IMM.CLS | hug |
|  | wonî | $n g e ̂$ | woni | myedê | mgoko |  |  |
|  | the.other | ERG | also | 3IMM |  |  |  |
|  | 'The one (i.e. They | $\operatorname{man}_{1} h$ <br> hugge | gged the each oth | ther $_{2}$, a $r$ one $b$ | nd also the one) | other ${ }_{2}$ hug | the one ${ }_{1}$ |

The woni. . .woni construction seems to be used, in preference to the numo or noko constructions, for reciprocal actions which are not simultaneous, but which can rather be thought about as two separate events. The reciprocal use of the construction has some theoretical interest: it is one of the rare cross-serial dependencies that show that natural languages cannot be modelled by context-free phrase-structure grammars (of the GPSG type, see Partee et al. 1990:503ff). For the intensional (as opposed to extensional) dependencies in question are of the following sort, where the second woni ngê (woni+ERG) depends for its interpretation on its contrast to the first woni ngê (the second 'the other' means 'not the prior one in the same syntactic role'), and similarly for the two instances of woni in the unmarked Absolutive case:


### 7.8.2.5 Uses of the reciprocal

The reciprocal has a slightly different range of usage from the parallel English construction. First, there is no overlap with the distributive (as in English each), for the distributive is expressed using different constructions:
(297) a. Steve Yidika Chris k:ii nt:uu ntémwintwémi ka

Steve Yidika Chris banana fruit each 3CI
pîpî ngmê
eating PFS3sO
'Steve, Yidika and Chris are each eating a banana'40
b. Stephen ngê k:aa woo ngmê ngmê ka kaapî Stephen ERG taro seeds one one 3CI planting.taro 'Stephen is planting the taro seeds one by one'

[^15]> c. Stephen ngê dee w:uu miyó miyó ka nt:ene Stephen ERG yam seeds two two 3CI planting 'Stephen is planting two yams in each hole'

Secondly, the reciprocal does not necessarily have a strictly reciprocal interpretation: thus the following example (298)a. describes a single event in which one man gave another a single axe, in the same terms as two paired givings constituting an exchange (as in b.).

| a. pini | n:ii | dê | y:oo tuu noko | dê | y:ee | ngmê, |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| man who | two | ERG axe | RECP.DAT | 3IMM | give.to3 | PFS3sO |  |
| $k e ̂$ | $v y i ̂ l o ~ d e ̂ ~$ |  |  |  |  |  |  |
| that the.one Dual |  |  |  |  |  |  |  | 'The two men who gave each other an axe, those two'

b. pini n:ii dê y:oo tuu dê noko dê
man who two ERG axe Dual RECP.DAT 3IMM
y:ee d:oo, kê vyîlo dê
give.to PFS3sO that the.one Dual
'The two men who gave each other the two axes, those ones'

Although the (298)b. example has the natural interpretation of an exchange of axes, it can be read as one man gave the other two axes!

In fact, single one-way acts of transfer seem often to be related with a reciprocal:
a. Chris John y:oo Mutros noko dê y:ee

Chris John ERG+PL tobacco RECP.DAT 3IMMPI 3.gave.to. 3
ngmê
PFS.3sO
'Chris and John gave the Mutros to each other'
(This could easily describe one cigarette given by Chris to John)
b. Kmiyé p:uu Daa p:uu y:oo toko noko dê

Kmiyé clan Daa clan ERG toko RECP.DAT 3IMM
dmy:aa ngmê
put.money PFS.3sO
'The Kmiyé and Daa clan members gave funerary payments (toko) to each other'
(The cultural prescription is in fact one way)

Other asymmetrical relations expressed with the reciprocal include chasing, following, etc., as in English:
a. Yidika Lêmonkê numo kuwó ka paa mo Yidika Lêmonkê RECP behind 3CI walk dS 'Yidika and Lêmonkê are walking behind one another'
b. mbêpê pyu yoo wunê numo kpêênî té running doers PL 3HABPROX.CLS RECP chase Pl.S 'The runners are chasing each other (round the track)'

Finally, as mentioned above, non-simultaneous acts of reciprocity, where these can be viewed as two distinct events, are preferably coded with the woni. . .woni construction rather than the reciprocal construction, in a pattern that diverges from English.

### 7.8.2.6 Reciprocals as bound anaphors and the hierarchy of syntactic roles

Reciprocals are clearly anaphors, bound by another argument in the same clause - unlike chóóchóó reflexives they do not admit of another interpretation. As we have seen, numo in Patient or Theme role cannot be bound by an Ergative subject (the Ergative subject in A-role is first demoted to an Absolutive in S-role, with numo incorporated in the verbal complex) - rather it is always bound by an overt or implicit Absolutive NP in S-role. But we have also seen that an Ergative NP, or an Absolutive NP, can bind a reciprocal in an oblique position in the noko construction. The fact that A-NPs cannot bind numo in O-position might suggest that in Yélî Dnye Absolutives rank higher than Ergatives, either in structural position or in a thematic-role hierarchy. But no overall hierarchy emerges, because incorporated O-NPs cannot bind any other NP, and anyway can never occur as clausemates with an A-NP. The constraints in fact seem to be as follows:
(301) Antecedents that can bind reciprocals:
(i) $\quad \mathrm{S}$-NP binds Incorporated-O-NP
(ii) A-NP binds Dative NP
(iii) Experiencer-NPs can bind Possessive within NP
(iv) Possessive within an NP can bind Experiencer NP

The status of Experiencer NPs in (iii) and (iv) is curious. Consider:
(302) a. yi yi dê noko a kwo mo their desire Dual RECP.DAT 3CI standing 3dS.Intrans 'They want/need each other', lit. 'Their desires two are standing to each other'

| b. Yidika | Pikuwa | numo | nee | dê | u | yi | dê |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Yidika | Pikuwa | RECP | canoe | Dual | 3sPOSS3 | desire | Dual |
| y:e | $a$ | kwo | mo |  |  |  |  |
| DualEXP | 3CI | stand | 3d.S.Intrans |  |  |  |  |
| 'Yidika and Pikuwa each want the other's canoes' |  |  |  |  |  |  |  |
| lit. 'To Yidika and Pikuwa each other's two canoes its two desires are |  |  |  |  |  |  |  |
| standing' |  |  |  |  |  |  |  |

In the (302)a. example, the dual desires are the surface subject, as reflected in the verb inflection, and the dative-case reciprocal noko would seem to be bound by the possessive yi in the Absolutive NP (surface subject). In the b. sentence, the possessive numo reciprocal seems to be bound by the Experiencer-case-marked resumptive pronoun ( $y: e$ ) (referring to Yidika and Pikuwa). So here the Experiencer subject binds the possessive in the Absolutive NP. This suggests that the binding is determined by degrees of obliqueness or embeddedness:
a. [[Their] desires] are standing [to each other]

b. [[[Each other's] canoes] their] desires] are standing [to them]


Further research in this direction might resolve some of the still outstanding questions about the underlying structures holding between Yélî Dnye arguments, and whether (as is hinted at in this reciprocal arena) Ergatives generally have fewer subject properties than Absolutives.

Note that in these Experiencer cases the inflectional affixes on the verb (in the examples (302) immediately above coding 'dual' desires) are irrelevant to the binding relation. If it was not for these cases, one might argue, as for reflexives, that the binding relation does not hold between the NPs and the reciprocal pronoun, but rather that the reciprocal is bound by the verbal inflections themselves. This would otherwise account for the majority of the binding patterns exhibited.

### 7.8.3 Summary: Reflexives and reciprocals compared

As Table 7.28 makes clear, in Yélî Dnye the canonical reflexive and reciprocal constructions - where the reflexive or reciprocal element is in patient role - contrast
in that the reflexive is expressed in a basically transitive clause, but the reciprocal is a largely intransitive clause with some transitive inflectional properties. The reciprocal clause is multiply marked as deviant: an Absolutive subject may occur with Transitive actor cross-referencing, and it is likely to have deviant person/ number or tense marking.

Table 7.28: Features of the main Reflexive vs. Reciprocal (numo) Constructions.

|  | Reflexive | Reciprocal |
| :--- | :--- | :--- |
| Subject | Ergative case | Absolutive case |
| Object | Reflexive pronoun, <br> unincorporated | Incorporated reciprocal pronoun |
| Verbal enclitics | Transitive only | Transitive or Intransitive (in continuous <br> aspect) |
| Deviant agreement | Optional (Monofocal Subject <br> $3^{\text {rd }}$ sing. Object regardless) | Transitive enclitics are always Monofocal <br> subject, 3 |
| rd person (Dual or Plural) Object |  |  |.

Focussing on the inflectional contrasts, Table 7.29 makes it possible to compare and contrast the verbal complex in the reflexive and reciprocal constructions. The first sentence in bold glosses 'We2 hit ourselves earlier today', while the roman (non-bold) sentence in the same cell means 'We2 hit each other earlier today', and so on, mutatis mutandis.

Table 7.29: Reflexive vs. Reciprocal inflection contrasted - Reflexives in bold, Reciprocals in non-bold (inflected with transitive verb vy:a /vyee 'to hit').

| PUNCTUAL | Person | Dual | Plural |
| :--- | :--- | :--- | :--- |
| Earlier Today | $\mathbf{1}$ | nyi chóóchóó dnye (numo) vy:a <br> dê /nyo* <br> 'We2 hit ourselves today' <br> dnye numo vy:a dê <br> 'We2 hit each other today' | nmî chóóchóó dpî vy:a té/nmo <br> dpî numo vy:a té |
|  | $\mathbf{2}$ | dpî chóóchóo dpî vy:a d:oo <br> dpî numo vy:a dê | nmyi chóóchóo dmye vy:a t:oo <br> dmye numo vy:á té |
|  | 3 | yi chóóchóo dê vy:a d:oo <br> dî numo vy:a dê | yi chóóchóo dê vy:a t:oo <br> dê numo vy:a té |

Table 7.29 (continued)

| PUNCTUAL | Person | Dual | Plural |
| :---: | :---: | :---: | :---: |
|  | Person |  |  |
| Yesterday | 1 | nyi chóóchóó nyi vy:a dê nyi numo vy: a dê | nmî chóóchóó nmî vy:a té nmî numo vy:a té |
|  | 2 | dpî chóóchóo dpî vy:a d:oo dpî numo vy: a dê | nmyi chóóchóo nmyi vy:a t:oo nmyi numo vy: a té |
|  | 3 | yi chóóchóó vy:a d:oo numo vy: $a$ dê | yi chóóchóó vy:a t:oo numo vy:a té |
| Day before <br> Yesterday | Person |  |  |
|  | 1 | nyi chóóchóó nyi vy:a doo nyi numo vy: a doo | nmî chóóchóo nmî vy:a too nmî numo vy: a too |
|  | 2 | dpî chóóchóó vy:a doo dpî numo vy:a doo | nmyi chóóchóó nmyi vy:a too nmyi numo vy: a too |
|  | 3 | yi chóóchóó vy:a doo numo vy: a doo | yi chóóchóó vy: a too numo vy: a too |
| Future | Person |  |  |
|  | 1 | nyi chóóchóó nyi vy:a dê anyi numo vy:a dê | nmî chóóchóó nmî vy:a té a nmî numo vy: a té |
|  | 2 | dpî chóóchóó dpî vy:a dê wa dpî numo vy: a dê | nmyi chóóchóó nmyi vy:a té wa nmyi numo vy:a té |
|  | 3 | yi chóóchóó wa vy:a d:oo wa numo vy: a dê | yi chóóchóó wa vy:a t:oo wa numo vy:a té |
| Habitual | Person |  |  |
|  | 1 | nye chóóchóó dmye vy:a dê dmye numo vy: a dê | nmye chóóchóó dmye vy:a té ?nmî numo vy: a té |
|  | 2 | dpî chóóchóó dpye vy:a dê dpî numo vy:a dê | nmyi chóóchóó dpye vy:a té dmye numo vy:a té |
|  | 3 | yi chóóchóó dpî vy:a dê dpî numo vy:a dê | yi chóóchóó dpî vy:a té dpî numo vy:a té |
| Imp | 1 | nyi chóóchóó vy: a déme numo vy: a déme | nmî chóóchóó vy:a téme numo vy: a téme |
|  | 2 | dpî chóóchóó vy:a dóó numo vy:a dóó! | nmyi chóóchóó vy:a tóó numo vy:a tóó! |
|  | 3 | yi chóóchóó vy:a déne numo vy:a déne | yi chóóchóó vy:a téne numo vy: a téne |

[^16]Table 7.29 (continued)

| PUNCTUAL | Person | Dual | Plural |
| :---: | :---: | :---: | :---: |
| CONTINUOUS |  |  |  |
| Tomorrow | Person |  |  |
|  | 1 | nyi chóóchóó a nyi vyee dê wa nyi numo vyee dê | nmî chóóchóó a nmî vyee té wa nmî numo vyee té |
|  | 2 | dpî chóóchóó a dpî vyee dê wa dpî numo vyee dê | nmyi chóóchóó a nmyi vyee té wa nmyi numo vyee té |
|  | 3 | yi chóóchóó wa vyee dê wa numo vyee dê | yi chóóchóó wa vyee té wa numo vyee té |
| Today Future | Person |  |  |
|  | 1 | nyi chóóchóó nye vyee dê nye numo vyee mo | nmî chooóchóó nmo vyee té nmo numo vyee té |
|  | 2 | dpî chóóchóó dpo vyee dê dpo numo vyee mo | nmyi chóóchóó nmyo vyee té nmye numo vyee té |
|  | 3 | yi chóóchóó a vyee dê a numo vyee mo | yi chóóchóó a vyee té a numo vyee té |
| Present | Person |  |  |
|  | 1 | nyi chóóchóó nye vyee dê nye numo vyee тo | nmî chóóchóó nmo vyee té nmo numo vyee té |
|  | 2 | dpî chóóchóó dpo vyee dê dpo numo vyee mo | nmyi chóóchóó nmye vyee t:oo nmye numo vyee té |
|  | 3 | yi chóóchóó ka vyee dê ka numo vyee mo | yi chóóchóó ka vyee t:oo ka numo vyee té |
| Earlier Today | Person |  |  |
|  | 1 | nyi chóóchóó dnye vyee dê kî nyi numo vyee mo | nmî chóóchóó dpî vyee té kî nmî numo vyee té |
|  | 2 | dpî chóóchóó dpî vyee d:oo kî dpî numo vyee mo | nmyi chóóchóó dmye vyee t:oo kî nmyi numo vyee té |
|  | 3 | yi chóóchóó dê vyee d:oo <br> kî numo vyee mo | yi chóóchóó dê vyee t:oo <br> kî numo vyee té |
| Yesterday | Person |  |  |
|  | 1 | nyi chóóchóó nyi vyee dê kî nyi numo vyee dê | nmî chóóchóó nmî vyee té kî nmî numo vyee té |
|  | 2 | dpî chóóchóó dpî vyee dê kî dpî numo vyee dê | kî nmyi numo vyee té nmyi chóóchóó nmyi vyee t:oo |
|  | 3 | yi chóóchóó vyee d:oo kî numo vyee dê | yi chóóchóó vyee t:oo <br> kî numo vyee té |

Table 7.29 (continued)

| PUNCTUAL | Person | Dual | Plural |
| :---: | :---: | :---: | :---: |
| Day before Yesterday | Person |  |  |
|  |  |  |  |
|  | 1 | nyi chóóchóó nyi vyee doo | nmî chóóchóó nmî vyee too |
|  |  | kî nyi numo vyee doo | kî nmî numo vyee too |
|  | 2 | dpî chóóchóó dpî vyee doo | nmyi chóóchóó nmyi vyee too |
|  |  | kî dpî numo vyee doo | kî nmyi numo vyee too |
|  | 3 | kî numo vyee doo | kî numo vyee too |
|  |  | yi chóóchóó vyee doo | yi chóóchóó vyee too |
| Habitual | Person |  |  |
| (prox) | 1 | nyi chóóchóó nye vyee nódó | nmî chóóchóó nmo vyee nmoo |
|  |  | nye numo vyee nódó | nmo numo vyee nyédi |
|  | 2 | dpî chóóchóó dpo vyee nódó | nmyi chóóchóó nmye vyee nmyo |
|  |  | dpo numo vyee nódó | nmye numo vyee nyédi |
|  | 3 | yi chóóchóó a vyee doo /dumo | yi chóóchóó a vyee too/tumo |
|  |  | a numo vyee nódó | a numo vyee nyédi |
| (Distal) | Person |  |  |
|  | 1 | nye chóóchóó nyipu vyee dê | nmî chóóchóó nmee vyee dé |
|  |  | nyipu/nyópu a numo vyee | nmee a numo vyee |
|  | 2 | dpî chóóchóó dpîmo vyee dê | nmyi chóóchóó nmyee vyee dé |
|  |  | dpîmo a numo vyee | nmyee a numo vyee |
|  | 3 | yi chóóchóó dpîmo vyee dê | yi chóóchóó dnye vyee dé |
|  |  | dpîmo a numo vyee | dnyimo a numo vyee |

### 7.9 Noun-incorporation and valence-changing operations

There are limited valence-changing operations in the language: nominal incorporation, a causative and a resultative construction. There is no true passive, anti-passive, or ditransitive causativizer (making a causative from a transitive verb). There is also no derivational morphology allowing transitive to intransitive conversion of verb roots - hence many verbs come in doublets, transitive and intransitive, so that one has pairs of distinct roots for e.g. grating coconut (chii TV vs. tiye IV), chewing betel (kuwo TV vs. tpapê IV), breaking (pwââ TV vs. pwópu IV), sailing (kédi TV vs. tpyîpî IV), one transitive and one intransitive (see §4.5.1). In addition, alternations from direct to indirect object and the like are also handled lexically, not by rule or derivation - thus for example there are two basic 'throw' verbs, one (d:ii/dimi) which has the object thrown as direct object
and the target as oblique NP (instrumental case), and another (tolo/t:ee/tele) which has the target as direct object and the thing thrown as oblique (instrumental case).

Here I detail the three regular valency-changing processes, namely a resultative construction, a causative construction and noun-incorporation.

### 7.9.1 The resultative construction versus pseudo-passive

How are passive-like sentences with indefinite agents expressed? There are at least three ways to do this: (i) by simply omitting mention of the agent ('Pseu-do-Passive'), (ii) by using an intransitive counterpart verb if there is one (lexical solution), (iii) by using the Resultative construction. These can be hard to distinguish, as will become clear.

One method for expressing passive-like meanings is to just leave off the Ergative NP (this is not a 'mediopassive’ or 'middle' or 'anti-causative’ construction, because there is no obvious change in grammatical relations):

| (304) a. | m:a yópu ngê ngomo kîl pwââ |
| ---: | :--- |
|  | yesterday wind ERG houseABS |
|  | 'The wind blew the house down' |

The verb 'to break' (like the majority of other verbs) has many unpredictable parts, and following the pattern elsewhere in the lexicon it seems best to treat it as in fact consisting of two main verbs, transitive and intransitive, each with its unpredictable or irregular parts (Table 7.30):

Table 7.30: The transitive and intransitive verbs 'to break'.

| 'break something' (Transitive) | 'break' (Intransitive) |
| :--- | :--- |
| Tense/Aspect/Mood Root | Tense/Aspect/Mood Root |
| TV citation form pwââ | IV citation form pwópu |
| Punct. imperative pwaa ngi | Punct. imperative pwédi |
| Punct.prox.past pwââ/puwâ | Punct. prox. past pwópu |

Table 7.30 (continued)

| 'break something' (Transitive) | 'break' (Intransitive) |
| :--- | :--- |
| Punct. rem.past pwââ/puwâ | Punct. rem. past pwaa wo |
| Followed pwaa wo | Followed root pwaa wo |
| Continuous pwaapî | Continuous pwópupwópu |

So one way to achieve a passive type of alternation in this and many other cases where there are suppletive transitive/intransitive counterparts is simply to switch to the intransitive verb. Note that in this case (unlike many others) the transitive/intransitive parts are not only similar but actually overlap as shown in bold (distinguishing the counterparts then depends on either tense or enclitic collocations). Where such an alternation is possible, the intransitive sentence suggests unknown agency, or if the agent is clear, implicates unintentional action, as in the contrast below:
(305) pyââ ngê hammer ngê péliti dê pwââ woman ERG hammer INST plate 3sIMMPI break.TV 'The woman broke the plate with a hammer (intentionally)'
(306) hammer péliti yede dê kéé, peleti dê pwópu hammer plate on 3sIMMPI threw plâte 3sIMMPI break.IV 'She threw the hammer on the plate (accidentally), and the plate broke'

Similarly, if I accidentally drop my glasses I might report it with an intransitive sentence like:

```
(307) kââyikuu dê pwópu
    glasses 3sIMMPI breakIV
    '(my) glasses broke'
```

The third expressive possibility is to use the Resultative alternation or construction. (This is distinct in type from the English resultative as in The man wiped the table clean, since the agent cannot be expressed and a stative adjective describing the result is not required.) The construction has a distinctive post-verbal enclitic ngmê. This transitive enclitic normally encodes Polyfocal Subject (plural subjects excluding $1^{\text {st }}$ person ones) portmanteau with $3^{\text {rd }}$ Sing Object in proximal tenses only, as in:

| (308) | pyââ | $d e$ | y:00 | kpîdî | pee | kити | ka | tpyé |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | woman ngmê | Dual | ERG+PL | cloth | piece | in_hand | 3PROXCI | holding |
|  | PFS3sOP | ROX |  |  |  |  |  |  |

'Two women were holding a piece of cloth'

However, in the Resultative Construction ngmê can occur in circumstances where it is clear that the agent was Monofocal (singular or $1^{\text {st }}$ person), and in distal tenses - it is effectively tenseless, since the action leading to the resulting state can have taken place at any time. Compare for example:

```
(309) a. d:ââ dê pwópu
    pot 3sIMMPI breakIV
    'The pot was broken earlier today or yesterday'
```

b. d:ââ pwaa wo
pot break.FOL sS.REM.Intrans
'The pot was broken the day before yesterday'
c. d:ââ pwaa ngmê
pot break.FOL RES
'The pot is broken' (untensed, action took place any time)

The first two examples are 'pseudo passives'; that is, the agent is simply unexpressed. It is the last which seems to be a true de-transitivizing de-tensed alternation, with focus on the resulting state. The deverbal or adjectival status of the verb is further evidenced by its occurrence with further predicates:
(310) péliti pwaa ngmê ka kwo
plate broken RES Deic+3sCI.PROX stands
'The broken plate is there'

Additional evidence that this forms a distinct construction, despite the homophony of ngmê, is that further inflection is possible. The active sentence in example (311)a. below describes an action, resulting in b., where ngmê is followed by the dual marker. These are the normal nominal markers for dual and plural nouns, showing that the structure is essentially a nominalization, even though it can function as a clause:


Likewise for the following:

| (312) a. daa ch:amê ngmê dê |  |
| ---: | :--- |
|  | not to.separate.things RES Dual |
|  | 'Not separated one from the other' |

b. pweepwee pee kââdî ngmê dé, numo p:uu dê
paper pieces stuck RES PL RECP attached.to Dual
da dmya
3IMMPI.CLS stuck
'The pages are joined/stuck together, they are stuck to each other'
c. nê vy:ene ngmê

1s old RES
'I'm already old'
d. nye vy:ene ngmê dê

We2 old RES Dual
'We2 have become old'
e. nmî vy:ene ngmê dé

We3 old RES PL
'We3 have already become old'/'We3 who have gotten old'

The Resultative Construction is restricted for the most part to transitive verbs of inherently punctual aspect - any transitive verb of this kind collocates with the construction, rather than it being restricted to a semantic subclass (e.g. to verbs of the 'break' - as opposed to the 'cut' type - which cross-linguistically typically undergo such an inchoative alternation). Apart from an exceptional class of intransitives noted below, intransitive verbs allow only the pseudo-passive or omission of the agent NP. The Resultative is formed on the unmarked (proximal tense) punctual aspect root of a transitive verb, or the followed root if there is one for that verb. (The fact that a followed root - i.e. a root that occurs wherever the
postverbal enclitic is non-zero - is required is interesting because it shows that this construction, despite nominalization, still follows rules for verb inflection.)
(313) a. yi mbwii dê pwópu
tree spine 3sIMMPI brokenIV
'The stick is broken'
b. *yi mbwii pwópu ngmê
tree spine brokenIV RES
'The stick is broken RES' (ungrammatical with intransitive verb)
c. yi mbwii pwaa ngmê
tree spine broken.TV RES
'The stick is broken'
d. *yi mbwii pwaap̂̂ ngmê
tree spine breaking.CI RES
'The stick is breaking RES'(ungrammatical with Continuous Aspect root)
(314)
a. yi mbwii dê chópu
'The stick is split'
b. *yi mbwii chópu ngmê
tree spine split.iv RES
'The stick is split RES' (ungrammatical with intransitive verb)
c. yi mbwii chaa ngmê
tree spine splitTV RES
'The stick is split'
d. *yi mbwii châpwo
tree spine cutting.CI
ngmê
RES (ungrammatical with Continuous Aspect root)
e. A: yi mwbii châpwo ngmê tree spine cut.PI RES 'Is it cut up?'
B: daa châpwo ngmê
NEG cut.PI RES
'not yet cut up'

Note that Resultative ngmê collocates only with a Present/Proximal tense root (punctual, transitive), and that although it carries with it an Absolutive argument, it cannot carry an Ergative one, or any other arguments:

```
(315) *Yidika ngê yi mbwii châpwo ngmê
Yidika ERG tree spine breakTV RES
'The stick broken by Yidika’
```

Any exceptional argument structure of roots with respect to the absolutive argument is preserved in this construction, thus, for example, in finite usage tpidi 'paint something' takes the thing painted as object while d:ee 'smear/paint with' takes the paint as object, and similarly in the resultative.
(316) a. Yidika ngê u nee mbyw:oo ngê dê tpidi Yidika ERG his canoe white.shell INST 3IMMPI paint 'Yidika painted his canoe with white stuff'
b. Yidika u nee (mbyw:oo ngê) tpidi ngmê Yidika 3sPOSS canoe white.shell INST painted RES 'Yidika's canoe is already painted white', lit. 'painted with white'
c. Yidika ngê mbyw:oo u nee p:uu dê d:ii Yidika ERG white.shell 3sPOSS canoe on 3IMM.PI smear 'Yidika smeared white paint on his canoe'
d. Yidika $u$ nee p:uu mbyw:oo d:ee ngmê Yidika his canoe on white.shell smear.FOL RES 'Yidika's canoe is already painted white', lit. 'smeared white on'

I have found a class of exceptional intransitive roots (e.g. y:ââ, followed root y:aa, 'disappear') that can collocate with the Resultative ngmê:
a. d:ââ y:aa ngmê
pot disappear.FOL RES
'The pot has disappeared'
b. ndyuw:e dnyââpu ngmê
fire grow.big RES
'Then the fire got bigger'
c. wópu ngmê dé
embark.in.canoe RES 3PL
'They have already left-by-canoe'
d. Raymond Alouitious vy:ene ngmê dê

Raymond Alouitious get.old RES Dual
'Raymond and Alouitious, the two of them are getting old'
e. km:ii pyw:ee ngmê
coconut fall.over.FOL RES
'The coconut is fallen over'
f. chikini dê mdo ngmê dê
pawpaw Dual get.ripe RES Dual
'The two pawpaws have become ripe’
g. cement ndê ngmê
cement get.hard RES
'The cement is already set/got hard'
h. nee daa ngêpa ngmê
canoe outrigger get.separated RES
'The canoe and the outrigger are already separated'
(cf. transitive: nee daa ch:amê ngmê - with a transitive verb)
i. tpii nt:êma ngmê
rain get.bigger RES
'The rain has already got bigger/worse'
j. lââ pyipó ngmê
boil heal.self RES
'The boil has already healed'
k. naa pyódu ngmê
feast become RES
'The feast has already happened'

1. pyââ tpamê ngmê
woman delivered.of.baby RES
'The woman has already given birth'
m . yélînkéli vy:êê ngmê
Yélînkéli become.old RES
'The boat the Yélînkéli is already scuppered'
n. yaa ngmê ngê ka tóó
sit.down RES ADV 3sPRSCI sitting
'They have already sat down'

This class of verbs would seem to have an inchoative semantics, although not all inchoatives seem to belong (*wââ ngmê 'it got light’, *pwene ngmê ‘already died’). It excludes general intransitive verbs of going, calling, falling, and so forth. The existence of such a class of intransitives taking the construction shows that the resultative cannot be considered a passive.

Interestingly, it is possible to indirectly transform an intransitive into a resultative, using the causative construction described in the next section, to feed the resultative. To use the passive/resultative with an intransitive, one must first transitivize with the causative. We can illustrate this with a pair of 'open’ verbs (Table 7.31):

Table 7.31: Transitive and intransitive verbs 'to open'.

|  | 'to open (transitive)' | 'be open (intransitive)' |
| :--- | :--- | :--- |
| proximate tenses, punctual | kpêmî | kwe'ne |
| remote past, punctual | kpêmî | kwe'ne |
| continuous | kpêmîkpêmî | kwe'nekwe'ne |



The meaning differences between examples (318)a., d. and e. are subtle, as suggested in the glosses - c. suggests intentionality, and d. a general state, emphasized in e. (see §8.7.2 for more on this last construction).

Not all intransitives allow this causative+resultative construction - they must in collocation with kwolo be construable as plausible causatives. Thus a verb like $d p \hat{\imath}$ 'sleep' resists such a reading, unless the subject is an infant being put to sleep:
(319) p:ee dpî kalê ngmê
'The child is already (made) asleep'

### 7.9.2 Causative constructions

There are at least three kinds of causative: lexical, periphrastic and a causativizing construction. In turn:

## 1. Lexicalized causative doublets:

Apart from many transitive/intransitive counterparts in the lexicon, there are traces of what was probably once a systematic causativizing alternation, expressed by nasalization of the intransitive root's first syllable. This is no longer productive, and is confined to a few verbs, such as the following pairs on the left, compared to the more general unpredictable pattern to the right:

## (320) Nasalized pairs

$p w i i$ 'exit, go out' $\rightarrow p w$ :ii 'get something out' ghay 'fall' $\rightarrow$ gh:ay 'make fall down' mbumu 'cry' $\rightarrow$ mb:uu 'make him cry' nyââa 'wake up' $\rightarrow$ ny:ââ 'wake him up'

## Normal unpredictable pattern

 kee 'enter' $\rightarrow$ knî 'make enter’tóó 'sit' $\rightarrow$ yé 'make sit, put' $t: a$ 'hang' $\rightarrow t$ :oo 'cause to hang' $k w o$ 'stand' $\rightarrow$ kââ 'make stand'

There are many further systematic doublets in the lexicon, but these are either formally unrelated, or they are related in non-rule-governed ways, e.g. ghêpê 'go down', ghîpî 'make go down'.

One interesting example, already mentioned under $\S 7.4$, concerns the relationship between stative positionals, their active counterparts and caused positionals (Table 7.32):

Table 7.32: Positionals with active and causative counterparts.

| stative | active | causative |
| :--- | :--- | :--- |
| kwo 'be standing' | ghê 'stand up' | kââ 'make stand' |
| tóó 'be sitting' | ya 'sit down' | yé 'make sit' |
| $t: a$ 'be hanging' | (chóó) kaalî 'hang (self) down' | t:oo 'cause to hang' |

Where there are intimately related counterparts like these, they seem to block the causativizing construction described below. Thus:

$$
\begin{array}{llll}
\text { a. } & \text { *kwo } & \text { dê } & \text { kwolo }  \tag{321}\\
& \text { standing } & \text { 3IMMPI } & \text { cause.to.be } \\
\text { b. } & \star \text { ghêêmı̂ } & \text { dêe } & \text { kwolo } \\
& \text { standing.up } & \text { 3IMMPI } & \text { cause.to.be }
\end{array}
$$

$\begin{array}{lll}\text { c. ghêêmî } & \text { dê } & k \hat{a} \hat{a} \\ \text { standing.up } & \text { 3IMMPI } & \text { make.stand }\end{array}$
'He stood it up standing'

## 2. Periphrastic causative construction:

This periphrastic construction uses a specific verb l:âmo, glossing 'arrange it, fix it', so that the whole construction glosses 'X fixed Y, so Y did Z', meaning the Agent caused Patient to do something, or alternatively ' X fixed Y , so that X did Z '. Thus the construction allows both 'subject control' and 'object control’:

(323) God ngê Adam Ø l:âmo ngê ghê

God ERG Adam 3REM fix-up 3sO_MFS(tvPostN) life/breath
$u$ mênê yó
his inside putREM
'God made Adam ${ }_{\mathrm{i}}$ so that He (God) put breath in him $_{\mathrm{i}}$ ' $=\mathrm{X}$ fixed Y so X made Y alive
3. Causativing main verb construction:

This construction takes an intransitive gerund (formed from the continuous root of the verb; §4.5.2; §8.7.1.4) as an incorporated object of kwolo 'cause to be’:
(324) Causative verb kwolo 'to cause something':
class: Transitive, irregular strong punctual root:
imperative: kwéli/kalangi
proximate stem: kwolo
remote past stem: kwólu
followed stem: kalê too
continuous aspect root: kîgha
Unlike normal incorporation, but like the punctual reciprocal construction, the verb remains inflectionally transitive:


This construction can be combined with the periphrastic one:
(326) Christ ngê pi $\emptyset$ l:âmo ngê, mê paa

Christ ERG person 3REM fix.it 3sOMFS REP walking
kwólu Ø
caused(REM) MF3sO
'Christ made the man walk again'

Points to note about this construction:
(a) The incorporated (caused) nominalized verb must be intransitive, so the structure does not introduce a third argument. It only makes a transitive from an intransitive, not a ditransitive from a transitive.
a. m:aa ngê Monkî Ø ngomo p:uu Ø dpodo

Father ERG Monki ABS house on 3sREM working(IV)
kwólu
caused(REM)
'Dad got Monki working on the house'
b. m:aa ngê Monkî Ø ngomo p:uu ka dpodo

Father ERG Monki ABS house on 3CPROX working(IV) kîgha
causing
'Dad has got Monki working on the house'
(328) *Father ngê Monkî Ø ngomo p:uu Ø wuwó

Father ERG Monki ABS house on 3sREM roofing(TV)
kwólu
caused(REM)
‘*Dad got Monki to roof (transitive verb) his house’
(b) The causee (Monki in the examples above) appears as a normal Absolutive NP. Its position in the sentences above, outside the verbal complex, suggests that it
is here the object for kwólu, and not (or not primarily) the subject of the incorporated intransitive verb. The resulting clause can be either punctual or continuous.

Although the valence increase is only from one argument to two, the construction is quite useful as a way of introducing an unexpected object, as illustrated in the following sentences.
(329) a. Ghaalyu ka kwódu

Name 3CIPROX vomit
'Ghaalyu is vomiting'
b. Ghaalyu ngê wêê ka kwada kîgha

Name ERG blood 3CIPROX vomiting cause.C
'Ghaalyu is vomiting blood'
c. Nkélipi ka knê

Name 3CIPROX shits(PROX)
'Nkélipi is shitting'
d. Nkélipi ngê wêê ka knênî kîgha

Name ERG blood 3CIPROX shitting cause.C 'Nkélipi is shitting blood'

Another frequent use of this construction, like the mb:ane construction mentioned below, is as a means of introducing English loans as inflectable verbs.
a. k:omo ngê kî mênê trick kîgha ngê
trick ADV CERT 1sMOT.REMCI trick cause.C MFS3sO 'I was always tricking him'
b. kê dmi exchange kalê ngópu
shell.money CLF exchange causeREMPI PFS3sO
'They mixed up the kê bead string'

### 7.9.3 Other complex predicates based on incorporation or otherwise

As we have just seen, the causative construction with kwolo is based on incorporation of a gerund in the predicate. A number of other important constructions use the same mechanism - that is, the use of a special verb acting as an auxiliary to form a compound predicate, allowing systematic alternations of valency, aspect or other dimensions. The following table (7.33) contrasts the functions of these constructions.

Table 7.33: Auxiliary verbs with valence changing, aspect changing or causativing effects.

| Auxiliary <br> Verb | Input or Main Action verb | Output <br> clause | Function | Meaning |
| :--- | :--- | :--- | :--- | :--- |
| kwolo | IV C gerund, incorporated | P or C TV | makes a TV | Causative |
| mbanê | IV C gerund, incorporated | P IV verb | makes a P IV | Inceptive <br> Punctualizer |
| pwââ | IV C gerund, not incorporated | P or C TV | makes a P or C TV | Inceptive |
| (kn:ââ) chaaa | TV or IV gerund, not incorporated | P or C TV | makes a P or C TV | Inceptive |
| (ngê) pyódu ${ }_{T V}$ | IV Gerund, TV Resultative or other | P/C TV | makes a TV | Causative |
| (ngê) pyódu | TV Gerund, Resultative or other NP | IV | makes an <br> inchoative IV | Inchoative |

*IV = intransitive verb, $\mathrm{TV}=$ transitive verb, $\mathrm{C}=$ Continuous, $\mathrm{P}=$ Punctual

One of the most important of these constructions is based on the verb mb:anê, which has limited main verb uses, e.g. as in example (331):
(331) Yidika u mo dê mb:anê

Name 3sPOSS alone 3sPI.IMM cause.be
'Yidika was abandoned to it' (lit. perhaps 'Yidika had to do it alone')

It is a punctual-only verb with proximal root mb:anê, followed root mbê, and Remote Past mbê wo.

Its principal use is as a compound-predicate forming verb which converts continuous aspect intransitive predicates to punctual ones, at the same time introducing an inceptive ('begin to') meaning. Although this may seem quite a specialized use, it should be remembered that the aspectual distinction between punctual and continuous is one of the most important dichotomies in the grammar, determining root form and distinct sets of inflectional proclitics and enclitics (§2.4.2; §6.1.2). In addition, there is a small, but important set of intransitive roots that lack a punctual suppletive form (recollect that most verbs come with distinct stems for both aspects), in particular dpodo 'working', pwiyé 'coming/going', mbê 'crying', ng: aa 'listening' as noted in Henderson (1995:17). The construction once again involves the incorporation of the content verb as a continuous gerund preceding the auxiliary mb:anê, the two verbs together being flanked by proclitics and enclitics. Consider the following examples:

```
(332)
a. engine a dpodo?
engine 3PRSCI working
'Does the engine work?'
b. engine dê dpodo mb:anê?
engine 3IMMPI working cause.be 'Is the engine fixed/now in working order?'
c. engine dê ghêdê
engine 3 NrPastCI shaking
'The engine was shaking'
d. engine dê ghêdê mb:anê engine 3IMMPI shaking cause.be 'The engine shook/shuddered'
e. Yidika ngê engine udênê dê ghodo Yidika ERG engine start.to 3sIMMPI shake 'He started the engine'
```

The sentence in example (332)a. is the normal continuous aspect of this contin-uous-only verb, while the b. sentence punctualizes the interpretation - did the engine suddenly start working again? The same contrast with another verb is illustrated in c. and d., while e. gives the corresponding transitive sentence using the matching transitive root (many verbs come in transitive and intransitive doublets).

The combination of continuous gerund and punctual meaning tends naturally to have an inceptive meaning, although this seems largely restricted to major changes of state, as illustrated in example (333) below.
a. myenté u gha myaa mbê mb:anê
also 3POSS core REP.CLS.3d/pl cry START
'Then his heart also began to cry'
b. Pwiliyópu dê kmaap̂̂ mb:anê?

Pwiliyópu 3IMM.PI eating cause.be 'Has Pwiliyópu started to eat (after his illness)?'
c. ala tpémi dê paa mb:anê?
this boy 3IMM.PI walking cause.be
'Has the infant begun to walk?'
d. tpómu dê danêmbum mb:anê?
baby 3IMM.PI talking cause.be
'Has the baby started to talk?’
e. mw:aandiye Mbweemono Ghaalyu ka dê ng:aa morning Mbweemono Ghaalyu DAT 3IMM.PI listening mb:anê cause.be
'In the morning Mbweemono listened to Ghaalyu (and did what he said)'

It also tends to get an impersonal interpretation, with the inception of the state of VERBing being agentless, as in example (334)a. below (the b. sentence, with the transitive verb counterpart is ungrammatical). Sentence e. with the causative auxiliary contrasts with d , as it emphasizes agency.


This construction is also used to introduce English loans (as already shown above in the d. example):

```
(335) a. wa nyi m:uu wa nyi believe mb:anê
    3FUT 2s see 3FUT 2s believe cause.be
    'You'll see it and you'll believe it'
b. w:uu paadi d\hat{\imath lose mb:anê cha w:ee}
    beads four 3IMMPI lose cause.be 2sIMP.CLS understand
    'They lost four (kê) beads, you understand?'
c. yoo de\hat{ mix mb:anê = yoo dê}
    people 3sIMMPI mix cause.be people 3sIMMPI
    mbimbala mb:anê
    scattered cause.be
    'The people are going around everywhere'
d. yimi tired mbê dniye
    properly tired cause.be PI.HAB.pl
    'They must be tired out!'
```

Another construction with inceptive meaning uses the verb pwââ 'to break' (followed root pwaa, Remote Past puwâ, Continuous root pwaapî.). Although the main action verb is usually intransitive, in this case the resulting construction is transitive because the main action verb is not incorporated inside the verb complex. The resulting construction is normally punctual, but continuous main verbs are possible, as illustrated in example (336)b. below.
a. tpómu ngê mbê $a \quad p w a ̂ a ̂ a$ baby ERG crying 3NrPST.CLS break 'The baby started to cry (yesterday or before)'
b. tpómu ngê mbê kiyedê pwaapî
baby ERG crying 3PRS.CI.CLS breaking
'The baby is about to start crying (in the state of beginning)'

The construction has limited uses as a regular inceptive, since with specific predicates it acquires special meanings as shown below.
a. dpodo pwaa ngi!
working break 2sIMP
'You set the date for the work!'
b. Mgaa ngê km:ii chaapî da pwââ

Mgaa ERG coconut breaking 3IMMCLSPI break
'Mgaa has started making copra (he has started the process by asking a group of people to help)'
c. Mboo ngê kmaapî a pwââ

Mboo ERG dining 3IMMCLSPI break
'He set the date for a feast'

Another, more regular inceptive is based on the verb chaa 'split' in collocation with kn:ââ 'source, base'. It forms transitive verbs from intransitive or transitive gerunds followed by kn:ââ. The construction has the form Gerund + kn:ââ ('base, source') + chaa ('split'). Chaa is a transitive verb and the gerund+kn:ââ fills the object slot, while chaa carries the tense/aspect of the beginning of the event:

| (338) Pulê | ngê | ka'ne pê vyómuvyómu | kn:ââ kêda |
| :--- | :--- | :--- | :--- | :--- |
| Pulê | ERG steps fixing source | CERT.3IMMPI.CLS |  |
| chaa ngmênê neli daa tóó |  |  |  |
| split but nails NEG sitting |  |  |  |
| 'Pulê started to fix the steps (today) but there were no nails' |  |  |  |

(339) a. Yidika ngê kpîmbó dpodo kn:ââ dp̂̂ chaa Yidika ERG dawn working source 3HABPI split 'Yidika always begins to work at dawn'
b. kmaapî kn:ââ dê chaa eating source 3IMMPI split 'He started eating'
c. n:uu ngê u vy:ee kn:ââ dê chaa who ERG 3POSS hitting source 3IMMPI split 'Who started hitting him?'
d. n:uu ngê km:ii chap̂̂ kn:ââ dê chaa who ERG coconut splitting source 3IMMPI split 'Who has started making copra?'
e. ngêpê kn:ââ a dê chaa ngmê praying source CLOSE 3IMMPI split PFS3sOPROX 'They began to pray’

Finally, there is the inchoative intransitive verb pyódu 'become' and its causative transitive counterpart of the same citation form, but with different suppletive forms as shown in Table 7.34:

Table 7.34: Inchoative and causative inchoative verbs with citation form pyódu 'become'.

|  | Intransitive 'become' | Transitive 'cause to become' |
| :--- | :--- | :--- |
| Imperative | (none) | pyódu |
| Proximal past | pyódu | pyódu |
| Remote Past | pyodo | pyódu |
| Followed root | pyaa | (none) |
| Continuous root | pyodopyodo | pyépi |

The intransitive verb produces an intransitive construction, placing an adjective or nominal in an adverbial phrase followed by adverbializer ngê. This allows a transitive verb to be first nominalized with the resultative construction (§7.9.1), then inserted as an adverbial, as in:

| (340) a. d:âa pwaa ngmê ngê pyodo |  |
| ---: | :--- |
|  | pot break.FOL RES ADV become |
|  | 'The pot was broken (long ago)' |

The transitive version allows the same insertion of a resultative transitive phrase. Here the function is less clear, and there is a subtle contrast with the non-causativized version which precedes each example.
a. Yidika ngê yi pââ dê chaa

Yidika ERG tree body 3IMMPI split
'Yidika split the log'
b. Yidika ngê yi pââ chaa ngmê ngê dê pyódu Yidika ERG tree body split RES ADV 3IMMPI cause.become 'Yidika made the log split into (further) pieces'
c. Yidika ngê d:ââ dê pwââ

Yidika ERG pot 3IMMPI broke
'Yidika broke the pot'
d. (Yidika ngê) d:ââ pwaa ngmê ngê dê pyódu Yidika ERG pot break.FOL RES ADV 3IMMPI cause.become 'Yidika made it broken (today)'/‘it got broken'

In example (341)d., if the agent is omitted, a lack of intentionality is conveyed - for example, Yidika may have bumped into a table and the pot may then have fallen.

The above examples all have a punctual reading. But continuous forms are possible - compare:
a. ntii ngê chaa Ø dyênê ngê
sea ERG reef 3REM.PI ruin MFSubj3sObjREM
'The sea ruined the reef (before yesterday)'
b. ntii ngê chaa dyênê ngmê ngê pyódu
sea ERG reef spoil RES ADV cause.become
$n g e ̂$
MFSubj3sObjREM
'The sea caused the reef to become really spoiled (before yesterday)'
c. ntii ngê chaa dyênê ngmê ngê doo pyépi sea ERG reef spoil RES ADV 3sREMCI cause.become.CI 'The sea was (continuously) spoiling the reef (before yesterday)'
d. ntii ngê chaa dyênê ngmê ngê adî pyépi sea ERG reef spoil RES ADV FUT3sCI cause.become.CI 'The sea will always be spoiling the reef'

Cessation can be expressed with the construction (Possessive) + Gerund + yé 'put down', which is a transitive verb with the gerund in object slot. For example:
a. Pulê ngê ka'ne pê vyomuvyómu dê yé, neli

Pulê ERG steps fixing 3IMMPI put.down nails
daa tóó
NEG sitting
'Pulê stopped fixing the steps (today) - there are no nails'
b. Weta ngê (u) kmaapî kêdê yé

Weta ERG (3sPOSS) eating.intransitive CERT3IMM put.down 'Weta has stopped (his) eating'
c. Weta ngê yi ntini u pîpî dê Weta ERG Anaphoric food 3sPOSS eating.TV 3IMMPI yé
put.down
'Weta has stopped his eating that food'

Note here that the possessed gerund is optional when the gerund is intransitive, but seems to be obligatory (or at least preferred) when the gerund is transitive, as illustrated.

### 7.9.4 Noun incorporation

Incorporation can be identified simply by the position of nominal elements in the slot between inflectional proclitics and verb - only incorporated elements may appear here. By this criterion, a number of nominal elements other than nouns can get incorporated, including PPs, and they may be incorporated by intransitive as well as transitive verbs. There is thus a cluster of incorporation types, already mentioned under §4.5.4.6:
(i) optional incorporation of PPs with intransitive verbs which obligatorily subcategorize for Dative PPs, with no change of transitivity status.
(ii) obligatory incorporation of Dative PPs with a handful of specified intransitive verbs, with no change of transitivity status.
(iii) intransitive verbs that incorporate their 'objects', i.e. the affected theme implicit in their semantics is optionally made explicit with no change of transitivity status.
(iv) true incorporation of objects by transitive verbs, with a consequent change of transitivity status, so that the verbal enclitics inflect as for an intransitive verb.

Briefly, here are some examples of the first three phenomena. The optional incorporation of obligatorily subcategorized PPs can be illustrated with the verb vyuwo 'look for' which takes a Dative/Ablative object of the search, here incorporated after proclitic wumê (Henderson 1995:27):
(344) wumê nêêdî ka vyuwo

3a/d/pl/HABPROXC.MOT possum Source/Goal look for
'He goes looking for possum'

Obligatory incorporation of a PP can be illustrated with the verb chaa 'to cook in a ground oven' which takes the theme (the food to be cooked) as a Dative/Ablative PP incorporated between proclitic and verb:
(345) ka nté ka chaa té

CERT.3PRS food Source/Goal ground-bake plS.CI.Intrans
'They are food-baking (in ground oven)'

The third type mentioned above is the incorporation of an 'object', the theme implied by the semantics of the verb but here made explicit as an NP between proclitic and verb - again with no change of the intransitive status of the clause (see also §8.7.1.3 for further examples):

## (346) nmî mbwo tpapê té

1plIMMPI native.betel chew Pl.S.CI.Intrans
'We3 were chewing betel earlier this morning'

Such a structure allows one to specify the specific type of the 'object', e.g. here native Rossel betel as opposed to t:aa 'imported betel species'. However, since there is (as so often) a counterpart transitive verb, as illustrated in example (347) below, the motivation for this structure is opaque:
(347) Yidika ngê mbwo ngma a kuwo Ø?

Yidika ERG native.betel INDF 3PRS.CI chew MFS.3sO.CI.PROX 'Is Yidika chewing any betel?'

I am not sure how lexically specific this incorporation of an implied 'object' by an intransitive verb is. Here however in (348) is another example:

| (348) $m u \quad n y: u u ~$ | kéni | téme | mo |
| :--- | :--- | :--- | :--- |
| there $1 d N r P S T C I-M o t i o n ~ b e c h e-d e-m e r . s p e c i e s ~ d i v e ~$ | dS.PROX.IV |  |  |
| 'We went diving for beche de mer there (earlier today)' |  |  |  |

This brings us to the subject of true object incorporation by lexically transitive verbs, with a consequent change of transitivity status. The valence-changing operation can be schematized thus as an old-fashioned transformation (the diagonal arrow shows the shift of Object position):
(349) 'Transformational' Pattern for Object-Incorporation:
$\rightarrow \quad$ NP+ERG Object-ABS [Proclitic V-Trans Enclitic(Trans)]

Here is a basic example:


Note the correlated changes:
i. The agent NP loses its ergative postposition falling into the unmarked absolutive case (illustrated in the following pair of examples);
ii. The object has moved inside the inflectional proclitic next to the verb, and
iii. The enclitic immediately after the verb which monitors transitivity switches to intransitive to signal the change in valency.
iv. The associated meaning change is in the expected direction: tpile ghêêghêê is a complex verb 'plate-washing, i.e. doing the dishes', naming a stereotypical activity (cf. Henderson 1995:27). In a similar way, the object often loses its definite/specific reading, as illustrated by the following pair of sentences (object in bold):
(352) Osborne mbwémi y:oo pyaa dpumo yâmuyâmu Ø

Osborne brothers ERG croc \d.HABC. hunt.C HABC. 30
'The Osborne brothers used to look for a particular crocodile'
$\rightarrow$
(353) Osborne mbwémi Ø dpumo pyaa yâmuyâmu Ø

Osborne brothers ABS 3d.HABCont croc hunt.C HABC. 30
'The Osborne brothers used to go crocodile hunting'

Similarly, compare the first of the sentences below (repeated from example (347) above) to the second:
(354) a. Yidika ngê mbwo ngma a kuwo Yidika ERG native.betel INDF. 3PRSCI chew Ø MFS.3sO.CI.PROX.Trans
'Is Yidika chewing any betel?'

| b. Yidika | $\varnothing$ | a | mbwo | kuwo | $\varnothing$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Yidika | ABS | 3PRSCI | native.betel | chew | sS.Intrans |
| 'Is Yidika betel-chewing?' |  |  |  |  |  |

However, these expected semantic corollaries are not always present. It is possible to incorporate objects which are definite, possessed and of arbitrary complexity, as we will now illustrate. First note that complex objects can be incorporated - compare the simple NP in example (355)a. below with the almost arbitrarily complex NP in b.:

# a. doo kpémi yâmuyâmu <br> 3sREMCI(PreN) shark hunting.C <br> 'He was hunting shark (before yesterday)' 

b. doo kpémi vy:êmî gh:aa pâ̂̂ ndî̀ vyokovyoko 3sREMCI(PreN) shark fin hair body big drying.C 'He was (collecting and) drying fins of large sharks (before yesterday)'

Definite NPs as in example (356)b. below, just like the indefinite in a., are also fine inside the verbal nucleus:

| a. wumê | yi kp:êênı̂ mo |
| :--- | :--- | ---: | :--- |
| CERT3d.ImmFUT tree cutting dPROXCI.Intrans |  |
| 'They2 are chopping (indefinite) trees (future today)' |  |

b. wumê k̂̀ yini kp:êên̂̂ mo

CERT3d.ImmFUT DEIC tree.SPEC cutting dPROXCI.Intrans 'They2 are chopping (definite) this tree (future today)'

It is possible to get the identical NP with deictic determiners both outside the verb complex and inside, as incorporated NPs:

| a. | kî | tpyé | nye |
| :--- | :--- | :--- | :--- | châpwo

b. nye kî tpyé châpwo mo

1dImmFUTCI Dem.Unm grass cut.CI 1dFUT.Intrans
'We will this-grass-cut today’

One expects constraints, however, of the sort that complex NPs can't contain quantifiers, deictics, proper names or possessives. Some of these expectations are correct:

| (358) | n:aa |  | ghêêghêê |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1sImmFUTCI thing washing |  |  |  |
|  | 'I am going to plate-wash ( to wash the plates)' |  |  |  |
| (359) | ngmile | kuи | n:aa | ghêêghêê |
|  | N+tpile | kuи | n:aa | ghêêghêê |
|  | Your thin | dish | 1sImm | washing |
|  | 'Your pla | I am | ng to w |  |

## but not:

$$
\begin{array}{lll}
\text { (360) } & { }^{*} \text { n:aa } & \text { ngmile ghêêghêê } \\
& \text { 1sImmFUTCI } & \text { your.thing washing } \\
& \text { 'I am going your-plate-washing' }
\end{array}
$$

But many of the expectations are confounded. Quantifiers can occur inside the verbal nucleus, but not numerals above one (cf. example (361)c. vs. d.):

| a. wumê | yi pâândîl ngmê | kp:êênı̂ mo |
| :--- | :--- | :--- | :--- | :--- |
| CERT3d.ImmFUT tree big one cutting | d.PROXCI.Intrans |  |
| 'They are cutting down one big tree' |  |  |

b. wumê yi yintómu kp:êênî mo

CERT3d.ImmFUT tree all cutting d.PROXCI.Intrans
'They2 are cutting down all kinds/every tree'
c. yi miyó wumê kp:êênî ngmê
tree two CERT3d.ImmFUT cutting PFS3sOPROX.Trans 'They2 are cutting down two trees' (miyó resists incorporation)
d. *wumê yi miyó kp:êên̂̂ mo CERT3d.ImmFUT tree two cutting d.PROXCI.Intrans *‘They2 are two-tree-cutting’ (ungrammatical)

And contrary to the unacceptability of 'your-plate-washing' illustrated in example (360) above, it is possible to get possessives inside incorporated NPs - compare the following, both possible descriptions for the traditional activity of pulling a canoe-log out of the bush. In this case the possessive is first person, and high on the animacy/definiteness hierarchy. Note that the transitivity change is marked in the enclitic:

| a. | $\boldsymbol{a}$ nee nyinê | paapaa $\emptyset$ |
| :--- | :--- | :--- | :--- |
| my canoe | 1d.CLS.ImmFUTCI | pulling MFS.3sO.PROX.Trans |

Overall, then, Yélî Dnye incorporation does not fit the typological expectations: it allows NPs of arbitrary complexity to be incorporated, and in the right circumstances they may be definite, possessed, or marked with demonstratives. Perhaps the constraint is overall semantic: the activity must be seen to be an expected, culturally stereotypical activity - washing your plates is just not how plates are washed, but as a collective enterprise in the river; pulling my canoe on the other hand is an activity I can expect general help with. The role of stereotypical activity in encouraging incorporation is made clear by the following examples. The verb $n t$ :ene is used for planting roots (yams, potatoes) that are not set vertically, the verb kaapî 'setting upright' for those (taro, banana, pineapple, etc.) that must be set vertically. Using the verb kaapî with say potatoes is perfectly construable it means putting them vertically in some container, but unlike the setereotypical planting construals, such a usage resists incorporation. Thus example (363)b. below is the incorporated version of a., and d. of c., but e. has no incorporated counterpart (f. is ungrammatical).
(363) a. kini dee nyimo nt:ene té
yam.sp yam.sp 1dImmFUTCI plant.horizontally MFS3plO.Trans 'We2 are going to plant some yams'
b. nyimo kini dee nt:ene mo

1dImmFUTCI yam.sp yam sp plant.horizontally dSFUT.Intrans 'We2 are going to plant some yams (incorporated)'
c. pwelap woo nyimo kaapî té
pineapple seed 1dImmFUTCI set.upright MFS3plO.Trans
'We2 are going to stand up the pineapple seeds, i.e plant them'
d. nyimo pwelap woo kaap̂̂ mo

1dImmFUTCI pineapple seed set.upright dSFUT.Intrans 'We2 are going to stand up the pineapple seeds, i.e plant them'
e. kini dee nyimo kaapî té
yam.sp yam.sp 1dImmFUTCI set.upright MFS3plO.Trans
'We2 are going to stand up the yams (e.g. in baskets, not plant them)'
f. *nyimo kini dee kaapî mo

In formal respects, too, Yélî Dnye incorporation has quirky features, including the incorporation of pseudo-objects by intransitives.

### 7.9.5 tee: A semi-productive intransitivizing suffix

Some transitive verbs allow intransitivization using the suffix or postverbal clitic tee, which makes an intransitive continuous root (as in example (364)a., or more naturally c.) from a transitive punctual root (as in b.):
(364) a. God mb:aamb:a ngê doo vyómu tee God good ADV 3sREMCI fix TEE 'God was making things properly'
b. God ngê mb:aamb:a ngê vyómu too God ERG good ADV fix MFS3plOPI ‘God made everything properly’
c. God u lama vyómu tee mb:aamb:a ngê a God his knowledge fix TEE good ADV 3PRSCI tóó
sitting
'God knows how to make things properly’

Similarly, (365)a. below is an intransitivized version of b., and c. shows how tee is not an inflectional clitic despite often replacing one, but a derivational suffix or verb compound component, since it can take further (intransitive) post-verbal clitics, and does not by itself turn a continuous gerund or nominalization into a finite verb (d.):
a. Weta dye ghi yintómu school k:oo doo t:âmo tee

Weta time part all school inside 3sREMCI steal TEE 'Weta was stealing /used to steal everyday from the school'
b. Weta ngê dye ghi yintómu school k:oo

Weta ERG time part all school inside pencil a t:âmo t:âmo too
pencil 3HAB stealing MFS3sOHAB
'Weta was stealing pencils everyday from school'
c. Weta Yidika dye ghi yintómu school k:oo a

Weta Yidika time part all school inside 3HAB
t:âmo tee mo
steal TEE dSPRSCI
'Weta and Yidika were stealing everyday from the school'
d. Weta u d:uu tee dono

Weta 3POSS tasting TEE bad 'Weta's tasting was bad'

Because the root with tee is a continuous form, it is also the basis for nominalizations such as kââdî tee pyu, 'One who joins together, brings people together', yipe tee pyu ‘One who accuses (people) falsely’, wópu tee pyu ‘a person who covers things up, doesn't tell the truth', ch:ámê tee pyu, 'One who separates things', dêpê tee pyu ‘One who chases the flies away (e.g. over a corpse)', têêdî tee pyu ‘One who transports by water, ferryman', d:uu tee pyu 'One who tries/tastes'.

The verbs observed to undergo this alternation are l:âmo 'fix', vyómu 'make', t:âmo 'steal', tîp̂̀ 'do wrong', kn:aadi 'do wrong, miss when throwing', kââdî 'join', yipe 'accuse falsely', wópu 'cover something', ch:amê 'to separate', dêpê, 'chase (flies) away', têêdî 'transport by water', $d: u u$ 'to do, try', but there are no doubt a few others. The suffix is unproductive over random transitive verbs: *vy: a tee pyu, 'One who hits', *ma tee pyu ‘One who eats’, *d:ii tee pyu ‘One who throws’.

A final puzzle is that tee does occasionally appear with already continuous transitive stems, as in ch:em tee pyu 'one who is putting things inside'. This usage also allows an inflected form:

| (366) | nye | ch:em | tee mo |
| :--- | :--- | :--- | :--- |
|  | 1dImmFUT put.in.container.CI | TEE | d.PRSCI |
|  | 'We two are loading things' |  |  |

### 7.10 Ellipsis

There is widespread ellipsis in Yélî Dnye discourse. NPs in subject and object role are standardly omitted when their referents have already been established in discourse - indeed new referents are often introduced in zero form (coded in verb inflection or quotation particle, as in the example below), and queried if necessary. When verbs are ellipsed, NPs normally carry the case inflections appropriate to their syntactic role with respect to the omitted verb. Note in the following case, in B’s turn the relevant verb (vyi ‘say, tell’) has never actually been used, since a quotation particle was used instead:

```
(367) A: akêda ngomo u mo (from R02_v21_s1)
    he.said.to.me house his self
    wa pwila
    3FUTPI buy
    'He said to me he was going to pay for his house by himself'
```

    B: n:uu ngê?
    Who ERG?
    'Who did?'
    A: yed:oo k̂̂ maawê ngê
thus that bigman ERG
'That bigman did'

Just as English do can act as a carrier of tense and aspect for an ellipsed verb, the Yélî Dnye preverbal clitic can act in the same way:
(368) A: mu pini yi doo kmaapî
that fellow ANAPH 3CI.REM eat.intrans
'That guy was eating (people)'
B: Kee tp:oo yi doo
Kee son ANAPH 3CIREM
'Kee's son was the one doing it'

That these proclitics can stand independently shows that they are something more than mere inflectional affixes.

## 8 Complex sentences

### 8.1 Relative clauses

First, some terminology: subjects of intransitive clauses are said to be in S-function, subjects of transitive clauses are in A-function, and objects are in O-function. The 'head' of the relative clause will be taken to be the NP to which the relative clause ascribes an additional semantic property - so in The man who came hit me, the head is the man and it is in S function in the relative clause and A -function in the matrix clause.

In Yélî Dnye, relative clauses have the following properties: they can have both restrictive and non-restrictive interpretations, they are marked by special relative pronouns, they are 'internally headed' in the sense of Keenan (1985) bearing the case of their role in the relative clause, and NPs in most grammatical relations can be relativized. Beyond this, they have special quirks to be discussed below.

Most, but not all, relative clauses are marked by the use of one of the relative pronouns: n:ii 'that/which/who', mw: a 'who', kwéli 'the place where'. The pronoun n:ii also occurs with demonstrative adjectives, as in kê n:ii, 'that one', but the other forms are restricted to relatives. N:ii occurs more often than mw: $a$ 'the human who' even for humans, but both are then possible:

| (369) $m u$ dmââdî | mw:a/n:ii kee wo |  |
| :--- | :--- | :--- | :--- | :--- |
| That girl who/that ascend | 3sREM.WEAK |  |
| 'The girl who came up' |  |  |

Certain structures do not require a relative pronoun at all (whether these are elided, or to be understood paratactically, is unclear):
(370) a tp:ee ka tuu n̂̂ y:ângo, pââ ndîl my son DAT axe 1sPast give.to3REM body big
'The axe I gave to my son is a big one'

The relative clause normally precedes the rest of the matrix clause, but this is variable. Order of phrasal elements within the relative clause is free, as generally in Yélî syntax. I will use square brackets to show the relative clause, and bold to demarcate the noun which the relative clause modifies, as in the following example:

```
(371) [tuu n:ii n\hat{l}}ndê ngê] nt:ee k\hat{\imath}\ 
    axe REL 1sPAST made 3sOREM.PI sea CERT 3sREM
    ghay wo
    fall.PI 3sS.REM.WEAK
```

    'The axe which I made fell into the ocean'
    Here the head NP tuu is both the subject of the main clause and the object of the relative clause - sometimes however, especially if the NP is oblique, it may be resumptively repeated (either as noun or pronoun) in the later clause. The head noun nearly always takes the case endings assigned to it by the role in the relative (modifying) clause - so that by case-marking criteria Yélî Dnye can be said to have 'internal' relative clauses, where the head noun functions syntactically as part of the internal clause, a relatively rare pattern associated with A-O-V/ S-V word order (Keenan 1985:163). Consider for example the following sentence where the head noun is the object of the main clause and the ergative agent of the relative clause, and carries the ergative case (note too how it is surrounded by elements of the relative clause rather than the main clause).

```
(372) [mbwêmê pi n:ii ngê dê vy:a] kêdê vy:a
    pig person REL ERG 3sIMMPI hit CERT+3sIMM hit
    'I hit the man who killed my pig'
```

However, an exception is experiencer relative clauses, that is, where the head noun plays a role as an experiencer in the relative clause. In that case, the head noun can occur inside the main clause with the case appropriate to the main clause, leaving a resumptive pronoun in the relative clause to carry the experiencer case appropriate to the relative clause:

| (373) | Mwonî | ngê | [pini | n:ii | Ø] dî | vy:a | [dómu |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Mwonî | ERG | man.SPEC | REL | ABS | 3IMMPI | hit | hunger |

In this construction, the relative clause is discontinuous, but this can also happen without the experiencer construction - compare the minimal pair in examples (373) and (374):

```
(374) Mwonî ngê [pini n:ii Ø] dî vy:a [kî-\emptyset
    Mwonî ERG man.SPEC REL ABS 3IMMPI hit CERT.3sCI.IMM
    nod:enod:e]
    become.angry.C
    'Mwonî hit the man who was angry (today)'
```

Here the head noun 'the man' is both Absolutive in the main and in the relative clause.

Since the relative clause normally comes first, it may introduce an NP not then repeated in the main clause. Thus both the following are possible, the second with a resumptive noun case-marked for its role in the main clause:

| a. [pini | n:ii | $d \hat{e}$ | t:a], | $a$ | mbwêmê | dê |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| man.SPEC | REL | 3IMMPI | arrive | my | pig3 | IMMPI |
| $t: a ̂ m o ~$ |  |  |  |  |  |  |
| stole |  |  |  |  |  |  |
|  | 'The man who came stole my pig' |  |  |  |  |  |

b. [pini n:ii dê t:a], yi pini ngê a man.SPEC REL 3IMMPI arrive ANAPH man ERG my mbwêmê dê t:âmo
pig 3IMMPI stole
'The man who came, he's the one who stole my pig'

NPs in most functions can be relativized. Following the terminology of A, S, and 0 roles or functions, the following (Table 8.1) are attested patterns of relativization:

Table 8.1: Patterns of relativization ( $V$ denotes NP is relativizable).

|  | Role in Relative Clause |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Role in Matrix | A | S | $\mathbf{0}$ | Oblique/ <br> Experiencer |
| $\mathbf{A}$ | V | V | V | V |
| $\mathbf{S}$ | V | V | V |  |
| $\mathbf{O}$ | V | V | V |  |
| Oblique | V | $?$ | V |  |
| Equative | V | V | V | V |
| Experiencer |  | V | V |  |

The following sentences illustrate some of these patterns, with the relative clause in square brackets and the head noun bold, and a resumptive NP or pronoun (if any) underlined. By the side is an annotation of the case and grammatical role of the NP in the main clause and (shown in brackets) the relative clause (e.g. ABS [ERG] codes Absolutive in the main clause and Ergative in the relative clause, similarly A [O] codes A role in main, O role in relative). The first set of examples covers the nine core-case permutations:

### 8.1.1 Relative clauses with n:ii - CASE - grammatical relation

| $\begin{aligned} & \text { ERG[ERG] } \\ & (376) \end{aligned}$ | $\mathrm{A}[\mathrm{A}]$      <br> [pini n:ii ngê a mbwêmê dê <br> man.spec REL ERG my pig 3IMMPI <br> vy:a nê      <br> hit 1 sO      <br> 'The man who killed my pig also hit me'      | vy:a], myaa hit, 3IMMREP |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { ERG[ABS] } \\ & \text { (377) } \end{aligned}$ | A[S] <br> [pini n:ii da lê], a mbwêmê <br> man.spec REL 3IMMCLS go my pig 'The man who came stole my pig' | dê t:âmo <br> 3IMMPI steal |
| $\begin{aligned} & \text { ERG[ABS] } \\ & (378) \end{aligned}$ | $\mathrm{A}[\mathrm{O}]$ <br> [pini n:ii dî vy:a], a mbwêmê <br> man.spec REL 1sIMM hit my pig dê t:âmo <br> 3IMMPI steal <br> 'The man whom I hit, (he's the one who) stole my | (yinê) <br> (the one) |

ABS[ERG] S[A]
(379) [pini n:ii ngê a mbwêmê dê t:âmo], dê mbêpê man.spec REL ERG my pig 3IMMPI steal 3IMM run 'The man who stole my pig ran away’

ABS[ABS] S[0]
(380) [pini n:ii dî vy:a], dê mbêpê
man.spec REL 1sIMM hit 3IMMPI run
'The man whom I hit ran away'

ABS[ABS] S[S]
(381) [pini n:ii dî mbêpê], awêde dê pw:onu man.spec REL 3IMM run today 3IMM die 'The man who ran away died today’

ABS[ERG] O[A]
(382) [pini n:ii ngê a mbwêmê dê t:âmo], dê vy:a man.spec REL ERG my pig 3IMM steal 3IMM hit 'I hit the man who stole my pig'

ABS[ABS] O[S]
(383) [pini n:ii dê mbêpê], dî vy:a
man.spec REL 3IMM ran 1sIMM hit
'I hit the man who ran away'

ABS[ABS] O[O]
(384) [pini n:ii dê vy:a a mbwó] yinê dî vy:a man.spec REL 3IMM hit my brother the.one 1sIMM hit 'I hit the man who my brother hit'

Some variant sentences with different word orders and also examples with oblique NPs follow:

ABS[ABS] O[O]
(385) [yi pini kêdê vy:a a mbwó ngê m:a pini that man CERT3IMM hit my brother ERG yesterday man n:ii] $v y: a$
REL hit
'I hit the man whom my brother hit yesterday'

ERG[ERG] A[A]
(386) [a mbwêmê n:ii ngê vy:a], dê vy:a nê
my pig REL ERG hit 3IMM hit 1sO
'The man who killed my pig hit me'

ERG[ABS] A[O]
(387) [pini n:ii nê vy:a] a mbwêmê dê t:âmo man.spec REL 1s hit my pig 3IMM steal 'The man whom I hit stole my pig'

```
ERG[ABS] A[S]
(388) [pini n:ii dê t:aa], a mbwêmê dê t:âmo
    man.spec REL 3IMM arrive my pig 3IMM steal
    'The man who came stole my pig'
DAT[ERG] Obl[A]
(389) [mbwêmê pini n:ii ngê dê châpwo], kê u
    pig man.spec REL ERG 3IMM cut money to him
    dê y:oo.
    1sIMM give.to.3
    'I gave the shell money to the man who cut the pig'
ABS[ABS] O[O]
(390) yi pini ka kê kêdê y:oo,
    that man DAT money CERT3IMM give.to.3
    [m:aam:aa ngê kê n:ii a ka dê kê].
    FZ ERG money REL 1sDAT 3IMM give.to.1
    'I gave to the man the shell money which my auntie gave me'
ABS[ABS] O[S]
(391) [kê n:ii a péé k:oo tóó], yi pini ka
    money REL my basket inside sitting that man DAT
    kêdê y:oo.
    CERT3IMM give.to. }
    'I gave to the man the shell money which was in my basket'
ABS[ERG] O[A]
(392) [pini n:ii ngê a mbwêmê dê vy:a], kêdê
    man.spec REL ERG my pig 3IMM hit CERT3IMM
    mbêpê.
    run
    'The man who killed my pig ran away'
ABS[INST] O[Obl]
(393) [tuu n:ii ngê ngomo noo wuwó] Mwon\imatĥ ngê
    axe REL INST house 1sREMCI construct Mwonî ERG
    kê pwââ.
    CERT3IMM break
    'John broke the axe which I used to make this house'
```

ABS[ABS] O[O]
(394) [Mwonî ngê dmââdî n:ii mbwili ngê], kî nyââ. Mwonî ERG girl REL impregnate MFS3sO CERT3 marry 'Mwonî married the girl whom he made pregnant’

ABS[ABS] O[O]
(395) [Mwonî ngê dmââdî n:ii nyââ],
Mwonî ERG girl REL marry

Mwolâ ngê k̂̂ mbwili ngê.
Mwolâ ERG CERT3 impregnate MFS3sO
'Mwolâ made pregnant the girl whom Mwonî married'

ABS[ABS] O[O]
(396) [Mwolâ ngê dmââdî n:ii mbwili ngê], Mwolâ ERG girl REL impregnate MFS3sO Mwonî ngê kî nyââ. Mwonî ERG CERT3 marry 'Mwonî married the girl whom Mwola made pregnant'

ABS[ABS] O[S]
(397) [Mwonı̂ ngê dmââdî n:ii mbwili ngê] kn:aa Mwonî ERG girl REL impregnate MFS3sO different pini p:uu kî maa yéé.
man PP CERT REP3sIMMPI marry.intrans
'The girl Mwonî made pregnant got married to another man’

DAT[ABS] Obl[O]
(398) [Mwonî ngê dmââdî n:ii mbwili ngê], Mwonî ERG girl REL impregnate MFS3sO Mwonî u kênê ngê ndapî yi dmââdî Mwonî his uncle ERG shell.money ANAPH girl ka dê y:oo.
DAT 3IMM give.to3
'Mwonî’s uncle gave ndap (shell money) to the girl whom Mwonî made pregnant'

## COM[ABS] Obl[O]

(399) [Mwonî ngê dmââdî n:ii mwbili ngê]

Mwonî ERG girl REL impregnate MFS3sO
Alotau $\underline{u}$ k:ii kî lee knâpwo.
Alotau 3s WITH CERT3 go.FOL dREM.IV
'Mwonî went to Alotau with the girl he made pregnant'

| $\begin{aligned} & \text { EXP[ABS] } \\ & (400) \end{aligned}$ | Obl[S] <br> [pini | n:ii | Kêna | da | ndê] | dómu | u ngwo |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | man.spec | REL | Kêna | CLS3IMM.PI | come.from | hunger | 3sEXP |
|  | $a \quad t:$ |  |  |  |  |  |  |
|  | 3PRS ha | ging |  |  |  |  |  |
|  | 'The man | o | efr | Kêna is hun |  |  |  |

ERG[EXP] A [Obl]
(401) [pini n:ii ngê dómu t:a] Mwon̂̂ dê vy:a. man.spec REL ERG hunger hanging Mwonî 3sIMM hit 'The man who was hungry hit Mwonî'

One clear generalization from these patterns is that if the head noun plays an oblique role in the main clause, requiring case-marking as Experiencer, Dative, or Comitative, then the external case is carried by a resumptive pronoun or a repeated NP.

It is also possible to relativize an NP inside a PP, as in the following where a resumptive or appositive NP is required in the main clause:
(402) Nkéli n:ii k:oo woo wo, yi nkéli mb:aamb:aa boat REL inside embark 3sREM.WEAK ANAPH boat good 'The boat into which he embarked is a good one'

Finally, 'the place where' relatives with kwéli fall into the same pattern as n:iirelatives with heads which play an oblique role in the main clause. In this case, the head noun is typically a locative of course in both clauses. Following the pattern for obliques, the relative clause requires a resumptive adverb in the main clause (recollect that locatives take zero case-marking):
(403) kwéli 'The place where'
a. [kwéli nê tóó], yi pini y:i
place.where 1s sitting ANAPH man.spec ANAPH.LOC
kêdê lê
CERT3IMM go
'The man came to where I was'
b. ye doo vyîmî, mudu y:i,

ANAPH 3sREMCI climbing upper ANAPH.LOC
[d:aa dmi kwéli doo ya]
moss CLF place.where 3sREMCI sitting
'He was climbing, up there, where the moss covering
was' (1997_v8g.txt, l.11)
c. [kwéli wumê lêpî], w:ââ y:i
place.where 3HAB.PROXCI.MOT going dog ANAPH.LOC
$a \quad$ lêpı̂
3HAB.PROX going
'Wherever the people go, the dogs go there'

Many temporal clauses (see also §8.5) are built using relativization. For example:

```
(404) dini ghi n:ii ngê nê wédi, yed:oo dê lê
    time part REL ADV 1s sago.making then 3IMM go
    'At the time at which I was making sago, he left'
```


### 8.2 Indicative conditionals

Indicative conditionals are formed in a quite unrelated way to Counterfactual conditionals, which are marked on the verbal proclitic of both antecedent and consequent, for which see $\S 8.3$ below. Indicative conditionals are marked on the antecedent of the conditional only, by replacement of the normal post-verbal inflectional enclitic, for example,

```
(405) ngmê (PFSubj.3sObjPI&CI.PROX) }->\mathrm{ knomomê
    té (MFSubj3PlObj.PI&CI.PROX) }->\mathrm{ tomomê
```

The protasis, the marked clause, always seems to come first, and there is a particle $y e$ 'then' that often heads the apodosis or consequent.

In some tense/aspect/person/number conditions, another enclitic can follow the base form knomomê, as in:

| (406) m:iituwo | Kostka mbwémi vyee knomomê dê, |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| day.before.yesterday | Kostka brother.dyad hit COND Dual |  |  |  |
| n:aa vyee |  |  |  |  |
| 1s.FUT.CI hit.CI |  |  |  |  |
| 'If he hit Kostka and brother the day before yesterday, I will hit him' |  |  |  |  |

Many conditionals are expressed without these special forms, by using a dubitative particle like apê or ndoo apê, and increasingly by formation with English if, so that a sentence like a. below is increasingly being replaced with b. (to an extent that there is some inconsistency in the usage of the paradigms below):

| (407) a. | m:iituwo | Kostka vyee knomomê, n:aa | vyee |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | day.before.yesterday | Kostka | hit.CI COND | 1s.FUT.CI | hit.CI |
|  | 'If he hit Kostka the day before yesterday, I will hit him' |  |  |  |  |
| b. | If Kostka vyee ngê, | $n: a a$ | vyee |  |  |
|  | if Kostka hit.CI MFS3sOREM | 1s.FUT.CI hit.CI |  |  |  |
|  | 'If he hit Kostka, I will hit him' |  |  |  |  |

Positive and negative conditionals are built essentially on the same forms, but there are distinct conditional enclitics for intransitive and transitive clauses, as always in the enclitic paradigms. We take the positive indicatives first.

### 8.2.1 Positive conditionals

The intransitive conditional paradigm (Table 8.2) collapses all person/number/ tense distinctions, by replacing the normal enclitic with indeclinable knomomê, except with Continuous aspect Habituals where the two combine.

Table 8.2: Intransitive Conditional enclitics (bold) with non-conditional forms
(non-bold) for comparison.

|  |  | SUBJECT NUMBER |  |
| :--- | :--- | :--- | :--- |
|  | Sing | Dual | Plural |
| PI REM, Hab | $\emptyset$ (strong roots) <br> wo (weak roots) <br> knomomêê | knâpwo <br> knomomêe | dniye <br> knomomê |

Table 8.2 (continued)

|  |  | SUBJECT NUMBER |  |
| :--- | :--- | :--- | :--- |
|  | Sing | Dual | Plural |
| PI FUT/Tod/Yest | knomomê | knî <br> knomomê | dmi <br> knomomê |
| CI now/Today (proximal) | $\emptyset$ | mo <br> knomomê | té <br> knomomê |
| CI Yester/Rem/Tomorr (distal) | $\emptyset$ | $\emptyset$ | $\emptyset$ |
| CI Hab Discontinued | knomomê | knomomê | knomomê |
| CI HabPROX | yédi | nódó | nyédi |
|  | knomomê yédi | knomomê nódó | knomomê nyédi |

The consequent can be in any mood or tense, as illustrated by the following.


The following examples illustrate how, even though tense/aspect information is neutralized in the conditional intransitive enclitic, it is preserved in the proclitic which carries the same information (except where it is neutralized there too):
(409) a. m:ïtwuwó Ø lee knomomê, ye
day.before.yesterday 3REM.PI go.FOL COND then
n:aa lêpı̂
1sImmFUTCI going
'If he went the day before yesterday, then I will be going'


Loss of information does take place though, as shown by the following distinct $3^{\text {rd }}$ person intransitive enclitics with borrowed if which all collapse onto the same intransitive conditional enclitic:
$\left.\begin{array}{llll}\text { a. if } \emptyset & \text { lee } & \text { knâpwo } & \rightarrow \text { lee knomomê } \\ \text { if } & \text { 3PAST.PI } & \text { go.FOL } & \text { 3d.PI.REM/HAB.Intrans }\end{array}\right]$
b. if dê lee knı̂ $\rightarrow$ lee knomomê if 3IMMPI go.FOL 3d.PI.PROX.Intrans 'If they2 have gone (earlier today). . ..'
c. if $\emptyset$ lee dniye $\rightarrow$ lee knomome
if 3PAST.PI go.FOL 3PIREM.PI
'If they3 have gone (the day before yesterday)'
d. if $\emptyset$ lee $d m i \quad \rightarrow$ lee knomome
if 3PAST.PI go.FOL 3PIPROX
'If they3 have gone (today or yesterday) . . ..'

Given the extensive conflations, it is perhaps not surprising that the conditional enclitics are the only verbal enclitics that can be doubled up, e.g. to mark the intransitive Habitual Continuous. The following examples demonstrate that these second enclitics follow the rules for the normal indicative Habitual forms:

| a. Alotau | a lêp̂l knomomê | yédi, | ye | Titus |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Alotau | 3CI going COND | sSHABCI.IV | then | Titus |
| $u$ | kpêe |  |  |  |

b. mumdoo Alotau a lêp̂̂ knomomê nódó, Titus
really Alotau 3CI going COND dS.HABCI.IV Titus
yi kpêê

3d/plPOSS direct.experience
'If they2 really used to go to Alotau, they2 (must) know Titus'
c. mumdoo Alotau a lêpî knomomê nyédi, Titus
really Alotau 3CI going COND plSHABCI.IV Titus
yi kpêê

3d/plPOSS direct.experience
'If they3 really used to go to Alotau, they3 (must) know Titus'
d. Alotau nye lêpî knomomê yédi, Titus

Alotau 2sImmFUTCI going COND sS.HABCI.IV Titus
ngmêê
(N)2s.experience
'If you1 used to go to Alotau, you1 (must) know Titus'
e. Alotau nmye lêp̂̂ knomomê nyédi, Titus

Alotau 2plImmFUTCI going COND plS.HABCI.IV Titus
nmyi kpêê
2plPOSS direct.experience
'If you3 used to go to Alotau, you3 (must) know Titus'
f. Alotau dpo lêp̂̂ knomomê nódó, Titus

Alotau 2d.ImmFUTCI going COND dS.HABCI.IV Titus
$d p \hat{\imath} \quad$ kpêê
2dPOSS direct.experience
'If you2 used to go to Alotau, you2 (must) know Titus'

In nonconditional intransitive sentences, the enclitic normally merely redundantly marks and sometimes disambiguates information in the proclitic, but in the transitive clause the enclitic alone carries cross-referencing of the object properties. Not surprisingly, then, the Transitive conditional enclitic paradigm is more complex, with the retention of some subject and object person/number, as well as some tense distinctions, as shown in Table 8.3. In the $3^{\text {rd }}$ person forms there is an approximation to the Monofocal/Polyfocal distinction, with the same form used for Singular and $1^{\text {st }}$ person except for $3^{\text {rd }}$ person Plural. Note that though it is tempting to isolate a conditional morpheme -momê- which then combines with
person/number information, that information has no regular form (e.g. there is no regular morph kno as in knomomê), and may combine either side of momê in particular cases - as usual, then, the forms have to be learnt for each combination of subject, object and tense/aspect information.

Table 8.3: Transitive Conditional enclitics (bold), with non-conditional forms for comparison (nonbold).

| TENSE/ <br> ASPECT/ <br> MOOD | SUBJECT <br> Person\&No | OBJECT |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Person | Sing | Dual | Plural |
| PI \& CI Prox/P.Hab | all | 1 | $n \hat{e}$ <br> $\rightarrow$ nêmomê | nyo <br> $\rightarrow$ nyemomê <br> $\rightarrow$ knomony:o | nmo $\rightarrow$ nmomomê |
| $\mathrm{Pl} \& \mathrm{Cl}$ Prox/P.Hab | all | 2 | $n g i \rightarrow$ <br> nyimomê | $\begin{aligned} & \text { dp:o } \\ & \rightarrow \text { dpîmomê } \end{aligned}$ | nmyo <br> $\rightarrow$ nmyemomê |
| PI \& CI <br> Prox/P.Hab | MF: (1/s) PF: $(2 / 3 / \mathrm{pl})$ | 3 | $\emptyset \rightarrow$ <br> knomomê <br> $n g m e \hat{e} \rightarrow$ <br> knomomê | $d \hat{e} \rightarrow$ <br> knomomê dê $d: o o \rightarrow$ <br> tomomê | té $\rightarrow$ tomomê $t: o o \rightarrow$ <br> tomomê |
| PI Rem/C. <br> Hab.Prox | all | 1 | noo $\rightarrow$ nonîmê | пуо́ри $\rightarrow$ nyópumê | nmoo $\rightarrow$ nmîmomê |
|  | all | 2 | $\text { nyoo } \rightarrow$ <br> nyipumê | $d p o \rightarrow$ <br> dpumomê | nтyoo $\rightarrow$ nmyimomê |
| PI Rem/C. <br> Hab.Prox | MF: 1/s | 3 | ngê (weak) $\rightarrow$ knomomê | $\begin{aligned} & \text { doo } \\ & \rightarrow \text { dumomê } \end{aligned}$ | too $\rightarrow$ tomome |
|  | PF: 2/3/pl |  | ngópu $\rightarrow$ knomomê | dumo <br> $\rightarrow$ dumomê | tumo $\rightarrow$ tomomê |
| C Non-Prox | all | 3 | $\emptyset \rightarrow$ <br> knomomê | $d \hat{e} \rightarrow$ <br> dumomê | $d e ́ \rightarrow$ <br> tomomê |

Some neutralization of enclitic information takes place here, as it does with intransitives, especially of number in $3^{\text {rd }}$ person where the proclitics are often zero, as in the following where the subject information is coded in the non-conditional enclitic but not in the conditional one:


Again, it is useful to compare sentences with borrowed English if and their counterparts with proper Yélî Dnye conditional enclitics, because the comparison shows to what extent the inflectional information is retained in the conditional form:
a. if $\varnothing$ mgaa noo $\rightarrow$ mgaa nonîmê if 3PastPI sorcerize 1sREM.PI sorcerize 1sREM.PI.COND 'If he has sorcerized me (day before yesterday) . . ..'
$\begin{array}{llllll}\text { b. if } & \emptyset & \text { mgaa } & \text { nyópu }\end{array} \rightarrow \begin{aligned} & \text { mgaa }\end{aligned} \quad$ nyópumê 'If he has sorcerized us2 (day before yesterday) . . .. . .. . .. . ...'
$\begin{array}{lllllll}\text { c. } \begin{array}{llll}\text { if } & \emptyset & \text { mgaa } & \text { nmoo }\end{array} \rightarrow & \text { mgaa } & \text { nmîmomê } \\ \text { if } & \text { 3PastPI } & \text { sorcerize } & \text { 1PlREM.PI } & & \text { sorcerize } & \text { 1PlREM.PI.COND }\end{array}$ 'If he has sorcerized us3 (day before yesterday) . . . . .. . .. . ...'
a. m:iituw:o Kostka Ø vyee knomomê, day.before.yesterday Kostka 3PastPI hit.CI 3sO.COND n:aa vyee
1sImmFUTCI hit.CI
'If he was hitting Kostka the day before yesterday, I will hit him'
b. if Kostka Conrad vyee doo $\rightarrow$ vyee dumomê
if Kostka Conrad hit.CI MFS3sObject hit.CI 3dO.COND
'If he hit Kostka and Conrad . . ..' (Idem)
c. if vyee too $\rightarrow$ vyee tomome $\hat{e}^{41}$
if hit.CI MFS.3plO.PI.REM/CI? hit.CI 3plO.COND 'If he hit them 3 ' (Idem)
d. if doo vyee $\rightarrow$ doo vyee kmomomê if 3sREMCI hit.CI 3sREMCI hit.CI 3sO.COND 'If they 3 hit him. . .' (Idem)

41 I should record with regard to example (414)c., that I initially thought the verb form vyee is unambiguously continuous aspect, but in fact this is not necessarily the case. Thus Yidika Weta y:oo dê vyee d:oo - they2 hit them2 today - can in fact only be punctual indicative. The forms above are correct and double-checked, but the interpretation of forms with vyee may sometimes be in question.

| e. if doo | vyee dé | $\rightarrow$ | doo | vyee | tomomê |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| if | 3sREMCI | hit.CI | 3plO.PROXCI |  | 3sREMCI | hit.CI | 3plO.COND |

Subj.3dO.COND
'If they two were hitting them (before yesterday) (Idem)
aka vyi ngi
me.to tell 2sIMP
then tell me'

Because the conditional construction, and particularly the transitive forms, are being lost to language change, I record here some more examples with a further range of person/number objects:
a. a vyee nmomomê, nmo vyee 3ImmFUT hit.CI 1PlObjectPROXCOND 1plImmFUTCI hit.CI 'If he hits us3 today, we will hit him'
b. $w-a y: a \quad$ nmomomê, anmî vy:a

Uncert-3FUTPI hit.PI.FOL 1Pl..PROXCOND 1PIFUTPI hit.PI 'If he will hit us3, we will hit him'
c. a vyee nyimomê, n:aa vyee

3ImmFUT hit.CI 2sObjectPROXCOND 1sImmFUTCI hit.CI 'If he hits you1, I will hit him'
d. ayee dpîmomê, n:aa vyee 3ImmFUT hit.CI 2sObjectPROXCOND 1sImmFUTCI hit.CI 'If he hits you2, I will hit him'
e. vyee nêmomê, n:aa mbêpêmbêpê 3ImmFUT hit.CI 1sObjectPROXCOND 1sImm FUTCI run.CI 'If he hits me, I'll run'
f. ayee nтуетотê, $d p \hat{\imath}$ mbêpê

3ImmFUT hit.CI 2PlObjectPROXCOND 2IMPDefd.PI run dmyino
2PlIMPIntransitive
'If he hits you3, then run away!'
g. vyee knomomê, a mbêpêmbêpê

3ImmFUT hit.CI 3sObjectCOND 3ImmFUTCI run.CI 'If he/they hits him, he will run away'
h. a vyee knomomê dê, a mbêpêmbêpê 3ImmFUT hit.CI 30.COND MFS.d30 3ImmFUTCI run.CI mo dS.CI.PROX
'If he/they hits them 2 , they 2 will run away'
i. a vyee knomony:o, nye mbêpêmbêpê

3ImmFUT hit.CI 1dO.COND 2d.ImmFUTCI run.CI mo
dS.CI.PROX.Intrans
'If he hits us2, we two will run away'
j. a vyee nyemomê, nye mbêpêmbêpê

3ImmFUT hit.CI 1dO.COND 2dImmFUTCI run.CI
mo
dS.CI.PROX.Intrans
'If he hits us2, we two will run away' (alternative conditional enclitic to prior example)
k. vyee tomomê, a mbêpêmbêpê

3ImmFUTCI hit.CI 3PlO.COND 3ImmFUTCI run.CI té

PlSubj.CI.PROX.Intrans
'If he hits they3, they3 will run away'

1. $\varnothing$ vy:a nyipumê, n:aa vyee

3PastPI hit.FOL 2sO.REM.PI.COND 1sImmFUTCI hit.CI
Ø
3sO.PROX
'If he hit you2 (day before yesterday), I'll be hitting him'
m. $\varnothing$ vy:a dpumomê, n:aa vyee

3PastPI hit.FOL 2dO.REM.PI.COND 1sImmFUTCI hit.CI
$\emptyset$
3sO.PROX
'If he hit you2 (day before yesterday), I'll be hitting him'
n. a vyee knomomê, a mbêpê Ø

3ImmFUTCI hit.CI 3sO.COND 3ImmFUTCI run.CI 3sCI.PROX 'If he/they will hit him, he'll run away'
о. a vyee tomomê, a mbêpê mo 3ImmFUTCI hit.CI PFS.3dO.COND 3ImmFUTCI run.CI d.CI.PROX 'If they2 will hit them2, they2 will run away'

As illustrated, the antecedent of a conditional can be in the Indicative or Habitual Mood, either aspect, while the consequent can be in either aspect and any mood,
including Imperative. There is no control (or specified anaphoric relations) across antecedent and consequent.

### 8.2.2 Negative conditionals

Both antecedent and consequent can be negated. These negations are partially analytic, that is a separate negative particle daa precedes the proclitics before the verb. Where that proclitic in the positive counterpart would be $a$ it is preceded and elided with $w u$ 'irrealis, uncertain' (thus forming wa), the epistemic modifier associated with future, interrogative and negative forms. The conditional enclitic however has special forms encoding object number/person, while subject information is mostly lost (note however the retention of Monofocal/Polyfocal subject information in e.g. the case of dual objects in proximal tenses). The following are some examples of transitive positive conditionals with the negative counterparts (in bold). The forms of the verb 'to hit' are:
(416) proximal tenses $v y: a$
remote past vyâ
followed root vya / vy:a
continuous root vyee

- note that a positive continuous aspect form is often more idiomatically converted into a negative punctual counterpart, which I give first (the continuous form is often idiomatically restricted to the antecedent clause). The following examples (417) to (426) provide the positives in italics and corresponding negatives (punctual, and where OK, continuous forms) in bold. Note that negative forms have the tense shifted into the past as noted in §6.1.4 (and see also §10.1), and also may have enclitics shifted from the other aspect. Because these complexities are hard to compute I illustrate extensively.

| (417) a. | a vyee nmomomê, nmo | vyee |
| ---: | :--- | :--- | :--- | :--- | :--- |
|  | 3PRSCI hitting 1plOCOND 1plSFUTCI hitting |  |

a. wa vy:a nmomomê, $a n m \hat{\imath} \quad v y: a$ 3FUTPI hit 1plOCOND 1plSFUTCI hitting 'If he hits us tomorrow, we will hit him' (with punctual forms)
b. daa wa vya/vy:a nmomomê, daa anmî vy:a NEG 3sFUT hit 1plOCOND NEG 1plSFUTPI hit 'If he doesn't hit us, we will not hit him'
c. daa dî̀ vyee nmomomê, daa nmî vyee NEG 3NrPSTCI hitting 1plOCOND NEG 1plS hitting 'If he is isn't hitting us, we won't be hitting him'
(419) a. a vyee nyimomê, n:aa vyee

3IMMFUTCI hitting 2sOCOND 1sFUT.MOT hitting 'If he hits you1 today, I will hit him' (cf. a vyee ngi - he will hit you today)
b. daa wa vya/vy:a nyimomê, daa nê vy:a NEG 3sFUTPI hit 2sOCOND NEG 1sFUTPI hit 'If he doesn't hit you2 today, I won't hit him' (punctual)
c. daa dî vyee nyimomê, daa n̂̂ vyee NEG 3NrPST hitting 2dOCOND NEG 1sNrPST hitting 'If he isn't hitting you2 today, I won't be hitting him' (continuous forms)
a. a vyee dpîmomê, n:aa vyee

3ImmFUTCI hitting 2dCOND 1sImmFUTCI hitting 'Today, if he hits you2, I'll hit him'
b. daa wa vya/vy:a dpîmomê, daa nî vy:a NEG 3FUTPI hit 2plCOND NEG 1sFUTPI hit 'If he doesn't hit you2 today, I won't hit him' (punctual)
c. daa wa vyee dpîmomê, daa nî

NEG 3ImmFUTCI hitting 2plCONDCI NEG 1sFUTPI
$v y: a$
hit (continuous antecedent)
(421)
a. vyee nêmomê, n:aa mbêpêmbêpê

3ImmFUTCI hitting 1sCOND 1sImmFUTCI hitting 'If he hits me I'll be running off, today'
b. daa wa vy:a nêmomê, daa nê mbêpê NEG 3FUTPI hit 1sOCOND, NEG 1sPRSCI running 'If he doesn't hit me, I won't be running off' (continuous consequent)

| c. daa wa nyee nêmomê, daa | nê | vy:a |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NEG 3ImmFUTCI hitting | 1slCOND, NEG | 1sFUT hit |

a. a vyee tomomê, a mbêpêmbêpê 3ImmFUTCI hitting 3plOCOND 3ImmFUTCI running té
plS.CI.IV
'If he hits them3, they will be running away today'
b. daa wa vy:a tomomê, daa wa mbêpê dmi NEG 3FUTPI hit 3plOCOND NEG 3ImmFUTPI run plS.IV 'If he doesn't hit them3, they won't run away (today)'
c. daa wa vyee tomomê, daa wa mbêpê dmi NEG 3ImmFUTCI hitting 3plOCOND, NEG 3FUTPI run plS.IV 'If he won't be hitting them, they won't run away' (continuous antecedent)
(425)
a. vyee nmyemomê, dp̂̂ mbêpê dmyino 3ImmFUTCI hitting 2plOCOND, 2IMPDefPI run 2plIMP.IV 'If he hits you3, then you should run away (today)!'
b. daa wa vy:a nmyemomê, n:aa ngmê mbêpê NEG 3sFUTPI hit 2plOCOND NEG.IMP run 'If he doesn't hit you3, then don't run away (today)!'
a. a vyee knomomê, a mbêpêmbêpê 3FUTPI hit 3sOCOND, 3ImmFUTCI running 'If he hits him, he will run away (today)'
b. daa wa vy:a knomomê, daa wa mbêpê NEG 3FUTPI hit 3sOCOND, NEG 3FUTCI running 'If he doesn't hit him, he won't run away'
c. da wa vyee knomomê, daa wa mbêpê NEG 3ImmFUTCI hitting 3sOCOND NEG 3FUTCI running 'If he doesn't hit him, he won't run away' (continuous antecedent)
b. daa wa vy:a knomomê dê, daa wa mbêpê kn̂̂ NEG 3FUTPI hit 3OCOND Dual NEG 3FUTPI run 3dS.IV 'If he doesn't hit them2, they 2 will not run away (today)'
c. daa wa vyee knomomê dê, daa wa mbêpê NEG 3ImmFUT hitting 3OCOND Dual, NEG 3FUT run knî
3dS.IV
'If he won't be hitting them2, they 2 won't run away' (continuous antecedent)

| a. | a | vyee | knomony:o, | nye | mbêpêmbêpê |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3ImmFUTCI | hitting | 1dOCOND | 1dImmFUTCI | running |  |

So far we have illustrated forms with a singular subject in the antecedent. Varying the subject number and object number, we have the following examples (427) to (432) illustrating the partial Monofocal/Polyfocal pattern of conflations (note how the negative in these cases preserves the positive enclitic, and thus the information):
(427)
(429)
a. $a$ vyee tomomê, $a$

3ImmFUTCI hitting MF/PFS3d/plOCOND 3ImmFUTCI mbêpêmbêpê mo
running DUAL.S.IV
'If they2 hit them2, they2 will run away'
b. daa wa vy:a tomomê, daa wa mbêpê NEG 3FUTPI hit MF/PFS3d/plOCOND NEG 3FUTPI run knî
DUAL.S.IV
'If they2 didn't hit them2, they2 will not run away'
(430)
a. vyee knomomê dê, a mbêpêmbêpê

3ImmFUT hitting MF/PFS3OCOND Dual 3ImmFUT running mo

PLURAL.S.IV
'If they3 hit them2, they2 will run away'
(431)

| $\boldsymbol{d a a}$ | $\boldsymbol{w a}$ | $\boldsymbol{v y} \boldsymbol{a}$ | knomomê | $\boldsymbol{d e ̂}$, | $\boldsymbol{d a a}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NEG |  |  |  |  |  |
| NEG | 3FUTPI | hit | MF/PFS3sOCOND | DUAL | NEG |
| mbêpe | 3FUTPI |  |  |  |  |
| run | knî | DUAL.S.IV |  |  |  |

'If they3 didn't hit them2, they2 will not run away’

```
(432) a. a vyee tomomê, a mbêpêmbêpê
    3ImmFUTC hitting MF/PFS3d/plOCOND 3ImmFUTCI running
    té
    PLURAL.S.IV
    'If they3 hit them3, they3 will run away'
b. daa wa vye tomomê, daa wa
    NEG 3ImmFUTCI hitting MF/PFS3d/plOCOND NEG 3FUTPI
    mbêpê dmi
    run PLURAL.S.IV
    'If they3 did not hit them3, they3 will not run away'
```

Illustrating the remote tense oppositions, in examples (433) and (434), a. provides the positive conditional, b. the negative version of a., while example (433)c. shows the currently favoured version of a. with English if:

| a. vy:a nyipumê, | n:aa | vyee |
| :--- | :--- | :--- |
| hit | 3sOCOND.REM | 1sImmFUT.MOT.CI |
| 'If he hitting you (the day before yesterday), I'll hit him (today)' |  |  |

b. daa vy:a nyipumê, daa nê vy:a

NEG hit 2sOCOND.REMPI NEG 1sFUTPI hit
'If he didn't hit him (the day before yesterday), I won't hit him (today)'
$\begin{array}{lllll}\text { c. if } a & v y: a & n y o o, & n: a a & v y: e e \\ \text { if } & & \end{array}$
if CLS hit 2sOCOND.REMPI 1sImmFUT.MOT.CI hitting
a. vy:a dpumomê, n:aa vyee
hit 2dOCOND.REM 1sImmFUT.MOT hitting 'If he hit you2 (the day before yesterday), I'll be hitting him (today)'
b. daa vy:a dpumomê, daa nê vy:a

NEG hit 2dOCOND.REM NEG 1sFUTPI hit
'If he didn't hit you2 (the day before yesterday), I won't hit him (today)'

The simpler intransitives follow similar patterns to their positive counterparts (with mostly invariant enclitic knomomê), as illustrated below:


| a. | a | lêpi | knomome, | n:aa |
| :--- | :--- | :--- | :--- | :--- |$\quad$ lêpî

b. daa wa lee knomomê, daa nê lê NEG 3FUTPI go.fol COND NEG 1sFUTPI go 'If he doesn't go, I will not go (today, tomorrow)'

| c. | daa | dî | lêpî | knomomê, | daa |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NEG | nê | lêpî |  |  |  |
| 'If he isn't going, then I'm not going' |  |  | NEG | 1sImmFUTCI | going |

However, one elicited sentence hints at special negatives in some parts of the paradigm, now being lost through language change, with the a. form replacing the b. form for example (437):

| a. If lee | dmi, | n:aa | lêp $\hat{\imath}$ |
| :--- | :--- | :--- | :--- |
| if go.fol | plS.IV | 1sImmFUT.MOT | going |
| 'If they3 come, I'll go' (positive with English if) |  |  |  |

b. lee knomomê, n:aa lêpi
go.fol COND 1sImmFUT.MOT going
'If they 3 come, I'll go'
c. daa lee dnyimomê, daa nêe lê

NEG go.fol 3plSCOND NEG 1sFUTPI go
'If they3 do not come, I won't go'

Here the negative retains the plural subject information lost in the positive conditional, but which is also preserved in the conditional with borrowed English if. Since all these forms are becoming much less used in favour of the borrowed if, it is hard to know whether this is a remnant of a much richer idiosyncratic negative paradigm used in the past, or just evidence of a current garbled system.

### 8.3 Counterfactual conditionals

Counterfactual conditionals express a conditional relation between two events that did not occur, or are not projectable. Unlike the Conditionals, the Counterfactuals are in frequent use, in part because the independent clauses have deontic uses. This is true despite the fact that counterfactuality can be expressed pragmatically:

| (438) | mââ | daa | $n \hat{\imath}$ | lê, daa | $n: u u$ | $m: u u$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| tomorrow | NEG | 1 sFUTP | go NEG | 1sFUT.MOT | see |  |
| 'If I don't go tomorrow, I won't see it' (Lit. 'I'll not go tomorrow (then) I |  |  |  |  |  |  |
| won't see it') |  |  |  |  |  |  |

Counterfactual conditionals have distinctive marking in both antecedent and consequent. Both clauses are marked by substituting the normal TAMP pre-verbal proclitics with special counterfactual proclitics (in contrast to indicative conditionals which mark just the antecedent, and mark the conditionality in the post-verbal enclitics). The antecedent is marked with a form plausibly derived from conflation with $w u$, the 'epistemically uncertain' or 'irrealis' marker, and the consequent with a form just possibly related to the deferred imperative ( $1^{\text {st }}$ person) marker paa. Note that these proclitics occur in the normal slot for pre-verbal clitics, so the structure of the whole counterfactual conditional looks like this:
(439) [CountF $[$ Ante $X Y Z$ antecedent-proclitic verb enclitic], [consq XYZ consequent-proclitic verb enclitic] ]
where X Y Z are constituents like subject/object noun phrases, postposition phrases, adverbials, possibly null, and the enclitics are also possibly null as defined by the paradigms. The clauses can disagree in aspect, transitivity or subject. Most of the examples I will give are reduced by anaphora to the minimum, namely two verbs and their flanking clitics.

To further complicate matters, there are special negative forms of the proclitics. This amounts to a substantial investment of specialized forms just for marking counterfactuals: the matrix of person/number/tense/aspect/mood intersections (minus the imperative, which does not apply) is 126 *2 (for each clause) *2 (for negatives) $=504$ cells. With an additional 18 cells for equational sentences, this makes a total of 522 cells. Just as with the non-counterfactual proclitics, this matrix is filled by a smaller number of distinctive forms, due to various conflations. There are tense conflations, so that (1) in the punctual aspect, near past and remote past are grouped - this grouping cross-cuts the distinction proximal/ distal tenses marked in the enclitics and is thus disambiguated by the enclitics, (2) in the same punctual aspect future and immediate past are grouped, (3) in the continuous aspect the two futures are grouped with the present. In addition there are similar person/number conflations to those observable in the basic proclitic system.

A further wrinkle is that both clauses (antecedent, consequent) of the counterfactuals have independent main-clause uses with modal meanings. However, these sometimes depart slightly from the counterfactual paradigm in form or
person/number/tense assignment. In essence, the use of either clause independently conveys a 'should have' meaning, with the difference one of focus:

```
(440)
    a. wudî lê
    CFAnt1sIMM go.PI
    'I should have gone (on reflection, I missed a chance)'
    b. pîdîl lê
    CFCons1sIMM go.PI
    'I should have gone (something happened, so I didn't)'
```

These deontic uses parallel the deontic uses of the $3^{\text {rd }}$ person imperatives, so counterfactual pêdê lê 'He should have gone' parallels imperative dpî lee wee 'He should go (later)'. One can of course try reversing the perspective, and think of the counterfactual conditionals as built out of two 'should have' clauses, but little is gained from that analytical perspective - obviously the antecedent forms in $w u$ might be related to the UNCERTAIN or irrealis evidential proclitic element, but it has proved hard to elicit any such full wu paradigm, while it is comparatively easy to elicit the counterfactuals. There is also no obvious source for the pê element in the consequent. The following is a textual example of such a single clause use of the consequent clause:

```
(441) ló dini p:aa kpo
    long.ago CFAnt1sNrPST give.to.2 nd
    'I should have given it to you long ago' (of shell-money debt)
```

It should be emphasized that these counterfactual elements are verbal proclitics (not sentential conjunctions), and occur next to the verb after all other elements, as in:


| b. Mwolâa nêedî | ka | wudî | vyuwo, ngmê |  |
| :--- | :--- | :--- | :--- | :--- |
| Mwolâ | possum | DAT | CFAnt3sNrPST.C | look.for | INDF

Just like other verbal proclitics, verbs which incorporate objects or (like vyuwo 'look for') prepositional phrases, allow the incorporated element (bold) to occur between proclitic and verb:
c. Mwolâ wudî nêêdî ka vyuwo, ngmê pî

Mwolâ CFAnt3sNrPSTCI possum DAT looking.for INDF CFCons vy: a
kill
'If Mwolâ had been possum-hunting (yesterday), he would have killed one’

Many of the examples below occur without explicit noun phrases, as they would so often in actual use.

There are distinct paradigms of counterfactual proclitics for positive and negative verbs, and within each of these classes, distinct sets for punctual and continuous aspect.

Counterfactuals are heavily used in discourse, which explains the maintenance of large paradigms (for a parallel Papuan flourishing of counterfactuals see Kulick \& Terrill 2019 on Tayap). Before proceeding, here is an example of usage from a myth (from recording r99_v7_s2):

Kwo, kakêmê u kwo w:ii ch:amê
3QUOT distinguishing.features to him CFAnt2sPROXPast explain ngê,
MFS.3sO.Trans
'The snake said: You (old lady) should have explained to him (your son, about me) / If you had explained it to him
kwo, u kwo w:ii kêma noo,
3QUOT to him CFAnt2sPROXPast point.to 1sOREM.PI/HAB.PROX kwo,
3QUOT
he said: You should have pointed me out to him / If you had pointed me (sacred snake) out to him

| kêê ungwo daa pênê | t:ângo |  |  |
| :--- | :--- | :--- | :--- |
| arm/hand | 3sEXP | NEG | 1sFUT/PRS.CFCons | put.something.on

### 8.3.1 Positive counterfactuals

Like the normal TAMP proclitics, there are two series, one for the Punctual and one for the Continuous aspect. (Other properties like transitivity are irrelevant.) We will take them in turn.

### 8.3.1.1 Punctual aspect

The following table (8.4) gives the basic forms for each of the clauses, antecedent and consequent. These proclitics of course replace the normal TAMP proclitics and largely carry the same meaning distinctions plus the marking of counterfactual conditionality. Thus the first form below wudî means 'If I had earlier today . . .', and the corresponding consequent form pîdî means 'then I would have . . . earlier today'. I should record that there seem to be alternate forms for some of these cells, but these forms (and in succeeding tables) are the ones most readily elicited.

Table 8.4: Counterfactual Conditional proclitics - Punctual aspect.

| Tense/Mood | Subject <br> Person | Antecedent |  |  | Consequent |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Subject Number |  |  | Subject Number |  |  |
|  |  | Sing | Dual | Plural | Sing | Dual | Plural |
| Future | Same as Immediate Past |  |  |  |  |  |  |
| Imm Past | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ | wudî wuchi waa | wu dnye wudu waa | wudu wudmyo waa | pîdî <br> pichi <br> paa | pîdnye <br> pudu <br> paa | pudu pîdmyi paa |
| Near Past | 1 2 3 | w:aa <br> w:ii <br> wo | w:ee <br> woo <br> wo | w:00 <br> w:ee <br> wo | p:aa <br> p:ii <br> pî | p:ee <br> poo <br> pî | $\begin{aligned} & p: o o \\ & p: e e \\ & p \hat{\imath} \end{aligned}$ |
| Rem Past | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ | w:aa <br> w:ii <br> wo | w:ee <br> WOO <br> wo | w:00 <br> w:ee <br> wo | $\begin{aligned} & p: a a \\ & p: i i \\ & p \hat{i} \end{aligned}$ | p:ee <br> poo <br> pî | $\begin{aligned} & p: o o \\ & p: e e \\ & p \hat{\imath} \end{aligned}$ |
| Habitual | (Apparently few forms, with the sense covered by Continuous Habitual counterfactuals*) |  |  |  |  |  |  |

[^17]Note that Future and Immediate Past are conflated, and so unless disambiguated by post-verbal clitics the following is ambiguous (recollect that $3^{\text {rd }}$ person singular subjects and objects often get zero enclitics according to tense/aspect/ mood):

| a. wudî $\quad$ lê, pîdîl | m:uu |  |
| :--- | :--- | :--- |
|  | CFAnt1sFUT/IMM go.PI CFCo1sFUT/IMM.P. | see.PI |
| b. 'If I would go, I would see it' |  |  |
| c. 'If I had gone (earlier today), I would have seen it', also 'I should |  |  |
|  | have gone to see it' |  |

Similar remarks hold for the conflation of Near Past (yesterday) and Remote Past (before yesterday). There follow some examples to show how the forms are used, grouped by the two main tense distinctions. These exemplifications will make clear the disambiguating role of the post-verbal clitics and the verb suppletions. For example, the conditional proclitic w:ee itself has a range of meanings including Near Past or Remote Past, $1^{\text {st }}$ Dual or $2^{\text {nd }}$ Plural, but in w:ee lee dmi ('If you3 had gone yesterday') the interpretation must be Near Past because the enclitic $d m i$ is restricted to the three proximal tenses, and it must be $2^{\text {nd }}$ person because $d m i$ is plural not dual. Or take $p: e e$, Counterfactual consequent with Near Past or Remote Past, $1^{\text {st }}$ person Dual or $2^{\text {nd }}$ person Plural interpretation; in $p$ :ee m:uu ngmê ('Then you3 would have seen it yesterday') it can only mean Near Past $2^{\text {nd }}$ person because transitive enclitic ngmê requires a proximal tense, and a Polyfocal (non $1^{\text {st }}$ person) subject (and $3^{\text {rd }}$ singular object). Sometimes too the suppletive verb root serves an essential purpose: wo could mean 3 rd person Near or Remote Past, but wo lê indicates Near Past because the Remote Past would require loo as the suppletive form of the verb. Note that Remote Past suppletions may be lost if the verb belongs to a class with 'followed roots' (i.e. a special root if there is a following enclitic) - but in that case the following enclitic is likely to carry the tense information. For example, compare pî módu 'then he would have seen it before yesterday' with a Remote Past root módu, and pî m:uu ngópu 'then they would have seen it before yesterday' with a tenseless followed root m:uu but a Remote Past enclitic for a polyfocal subject. Such computations - calculations of intersecting marking strategies - lie at the heart of the language, and are very nicely illustrated in the Counterfactual forms.
(445) Future/Immediate Past (Today/Tomorrow)

| a. | wuchi | lê, pichi | m:uu |
| :--- | :--- | :--- | :--- |
| CFAnt2sFUT/IMM.P. | go.PI CFCon2sFUT/IMM.P. | see.PI |  |
| 'If you had come, you would have seen it' |  |  |  |


| b. waa lê, paa | m:uu |  |
| :--- | :--- | :--- |
| CFAnt3FUT/IMM.P. | go.PI CFCon3FUT/IMM.P. | see.PI |
| 'If he had come, he would have seen it' |  |  |

c. wudnye lee knî, pîdnye m:uu CFAnt1d.FUT/IMM.P. go.PI PROXPI.d CFCon1d.FUT/IMM.P. see.PI 'If we2 had come, we would have seen it'
d. wudu lee knî, pudu

CF.Ant.2d.FUT/IMM.P. go.PI d.Intrans CF.Cons2d.FUT/IMM.P. m:uu ngmê
seePI PFS3sOPROXTrans
'If you had come, you2 would have seen it’
e. wudmyo lee dmi,

CFAnt3PlFUT/IMM.P. go.PI plS.Intrans
pîdmyi m:uu ngmê
CFCons3PIFUT/IMM.P. see PFS.3sObject.WEAK
'If you3 had come, you3 would have seen it'
f. wudu lee dmi, pudu

CF.Ant1pl.FUT/IMM.P. go.PI plSIntrans CFCons1PlFUT/IMM.P. m:uи
see
'If we3 had gone, we3 would have seen it'
g. waa lê, paa m:uu

3IMM/FUT.P.CF.Ante go.PI 3IMM/FUT.P.CF.Consq see
'If he had gone, he would have seen it'
h. waa lee knî, paa m:uu

CFAnt3IMM/FUT.P. go.PI dS.Intrans CFCons3IMM/FUT.P. see
ngmê
PFS3sO
'If they2 had gone, they2 would have seen it'
i. waa lee dmi, paa m:uu

CFAnt3IMM/FUT.P. go.PI plS.Intrans CFCons3IMM/FUT.P. see ngmê
PFS3sO
'If they3 had gone, they would have seen it'
(446) Near Past (Yesterday - as disambiguated by verb root and enclitic)

| a. w:aa | lê, $\quad p: a a$ | $m: u u$ |  |
| :--- | :--- | :--- | :--- |
| CFAnt1sNrPST/REMP. | go.PI | CFCons1sNrPST/REMP. | see |
|  | 'If I had gone (yesterday), I would have seen it' |  |  |



The Remote Past is often disambiguated not only by the post-verbal clitics but also by verb root suppletion:

'If they 3 had gone (before yesterday), they $2 / 3$ would have seen it'

There are at least some forms for the Habitual Mood which may be more analytic, but I have no full paradigm, partly because it is hard to concoct plausible scenarios, unlike the corresponding forms for the Continuous aspect:


```
    Mass CFAnt3PAST.HAB do affairs 1plPOSS knowledge NEG
    p\imatĥ tóó
    CFCons3IMMC sitting
    'If (the priest) didn't say mass, we would know nothing'
```

The consequent here is in the continuous aspect, our next subject, indicating that a punctual antecedent can go with a continuous consequent.

### 8.3.1.2 Continuous aspect

The continuous aspect distinguishes the full range of tenses, and there are also some special forms for equational sentences of the form 'If you were an X'. The following table (8.5) gives the forms.

Table 8.5: Counterfactual Conditional proclitics - Continuous aspect.

| Tense/ Mood | Subject <br> Person | Antecedent |  |  | Consequent |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Subject Number |  |  | Subject Number |  |  |
|  |  | Singular | Dual | Plural | Singular | Dual | Plural |
| Future/ Present | 1 | wunê | w:ee | w:oo | pênê | p:ee | pun:oo |
|  | 2 | w:ee | wodo | w:ee | p:ee | po | pînmyi |
|  | 3 | wo | wo | wo | pê | pê | pê |
| Immediate Past | 1 | w:aa | w:ee | w:oo | p:aa | p:ee | p:oo |
|  | 2 | w:ii | woo | w:ee | p:ii | poo | p:ee |
|  | 3 | wo | wo | wo | pî | pî | pî |
| Near Past | 1 | w:aa | wony:oo | wunê | p:aa | pêny:oo | pênmî |
|  | 2 | w:ii | wudu | wunmyi | p:ii | pudu | pînmyi |
|  | 3 | wudî/waa | wudu | wudnyi | paa | pudu | pêdnyi |
| Remote Past | 1 | wonoo | wonyipu | wonmee | ponoo | pênyipu | pênmee |
|  | 2 | wonyoo | wodpîmo | wonmyee | pênyoo | pêdpimo | pênmyee |
|  | 3 | wodoo | wodpîmo | wudnye | podoo | pêdpîmo | pîdnye |
| Habitual | 1 | wunê | w:ee | w:oo | pênê | p:ee | p:oo |
|  | 2 | w:ee | wodo | w:ee | p:ee | podo | p:ee |
|  | 3 | wo | wo | wo | pê | pê | pê |

Table 8.5 (continued)

| Tense/ Mood | Subject <br> Person | Antecedent |  |  | Consequent |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Subject Number |  |  | Subject Number |  |  |
|  |  | Singular | Dual | Plural | Singular | Dual | Plural |
| Equational <br> 'If you <br> were...' | 1 | w:aa | w:ee | w:oo | p:aa | p:ee | p:oo |
|  | 2 | w:ii | w:ee | w:ee | p:ii | p:ee | p:ee |
|  | 3 | wo | wo | wo | pê | $p \hat{e}$ | $p \hat{e}$ |

Notice certain features of this paradigm. An antecedent form like w:oo can be both Future ( $1^{\text {st }}$ plural) and Immediate Past (same person/number), but the consequent form is different in the two tenses (pun:oo vs. p:oo) - so disambiguating the whole conditional. Similarly for many other forms - once again, economy of form achieves gestalt signalling success, but at the expense of compositionality of the overall structure (as pointed out in §2.3). Notice too that person/number conflations follow the somewhat unpredictable patterns encountered in the general proclitics, with e.g. $3^{\text {rd }}$ person especially likely to go with loss of number, $2^{\text {nd }}$ and $3^{\text {rd }}$ Dual to conflate, etc. In general, as we have seen so often before, this is a paradigm that must be learned.

Once again, we need some examples to bring this to life. The following illustrate future/present uses, but they also illustrate the nature of the counterfactual clitics as strictly preverbal - nominals occurring between them and the verb must be incorporated, and the verb detransitivized. The phrase mbwo tpapê 'native-betel chewing' forms a complex intransitive verb with incorporated object - where the enclitic is non-null (as with dual subjects in proximate tenses as in d. below), one can see that the verb tpapê takes an intransitive enclitic. This verb however is a curious intransitive verb which can incorporate its 'object’ - it has counterpart transitive kuwo exemplified below.
(449) Present/Future
$\begin{array}{llll}\text { a. wunê } & \text { mdono, pênê } & \text { mdono } \\ \text { CFAnt1sFUT/PRS.C. doCI } & \text { CFCons1sFUT/PRS.C. doCI }\end{array}$ 'If I were doing it, I would be doing it (but I'm not, so why are you blaming me)?'
b. wunê dpodo, pênê mbwo

CFAnt1sFUT/PRS.C. doCI CFCons1sFUT/PRS.C betel.sp tpapê
chewing
'If I were working, I would be chewing betel'

```
c. w:ee dpodo, p:ee mbwo
    CFAnt2sFUT/PRS.C. doCI CFCONS2sFUT/PRS.C. betel.sp
    tpapê
    chewing
    'If you1 were working, you would be chewing betel'
d. wodo dpodo mo,
    CFANT2dFUT/PRS.C. doCI dS.PROXIntrans
    po mbwo tpapê mo
    CFANT2dFUT/PRS.C. betel.sp chewing d.CIPRS/FUT.Intrans
    'If you2 were working, you2 would be chewing betel'
e. wodpîmo dpodo, pêdpîmo mbwo tpapê
    CFANT2dREM.C. doCI CFCons2dREMC betel.sp chewing
    'If you2 had been working (before yesterday), you2 would have been
    chewing betel'
```

Although the main point here is that the counterfactual proclitics operate just like indicative proclitics, the alternation between incorporated and non-incorporated objects also makes clear the special position of incorporated objects between proclitic and verb (§7.9.4). In example (450)a. below one has the minimal sentence without NPs, in b. we have an Absolutive subject NP in the antecedent outside the verbal complex of course, and an Object NP incorporated inside the complex in the consequent. In c. we have a non-incorporated version with a quantified NP object.

| a. | wo | dpodo, | pê | mbwo tpapê |
| :--- | :--- | :--- | :--- | :--- |
| CFAnt3PRS/IMMC | workCI | CFCons3PRS/IMMC | betel.sp | chewing | 'If he were working he would chewing betel'

b. Father Mathew awedê wo Father Mathew today CFAnt3PRS/IMMC dpodo, pê mbwo tpapê workCI CFCons3PRS/IMMC betel.sp chewing 'If Father Mathew would have been working today, he would have been betel-chewing away'
c. Father Mathew awedê wo dpodo,

Father Mathew today CFAnt3PRS/IMMCI workCI
mbwo yil̂̂ pê kuwo
betel.sp much CFCons3PRS/IMMCI chewing
'If Father Mathew would have been working today, he would have been chewing much native betel'

The following example shows that continuous aspect antecedents can have punctual consequents:
a. Father Mathew Tili awedê wo dpodo

Father Mathew Tili today CFAnt3PRS/IMMC working 'If Father Matthew and Tilly were working today, mo, nkéli mbwaa paa chedê dS.CIProx boat water CFCon3IMMP finish they would have used up the fuel'
b. wodpîmo dpodo, Alotau p̂̀ lee

CFAnt2/3dREM.C working Alotau CFCons3REM.P go.FOL knâpwo dS.REM. 'If they2 had been working, they would have gone to Alotau' (PI)

The following examples illustrate different person/number configurations in the Remote Past tense in the continuous aspect. Notice for example that in the Remote Past cases with e.g. dual subjects there are no corresponding verbal enclitics - this follows the general rule that Remote Past Continuous Indicative Intransitive sentences don’t take postverbal enclitics (Table 6.35).

| a. wonoo $\quad$ dpodo, ponoo | mbwo tpapê |
| :--- | :--- | :--- | :--- |
| CFAnt1sREMCI working | CFCons1sREMCI betel.sp chewing |
| 'If I had been working, I would have been chewing (whatever the rules)' |  |
| (Remote Past) |  |

b. wonoo dpodo, school fees p:aa módu CFAnt1sREMCI working school fees CFCons1sREMPI see.REM 'If I had been working, I would have been putting school fees aside' (Remote Past)
c. wonyipu dpodo, pênyipu nkéli mbwaa ndan̂̂ CFAnt1dREMCI working CFCons1dREMCI boat water drinking 'If we2 had been working, we would have been drinking beer' (Remote Past)
d. wodpîmo dpodo, pêdpîmo nkéli mbwaa ndan̂̂ CFANT2dREMCI working CFCons boat water drinking 'If you2 had been working, you2 would have been drinking beer' (Remote Past)
e. wodoo dpodo, podoo nkéli mbwaa ndanê CFAnt3sREMCI working CFCons3sREMCI boat water drinking 'If he had been working he would have been drinking beer' (Remote Past)

## f. wodpîmo dpodo, pêdpîmo nkéli mwaa ndanê CFAnt3dREMCI working CFCons3dREMCI boat water drinking 'If they 2 had been working, they 2 would have been drinking beer' (Remote Past)

The following examples illustrate other tenses. Note the two small vowel changes in example (453)h. vs. i., which make the contrast Near vs. Remote Past (the same alternation as in the non-counterfactual paradigm).

f. ma wunê dpodo, pênmî mbwaa yesterday CFAnt1plNrPSTCI working CFCons1plNrPSTCI water ndan̂̂
drinking
'If we3 (yesterday) had been working, we3 would have been drinking beer (yesterday)' (Near Past)
g. wunmyi dpodo, pînmyi mbwaa ndan̂̂ CFAnt2plNrPSTCI working CFCons2plNrPST water drinking 'If you3 (yesterday had been working, you would have been drinking beer (yesterday)' (Near Past)
h. wudnyi dpodo, pêdnyi mbwaa ndan̂̂ CFAnt3plNrPSTCI working CFCons3plNrPSTCI water drinking 'If they3 (yesterday) had been working, they3 would have been drinking beer (yesterday)' (Near Past)
i. wudnye dpodo, pîdnye mbwaa ndan̂̂ CFAnt3plREMCI working CFCons3plREMCI water drinking 'If they3 had worked (day before yesterday), they 3 would have drunk beer (day before yesterday') (Remote Past)
j. wonmee dpodo, pênmee mwaa ndan̂̂ CFAnt1plREMCI working CFCons1plREMCI water drinking 'If we3 had worked (day before yesterday), we3 would have drunk beer (day before yesterday') (Remote Past)
k. wonmyee dpodo, pênmyee mbwaa CFAnt2pIREMCI working CFCons2plREMCI water ndanî drinking 'If you3 had been working (day before yesterday), you3 would have drunk beer (day before yesterday)’, (Remote Past)

There are also forms for the Habitual mood, as indicated in the table. Here are some examples:
(454) a. wo lêpî yédi, pê mumu

CFAnt3HABC going sSHABIV CFCons3HABC seeing
ngê
MFS3sOHABC
'If it had been the case that he habitually went, he would have habitually seen it'
b. wodo dpodo mo, podo nkéli mbwaa

CFAnt2dHABC working plSIV CFCons2dHABC boat water ndanî mo
drinking plSIV
'If you2 were habitually working, you2 would be habitually drinking beer’
c. w:oo dpodo té, p:oo nkéli mbwaa

CFAnt1plHABC working plSIV CFCons1plHABC boat water ndanı̂ té
drinking plSIV
'If we3 were habitually working, then we3 would be habitually drinking beer’

In addition, equative sentences could be construed as having a similar aspect to Continuous aspect sentences. Some examples of equational counterfactuals follow.

| a. w:aa | council, | p:aa | mââwe |
| :--- | :--- | :--- | :--- |
| CFAnt(Equ)1s | councillor | CFCons(Equ)1s | big.man |
| 'If I was councillor, I would be a big man' |  |  |  |

b. wo council, pê mââwe

CFAnt(Equ)3 councillor CFCons(Equ)3 big.man
'If he was councillor, he would be a big man'
c. w:ii mââwe, p:ii ndeepi

CFAnt(Equ)2s big.man CFCons(Equ)2s rich.man
'If you1 were a mââwe, you would be rich in ndap'
d. w:oo pi ngmêmî dé, p:oo

CFAnt(Equ)1pl man unmarried PL CFCons(Equ)1pl
vyipi dé
good.fisherman PL
'If we3 were young men, we would be good fishermen'
e. w:ee pyââ dé, p:ee dpodo módó

CFAnt(Equ)2pl woman PL CFCons(Equ)2pl working girl
mb:aa yoo
good PL(Hum)
'If you3 were women, you would be good working girls'

Finally, as mentioned, the individual clauses have deontic uses, similar to the imperatives, but also 'should' in the sense of 'it would have been rational if' as in example (456)c.:
(456)
a. w:ee tp:ee knî ye vyuwo

CFAnt2s child AUG to them look after
'You should/must look after the children'
b. p:ee tp:ee knî ye vyuwo

CFCons2s child AUG to them look after
'You should/must look after the children'
c. Y:oonkigha yâpwo u mênê ngmê pê tóó,

Yonga.Bay sacred.area inside INDF CFAnt3EQU sitting yâpwo mê pyeede té,
gods also sitting.pl plSPRSC.IV
'At Yonga there should have been a sacred area, (because) there are many gods there'

### 8.3.2 Negative counterfactuals

The negative counterfactuals have their own paradigms, provided below in two tables, one for the punctual (Table 8.6) and one for the continuous aspect (Table 8.7), treated in the following sections. After each table there follows a complete set of examples exemplifying the paradigm - it is important to see how negative counterfactual proclitics which sometimes collapse tenses are disambiguated by the enclitics and verb stems. Note that negation is analytic (marked by NEG daa) in many but not all of the Punctual antecedents (cf. Table 6.27 in §6.1.4.1) and consequents, and in most of the Continuous paradigm, but there are exceptions so the paradigms nevertheless have to be learnt.

### 8.3.2 1 Punctual aspect, negative counterfactuals

Table 8.6: Negative Counterfactual proclitics - Punctual aspect (Positive form in non-bold, Negative in bold for comparison).

| IF | sing | dual | pl | THEN | sing | dual | pl |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Distal FUT <br> SAME as |  |  |  |  |  |  |  |
| Imm Past* |  |  |  |  |  |  |  |$\quad$|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Imm Past | wudî/ <br> wud:oo/ <br> wud:aa <br> (+close?) | wu dnye <br> wo <br> dny:oo | wudu <br> wo <br> dp:oo |  |
| 1 |  |  |  |  |

Table 8.6 (continued)

| IF | sing | dual | pl | THEN | sing | dual | pl |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Distal FUT |  |  |  |  |  |  |  |
| SAME as |  |  |  |  |  |  |  |
| Imm Past* |  |  |  |  |  |  |  |
| 2 | wuchi | wudu | wudmyo |  | pichi | pudu | pîdmyi |
|  | wuchoo | wo dpo | wo |  | daa | daa | daa pîdmyi |
|  |  |  | dmy:00 |  | pichi | pudu |  |
| 3 | waa | waa | waa |  | paa | paa | paa |
|  | wudoo | wodoo | wodoo |  | daa paa | daa paa | daa paa |
| Near Past | w:aa | w:ee | w:oo |  | p:aa | p:ee | p:oo |
| 1 | wo dîpî | wo dipi | wo dpîpî |  | daa p:aa | daa p:ee | daa p:oo |
| 2 | w:ii | woo | w:ee |  | $p: i i$ | poo | p:ee |
|  | wo dîpî | wo dpîpî | wo dpîpî |  | daa p:ee | daa poo | daa p:ee |
| 3 | wo | wo | wo |  |  | pî |  |
|  | wudaa | wodaa | wodaa |  | daa pê | daa pê | daa pê |
| Rempast | w:aa | w:ee | w:oo |  | p:aa | p:ee | p:oo |
| 1 | wo dîpî | wo dîp:ee | wo dpîpî |  | daa p:aa | daa p:ee | daa p:oo |
| 2 | w:ii | woo | woo |  | p:ii | poo | p:ee |
|  | wo dipi | wo dpîpî | /?w:ee |  | daa p:ee | daa poo | daa p:ee |
|  |  |  | wo dpîpî |  |  |  |  |
| 3 | wo | wo | wo |  | pî | pî | pî |
|  | wo daa | wo daa | wo daa |  | daa pî | daa pê | daa pê |

The following examples exemplify parts of the paradigm. Negative counterparts in bold follow positive examples. Recollect that negation often shifts tense, so that Remote Past verb stems and enclitics can collocate with Immediate Past (if there is an enclitic it will carry the tense shift, since the verb may have the followed root form). For example:


The following forms are in the Immediate Past tense, which is equally used for the Present and Future (as disambiguated by temporal adverbials). Positives are given first, with negative counterparts in bold, for comparison. Recollect in this tense negatives shift to Remote Past tense (cf. example (458)b. to b'. below):

```
(458) a. wudî lê, pîdî m:uu
    CFAnt1sIMM.P go CFCons1sIMMP see
    'If I had come (today) I would have seen it (I should have gone and
    seen it)'
b. wud:oo/wud:a loo, daa pîdî̀ m:uu
    NEGCFAnt1sIMM.P go.REM NEG CFCons1sIMM.P see
    'If I had not gone today, I would not have seen it'
b'.wud:a lê, daa pîdê m:uu
    NEGCFAnt1sNrPST.P go NEG CFCons1sIMM.P see
    'If I had not come yesterday, I would not have seen it'
c. wuchi lê, pichi m:uu
    CFAnt2sIMM.P go CFCons2sIMM.P see
    'If you had come (today) you would have seen it'
d. wuchoo loo, daa pichi m:uu
    NEG.CFAnt2sIMMP go.REM NEG CFCons2sIMM.P see
    'If you had not come (today) you would not have seen it'
e. waa lê, paa m:uu
    CFAnt3sIMM.P go CFCons3s see
    'If he had come (today), he would have seen it'
f. wudoo loo, daa paa m:uи
    NEG.CFAnt3sIMM.P go.REM NEG CFCons3IMM.P see
    'If he had not come today he would not have seen it'
g. wudnye lee knî, pîdnye m:uu
    CFAnt1dIMM.P go.fol d.PI.IV CFCons1dIMM.P see
    'If we2 had gone (today) we would have seen it'
h. wo dny:oo lee knâpwo, daa pêdnye m:uu
    NEG.CFAnt1dIMM.P go.fol dREM.P.IV NEG CFCons1dIMM.P see
    'If we2 hadn't gone (today) we wouldn't have seen it'
i. wudu lee knî, pudu m:uu ngmê
    CFAnt2dIMM.P go.fol d.PI.IV CFCons2dIMM.P see PFS.3sO
    'If you2 had gone (today), you2 would have seen it'
j. wo dpo lee knâpwo, daa pudu m:uu
    NEG.CFAnt2dIMM.P go.fol dREM.P.IV NEG CFCons2dIMM.P see
    ngmê
    PFS.3sO
    'If you2 had not gone (today), you2 would not have seen it'
```

k. wudmyo lee dmi, pîdmyi m:uu

CFAnt2plIMM.P go.fol plS.P.IV CFCons2plIMM. see ngmê (you3)
PFS.3sO
'If you3 had gone (today), you would have seen it'

1. wo dmy:oo lee dniye, daa pîdmye m:uu

CFAnt2plIMM.P go.fol plS.REM.IV NEG CFCons2plIMM.P see ngmê
PFS.3sO
'If you3 had not gone (today), you3 would not have seen it'
m. wudu lee dmi, pudu m:uu (we3)

CFAnt1plIMM.P go.fol plS.P.IV CFCons1plIMM.P see
'If we3 had gone (today) we would have seen it'
n. wo dp:o lee dniye, daa pudu

NEG.CFAnt1plIMM.P go.fol plS.REM.IV NEG CFCons1plIMM.P m:uи
see
'If we3 had not gone (today), we would not have seen it'
o. waa lee knî, paa nm:uu ngmê

CFAnt3dIMM.P go.fol dSPI.IV CFCons3dIMM.P see PFS.3sO
'If they 2 had gone (today), they 2 would have seen it'
p. wodoo lee knâpwo, daa paa

NEGCFAnt3dIMM.P go dSREMPI.IV NEG CFCons3dIMM.P
m:uu ngmê
see PFS.3sO
'If they2 hadn't gone (today) they would not have seen it'
q. waa lee dmi, paa m:uu

CFAnt3plIMM.P go.fol plSIMM.IV CFCons3plIMMP see ngmê
PFS.3sO
'If they3 had gone, they would have seen it'
r. wodoo lee dniye, daa paa

NEGCFAnt3IMM.P go.fol plS.REM.IV NEG CFCons3dIMM.P
m:uu ngmê
see PFS.3sO
'If they3 had not gone, they would not have seen it'

Examples for the Near Past tense (yesterday) follow (here there is no tense shift):

```
(459)
a. w:aa lê, p:aa m:uи
    CFAnt1sNrPSTP go, CFCons1sNrPSTP see
    'If I had gone yesterday, I would have seen it'
b. wo dîp̂̂\imath lê, daa p:aa m:uu
    NEGCFAnt1NrPSTP go NEG CFCons1dNrPSTP see
    'If I had not gone yesterday I would not have seen it'
c. w:ee lee knî, p:ee m:uu
    CFAnt1dNrPSTP go dSNrPST.IV CFCons1dNrPSTP see
    'If we2 had gone yesterday we would have seen it'
d. wo dipi lee knî, daa p:ee
    NEGCFAnt1NrPSTP go.fol dSNrPST.IV NEG CFCons1dNrPSTP
    m:uи
    see
    'If we2 hadn't gone yesterday we2 wouldn't have seen it'
e. w:oo lee dmi, p:oo m:uu
    CFAnt1plNrPSTP go plSNrPSTIV CFCons1plNrPSTP see
    'If we3 hadn't gone yesterday, we would not have seen it'
f. wo dpîpî lee dmi, daa p:oo
    NEG.CFAnt1plNrPST go.fol plSNrPSTIV, NEG CFCons1plNrPSTP
    m:uи
    see
    'If we3 had not gone yesterday, we wouldn't have seen it'
g. w:ii lê, p:ii m:uu
    CFAnt2sNrPSTP go CFCons2sNrPSTP see
    'If you1 had gone yesterday you would have seen it'
h. wo dîp\imatĥ lê, daa p:ee m:uu
    NEG.CFAnt2sNrPSTP go NEG CFCons2NrPSTP see
    'If you1 hadn't gone yesterday, you wouldn't have seen it'
i. woo lee knî, poo m:uu
    CFAnt2dNrPSTP go.fol dSNrPST.IV CFCons2dNrPSTP see
    ngmê
    PFS.3sO
    'If you2 had gone yesterday you2 would have seen it'
j. wo dpîp\hat{\imath} lee kn\hat{\imath}, daa poo
    NEGCFAnt2dNrPSTP go.fol dSNrPST.IV NEG CFCons2dNrPSTP
    m:uu ngmê
    see PFS.3sO
    'If you2 hadn't gone yesterday you2 wouldn't have seen it'
```

k. w:ee lee dmi, p:ee m:uu

CFAnt2plNrPSTP go.fol plSNrPSTIV CFCons2plNrPSTP see ngmê
PFS.3so
'If you3 had gone yesterday you3 would have seen it'

1. wo dpîpî lee dmi, daa p:ee

CFAnt2plNrPSTP go.fol plSNrPSTIV NEG CFCons2plNrPSTP
m:uu ngmê
see PFS.3sO
'If you3 had not gone yesterday, you3 would not have seen it'
m. wo lê, pî m:uu

CFAnt3NrPSTP go, CFCons3NrPSTP see
'If he had gone, he would have seen it'
n. wudaa lê, daapêe m:uu

CFAnt3NrPSTP go NEG.CFCons3NrPSTP see
'If he hadn't gone he wouldn't have seen it (yesterday)'
o. wo lee knî, pî m:uu

CFAnt3NrPSTP go.fol dSNrPST.IV CFCons3NrPSTP see
ngmê
PFS.3sO
'If they 2 had gone, they $2 / 3$ would have seen it'
p. wodaa lee knî, daa pê

CFAnt3d/plNrPSTP go.fol dSNrPST.IV NEG CFCons3NrPSTP m:uu ngmê
see PFS.3sO
'If they2 hadn't gone they wouldn't have seen it'
q. wo lee dmi, pî m:uu

CFAnt3NrPSTP go.fol plSNrPSTIV CFCons3NrPSTP see
ngmê (they3)
PFS.3sO
'If they3 had gone yesterday they would have seen it'
r. wodaa lee dmi, daa pê

CFAnt3d/plNrPSTP go.fol plSNrPST.IV NEG CFCons3NrPSTP
m:uu ngmê
see PFS.3sO
'If they3 had not gone, they would not have seen it'

There follows some exemplification of the Remote Past (i.e. expressing thoughts about things that might have happened before yesterday).

```
(460) a. w:aa loo, p:aa módu
    CFAnt1sREMP go.REM CFCons1sREMP see.REM
    'If I had gone (before yesterday) I would have seen it'
b. wo dîpî loo, daa p:aa módu
    NEG.CF1REMP go.REM NEG CFCons1sREMP see.REM
    'If I had not gone (before yesterday) I would not have seen it'
c. w:ee lee knâpwo, p:ee módu
CFAnt1dREMP go.fol dREMP.IV CFCons1sREMP see.REM
'If we2 had gone (before yesterday), we2 would have seen it'
d. wo dîp:ee lee knâpwo, daa p:ee módu
NEGCFAnt1dREMP go.fol dSREMP NEG CFCons1sREMP see.REM
'If we2 had not gone (before yesterday), we would not have seen it'
e. w:oo lee dniye, p:oo módu
CFAnt1plREMP go.fol plSREMP.IV CFCons1plREMP see.Rem
'If we3 had gone (before yesterday), we3 would have seen it'
f. wo dpîp̂̂ lee dniye, daa p:oo módu
    CFAnt1REMP go.fol plSREMP.IV NEG CFCons1plREMP see.REM
    'If we3 had not gone (before yesterday), we would not have seen it'
g. w:ii loo, p:ii módu
    CFAnt2sREMP go.REM CFCons2sREMP see.REM
    'If you1 had gone (before yesterday) you1 would have seen it'
h. wo dipi loo, daa p:ee módu
    NEG.CF2REMP go.REM NEG CFCons2sREMP see.REM
    'If you1 had not gone you would not have seen it'
i. woo lee knâpwo, poo m:uu
    CFAnt2dREMP go.fol d.REMP.IV CFCons2dREMP see
    ngópu
    PFS3sOREMP
    'If you2 had gone (before yesterday) you would have seen it'
j. wo dpîp\hat{\imath} lee knâpwo, daa poo m:uu
    CFAnt2sREMP go.fol d.REMP.IV NEG CFCons2dREMP see
    ngópu
    PFS3sOREMP
    'If you2 hadn't gone before yesterday you would not have seen it'
k. w:ee lee knâpwo, p:ee m:uu
    CFAnt1dREMP go.fol plSREMP.IV CFCons1dREMP see
    ngópu
    PFS3sOREMP
    'If we2 had gone (before yesterday) we2 would have seen it'
```

1. wo dpîp̂̂ lee knâpwo daa p:ee

NEG.CFAnt1REMP go.fol plSREMP.IV NEG CFCons1dREMP
m:uu ngópu
see PFS3sOREMP
'If we2 had not gone (before yesterday) we would not have seen it'
m. w:oo lee dniyé, p:oo m:uи

CFAnt1plREMP go.fol plSREMP.IV CFCons1plREMP see
ngópu
PFS3sOREMP
'If we3 had gone (before yesterday) we3 would have seen it'
n. wo dpîp̂̂ lee dniye, daa p:oo

NEG.CFAnt1REMP go.fol plSREMP.IV NEG CFCons1plREMP
m:uu ngópu
see PFS3sOREMP
'If we3 had not gone (before yesterday) we would not have seen it'
o. wo loo, p̂̂ módu (he)

CFAnt3REMP go.REM CFCons3REMP see.REM
'If he had gone (before yesterday) he would have seen it'
p. wo daa loo, daa pî módu

NEG.CFAnt3RMP goREM NEG CFCons3REMP see.REM
'If he hadn't gone he wouldn't have seen it ${ }^{\prime}$
q. wo lee knâpwo, p̂̀ m:uu

CFAnt3RMP go.fol dSREMP.IV CFCons3REMP see.fol ngópu
PFS3sOREMP
'If they 2 had gone before yesterday, they would have seen it'
r. wo daa lee knâpwo, daa pê

NEG.CFAnt3RMP go.fol dSREMPIV NEG CFCons3d/plREMP
m:uu ngópu
see.fol PFS3sOREMP
'If they 2 had not gone before yesterday, they would not have seen it'
s. wo lee dniye, p̂̀ m:uu

CFAnt3RMP go.fol plSREMP.IV CFCons3REMP see.fol
ngópu (they3)
PLS3sOREMP
'If they3 had gone, they would have seen it'
t. wo daa lee dniye, daa pê

NEGCFAnt3RMP go.fol plSREMP.IV NEG CFCons3d/plREMP
m:uu ngópu
see.fol PFS3sOREMP
'If they 3 had not gone, they would not have seen it'

Unlike with the Continuous counterfactuals, I was unable to elicit systematic punctual habituals, positive or negative.

### 8.3.2.3 Continuous aspect: Negative counterfactuals

Table 8.7: Negative Counterfactual proclitics - Continuous aspect (Positives in roman, corresponding Negatives in bold).

| TENSE, | SING |  | DUAL |  | PLURAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | If | then | If | then | If | then |
| Future/ Present |  |  |  |  |  |  |
| 1 | wunê wo dinê | pênê daa p:aa | w:ee wo dipi | p:ee <br> daa p:ee | w:oo <br> wo dpîpî | pun:oo <br> daa pon:oo |
| 2 | $\begin{aligned} & \text { w:ee } \\ & \text { d:ee } \end{aligned}$ | p:ee daa nyi | wodo wo dpîdoo | po / podo daa poo | w:ee wodaa | pînmyi daa pînmyi |
| 3 | wo wo daa | $p \hat{e}$ daa pê | wo wo dipi | pê daa p:ee | wo wo daa | pê daa pê |
| Imm Past (today) |  |  |  |  |  |  |
| 1 | w:aa <br> wo dî nê | p:aa daa p:aa | w:ee wo d:ee | p:ee daa p:ee | w:oo <br> wo dpînê | $\begin{aligned} & p: o o \\ & \text { daa p:oo } \end{aligned}$ |
| 2 | w:ii wochoo | p:ii <br> daa pichi | woo wo dpîpî | poo <br> daa poo | w:ee w:ee dp:ee | p:ee <br> daa p:ee |
| 3 | wo wo daa | pî daa pî | wo wo daa | pî daa pî | wo wo daa | pî daa pî |
| Near Past (yesterday) |  |  |  |  |  |  |
| 1 | w:aa <br> wo dê <br> nê | p:aa <br> daa p:aa | wony:oo wo dipi | pêny:oo daa p:ee | wunê wo dê nê | pênmî daa p:aa |
| 2 | w:ii wodipi | $p: i i$ daa p:ee | wudu wo dpo | pudu daa pudu | wu nmyi wo dê nmyi | pînmyi daa pînmyi |
| 3 | waa <br> wo dê dî | paa <br> daa paa | wudu wo dê dpî | pudu daa pê dpî | wu dnyi wo dê dnyi | pêdnyi daa pêdnyi |

Table 8.7 (continued)

| TENSE, PERSON | SING |  | DUAL |  | PLURAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | If | then | If | then | If | then |
| Rem Past (before yesterday) |  |  |  |  |  |  |
| 1 | wonoo wo dê noo | ponoo <br> daa <br> ponoo | wonyipu <br> wo dê <br> nyipu | pênyipu <br> daa <br> pênyipu | wonmee <br> wo dê <br> nmee | pênmee daa pênmee |
| 2 | wonyoo | pênyoo | wodpîmo <br> wo <br> dêdpîmo | pêdpîmo <br> daa pê <br> dpîmo | wonmyee wo dê nmyee | pênmyee <br> daa <br> pênmyee |
| 3 | wodoo <br> wo <br> dêpwo | podoo <br> daa <br> podoo | wodpîmo <br> wo <br> dêdpîmo | pêdpîmo <br> daa <br> pêdpîmo | wudnye wo dê dnye | pîdnye daa pêdnye |
| Hab |  |  |  |  |  |  |
| 1 | wunê wo dî nê | pênê daa p:aa | w:ee <br> wo d:ee | p:ee <br> daa p:ee | w:oo <br> wo dpîn:oo | p:oo <br> daa pono/ pên:oo |
| 2 | w:ee wod:ee | p:ee daa p:ee | wodo wo dpî doo | podo daa poo | w:ee wo dp:ee | p:ee <br> daa p:ee |
| 3 | wo <br> wo daa | $p \hat{e}$ daa pê | wo wo daa | $p \hat{e}$ daa pê | wo wo daa | pê daa pê |

## EXISTENCE

"If you
were"

| $\mathbf{1}$ | w:aa | p:aa | w:ee | p:ee | w:oo | p:oo |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| wa d:aa | d:aa p:aa | wo d:ee | daa p:ee | wo dp:oo | daa p:oo |  |
| $\mathbf{2}$ | w:ii | p:ii | woo | poo | w:ee | p:ee |
|  | wo d:ii | daa p:ee | wo dpo | daa poo | wo dp:ee | daa p:ee |
| $\mathbf{3}$ | wo | pê | wo | pê | wo | pê |
|  | wo daa | daa pê | wo daa | daa pê | wo daa | daa pê |

The negative continuous counterfactuals offer a full paradigm, complete with Habitual aspect as shown in Table 8.7 (organized in a slightly different way to the punctual paradigm). Note that the negatives in the table appear more analysable than they actually are: whereas the negative consequents often merely differ from the positives by a preposed daa, the antecedents like wo dî nê look analysable but aren't (there is no collocation dî nê elsewhere in this or other paradigms). However for many of the forms more analytic alternatives seem possible. For example the
forms wudu . . .pudu, $3^{\text {rd }}$ person dual Near Past, apparently have the alternatives wo $d p \hat{\imath} . .$. paa dpî where $d p \hat{\imath}$ is the regular $3^{\text {rd }}$ Person Dual for this tense in the indicative.

It is notable that important contrasts are carried by as little as single subtle vowel changes - cf. for example Near Past $3^{\text {rd }}$ Person Plural wo dê dnyi. . .daa pêdnyi and Remote Past $3^{\text {rd }}$ Person Plural wo dnê dnye . . .daa pêdnye. These are genuine contrasts.

Here we will just selectively illustrate with some exemplars of the table above. Note that mbwo tpapê 'chewing native betelnut' is a customary activity typically with nominal incorporation, which renders a transitive verb into an intransitive one - the nominal will then fall between the proclitic and the verb. We start with the Present tense.

| a. wunê | dpodo, pênê | mbwoo tpapê |
| :--- | :--- | :--- | :--- |
| CFAnt1sPRSC working CFCons1sPRSC betel | chewing |  |
| 'If I would be working (now), I would be chewing' |  |  |

b. wo dînê dpodo, daa p:aa mbwoo tpapê

NEGCFAnt1sPRSC working NEG CFCons1sPRSC betel chewing 'If I was not working I would not be betel chewing'
c. w:ee dpodo, p:ee mbwo tpapê

CFAnt2sPRSC working CFCons2sPRSC betel chewing
'If you1 were working (now) you would be betel chewing'
d. d:ee dpodo, daa p:ee mbwo tpapê

NEGCFAnt2sPRSC working NEG CFCons2sPRSC betel chewing 'If you1 were not working (now) you1 would not be betel chewing'
e. wodo dpodo mo, podo mbwo

CFAnt2dPRSC working dSPRSC.IV CFCons2dPRSC betel tpapê mo
chewing dSPRSC.IV
'If you2 were now working, you would be betel chewing'
f. wodpîdoo dpodo mo, daa p:oo

NEGCFAnt2dPRSC working plSPRSC.IV NEG CFCons2sPRSC
mbwo tpapê mo
betel chewing plSPRSC.IV
'If you2 were not now working, you2 would not now be betel chewing’
g. w:ee dpodo té, pînmŷ̂

CFAnt2plPRSC working plSPRSC.IV CFCons2plPRSIV mbwo tpapê té
betel chewing plSPRSC.IV
'If you3 were now working, you3 would be betel chewing’


Some examples in Near Past tense (yesterday) follow.

| a. w: $\quad$ dpodo, p:aa | mbwo tpapê |
| :--- | :--- | :--- |
| CFAnt1sIMMC working CFCons1sIMMC betel chewing |  |
| 'If I had been working (yesterday) I would have been betel chewing' |  |

b. wo dî nê
dpodo, daa p:aa
mbwo tpapê
NEGCFAnt1sIMMC working NEG CFCons1sIMMC betel chewing 'If I hadn’t been working (yesterday) I wouldn’t have been betel chewing’
c. woo dpodo mo, poo mbwo

CFAnt2dIMMC working pISPROXC.IV CFCons2dIMMC betel tpapê mo
chewing plSPROXIV
'If you2 had been working yesterday, you2 would have been chewing'
d. wo dpîpî dpodo mo, daa poo

NEGCFAnt2dIMMC working plSPROXIV NEG CFCons2dIMMC mbwo tpapê mo
betel chewing plSPROXIV
'If you2 hadn't been working yesterday, you2 would not have been chewing'
e. wudu dpodo, pudu mbwo tpapê CFAnt3dIMMC working CFCons3dIMMC betel chewing 'If they2 had been working yesterday, they would have been chewing’
f. wo dê dp̂̂̀ dpodo, daa pê dpî mbwo tpapê NEGCFAnt3dIMMC working NEG CFCons3dIMMC betel chewing 'If they2 had not been working yesterday, they would not have been betel chewing,

Here are some Remote Past examples:

```
a. wonmee dpodo, pênmee nkéli mwaa
CFAnt1plREMC working CFCons1plREMC boat water
ndanî (we3 REM)
drinking
'If we3 had been working (before yesterday) we3 would have been
drinking beer'
b. wo dê nmee dpodo, daa pênmee nkéli mbwaa NEG1plREMC working NEG CFCons1plREMC boat water ndanî
drinking
'If we3 had not been working (before yesterday), we3 would not have been drinking beer'
c. wonmyee dpodo, pênmyee nkéli mbwaa ndan̂̂ CFAnt2plREMC working CFCons2plREMC boat water drinking 'If you3 had been working (before yesterday) you3 would have been drinking beer’
d. wo dê nmyee dpodo, daa pênmyee nkeli
NEGCFAnt2plREMC working NEG CFCons2plREMC boat mbwaa ndanî
water drinking
'If they 2 had not been working (before yesterday) they would not have been drinking beer'
e. wu dnye dpodo, pêdnye nkéli mbwaa ndanê CFAnt3plREMC working CFCons3plREMC boat water drinking 'If they3 had been working (before yesterday) they would have been drinking beer’
f. wo dê dnye dpodo, daa pêdnye nkéli NEGCFAnt3plREMC working NEG CFCons3plREMC boat mbwaa ndanî
water drinking
'If they had not been working (before yesterday) they would not have been drinking beer’
```

Now some exemplification of the Habitual Mood:

| (464) a. | wunê $\quad$ dpodo, pênê |
| ---: | :--- |
|  | CFAnt1sHAB working CFCons1sHAB betel chewing |

h. wo d:ee dpodo, daa p:ee mbwo tpapê NEG.CFAnt2sHAB working NEG CFCons2sHAB betel chewing 'If you1 had not been habitually working, you would not have been habitually betel chewing'
i. w:ee dpodo té, p:ee mbwo tpapê CFAnt2plHAB working plSC.IV CFCons2plHAB betel chewing té
plSC.IV
'If you3 had been habitually working, you3 would have been habitually chewing betel'
j. wo dp:ee dpodo té, daa p:ee mbwo NEG.CFAnt2plHAB working plSC.IV NEG.CFCons2plHAB betel tpapê té
chewing plSC.IV
'If you3 had not been habitually working, you3 would not have been habitually chewing betel'
k. wo dpodo yédi, pê mbwo

CFAnt3HAB working 3sHABC.PROX CFCons3HAB betel tpapê yédi chewing 3sHABC.PROX 'If he had been habitually working, he would habitually have been chewing betel'

1. wo daa dpodo yédi, daa pê

NEG.CFAnt3HAB working 3sHABC.PROX NEG CFCons3HAB
mbwo tpapê yédi
betel chewing 3sHABC.PROX
'If he had not been habitually working, he would not habitually have been chewing betel'
m. wo dpodo nódó, pê mbwo

CFAnt3HAB working 3dHABC.PROX CFCons3HAB betel tpapê nódó
chewing 3dHABC.PROX
'If they2 had been habitually working, they2 would habitually have been chewing betel'
n. wo daa dpodo nódó, daa pê

NEG.CFAnt3HAB working 3dHABC.PROX NEG CFCons3HAB
mbwo tpapê nódó
betel chewing 3dHABC.PROX
'If they 2 had not been habitually working, they 2 would not habitually have been chewing betel'


Finally, there are equative sentences with predicative nominals (continuous in nature), of the kind illustrated below:
a. w:aa nkwépi, p:aa pi dono

CFAnt1sEQU sorceror CFCons1sEQU person bad 'If I was a sorceror I would be a bad person'

| b. wo d:aa | nkwépi, | d:aa p:aa | pi | dono |
| :--- | :--- | :--- | :--- | :--- |
| NEG.CFAnt1sEQU | sorceror | NEG.CFCons1sEQU | person | bad |
| 'If I wasn't a sorceror I would not be a bad person' |  |  |  |  |

c. w:ee nkwépi dê, p:ee pi dono dê

CFAnt1dEQU sorceror DUAL CFCons1sEQU person bad DUAL 'If we2 were sorcerors, we2 would be bad people'

| d. wo d:ee | nkwépi | dê, | daa p:ee | $\boldsymbol{p i}$ |
| :--- | :--- | :--- | :--- | :--- |
| NEG.CFAnt1dEQU | sorceror | DUAL | NEGSCFCons1sEQU | person |
| dono dê |  |  |  |  |
| bad $\quad$ DUAL |  |  |  |  |

'If we2 were not sorcerors, we2 would not be bad people'
e. w:oo nkwépi dé, p:oo pi dono dé

CFAnt1plEQU sorceror PL CFCons1plEQU person bad PL
'If we3 were sorcerors, we3 would be bad people'

| f. wo dp:oo | nkwépi | dé, daa p:oo | $\boldsymbol{p i}$ |  |
| :--- | :--- | :--- | :--- | :--- |
| NEG.CFAnt1pIEQU | sorceror | PL | NEG.CFCons1plEQU | person |
| dono dé |  |  |  |  |
| bad PL |  |  |  |  |
|  | 'If we3 were not sorcerors, we3 would not be bad people' |  |  |  |

g. woo nkwépi dê, poo pi dono dê CFAnt2dEQU sorceror DUAL CFCons2dEQU person bad DUAL 'If you2 were sorcerors, you would be bad people'
h. wo dpo nkwépi dê, daa poo pi NEG.CFAnt2dEQU sorceror DUAL NEG.CFCons2dEQU person dono dê bad DUAL 'If you2 were not sorcerors, you2 would not be bad people'
i. w:ee nkwépi dé, p:ee pi dono dé CFAnt2plEQU sorceror PL CFCons2plEQU person bad PL 'If you3 were sorcerors, you3 would be bad people’
j. wo dp:ee nkwépi dé, daap:ee pi NEG.CFAnt2plEQU sorceror PL NEG.CFCons2plEQU person dono dé bad PL 'If you3 were not sorcerors, you3 would not be bad people'
k. wo nkwépi, pê pi dono CFAnt3EQU sorceror CFCons3EQU person bad 'If he was a sorceror he would be a bad person'

1. wo daa
nkwépi, daa pê pi dono
NEG.CFAnt3EQU sorceror NEG.CFCons3EQU bad person 'If he was not a sorceror he would not be a bad person'
m. wo nkwépi dê, pê pi dono CFAnt3EQU sorceror DUAL CFCons3EQU person bad dê (they2)
DUAL
'If they2 were sorcerors they2 would be bad people'
n. wo daa nkwépi dê, daapê pi

NEG.CFAnt3EQU sorceror DUAL NEG.CFCons3EQU person dono dê
bad DUAL
'If they2 were not sorcerors they 2 would not be bad people'
o. wo nkwépi dé, pê pi dono dé

CFAnt3EQU sorceror PL CFCons3EQU person bad PL 'If they 3 were sorcerors they 3 would be bad people'
p. wo daa nkwépi dé, daa pê pi

NEG.CFAnt3EQU sorceror PL NEG.CFCons3EQU person dono dé
bad PL
'If they3 were not sorcerors they 3 would not be bad people'

### 8.4 Quotation and reported speech

Generally speaking, all reported speech is quoted directly, with the tense and person appropriate at the original time of speaking. The fidelity of reproduction sometimes even includes reporting the words in the original language if different from Yélî Dnye (for example in Tok Pisin, which is not much in use on Rossel). One systematic exception to this, mentioned earlier (§5.2), is that pronouns can obtain ergative marking in quotation contexts, and in this case pronouns pick up the actual reference rather than the reported one. This and other subtle relativizations of deictic parameters are described in §8.4.3, but the main complications involve circumstances where A says something to B to tell C - in this case B's telling C may retain $3^{\text {rd }}$ person marking in verbal form (and A's tense marking), but introduce $2^{\text {nd }}$ person in pronominal form (as in 'Dad says you are to come now' expressed as 'Dad says you let him come now'). Section 8.4.2 is devoted to this special case, while §8.4.1 details normal reported speech, which involves hundreds of special quote formulae.

Reported speech constructions are used to do much more than report actual speech. They are also the general means for describing people's states of mind. So to narrate that the protagonist was thinking such and such, one says in effect 'He said to himself: I'll do such and such', where deixis is largely relativized to the protagonist's point of view. However, although the tense of the embedded thought may therefore be present (cf. He thought "I'm going"), it may also be past, reflecting the time of the thinking (cf. He thought I'd (i.e. he'd) go). Mostly these constructions involve a first person subjective perspective, as in the 'want' construction detailed in §7.5. The following examples illustrate some of these usages:


| d. | nipi |
| :--- | :--- |
| nê dono |  |
| 1s>self.HAB.QUOT.to.self 1 s bad |  |
| 'I always used to say to myself: I'm bad' |  |

But there's at least one construction, with its own paradigm of pseudo-quotation particles meaning 'without his/their, etc., knowing', which systematically uses a fixed $2^{\text {nd }}$ person as subjective subject:
(467) Ghaalyu mgîdî vy:o Ø dp̂̂,

Ghaalyu night in 3NrPST sleeping
'Ghaalyu was sleeping in the middle of the night
nana kwodo yimê ngê _nyi pyââ

3sNot.Knowing.NrPast rat ERG 2sPOSS.foot toe
ngee pîpı̂
3PRSCI.CLS eating
without knowing that a rat was chewing your (Ghaalyu's) toes'

This makes sense if the construction is thought of as unreported speech: 'He was not told: the rat is chewing your toes'. The construction is further discussed below.

### 8.4.1 Quotation with quotation particles

Quotation by quotation particle is of special importance, because it is not only the means of reporting speech, but also, as mentioned, the basic means to express subjectivity - the thoughts, feelings, intentions and subjective states of protagonists, as illustrated by the following (quotatives in bold):
(468) a. ngmênê u kwo daa nê lê, nana kwodo dîy:o it.seems.to.her NEG 1sIMM.PI go without.knowing later kââdî, ala ngwo, apu, n:aa lêpî sun now $3 \mathrm{~s}>3$ sQUOT 1sPROXCI going 'She thought to herself "I won't go", but unbeknowst to her, later the sun (came out), now, she said to herself, I'll go'
b. kî tpémi ngê kma apu nê kwódu this boy ERG frog 3s>selfQUOT.PRS 1sPST.PI blockade 'This boy is saying to himself I am going to capture this frog, i.e. he is trying to catch the frog’

In principle, quotatives are used before each clause of reported speech - the following was an infamous statement by a resident whiteman who had meant to say pyaa yâmuyâmu, 'crocodile hunting' (cf. Henderson 1995:85):

| (469) Hughie ngê | yepê, | $n: a a$ | pyââ | yâmuyâmu |
| :--- | :--- | :--- | :--- | :--- |
| Hughie ERG | 3s>3plQUOT.REM | 1sImmFUTCI | woman | hunting |
| 'Hughie said: "I am going woman hunting"" |  |  |  |  |

Consequently, scope of the quotation is not in question in sentences like the following:

| (470) | Machedê kwo | mê | d:uu | ngi, | mê |
| :--- | :--- | :--- | :--- | :--- | :--- |
| finished 3s>3sQUOT.REM | REP3REM do plS.2sOIMP | REP3REM |  |  |  |
| $d: u u$ ngê |  |  |  |  |  |
| do MFS3sO |  |  |  |  |  |
| 'OK, he said (to him): "Do it again", and he did it again' |  |  |  |  |  |

The predicates of saying here are not normal verbs - they are quotation formula or particles that encode subject (speaker), indirect object (recipient), tense and other features within a single word. Sometimes the word is partially analysable into morphemes, although this really has diachronic relevance only, since the forms are synchronically unpredictable. In the example before the last, yepê can be analysed as ye-pê, where ye is the pronoun 'to/from them' and pê is an unanalysable element meaning ' 3 rd person speaker saying in remote past tense'. In a similar way then we have akapê, analysable as $a$-ka-pê 'me-DAT-3speakingREM', i.e. 'He said to me the day before yesterday', or ngêpê analysable as $n g a-p e ̂$ 'to+2s-3speakingREM', i.e. 'He said to you the day before yesterday'. These forms are thus partially analysable post hoc, but first principles cannot predict the correct form (they are what Makkai 1972 called 'idioms of encoding' even if they may be partially transparent from a decoding point of view). Further, the residue after stripping transparent morphs often does not remain a morpheme in its own right. In what follows I will treat them as essentially arbitrary forms, but the reader will note that they are often composed of two parts, first an indicator of the addressee and then an indicator of the speaker/tense/mood. I'll sometimes separate and gloss the parts separately so readers can see this - but they should not conclude that these forms are therefore fully compositional, or that they really form two lexical words, even though they are (by voicing rule) separate phonological words. The addressee indicators are the more transparent elements, closely related to the dative (source/goal) pronouns, which are repeated below for convenience. Normally however I'll gloss the quotation particles as a
whole along the lines "2s>3sIMMQUOT" meaning 'a second singular speaker said to a $3^{\text {rd }}$ singular addressee earlier today the clause that follows' (unlike for continuous aspect, I'll not mark punctual aspect for compactness). Such quasi-verbs have some theoretical interest. Although fairly full tense/mood paradigms exist, the paradigmatic distinctions are not identical to the distinctions made in normal verbs, and these quotation particles occur without the inflectional particles mandatory on finite verbs. Despite this, it is notable that the quotation particles can carry the full range of case-marked arguments that a normal verb of saying can take, as illustrated below (quotation particle kwowo in bold):
(471) Yidika ngê Joseph ka kwowo ndapî ala

Yidika ERG Joseph DAT 3rdSpkr>3sAddr.QUOT.ImmFUT money this 'Yidika is going to say tomorrow to Joseph "Here’s the shell-money"'

Normal verbs of saying do exist, of course. There are a range of both transitive and intransitive verbs of saying and telling (e.g. tpapê 'tell (intransitive)', nj:ii 'narrate, tell a story (transitive)', vyi 'say (transitive)', but these are not normally used to report conversations, but for other uses, for example:

| (472) | Nd:uu | nga | n:aa |
| :--- | :--- | :--- | :--- |$\quad$ tpapê


| (473) | danêmbum | nîê | nj:ii |
| :--- | :--- | :--- | :--- |
|  | story | 1sPRS.CLS | narrate |
|  | 'I'll tell (you) a story' |  |  |

For reported speech, the quotative formulae are the basic means. How many such quotation particles are there? Just as with the inflectional particles we can calculate the matrix: there are 9 person/numbers, up to six tenses, 2 aspects, 2 moods, etc. Focussing just on the punctual aspect, that would give us 9 * 9 (for each possible speaker person/number to each possible recipient person/number) for each of 4 indicative tenses, plus the habitual and the imperative, i.e. $81 * 6=486$ cells. Amazingly, many of these potential cells are actually filled, including some of the reflexive cases ('I said to myself', etc.). The following tables (8.8 to 8.10) are derived partly from notes kindly made available by Jim Henderson, and partly by direct elicitation - some of them would be vanishingly rare in normal texts (and elicitation sometimes proved correspondingly difficult), but many (especially the past tenses) are frequently used. The tables provide the basic punctual indicative paradigm, the present tense continuous paradigm, followed by the
imperative and habitual moods. Each table is a matrix with speaker person/ number in columns, and addressee person/number in rows. I provide in Table 8.8 the ordinary unmarked ('nominative') and in Table 8.9 the dative pronouns for reference, since they are often more or less perspicuously (but unpredictably) embedded in the quote particle.

Table 8.8: Ordinary unmarked pronouns for reference.

| 1s | 1d | 1pl | 2s | 2d | 2pl | 3s | 3d | 3pl |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ne | nyo | nmo | nyi | $d p: o$ | nmyo | $\ldots$ | $\ldots$ | $\ldots$ |

Table 8.9: Ordinary Dative pronouns for reference.

| 1s | 1d | 1pl | 2s | 2d | 2pl | 3s | 3d | 3pl |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $a k a$ | nye | nmo | nga | $d p o$ | nmye | kwo | $y e$ | $y e$ |

The addressee component in Table 8.10 is rather clearly distinguishable in some of these paradigms:

Table 8.10: Some frequent exponents of the addresseecomponent, preceding the speaker component.

| Addressee $\Downarrow$ | Sing | Dual | Plural |
| :--- | :--- | :--- | :--- |
| $\mathbf{1}$ | $a k a$ | $n y e$ | $n m o / n m e ̂$ |
| $\mathbf{2}$ | $n g a$ | $d p \hat{\imath} / d p \hat{a}$ | $n m y e$ |
| $\mathbf{3}$ | $k w o$ | $y e / y i$ | $y e / y i$ |

Note: many of the vowels centralize in actual use, e.g. $a$ ka may be realized as $a$ kê, nga may be realized as ngê.

In the tables below ( 8.12 to 8.14), we follow the tenses from Future to Remote Past.
Table 8.11 should be read as follows: the first form in the first column is nga $n \hat{e}$, a first person speaker addressing a second singular person, so it means 'I will tell you tomorrow that/whether'. Although some of these Future forms may be thought to have very little utility, a number of them are certainly attested in usage. (I remind the reader that although the gloss in b. below might suggest compositionality, nê alone is a verbal proclitic; similarly kwowo in a. might be analysed as kwo-wo, but wo has no independent meaning - the morpheme break is of diachronic interest only. It suggests that some of these forms, like nganê, historically derive from a dative pronoun and a verbal proclitic.)

Table 8.11: Future (Tomorrow only; Punctual, also perhaps Continuous).

| SPEAKER |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ADDR | 1s | 1d | 1pl | 2s | 2d | 2pl | 3s | 3d | 3pl |
| 1 s |  |  |  | a ka nyi | a ka dpî | a ka nmyi | $a k a$ wo | a ka wo | a ka wo |
| 1d |  |  |  | nye wa | nye wa <br> dpî |  | nye wo | nye wo | nye wo |
| 1pl |  |  |  | nmo wa nyi | nmî wa dpî | nmo wa nmyi | $\begin{aligned} & \text { nmo } \\ & \text { wo } \end{aligned}$ | nmo <br> wo | nmo wo |
| 2s | $\begin{aligned} & n g a \\ & n \hat{e} \end{aligned}$ | $\begin{aligned} & d p o \\ & \text { nê } \end{aligned}$ | nmye <br> $n \hat{e}$ |  |  |  | nga wa | nga wa | nga wa |
| 2d |  |  |  |  |  |  | dpo wa | dpo wa | dpo wa |
| 2pl |  |  |  |  |  |  |  |  |  |
| 3s | $\begin{aligned} & \text { kwo } \\ & \text { nê } \end{aligned}$ | kwo <br> nye | kwo <br> nmo | kwo nyi | kwo nyi | kwo <br> nmyi | $\begin{aligned} & \text { kwo } \\ & \text { wo } \end{aligned}$ | kwo wo | kwo wo |
| 3d | ye nê | ye nye | ye nmo | ye nyi | ye dpî | ye nmyi | ye wo | ye wo | ye wo |
| 3 pl | ye nê | ye nye | ye nmo | ye nyi | ye dpî | ye nmyi | ye wo | ye wo | ye wo |

(474) a. Brother Ray ngê Joseph ka kwowo ndapî ala

Brother Ray ERG Joseph DAT 3>3sQUOT.FUT shell.money this 'Brother will say to Joseph 'Here's the money"
b. nganê wanê lê
$1 \mathrm{~s}>2 \mathrm{sQUOT} . F U T$ UNCERT 1 sFUTPI go
'I'll tell you tomorrow whether I'll go'
c. yewo mââa naa

3>3plQUOT tomorrow feast
'He will tell them tomorrow "the feast will be tomorrow"' (i.e. He will tell them tomorrow it will be the day after tomorrow)

The Present tense Continuous forms in Table 8.12 seem to be restricted to the present. Their uses are as in the following examples:

> a. a ka nyimo lukwe?
> 2s $>1$ sPRS.QUOT.CI what
> 'What are you trying to tell me?'
b. ngê numo alangwo d:uu ngi!
$1 \mathrm{~s}>2$ sPRSQUOT.CI now do 2sIMPPI
'I am telling you: do it now'
Table 8.12: Present Tense Continuous aspect (presumes ala ngwo 'right now' e.g. kwo numo- ‘I am telling him now'). Question marks indicate uncertain forms or possible gaps in the paradigm.

| Address | Speaker |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\Downarrow$ | 1s | 1d | 1pl | 2s | 2d | 2pl | 3s | 3d | 3pl |
| 1s |  |  |  | a ka nyimo | a ka nyimo | a ka nyimo | a kópu | a kópu | a kópu |
| 1d |  |  |  | nye nyimo | nye nyimo | nye nmyimo | nyipi | nyipu | nуіри |
| 1pl |  |  |  | nmo nyimo | nye nyimo | nye nmyimo | nто́pu | nто́pu | nmópu |
| 2s | nga numo | nganyimo | nga <br> nmîmo | nyimo | - | - | ngópu | ngópu | ngópu |
| 2d | dpâ numo | dpanyimo | dpâ nmîmo | - | ?yenyimo | - | dpópu <br> (dpîdoo)* | dрópu | dрópu |
| 2pl | nmye numo | nmyenyimo | nmye nmîmo | ? | ? | ?yenmyomo | птуópu | птуópu | nmyópu |
| 3 s | kwo numo | kwo nyimo | kwo nmîmo | kwo nyimo | kwo nyimo | kwo nyimo /kwo nmyomo | kwodo <br> / kópu (soon) | kwodo/ kópu | kwodo/ <br> kópu |
| 3d | ye numo | ye nyimo | ye nmîmo | ye nyimo | ye nyimo | ye nyimo/ ye nmyomo | yedê | yedê | yedê |
| 3pl | ye numo | ye nyimo | ye nmîmo | ye nyimo | ye nyimo | ye nmyomo / <br> ye nyimo | yedê <br> / yipu | yedê/ <br> yipu | yipu |
| Unspecified |  |  |  |  |  |  | apu | apu | apu |

c. ngênmîmo mwi chi lêpî

1pl>2sPRSQUOT. there 2sIMPCI go.CI
'We3 are saying to you1: you1 buzz off!'
d. ngópu nyi vyîlo

3>2sPRSQUOT.CI you the.one
'He's saying that you are the one'
e. kópu mbwêmê a chóó dê t:âmo

3>3sPRSQUOT.CI pig my self 3IMMPI stole
'He's telling him that I am the one who stole the pig'
f. nmópu Yidika mbii

3>1plPRSQUOT.CI Yidika sick
'He is telling us that Yidika is sick'
g. ngópu vyi ngi

3>2sPRSQUOT.CI tell 2sIMPPI
'He is saying to you: tell it!'
h. kî pini ngê apu, Ghaalyu angenê?
that person ERG 3>anyPRSQUOT.CI Ghaalyu where
'This guy is saying: where is Ghaalyu?'
i. dpânumo n:aa lêp̂̂

1s>2d.PRSQUOT.CI 1sCIPRSMOTION going
'I tell you2 I am going'
j. dpânyimo nye lêpî mo

1d>2d.PRSQUOT.CI 1d.CIPRS going dS.CIPROX.Intrans
'We2 are saying to you2 - we are going'
k. kî pini ngê dpópu lee choo
that person ERG 3>2d.PRSQUOT.CI go.FOL 2sS.IMP.Intrans
'This guy is saying to you2 you must go'

1. nganumo/ngad:a muntoo

1s>2sPRSQUOT.CI/1s>2sIMMQUOT.PI enough
'I am telling you/I just told you: enough! (stop crying)'
m. Kakan ka kwo numo ma ngi
man's.name DAT 1s>3sPRSQUOT.CI eat 2sS.IMP.PI
'I am telling Kakan to eat it'
o. Ngmidimuwó ka kwo numo Kakan ngê
woman's.name DAT $1 \mathrm{~s}>3$ 3PRSQUOT.CI man's.name ERG
$d p \hat{\imath} \quad m a \quad n g e ̂$
2/3IMP eat 3sS3sOIMP
'I told Ngmidimuwó to tell Kakan to eat it’ (lit. 'I to her Ngmidimuwó
"Have Kakan eat it"')
Table 8.13: Quote Formulae for Immediate Past (earlier today), Punctual Aspect*.

| Addr. | Speaker | $\Rightarrow$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\Downarrow$ | 1s | 1d | 1pl | 2s | 2d | 2pl | 3s | 3d | 3pl |
| 1s | d:ê 'I said to myself today’ |  |  | a ka ch:e 'you told me' | a ka nye | a ka nmyimo | a ka dê 'he said to me' | $a \mathrm{ka}$ dê | $a \mathrm{ka} \mathrm{de}$ |
| 1d |  | nyed:a |  | nye ch:e | nye nyimo | nye nmyimo | nyedê | nyedê | nyedê |
| 1pl | nmo d:a |  |  | nmo ch:e | nmo nmyimo | nmo nmyimo | nmîdê | nmîdê | nmîdê |
| 2s | nga d:a | nga dnye / nga ch:e | nga dnye nga ch:e | ch:e |  |  | ngadê | ngadê | ngadê |
| 2d | dpî d:a | dpo dnye / dpo ch:e | dpo dnye/ dpo ch:e |  |  |  | dpî dê | dpîdê | dpîdê |
| 2pl | nmye d:a | nmye ch:e | nmye ch:e |  |  |  | nmyedê | nmyedê | nmyedê |
| 3s | kwo d:a | kwoch:e kwo dnye | kwoch:e / kwo dnye | kwo ch:e | kwo ch:e (kwo nyimo - 'did you ask him?') | kwo ch:e / kwo nmyîmo | kwodo (NB also adê unspecified recipient) | kwodo | kwodo |
| 3d | ye d:a | ye ch:e | ye ch:e | ye ch:e | ye nyîmo | ye nmyîmo | ye nmyîmo |  |  |
| 3 pl | ye d:a | ye ch:e | ye ch:e | ye ch:e | ye dpî <br> (HAB form is yedpîmo/ yednyimo) | ye dmye * | ye dê | ye dê | yedê |

[^18]Table 8.13 gives the forms for the Immediate Past, Punctual aspect. As in a number of the other quotation paradigms, there are further forms that are semantically general over the recipient. Thus adê, 'he said', does not specify singular or plural recipients (although it may signal that the current speaker heard the exchange):
(476) Father ngê adê Monki ngê dinghy ghêê ngê Father ERG 3sQUOT Monki ERG dinghy wash 3sS.3sO.IMP.WEAK 'Father said Monki should wash the dinghy' (i.e. Father said "Let Monki wash the dinghy")

Some examples of use:

```
a. ngêdê vyi ngi
    3>2sQUOT.IMM tell 2sS3sO.IMP.PI
    'He told you (earlier today) to tell' (i.e. He said to you "You must tell it")
b. a ka ch:e km:ii vyini
    me DAT 2sIMMQUOT coconut climb.2sIMP
    'You told me to climb the coconut'
c. a ka dê ma ngi
    me DAT 3SIMMQUOT eat 2sIMP.PI
    'He told me to eat it'
d. nye ch:e ma nyoo
    1d.DAT 2sIMMQUOT eat 2dS.3sO.IMP.PI
    'You told us2 to eat it' (i.e. You told us2
    "eat it, you2!")
e. kwo ch:e ma ngi
    him.DAT 2sIMMQUOT eat 2sIMP.PI
    'You told him to eat it'
f. ye d:a ma yóó
    them.DAT 1sIMMQUOT eat 2plS.3sOIMP.PI
    'I told them3 "you3 eat it"'
g. ye dmye Lów:a nmo lêpî té
    them.DAT 2plIMMQUOT Lów:a 1PL going plS.PRS/FUTCI
    `Did you3 tell them you3 are going to Lów:a?' (Did you tell
    them3 "We3 are going to Lów:a"?)
h. dpîd:a lee choo
    1s>2sIMMQUOT go.FOL 2dS.IMP.PI.Intrans
    'I told you2 (earlier today) to go'
```

i. kwo d:o daa nê ma
$1 \mathrm{~s}>3$ sIMMQUOT NEG 1sREM eat
'I told him today: I have not eaten/am not about to eat'
(REM prenucleus is here triggered by Negation - see §10.1)
j. yech:ee nmo lêpî té
$2 \mathrm{~s}>3 \mathrm{~d} / \mathrm{pl}$ IMMQUOT 1plImmFUT.CI going 1plS.PROXIntrans
'You told them (earlier today) we are going?'
k. nmîdê tpile we têdê daa nê lê
$3 \mathrm{~s}>1 \mathrm{pl}$.IMMQUOT sing.sing place NEG 1sREM.PI go
'He said to us (today): I am not going to the sing-sing'

1. ngêdê chi dpî 3>2sIMMQUOT 2sIMP.CI sleeping
'He told you: sleep!'

The Near Past forms (identical to Remote Past forms) are given in Table 8.14 below. So we have:

| (478) | $m a$ | $n \hat{e}$ | mââ | Lów:a | $n \hat{e}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | yesterday | $1 \mathrm{~s}>1 \mathrm{sNrPastQUOT}$ | tomorrow | Lów:a | 1 sNrPST | go

Alternative forms with an embedded clause in different tense or mood:

| a. | $m a$ | $n \hat{e}$ | mââ | Lów:a | wa nê |
| :--- | :--- | :--- | :--- | :--- | :--- |
| yesterday | ls $>1$ sNrPastQUOT |  |  |  |  |
|  | tomorrow | Lów:a | 1sFUT | go |  |
| 'Yesterday I said to myself "tomorrow I'll go to Lów:a"" |  |  |  |  |  |

b. ma ngênê mââ Lów:a nê lê yesterday $1 s>2 s$ NrPastQUOT tomorrow Lów:a 1sFUT go 'Yesterday I said to you "tomorrow I'll go to Lów:a"'
c. kwono n:aa lêpî

1s $>3$ sNrPastQUOT 1sImmFUTCI going
'I said to him: I'm going'
d. kwînye n:aam:uu d:uu

2>3sNrPastQUOT NEG2sIMPCI.MOT doing
'Did you(s/pl) say to him: don't do it?'
e. a kapê dono kópu
$3>1$ sNrPastQUOT bad affair
'He said to me yesterday: a bad business'
f. ma dpîpê amênı̂ diyé?
yesterday $3>2 \mathrm{~d}$.NrPastQUOT 1sDistFUT.REP return
'Yesterday, did he say to you2 that he'll be coming back today' (i.e.'Did he say "I'll return tomorrow"?')
Table 8.14: Near Past Tense M: $a$ (Yesterday) or Remote Past (m:iituwo, day before yesterday). ${ }^{42}$

| Addr. | Speaker $\Rightarrow$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\Downarrow$ | 1s | 1d | 1pl | 2s | 2d | 2pl | 3s | 3d | 3pl |
| 1s | $n e ̂$ | - | - | a ka nye | a ka nye | a ka nye | a kapê | $a \mathrm{ka}$ pê | $a \mathrm{kê} p \hat{e}$ |
| 1d | - | - | - | $\begin{aligned} & \text { nye } \\ & \text { nye } \end{aligned}$ | nye | nye | nyêpê | nyêpê | nyêpê |
| 1pl | - | - | - | nmo nye | nmo nye | nmo nye | nmîpê | nmîpê | nmîpê |
| 2s | ngênê | ngê nyenê | $n g e ̂$ <br> nmînê | nye 'to self' | - | - | ngêpê | ngêpê | ngêpê |
| 2d | dpînê | dpo nyenê | dpino | - | nye | - | dpîpê | dpîpê | dpîpê |
| 2pl | nтyenê | nmye nyenê | nтуeno | - | - | nye | nmyîpê | nmyîpê | nтyîpê |
| 3s | kwonê/ kwono | kwonye/ kwinye | $\begin{aligned} & \text { kwo } \\ & \text { nmo } \end{aligned}$ | kwînye | kwînye | kwînye | kwo/ <br> kwopê <br> apê (to anyone) | kwo/ kwopê | kwo/ kwopê |
| 3d | yenê | ye nye/ <br> ?kwonye | ye nmo | ye nye | ye nye | ye nye | yepê/ <br> уо́ри | yepê/ <br> уо́ри | yepê/ <br> уо́pu |
| 3 pl | yenê/ <br> yeno | ye nye | ye nmo | ye nye | yenye | yenye | yepê/ <br> уо́pu | yepê/ уо́ри | yepê/ уо́ри |

42 These forms have been exhaustively checked and alternate forms (like yópu for yepê) do not necessarily seem to make a tense difference, even though they may suggest one tense or the other (e.g. yópu seems more used for the remote past).

Remote Past forms are the same as Near Past forms in Table 8.14. Some examples follow.


The imperative paradigm (Table 8.15) is not easy to fill out through elicitation. The forms with second person are clear, and there are also some clear forms for third
person subjects as shown, all specialized with imperative force. One confusing fact is that the forms ending in -ipi also occur in the Habitual quotative paradigm below, but there's no identity with the Imperative paradigm, despite some overlaps.

Table 8.15: Imperative Quote Formulae (e.g. a kipi = 'you tell me').

| Address Speaker $\Rightarrow$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\Downarrow$ | 1 s | 1d | 1pl | 2s | 2d | 2pl | 3s | 3Dual/PL |
| 1s | - | - | - | a kipi | a kipi | a kipi |  |  |
| 1d | - | - | - | nyipi | nyipi | nyipi |  |  |
| 1pl | - | - |  | nmipi | nmipi | nmipi |  |  |
| 2s | - | - | - | apii 'you say this' | - | - |  |  |
| 2d | - | - | - | - | apii | - |  |  |
| 2pl | - | - | - | - | - | apii |  |  |
| 3s |  |  |  | kwi 'you tell him!' | kwipi 'you2 tell him' | kwipi | kwipi | kwipi |
| 3d |  |  |  | yipi | yipi | yipi | yipi | yipi |
| 3pl |  |  |  | yipi | yipi | yipi | yipi | yipi |

The interpretation and utility of these imperative forms is illustrated below:
a. a kipi dî kn:aadi

2s>1sIMP.QUOT 1sIMMPI make.mistake
'You say to me: I made a mistake'
b. A to B: a kipi Kîmbêkpâpu n:aa lêpî?

2s>1sIMP.QUOT Place.Name 1sImmFUTCI going 'Are you asking me to go to K? May I go to K?'
B to A: up:o, chi lêpî
alright 2sIMPCI going 'OK, off you go'
c. Nkéli u dpodo pyu dê y:oo Parish boat 3sPOSS working doer Dual ERGDual/PL Parish Council ka dpî vyi y:e, yipi Council DAT 2dS.IMP.PI say 3d/plS.sO.IMP 3d>3pl.IMP.QUOT mu ntoo enough
'The boat crew must tell the parish council this, they must say to them: Enough!'
d. Father ka dpî vyi y:e, kwipi muntoo Priest DAT 2d.IMP.PI say 3d/pl.S.sO.IMP 3d>3sIMP.QUOT enough 'You2 must say to Father, they2 must tell him enough'
e. apii m:aa

2s $>2$ sIMP.QUOT daddy (to infant) ‘Say it like this: ‘Daddy’
f. Yidika ka kwi, kââkââ man's.name DAT 2s>3sIMP.QUOT grandfather (instructing boy in proper kin term) 'You say to Yidika: (classificatory) 'Grandpa"
g. a kipi nê

2s>1sIMP.QUOT 1s
'You say to me: I'm the one' (i.e. confess, you did it)

Some more examples of usage:
a. a kipi "mw:ââkó"

2>1sIMP.QUOT thanks
'Say thank you to me!'
b. kwi "mw:ââkó"

2s>3sIMP.QUOT thanks
'You say thanks to him!'
c. apii "dpî ma ngi!"

2s $>2$ sIMP.QUOT 2/3IMPDefd eat 2s3sO.IMP
'You must say to yourself: eat it'
d. nyipi "ma nyo!"

2s>1d.IMP.QUOT eat 2dS.sO.IMP
'You1 tell us2 "You2 eat it"'
e. nmipi "ma yó"

2>1pl.IMP.QUOT eat 2pl.3sO.IMP
'You tell us3 "You3 eat it"'
f. yipi "ma nyo/yó"

2/3>3plIMP.QUOT eat 2d/2plS.3sO.IMP
'You tell them $2 / 3$ "You2/3 eat it""
g. kwipi ma ngi
$2 s>3 s I M P . Q U O T$ eat $2 s S .3 s O I M P . P I$
'You tell him to eat'
h. kwipi "nê mââ"
$2 s>3$ sIMP.QUOT 1s tomorrow
'You tell him "I'll (see you) tomorrow"'
i. magistrates ye yipi yi kópu dono magistrates 3PLDAT 2/3d/PL>2/3d/pl.IMP.QUOT that affair bad 'The magistrates must say to them: that is a bad business'

Note that quotation-particle+clause can be embedded in another of the same kind, in which case some deictic shifting to $3{ }^{\text {rd }}$ person may occur:

```
(483) Yidika ngê Pikuwa ka apê
man's.name ERG man's.name DAT 3s>anyNr/REM.QUOT
Kakan ka kwipi chi lêp\hat{\imath}
man's.name DAT 3s.3sIMP.QUOT 2sIMPCI going
'Yidika said to Pikuwa (before today) let him (Pikuwa) say to Kakan
"Off you go"
```

A further note on apii. Its literal use is as exemplified above and in the sentence below:
(484) km:ii u mênê apii, waterline anyi t:a coconut 3Poss inside $2 s>2$ sIMP.QUOT waterline where hanging nê, yed:oo mu kêêlî ghê copra shed dp:uu 3S.PROXCI then that place part copra shed 3HABCI.MOT m:uu ngmê see PFS.3sOHABPI
'You have to say to yourself, inside the coconuts is there still a waterline, they used to see it at the copra marketing board'

However, apii (2s>2sIMP.QUOT) also derivatively constitutes a common tag question form, where it asks for confirmation of a statement, as in:
a. Jazz II wa kee, apii? Jazz II 3FUTPI ascend TAG 'MV Jazz is coming up, isn't it?'
b. Kêna wa nê lê, apii?

Kêna UNCERT.FUTPI 1s go TAG
'Am I going to Kêna, or not (I am wondering to myself)'

The habitual, recollect, codes 'generic action', repetitive normative behaviour, glossed with 'used to' in the local English regardless of tense. Table 8.16 gives the habitual quotatives, as exemplified in (486):

[^19]Table 8.16: Habitual forms (addressee prefixes are optional).

| Addr. | Speaker $\Rightarrow$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\Downarrow$ | 1 s | 1d | 1pl | 2s | 2d | 2pl | 3s | 3d | 3 pl |
| 1s | nipi 'I used to say to myself' | - | - | a ka nyipi | a ka dpyipi | a ka nmyipi | a kódoo | a kódoo | a kódoo |
| 1d | - | (noko) nyipi ${ }^{43}$ | - | nye nyipi | nye dpyipi | nye nmyipi | nyedoo/ <br> nyedpo | nyedoo/ <br> nyedpo | nyedoo/ <br> nyedpo |
| 1pl | - | - | noko nmipi | nmo nmîpi | nmo dyipi | nmo nmyipi | nmodoo | nmodoo | nmodo/ nmodpo |
| 2s | ngê nipi <br> / ngipi | ngê dmye | ngê nmipi | - | - | - | ngêdoo <br> /ngêdpo* | ngêdoo | ngêdoo |
| 2d | dpo nipi | dpo dmye | dpo nmipi | - | noko dyipi | - | dpîdoo | dpîdoo | dpîdoo |
| 2pl | nmye nipi | nmye dmye | nmye nmipi | - | - | noko nmyipi | nmyedoo | nmyedoo | nmyedoo |
| 3s | kwo nipi | kwo dmye | kwo nmipi | kwo nyipi | kwo dyipi | kwo nmyipi | kwódo | kwódo | kwódo |
| 3d | ye nipi/ ye numo | ye dmye | ye nmipi | ye nyipi | ye dpyipi | ye nmyipi | ye dpo | ye dpo | ye dpo |
| 3 pl | ye nipi/ ye numo | ye dmye | ye nmipi | ye nyipi | ye dpyipi | ye nmyipi | ye dpo | ye dpo | ye dpo |

[^20]b. nye dpyipi mbwêmê dp̂̂ ma nyoo

1Dual.DAT 2d>1d.HAB.QUOT pig 2dS.IMP eat 2dS.3sO.IMP
'You2 used to say to us2, you2 eat a pig!'
c. kwódo, chi mgeemgee

3>3sHAB.QUOT 2sIMMPI lazy
'They used to tell him: you are lazy'
d. ngê nmîpi, nyi tp:ee mb:aamb:aa

1pl>2sHAB.QUOT 2s boy good
'We used to tell you you were a good boy'
e. nyedpo, dp̂̂ mgeemgee pyu dê

3>1dQUOT 2DualIMM lazy doer Dual
'He used to say to us, you2 are lazy'
f. dpîdoo choo n:aa kpîpî

3>2d.HAB.QUOT 2dS.IMPCI fish.with.line
'He used to say to you2, you go fishing'
g. ngêdoo, namê dpodo
$3>2$ sHAB.QUOT 2 2NEGIMP.CI working
'He used to say to you2, don't work'
h. noko nyipi chi kmaapî

REFL.DAT 2d>?HAB.QUOT 2sIMPCI eating
'We used to say to each other, you eat!'
i. nmyipi dmyinê kmaapî

2pl>2/3HAB.QUOT 2plIMPCI eat
'You3 used to say you3 guys eat'
j. (a ka) nyipi chi dpodo
(1sDAT) 2sHAB.QUOT 2sIMPC working
'You used to say to me, work!'
k. nipi nê dono

1s $>1$ sHAB.QUOT 1s bad
'I used to say to myself: I'm bad'

1. a ka dpyipi nyi dono

1sDAT 2d.HAB.QUOT 2s bad
'You2 used to say to me: you're bad'
m. Jimi Kaawe ngê ye dpo namê nkîngê
man's.name ERG 3s>3d/plHAB.QUOT 2sNEGIMP be.frightened
'Jimmy always used to say: don't be frightened'
n. nmo nmîpi namê school

1plDAT $2 s>1$ plHAB.QUOT $2 s N E G I M P$ school
'You1 used to tell us3 you should not go to school'

| o. | a kódoo chi dpodo |  |
| :--- | :--- | :--- | :--- |
|  | 3>1sHAB.QUOT | 2sIMPC working |
|  | 'They always used to say to me: you work!' |  |
| p. | nyipi $\quad n e \quad$ e | d:uu |
|  | 2sHAB.QUOT | 1sNrPST/REM.PI do |
|  | 'You used to say (to yourself) I'll do it (you wanted to do it).' |  |

The following forms (Table 8.17) seem to be specialized for 'saying to oneself', i.e. for describing subjective states of self or others. I believe there are further distinctions between tenses, not recognized here and not properly recorded. Although another addressee can (at least for some of the forms) be specified, if none is provided the interpretation is that the protagonist is thinking or speaking to himself.

Table 8.17: Speaking to self, or unspecified addressee (Punctual aspect, apparently either of unmarked tense or mixed tenses).

| Speak | 1s | 1d | 1pl | 2s | 2d | 2pl | 3s | 3d | 3pl |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| awede (Today) | d:a/ <br> numo | nyinê/ <br> numo | nmînê | ch:e | nyemo | nmyimo | apu | apê | apê |
| ma (Yesterday) | nê | nyinê/ <br> numo | nmînê | nyinê | nyemo | nmyimo | apê | apê | apê |
| m:ii <br> tuwó (Days before <br> yesterday) | nê | nyinê/ <br> numo | nmînê | nyinê | nyemo | nmyimo | apê | apê | apê |



|  | ch:e nê mââwe |
| :---: | :---: |
|  | $2 \mathrm{~s}>2 \mathrm{sIMM}$.QUOT 1s bigman |
|  | 'You are saying to yourself that you are a big man' |
| f. | adê wudî lê |
|  | 3s>3sIMM 1sIMMPI.CF.Ant go |
|  | 'He said to himself today, I should have gone' |

The forms in Table 8.17 are used to narrate the thoughts of a protagonist in a story. Note that they are not the same as the evidential forms used to report seeming facts (as in 'it seems to me' etc.), which are tenseless and are as follows (Table 8.18, with examples in (488)):

Table 8.18: "It seems to me/you/him etc" (tenseless).

|  | Sing | Dual | Pl |
| :--- | :--- | :--- | :--- |
| $\mathbf{1}$ | na a ka | nyinê nye | nmînê nmo |
| $\mathbf{2}$ | na ngê | dpînê dpo | nmyinê nmye |
| $\mathbf{3}$ | ngmênê u kwo | yinê ye | yinê ye |

a. ngmênê ukwo, n:aa lêpî
it.seems.to.him 1sHABCI going
'It seems to him that he'll go, i.e. he's inclined to go'
b. ngmênê u kwo, wudîl lê
it.seems.to.him 1sIMMPI.CF.Ant go
'It seems to him: I should have gone (i.e. he realizes he should have gone)'
c. naaka mââwê ndî̀ ngmê
it.seems.to.me bigman great INDF
'He is one of the great bigmen it seems to me'
d. yinêye doo untââ
it.seems.to.them NEG enough
'It seems to them not enough'
e. naaka kî tp:ee, lukwe dîy:o a yééyéé it.seems.to.me that boy, what reason 3ImmFUTCI marrying 'It seems to me he is just a boy, why is he getting married?'
f. ma naaka yey pyu yi vy:o
yesterday it.seemed.to.me yey doer ANAPH among dêdî kwo
NEG3sNrPSTC standing
'Yesterday it seemed to me that there were no good yey giver (diviner) among them’
g. na ngê n:uu?
na N+ka who
'It seems to you who (did it)?'
h. yinê ye noo k:omodanê
it.seems.to.them 1sREMC lying
'It seemed to them that I was telling a lie/tricking them
(before yesterday)’

Table 8.19: Without Knowing (Present tense paradigm).

| Tense | 1s | 1d | 1pl | 2s | 2d | 2pl | 3s | 3d | 3pl |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| IMM | nana a | nana | nana | nana | nana | nana | nana | nana | nana |
| (today) | kada* $^{\text {n }}$ | nyede | nmoda | ngada | dpoda | nmyidê | kwodo | yedê | yedê |
| NrPST/ REM | nana | nana | nana | nana | nana | nana | nana | nana | nana |
| (Yesterday <br> or before) | aka pê | nyepê | nmopê | ngêpê | dpîpê | nmyipê | kwo | yepê | yepê |

*nana a kapê is past or future - full non-present paradigm not collected, but Near Past
(Yesterday) and Remote Past (before yesterday) seem to be the same.
The 'without knowing' construction is of special interest: the shape of the particles (Table 8.19) and the way it handles deictic shifts makes it clear it should be understood as a special kind of quotation particle, where the non-knowing participant is addressed in the second person (by the all knowing narrator perhaps, or an unmentioned witness).
(489) Ghaalyu mgîdî vy:o Ø dpî, nana kwodo Ghaalyu night middle 3IMM sleeping, 3sNot.KnowIMM yimê ngê _nyipyââ ngee pîp̂̂
rat ERG 2s-toe 3IMMC.CLS eating
'Ghaalyu was sleeping in the middle of the night, without knowing that a rat was chewing your (Ghaalyu's) toes'

The $2^{\text {nd }}$ person perspective can be expressed e.g. as the subject of the subordinate clause, as below. Note the tense alternations between (490)a. and b. do not affect the embedded verb, which is in the Immediate Past:
(490) a. Mgaa mgîdî vy:o Ø dpî, nana kwodo

Mgaa night middle 3sIMM sleeping 3sNot.KnowREM
_ngêê ndiya chi yé
your.hand in.fire 2sIMMP put
'Mgaa was sleeping, he put his hand in the fire without knowing' (Immediate Past)
lit. 'Mgaa was sleeping, (and someone reported to him) you put your hand in the fire'
b. Mgaa mgîdî vy:o doo dpî, nana kwo

Mgaa night middle 3sREM sleeping, without.knowing
_ngêê ndiya chi yé
your.hand in.fire 2sIMMP put
'Mgaa was sleeping, he put his hand in the fire without knowing' (Remote Past)

The $2^{\text {nd }}$ person perspective can also be expressed in the object position:
(491) a. r97_12_v9_s1

Kwo, lee knî nana yepê,
3QUOT go_ 1dS.IMP 3dNot.Knowing
mwiyé kî d:uu m:uu dp:o
first CERT 3IMM.MOTPI see you2
'They said: Let's go. They didn't know that he had seen them first (lit. They didn't know that he came and saw you two)'
b. (August 11, 2011 42:02)
nana a kêpa, dîy:o wunê tókótókó
without my knowing(past/future), later 3ImmFUTCI testing
$n g i$
2sObject
'Without my knowing then, later it would test me (lit. you)'

There follow some exemplifications of the paradigm, first in Immediate Past tense (earlier today):

IMM (Today)
(492) a. nana a kada, yimê ngê _nyipyââ ngee pîpî

1sNot.KnowIMM rat ERG 2s-toe 3IMMC.CLS eating 'Without my knowing the rat was biting my (lit. your) toes'
$\begin{array}{lllllll}\text { b. nana ngada, yimê } & \text { ngê } & \text { _nyi pyââa } & \text { ngee } & \text { pîp̂̂ } \\ \text { 2sNot.KnowIMM rat } & \text { ERG } & \text { 2s-toe } & \text { SIMMC.CLS } & \text { eating }\end{array}$
d. nana yedê, yimê ngê dp̂̂ nté ka chedêchedê 3dNot.KnowIMM rat ERG 2d food CERT3IMMC finishing 'Without them2 knowing the rat was finishing off their2 (lit. your2) food'
e. nana nyedê, yimê ngê dpî nté ka chedêchedê 1dNot.KnowIMM rat ERG 2d food CERT3IMMC finishing 'Without us2 knowing the rat was finishing off our2 (lit. your2) food'

Under some circumstances, however, $3^{\text {rd }}$ person subjects (a. and b. below) and objects do not necessarily make this shift to $2^{\text {nd }}$ person:

| a. | kî | nê | t:âât:ââ, nana kada | wu meedi chi/ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| CERT | 1sIMMC | waiting | 1sNot.Know that path.spec | 2sIMMP/ |
| dêe | kwolo |  |  |  |

b. nana nmopê, ka nmy:uu nmo 1plNot.Know CERT3IMMC looking.for 1plOPROXC 'Without us knowing, he was looking for us'

Other miscellaneous examples with $2^{\text {nd }}$ person shift:
a. nana nyêpê, ka nmy:uu dp:o

1dNot.Know CERT3IMMC 2plOPROXC
'Without we2 knowing, he was looking for us2 (you2)'
b. nana nyêpê, l:âmo dpo ngee ngmê

1dNot.Know losing $2 d S N r P S T C$ get $2^{\text {nd }}$ Dual
'Without us2 knowing (yesterday), we (lit. you2) lost that thing
c. nana ngêpê, _ngênê dê pw:onu Alotau

2sNotKnow.NrPast 2sPOSS.Uncle 3sIMMP died Alotau 'You didn't know (yesterday) that your uncle died in Alotau'
d. nana yepê, yâpwo ghii u mênê dmye kee 3plNot.Know.REM sacred.place parts its inside 2plIMMP enter dmi
plSIMMP
'Without them3 knowing, they went inside a yâpwo'
e. nana nyêdê, $d p \hat{\imath}$ kê l:âmo dpo ngee

1dNot.KnowIMM 2dPOSS shell.money losing 2dIMMP get
ngmê
PFS3sOPROX
'Without us2 knowing(today), we2 (lit. you2) lost our (lit. your2) kê shell coin'

### 8.4.2 Reported instructions

As has been mentioned, there is a special construction for relaying an instruction, a bit like English You are to come in now. As Henderson noted (1995:87), in this construction the overt pronominals will reflect the current speech participants, but the inflectional system may reflect the original speech situation. In the original situation, Dad might say to a messenger:
(495) Kaawe a pwiyé we

Kaawe CLS come P.IMP3sS
'Let Kaawe come here’

And then the messenger may say to Kaawa:
(496)
M:aa ngê apu, nyi a pwiyé we
Dad ERG QUOT.3s>anyPRS 2s CLS come PIMP3sS
'Dad says You are to come now' lit. 'Dad says you let him come'

In this way one can get a mismatch of person marking between that appropriate to the initial speech event, and that appropriate to the reporting event: here the $2^{\text {nd }}$ person pronoun takes a $3^{\text {rd }}$ person imperative inflection.

However, there is some latitude in this system. Consider for example the case of possessive pronouns. These will often stay rigid under the report (where in (497)a. S tells K to tell Y, and in (497)b. K tells Y):
(497)


But the pronominals can be relativized to the second situation of speaking - below in (498) either the b. or c. variants can be used to express the same meaning:


There are additional special properties of these situations. Consider the following where the (499)a. example has a verb of giving specialized to $3^{\text {rd }}$ person recipients, inflected with a $2^{\text {nd }}$ person singular subject and a $1^{\text {st }}$ person recipient - note that the recipient is deviantly expressed with 1 s signalled by the absolutive form of the pronoun, not the oblique or possessive. The next two examples show that other variants are also possible, in $b$. with a match between verb and recipient person, but in c. with a mismatch between the verb inflection and the verb root!


These details are of some interest in that they seem to establish some kind of crosslinkage between the clause of saying and the reported speech, but they do not establish that the reported speech is actually embedded. Although the verb or quotation formula could be said to have the reported clause as subcategorized under its argument structure, syntactically some kind of adjunction may be all that is involved.

### 8.4.3 Other relativizations of deixis

There are complexities around the parameters of person, time and place, where a reported utterance might be ambiguous between values for those parameters in the original reported speech event versus those relevant for the reporting speech event. First, consider the case of person deixis. Reported $1^{\text {st }}$ and $2^{\text {nd }}$ person pronouns might in principle be ambiguous, but in fact mostly there are special constructions which avoid this, as illustrated below:

[^21]b. Mwon̂̂ ngê Weta ka kwo: nê ka dp̂̂̀ Mwonî Erg Weta DAT 3>3QUOT 1s CERT3CI sleeping 'Mwonî said to Weta: I (current speaker, not Mwonî) was sleeping'
c. Mwonî ngê Weta ka kwo: kî nyi dpî Mwonî Erg Weta DAT 3>3QUOT CERT 2s sleeping 'Mwonî told Weta: you were sleeping' i.e. that he Weta (not current addressee) was sleeping
d. Mwonî ngê Weta ka kwo: nyi ka dp̂̂ Mwonî Erg Weta DAT 3>3QUOT 2s CERT3CI sleeping 'Mwonî told Weta that you (current addressee, not Weta) was sleeping’

In these cases, the clause reporting the speech has the normal form of direct speech in example (500)a. (kî nê $d p \hat{\imath ̂}$ ) and c. (kî nyi $d p \hat{\imath}$ ), the cases where person deixis is relativized to the original speech event. It has a special form in the cases where the $1^{\text {st }}$ and $2^{\text {nd }}$ pronouns refer to the reporter (b. nê $k a d p \hat{i}$ ) or his addressee (d. nyi $k a d p \hat{i}$ ) - in these cases the $k a$ is a $3^{\text {rd }}$ person inflection combined with the $1^{\text {st }}$ and $2^{\text {nd }}$ person pronoun.

When the pronoun or inflection instantiates an Ergative argument, in both direct speech and reported speech the pronoun would normally not appear. However, just where it refers to the speaker or addressee of the current speech event, it occurs with Ergative case marking:

| a. | Mwonî | ngê | Weta | ka | kwo, | $a$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | nee


| d. Kêpî ngê | dê | vyi, | kwo, nê | ngê | $a$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Kêpî | ERG 3IMM | said, | 3>3QUOT | 1s | ERG | 1 sPOSS |

Notice the oddity of example (501)c., where $1^{\text {st }}$ person pronominal elements refer to different individuals: the ergative pronoun (nê, 'I') refers to the current speaker, but the enclitic noo, coding $1^{\text {st }}$ person object etc., refers to the person performing the embedded speech act (she would have said "He blocked me", but it is here represented as "I (the current speaker) blocked me (the one reported to have said this)". Again, consider d., where the nê ngê ('I ERG') must refer to the speaker of the whole current sentence (Kêpî), but the a ngomo 'my house' refers to the embedded speaker, a woman.

Similar constructions disambiguate possessive pronouns, as the following illustrate:

e. Mwon̂̂ ngê Weta ka kwo, u nee chi Mwonî ERG Weta DAT 3>3QUOT 3sPOSS canoe 2sIMMPI 'nuw:o
take
'Mwonî asked Weta if he (Weta) had used his Mwonî’s / someone else's canoe’

As the last example shows, only the $3^{\text {rd }}$ person pronoun has ambiguities - here it can be read as referring to the reported speaker, i.e it can be relativized to the reporting event. However the salient reading is reference to a third party.

Time and place deixis are more ambiguous, although again the favoured interpretation is clearly with regards to the original reported speech situation. Consider the following permissible interpretations of the place adverb al:ii 'here':
(503) Njinjópu, Mwonî ngê Weta ka kwo, al:ii dpo placename Mwonî ERG Weta DAT said here 2/3sIMPDefd.CLS pwiyé
come
'At Njinjópu, Mwonî said to Weta, you must come here’
(i) Mwonî told Weta to come to where Mwonî then was i.e. to Njinjópu
(ii) Mwonî told Weta to come to where current speaker and addressee now are

Time expressions also have potential ambiguities, but with the same preference for values given by the original speech situation:
(504) ma Mwonî ngê Weta ka kwo, mââ
yesterday Mwonî ERG Weta DAT 3>3QUOT tomorrow
dpo
2/3sIMPDefd.CLS
pwiyé
come
'Yesterday Mwonî told Weta: you must come tomorrow’ i.e. today

However both the following are possible ways of expressing the same reported proposition:


In formal meetings, speakers may refer to themselves by name, with third person agreement. Nevertheless embedded sentences are likely to retain first person reference, as in (said by John):

| (506) | ye | John | $u$ | lama | mêe | daa | tóó |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | K:aalum

### 8.5 Temporal subordination

There are a number of distinct constructions involving temporal subordination, with translations glossing 'When . . .', 'While . . .', 'As soon as. . .', etc. Many of these involve periphrastic adverbials of the kind 'the time at which', but there is at least one full paradigm of verbal proclitics devoted entirely to the portmanteau expression of tense/aspect/person/number together with temporal subordination - I will call this the Yi-paradigm. The Yi-paradigm is easily confused with other uses of $y i$, including the cleft construction and ordinary anaphoric linkage (also with $y i$ ), but the cleft form is relatively indeclinable (usually of the form yinê) whereas the Yi-construction has a full range of portmanteau forms of yi. I will describe first the more analytic constructions, returning to the Yi-paradigm below.

### 8.5.1 Adverbial constructions

An adverbial clause of temporal subordination (a 'when' clause) can be built by using the periphrastic temporal specifier dini ghi 'time part' together with an adverbialized relative clause, to build a structure 'At the time at which S1, S2':

| (507) u | dînê | dini | ghi | n:ii | $n g e ̂$ | $a$ | ghêê |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3sPoss | shake time | part | REL | $\mathrm{ADV}_{-}$ | 3sREM.PI.CLS | moved |  |
| ngê | kîd:oo | yi | yilî | doo | n: aa | $a$ | $n k a a$ |
| MFS3sOREM after.that tree many | 3sREMCI.MOT | CLOSE participate |  |  |  |  |  |
| 'When he pulled it to shake it, all the other trees shook too' |  |  |  |  |  |  |  |

### 8.5.2 The têdê-construction

The noun têdê means 'time' or 'place', and is used to build nominalizations, as in:

| (508) | $k p \hat{\imath} p \hat{\imath} \quad$ têdê | n:aa | lêp̂̂ |
| :--- | :--- | :--- | :--- | :--- |
|  | fishing time/place | 1sPRSCI | going |
|  | 'I am going fishing' |  |  |

In a similar way, it combines with a Continuous verbal root (or gerund) to form a 'While'-clause:

| (509) nêêdî | yâmuyâmu têdê | $y: i$ | $m u$ | $n \hat{e}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| possum | hunting | while | there/here there | 1sREM.PI.CLS |
| ghêpê | wo |  |  |  |

### 8.5.3 The $y i$-construction

This construction expresses rather different notions in the punctual and continuous aspects. We will take them in turn. In the punctual aspect, it builds a two-clause construction [ $\mathrm{S} 1+\mathrm{S} 2$ ], with the yi-marked clause being S 1 , the whole understood to convey 'As soon as S1, S2', 'When S1, S2':

| (510) | Fabian | y | yi | t:aa, yed:oo | $a$ | $n m \hat{l}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| lee |  |  |  |  |  |  |
| Fabian | 3FUTPI.CLS | YI arrive then | FUT | 1 pl | go.FOL |  |
| $d m i$ |  |  |  |  |  |  |
| plPROXPI |  |  |  |  |  |  |

(511) nté yidî m:a, tpii da ghay
food 1sIMMPI.YI eat rain 3sIMM.CLS fall
'As soon as I had eaten (earlier today), rain fell'

The marking of the $y i$ construction involves the fusion of $y i$ with the inflectional proclitic in arbitrary ways, as shown in the following table (Table 8.20) for the Punctual Aspect paradigm. The exact interpretation of the temporal overlap between the two events, and the causal relation between them, is perhaps a matter of pragmatic construal, as already suggested by the examples above. The strong interpretation, 'as soon as, and as a result of' is clearly a matter of pragmatic interpretation, as it is sometimes obviously inappropriate:


But where appropriate it goes through:
a. yichi vy:a, ghó dê
YI2sIMMP hit spirit 3sIMMP blow
'When you hit him, his spirit flew (unconscious, today)'
b. y:aa d:uu ngê,
YI3REMP taste MFS3sOREMP
'When I tasted it, I vomited'

Incidentally, the adverbial temporal construction and the yi-construction can be combined, as in:

| (514) dini ghi | n:ii | ngê | yichi | t:aa, lukwê | ngmê |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| time part | REL | ADV | YI2sIMMP | arrive | what | INDF |
| de | pyódu |  |  |  |  |  |

There is also apparently a Habitual paradigm with non-unique forms (bottom of Table 8.20), which has a 'whenever' interpretation, as illustrated here:

| a. $y u d u \quad t a a, ~ d p \hat{\imath}$ | $l \hat{e}$ |
| :--- | :--- | :--- |
| YI.1sHABP arrive 3HABP | go |
| 'Whenever I arrive he goes' |  |

b. yidnye taa knî, dpî lê

YI.1dHABP arrive dS.IV 3HABP go
'Whenever we2 arrive he goes'

Table 8.20: yi-Construction - the Punctual aspect paradigm.

| Future | Sing | Dual | Plural |
| :--- | :--- | :--- | :--- |
| $\mathbf{1}$ | $a y: a a$ | $a y: e e$ | $a y: u u$ |
| $\mathbf{2}$ | $a y: i i$ | $a y u u$ | $a y i n m y i / v y: e e$ |
| $\mathbf{3}$ | $y i$ | $y i$ | $y i$ |

Immediate Past
(and Present, Today)

| 1 | yidî | yi dnye | yudu |
| :---: | :---: | :---: | :---: |
| 2 | yichi | yudu | yi dmye |
| 3 | yi | yi | yi |
| Near Past (Yesterday) |  |  |  |
| 1 | $y: a a$ | y:ee | y:uu |
| 2 | $y: i i$ | yuи | vy:ee |
| 3 | yi | yi | yi |
| Remote Past (Before Yesterday) |  |  |  |
| 1 | $y: a a$ | $y: e e$ <br> e.g. y:ee taa knâpwo 'as soon as we2 arrived' | y:00 <br> e.g.y:oo taa dniye 'as soon as we3 arrived' |
| 2 | $y: i i$ | yuи <br> e.g. yuu taa knâpwo 'as soon as you2 arrived' | vy:ii <br> e.g. vy:ii taa dniye 'as soon as you3 arrived' |

Table 8.20 (continued)

| Future | Sing | Dual | Plural |
| :--- | :--- | :--- | :--- |
| $\mathbf{3}$ | $y i$ | ei <br> e.g. yi taa knâpwo 'as <br> soon as they2 arrived' | yi <br> e.g. yi taa dniye 'as <br> soon as they3 arrived' |
| Habitual |  |  |  |
| $\mathbf{1}$ | yudu | yidnye | yudu |
| $\mathbf{2}$ | $y i d p y i$ | yudu | yi dmye |
| $\mathbf{3}$ |  | $y u u$ | yuu |
| Imperative | $y i$ | $y i$ |  |
| $\mathbf{1}$ | $y i$ | $y i$ | $y i$ |
| $\mathbf{2}$ |  | $y i$ | $y i$ |
| $\mathbf{3}$ | $y y y$ |  |  |

We turn now to the Continuous Aspect version of the yi-construction with special proclitics as in Table 8.21. The meaning is somewhat different, as the construction now suggests considerable or complete overlap between the events in S1 and S2:

| a. linê | lêpî, n:aa | 'ne'ne |  |
| :--- | :--- | :--- | :--- |
| YI.1sPRSCI | go.CI | 1sPRSCI.MOT | taking |
| 'I'll take it as I go' |  |  |  |

b. y:ee lêp̂̂, dpî 'nuw:o ngi YI2sPRS going 2sIMPP take 2sS3sOIMPP
'Take it along as you go'
c. nkéli k:oo yinmo lêp̂̂ nyédi, nmîmo
boat inside YI.1PlHAB go.CI PlSubjHABCI.Intr 1plHABCI
kpîpî nyédi
fishing PlSubjHABCI.Intr
'Whenever we are going along in a boat, we trawl for fish'
d. yidê lêp̂̂ yuu châpwo

YI.3sNrPSTC going leg cut
'As he was going he cut his leg (yesterday)'
e. yi nyipu lêpî, nyipu danêmbum

YI.1dREMC going 1dREMC talking
'As we2 were going, we2 were talking (day before yesterday)'
f. yi nmee mbêpê, nmee nd:amênd:amê

YI.1plREMC running 1plREMC singing.sacred.song
'As we were running along (in a sailing boat), we would sing sacred songs (Remote Past)'

Table 8.21: yi-Construction: The Continuous aspect paradigm.

| Tomorrow | Sing | Dual | Plural |
| :---: | :---: | :---: | :---: |
| 1 | $a \mathrm{y}: \mathrm{i} / \mathrm{a}$ yinîlêpı̂ | a yi ny:oo lêpi__ | $a$ yi nmîlêpî_ |
| 2 | a yi nyil lêpî | a yi dpî / a yudî lêpî | a yi nmyi lêpi_ |
| 3 | a yi lêpî | a yi dpî / a yudî lêpî | a yi dnyi lêpî_ |
| Now |  |  |  |
| 1 | yinê lêpî_ | y:ee lêpîmo | yinmo / yuno lêpîté |
| 2 | y:ee lêpî_ | yidpo / yido lêpîmo | vy:ee lêpîté |
| 3 | ye lêpî_ | ye lêpîmo | ye lêpîté |
| Today |  |  |  |
| 1 | y:aa lêpî | y:ee lêpîmo | y:oo lêpîté |
| 2 | y:iil lêpî | yuu lêpî mo | vy:ee lêpîté |
| 3 | yi lêpî | yi lêpîmo | yi lêpî té |
| Yesterday |  |  |  |
| 1 | y:aa lêpî | yi nyoo lêpi_ | yi $n m \hat{1} / y_{\text {y }}$ |
| 2 | y:iil lêpî | yi dpî / yudu lêpî_ | yi nmyi lêpi_ |
| 3 | yidîlêpî | yi dpî/ yudu lêpî_ | yi dnyil lêpî_ |
| Day before yesterday |  |  |  |
| 1 | yi noo lêpî_ | yi nyipu lêpî | yi nmee lêpî_ |
| 2 | yi nyoo lêpi_ | yi dpîmo lêpi_ | yi nmyee lêpi_ |
| 3 | yi doo lêplî | yi dpîmo lêpi_ | yi dnye lêpî_ |
| Habitual |  |  |  |
| 1 | yinê lêpî yedi | y:ee lêpî nódó | yinmo/yuno lêpîté |
| 2 | y:ee lêpî yedi, nyimo kpîpî yedi | yi dpo lêpî nódó | vy:ee lêpî nyédi |
| 3 | ye lêpî yedi | ye lêpî nódó | ye lêpî nyédi |

The yi-construction described here is a special bi-clausal construction. The $y i$-element itself is a declinable anaphoric which is found in other constructions, for example the single-clause focus construction where it combines with the absolutive-focussing particle vyîlo (see §8.6.1)

### 8.6 Focus constructions and clefts

There are two basic focus constructions, defined semantically as constructions which highlight one argument as the focus, and assert that this argument in particular, rather than other salient alternatives, played the relevant role in the event. One is restricted to Absolutive arguments, the other to Ergative ones (a
reflex of the syntactic ergativity of the language: see Chapter 9). One construction is based on the identificatory deictic element vyîlo (or vyîl̂) together with an anaphoric proclitic on the verb, the other involves special forms of the proclitic (e.g. yinê, again involving the anaphoric element $y$ i). They have different uses: the vyillo-construction highlights the Absolutive argument ( S of an intransitive clause, O of a transitive one), while the yinê construction highlights the Ergative subject of a transitive verb, as illustrated below:
a. kî pini ngê chêêp̂̀ vyîlo yi tvyîlo highlights
that man ERG stone FOC-ABS ANAPH Absolutive NP
d:ii
threw
'That's the stone which the man threw'
b. kî pini ngê chêêp̂̂ yinê dê $\leftarrow$ yinê highlights
that man ERG stone FOC-ERG 3sIMM Ergative NP
d:ii
threw
'That's the man who threw the stone'

Note that we can test the ergative/absolutive alternation here using paired verbs, like tpapê 'chew betel nut' (intransitive although incorporating), and kuwo 'chew betel nut' (transitive):
(518) a. Monki vyîlo yi mbwo < vyîlo highlights S-NP

Monki FOC-ABS 3Anaph betel
tpapê ( ${ }^{*}$ Monki yinê mbwo tapê)
chew.intrans
'Monki is the one who was chewing betel'
b. Monki ngê mbwo yinê kuwo <yinê highlights A-NP

Monki ERG betel FOC-ERG chew.trans
'Monki is the one who was chewing (not us)'
c. Monki ngê mbwo vyîlo yi <vyîlo highlights 0-NP

Monki ERG betel FOC-ABS 3Anaph
kuwo
chew.trans
'Monki was chewing betel, not anything else’
We noted in §7.9.4 (also §8.3.1.2; §8.3.2.2; §8.7.1.3) that tpapê as in example (518)a. above is an exceptional verb, since it is morphologically intransitive but in some
respects syntactically ergative, incorporating a pseudo-object. Here though it is the morphological status with an Absolutive subject that is relevant. One can further show this by looking at normal transitives, which optionally incorporate their object, thus detransitivizing. In this case, the detransitivization allows vyîlo to have scope over an agent of a (detransitivized) transitive verb. The normal transitive structure in example (519)a. below would require the yinê-construction to focus on the agents. The intransitivized sentence in example b. has the object of the transitive sentence incorporated in a privileged position between proclitic and verb, while the enclitic also displays the change of transitivity status. Now to focus on the agents one must use a vyîlo-construction:
a. Monki Tili y:oo mbwo yinê kuwo

Monki Tili ERG+PL betel FOC-ERG chew.trans ngmê
Trans.PFS.3sO.CIPROX
'Monki and Tilly were the ones who were chewing betel'
b. Monki Tili vyîlo dê yi mbwo kuwo

Monki Tili FOC-ABS Dual ANAPH betel chew.trans
mo
Intrans.d.CIPROX
'Monki and Tilly were the betel-chewing ones'
c. Monki Tili vyîlo dê yi mbwo tpapê

Monki Tili FOC-ABS Dual ANAPH betel chew.intrans mo
Intrans.d.CIPROX

The c. sentence, with the substitution of intransitive verb root tpapê for transitive kuwo, utilizes the same focus construction as the detransitivized sentence in b .

Scope is thus fully determined on the basis of (surface) grammatical relations, not by the position of the cleft elements. The following sections provide more detail on both constructions.

### 8.6.1 The vyîlo focus construction

To transform a non-focussed sentence into its focus or clefted counterpart, two elements are added to the pre-verbal nucleus: vyîlo followed by anaphoric yi suitably fused in portmanteau form with other elements in the proclitic:

| a. non-focal: | mââwe ka kwo? |  |
| :--- | :--- | :--- | :--- |
|  | Bigman CERT-3sCI.PROX stand.sS |  |
|  | 'Is the bigman standing there?' |  |
| b. focal: | mââwe vyîlo y:e | kwo |
|  | Bigman DEICTIC ANAPH-3sCI.PROX | stand.sS |
|  | 'Is that the bigman standing there?' |  |

Vyillo has independent uses as a presentational deictic. The following illustrates the non-focus uses of deictic vyîlo:44

| (521) A: | ala vyîlo? B: ye | daa vyîlo |  |
| ---: | :--- | ---: | :--- |
|  | this-nr-Spkr the-one? | that-nr-Addr | NEG the-one |
|  | 'Is this the one?' | 'No, that (near you) is not the one' |  |

There is no proximal deictic component in vyîlo: thus one can say equally kî vyîlo 'is that-medial the one?', wu vyîlo 'is that-uncertain the one?', mu vyîlo 'is that-distant the one?'.

But the focus-element vyîlo normally occurs in a special slot, just before the verbal proclitic, and is invariant over tense, mood, person, and so on. The other element of the construction is anaphoric $y i$, which fuses with the normal verbal proclitic in a not wholly predictable paradigm of 144 cells (defined by tense, aspect, person, number, mood configurations). This yi appears to inflect exactly as the paradigm involved in the bi-clausal temporal construction described in §8.5.3 (see Tables 8.20 and 8.21). There are some quite subtle distinctions in the form that this yi element takes, for example, in continuous aspect, an alternation between $y i$ and ye according to tense:

44 The fact that vyîlo has these other deictic uses makes it possible to introduce deictic vyîlo in a yinê-construction - in that case the sentence has the properties of a yinê cleft (and vyîlo occurs initially, not in the pre-nucleus):
(i) vyîlo yi pini ngê yinê a d:uud:uu ngê DEIC ANAPH man+spec ERG A-FOCUS 3HabCont do.Cont MonoFS.3sO.HabCont 'He's the one who habitually does it'

Thus the vyîlo construction is defined not just by the element itself, but by the whole construction.
(522) a. James Headmaster ka vyîlo ye nkîngê James headmaster POSTP FOC-ABS ANAPH.3PRS be.afraid 'James is the one (currently) frightened of the Headmaster'
b. James Headmaster ka vyîlo yidoo nkîngê James headmaster POSTP FOC-ABS ANAPH.3.REMPC be.afraid 'James is the one who used to be frightened of Headmaster'
c. ngêpê ngomo vyîlo ye wumê wuwó ngmê prayer house FOC-ABS ANAPH 3ImmFUTC building PFS3sO 'They are building a church, not anything else'
d. ngêpê ngomo vyîlo yi dnyi wuwó prayer house FOC-ABS ANAPH 3plNrPSTC building 'They were building a church, not anything else'
(Below, for compactness, the ANAPH element will not be fully glossed.) The key observation is that the vyîlo-construction focuses on the absolutive argument of sentences whether S or O, and similarly on the absolutive one of experiencer ('oblique subject') sentences.

Since the pre-verbal position of vyîlo (just before yi) is the normal unmarked location, its scope (underlined in the following examples) is determined by grammatical relations, specifically by restriction to the absolutive argument of normal subject sentences (the S-argument in a. below, or the O-argument in b.). Even when it is moved, the scope remains the same:

| a. | $\frac{k \hat{\imath} d m a ̂ a ̂ d \hat{\imath}}{}$ | mbwódo vyîlo | yi | kmaap $\hat{\imath}$ |
| :--- | :--- | :--- | :--- | :--- |
| that girl | on.ground | FOC-ABS | ANAP | dine |

b. kî pini ngê chêêpî vyîlo yi d:ii $\rightarrow$ movement that man ERG stone FOC-ABS ANAPH threw possible 'That's the stone which the man threw'

Changes in scope can be illustrated by the interaction of this construction with others. When O-incorporation detransitivizes the sentence (524)a. below as in b., it has the expectable change of scope - since there is no surface O-NP to scope over in the incorporated sentence b., the scope now switches to the absolutive subject or NP in S-function. PP-incorporation, which takes place with some exceptional intransitives, has no effect on the function of the S-NP, and thus the scope remains on the S-NP in these cases (see example c.).
a. Incorporation with transitive verb - intransitivizing, scope changes k̂̂ pyópu ngê nté vyîlo yi ch:eech:ee that woman ERG food(ABS) FOC-ABS ANAPH cooking 'This is food that the woman was cooking'
$\rightarrow$ b. kî pyópu vyîlo [yi nté ch:eech:ee] $]_{\text {verb complex }}$ that woman FOC-ABS ANAPH food cooking 'This is the woman who was food-cooking'
c. Incorporation of PP by intransitive V - does not change scope:

Mwonî vyílo yi nêêdî ka vyuwo Mwonî FOC-ABS ANAPH possum DAT look.for 'Mwonî is the one who looks for possum'
d. Experiencer construction - Absolutive NP is focussed as before:

Yidika ngê nkéli u yi vyîlo yi a Yidika EXP boat its desire FOC-ABS ANAPH 3sCI.PROX kwo
standing
'It is a boat (not a canoe) that the desire is standing for Yidika' (i.e. He wants a boat)
e. Reciprocal - subject can be in scope if intransitive verb:

| kî | $\frac{\text { tpódu }}{}$ | noko | vyîlo | dê | yi | danêmum |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| those | men.two | RECP.DAT | FOC-ABS | Dual | ANAPH | talking |
| mo |  |  |  |  |  |  |

Intrans.CI..PROX
'Those two men are the ones who were talking to each other'

In the experiencer construction in d. above with a 'dative'-subject, vyîlo has scope over the absolutive NP as always (here the 'want' predicate takes the object of desire in the absolutive case, and the desirer in the 'dative' or rather the special experiencer case). Reciprocals are a complex part of the grammar, intransitivizing in certain tenses/aspects, and (unlike reflexives) occurring with intransitive verbs as in e. above. Here the S-NP ('those two men') binds the oblique NP noko 'to each other', thus allowing a vyîlo construction to focus on the subject of a reciprocal clause, not an option with reflexive clauses.

There is one important rider on the otherwise invariant rule that vyîlo takes scope over the absolutive NP, for the scope can include Instrumental NPs (but not e.g. Dative NPs):
(525) kî pini ngê kpîdi pee dmââdî ka yuu that man.spec ERG cloth piece girl DAT foot ngê vyîlo yi y:oo
INST FOC-ABS ANAPH give.to. 3
'It was a cloth that that man gave with his foot to the girl' OR 'It was with his foot that that man gave the cloth to the girl' BUT NOT 'It was to the girl that that man gave the cloth with his foot'

It is not clear why this should be the case: despite the explicit marking of instrumental NPs (with a case-marker which in the singular is homophonous with the ergative), perhaps they are less oblique (higher on a thematic hierarchy) than other oblique NPs. In any case, vyîlo can not scope over e.g. the dative NP ('to the girl') in the example above.

To further illustrate the S/O restriction, consider first the following transitive sentences, where the focussed element is always the object:
a. vyîlo yi kópu yi dî vyi FOC-ABS that word ANAPH 1sImmPST say 'Those are the words I said'
b. bread vyîlo yi Ø ma bread FOC-ABS ANAPH 3sPRS eat 'It's bread that he eats'
c. ngêpê ngomo vyîlo yi wumê wuwó prayer house FOC-ABS ANAPH 3ProxHabC+MOT build ngmê PFS3sO
'It's a church they are building (not anything else)'
d. ship vyîlo ye ndînê ngmê ship FOC-ABS ANAP construct PFS3sO 'It's a ship (steel boat) they are building!'

Contrast this with intransitive sentences where the focussed element is always the subject:
(527) a. kî dmââdî bicycle mbêmê vyîlo yi yââ

DEIC girl bicycle on FOC-ABS ANAPH sit.down 'This girl is the one who sat on the bike'
b. kî dmââdî mbwódo vyîlo yi kmaapî DEIC girl on.ground FOC-ABS ANAPH dine 'This is the girl who was eating on the ground'
c. kî pyópu vyîlo yi nté ch:eech:ee

DEIC woman FOC-ABS ANAPH food cooking 'This is the woman who was food-cooking'
d. Mwonî vyîlo yi nêêdî ka vyuwo

Mwonî FOC-ABS ANAPH possum POSTP look 'Mwonî is the one who looks for possum'
e. James Headmaster ka vyîlo ye nkîngê

James Headmaster POSTP FOC-ABS ANAPH be.frightened 'James is the one frightened of the Headmaster (ye is not $y i$ - is Present)'

Note that in example (527)c. the verb is transitive, but the clause is intransitive because the object is incorporated (nté 'food' occurs between proclitic yi and the verb), and vyîlo picks out the intransitive (zero-case marked) subject. Similarly, in d., we have an intransitive verb ('look (for)') which can incorporate its subcategorized PP (here 'for possum') - although there are two NPs in play, it is the absolutive not the oblique that is focussed on. The sentence in e. has an intransitive verb that subcategorizes for a non-incorporated PP ('be frightened of NP') and here again the subject is focussed on.

In Experiencer (Dative-Subject) structures, vyilô consistently picks out the absolutive NP as expected:
(528) Yidika ngê nkéli u yi vyîlo yi a kwo Yidika EXP boat 3POSS desire ABS-FOC ANAPH 3PRS standing 'It is a boat that Yidika wants' (lit.'It is a boat the desire for which is standing to Yidika’)

### 8.6.2 The yinê construction

This construction is the most frequent focus construction. (It is not to be confused with the formally similar yi-construction, which is a two-clause construction of temporal subordination discussed in §8.5.3, nor with the simple anaphoric yi construction just met inside the vyîlo-construction, described in §8.6.1). The yinê construction is marked either entirely in the proclitic in portmanteau form (3 $3^{\text {rd }}$ person yinê (S)/ y:oo (Dual/PL in distal tenses), relatively indeclinable), or in other persons by a combination of the normal proclitic preceded by a possessed emphatic chóó, as in a chóó anê kââa 'My self I-will put (it)'. This second form could be said to be merely an emphatic, but it serves the same focus function and was elicited as the non- $3^{\text {rd }}$ person counterpart, and furthermore it can co-occur with
other emphatics. The paradigm of yinê-forms, which replace the normal verbal proclitics, looks then as in Table 8.22 (for the punctual aspect) and Table 8.23 (for the continuous aspect). I have illustrated with the verb kââa 'put (standing)' (suppletive forms kaa, kapî) and appropriate enclitics, but the operative yinê-element is just the material before the verb.

Table 8.22: Yinê construction, Punctual aspect (Indicative mood unless noted) Illustrated with verb kââ/kaa/kapî 'put'/'putting', with 3s Object e.g. 'He is the one who put it'.

| PERSON - <br> TENSE - Tomorrow | Sing | Dual | Plural |
| :---: | :---: | :---: | :---: |
| 1 | a chóó anê kââ | nye chóó anyi kââ | nmî chóó anmî kâa |
| 2 | nyóó anyi kââ | dpî chóó a dpî kaa ngmê | nmyi chóó anmyi kââ ngmê |
| 3 | yinê wa kâa | y:oo wa kaa ngmê | y:oo wa kaa ngmê |
| TENSE - Earlier today |  |  |  |
| 1 | a chóó dê kâa | nyi chóó dnye kââ | nmî chóó dpî kââ |
| 2 | nyóó chí kââ | dpî chóó dpî kaa ngmê | nmyi chóó dmye kaa ngmê |
| 3 | yinê dê kâa | yinê dê kaa ngmê | yinê dê kaa ngmê |
| TENSE - Yesterday |  |  |  |
| 1 | a chóó nê kââ | nye chóó nyi kââ |  |
| 2 | nyóó nyi kââ | dpî chóó dpî kaa ngmê | nmyi chóó nmyi kaa ngmê |
| 3 | yinê kââ | yinê kaa ngmê | yinê kaa ngmê |
| TENSE - REM |  |  |  |
| 1 | a chóó nê kâa | nye chóó nyi kâa | nmî chóó nmî kââ |
| 2 | nyóó nyi kââ | dpî chóó dpî kaa ngópu | nmyi chóó nmyi kaa ngópu |
| 3 | yinê kââ | y:oo kaa ngópu | y:oo kaa ngópu |
| MOOD - Habitual |  |  |  |
| 1 | a chóó dpî kââ | nyi chóó nye kapî ngê | nmî chóó nmo kapî ngê |
| 2 | nyóó dpyi kââ | dpî chóó dpyi kaa ngmê | nmyi chóó dmye kaa ngmê |
| 3 | yinê dpî kââ | yinê / y:oo dpî kaa ngmê | yinê /y:oo dpî kaa ngmê |
| - Imp Deferred* |  |  |  |
| 1 | - | - | - |
| 2 | nyóó anyi kââ | dpî chóó a dpî kaa ngmê | nmyi chóó anmyi kaa ngmê |
| 3 | chóó dpî kaa ngê | yi chóó dpî kaa y:ee | yi chóó dpî kaa y:ee |

*Note: There appear to be no Non-deferred Imperative forms

Table 8.23: Yinê construction, Continuous aspect.

| PERSON - <br> TENSE - Tomorrow | Sing | Dual | Plural |
| :---: | :---: | :---: | :---: |
| 1 | a chóó anî kapî | nyi chóó any:oo kapî | nmî chóó anmî kapî |
| 2 | nyóó anyi kapî | dpî chóó adpî kapî | nmyi chóó anmyi kapî |
| 3 | yinê adî kapî | y:oo adpî kapî | y:oo adnyi kapî |
| TENSE - Now |  |  |  |
| 1 | a chóó n:aa kapî | nyi chóó nye kapî | nmî chóó nmo kapî |
| 2 | nyóó nye kapî | dpî chóó dpo kapî ngmê | nmyi chóó nmye kapî ngmê |
| 3 | chóó a dî kapî | yi chóó a dpî kapî | yi chóó a dnyi kapî |
| TENSE - Earlier <br> today |  |  |  |
| 1 | a chóó nî kapî | nye chóó nyi kapî | nmî chóó nmî kapî |
| 2 | nyóó nyi kapî | dpî chóó dpî kapî ngmê | nmyi chóó nmyi kapî ngmê |
| 3 | yinê kapî | yinê kapî ngmê | yinê kapî ngmê |
| TENSE - <br> Yesterday |  |  |  |
| 1 | a chóó nê kapî | nyi chóó ny:oo kapî | nmî chóó nmî kapî |
| 2 | nyóó nyi kapî | dpî chóó dpî kapî | nmyi chóó nmyi kapî |
| 3 | yinê dî kapî | yinê dpî kapî_ | yinê dnye kapî (not dnyi) |
| TENSE - REM |  |  |  |
| 1 | a chóó noo kapî | nyi chóó nyipu kapî | nmî chóó nmee kapî |
| 2 | nyóó nyoo kapî | dpî dpîmo kapî_ | nmyi chóó nmyee kapî |
| 3 | yinê doo kapî_ | yinê dpîmo kapî_ | yinê dnye kapî_ |
| MOOD- Habitual* |  |  |  |
| 1 | a chóó n:aa kapî $n g e \hat{e}$ | nyi chóó nye kapî ngê | nmî chóó nmo kapî ngê |
| 2 | nyóó nye kapî $n g e ̂$ | dpî chóó dpo kapî ngópu | nmyi chóó nmye kapî ngópu |
| 3 | yinê a kapîngê | yinê / y:oo a kapî ngópu | yinê / y:oo a kapî ngópu |
| MOOD- Imperative |  |  |  |
| 1 | a chóó anî kapî | nyi chóó any:oo kapî | nmî chóó anmî kapî |
| 2 | nyóó chi kapî ** | dpo choo kapî | nmyi chóó dmyinê kapî |
| 3 | (yinê) chóó kapî *** | y:oo a dpî kapî | y:oo adnyi kapî |

[^22]The yinê focus construction, constituted as illustrated in the paradigms, does not itself have the syntactic (dual-clause) structure of an English cleft, although it can be combined with such a structure, using deictic vyîlo (distinct from the focus-marker):

| a. vyîlo yi pini | ngê | yinê | a | d:uud:uu |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| DEIC Anaph man.spec | ERG | FOC.ERG | 3HAB.C | do.HAB.C |  |
| $n g \hat{e}$ |  |  |  |  |  |
| MFS.3sO |  |  |  |  |  |
| 'This is the man who habitually does it' |  |  |  |  |  |
| b. nyi vyîlo nyóó | nye | d:uud:uu | ngê |  |  |
| you DEIC | (N)2sSELF | 2sHAB.C do.HAB.C | MFS.3sO |  |  |
| 'You there are the one who habitually does it' |  |  |  |  |  |

Notice how such a structure has three pronominally-marked elements (for b. above, the pronoun nyi, the $2^{\text {nd }}$ person possessive nasal assimilated to chóó as nyóó, and the $2^{\text {nd }}$ person habitual proclitic nye). But here we will concentrate on the simplex yinê focus construction, since its properties carry over to the more complex cleft of which it is a part.

As noted above, the yinê construction can only highlight the transitive subject or A-function argument (in contrast to absolutive NP focussing by the vyîlo construction):

```
(530) Tili ngê yinê dê t:âmo
    Tili ERG FOC-ERG 3IMMPI steal.PROX
    'Tilly (and no one else) is the one who stole it'
```

A typical use of the yinê construction is to announce the revelation of an identity, hitherto unknown or mysterious, or thought to be someone else, as in the following extracts from myths:


```
c. Gha cha y:00, y:00 a
    Gha man+wife ERG-PL FOC-ERG 3sREM.PI.CLS
    'nuw:o ngópu
    bring PFS3sO.REM.PI/HABC(Trans)
    'Gha and his wife, they are the ones who brought it
    (shell-money to Rossel)'
```

In conversation it may be used to contradict an assumption:

| (532) A: | mââ, Yelingep Dâmu'nuwo wa le <br>  <br>  <br> tomorrow boat.name place.name 3FUTP go |
| ---: | :--- |
|  | 'Tomorrow the boat Yelingep is going to Damenu' |

### 8.7 Constructions based on nominalization

The basic nominalization of a verb uses the continuous root directly, without derivation, as a gerund or 'action nominal' (Koptjevskaja-Tamm 2013). Thus an inherently punctual transitive verb like $p w a \hat{a} \hat{~ ' b r e a k ' ~ h a s ~ a ~ s u p p l e t i v e ~ c o n t i n u o u s ~ r o o t ~}$ pwaapî which can be used directly as a nominal meaning 'breaking something'. Its intransitive counterpart is pwópu, with continuous root pwópupwópu, 'breaking', which can likewise be used as a gerund. Inherently continuous roots like dpodo, 'working', also directly yield gerunds, u dpodo 'his work'. These gerunds have a number of uses, playing a role in special constructions listed below, but they can generally take the place of any NP, occurring e.g. in ergative position:

| (533) | kwo yééyéé | ngê | a |
| :--- | :--- | :---: | :--- |$\quad$ 'nuwo

In addition to this, the resultative construction (§7.9.1) yields nominalizations, which can play the role of an NP in a sentence.

### 8.7.1 Nominalization and syntactic ergativity

In English, arguments of nominalizations of the following kind have an obvious interpretation - if the verb is transitive the argument is in A-function, as in example (534)a., or if intransitive it is in S-function, as in b. (but see Quirk et al. 1985:1063ff and Koptjevskaja-Tamm 2013 for the full story):
(534) a. Your hitting is haphazard
b. Your snoring is a problem

In other words, the possessive pronominal argument is interpreted in both cases as a nominative subject. But in Yélî Dnye, the equivalent transitive verb has an odd interpretation to English ears (recall: $2^{\text {nd }}$ person singular possession is expressed by fusing of a floating homorganic nasal, represented here as prefix N ):

| (535) | ngmapı̂ |
| :--- | :--- |
|  | dono |
| 2s mgap̂̂ | dono |
|  | 2sposs+killing-by-sorcery |
|  | bad |

'Your sorcerizing is bad' means 'The killing of you by sorcery would be bad' not ‘The killing by you using sorcery would be bad’

It has in effect a passive-like interpretation - 'your being killed by sorcery would be bad'. This alerts us to the fact that whereas English nominalizations as in the examples above preserve the subject (whether in A- or S-function) as a possessive to the left of the gerund, Yélî Dnye gerunds preserve the absolutive noun phrase (whether in S- or O-function) immediately to the left.

### 8.7.1.1 Lexical arguments of nominalizations

Leaving aside till §8.7.1.3 pronominal possession of the kind just illustrated, the basic generalization is that the full lexical arguments of nominalized verbs in Yélî Dnye show the following pattern:

- Lexical arguments that would be Absolutive arguments in finite constructions whether in S or O role - surface as unmarked NPs associated with nominalized verbs
- Lexical arguments that would be Ergative ones in a finite clause can surface optionally as lexical possessors of transitive gerunds
(These patterns do not seem to fit the typology laid out in Koptjevskaja-Tamm 2013, but would constitute another minor type where S and O are unmarked and

A alone can be a possessor.) As illustration of the basic pattern, we can exploit the fact that many verbs have transitive and intransitive doublets, each with a set of suppletive verb forms. Thus we have in Table 8.24 the following paired roots for the verbs 'to turn something over' vs. 'to turn over (e.g. capsize)':

Table 8.24: 'To turn something over' vs. 'to turn over (e.g. capsize)'.

| Suppletion categories | Transitive Verb | Intransitive Verb |
| :--- | :--- | :--- |
|  | 'to turn something over'' | 'to turn over self'' |
| punctual proximal tenses | tpaa | tpââlî |
| punctual remote past | tpólu | tpalî |
| punctual followed root | tpaa | tpalî |
| continuous aspect | tpiyé | tpâlîtpâlî |

In each case, it is the continuous aspect root which is used as the non-finite, nominalized form of the verb. Consider first the transitive forms: (536)a. gives the finite transitive sentence, b. its unmarked nominalization.
(536) Transitive nominalization
a. Yidika ngê u nee dê tpaa

Yidika ERG 3Poss canoe 3simmpastPI overturn.TV 'Yidika overturned his canoe'
b. nee tpiyé dono
'Overturning a canoe is bad (don't do it)'
c. Yidika u nee tpiyé dono

Yidika his canoe overturning.TV bad
'Yidika's over-turning of the canoe is bad (Yidika did it, not someone else using Yidika’s canoe)’ (does not mean 'overturning Yidika’s canoe is bad')

When the finite clause in example (536)a. is nominalized, it is the 0 argument that is the unmarked surviving argument as in $b$. The ergative argument can however be got in by using a possessive structure, as in c. In that case the possessor must be understood as the agent, not as a semantic possessor.

In contrast, with the intransitive verb counterpart, the $S$ argument is the unmarked surviving argument, and a possessor can only be interpreted as a semantic possessor (the owner), not as the agent of the action. In example (537), a. gives the finite intransitive sentence, and b. its unmarked nominalization, while c. shows
that an additional possessive NP only has an 'ownership' (not an agentive) reading (d. shows the finite counterpart):
(537) Intransitive nominalization
$\begin{array}{ll}\text { a. nee dê tpââl̂̂ } \\ \text { canoe 3simmpastPI overturn.IV } \\ \text { 'The canoe overturned' } \\ \text { b. nee tpâlîtpâlî dono } \\ \text { canoe overturning.IV bad } \\ \text { 'The overturning of a canoe is bad (whenever it happens)' } \\ \text { c. Yidika u nee tpâlîtpâlî dono } \\ & \text { Yidika his canoe overturning.IV bad } \\ \text { 'The turning over of Yidika's canoe is bad' } \\ \text { d. Yidika u nee dê } \\ \text { Yidika his canoe 3simmpastPI overturn.IV } \\ \text { 'Yidika's canoe turned over (not necessarily with him on board)' }\end{array}$

### 8.7.1.2 Pronominal arguments of nominalizations

As we saw, these nominalizations or gerunds can be pronominally possessed, and in that case a variant of the normal pattern usually applies, since the possessive pronoun has the same interpretation as a non-possessive lexical noun. Thus, in examples (538)a. and b, below, intransitive verbs (with $S$ arguments) have the possessor interpreted as $S$, while transitive verbs, as in c . and d., have the pronominal possessor interpreted as in O function:


Thus so far we have the following patterns:

- Lexical arguments that would be Absolutive arguments in finite constructions - whether in S or O role - surface as unmarked NPs associated with nominalized verbs
- Lexical arguments that would be Ergative ones in a finite clause can surface optionally as lexical possessors of transitive gerunds
- Pronominal arguments that would be in Absolutive case in the finite counterpart construction surface directly as possessive pronouns before the gerund (this is Koptjevskaja-Tamm’s 2013 'Ergative-Possessive’ type of action nominal, except that participants in A function do not appear).

The Yélî Dnye patterns are exceptional, judging from the WALS samples: most languages with ergative case-marking avoid the interpretative problems by not having gerunds at all, or by retaining the full marking of finite sentences (comparing WALS Chapter 98, Comrie 2013; and Chapter 62, Koptjevskaja-Tamm 2013; see also Comrie \& Thompson 1985).

### 8.7.1.3 Exceptional intransitive verbs

These patterns are, however, somewhat complicated by the fact that a finite sentence with an incorporated object seems to be able to carry that incorporated object with it in the nominalized form. The evidence for this comes from exceptional (morphologically) intransitive verbs like tpapê 'chew betel' which allow incorporated pseudo-objects:
a. mbwo tpapê dono
native-betel chewing bad
'Chewing native betel is bad'
b. u/yi mbwo tpapê dono

3s/3PlPoss native.betel chewing bad
'His/their chewing native betel is bad' (not 'Chewing his/their betel is bad')
c. mwo tpapê dono (= nyi mbwo tpapê

N+mbwo in Western dialect)
2sPoss+native-betel chewing bad
'Your1 chewing native betel is bad'
d. Yidika u mbwo kuwo dono

Yidika 3sPoss native-betel chewing.TV bad
'Yidika's chewing of native betel is bad' (not ' The chewing of Yidika's betelnut is bad')

In these cases, despite the intransitive verb root, the pattern of interpretation is like that with transitives: the unmarked NP is interpreted as in O-like function, and the possessive cannot be interpreted as a possessor (example (539)b. cannot mean 'Chewing his/their betel nut is bad'), but must be interpreted as an A-like argument, even though in the corresponding finite clause it would be an absolutive subject of an exceptional intransitive verb. Notice that in d. the pattern of interpretation is identical when the counterpart transitive root kuwo is used instead of intransitive tpapê.

There is another exceptional class of intransitive verbs which incorporate a PP rather than an NP - for example the verb vyuwo 'to look for' subcategorizes for a PP with postposition $k a$ (just like English 'look for him'), and the whole PP can be optionally incorporated. In this case, when the verb is nominalized its arguments are interpreted just like a normal intransitive verb's arguments:

$$
\begin{array}{llllll}
\text { a. } & \text { kêndap } & \text { ka } & \text { vyuwo } & \text { dpodo } & \text { ntîl }  \tag{540}\\
& \text { shellmoney } & \text { DAT } & \text { looking.for } & \text { work } & \text { big } \\
& \text { 'Looking for kêndap shellmoney is hard work' }
\end{array}
$$

b. Cosmis u kêndap ka vyuwo John Lêmonkê

Cosmis 3sPOSS shell.money DAT looking John Lêmonkê
u dpodo
3sPoss work
'It is John's work to look for kêndap (shell money) for Cosmis' (not 'Cosmis’ looking for shell money is (really) John Lêmonkê’s work')

Here, as example (540)b. makes clear, the possessor of the NP in the PP (Cosmis) has the normal possession reading.

These facts are interesting because they show that it is the syntactic behaviour of verbs, not the morphology of their arguments, that governs this particular aspect of syntactic ergativity, namely the interpretation of arguments of nominalizations. Thus in the case of the morphological intransitives which behave syntactically like transitives, incorporating an O-like NP, the nominalizations behave just like regular transitive verbs. On the other hand, morphologically intransitive verbs that incorporate their PPs are still both morphologically and syntactically intransitive, so their nominalizations behave like regular intransitives. However, we will see immediately below that not all aspects of syntactic ergativity are so indifferent to morphological ergativity.

### 8.7.1.4 The control of the arguments of gerunds in complex constructions

There is not much evidence in the language of complex control patterns (i.e. patterns of obligatory coreferential interpretation across clauses). One exception is the causative construction, the only valence-increasing operation in the language. This involves a causative verb which (obligatorily) incorporates a gerund, which is a nominalized clause. The causative verb kwolo ('make, cause', with continuous form kîgha) normally takes an intransitive gerund (e.g. 'work') to make a transitive verb, e.g. 'make someone work' (lit. 'make someone (he) be working'). This of course is an absolutive control pattern ( $\mathrm{O}-\mathrm{NP}$ of 'make/cause' is coindexed with the S-NP of 'working'). In the normal case the intransitive gerund is an Agentive or Unergative intransitive, so the interpretation is ' X causes Y to do something', as illustrated below:

```
(541) Yidika ngê tp:ee dê a dpodo kîgha
    Yidika ERG boy dual-N 3sIMMCI.CLS work causing
    dê
    MFS.3dO.PROX.TV
    'Yidika was making the two boys work'
    lit. 'Yidika was making the two boys}\mp@subsup{\mp@code{l}}{1}{},(\mp@subsup{\mathrm{ they }}{1}{})\mathrm{ working'
```

Now, exceptionally, kwolo may take transitive gerunds like châpwo 'cutting something'. In this case, however, the construal is different - it does not mean 'make someone cut something', it means rather 'to make something be cut into pieces'. That is to say, it is construed as 'He made it ${ }_{1}$ (O-NP) cutting of it ${ }_{1}$ (O-NP)', again an absolutive pattern of interpretation. This is entirely consistent with the general construal rules for gerunds - they retain the absolutive NP, whether in S- or O-function. This pattern is illustrated below in example (542)a.:


The b. sentence above shows a sentence closely parallel to a., but with an intransitive gerund from an unaccusative/patientive (or Undergoer subject) verb that means 'be tearing (of things)'. The interpretation contrasts with that in the a. sentence, where the causee is the agent of the intransitive gerund, because the 'be tearing' verb is Patientive or Unaccusative, and presumes an inanimate subject. Nevertheless both sentences share the same control pattern: the control or coindexing runs from the matrix Absolutive NP to Absolutive NP of the gerund.

Summing up the patterns of interpretation for these causative structures, they show a resolutely absolutive pattern of control, even in the exceptional cases: an absolutive NP (O-NP of the causative verb) controls an S-NP, or exceptionally an $0-\mathrm{NP}$, of the gerund. I should note that, although the gerund is not strictly a clause but merely a nominalization, this is the nearest we seem to come in Yélî Dnye to an absolutive cross-clausal 'pivot'-like pattern of interpretation (as described by Dixon 1994 as definitive of syntactic ergativity: see Chapter 9 below).

### 8.7.2 Other nominalization structures

The resultative construction was described in §7.9.1, as involving a transitive punctual root (proximal tense) which carries with it the O-argument of the corresponding transitive sentence, now in subject role. Normally it is interpreted as a full clause. But it can also be directly used as a nominalization without further derivation. Note that resultatives take dual/plural agreement markers just like NPs, suggesting that they are underlyingly nominalizations in all cases. When used as nominals, such resultative NPs can then play a further role in the NP slots in other sentences. They can thus occur e.g. as the subject of attributive adjective clauses:
a. Tili u d:ââ pwaa ngmê dono
Tili 3sPOSS pot break.TV RES bad
(or: Tili ud:ââ dono pwaa ngmê)
'The breaking of Tilly's pots is bad'
(using RESULTATIVE construction)
b. te ndiya yé ngmê dono, ngmênê d:ââ k:oo kéé
fish on.fire put RES bad but pot inside put.in
ngmê mb:aamb:aa
RES good
'It's bad to put fish on a fire, they are better in a pot'
(lit. fish-being put on a fire bad, but being-put.in inside a pot good)

Or they can be adverbialized by a postposed adverbializer ngê, and then occur with positionals to describe a state:

| a. ke'ne kwe'ne kalê ngmê | ngê | $k a$ | tóó |
| :--- | :--- | :--- | :--- | :--- | :--- |
| door openIV Causative RES ADV | CERT3sPRSCI | sit |  |
| 'The door stays open (habitually)' |  |  |  |
| (repeated from example (318)f.) |  |  |  |

b. d:ââ yi dê yi kêêlî kaa
pot tree Dual 3PLPOSS between put.standing
ngmê ngê a kwo
RES ADV 3PRSCI standing
'The pot is standing put (jammed) between two trees'
c. yi w:uu kuu tapil mbêmê kaa ngmê ngê
tree seed dishful table on.top put.standing RES ADV
a kwo
3PRSCI standing
'A dishful of nuts has been put standing on the table'

In this construction the NP acting as the (Absolutive) argument of the Resultative is simultaneously acting as subject of the positional verb (as shown by the collocational constraints between the NP and verbs, e.g. doors 'sit', pots 'stand').
a. pyââ ngê leede yi p:uu dê kââ
woman ERG ladder tree against 3IMM make.stand 'A woman put the ladder against the tree'
b. leede yi p:uu kaa ngmê ngê
ladder tree against make.standFOL RES ADV
$a \quad k w o \quad\left({ }^{*} t: a\right)$

3PRSCI standing (*hanging)
'The ladder is standing having been made to stand against the tree' (note ngê is obligatory here after ngmê)
c. kwo al:ii 'nuw:o ngmê ngê d:ii

3sQUOT here take/bring Resultative ADV NEG2sCI tóó
sitting/being(s/d)
'She said: You are not really (from here), having been brought here (by marriage)'

### 8.8 Other biclausal constructions

There are many conjunctive expressions which serve to construct biclausal dependencies. The following examples illustrate the use of $k: o m(o)$ tpile, 'although, even though', mu kópu 'because', anté 'when', p:ee 'instead of' (with negative):
(546) a. k:om tpile _nyi ye daa kwo, ngmênê

EVEN.THOUGH 2s+desire 3plDAT NEG standing, but
dpî lili
2sIMP go.IMP
'Even though they don't want you, you should go'
b. n:aa lêpî, mu kópu t:ââ wa a

1sIMMFUT.C going BECAUSE flood UNCERT.3IMMFUT
ghî
come.down
'I'm going because a flood might come down'
c. Yidika dê nod:e, mu kópu dîy:o Mbilipe

Yidika 3IMMP become.angry FOR.THAT.REASON Mbilipi dê lê
3IMMP go
'Mbilipe went off because Yidika was angry (today)'
d. nkéli anté wa kee, Alotau n:aa
boat WHEN UNCERT.3ImmFUT ascend Alotau 1sImmFUTC
lêpı̂
going
'When a boat comes, I'll go to Alotau'
e. Ghêlî daa pwene, u kee yoo ungwo m:uu

YET NEG died.REM 3POSS grandchild PL in.turn saw
too
MFSplO
'Before he died (lit. He hadn’t yet died) he saw his grandchildren’
f. p:ee dêdê dpodo, Ghaalyu mbii

INSTEAD.OF NEG3NrPSTC working, Ghaalyu sickness
'Instead of working Ghaalyu was sick'

These conjunctive expressions come before the predicate, although nominals may precede them as in example (546)d. These constructions do not seem to show any special control characteristics or cross-clausal dependencies.

## 9 Yélî Dnye as a syntactically ergative language

Distributed through this grammar are a number of observations that suggest that Yélî Dnye is a systematically ergative language on a number of different levels. Here I bring these observations together to suggest that Yélî Dnye is properly considered not only an ergative language at the level of case-marking, but also a syntactically ergative language (see also Levinson, nd).

### 9.1 Degree of ‘morphological ergativity’ (case marking)

Yélî Dnye clause agreement has both head-marking (verbal) and dependent-marking (nominal) properties (it can be said to be 'double-marked'). Recollect that at the case-marking level, all NPs in A-function - that is, subjects of transitive verbs receive direct ergative case obligatorily (which is unusual for a Papuan language), with only the partial exception of personal pronouns. This is already unusual, as most ergative marking is 'split', in the sense that often pronouns or NPs revert to a nominative/accusative pattern in certain syntactic environments - in Yélî Dnye this happens only with personal pronouns in non-embedded contexts. It is true that the verbal cross-referencing system operates partially in a nominative way: the verbal subject-indicating proclitics have the same form regardless of transitivity. On the other hand, the verbal enclitics have alternate paradigms for transitive and intransitive verbs: in both cases, the enclitics are largely concerned with the marking of absolutive (S or O) properties. Overall, by comparison to other ergative languages, Yélî Dnye is pretty much as ergative as languages come at the 'morphological' level of case-marking.

### 9.2 Syntactic ergativity

Syntactic ergativity has been defined by Dixon (1994:143) as follows:
In some languages there are syntactic constraints on clause combination, or on the omission of coreferential constituents in clause combinations. If these constraints treat $S$ and $O$ in the same way and A differently, then the language is said to be "syntactically ergative", with an S/O pivot. (Where A is the subject and $O$ the object of a transitive verb, and $S$ the subject of an intransitive verb, emphasis added)

Yélî Dnye is not syntactically ergative by this definition. However, absolutive arguments (that is, S and O) are treated systematically together as a single category for the purpose of syntactic operations, while ergative (A) ones are treated
distinctly. It just so happens that these syntactic operations are clause-internal, and are not relevant for clause combining. This motivates considering Yélî Dnye as exhibiting a different kind of syntactic ergativity, namely an intra-clausal kind. Let us review the evidence.

### 9.2.1 Syntactic ergativity and quantifier floating

Henderson $(1995: 15,41)$ noticed that the indefinite marker ngmê 'a, one' can be moved out of its NP and into the pre-verbal nucleus (before the proclitic) just in case the NP is in either S or O function - i.e. is Absolutive. This acts as an indirect way of marking Absolutive arguments, along the following lines, where 'input' characterizes the structure without this quantifier (Q) floating, and 'output' characterizes the floated-Q structure:
(547) input: X .. [N ..Q ] $]_{\text {ABS }} Y$ [Proclitic Verb Enclitic] verb complex output: X . . [N.... $]_{\text {ABS }} \mathrm{Y} \quad[\mathrm{Q} \text {-Proclitic Verb Enclitic] }]_{\text {verb complex }}$

Although Yélî Dnye phrase order is very free, word order within phrases is very largely fixed and only one case marker occurs per NP, at the right flank. The verb complex - the verb (plus or minus compound verbs or incorporated objects) flanked by inflectional proclitic and enclitic - is a tightly closed structure. Given these facts, it is easy to detect Q -floating, especially as the Q sometimes phonologically assimilates to the proclitic.

Q-floating of this kind is not obligatory, but it is generally applied when the NP is indefinite. In fact, the phenomenon is both more general and more complex than Henderson (1995) had noted: other indefinite quantifiers can be similarly floated, and there are additional agreement consequences of this movement. ${ }^{45}$ Consider the following examples with an indefinite NP (tp:ee nmgê 'a boy') in O function (i.e. as absolutive object of a transitive verb):
(548) a. Weta ngê tp:ee ngmê dê vy:a

Weta ERG boy INDF 3IMMP hit. .PROX 'Weta hit some boy (earlier today)'

45 Incidentally, I shall talk about 'lowering' both in the case that the quantifier is associated with a subject ( S ) and with an object ( O ), presuming that the parallel strengthens the case for a flat sentence structure, without a VP (for which there is no evidence).
$\begin{array}{llllll}\text { b. Weta ngê tp:ee ngmê } & \text { nkéli } & \text { k:oo dê } & \text { vy:a } \\ \text { Weta ERG boy INDF boat inside } & \text { 3IMMP } & \text { hit. .PROX } \\ \text { 'Weta hit a boy in the boat (earlier today)' } & \\ \text { c. Weta ngê tp:ee nkéli k:oo ngmê } & \text { dê } & v y: a \\ \text { Weta ERG boy boat inside INDF 3IMMP } & \text { hit. .PROX } \\ \text { 'Weta hit a boy in the boat (earlier today)' } & \\ & \text { (slight change of emphasis towards focus on the quantification) }\end{array}$

The example in (548)a. can be pronounced either with a hard post-alveolar [t] on proclitic dê, or as a post-alveolar flap [r], assimilating the indefinite ngmê to a single phonological word ngmêda, [ทməræ]. The unassimilated version corresponds to the example in b., where ngmê is separated from dê by a PP, while the assimilated version corresponds to c., where ngmê has been moved out of the NP and over the PP into the pre-nucleus. Both b. and c. are good structures, which seem to have a slightly different semantic nuance, as indicated in the glosses.

Thefollowing example(549)showsthatanexactly parallelthing happens to the indefinite quantifier when the NP it modifies is in S-function, i.e. also in Absolutive case: a.shows the unlowered quantifier, b. theoptionally lowered version, while the rest of the examples show that the phenomenon generalizes to other quantifiers (including numerals) which can be read indefinitely:
a. Yélî pi ngmê nkéli k:oo doo dpodo

Rosssel man INDF boat inside 3REM.CI work.ContAspect 'A Rossel man was working in the boat (day before yesterday)'
$\rightarrow \quad$ b. Yélî pi nkéli k:oo ngmê-doo dpodo
Rossel man boat inside INDF-3REM.CI work.ContAspect 'A Rossel man was working in the boat (day before yesterday)'
c. Yélî pi ngmidi nkéli k:oo doo dpodo

Rossel man one boat inside 3REM.CI work.ContAspect 'One Rossel man was working in the boat (day before yesterday)'
$\rightarrow \quad$ d. Yélî pi nkéli k:oo ngmidi-doo dpodo
Rossel man boat inside one-3REM.CI work.ContAspect
'One Rossel man was working in the boat (day before yesterday)'
e. Yélî pi nkéli k:oo miyó-doo dpodo

Rossel man boat inside two-3REM.CI work.ContAspect 'Two Rossel men were working in the boat (day before yesterday)'
f. Yélî pi nkéli k:oo yilî-doo dpodo

Rossel man boat inside many-3REM.CI work.ContAspect 'Many Rossel men were working in the boat (day before yesterday)'
g. Yélî pi nkéli k:oo yémi-doo dpodo? Rossel man boat inside how.many-3REM.CI work.ContAspect 'How many Rossel men were working in the boat (day before yesterday)?'
h. Yélî pi nkéli k:oo m:uu-doo dpodo? Rossel man boat inside another-3REM.CI work.ContAspect 'Were there any more Rossel men working in the boat (day before yesterday)?’

So far we have seen that indefinite NPs in either O-function or S-function allow their Quantifiers to float to the proclitic position within the verbal complex. Indefinite NPs in A-function do not allow this - any floated Q in proclitic position will always be understood as modifying the O-NP, not the A-NP, as in examples (550) a. and c. below (b. shows that independent marking of indefiniteness on the A-NP is also, not surprisingly, possible):
$\begin{array}{lllllll}\text { a. } & \text { pi } & \text { knî } & \text { y:oo } & \text { chêêpî̀ } & \text { (knî) } & \text { ngmêe } \\ \text { person } & \text { AUG } & \text { ERG.PL } & \text { stone } & \text { (AUG) } & \text { INDF } & \text { 3IMMP } \\ \text { d:ii } & & n g m e ̂ & & & & \\ \text { throw.PROX } & \text { MFS.3sO } & & & & \end{array}$ 'People threw some stones' (not 'Some people threw the stones')
b. pi ngmê knî y:oo chêêp̂̂ ngmê dê
person INDF AUG ERG.PL stone INDF 3IMMP
d:ii ngmê
throw.PROX MFS.3sO
'Some people threw some stones'
c. pi ngê nkéli k:oo ngmê vyâ
person ERG boat inside INDF hit
'The man hit someone inside the boat' (not 'Some man hit him inside the boat')

In addition to acting as an indirect mode of case-marking, Q-floating also marks the absolutive NP as indefinite. Consequently, the universal quantifier yintómu does not happily float, or rather if it does it has to be given an indefinite reading, as in the example below:

```
(551) Yélî pi nkéli k:oo yintómu yémi doo
Rossel man boat inside all how.many 3REM.CI
dpodo?
work.ContAspect
'How many Rossel men all together were working in the boat (day before
yesterday)?'
```

In addition, deictics do not normally collocate with floated quantifiers: thus the version of example (549)e. above with a deictic as well as a floated-Q is unacceptable: ${ }^{46}$

```
(552) *kî pini nkéli k:oo miyó-doo dpodo
DEIC man boat inside two-3REM.CI work.ContAspect
'Those two men were working in the boat (day before yesterday)'
```

One additional structural point: NPs with floated-Qs are generally cross-referenced with singular agreement regardless of the semantic quantity (Quantified NPs can in general take singular agreement, but here the expectation is definitely stronger, although still not obligatory). Thus contrast the following, where the first sentence has the unfloated Q (pyile 'three') and the second has a floated Q:
(553) a. Weta Yidika y:oo tp:ee pyile skuli k:oo Weta Yidika ERG.PL boy three school inside a vyee tumo 3REM.PI hit.foll PFS.3plO.PI.REM
'Weta and Yidika hit 3 boys inside the school (the day before yesterday)’

46 A deictic can co-occur with a floated $Q$ from the same NP if it can be interpreted as not referring to a definite entity. For example, in the following the deictic is interpreted as qualifying the Q:
(i) kî yélî pi nkéli k:oo yilî -doo dpodo DEIC Rossel man boat inside many 3RempastCont work.Cont... 'That many Rossel men were working inside the boat'

| $\rightarrow \quad$ b. | Weta | Yidika | y:oo | tp:ee | skuli | k:oo | pyile |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Weta | Yidika | ERG.PL | boy | school | inside | three |
|  | $a$ | vyee | ngópu |  |  |  |  |
|  | 3REM.PI | hit.foll | PFS.3sO.PI.REM |  |  |  |  |

'Weta and Yidika hit 3 boys inside the school (the day before yesterday)'

The first sentence in example (553) has the enclitic tumo, which here codes for a polyfocal (plural non- $1^{\text {st }}$ person) subject and a $3^{\text {rd }}$ plural (three or more) object in the Punctual indicative, Remote Past. The second sentence with the lowered Q uses instead the enclitic ngópu, which codes for a polyfocal subject and a singular $3^{\text {rd }}$ person object in the same tense/mood (ngópu could only be replaced here with tumo in restricted contexts, like asking a question). This quirk suggests that the NP is checked for agreement only 'after' Q-floating (i.e. the floated Q is somehow invisible to agreement processes).

What is the function of Q-floating? The clue is perhaps provided by the fact that it occurs only with indefinite NPs. Since indefinites are usually used to introduce referents, this fits the pattern noted by Du Bois (1987) whereby new referents tend to be introduced universally in O - or S -function. The following statistics in Table 9.1 show a similar pattern across languages, namely the small number of new referents introduced in A-function, regardless of accusative vs. ergative morphology:

Table 9.1: Percentage of newly-introduced referents in A -, S - and O -function.

|  | A | S | O |
| :--- | ---: | :--- | :--- |
| English new referents | $0 \%$ | $21 \%$ | $79 \%$ |
| Sakapulteko | $6 \%$ | $55 \%$ | $40 \%$ |
| Yélî Dnye | $26 \%$ | $47 \%$ | $27 \%$ |

Quantifier-lowering thus ensures that such referent-introducing NPs are now doubly flagged - once by the lack of overt case-marking (indicating O/S function), and secondly by Q-floating (indicating indefiniteness). Some cross-linguistic parallels in this area have been noted by Manning (1996:75) and others.

### 9.2.2 Review of other features of syntactic ergativity

Further features of syntactic ergativity have been covered elsewhere, and it will be sufficient here simply to remind the reader of the features in question.

### 9.2.2.1 Focus constructions

In §8.6, we showed that there are two main focus constructions in the language. The vyîlo construction picks out only absolutive NPs as the NP in focus, regardless of the position of the vyîlo constructional elements. In contrast, the yinê construction picks out only ergative NPs. In other words, the scope of the focus operation is determined by choice of construction, not word order, and for these purposes S - and O -arguments form a single class, and A -arguments another, and each class feeds a totally different construction. That it is case-marking and not underlying thematic role that determines the focus is clear from intransitivized structures, as in the following where the object ( $m b w o$ ) in a. is incorporated within the verbal complex in b. as arrowed, so rendering the structure intransitive (example repeated from (519)a. (§8.6)):

| a. Monki Tili y:oo mbwo yinê | kuwo |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Monki Tili ERG+PL betel FOC-ERG | chew.trans |  |  |  |
| ngmê |  |  |  |  |
| Trans.PFS.3sO.CIPROX |  |  |  |  |
| 'Monki and Tilly were the ones who were chewing betel' |  |  |  |  |
| b. Monki Tili vyîlo $\quad$ de | yi | mbwo kuwo |  |  |
| Monki Tili FOC-ABS Dual ANAPH betel chew.intrans |  |  |  |  |
| mo |  |  |  |  |
| Intrans.d.CIPROX |  |  |  |  |

In this case, the focus construction must change to match the surface case. Verbal doublets, one transitive and the other intransitive, show the same pattern - the choice of focus construction depends on the surface case. Finally, exceptional case structures as found in experiencer constructions, still follow the pattern: the NP in absolutive case is the one focussed on by the vyîlo construction.

### 9.2.2.2 Control of the arguments of nominalizations

In §8.7, we reviewed the facts about the arguments of nominalizations of gerunds. Although there are some complexities, the basic generalization is that only Absolutive arguments (0- or S-function NPs) are preserved as unmarked arguments. There are various types of nominalization, e.g. the resultative construction, and the same pattern holds. Nominalization is thus a syntactic operation that systematically picks out the class of Absolutive NPs as surviving arguments. Here we review some further coreferential constraints pointing to the importance of this pattern. It should be noted in advance that although some non-ergative lan-
guages display ergative-like patterning of the arguments of gerunds (specifically by marking $O$ and S with possessives, Koptjevskaja-Tamm 2013), nevertheless the Yélî Dnye patterns are different and distinctive.

The resultative construction produces nominalizations from transitive verbs and a number of inchoative intransitives (hence it is not a passive). In this construction the O-argument of the transitive is preserved, and behaves like an S -argument, as in example (555)a. below which can stand as a whole clause:
a. ke'ne kpêmî ngmê
door openTV RES
'The door is open/unlocked (go and get the thing I left behind)'
b. ke'ne kwe'ne kalê ngmê
door openIV Causative RES
'The door is open (in its usual state)'

The sentence in example (555)b. shows that an intransitive verb counterpart (here 'open.intransitive') of the transitive verb can be first transitivized with the causative construction described in §8.7.1.4, then nominalized with the resultative construction, with just slight meaning differences (captured in the glosses). In this case, the original S-argument of the intransitive becomes first an O-argument, then an $S$-argument again. An alternative way to express very much the same state of affairs converts the nominalization into an adverbial on a positional verb (normally used in existential and locative constructions):
(556) ke'ne kwe'ne kalê ngmê ngê ka tóó
door openIV Causative RES ADV CERT3sPRSCI sitting
'The door stays open (habitually)', lit. 'The door sits having-caused-to-be-
opened'

Here the S-subject of the positional verb, ke'ne 'door', is also understood as the O-subject of the resultative nominalization, itself derived from an S-subject of an intransitive under causativization. The constancy behind these changes in argu-ment-status is that ke'ne 'door' remains Absolutive throughout. Notice that in this positional construction we have a coreferential relation between the thing 'sitting' and the thing 'opened':

$$
\text { [ } \mathrm{S}_{1}\left[\mathrm{O}_{1} \text { open.caused.RESULT] }\right]_{\text {ADV }} \text { sit] }
$$

In the normal case, where an underived transitive is used in a positional construction, the same pattern is observed:

| (557) péliti | pwaa | ngmê | ka | $k w o$ |
| :--- | :--- | :--- | :--- | :--- |
| plate | broken | RES | CERT3sCI.PROX | stands |

'The broken plate is there'

Now, as mentioned, there are exceptional inchoative intransitive verbs that take the resultative construction, meaning e.g. 'become bigger', 'become old, 'sit down':

| (558) $y a$ | $n g m e ̂$ | $n g e ̂$ | $k a$ | tóó |
| :--- | :--- | :--- | :--- | :--- |
|  | sit.down | RES | ADV | CERT.3CI.PROX |

'They are already sat down', lit. 'Having sat.down they are sitting'
In this case the construal pattern is as follows:

$$
\left[\mathrm{S}_{1}\left[\mathrm{~S}_{1} \text { sit.down.RES }\right]_{\mathrm{ADV}}\right. \text { sit] }
$$

The generalization of course is that it is absolutive arguments that corefer instead of picking out the O -argument of a transitive, in this case it is the S -argument of the inchoative verb that is identified with the $S$-argument of the positional verb.

I should note that, although these two kinds of nominalization (gerund, resultative) are not strictly clauses but merely nominalizations, this is the nearest we seem to come in Yélî Dnye to the absolutive 'pivot' that Dixon (1994) takes to be the hallmark of syntactic ergativity.

### 9.2.2.3 Absence of 'universal subject' constructions

Many authors have followed Dixon $(1979,1994)$ in thinking that there are universal subject properties shared by $A$ and $S$ arguments in all languages, for example the control of PRO-like structures (null subjects of infinite complements), the binding of reflexives, or the understood subjects of imperatives. Even syntactically ergative languages were thus assumed to display universal subject properties in these kinds of structures. Yélî Dnye is interesting here because it is does not clearly conform to these expectations (acknowledging though that the verbal proclitics are identical for $S$ and A). Dixon's expectations and the corresponding Yélî Dnye facts are as follows:

[^23]The Yélî Dnye imperative §7.2.1 is a construction with distinct forms for transitive and intransitive sentences - although the proclitics (where relevant, especially in the continuous aspect) are shared, the enclitics are distinct (as throughout the tense/aspect/mood paradigms). Since there are distinct constructions for A- vs. $S$-subjects, there is no special evidence here for $S / A$ conflation in Yélî Dnye. It is true (as Bernard Comrie pers. comm. reminds me) that Dixon allows that A and S may behave morphologically somewhat differently in the transitive/intransitive imperatives (1994:133) but he assumes that the imperative construction has some unity and commonality across varied transitivity, and that doesn't seem to be the case in Yélî: That we call both constructions 'imperatives' is due to a commonality of function not of grammar. Moreover, in Yélî Dnye the imperative is just another (deontic) mood, with a full 3 person * 3 numbers paradigm, plus two tenses (immediate and deferred imperatives) - there is thus no particular association with $2^{\text {nd }}$ person singular (perhaps calling the two constructions 'imperative' at all is misleading).
(b) 'Want'-constructions (and similar constructions) where verbally expressed tend universally to have e.g., an 'S-wants-A/S do something', where coreferentiality may be stipulated from S to either S or A indifferently (i.e. from Subject to Subject) (Dixon 1994: 134-137)

But in Yélî Dnye we find just very specific constructions in these cases. For example, the English sentence Jim wants to go is expressed in effect as: ‘To Jim desire is standing "I go""- i.e. with a direct quotation specifying the desire from the perspective of the wanter (see §7.5). The wanter is not in surface subject position but rather in a 'dative'-like experiencer case, and first-person signals subjective identity with the desirer (the thing or event wanted need not be an action by the desirer of course). In general, it is hard to find control (PRO-like) structures in the language - the best case might be the understood subjects of gerunds or nominalizations as described above §8.7; §9.2.2.2), and this yields an absolutive pattern (collapsing S- or O-function NPs), not a pattern easily interpreted in terms of universal subject properties.
(c) Where reflexivity is coded by a reflexive pronoun, then the antecedent tends to be indifferently in A- or S-function, i.e. reflexives tend to be controlled by universal subjects (Dixon 1994: 138)

Yélî Dnye reflexives are indeed of the pronominal type. They are often ambiguous between an emphatic and a reflexive reading. But reflexives (as opposed to emphatics) typically have antecedents in A-function, so they offer little evidence for universal subject as binder of reflexives. The binding of reflexives is actually curious - consider again an example from §7.8.1:

```
(559) chóó(chóó) u mî ngê dê vy:a Ø
3s.self his father ERG 3IMM.PI hit MFS3sO.PROX
'Himself's father hit him' (i.e. 'His own father hit him')
```

The reflexive here seems to be bound from an unusual position: the absolutive object (coded in the zero enclitic) appears to be binding an adjunct to the subject ('Himself's father hit him'), contrary to the predictions in a lot of the theoretical literature. This might favour the view that absolutive arguments may be underlying subjects. Note though that Jackendoff (1972) observed that English sentences like The photos of himself with a mask infuriated Trump also violates various binding predictions, suggesting that a hierarchy of thematic roles rather than syntactic position is what licenses binding. In any case, reflexives can also be bound by oblique NPs, e.g. experiencer or dative-like subjects. Reciprocals are also telling: they cannot be bound by an Ergative NP in the central construction (as in 'They hit each other') - the construction is obligatorily intransitivized, so the binder is an Absolutive NP §7.8.2). Further, reciprocals can be bound from oblique positions, e.g. absolutive arguments can bind possessives on absolutive NPs, and possessors on absolutive NPs can bind experiencer subjects §7.8.2). The relevant point here is that there is no particular support for a universal subject notion (a conflation of A and S) in the behaviour of Yélî reflexives and reciprocals.
(d) In many languages there are constraints on relativization, question-formation or other major extraction procedures that apply exclusively to a 'subject' (S/A) category of argument

Many languages that are morphologically ergative (but by no means all) have what Dixon calls an S/A pivot (i.e. they are not syntactically ergative), so that syntactic operations like relativization, coordination and subordination require an NP shared by the two clauses and they must be in either A or S function (Dixon 1994:155, 172ff). In contrast syntactically ergative languages have S/O pivots according to Dixon, with corresponding constraints now in terms of shared NPs in S or O function in e.g. relativization (Dixon 1994:169). The generative tradition has generalized this characterization of syntactic ergativity to configurational constraints on relativization and extraction of A-arguments: ergative NPs do not extract (see Deal 2016; Polinsky 2017 for review).

Yélî Dnye shows no sign of an S/A pivot. But it also shows no constraints on A-argument relativization. Relativization (§8.1) is entirely catholic - NPs in ergative, absolutive, experiencer or oblique cases in the matrix sentence can all be relativized, and they seem to be able to be in any of the other cases in the embedded clause. Interrogatives likewise can be formed on NPs in any case (§7.2.2), ergative, absolutive, dative, experiencer, comitative, etc. Nevertheless, many syntactic operations treat $\mathrm{S} / \mathrm{O}$ arguments identically, and A arguments differently.

Summarizing, the more obvious manifestations of a universal subject category (uniting A- and S-functions), or indeed of a language-specific S/A pivot, seem to be largely lacking in Yélî Dnye, setting aside the verbal proclitics. Rather, the overall generalizations seem to be that syntactic operations in Yélî Dnye are either restricted to S/O, or apply only to A, or apply equally to A, S, O and often oblique NPs as well. There is thus no major role for a subject category understood as a union of $S$ and A functions in the syntax of Yélî Dnye.

### 9.2.3 Yélî Dnye as exhibiting a distinct type of syntactic ergativity

At the time of writing, there is a growing literature on syntactic ergativity (e.g. Plank 1979, Dixon 1994, Manning 1996, and Deal 2016 and Polinsky 2017 for recent reviews). Much effort has gone into trying to find a structural difference that might explain the syntactic phenomena, e.g. by treating S/O as superficial subjects and A as oblique (Dixon 1972; Manning 1996), or more recently in terms of underlying movement of subjects, so blocking movements of various kinds like Wh-extraction (see Deal 2016, Polinsky 2017 for review). A lot of this work assumes the languages are configurational, and specifically have a VP node, but there is no such evidence for Yélî Dnye. In addition, much of this effort (and certainly that in Dixon 1972, 1994 and Manning 1996) is directed at languages which show 'pivot'-like behaviour of an S/O category in coordination reduction, relativization, clefts and so on - i.e. constraints on building bi-clausal constructions. Yélî Dnye shows few such constraints. In contrast, Yélî Dnye shows largely intra-clausal syntactic ergativity, in focus constructions, quantifier floating, and the construal of the arguments of gerunds. Only the latter might be interpreted as bi-clausal constructions. The details of the S/O constraints are sufficiently intricate, and sufficiently hooked to surface case, to indeed suggest a deep connection between the morphology and sentence structure (as suggested by Deal 2016). Moreover, the relatively small role that an S/A category plays in any level of linguistic organization save the verbal proclitics is cross-linguistically remarkable. It seems hard to escape the conclusion that, in its own distinctive way, the language is as ergative in its syntax as any language yet described.

## 10 Negation - an overview

### 10.1 Review of the major ways in which negation is marked

One of the most complex aspects of Yélî Dnye morphosyntax is negation. We have already detailed many facts about negation, but they are distributed throughout the relevant sections: $\S 6.1 .4$ on negative proclitics, $\S 6.2 .3$ on negative enclitics, §7.2.1.2 on negative imperatives, $\S 7.3 .1$ on negative equatives, $\S 8.3 .2$ on negative counterfactuals. An overview of this important semantic function may therefore be helpful. Negation in Yélî Dnye is complex in that its expression is very various, and its reflexes distributed throughout the clause. It is marked by special verbal inflectional proclitics replacing the positive ones, by special verbal inflectional enclitics (or special uses of them), by verb suppletion and other means.

The simplest form of negation occurs in equational clauses: thus kî pini mââwe 'that man is a big man' becomes kî pini daa mââwe 'that man is not a big man'. The negative particle is constant however only in the $3^{\text {rd }}$ person - there are special portmanteau forms for other person/number combinations (see Table 7.15 in §7.3.1 above), e.g. dp:ee mââwe yoo ‘You (3 or more) are not bigmen'. The fusion of the negative - we might take the base form to be daa - with any pronominal element present is striking, even here where the pronominal is not an agreement clitic but an independent subject.

The expression of negation in tensed clauses with full verbs displays a series of complex paradigms. Essentially, the negative element fuses with the proclitic marking tense/aspect/mood/person/number in largely unpredictable ways, requiring rote learning. Since there are different paradigms of positive proclitics for punctual vs. continuous aspects, there are also different paradigms for the negative forms (144 cells in total). Inspection will show that the forms are not always different across the two aspects: e.g. dîpî occurs as a 1s Immediate Past (earlier today) form in the Continuous aspect, but as a 1s Proximate Past (yesterday) form in the Punctual aspect. This is a typical semi-systematic shunt across tenses, holding for all the first and second person forms, but there are distinct forms in each aspect for the third person in these tenses. Note too that negation sometimes appears analytic, i.e. as an unfused item - thus in the remote past continuous aspect dê precedes the normal positive person/number markers, except in the 3 s which has a fused form. The details were given in §6.1.4.

The verbal proclitics fuse with many other kinds of information, and these fused forms may themselves have specialized negative forms. For example, we have seen in §8.3.2 that the counterfactual conditionals involve special forms in the same 144 cells for tense/mood/person in two aspects, with separate para-
digms for punctual and continuous forms, and separate paradigms for protasis and apodosis. Counterfactuals of course entertain a world which is the negative of the actual one, but that imagined world can itself be expressed negatively. Each of the forms in the protasis has a special negative form, but the apodosis has the proclitic simply prefixed with daa throughout. For example, for the positive sentence:
(560) wudî lê, pîdî m:uu 'If I had gone (today), I would have seen it',
the negative is:
(561) wud:oo loo, daa pîdîm:uu 'If I had not gone (today), I would not have seen it'.

Here wud:oo is the unpredictable negative form of wudî, loo is the Remote Past form of lê used in the Proximate Present to indicate a negative context, daa is the negative element in the apodosis.

Since deictics and associated motion and many other markers also fuse with the proclitic, there are many additional special negative paradigms, not all of which have been fully collected.

Finally, the proclitic position is filled by a range of special forms for negative imperatives, provided in $\S 7.2 .1 .2$. These take different forms for continuous and punctual aspect, and within the punctual aspect for imperatives to be carried out right away vs. later. In the second person singular forms in particular there are a range of alternates, with different nuances about the urgency of the situation or the generality of the ban.

The postverbal enclitic does not mark negation so directly, with a fused daa element or the like. Nevertheless, negation is generally also marked in the enclitics (which are distinct for transitive vs. intransitive verbs) either by special forms, or by a shift of use (e.g. by the use of the Remote Past transitive enclitics in the Immediate Past), although some enclitics remain the same in both positive and negative sentences of the same tense/mood. Again, there seems no way to predict these forms, or shifts, or lack of them, requiring rote learning of the paradigms. The details are given in §6.2.3.

In addition to double signalling of negation in proclitic and enclitic, negation may be marked elsewhere as well. One of these additional signals is alternation of the verb root. Just a few verbs have special suppletive forms for negative contexts. Thus lê, the basic verb 'to go', has the following suppletive forms (Table 10.1):

Table 10.1: Suppletive forms of the verb 'to go'.

| punctual imperative: | lili |
| :--- | :--- |
| punctual proximate past: | $l \hat{e}$ |
| punctual proximate past in negative contexts: | nê |
| punctual remote past: | loo |
| punctual remote past in negative contexts: | n:ee |
| punctual followed root: | lee |
| invariant continuous form: | lêpî |

Most punctual roots have a distinct Remote Past root, often involving an additional syllable, or a complete replacement of phonemes. In negative contexts this form is used not only in the Remote Past, but also in the Proximate Past, for events that happened earlier today, now with a wider person/number coverage (from 3s Remote to Monofocal Immediate Past Negative). As remarked in the introduction, this serves to give a distributed marking of negation, for example doo ntî̀ 'he did not eat it today' is composed of two elements each of which could have positive meaning, doo ‘3s Continuous aspect Remote Past', ntî̀ 'Punctual aspect Remote Past', but in combination they can only have the negative interpretation given.

The following paired examples of positive (i) and negative (ii) sentences give some sense of the way in which the marking of negation is distributed across the clause. Note for example in (562)a. the change of verb root (as if in Remote Past, although the inflections signal Immediate Past), with distinct negative proclitics and enclitics. In contrast in b. the verb root doesn't alternate because the following enclitic triggers the 'followed' root (in this case the same as in (i)). The example in d. shows how a verbless positive clause (other than an equative) may require 'positional support' in the negative a bit like English 'do support' (as in 'John didn't come'). The counterfactuals in f. show the special complexity of this construction. Note here though that the use of the Remote Past verb root in the Present Negative does not hold in Counterfactual clauses as it does in normal indicative clauses.

| a. (i) nté dê ma. Yed:oo | $d p \hat{\imath}$ | kpaka |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | food 3IMMPI eat.TV | So | 2/3IMP.Defd |
|  | punish |  |  |

(ii) nté doo ndî̀. Yed:oo kîngê kpaka food NEG.3IMM eat.REM So NEG.3IMP punish ngmê
NEG.PF.S.3sOIMP.PI
'He didn't eat the food. So he should not be punished (today)' (or: nté doo ma ngê. Yed:oo kî ngê kpaka ngmê.)
b. (i) dê ma ngmê. Yed:oo dpî kpaka déne 3IMMP eat PFS3sOPROX so 3IMP.P punish 3S3dO.IMP.P 'They2 did eat it. So they2 should be punished.'
(ii) doo ma ngópu. Yed:oo kî dmyengê kpaka 3NEG eat PFS3sOREMP so NEG2plIMP punish d:oo
NEG3d/plS3dO.IMP
'They2 did not eat it. So they 2 should not be punished.'
c. (i) Ghaapwé Dâmu'nuwo kêdê lê, nkéli kamı̂ Ghaapwé Dâmu'nuwo CERT3IMMPI went boat new d:uu m:uи
3IMM.MOT see
'Ghaapwé went to Dâmu'nuwo, so he saw the new boat (today)'
(ii) Ghaapwé Dâmu'nuwo doo n:ee, nkéli Ghaapwé Dâmu'nuwo NEG3IMM went.REM.NegPol boat doo kamı̂ n:aa módu NEG3IMM new motion see.REM
'Ghaapwé didn't go to Dâmu'nuwo, so he didn’t see the new boat (today)'
d. (i) ala ngwo t:ââ, dishi nangê ghêê té this time flood dish NEG2sIMPDefd wash MFS.3plOIMP 'There's a flood now, so don't wash the dishes (plural),

- dîyo dpî ghêê té
- later 2/3SIMPDefd wash 2sS3.OIMP
- wash them later'
(ii) ala ngwo t:ââ daa tóó, dishi ghêê
this time flood NEG sitting dishes wash
té -dîyo nangê ghêê té
MFS.3plOIMP - later NEG2sIMPDefd wash MFS.3plOIMP
'There's no flood now, so wash the dishes, don't do them later'

| e. (i) ala ngwo t:ââ, dishi dê nangê ghêê |  |
| :--- | :--- | :--- | :--- | :--- |
| this time flood dish NEG2sIMPDef wash |  |
| dê |  |
|  | MFS.dOIMP |

'There's a flood now, so don't wash the two dishes

- dîyo dpî ghêê dé
- later 2/3SIMPDefd wash 2sS3dOIMP
- wash them later'
(ii) ala ngwo t:ââ daa tóó, dishi dê
this time flood NEG sitting dish Dual
ghêê dé
wash 2sS.3dO.IMP
- dîyo nangê ghêê dê
- later NEG2sIMPDefd wash MFS.dO.IMP
'There's no flood now, so wash the two dishes; don't wash them later'
f. (i) waa lê Dâmu'nuwo, nkéli paa m:uu CFAnt3IMM go Dâmu'nuwo boat CFCons3.IMM see 'If he had gone (today) to Dâmu'nuwo, he would have seen the boat'
(ii) wudoo n:ee Dâmu'nuwo, nkéli daa

NEGCFAnt3sIMM goNegPol Dâmu'nuwo boat NEG
раа т:ии
CFCons3IMM see
'If he had not gone (today) to Dâmu'nuwo, he would not have seen the boat'
g. (i) wo loo Dâmu'nuwo, nkéli p̂̂ módu CFAnt3REM go.REM Dâmu'nuwo boat CFCons3REM see.REM 'If he had gone (before yesterday) to Dâmu'nuwo, he would have seen the boat'
(ii) wodaa n:ee Dâmu'nuwo, nkéli daa

NEGCFAnt3sREM go.NegPol Dâmu'nuwo boat NEG
pê módu
CFCons3REM see
'If he had not gone (before yesterday) to Dâmu'nuwo, he would not have seen the boat'

### 10.2 Negation and quantification, negative polarity items

The basic positive quantifiers and their negative counterparts were given in §4.2.3. The bare noun with negation is understood as universally quantified - thus pi daa lêpî (person NEG going) is understood as 'nobody is going'. Contrariwise, the bare noun in positive sentences is understood as existentially quantified - thus pi ka lêpî (person CERT.3PRSCI going) is understood as 'some people are going'. Nouns with the augmentative plural knî in this respect act like bare nouns: pi knî yi lama daa tóó 'person AUG their knowledge not sitting, i.e. nobody knows'.

There is some fusion of negative universal quantification with the inflectional proclitics, although the partial table Table 10.2 below suggests this is largely constrained to the Remote Past specialized form dêpwo 'no-one/nothing VERBed', the Near Past dadê and the Present dêdê. The a. and b. sentences in example (563) below are both possible. Some of these special forms also occur with other near universal quantifiers like the negative polarity item mdoo, as in c.

```
a. pi dêpwo a ya
    person NONE.REM 3PSTC staying
    'No one stayed (behind)'
b. pi yintómu dêpwo a ya
    person all NONE.REM 3PSTC staying
    'No one stayed (behind)'
c. y:i mywapê mdoo dêdê kwo
    there ebony much(NEG) NEG.All.3PRSCI standing
    'There's not much ebony there'
```

Another such special form is $d$ :uu wodo meaning 'never' (paradigm in Table 10.3):
(564) kî yâpwo kêpa pyââ ngê mbiye ngê, This sacred.place in.front woman ERG punting ADV kepe ngê kê d:uu wodo t:oo paddling ADV CERT? NEVER touch 'Women never pole around the front of this sacred place, they never touch it with a paddle’

An exceptional item is negative polarity item pye (EVER) which glosses as 'we don't', 'one never' or the like - it typically occurs in general negative statements about behaviour with a general $1^{\text {st }}$ person dual/plural interpretation (one might think about it as a pronoun, like English one or German man, taking inflections for a $3^{\text {rd }}$ person singular subject, but carrying also negative universal quantifica-

Table 10.2: Universal quantification - Negatives and positives compared.

|  | CONTINUOUS ASPECT |  | PUNCTUAL ASPECT |  |
| :---: | :---: | :---: | :---: | :---: |
|  | NEG | POS | NEG | POS |
| FUT | pi daa dê ya <br> 'No one will stay home (tomorrow or later)' | pi yilî/yintómu a da ya 'Many people/ everyone will stay back' | pi ngmê ngê tpile daa wa y:oo 'No one will give anything' | pi yintómu (ndapî) wa y:ee ngmê 'Everyone will give (some money)' |
| IMM PST today | pi daa dê tóó <br> 'No one will stay' = pi dêdê tóó | pi yintómu a tóó 'Everyone is there' | pi ngmê ngê tpile daa wa y:oo 'Nobody will give anything' | pi yintómu (ndapî) dê y:ee ngmê 'Everyone will give some money’ |
| NrPST yesterday | pi da dê a ya* ‘No one stayed behind (yesterday)' | pi yintómo dnye a ya <br> 'Everyone was <br> staying' | pi ngmê ngê tpile daa y:oo ‘Nobody gave anything yesterday' | pi yintómu (ndapî) kê y:ee ngmê' 'Everybody gave money' |
| REM <br> days <br> before <br> yesterday | pi dêpwo a ya 'No one stayed (behind)' | pi yintómu doo a ya 'Everyone was staying (before yesterday)' | pi ngmê ngê tpile <br> daa $y$ :ângo <br> 'Nobody gave anything' | pi yintómu (ndapî) kê y:ee ngópu** 'Everybody gave money’ |

* Note truncation of daa to da in this tense. Alternate would be: pi daa ya
** He didn't give any would be: daa y:ângo

Table 10.3: ‘Never’: Negative Universal quantification over time.

| Person | Sing | Dual | Plural |
| :--- | :--- | :--- | :--- |
| $\mathbf{1}$ | D:uu w:ee nê | D:uu w:ee lee knî | D:uu w:ee lee dmi |
|  | 'I never go' | 'We2 never go' | 'We3 never go' |
| $\mathbf{2}$ | D:uu w:ee nê | D:uu w:ee lee knî | D:uu w:ee lee dmi |
|  | 'You1 never go' | 'You2 never go' | 'You3 never go' |
| $\mathbf{3}$ | D:uu pê lê | D:uu pê lee knî' | D:uu pê lee dmi |
|  | 'He never goes' | 'They2 never go', | 'They3 never go' |

*The following sentence however suggests that w:ee can be used here too: Mwonî Pikuwa y:oo tââkê d:uu w:ee ma ngmê, 'They2 never eat turtle'
tion over times; see also Table 10.3.). In the b. sentence in example (565), wodê is a further negative polarity item signifying 'never':

```
a. pye daa nê/n:ee
1pIEVER NEG go.NEGpolNrPST/REM
'We didn’t go (yesterday)/(remote)'
```

b. pye d:uu wodê vyuwó yi kêêlî ghi

1pIEVER NEG3HABP.Never burn.off those area CL(parts)
'You/we should never burn that area (where we plant vanilla)'
c. pye d:uudpî lê

1plEVER NEG3HAB go
'We never go there'
d. mt:enge pye daawa ma
puffer 1plEVER NEG.3FUT.PI eat
'We won't eat mt:enge fish (poisonous puffer)'

### 10.2.1 Negative polarity items, and intrinsically negative words

The particle ngê occurs frequently in negative proclitics. Amongst the meanings it has is something like '(not) yet', and 'not previously', and with future tenses 'never':
a. doo taa wo

NEG3IMMP arrive.REM sSREM.PI.IV.Weak
'He didn't come (today)'
b. doo ngê taa wo

NEG3IMMP YET arrive.REM sSREM.PI.IV.Weak

1. 'He hasn't yet arrived (today)'
2. 'He had not been here before today'
c. daa
$t: a a$
NEG3NrPST/REM.P arrive.PROX
'He didn’t come yesterday’
d. daa taa wo

NEG3NrPST/REM.P arrive.REM sSREM.PI.IV.Weak
'He didn't come the day before yesterday'
e. daa
ngê taa
(wo)
NEG3NrPST/REM.P YET arrive.REM sSREM.PI.IV.Weak

1. 'He hadn't come yet (day before yesterday), but later he came'
2. 'He hadn't come before (he came for the first time) (the day before yesterday)'
f. daa wa $t: a a$

NEG3FUT.P 3FUTPI arrive.PROX
'He will not come'

| g. | daa | $n g e ̂ \quad w a$ | $t: a a$ |
| :--- | :--- | :--- | :--- |
| NEG3FUT.P | YET | 3FUTPI | arrive.PROX |
|  | 'He will never come' |  |  |

There are numerous other lexical items and phrases that occur only in negative contexts (glossed here with NegPol ), as illustrated in the following where the negative polarity item is in bold:
a. ghêlî k:ii n:aa ngmê lê

Just.yetNegPol NEG2sIMP go
'Don't go yet'
b. daa ghêdê

NEG shortageNegPol
'There's plenty, no shortage'
c. pi mdoo doo n:ee
people manyNegPol NEG came.REM.NegPol
'Few people came, not many came'
d. Yidika doo ngê loo

Yidika NEG yetNegPol gone.REM.P(=PRS in NegPol context)
'Yidika hasn't gone yet' (Remote Past for Present in negative polarity context)
e. kêla mo 'not any’

A: t:aa ngma a tóó? betel INDF 3CI sitting? 'Do you have some betelnut?'
B: kêla mo, daa tóó not any NEG sitting 'None at all, there's none'
f. pi daa tóó, pi chii daa kwo
person NEG sitting person sign.of NEG standing 'There’s no one, no one at all is there’ (lit. 'Not a person trace standing’ (chii takes positional kwo)

There are also numerous words (like English hardly) which have covert negative content:
a. dyninté 'not properly', as in:
dnyinté a w:ee ngópu
not.properly CLS understand PFS3sO
'They didn't understand properly.'
b. dîpî 'to fail to do something'
dê dîpî, doo n:ee
3IMM fail NEG3IMM go.REM.NegPol
'He failed to go'
c. wop 'lacking, without', as in:
wop dî lê
without IsIMM go
'I went without anything'
d:âa k:oo ntii daa tóó, nté pyópu wop
Pot inside salt.water NEG sitting pot.of.food without
dpî kââ
1plIMMPI put.standing
'There's no salt water in the pot, we put it on without (salt)'
d. kuu 'to be not responsible, not at fault', as in:
nê kuu
'I'm not responsible. (It's not my fault.)'
e. kwodé 'be not wanting'
m:iituwó apê, a kwodé
day.before.yesterday he.said: my not.wanting
'The other day he said, I don't want (it)'
f. módó 'without reward/reason'
mu ngomo pââ ndî nmyi lama, ala
DEIC house big 2PLPOSS knowledge this
módó n:aa tóó
without.result 1sMOT sitting
'That big house you know I am without (its result/payment)'
[not paid back for the work]
g. têd:a 'to fail to happen'
tpile we dê têd:a, kpaakpaa u l:êê dîy:o
song.fest 3IMMP fail.to.happen funeral.feast its reason
'The song fest didn’t take place because of a funeral feast
h. w:âno 'hold back from giving'

Weta ngê chîmo w:êê ngê
Weta ERG stone.axe hold.back MFS3sOREMP
'Weta held back/did not give the stone axe'
i. Possessive + kwodé, 'not to my (his, etc.) taste/liking’
a kwodé, daa nê lê
1POSS not.taste NEG 1sPROX go
'I don't want to go'
j. nana 'Not knowing’, (see §8.4.1, Table 8.19)

| nana kwo, pyaa | $n g \hat{e}$ | $d e \hat{m a}$ |  |  |
| :--- | :--- | :--- | :--- | :--- |
| 3REM NOT KNOW | crocodile | ERG | 3IMM | eat | 'He didn’t know (long ago), the crocodile had just eaten it (his dog)'

With this review of the special intricacies of negation in Yélî Dnye, we conclude the description of the phonology and syntax of the language. Given the complexities of the language, and providing it survives the upheavals of the twenty first century, this is, one hopes, not the last word on the subject. The overall level of complexity in the language seems quite extraordinarily high, with the huge phoneme inventory, the many and large arrays of morphemic alternates, their non-additive 'gestalt' or distributed exponence, and the high degree of irregularity in the syntax and lexicon. It raises interesting questions about how such a system has arisen: Is it simply a consequence of millennia of isolation and the limitations of the purifying processes in cultural evolution (Wray \& Grace 2007, Hajek 2004), or is it rather the result of schismogenesis (Bateson 1936:175; Thurston's 1989 esoterogeny), the active construction of difference by a Papuan group in a sea of Austronesian languages? The complexification is one thing, the idionsyncratic and unusual typological directions in which it is taken another. Yélî Dnye certainly deserves attention from a sociolinguistic and evolutionary point of view (Trudgill 2004, 2011). The complexities are not without cost. Work on the acquisition of the phonology by children (Casillas et al., 2020, Cristia \& Casillas, in press) suggests that the full phoneme inventory is acquired quite late, and it seems likely that it takes a considerable time before children master the various complexities that the morphology and grammar confront them with.

Part II: Topics in semantics and language use

## 11 Lexical fields

The structural properties of the grammar of a language, as catalogued in the main body of this book, give but the faintest idea of how a language is used, or indeed how the vast bulk of it - namely the lexicon - is structured. Here just a few semantic domains are reviewed, which will give some idea about how interesting the lexical organization of this language is. Cutting and breaking verbs provide an interesting example of the way in which Yélî Dnye cuts up semantic domains in an unfamiliar way, against the cross-linguistic generalizations. Lexical organization interacts with the grammar of course: for example, the small set of positional verbs handle locational and existential statements but also serve as a template for other lexical sets, like the verbs of putting and taking reviewed here. These underlying templates - or semplates as we have called them (Levinson \& Burenhult 2009) - are major structuring principles in the organization of the lexicon. The landscape semplates, also reviewed here, are another case in point: the same contrastive oppositions show up in lexical set after set, despite unrelated forms. Thus the same underlying semantic axes serve to structure the naming of directions, the naming of topography and the major verbs of motion; they offer critical keys to the way the whole language is structured. Place names have the additional property that they are the longest words in the language, offering rare phonotactic structures.

Another kind of connection to grammar is provided by the kinship terminology - kin terms are predicates, with their own recursive algebraic expressions, a mini-grammar in effect, and the Rossel kin terminology is one of the most complex attested in the Pacific.

### 11.1 Verbs of 'cutting' and 'breaking'

We turn to a first domain to illustrate the way that Yélî Dnye lexical organization often deviates from universal claims and cross-linguistic expectations. The Yélî Dnye verbs covering the 'cutting' and 'breaking' domain do not divide it in the cross-linguistically expectable way with verbs focusing on special instruments and manners of action on the one hand, and verbs focusing on the resultant state on the other hand (Levin 1993; Majid \& Bowerman 2007). Instead, just three transitive verbs and their intransitive counterparts cover most of the domain, and they are all based on 'exotic' distinctions in mode of severance - coherent severance with the grain vs. against the grain, and incoherent severance (regardless of grain). For the full ramifications of this system see Levinson (2007a).

The relevant semantic domain can be thought of as "caused division", where an agent causes an object (the theme) to lose its integrity (wholeness), with or without the use of a tool or instrument. An expectation has been that most languages will have a set of 'basic' verbs that together exhaustively cover this domain at a general level, supplemented with more detailed verbs which describe subtypes of these actions (cf. general break vs. specific crush, general cut vs. specific cleave). Moreover 'break'-type verbs (incoherent separation) might be expected to contrast with 'cut'-type verbs (controlled and localized separation) in their argument structure and the alternations they undergo (Levin 1993). The core verbs can be operationally defined as those occurring in responses to specific video clips ("Cut and Break Clips", Bohnemeyer et al. 2001). Most Yélî Dnye verbs come in doublets, transitive and intransitive, but here (Tables 11.1 to 11.3) one of the focal verbs does not. There are thus five focal verbs, or 2.5 doublets, as follows (glosses approximate - see below):

Table 11.1: Transitive verb with Intransitive counterpart: 'break'.

| "break something" (Transitive) | "break" (Intransitive) |
| :--- | :--- |
| Tense/Aspect/Mood Root | Tense/Aspect/Mood Root |
| TV citation form pwââ | IV citation form pwópu |
| Punct. imperative pwaa ngi | Punct. imperative pwédi! |
| Punct. prox.past pwââ/ puwâ | Punct. prox.past pwópu |
| Punct. rem.past pwââ/ puwâ | Punct. rem.past pwaa wo |
| Followed pwaa wo | Followed pwaa wo |
| Continuous pwaapî | Continuous pwópupwópu |

Table 11.2: Transitive verb with Intransitive counterpart: 'sever along the grain: split, tear'.

| "split something" (Transitive) | "split" (Intransitive) |
| :--- | :--- |
| Tense/Aspect/Mood Root | Tense/Aspect/Mood Root |
| TV citation form chaa | IV citation form chópu |
| Punct. imperative chaa ngi | Punct. imperative chépi! |
| Punct. prox.past chaa | Punct. prox.past chapî/chaa |
| Punct. rem.past chópu | Punct. rem.past chópu |
| Followed (n.a.) | Followed (n.a.) |
| Continuous chapî | Continuous chópuchópu |

Table 11.3: Transitive verb: 'sever across the grain: cut, chop, sunder'.

| "cut something" (Transitive) |  |
| :--- | :--- |
| Tense/Aspect/Mood | Root |
| TV citation form | châpwo |
| Punct. imperative | chepwe |
| Punct. prox.past | châpwo |
| Punct. rem.past | châpwo |
| Followed | (n.a.) |
| Continuous | châpwo |

### 11.1.1 The semantics of the core verbs

Some of the Yélî Dnye verbs are unusual viewed against the general solution emerging from comparative work (see Majid \& Bowerman 2007). First, no distinction is made between "snapping" and "smashing" events, in contrast to most languages. Second, the verb chaa is used both for tearing events and cutting events of a specific sort, e.g. longitudinal splitting of a carrot with a knife. This is a clue, if it was needed, that these verbs represent an unusual categorization of this domain. For strictly speaking there is no "cutting" verb in the language! The way the language semantically divides the domain seems to be as follows, with the subtypes for each of the three transitive verbs subsumed within the indicated general notion (CAPS), and thus not recognized as different senses:

```
châpwo
SEVER AGAINST THE
GRAIN:
1. cut with instrument
```

```
chaa
SEVER WITH THE GRAIN:
1. split with instrument
2. tear by hand without
```

Figure 11.1: Intensions of the main verbs of "cutting and breaking".

The crucial underlying semantic parameter appears to be the notion of 'grain', more exactly fibres. Materials which are built of aligned fibres (wood, leaves, vines, cloth, etc.) have the property that they are severable in very different ways 'with the grain' (along the fibres), or 'against the grain' (across the fibres). These materials in turn differ from those without 'grain', i.e. not built from fibres, which can easily break incoherently in any direction - fibrous materials can also break incoherently under extreme compression or torsion. These underlying distinctions in folk 'materials science' seem to underlie the distinction between the three transitive verbs: on the one hand, wood can undergo chaa, splitting along the grain, or châpwo, severing across the grain, or pwââ, cracking both along and across the grain, but on the other hand, cloth will tend to chaa, tear or split, and pottery to $p w a ̂ \hat{a}$, break into irregular pieces.

All three distinctions are concerned primarily with the state change caused in the theme (the affected object), not with the type of activity that produces it. In a sense, they are semantically all 'break'-like verbs, caring primarily for how the theme breaks: along the grain, across the grain or less systematically. Alternatively one could think about them as 3 DIVIDE verbs: 'divide coherently into two along the grain' vs. 'divide coherently across the grain', vs. 'divide incoherently'. This three-way distinction recognizes no special role for an instrument of any kind, let alone making distinctions between say axes, saws and knives. Note especially in Figure 11.1 how with the verb chaa 'tearing' scenes fall into the same category as scenes depicting lengthwise division with a knife.

Further evidence for the importance of these semantic parameters can be found beyond the core basic set of Yélî Dnye verbs. Thus châpwo means 'sever across the grain', and the causative châpwo kwolo is formed by embedding the gerund as the theme argument of the causative verb kwolo - this has the specialized meaning 'sever crosswise into many pieces'. It contrasts with another causative form pepe kwolo which means 'sever longitudinally into many pieces' (there is no synchronic independent meaning to pepe).

This three-way semantic distinction clearly cuts across any 'cutting/breaking' division of the domain. It is an entirely different way to divide such events. Why would the inhabitants of Rossel choose such a system? Probably because the language reflects the culture of a century ago, when there were no metal tools, and the only substantial tools were relatively blunt stone axes ground from basalt. With such simple tools, the bush materials from which Rossels construct canoes and houses could only be made with difficulty. Cutting across the grain was especially problematic, and wherever possible timber, vines and fibres were divided along the grain: it is still a material culture of split fibres - floor boards, baskets, mats, thatch, planked canoes, ropes, grass skirts, all involve split materials. The Yélî Dnye semantics serves as a useful reminder that 'universal' tendencies in
semantics are perhaps just as likely to reflect cultural tendencies as any nativist constraints.

Whereas the English vocabulary of 'cutting' and 'breaking' is greatly expanded through distinctions between instruments used (cut, saw, chop, scythe), the manner employed (hack, hew, slash, gash) or both (cleave, stab, lop), Yélî makes no distinctions according to instrument - to code the instrument an NP in Instrumental case is employed, and all three transitive verbs collocate happily with an NP meaning, for example, 'with the knife', 'with the hammer', although speakers as often as not feel it unnecessary to encode the instrument. Yélî Dnye is also oblivious, as it were, to manner distinctions. In the stimuli, a number of scenes would have natural English descriptions of the kind hack, smash or shatter, where the verbs encode manner distinctions, but these pass without comment on manner in Yélî Dnye. Only under prompting could one extract the adverbial dpodo mbiy:e 'with effort', or the construction yeda pwââ ala pwââ 'keep on breaking'. A parallel could here be drawn to the well known 'satellite-framing' vs. 'verb-framing' distinction in motion semantics (Talmy 2000), where only the former (as in Germanic languages like English) permit merging of manner information with the main verb.

### 11.2 Verbs of 'putting' and 'taking’

The best way to do cross-linguistic comparison of a domain is to use the same stimulus materials across the languages to ensure that we have extensional equivalence, as used in the previous study of cutting and breaking. The remarks in this section are based on scenes of putting and taking, as in the video stimulus materials developed by the Event Representation project at the Max Planck Institute (Levinson \& Brown 2012; Bowerman et al. 2004). Before the application of these materials, my understanding of the relevant verbs in Yélî Dnye was in fact entirely mistaken. For it turns out that there is an underlying key to the system, which had completely escaped me.

### 11.2.1 Underlying positional semplate

The key is a covert system of nominal classification by verbs. As we've seen, Yélî Dnye employs a set of positional verbs for all static descriptions and existential statements. This classifies entities three ways, whether material or immaterial, according to whether they take the 'standing', 'hanging' or 'sitting' positional verb, repeated here (Table 11.4) for convenience.

Table 11.4: Positional Verbs (with inherently continuous aspect).

|  |  | 'sit/lie' | 'stand' | 'hang' |
| :--- | :--- | :--- | :--- | :--- |
| Indicative, Proximal tense | Sing/Dual | tóó | kwo | t:a |
|  | Plural | pyede | wee | t:a |
| Non-Indicative, or non-proximal tense | Sing/Dual/ Pl | ya | kwo | t:a |

The assignment of nominal concepts to positional verbs turns out to be absolutely crucial for deciding which PUT or TAKE verb to use, for to each of the positional verb categories ('sit', 'stand', 'hang') there is a corresponding specialized PUT verb and a specialized TAKE verb. Or to put it another way, the 6 main PUT and TAKE verbs are strictly subcategorized following the same categories as used for the three stative positional verbs. Thus if an object "stands", it is "put(standing)", and "taken(standing)", although there is no superficial (morphological or lexical) relation between the three verbs - it is only a shared semantic category (Levinson \& Brown 2011). To make this clear, consider:

Scene 32

| kaapî | tapil | mbêmê | ka | kwo, | pyópu | ngê | da |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| cup | table | on | is | standing | girl | ERG | 3past.perf. |

y:00
take.standing
'The cup was standing on the table, a woman took it'

Here, since one uses the stative positional "stand" for any object with a base or vertical long axis (see Levinson 1999), the TAKE verb must be the corresponding 'take-standing' verb y:oo, "take (of standing object"). Nothing else will do. In general, usage seems very consistent with this rule: use the TAKE or PUT verb that corresponds to the positional that would have been employed. The responses to some of the stimulus films in the PUT \& TAKE series illustrate this perfectly:
(570) Scene 10 (v3)

| kwodo | $m e ̂$ | $k a$ | $k w o$, | mbêmê | $y i$ | 'ne'ne | ngma |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| maiden | REP | is | standing | on.head | tree | flower | INDF |
| $a$ | $\underline{k w o,}$ |  |  |  |  |  |  |
| is | standing |  |  |  |  |  |  |

'Again a girl is standing, a tree flower is standing on her head'
pyââ ngmê ngê kada y:00
woman INDF ERG CERT.3PRS.CI.Close take.standing.thing 'A woman takes.standing.thing (removes the flower)'

```
k\hat{e}\quadma ka\hat{a}
CERT.3. REP put.standing.thing
'She stood it back again (stuck it back again)'
```

Note that a flower is held to kwo 'stand' when inserted in hair, and so the corresponding TAKE verb is $y$ :oo 'take (a standing thing)', and the corresponding PUT verb is kââ 'put (a standing thing), stand a thing up' (Table 11.5).

The following example illustrates the use of the 'take (of hanging thing)' verb. The 'hang' positional verb basically applies to any attached or tied-on object unless it projects stiffly from a ground object - thus socks are said to 'hang' (t:a) on feet, and consequently one takes them off with the verb for 'take a hanging thing' (ngee):


If we also take into account the corresponding internally caused verbs ("make oneself stand up", etc.), each semantic category ('sitting', 'standing', 'hanging') has a tetrad of verbs, as in Table 11.5:

Table 11.5: Correspondence between positional verbs and verbs of PUT and TAKE.

| Stative Positionals <br> (intransitive) | PUT Causative <br> (transitive) | TAKE Undo Causative <br> (transitive) <br> +CLOSE | Active <br> (intransitive) |
| :--- | :--- | :--- | :--- |
| kwo 'be standing' | kââ 'stand <br> something up' | y:oo 'take something <br> which stands' | ghê 'stand up' |
| tóó 'be sitting' | yé 'put something |  |  |
|  | down' | $n g i ̂ ~ ' t a k e ~ s o m e t h i n g ~$ <br> which sits' | yââ 'sit down' |

This kind of implicit structure in the lexicon we have dubbed a semantic template or 'semplate’ (Levinson \& Burenhult 2009). Note that (a) these PUT and TAKE verbs are at the highest general descriptive level - more detailed ones also exist, but one cannot find more general verbs and (b) usually only one is applicable. An additional curiosity of the 'take' verbs is that they all obligatorily require the grammatical category +CLOSE (CLS), a portmanteau form of the preverbal inflection that typically indicates motion towards the deictic centre (§6.1.3.1). This helps to distinguish them from their homonyms, and makes sense as a narrative shift of the deictic centre to the subject's point of view.

So far, the verbs have been given in their citation form. However, most verbs in the language have two or three suppletive forms, depending on such factors as tense, aspect and whether or not there is a following inflectional enclitic. The main suppletive parts for the PUT and TAKE verbs are shown in Table 11.6. Note that these are mostly tense and aspect suppletions ('followed root' suppletions occur where there is a following inflectional enclitic, mostly triggered by dual/ plural subjects), although imperative suppletions are not shown here:

Table 11.6: Suppletive parts of the three major PUT and three major TAKE verbs.

| PUT verbs and their parts |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| PUT | Proximal tenses | Followed root (or same as Proximal) | Remote Past | Continuous aspect |
| kââ 'put (standing)' | kââ | kaa | kââ | kapî |
| yé 'put (sitting)' | yé | (yé) | yó | yiyé |
| t:oo 'put (hanging)' | t:0o | t:ee | tângo | teemî |
| TAKE verbs and their parts |  |  |  |  |
| TAKE | Proximal tenses | Followed root (or same as Proximal) | Remote Past | Continuous aspect |
| y:00 'take (standing)' | y:0o | $y: e e$ | yângo | yémî |
| ngî 'take (sitting)' | $n g i ̂$ | (ngî) | ngódu/ngêêdî | ngêênî |
| ngee 'take (hanging)' | ngee | (ngee) | ngópu | ngêêpî |

These six verbs of putting and taking, which distinguish whether the object placed or removed canonically ‘sits', 'stands' or 'hangs', are the unmarked verbs of PUTTING and TAKING - there is no verb that is semantically general over these distinctions which at the same time has anything like the same generality of application. But there are more specialized verbs of PUTTING and TAKING, with glosses like 'stuff in', 'pull out', 'stick body part in', 'attach, stick', 'unstick', etc., which ignore the canonical collocations with positional verbs but instead make different semantic
distinctions. In general, these verbs have application when the object to be placed or removed is not static in its location simply by force of gravity, but is rather held in place by other forces (e.g. by pressure or adhesion). Thus if the object transferred will freely "sit", "stand" or "hang" when in the container, then the relevant PUT or TAKE verbs (as above) can be used. But if not, then other verbs are relevant. Altogether, another ten verbs or so were used in responses to the stimulus set.

### 11.2.2 Additional 'putting' and 'taking' verbs

These additional verbs involve such semantic parameters as 'tight fit', 'attach to’, or 'immerse, bury', or they may involve e.g. special kinds of figure or theme (the object placed or removed). Like the main PUT\&TAKE verbs, these verbs often seem to come in doublets, with equal specificity for goal-oriented and source-oriented verbal concepts. Those verbs used to describe the stimulus set included the following:
(A) TIGHT FIT verbs. One important pair of verbs is:
$k n \hat{\imath}$ - insert, stuff in, push in
pêêdî - extract, pull out
These presuppose "tight fit" (i.e. figure is held in ground by pressure), and will be used for putting e.g. knife into sheath, rag into hole, etc. These conditions seem to pre-empt the use of the six main PUT/TAKE verbs, i.e. one doesn't seem to be able to use a more general verb in these situations.
(B) ADHESION is another semantic parameter of importance. The language has special adpositions of adhesion (e.g. p:uu 'stuck on', 'nedê 'stuck on by spiking', etc.). The relevant matching verbs here are:
d:ii/dyingo, dimi - to attach, put on (of e.g. paint, plaster)
pywalî - to remove an attached thing

So one could say:
(572) Yidika ngê ngomo p:uu dumo dyîngo, awêde

Yidika ERG house attached.to wall attached today
da pywalî
3IMMPI.CLS unattach
'Yidika attached the wall to the house (some time ago), now he's unattaching (removing) it'
(C) FIGURE or GROUND SPECIFICITY. Special 'figures' or 'grounds' motivate other special verbs, including:
kwolo 'put animate thing in' (e.g. pig inside pen), or 'put body part inside' (the converse here is the more general pêêdî 'pull out') pudo 'put body part inside enclosed space' (e.g. hand or foot in hole) kmênê 'put something in water or soil, i.e. immerse, bury' ché 'put in container (basket, pot, canoe) and leave there’

The last of these verbs (ché) is an important PUT IN verb, but it is quite specialized and could not be used e.g. to describe the insertion of a stick in a hole (not a container) nor a hand in a bucket (since the hand would have to be severed to meet the condition that the theme be left in the place described). For the latter case, pudo is the specialized verb, used especially to describe e.g. putting one's hand under coral to look for shell fish. The verb kwolo is specialized to putting animate things (including hands, heads, etc.) into enclosures - e.g. putting a pig inside its fence or a chicken in a coop, although in response to the stimulus set it was also used for putting hands into holes.

Some details of these additional PUT IN/TAKE OUT verbs follow (Table 11.7):

Table 11.7: Some more specialized PUT and TAKE verbs.

|  | PUT IN |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Prox | Follow | Rempast | Cl |
| ché 'put in and leave' | ché |  | chângo | ch:em |
| kwolo 'put animate in, etc.' | kwolo | kalê | kwólu | kîgha |
| knî 'stuff in', 'put up (of <br> hands)', 'put in boat' | knî | km:êê | kmungo | kmîmî |
| pudo 'put body part in hole' | pudo/pódu | - |  | pudopudo/pwede |
| kmîmî 'stuff in'     <br> kmênê 'put in water, bury'     <br> myw:êênî 'push' myw:êênî - myw:êênî̀ myw:êênîmyw:êênî̀ |  |  |  |  |


|  | TAKE OUT |  |  |  |
| :--- | :--- | :---: | :--- | :--- |
|  | Prox | Follow | Rempast | Cl |
| pêêdî'pull' <br> +CLOSE | pêêdî | - | pêêdî | peede/paapaa |
| pw:ii ‘cause to exit' | pw:ii |  | - | pw:ii |

### 11.2.3 Notes on the argument structure and syntax of the core PUT and TAKE verbs

The syntactic properties of the three verbs belonging to each class, the PUT verbs and the TAKE verbs (six altogether), appear to be identical. They are all canonical transitive verbs with overt subjects in the ergative case and overt objects in the absolutive case. But the PUT verbs subcategorize for a locative GOAL (the place in which the thing is put), while the TAKE verbs subcategorize for a locative SOURCE (the place from which the thing is taken). As we have seen, location is indicated by a rich series of locative postpositions, but there is no ablative/ locative marking for motion, so GOAL and SOURCE are distinguished only by the collocating verb:

| a. pyââ | ngê | $d: \hat{a} a ̂$ | $k: o o$ | mbywuu | kêdê | yé |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| woman | ERG pot inside | flesh | CERT3IMMPI | put.sitting |  |  |
|  | 'The woman put(sitting) the flesh inside the pot' |  |  |  |  |  |
| b. | pyâa $\quad$ ngê | d:ââa | $k: o o \quad$ mbywuu | kada | $n g \hat{\imath}$ |  |
|  | woman ERG pot inside flesh | CERT3IMMPI.CLS | take.sitting |  |  |  |
|  | 'The woman took(sitting) the flesh (from) inside the pot' |  |  |  |  |  |

The two sentences are parallel in their structure with the same agentive ergative NP pyââ ngê 'the woman', and the same patient absolutive NP mbywuu 'flesh, meat' (absolutives are unmarked). Note too that examples (573)a. (PUT) and (573) b. (TAKE) have the identical noun phrase, $d$ :ââ $k$ :oo 'inside the pot', indicating the Ground - given a PUT verb this must be interpreted as GOAL, and given a TAKE verb as SOURCE. Like English put, these verbs thus subcategorize for a locative NP - they are three-argument verbs. Unlike English, all these NPs are optionally expressed. Ergative and absolutive NPs are cross-referenced on the verb - in (573) the ergative in the PUT sentence is cross-referenced by the preverbal clitic kêdê, and in the TAKE sentence by its variant kada encoding deictic 'hither' (an obligatory feature of TAKE verbs). The patient is cross-referenced by a null enclitic, coding proximal tense, singular agent and singular object. The Ground (Source) Goal) NP has no cross-referencing, but can equally be omitted.

This pattern whereby SOURCE or GOAL is indicated by the choice of verb, which subcategorizes for one or the other, is entirely general in the language (as mentioned in §2.4.5, §7.2.2.3). Verbs of motion, whether intransitive as in lê 'go', or transitive as in ghîpî 'carry down a slope', subcategorize for, in these cases, a GOAL, and in others a SOURCE.

It follows from these subcategorization facts, together with the unmarked nature of SOURCE/GOAL NPs, that it is impossible to construct a single clause
which specifies both SOURCE and GOAL for a single motion event. For example, for a stimulus clip in which a woman takes an apple from on top of a pile of books and moves it to on top of a boot, the shortest possible description was:
(574) kî $\quad$ pyópu
that ngê yi kigha pukudmi dyuu mbêmê
da $\quad$ woman
3IMMPI.CLS took.sitting boot on that fruit book pile on
'The woman took(sitting) the fruit from the book pile and put(sitting) it on
the boot'

The core Yélî Dnye PUT and TAKE verbs are of some interest for the following reasons:
(i) They indicate that the three-way classification of nominal concepts forced by the positional verbs is a thorough-going underlying semantic template which shows up in other domains, like PUT \& TAKE verbs. Such systematic verbal classification of nominal concepts is unusual (but see Hellwig 2007 for a parallel case).
(ii) The six main verbs are unusual in exhibiting an exact symmetry, with 3 distinctions each in the PUT vs. TAKE subdomains - most languages display more subdivisions in the PUT subdomain than the TAKE one.
(iii) The systematic nature of the oppositions indicates that PUT \& TAKE forms a coherent domain or semantic field in this language, which may be less evident in other languages.
(iv) The argument structure of these verbs specifies three arguments for each: an agent, a patient and a SOURCE or GOAL argument. Case is assigned as follows: ergative to agent, absolutive to patient, and unmarked oblique to the SOURCE or GOAL ground argument, which may take a (static) locative postposition within its scope (so the whole may be understood as, e.g., 'from inside the house'). The verb itself assigns SOURCE vs. GOAL to the ground argument. A clause can thus only have either a SOURCE or a GOAL NP, but not both.
(v) There are no more general verbs for PUT or TAKE, but there are more specific ones. Some of these also come in PUT vs. TAKE doublets (e.g. 'stuff in' vs. 'pull out'). The specific constraints encoded include force-dynamics and specific properties of the patient (as in 'put body part in') or goal (as in 'put in water', 'put in canoe').

### 11.3 Landscape terms, semplates for motion and toponyms

We have seen that culture-specific concepts can structure lexical domains, with grammatical implications. We now turn to another domain, where the cultural conceptualization has deep ramifications across many lexical sets and across parts of speech. Rossel Island has a mountainous terrain criss-crossed only by steep and rocky paths; all movement is by foot or by canoe around the coast. Once again there is an immanent semantic structure underlying lexical oppositions, arguing against the linguistic tendency to think of the lexicon as an unordered repository of words. Such implicit structures are likely to be especially prominent where peoples have occupied the same ecology for eons. The semantic template ('semplate') relevant here makes, on a first pass, a three-way opposition between UP/OVER/DOWN, which structures three different verbal sets of unrelated form: intransitive verbs of motion (e.g. 'ascend’, 'cross over', ‘descend’), transitive verbs of motion taking a landform object (e.g. 'climb the mountain', 'cross over the mountain', 'descend the mountain'), and transitive verbs of carrying (e.g. 'carry X up a slope', 'carry X over a saddle', 'carry X down a slope'). As is made clear in Table 11.8, these three verbal sets are morphologically unrelated, with one verbal exception (l:uu, both a landscape transitive and a carry verb).

Table 11.8: Verbs of movement in the landscape.

|  | UP | DOWN | OVER | ALONG |
| :--- | :--- | :--- | :--- | :--- |
| Intransitives | kee 'ascend' | ghî̃ 'descend' | lóó 'cross over' | paa 'go along' |
| Landscape | $v y: u u$ | 'nuw:o | l:uu 'cross | kwolo |
| transitives | 'ascend X' | 'descend X' | over X' | 'traverse X' |
| Carry | $k m: e ̂ e ̂ ~ ' c a r r y ~$ | ghîpî 'carry X | l:uu 'carry X | dnyinê 'carry |
| transitives | X up' | down' | over' | along' |

Figure 11.2 illustrates the oppositions mapped onto an underlying ridge model (see Levinson 2006b and the prior section for the argument structure of Yélî motion verbs, and Levinson 2008 and Levinson \& Burenhult 2009 for this domain).

Hills and mountains are one sub-domain where this semplate structures the vocabulary. Another is movement with respect to a watercourse. Rivers in Yélî are understood in terms of three sections: a freshwater section running from source to tidal section, a tidal section that runs into the lagoon, and a lagoon section that runs out to a break in the reef caused by fresh water flow. Each part has a separate term and a separate proper name. Nevertheless river navigation and motion verbs are indifferent to this division. One follows up a watercourse, follows it down or crosses over it, as illustrated in Figure 11.3. It is important to note that the prepo-


Figure 11.2: Semantic Template UP/OVER/DOWN/ALONG underlying 3 different sets of motion verbs. Top Panel: Intransitive and transitive motion verbs, and 'carry' transitives mapped onto ridge model. Bottom Panel: The vector heads, tails and transits which also play a role in toponyms (After Levinson \& Burenhult 2009).
sitions in the English glosses are incorporated in the verbal semantics. Note too that two of the verbs ('follow up', 'follow down') are the same as the corresponding transitives for going up and down hills, but the 'cross over' verb is specialized for water courses. This suggests a generalization: going up a river is like going up a hill, in that it requires greater effort - in other words, the terms are based on 'force dynamics’ (Talmy 2000).


Figure 11.3: Left Panel: Application of the UP/OVER/DOWN scheme applied to water courses illustrated with 'landscape transitive' verbs. Right Panel: The three segments of a water course, and the named vector heads and tails (illustrated with the Pene river) (After Levinson \& Burenhult 2009).


Figure 11.4: Application of the UP/DOWN schema to the macroscale of sea-journeys under prevailing winds from the East: Illustrated here with carry transitives, motion intransitives, and adverbs of direction (After Levinson \& Burenhult 2009).

Force dynamics explains the extension of this template to larger geographic space, as illustrated in Figure 11.4, where 'descend' verbs take on the meaning of westward, and 'ascend' the meaning of eastward. This follows from the fact that prevailing winds are from the east, so it is much more laborious to go east than west. (It is not a coincidence that Melanesians and Polynesians explored eastwards, knowing they could easily return in the other direction.) Going north or
south is as easy as going west (in a sailing canoe these would be efficient broad reaches). So now all three sets of verbs (intransitives, landscape transitives and carry transitives) have coherent applications to the flat.


Figure 11.5: Generalized 'force dynamics’ model (After Levinson \& Burenhult 2009)

The inclined ridge model is also instantiated in nominals labelling the TOP, BOTTOM, SADDLE and FLANK as labelled in Figure 11.2 above. These nominals play an important role in the formation of toponyms, so we have e.g. Mbu mbêmê lit. 'at the top of the mountain', a village name; Pwele vyuwo 'at the bottom of the Pwele ridge', another village name, Kpéé paa 'on the flank of Mt. Kpée’, yet another village name, and Tââ chóó 'Mt Táá pass', the name of a pass over the highest mountain.

These observations invite the generalized force dynamics model in Figure 11.5, which explains the parallel usage of vocabulary across domains (landforms, water courses and sea). This force dynamical semplate has static applications as starting points, ending points and midpoints on the motion template, as sketched in Figure 11.2 (bottom panel). Terms for bottom of slope, top of slope, saddle of a pass, flank of a hill, all figure very largely in place names, which we now turn to.

### 11.3.1 A note on the toponyms of Rossel

Toponyms are formally isolatable as adjuncts that can be introduced into almost any clause without a postposition. They are amongst the longest words in the language, with up to six or more syllables (e.g. Wédidmyinênyedê). Some of the rarest phonemes also occur in them - e.g. kpy (the palatalized labiovelar stop) is attested in only five words, three of them placenames.

Rossel toponyms are often quite complex, plausibly by origin multi-morphemic expressions, frequently no longer clearly analysable. However many village names are formed on the basis of a proper name plus a descriptive epithet, glossing like 'At the bottom of X (a hill name)', 'X point' (where X is also often a hill name), ' $X$ pass' (where $X$ is a mountain or ridge), ' $X$ on top' (where $X$ is a mountain or hill), and so on, as illustrated in the prior section. Common formations are illustrated in Table 11.9. Sometimes, the whole complex is analysable, as in Knwede-kó-ntó-km:ee 'knwede-branch-dead-shade.of' i.e. 'in the shade of the dead branch of a knwede tree’, but sometimes it may be entirely opaque. Note that the final morphemes in the table often have built-in locative meanings, either because they are postpositions or special locative forms (e.g. km:ee 'in.shade.of.tree’) - this may help to explain why toponyms rarely take explicit locatives.

Table 11.9: Composition of village names (sample of 147).

| final morpheme | frequency in sample ( $\mathrm{N}=147$ ) | gloss | example | gloss |
| :---: | :---: | :---: | :---: | :---: |
| -kpâpu | 12 | 'ridge, hill' | Kpêdêkpâpu | 'tree.species- hill' |
| -‘nuwo | 10 | 'point, promontory' | Yélî'nuwo | '(east) Point of Rossel' |
| -vyuwo | 10 | 'bottom of incline' | Kimbêvyuwo | 'bottom of Kimbê hill' |
| -mbêmê | 8 | 'on top of' | Mbumbêmê | 'on top of the mountain/hill' |
| -ngê | 6 | (archaic locative, apparently 'on top of') | Kmîmêngê | 'on top of Kmîmê hill' |
| -chóó | 6 | 'pass, saddle' | Dómuchóó | 'pass over Domu' |
| -km:ee | 4 | ' in shade of tree' | Kimikm:ee | 'in the shade of the kimi tree' |
| -paa | 3 | 'bank of river' | P:uupaa | 'bank of P:uu river' |
| -p:uu | 3 | 'on side of' | Nkélimop:uu | 'on the side of Nkélimo hill' |
| -nyedê | 2 | 'on the top, near' | Wédidmyinênyedê | 'on top of Wédidmyinê hill' |

Area names are more often monomorphemic than village names, although a number also show regular formations, as illustrated in Table 11.10. These formations suggest that area names often originate metonymically, after the name of a hill, river or path (paths are major landmarks, and most have names of their own.) All area names can have the term wee 'district' added after them. More area
names are simple lexemes like Mîlî or Nkâdâ: where these are contiguous, the conjunction (e.g. Mílî Nkâdâ) denotes the conjunction of the areas. A few area names are fully analysable, reflecting historical or mythological events, such as Kââdî ndê kuwó têdê 'the place for making the fire of the sun', or Nkwolo yââ ngê ntoo ndap̂̂ 'wild taro leaf, how many shell coins' (place where big men used to meet for shell money business). Presumably through corruption these can end up as unanalysable multisyllabic terms, such as the four syllable Mgîkpêmgamkpê, where only the first syllable clearly means anything (Mgî 'Mount Rossel'). For the major named places around the island, see Appendix I.

Table 11.10: Area names.

| final <br> morpheme | frequency in <br> sample $\mathbf{N = 1 2 6 )}$ | gloss | example | gloss |
| :--- | :---: | :--- | :--- | :--- |
| -vyuwo | 8 | 'bottom of <br> incline' | Pwelevyuwo | 'bottom of Pwele' (no <br> mountain Pwele) |
| -nyedê | 4 | 'on/over' (of <br> paths especially) | Tiinyedê | '(path) on beach' |
| -chó | 4 | 'pass, saddle' | Kêlechó | 'pass over Kêle' |
| -yu <br> (=vyuwo $)$ | 2 | 'bottom of <br> incline' | Nduw:ayu | 'bottom of Nduw:a' (no |
| -chedê | 2 | 'near' (especially <br> of rivers) | Nyâpuchedê | 'near Nyâpu river' |
| -mênê | 1 | 'inside' | Yââmênê | 'inside Yââ' |
| 'nuwo | 1 | 'point' | Kââpyw:aa'nuwo | 'Kââpyw:aa point' |

Place-naming of natural features and areas is very dense, as has been reported for other tropical islands (e.g. Truk, Goodenough 1966). Features of the lagoons, including each reef segment, tidal pools, sea-weedy areas, etc., have proper names. Due to beliefs about sacred areas, some of these names are also proper names for gods or spirits: thus Yidika names a particular off-shore rock, but is also an ordinary man's name - the rock in question is the reification of one of the sons of Mbaati, a principal god of Rossel (see Levinson 2008).

### 11.4 Classification of the natural world

The classification of the natural world in a language expresses a cultural ontology, which in turn has grammatical reflexes. For example, only pigs, dogs, tame birds (i.e. domesticates), boats and people have proper names. The division of
living beings has implications for existential and locative expressions utilizing the constrained set of positional verbs: humans and gods are said to 'sit', animals to 'stand', fish and birds to 'move-in-their-medium' - although roosting birds ‘stand’ while flying foxes 'hang’ (see §4.5.3 and Levinson 2006b).

No systematic ethnobiology has been done on Rossel, and indeed the biological taxa have not been established. Until such collaborative work is done, the following notes must be taken as tentative, but they hint at a great richness of traditional knowledge about the biological environment. The higher level ethnobiological categories are of some special interest as they have some unusual groupings and a number of higher level categories or 'unique beginners'. The higher animals, including birds are relatively impoverished on this island environment, while fish and plants teem.

Figure 11.6 shows some major named divisions and selected sub-branches in the biological world. It was elicited using the following kinds of frame, tpile tp:oo dyêêdî yintómu, ló nté dé? 'What are all the kinds of animals?', kwidi tpile pê dyêêdî ngmê? 'Is a kwidi a kind of snake?'.


Figure 11.6: Higher level taxa in Rossel ethnobiological classification.

Table 11.11 illustrates these major categories of the natural world in more detail, and gives some glimpse of the taxonomic richness. A great number of superordinates are implicit or unlabelled. There follow some generalizations about part of this classification.

For the birds we have a probably nearly complete scientific identification (Pratt et al. 2005) of the 40 odd non-pelagic species found on Rossel, but without secure linkage to Yélî names, which I have nevertheless attempted to add below by identification from photographs. Most of the Yélî Dnye terms seem to be at the species level, with no terminological recognition of major families like Acciptridae (Hawks) or Columbidae (Pigeons). Speakers do recognize groups like raptors and parrots, but do not name these higher order taxa. Only a few species (fruitdoves) seem to be collapsed at a genus level (Ptilinopus superbus superbus and $P$.
rivoli strophium are both called $m b: \hat{e ̂ e ̂), ~ a l o n g ~ p o s s i b l y ~ w i t h ~ e g r e t s / h e r o n s ~(m u w o ́ ~}$ designates both the black and white phases of Egretta sacra sacra but probably covers all three species of Egretta known to occur in the Louisiades) and kingfishers (tada 'Halcyon chloris, H. saurophaga' ). One false grouping is likely: two kinds of kpé or bushfowl are recognized, Megapodius freycinet macgillivrayi is kpé proper or pó kpé, while p:ââ kpé seems to denote the unrelated Nicobar pigeon Caloenas nicobarica nicobarica. Names are mostly non-descriptive, but there are some exceptions like kwini kigha pîpî pyu, lit. 'The bird eating kwini fruits, i.e. Chalcophaps indica rogersi'. These descriptive terms probably mostly make sense in mythological terms, e.g. ndapî nté pîpî pyu 'shell money food eater i.e. ?Dicaeum pectorale rosseli' is a woodpecker species with a reddish breast, as if he acquired his colouring through eating valuable ndap shells. Pelagic birds seem to have less precise identification - e.g. chaa pyu 'reef doer' seems to cover many birds in the Laridae, a bit like our vernacular 'sea gull'.

Small birds collocate with the classifier or epithet tp:oo, 'small thing'. Some birds like chalê, which is said to inhabit the sacred area of Mt Mgî and only fly to the coast to die, may be entirely mythical, although it was identified from photos as the brown cuckoo-dove, Macropygia amboinensis cinereiceps (listed by Pratt et al. 2005 as occurring on Rossel). There are a set of half a dozen verbs denoting bird calls which are specific to certain groups of birds; for example, the wuwó or Pitta bird alone is said to mbiye, coo in a specific manner. A great deal is known about the habits, food stuffs and mating rituals of the different species, some of which are celebrated in the tpile we epic songs (§12.4). It is locally well-known for example that the mbuwó (Egretta sacra) heron has two radically different morphs, the black and the white. Each of the dozen clans on Rossel has a bird totem, drawn from the more salient species (see Levinson 2006c).

While terrestrial birds are classified mostly at the species level, forest trees on the other hand seem to show naming at the genus rather than species level (although botanical investigation has been only rudimentary; my identifications were done with the help of the native speaker forester Sam Aloysius). For example the term chikî refers to both Instia bijuga and Instia palembanica, two species of hard wood used for house posts, although local knowledge distinguishes the species by size of fruit. For the tree species scientifically identified (c. 150), most Yélî Dnye terms seem to group them at the genus level. Where the tree is of special interest, like the nut bearer kponê, distinct species are likely to be recognized (kponê têdê, kênê kponî, mbilimbili té). Some genera of no particular economic importance are also finely distinguished at the species level, e.g. vyaapê is Podocarpus neriifolius, dada yi is P. amarus.

Rossel fish terminology should be of special interest to the ethnobiologist, because tropical fish typically have three distinct life stages in which they may
be of quite different colour and even of very different shape, and may also show sexual dimorphism (related to stages in hermaphroditic species) - a distinction has to be made between natural kind and the colours/shapes of individuals, in a way that might be challenging for folk biology. The following notes are based on tentative identifications from fish handbooks using specimens from fishing expeditions. The Rossel terminology often (but not always) provides different unrelated terms for these stages, but people are perfectly clear that they are of the same biological essence. So for example, the Humphead Wrasse (Cheilanus undulatus) is known as d:êe vyono in its initial phase, kpaapî tp:oo kpaapî tp:oo soon thereafter, kpeekpee in its intermediate stage, but dpuwo in its terminal phase when it grows a distinct hump on the forehead. But they are all correctly noted to be of one species. Four stages of the Bluefin Trevally (Caranx melampygus) are distinguished (l:ââ muтu > l:ââ > l:ââ mê kaanga > kaanga), although it may actually turn out that some of these are in reality different species. In these sorts of cases, one term is understood to be the 'basic term' - here it is l:ââ for instance. On the other hand, closely similar Caranx species such as Caranx lugubris are given their own name (yili keemi), and recognized to not be in a developmental series of the same kind.

Rossel pelagic fish terms are about $75 \%$ ( 130 of a sample of 170) monomorphemic, about $25 \%$ multimorphemic. The multimorphemic terms are not descriptive binomials (cf. English Red Snapper), with the exception of the names for sharks, also classified as fishes. In some cases there is a classifier attached, as in mbanê $p \hat{e}$ 'long toms' ( $p \hat{e}=$ snake, worm classifier), or ghipe dmi ('broom' incorporates the classifier dmi 'bundle') which denotes a leatherjacket species, or kêêdê w:uu (Spotted porcupinefish, Diodon hystrix), where w:uu is the classifier for round things and seeds and the fish in question puffs itself up in defence. (Incidentally, most shell fish species have the classifier w:uu attached as part of their name.) In a few cases there is reduplication, as in kpaapî tp:oo kpaapî tp:oo (lit. "Cockatoo chick, cockatoo chick"), denoting a largish specimen of giant wrasse (Cheilanus undulatus). In a few cases there are descriptive terms like kpii kn:ââ (lit. 'bole of the kpii tree (Syzgium spp)' denoting the sailfish tang, Zebrasoma scopas (perhaps motivated by its huge fins, reminiscent of the large buttesses of the Syzgium species - see below on the analogy to trees). Often these descriptive terms are of uncertain meaning, like mye waa u te 'Mye Waa her fish' (presumably a mythological allusion, denoting the snapper Lutjanus fulviflamma), or tââ yu che pyu ('swallow-species leg digging doer', denoting the cardinal goatfish Parupeneus ciliatus), or kââdî vyuwo ('bottom of the sun', denoting another goatfish species). What one does not find is systematic use of a family or genus term with species qualifiers - terms that at first look like this tend to denote unrelated types of fish (e.g. kîkî 'Orchid sp.', 'Convict surgeonfish, Acanthurus triostegus', kîkî pyopwe, ‘Golden trevally, Gnathanodon speciosus’, kîkî tpâpî 'Damselfish species’).

Fish terms show some sort of interesting partial analogy between air, land and sea. Around $20 \%$ of fish names are also names for either plant species (typically trees) or bird species, or both ( 32 out of a sample of 170). In some cases it is clear that this is analogical, for example, $d$ : aa denotes a scorpion fish species and also algae and moss - scorpion fish often appear like algal growths. Keemi denotes both a tuna species and the canarium nut tree, both the most highly prized wild produce in their domain. K:omo denotes a wasp fish (Apistops sp.) and a dangerous spiny grass, kêmb:aam denotes a colourful fish with orange band (Balistes undulatus) and a croton plant species with orange band on the green leaves. T:aa denotes the best betelnut species, but also a stinging firefish species (both have a 'kick'!). Behavioural analogy may lie behind these parallels, e.g. the conflation under maalî of the giant sea-eagle (Haliaeetus leucogaster) and a large Grouper species - the term also means a leader of men. Similarly, the deadly stonefish is likened to the gods of sacred places where the uninitiated may not tread without danger (both are ' nmo ). Since the matrilineal clans of Rossel all have bird, fish and plant totems, an analogy between air, land and sea is already established (although each clan always has bird, fish and plant totems with distinct rather than shared names - see Levinson 2006c). Some fish are surrounded by taboos, for example, njépi, the yellow-margin triggerfish (Pseudobalistes flavimarginatus - a curious fish with incisor like teeth) can only be eaten by men. Myth connects it to an exchange between the high god Ngwonoch: a and the sorcery god Yee (njépi was given in exchange for mtye, a brightly coloured lorikeet).

Table 11.11 captures an implicit taxonomy of some of the major life forms from animals to plants, based on elicitation asking whether an $X$ is a kind of $Y$; it is in no way exhaustive of local knowledge. The table over-regularizes, as there is no complete consensus across adults, but it is clear that there are systematic indigenous ideas here, and that Rossel Island would be an excellent location for ethnobiological investigations in an undisturbed ecology.

An ethnobiological taxonomy of this kind can misleadingly suggest a neat parallel with scientific nomenclature. But for a start, there are glaring mismatches with Western biological categories: marine mammals and sharks are classed with fish, and bats with birds. These classifications seem largely based upon the manner of motion through the medium of the natural habitat (water, air), corresponding to the positional verb m:ii 'to inhabit or move through the medium of one's natural habitat'. Yet eels and prawns are not classed as fish or snakes or the like, remaining oddballs. Other classifications seem shape based, so tape worms are mwi pê, a kind of snake or tpile pê, although the millipede pêpê despite its name is not in the snake category. Thus quite a few life forms find themselves falling outside a neat taxonomy.
Table 11.11: Major categories of the natural world, with some exemplification of subordinate taxa.

| Rank 1 | Rank 2 | Rank 3 | Rank 4 | Rank 5 |
| :---: | :---: | :---: | :---: | :---: |
| pi'humans, gods, spirits' | yéli pi 'Rossels' |  |  |  |
|  | nkéli pi ‘ship (i.e.white) people' |  |  |  |
|  | dy:ady:a pi 'people of other islands" |  |  |  |
|  | 'nmédi’nmédi <br> 'legendary heroes’ |  |  |  |
|  | ' $n m o$ 'gods of sacred places' |  |  |  |
|  | kmîna 'ghosts of victims of violence' |  |  |  |
|  | dp:eene 'ghosts of drowned' |  |  |  |
|  | mbwee 'ghosts of people who died from sickness' |  |  |  |
|  | kêêmbadî 'spirits who live in trees' |  |  |  |
| tpile tp:00 'animals' | 'nmo 'birds' | $\mathrm{mgami}_{1}$ 'bats' | nkéli mgâmu 'large flying fox' |  |
|  |  |  | mgâmu têdê 'small flying fox' |  |
|  |  |  | kêêlî mgâm 'middle flying fox' |  |
|  |  |  | kmekme 'flying fox sp.' |  |
|  |  |  | mbyimi 'brown bat sp.' |  |

Table 11.11 (continued)


| Rank 1 | Rank 2 | Rank 3 | Rank 4 | Rank 5 |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | vy:êmê 'Ducula spilorrhoa' |
|  |  |  |  | mb:êe 'Ptilinopus rivoli strophium, ?and Ptilinopus |
|  |  |  |  | superbus superbus' |
|  |  |  |  | kwini kigha pîpî pyu, lit. 'The bird eating kwini fruits, |
|  |  |  |  | Chalcophaps indica rogersi' |
|  |  |  |  | mtyîmwe 'Myzomela sp.' |
|  |  |  |  | mbuwó 'Egretta sacra sacra?et al.' |
|  |  |  |  | dyu '?Charadrius dubius' |
|  |  |  |  | vy:êmê 'Ducula spilorrhoa ?and other D. species' |
|  |  |  |  | chala '?Macropygia amboinensis cinereiceps' |
|  |  |  |  | pyipwo '?Pachycephala pectoralis' |
|  |  |  |  | ndapî nté pîpî pyu |
|  |  |  |  | '?Dicaeum pectorale rosseli’ |
|  |  |  |  | pyi pyu |
|  |  |  |  | 'Monarcha cinarescens rosseliana' |
|  |  |  |  | nkwolo nk:êênî pyu |
|  |  |  |  | '?Pachycephala rufiventris meeki' |
|  |  |  |  | vyeele tp:oo |
|  |  |  |  | ' Collocalia esculenta esculenta' |
|  |  |  |  | ghêêdê kuu 'black heron ?Egretta picata' |
|  |  |  |  | kîdî 'Esacus magnirostris (?and other curlews?)' |
|  |  |  |  | chaa pyu 'seagulls' |
|  |  |  |  | mgî 'Fregator minor' |
|  |  |  |  | kînî 'Sterna fuscata' |
|  |  |  |  | dyu 'Charadrius sp.?' |
|  |  |  |  | (and numerous unidentified species) |
|  |  |  |  | chu 'Eurystomus orientalis waigiouensis' |

Table 11.11 (continued)


Table 11.11 (continued)

| Rank 1 | Rank 2 | Rank 3 | Rank 4 | Rank 5 |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | nkaaka 'Bulbometapon muricatum' <br> (cods/groupers:) <br> ala mga 'Variola albimarginata' <br> dél:ââ ‘Plectropomus truncatus’ <br> nkwépi 'Cephalopholis argus' <br> wówokê 'Epinephelus fuscoguttatus' <br> kwini yââ kwini yââ 'Epinephelus caeruleopunctatus' <br> (and some 150 further names) |
|  |  | lete 'dolphins' |  |  |
|  |  | pywâpwo 'dugong' |  |  |
|  | (lizards) | kîghe (general) | kââdîlyu |  |
|  |  |  | chipw:a |  |
|  |  |  | chii tp:oo |  |
|  |  | tapê (gecko) | mbuwe |  |
|  | tpile pê 'snakes' | (other snakes) | ntii tpile pê | ntii kwidi pê 'long beche de mer' |
|  |  |  |  | da too pê 'yellow striped snake' |
|  |  |  | wulê |  |
|  |  |  | kwidi 'lazy snake' |  |
|  |  |  | ngoo tê pê 'blind snake' |  |
|  |  | mw:ee 'pythons' | mw:ee ${ }_{2}$ têêpî |  |


| Rank 1 | Rank 2 | Rank 3 | Rank 4 | Rank 5 |
| :---: | :---: | :---: | :---: | :---: |
|  | tpile wee 'insects' | (ants) | têpê wee 'ant lion' |  |
|  |  |  | yaawe 'green ants' |  |
|  |  |  | mbude 'large black ant' |  |
|  |  |  | yââ kî 'yellow/brown ant' |  |
|  |  |  | kimiwe 'large flying ant' |  |
|  |  |  | tpiitpii wee 'rain flying ant sp.' |  |
|  |  |  | $y$ :eng:e 'termites' |  |
|  |  | (bees) | wири |  |
|  |  |  | mty:aa wee |  |
|  |  | (grasshoppers) | kmîpwe |  |
|  |  |  | kpele |  |
|  |  | $m b: \hat{e ̂ e ̂}$ (spiders) | ndipi nyu 'trap door spider' |  |
|  |  |  | momb:êê |  |
|  |  |  | tââkê |  |
|  |  |  | kpéki |  |
|  |  | kiminîpî wee (wasps) |  |  |
|  | (unclassified animals) | pêpê |  |  |
|  |  | 'millipede' |  |  |
|  |  | tpy:aakaa 'butterfly’ |  |  |
|  |  | ghînî 'caterpiller' |  |  |

Table 11.11 (continued)


| Rank 1 | Rank 2 | Rank 3 | Rank 4 | Rank 5 |
| :---: | :---: | :---: | :---: | :---: |
|  | yedê kpê 'vines' | dp:êê ch:aa |  |  |
|  |  | tupu |  |  |
|  |  | Ivamê |  |  |
|  |  | kwee |  |  |
|  |  | n:ii |  |  |
|  |  | mtî |  |  |
|  | mbiye 'grasses' | komo 'common grass' |  |  |
|  |  | paapaa <br> 'razor grass' |  |  |
|  | (palms) | km:ii 'coconut' |  |  |
|  |  | wédi 'sago' |  |  |
|  |  | ('betel nuts') | t:a a |  |
|  |  |  | mbwo |  |
|  |  | ('pandanus') | kweeli, mty:u, dii tap, nkî̀, pala, pywââ, pono, chuu |  |
| tpile 'things, inanimate entities' | (corals) | wuwo (hard corals) | wuwo w:uu 'spherical corals' | mbêê w:uu 'Platygyra spp' |
|  |  |  | la 'branching corals' |  |
|  |  |  | dp:ii 'flat coral type' <br> (Acroporidae spp) |  |
|  |  |  | mganê mganê yââ 'flat coral type' (Montipora spp) |  |
|  |  |  | dp:êê u nee '(Fungidae family)' |  |
|  |  | wulê 'soft corals' |  |  |

### 11.5 Rossel kin term system

Kin terms form a mini-grammar of their own: they look like nouns, but are no doubt in all languages really relational predicates, with a fully recursive system of indefinite extension (as in 'mother's brother's wife's father'). The Rossel kinship terminology is a complex system adapted to a dual descent system, that is, reckoning both through patrilineal and matrilineal lines. Land inheritance is strictly patrilineal, and residence patrilocal for males (women marry out). Overtly, the system appears matrilineal, with 15 named matriclans, each with bird, tree and fish totems and associated sacred places. These clans regulate marriage, since marriage is strictly clan exogamous. The terminology has generational skewing similar to a Crow III system, as on the Trobriands, but it has alternating generational terms mapped on top, suggesting remnants of a section system. The full system is too complex to describe here (see Levinson 2006c), but major points are here highlighted.

Table 11.13 gives a more or less complete list of the terms, with sample kintype extensions. The extensions often vary according to the sex/gender of the propositus, that is the person from whom the reckoning is made (e.g. Nick in Nick's grandson): for compactness and for reasons of my own experience with the system, the account here is male biased, but see Levinson (2006c) for the complementary perspective. These terms are given in citation form, i.e. unpossessed, where possible (some terms are suppletive under possession). Terms always occur possessed however. Possession mostly follows the normal rules for nominals (see §4.2.1), except for the following suppletive forms (Table 11.12), covering the natal family, which are the only terms which are not 'classificatory' (i.e. they pick out a single kin-type and thus do not apply to a large set of kin):

Table 11.12: Rossel natal kin terms.

| English <br> gloss | $\mathbf{1}^{\text {st }}$ person/ <br> Unmarked Form | $\mathbf{2}^{\text {nd }}$ person <br> 'Your X' | $\mathbf{3}^{\text {rd }}$ person <br> 'his $\mathbf{X ' ~}$ |
| :--- | :--- | :--- | :--- |
| son | a tp:ee | 'nm:ee | tp:oo |
| daughter | a tp:ee módó | 'nm:ee módó | tp:oo módó |
| father | m:aa | mî | u mî |
| mother | niye | niye | u pye |

Table 11.13: Complete list of Rossel kin terms.
(a) Core kinterms in alphabetical order, unpossessed roots
(Definitions are for male propositus or speaker, except where stated otherwise. $\mathrm{F}=$ father, M=mother, $\mathrm{B}=$ brother, $\mathrm{Z}=$ sister, $\mathrm{S}=$ son, $\mathrm{D}=$ daughter, $\mathrm{H}=$ husband, $\mathrm{W}=$ wife)
chênê ZS, ZD, ZDDD/ZDDS and Ds of classificatory a tîdê
kââpyââ MM, and all senior generation women of M's Clan
(e.g. MMZ,MMM,MMMM, etc.)
all senior generation women of F's Clan (FM,FMZ,FMM),
and same and -2 generation of women in F's Clan (FZD, FZDDD, FZDDDDD) ${ }^{47}$
kââkââ FB , FF , FFB , FFBS , any male in F 's Clan of senior generation (e.g. FMB, FMMB,
FMMMB), ${ }^{48}$ also any male of any generation in FF's and MF's clans
(e.g. MF, MFZS, MFZDS, MFZDDS, etc.)
also FFZH, MZH, MMH
kaawó FF, FB, MF, MFB, (archaic term, in Armstrong 1928)
kee BS, BD, ZSS, ZSD, MBDS\&D, MBSS\&D, WZDS\&D, DS\&D, SS\&D, ZSS\&D, MMZSS, MMZSSS
kédikââ (for male speaker; q.v. 'n:ââ) MBW, MMZSW, WZ, HB, BW (this term is used
especially in reference to those affines chosen to be in taboo relation, typically eldest and youngest sisters of wife, $W$ of eldest $M B$, the others of same genealogical relation are called mbwanko). The term kédikââ and name of person is taboo in address; use name of spouse instead. Therefore not really a classificatory term.
kémedi (for female ego \& referent only) BW, MZSW
kênêwó MB (becoming archaic)
kênê $M B, M M M B$
kîghê = kââkââ (FB and other kââkââ's)
kpâm, kpâmu W
m:aa F (address)
m:aam:aa = mî pyââ (reference only) FZ, FZDD, FFBD, FFFBSDD, etc. ${ }^{49}$
mbywé, mbwiyé WF/WM,DH, WFZ, etc. (reciprocal: nye mbywé ‘we are in laws');
WM mbywé pyââ: mbwyéngma = WMB (reciprocal)
mbwó (male speaking) B, MZS, and in general all males of M's Clan of even generations (+2
like MMB, +4 e.g. MMMMB, -2 like ZDS, -4 e.g. ZDDDS)
Also FBS, FFBSS, and any(??) son of a man in father's clan
mbópó (female speaking) BS, BD
mbwanko $=$ WZs who are not designated in taboo relation, i.e. not kédikââ.
mg:êê (male speaker, q.v. vyîlt) WB, ZH, ZHB
mîchó FZS, FZDDS, FZDDDDS(i.e. males in F's Clan of even junior generations ( $0,-2,-4$ ), also FMZDS, MZH for female ego(?).

47 Daughters of FMZ are m:aam:aa, but their daughters are kââpyââ again, and the next generation m:aam:aa, then kââpyââ, and so on. Close women of these categories, especially FZD, are unmarriagable.
48 Seniority is reckoned carefully: "We can't call them $a$-mbwó, because they name their sons like me, so only sons of those men are $a$-mbwós".
49 Note that no term is given for FZH, who will receive various designations, derived through other genealogical connection

Table 11.13 (continued)

```
mî F, FZ (mî pyââ)
'n:ââ BSW, SW, MBSW, wife of a classificatory MBS
piye = pye M, MZ, MMZD, FBW, FBWZ
tpuutpuu = MZ
m:aam:aa = mî pyââ FZ, FMZD (marriageable) 'n:ââ (female speaker) SW, BSW, MMBW?,BSW,
MMZSSW, MMZSSSW, and in general any wife of a kee(?)
niye M (address)
teetee MB = address only for kênê
tîdê (male speaking) Z, MZD, MMZDD, or Ds of classificatory chênê
tp:ee S, D (tp:ee modo)
vyîlî (or vyîló) (female speaker, q.v. mg:êê) HBW, woman's BW
w:ââ MBS, MBD, MMZSS, WZD (w:ââ modo)
    (w:ââ also means 'dog')
(b) Terms in Armstrong (1928), now mostly archaic:
mbywéngma ZDH, WMB
kênêwó = kênê, MB
kaawó FF, MF, FB = kââkââ including extensions
kî médi reciprocal address BH, HZ instead of names
tp:ee kaa = first born (still in use)
tp:ee tpuu = last born (still in use)
(c) Great-(Great, etc.)-Grandchildren terms, via both male and female children:
maka = child's child's child; e.g. DDD, DSD, etc. S or D of kee (DS)
wuduma \(=\) child's child's child's child, e.g. DSDS
kêêdupu = child's child's child's child's child e.g. DSDSD
(kêêdupu also means ‘elbow’)
mêêdupu e.g. DSDSDD
yi duuwo e.g. DSDSDDD
(d) Collective or dyadic kin terms: (plural with knî, e.g. u kpâmu ghee knî). Senior kinsman is the propositus, outside the scope of the plural.
ghee 'woman with S,D or ZS, ZD'
chimi 'man with his ZS' (from u chênê)
mupwo 'man with his son' or 'with MBS', mupwo knî 'man with his family' or 'woman with her BS or DS'
mbwémi 'man with his brother (or FBS), or woman with her sister' (from u mbwó)
lémi 'person with opposite sex sibling'
k:eemi 'man with his BS, SS or DS'; or 'woman with her SS or SD' (from u kee)
with kee, 'grandchildren'
dy:eemi 'man with his WB' (male propositus only) (not derived from u mg:êê)
mbyw:eemi 'man with his WF, WM, or DH' (from u mbwiyé)
or 'woman with DH (only)'
'n:eemi ‘woman with SW, or HM, HF, HFB, HMB' (from u `n:ââ), 'man with SW, MBSW'
vyimi 'woman with BZ or HZ' (from \(u\) vyîló)
```

Table 11.13 (continued)

```
(e) Step kin
wo tp:ee 'step-son of a man, i.e. WS by another man (male propositus only)'
wo tp:ee módó 'step-daughter of a man, i.e. WD by another man (male propositus only)'
w:ââ 'step-son or daughter of a woman, i.e. HS by another woman (female propositus)',
children of another wife (wife speaking)
pyekiy:a 'step-mother, i.e. FW not M'
wo mî 'step-father, i.e. MH not F'
```

I will return to the core terms, but first a few notes on the non-core vocabulary listed under (b)-(e). The set of great-great-great. . . grandchildren terms in (c) reflects the very deep mental genealogies that Rossel people maintain - normally 8-10 generations in the male line, 4-6 in the female line (these terms are used to assert connections with ancestors).

The set of dyadic terms in (d) are of considerable interest, as they reflect a deep Papuan past: "dedicated dyad roots seem to be unique to Papuan languages" while true dyad suffixes are an Australian areal feature (Evans 2006). These terms refer to a dyad, namely a focal (usually senior) kinsman (e.g. in the case of chimi classificatory MB) and a paired junior kinsman (e.g. classificatory ZS). The dyad terms are lexicalized roots, although their origin in the junior member of the term is sometimes obvious, as noted in Table 11.13(d). Thus we have k:eemi, 'a man with BS, SS, DS i.e. a man with one of his kee'. Unless augmented, they take the dual form of the verb, and cannot combine with singular marking. They can be pluralized with the augmentative plural knî, which only has scope over the junior members, so chimi knî means 'an uncle with his nephews’ (i.e., at least three in total). The terms are internally possessed (Nick Evans points out to me), so no overt possessive is employed with them: Yidika chimi $_{\mathrm{i}}$ knîj glosses 'Yidika his ${ }_{\mathrm{i}}$ nephews $_{j}$ and their ${ }_{j}$ uncle $_{i}$ '. These terms cannot combine with numbers, so one cannot say Yidika chimi knî limi 'Yidika and his five nephews', but one can use general quantifiers, e.g. Yidika chimi knî yintómu, 'Yidika and all his nephews', or Yidika chimi knî yilî a lêpî ‘Yidika and lots of his nephews are coming'. Some further possibilities and constraints are shown in example (575) (note e.g. that a single propositus can be used for more than one dyad, as in h .):

b. chimi a lêpî mo
nephew.dyad 3CI going dS.intransCI
'A man with 1 nephew is going'
c. chimi knî a lêpı̂ té
nephew.dyad Aug 3CI going plS.intransCI
'A man with 2 or more nephews is going'
d. mupwo $a$ lêp̂̂ mo
father.child.dyad 3CI going dS.intransCI
'A man with a S or D is going'
e. ghee a lêpî mo mother.child.dyad 3CI going dS.intransCI 'A woman with a S or D is going'
f. Yidika dy:eemi a lêp̂̂ mo

Yidika man\&WB.dyad 3CI going dS.intransCI
'Yidika and his WB are coming' (note this is asymmetrical, it cannot mean 'man with his ZH')
g. nye mbwémi
we2 brother.dyad
'We two are (classificatory) brothers' (used e.g. in oaths)
h. Yidika chimi kn̂̀ mupwo kn̂̂ dê

Yidika nephew.dyad Aug son.dyad Aug 3immpast
lee dmi
went 3plPIintrans
'Yidika went with his nephews and his sons'
i. Yidika chimi mupwo dê lee dmi

Yidika nephew.dyad son.dyad 3immpast went 3plPIintrans 'Yidika went with one of each, a nephew and a son'
j. Yidika chimi kn̂̂ Yidika mupwo dê

Yidika nephew.dyad Aug Yidika son.dyad 3immpast
lee dmi
went 3plPIintrans
'Yidika went with two or more nephews and one son'
Returning to the core terms listed as (a) in Table 11.13, these classificatory terms are used in three distinct but compatible ways. First, they are used by calculating the exact genealogical connection, and then (on one theory) applying reduction rules of the sort argued for by Lounsbury (1965). Figure 11.7 shows the mapping of the terms onto an idealized genealogical network, where the sloping lines indicate generational conflations by Crow skewing rule (the lines ignore the confla-


Figure 11.7: The Rossel kin terms and generational skewing.
tion over alternating generations - this is what makes the system different from a normal Crow system).

The second way the terminology is used is sociocentrically, in terms of ego's significant other matriclans.

Figure 11.8 shows this for a male ego. This makes clear the coherence of the system when mapped onto significant clans, and the equivalence of alternating generations (shown by arrows).


Figure 11.8: Rossel system (male ego).

Interestingly, the system maps equally well onto the patrilines, which form by far the most important corporate groups as shown in Figure 11.9:

|  | F's Matriclan | F's Patriline |
| :---: | :---: | :---: |
| m/f |  |  |
| +4 | kââkââ/kââpyâa | kââkâa/kââpyâa |
| +3 | kââkâa/kââpyâa | kââkâa/kââpyâa |
| +2 | kââkâa/kââpyâa | kââkâa/kââpyâa |
| +1 | kââkâa*/m:aam:aa | kââkââ*m:aam:aa |
| 0 | mbwóltîdê | mbwóltîdê |
| -1 | kââkâalm:aam:aa | kee/kee |
| -2 | mîcho/kâapyââ | kee/kee |
| -3 | kââkâalm:aam:aa | kee/kee |
| -4 | mîcho/kââpyââ | kee/kee |

Figure 11.9: Terms applied to father's matriclan (mîu p:uu) vs. father's patriline (mî u tii).

The third important way the system is used is as a system of reciprocals. From the usage of say, my mother to another kinsman, I can triangulate my own proper usage without knowing anything about the exact genealogical relationship in question. Table 11.14 gives a subset of the equivalence rules involved.

Table 11.14: Classificatory rules for a male ego.

| If my father calls a man | a mbwó, <br> a kênê <br> a kîghê or a kââkââ <br> a chênê | I should call him | a kîghê or a kââkââ. <br> a kîghê or a kââkââ <br> a kîghê or a kââkââ <br> a mîchó |
| :---: | :---: | :---: | :---: |
|  | a mîchó |  | a kîghê or a kââkâa |
|  | a kee |  | a mbwó |
|  | a tp:ee |  | a mbwó |
|  | $a \mathrm{w}$ :ââ |  | a mbwó |
| If father calls a woman | $a$ w:ââ | I should call her | a tîdê |
|  | a kee |  | a tîdê |
|  | a chênê módó |  | a kââpyââ |
|  | a m:aam:aa |  | a kââpyââ |
|  | a kââpyââ |  | a kââpyââ |
| If mother calls a man | a mbópó | I should call him | a w:ââ |
|  | a tîdê |  | $a$ kênê |
|  | $a \mathrm{kênê}$ |  | a mbwó |
|  | a mîchó |  | a kîghê |
| If mother calls a woman | a kââpyââ | I should call her | a kââpyââ |
|  | a m:aam:aa |  | a m:aam:aa |
| If M or F calls a woman | a pye |  | a kââpyââ |
| If $a$ kênê calls a woman | $a \times n$ :ââ |  | $a$ 'n:ââ |
|  | a pye |  | $a$ kââpyââ |
| If $a$ kênê calls a man | a mbywé | I should call him | a mbywé |
|  | a kênê |  | a mbwó |
|  | a kîghê |  | a kîghê |

Since the island is a closed world, presumptive kinship is employed. When Rossel islanders travel to another village, they always first seek their closest kin - it is likely that a woman relative will have married there, and in a society with widespread belief in sorcery, kin are by far the safest persons to stay with. Kinship remains by far the most important conceptual and practical principle for social organization. Experiments show that children as young as six years of age can recite ancestors up to 11 generations deep, and likely soon after master the main elements of the system and can reason using the recursive kinship algebra, so being able to predict their own proper application of a term to a referent from listening to e.g. father's usage (Casillas and Levinson, in preparation).

## 12 Taboo ‘languages’, special vocabularies and registers of Yélî Dnye

Yélî Dnye had three distinct types of 'taboo language' or special vocabulary ('had' because all three are falling into disuse). First, women avoided a number of ordinary words, especially for the sea and sea-faring equipment, presumably because this was a domain for ritual caution, men for example singing nt:amênt:amê hymns to pacify the ocean and its currents. Secondly, in the presence of in-laws, and especially those with whom a special level of taboo had been contracted, a large range of everyday terms denoting body parts, clothing and personal possessions were replaced by a special in-law vocabulary. Thirdly, each sacred place had, according to its legends, specific words that had to be avoided, e.g. the name of the resident god, the names of various of his attributes and avatars, etc. Only indirect reference would be made to the god or resident ' $n m o$ anywhere near his abode (instead he would be referred to just as kê pini 'that man' or by means of a set of secondary descriptive names). Similarly, the names of his abode would be avoided in the vicinity - for example on Mgî (Mt Rossel, home of Ngwonoch:a the high god) one talked of Denikpâpuchóó, avoiding Mgî. In the case of the sacred islet of Lów: a the taboo vocabulary was quite extensive and is given here as best we can reconstruct it. In addition to the special taboo vocabularies detailed below, there are many ways in which avoidance is behaviourally manifest - for example in name avoidance and very indirect reference (see Levinson 2005, 2007b).

### 12.1 Women's language

In addition to a few lexical switches (e.g. kîméédi or kî kyîmwi 'that woman' instead of the gender-neutral speaker version kî pyópu), women's speech shows exaggerated palatalization, so for example the prenasalized stop written /nt/ is likely to be pronounced palatalized, orthographically /nj/ [nd3], and this is extended to some words beginning with / $\mathrm{t} /$, like the name Tili, pronounced /chili/ [ $\mathrm{t} f]$ ].

In the past especially, women avoided using ordinary words in reference to certain entities. The terms avoided with their respectful alternates are given in Table 12.1. No morphosyntactic reflexes were triggered by these substitutions:

$$
\begin{array}{ll}
\text { a. (man speaking) } & \begin{array}{l}
\text { nt:ee lee dmyino } \\
\\
\\
\\
\\
\\
\\
\\
\\
\\
\\
\end{array} \text { You3, LOC go to the sea' } \tag{576}
\end{array}
$$

| b. (woman speaking) | tpyele lee dmyino <br> sea.LOC go.FOL 2plIMP.Intrans |  |
| :--- | :--- | :--- |
|  |  | 'You3, go to the sea (woman speaking)' |
| c. (man speaking) | ntii $\quad$ nmyinê vy:ee yó |  |
|  |  | salt.water 2PlCI fetch 2Pl.IMP3sO.Trans <br> 'Go and fetch sea water' |
| d. (woman speaking) | tpili $\quad$ nmyinê vy:ee yó <br> salt.water 2PlCI fetch 2Pl.IMP3sO.Trans |  |
|  |  | 'Go and fetch sea water' |

Table 12.1: Sample of women's traditional vocabulary replacements.

| Everyday men's term | Gloss | Women's term | Gloss if transparent |
| :--- | :--- | :--- | :--- |
| ntii | 'sea, salt water' | tpili |  |
| nt:ee | 'sea LOCATIVE' | tpyele |  |
| nee | 'canoe' | dyudu |  |
| kwede | 'bailer shell' | kódu yââ/ mtene pyu |  |
| lyé | 'sail' (of pandanus) | pele yââa | 'coconut mat' |
| mbwaa | 'fresh water' | tolo | '?throwing' |
| Lów:a | 'Lów:a isle' | mwada tpili pee | 'the far sea side' |

### 12.2 In-law taboo vocabulary

There is great respect shown to in-laws in Rossel Island society (the converse of this is that a favourite past-time is joking about another, co-present, man's father-in-law (see Levinson 2005) - retaliation is in kind!). Usually a spouse adopts one or two brothers-in-law or sisters-in-law as kédikââ, in-laws due elaborate and punctilious respect, at the time of marriage. Proper respect to these people involves not saying the person's names (i.e. never uttering those sounds and avoiding similar words), speaking of the person in the plural and always using an intermediary when giving something to the person. As well as one or two of the wife's sisters or the husband's brothers, the relationship may target a man's brother's wives, his sister's husband's sister, his mother's brother's wife, etc. For example, my principal consultant Yidika's grandmother (Tómokigha, now deceased) observed these strict relations with just three classes of people: her husband's sisters, her brothers' wives, and her sisters' husbands. People in these strict respect relations observe, or used to observe, a choko relationship involving the replacement of a number of ordinary words by choko counterparts when in
their presence, the avoidance of close proximity (they were given a wide berth), the avoidance of direct exchange of anything by hand with them (children were used as intermediaries), and strict taboos on helping them bodily or with apparel in any way (a great inconvenience in the case of sickness, for example). They were considered yâpwo, sacred or taboo.

Although the alternate vocabulary has largely died out, two linguistic aspects of the original choko relation and other in-law avoidances remain: an absolute, strict taboo on the use of the name of the kédikââ (even if when being used to refer to someone or something else), the use of a polite plural of reference, and a general rule of avoiding co-presence where possible. A woman, instead of naming her husband Yidika's brother, for example, might use his wife's name Ngmidimuwó, saying Ngmidimuwó u pi knî ‘Ngmidimuwó’s folks’ or even Ngmidimuwó u wee mgî knî, 'Ngmidimuwơ's district Mount Rossels'! In turn, she might be referred to by the husband’s brother as Yidika u p:aa tpémi ‘Yidika’s village’s people’. The use of the polite $3^{\text {rd }}$ person plural for kédikââ (either in address or reference) remains current not only for those in the strictest kédikââ relation, as in:

```
(577) a kédikââ daa pyede té
    1sPoss taboo.in.law not sitting.plural plS.Intrans.CIPROX
    'My taboo-in-law (singular) are not there (plural)'
```

but also for others to whom respect is owed, including a man's own sisters (classificatory or real). For example, a middle-aged man (Y:emwe) said of his classificatory sister,

| (578) | wu | $d m a ̂ a ̂ d i ̂ ̀ ~$ | $k \hat{\imath}$ | $d: u u$ | lê, daa | $a$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| that.invis | girl | DEF | 3IMM.PI.MOT | go | not | 1sPoss |
|  | lama | yéli |  |  |  |  |
|  | knowledge | group.of.people |  |  |  |  |
|  | 'That girl who left, I don't know those-many (= her!)' |  |  |  |  |  |

Even a man's elder sisters may be referred to in the plural, although the name will not be avoided:

| (579) Yóóta daa pyede | té, | kêdê | lee |
| :--- | :--- | :--- | :--- | :--- |
| Yóóta not sitting.plural | plS.Intrans.PROX | CERT3IMMPI go.FOL |  |
| $d m i$ |  |  |  |
| plS.PI.PROX |  |  |  |
| 'Yóóta (my sister) is not here, she’s gone' |  |  |  |

This plural of respect is a referent-honorific, but the alternate vocabulary which also used the plural of respect was essentially a system of addressee/bystander honorifics (see Levinson 1983:90 for the distinction, after Comrie). In bystander honorifics, where respect is shown to the non-addressed present parties, 3 rd person plural in reference to individuals was used in their hearing. Apparently, despite the $3^{\text {rd }}$ person forms, it was possible to combine them with the N (assimilating nasal) of $2^{\text {nd }}$ person singular possessive forms, to make address obliquely clear if absolutely necessary. Women in the presence of their in-laws held up a large bush-umbrella ( $k a a$ ) leaf to hide themselves.

The alternate vocabulary with its everyday counterparts is given in Table 12.2 (where there is more than one form, they came from different informants). Most of the words replaced are body part terms or words for clothing and carried possessions. Not all body part terms were replaced: the neck (mbwamê), adam's apple (ndîkîdi), stomach (km:oo), and others not mentioned here retained their ordinary form. Of some interest are the conflations, e.g. of everyday terms for upper and lower leg with a single term, where there is no such term in the everyday language (similarly for male and female genitals, clothing in general, etc.), paralleling such taboo vocabularies in Australia (e.g. Haviland 1979a).

Table 12.2: In-law respect vocabulary.

| Everyday term (unpossessed form) | Gloss | In-law term <br> (in polite $3^{\text {rd }}$ Person plural Possession) | Literal gloss if transparent |
| :---: | :---: | :---: | :---: |
| BODY PARTS |  |  |  |
| ngwolo | eye | yi wuché / yi chéé dê | 'their ?' |
| komo | mouth | yi kp:aa têdê | 'their felling place' |
| kópu | words | yi kp:aa têdê | 'their felling place' |
| 'n:uu | nose | yi kwodo | 'their maiden' |
| mbodo | head | yi njé | 'their rib (of sailing canoe)' |
| mbêmê | head(locative) | yi njee |  |
| ngwene | ear | yi pééni yââ dê | 'their ? leaves dual' |
| kêê | hand | yi kéépi | 'their ?' |
| kpââlî | upper leg | yi péépi | 'their ?' |
| yi | lower leg | yi péépi | 'their ?' |
| yodo | belly | yi mbwene | 'their ?' |
| nyóó | teeth | yi kpéngima tii / wóóma tii | 'their ?' |
| mbodo gh:aa | hair | yi njé gh:aa | 'head(taboo) hair' |

Table 12.2 (continued)

| Everyday term (unpossessed form) | Gloss | In-law term (in polite $3^{\text {rd }}$ Person plural Possession) | Literal gloss if transparent |
| :---: | :---: | :---: | :---: |
| gh:aa | hair (feathers, etc.) | yi njé yââ vyi | 'head(taboo) leaf bunch' |
| kpââlî vyuwo | groin | yi tpyodo | 'their ?' |
| mdî | penis | yi tapa | 'their boulder that runs down a mountain' |
| tpe/tpoo | vagina | yi tapa | idem |
| ngmo | breast | yi ntînî dê | 'their scented herb species' |
| kêê pyââ | finger 'hand woman' | yi kéépi pyââ | 'hand(taboo) woman' |
| yi pyââ | toe | yi péépi pyââ | 'leg(taboo) woman' |
| kwódo ng:oo dmi | face | yi ghââ kn:ââ dmi | 'embarrassment base bundle’ |
| nkene kn:ââ dê | shoulder | yi mbw:ene knââ dê |  |
| OTHER WORDS |  |  |  |
| kpîdî | cloth, clothing | yi kpéni nkoo |  |
| 'ne | grass skirt | yi kpéni nkoo |  |
| pwono | male pubic leaf | yi yââ | 'their leaf' |
| pee | male belt for pubic leaf | yi yedê kpê | 'their vine string' |
| péé | basket | yi mgéé |  |
| $u$ mênê | inside (house, basket, etc.) | yi tp:ênê |  |
| kada | in front of | ghââ | 'slashing' |

### 12.3 Lów:a island taboo vocabulary

Sacred places, or yâpwo ghi, were (and largely remain) taboo in the proper sense: they could only be approached in the presence of the yâpwo chóó or guardians, singing the appropriate propitiatory nt:amê (see Levinson 2008). Free talk would have been avoided inside these areas, and words that had particular resonance with the myths attached to the place were likely to have had alternate replacements. Large areas, including the whole of Mgî, Mt Rossel, would have fallen under these injunctions, and to this day in these areas reference to the residing god and his home will be indirect (e.g. as mentioned above, instead of mentioning the mountain Mgî, home of the high god Ngwonoch:aa, people will say Denikpââpuchóó 'name for any taboo mountain' if in the bush near the mountain).

Armstrong's (1928) ethnography provides a list of alternate terms (pp. 149-50) used on the sacred isle of Lów:a, 16 km east of the main island. Although Armstrong's spelling is sometimes unrecognizably obscure, it provided a useful base for further elicitation (showing too that the vocabulary has not changed much in nearly a century). Unlike with other sacred places, these words are not themselves considered very secret knowledge, as many men visit Lów:a for fishing (although women may not set foot there). On a visit I made in 1999 with East Point men, the vocabulary was still at least partially observed. A rich mythology links Lów: a with Lââp, a goddess who takes the form of a huge octopus and crab, controlling the SE trade winds, with her husband Kpiye (with a moray eel avatar), and with Yee, a malevolent god in the form of a sea eagle who had incest with his sister and ate her, thus initiating cannibalism.

The alternate vocabulary, as far as I have been able to elicit it, is as in Table 12.3:

Table 12.3: Taboo vocabulary used on sacred isle of Lów:a.

| Everyday <br> word | gloss | Lów:a taboo <br> vocabulary | Literal meaning <br> if any | Notes |
| :--- | :--- | :--- | :--- | :--- |
| kââdî | sun | mwââdî | 'rainforest tree <br> sp.' |  |
| d:ââ | moon/pot | têpêm:aa | '?earth daddy' | taboo term has same <br> polysemy |
| tpii | rain | mgâmu <br> (also means <br> 'flying fox') | 'flying fox' |  |
| ndê | fire | nt:u | 'body, flesh (of <br> e.g. shell-fish), <br> fruit' |  |
| mbwaa | water | tolo | 'water' in <br> woman's <br> language | Also said to be 'water' <br> in Saman dialect |
| koo | limepot | chimi | 'clam species'/ <br> 'uncle with <br> nephew' |  |
| yélî | Rossel | tenukwo / <br> denikpâpu chóó |  | (Armstrong glossed <br> these terms as |
| mbu | mountain | denikpâpuchóó | '?Pass over hills <br> of Deeni' | Also the way to refer to <br> specific mountains on <br> Rossel |
|  |  |  | Yt Rossel | Yee Lów:a |

Table 12.3 (continued)

| Everyday word | gloss | Lów: a taboo vocabulary | Literal meaning if any | Notes |
| :---: | :---: | :---: | :---: | :---: |
| pyede | a fish species | déél:âa |  |  |
| tpile pê | snake | chii tepê | 'jungle eel' |  |
| (no term) | sea eel (generic) | te pê | 'fish snake' | covers all the sea eels: yóódu, k:ii kigha pê, poko pê, tênê tênê pê, daa too pê |
| mââwe | bigman | limuwee | '?limu district/ beetle’ |  |
| chêêpî | stone | yéli vy:eenî | '?group of old people’ |  |
| yi | tree | lîmî | 'lightening' |  |
| péé | basket | chimipéé | 'clam sp. basket' |  |
| wêê | blood | vyêêdî |  |  |
| nt:eemi | NW Season | mbweene |  |  |
| ch:ee | to cook | mwéé | 'tree species with nice smell' |  |
| pêla | tongs | ndenikê |  |  |
| ndap | shell coinage | mbwênêma, mbonoma |  |  |
| kpaapîkpaapî | white | nyipinyipi |  |  |
| kpêdêkpêdê | black | mgwâmumgwâmu |  |  |
| Y:amî | Sudest island | Njiipe |  |  |
| yedê | rope | limokpêti |  |  |
| yimê | rat | lów:a dpuwomgaala | ?'Lów:a conch palm’ |  |
| 'nmo | bird | kînî | 'sooty tern' |  |
| 'nmo | yâpwo, sacred site | kînî | 'sooty tern' | same polysemy in both vocabs over god/ bird |
| pywâpo | dugong | nkéliyipââ | 'foreign log' |  |
| pyaa | crocodile | ghêdêpââ | '?shaking log' |  |
| vyee | kill | mb:uu, waa | 'crying' |  |
| $d p \hat{\imath}$ | sleep | kwo | 'standing' |  |

Table 12.2 (continued)

| Everyday word | gloss | Lów: a taboo vocabulary | Literal meaning if any | Notes |
| :---: | :---: | :---: | :---: | :---: |
| mbii | sick | kinima <br> (dê kinima - I got <br> sick) |  |  |
| nkwépi | sorcerer | pwiyépyu | '?doer of coming' |  |
| ghê dmi | ghost | dênté |  |  |
| mbwêmê | pig | kpémi | ‘shark’ |  |
| w:ââ | dog | kpémi | 'shark' |  |
| Ngwonoch:a | high god | kênêwee | '?Kênê district/ insect' |  |
| nkéli chêêpî | steel, knife | limone (= knife only) |  |  |
| maa | road | wuputii | '?bee line' | also in Mgî taboo language |
| yodo | moray | mbwene, mbwééné | 'belly' (in-law vocab) | Everyday word yodo = belly, moray |
| dpênê | river eel | tolo têpê | 'water (woman's language) soil' |  |
| kpii <br> modo <br> ghêê | clam spp | kmenemuwó (for all clam $s p$ ) | 'woman's monthly period' |  |
| tââkê | turtle | kwee w:uu | 'nut species, widow's retreat' |  |
| kwodo | maiden | tpe kwodo mbuwó | 'vagina maiden heron' | Here extended to 'wife' |
| pyââ | woman | njenge |  |  |
| nêêdî | possum | ghaa knâpwo mbwamê | '?croak bottom neck' |  |
| mbweembwee | 'getting big' | kênêkênê | '? uncle, uncle' |  |
| kpânêkigha | village name | teekigha |  |  |
|  | cooking | mwéé 'cooking' | 'fragrant wood sp.' |  |
|  | sleeping | kwo | 'standing' |  |
| vy:êmî | fetch (water) | mbaana |  |  |
| dpuwó n:uu | a well | mbyw:a | '?East wind' |  |
| pyudu | seven | wéniwali | 'six eight' |  |

Table 12.2 (continued)

| Everyday <br> word | gloss | Lów:a taboo <br> vocabulary | Literal meaning <br> if any |
| :--- | :--- | :--- | :--- |
| mweeli mbwó | cooking <br> stones | mwe w:uu dyuu | 'mwe round. <br> things heap' |
| mdî | penis | kweeli kînî | 'Pandanus <br> species sooty <br> tern' |
| tpe | vagina | pîdê | '?1'st sing. <br> counterfactual' |
| mbodo | head | nkênî km:ii | '?shoulder <br> coconut' |
| kpé kn:ââa | reef passage | mbéli kn:ââ | 'blue.sea base' |
| kpéé | bush hen | dówo mgaala |  |
| kpéé | scraping | chimi kpee | 'clam sp. |
|  |  |  | coconut. <br> scraper' |

Included in the list are a number of taboo register verbs. These are inflected in a regular way, giving us some independent insight into the default inflection for verbs, as shown in Table 12.4:

Table 12.4: Some verbs from the taboo vocabulary used on sacred isle of Lów:a.

|  | Aktionsart | Imp | Proximal tenses | Remote Past |
| :--- | :--- | :--- | :--- | :--- |
| mwéé 'cook' | Punctual | mwéé ngi | mwéé | mwéé ngê |
| mb:uu 'kill' | Punctual | mb:uu ngi | mb:uu | mb:uu ngê |
| kwo 'sleep' | Continuous | chii kwo | kwo | kwo |

There are a number of points to be made about the full list of taboo terms. First, as earlier reported for taboo vocabularies, there are interesting conflations of everyday terms in one taboo term. For example, the everyday language has no category for clam shells, so one might think the Tridacnidae are not recognized as a family - but the taboo language has one term covering the six species found on Rossel. Note also the single term for domesticated animals, pigs and dogs. In the same way, while Yélî Dnye has three (at least incipient) colour terms (black, white and red - but see Levinson 2000b), the taboo language has only black and white terms, as if it were in the first Berlin and Kay (1969) stage. Second, the motivation for particular ordinary terms being replaced lies largely in the details
of the mythology connected with this sacred isle. For example, 'seven' (but not any other number) is replaced because Laap, the aforementioned goddess of the place, is conceived of as an octopus with seven arms. The everyday term for octopus, kpé, is avoided in the same manner as the names of in-laws: any word, whatever the meaning, which has a similar sound must be avoided: for example, the man's name Kpakpé will be changed into Kpambwéli. An exception is the word for shark, kpémi, used to replace both the everyday words for dog and pig: this is motivated by the belief that in T:eemî, the Rossel heaven under the lagoon, the sharks are the inhabitants' domesticated animals. Laap's husband Kpiye has a moray eel avatar, so the everyday word yodo 'moray, belly' is also replaced in both its meanings. Similarly, a magical possum called Pele plays a role in the myths, so the everyday word for 'possum' is replaced. Many of the other objects whose names are avoided are also related to the myths, especially to a competition between Yee on Lów: a and Ngwonoch:a on Mgî, Mt Rossel. Thus fresh water has special resonance, as the spring on Lów:a has its alleged source on Mgî.

There are said to be other taboo languages for other sacred places on Rossel, e.g. for the highest parts of Mgî, and the sacred area of Pwelevyuwo. It is clear that they share some of the same terms - for example, the Mgî vocabulary has tolo for water, and wupitii for road (path). Some informants tell me that the in-law choko vocabulary for body-part terms is also used on Lów:a, and presumably in other sacred sites. But sacred places are likely to have their own specialisms, as dictated by the mythology connected to the places.

### 12.4 Special registers and genres

For a society without any significant division of labour (above the level of men and women's work), there are a surprising number of specialist registers. One of the most obvious of these is the register for talking about kêndap̂ 'shell money' (even the use of it is called 'speaking', as in kê tpapê a lama daa tóó, 'the use of kê, lit. the speaking of it, is not known to me'). There are for a start the twenty odd denominations of ndapî shells, with names such as puch:em (high value coin formerly used for compensation to the victim's family at a cannibal feast), yodonkîpwéntoo (high value coin used in brideprice payments). Then in addition there are function or role names for any payment: e.g. mgêmî ndapî is the crucial coin that is permanently passed over in brideprice payments, which must be of têpudî ndoo denomination. Parallel to the ndapî series of coins, there are kê coins (large beads), some of which also have names, like tap, a kê coin that used to be used exclusively for a secondary marriage type where a woman was bought for
prostitution. Or at a pig feast, ten crucial kê coin-strings (kê kn:ââ, base kê) must be produced to form the bottom of the kê string in payment of the pig. These each have role names (1. knââ, 2. kn:ââ u pwo, 3. kn:ââ kn:ââ yi pwo, 4. mwo u pwo, 5. mudu u pwo, 6. mgêmî ngmênê kééni kn:ââ , etc.) since the actual choice of coin is up to the pig seller. In addition, the first payment coin to be presented is (once accepted) called $k n: a \hat{a} \hat{a}$, but it is usually later retrieved upon presentation of one called ngm: aa kn:ââ or pwee kn:ââ, a substitute payment. The biggest kê are usually lent on security, with special terms for each level: ngm:aa kn:ââ (in the case of brideprice) or pwee kn:ââ (in the case of pigs) is security for kê kn:ââ, and kââ kn: $\hat{a} \hat{a}$ is (in the case of pigs) in turn security for ngm:aa kn:ââ. There are also special verbs for e.g. repaying shell money debt (ngmepe), etc. Altogether there is a large body of vocabulary dedicated to shell money transactions (the procedures themselves described in Liep 2009).

More interesting than the technical terms is a whole mode of speaking associated with talking about shell money, where inter alia an extended metaphor of hunting seems to be employed. Thus to give a shell coin is to 'throw it' (kéé/kéké), or to 'hold tight to something trying to get away' (tpee), to earn one is to 'break' it (puwâ), a pig sold for kêndap is te 'fish, game' and the capturing of a base kê kn:ââ is 'to hit/kill' it (vy:a), when it becomes ntóó ('a corpse, dead body'). The mode of speech may reflect the actual hunt for victims in cannibal days. There are also fixed similes, so that e.g. saying that the tail of the fish is shaking at the fish trap means that investing in that man's son's marriage will bring a quick return since he has nearly mature daughters who will yield brideprice. Or saying mbwaa $n$ :aa ngmêêpî‘I am going to exchange the river' means 'I am going to trump, overbid'. The hidden, secret nature of the jargon perhaps reflects the difficulties of hanging onto valuables (shell coins, ceremonial axes, shell necklaces, ceremonial limesticks) in an exchange society, thus an inheritance of valuables is nj:ee 'rubbish', a valuable is wópu (specialized archaic term).

Another specialized register and use of language is found at the mortuary feast or kpaakpaa after a death. Since sorcery accusations are at stake, the language is particularly opaque, and cast entirely in parables. Such opaque speeches are called yey. Even the lead-up speeches make heavy use of analogy:

| (580) | $d \hat{\imath}$ | $-a$ | $n d \hat{e}$ | $m u$ |
| :--- | :--- | :--- | :--- | :--- |
| 1sImPast | -DEIC.PROXS | come_from | that | place_of_mourning |
| $u$ |  |  |  |  |
| his/her/its |  |  |  |  |
|  | 'I didn't go to the lying-in-state place |  |  |  |


| mênê | d:oo | kee wo, | nê | kââkââ |
| :--- | :--- | :--- | :--- | :--- |
| in/inside | NEG1s | go sSREM(ivPostN) | I/me | Grandfather/Uncle |
| because I am to grandfather |  |  |  |  |


| $u$ | nkîgh:ê | paa | neepi | p:uu | komo |
| :--- | :--- | :--- | :--- | :--- | :--- |
| his/her/its | near | side | sago_vessel_SPEC | sago_funnel | mouth | only at the lip of the secondary sago-vessel

neepi nmye mu tóó
sago_vessel_SPEC to/from_you that sitting/being(s/d)
the (secondary) sago vessel before you
(i.e. I am not the real son, the real son is here, i.e. Harry)
mee kn:ââ yinê a peepee
tree_species butt that's_the_one DEIC.PROXS hitting/cutting
kîgha
going_to
The base of this great oak (i.e. Harry) is the one who is going to cut this into pieces (i.e. explain Dalaan's life)'

There are three major traditional song types, yaa, nt:amê, and tpile wee. Yaa are songs of lament, typically composed especially on the occasion to be sung over a dead body, especially by women but also by men. Mgâwo (Noel's father) is famous for arriving to pay his respects to the dead body already singing a yaa composed on the way. Nt:ame, by contrast, cannot be composed, but are handed down from generation to generation, supposedly composed by the gods Ngwonoch:aa, Mêê, etc. Nt:amês exist for weeding, gardening, pulling and launching new canoes, sailing over dangerous reefs, and entering yâpwo, etc. Some of these (e.g. those for new canoes) are vast compositions, designed to be sung continuously over a 12 hour night, modelled on the journeys of the first gods of Rossel. There are about a dozen distinct song cycles of this kind, each region of the island having its own speciality. Their language is opaque and often archaic. Finally tpile wee are also 12-hour long compositions, entirely different in tone: they have light-hearted pastoral themes with sometimes wicked double-entendre. There are c. 50 such song cycles in the current repertoire on Rossel Island, each perhaps 50,000 words in length, and entirely committed to verbal memory without written support. They are composed by known individuals, who usually draw on much existing verse in compiling the huge assemblage, which consists of a number of thematic sections, each typically dedicated to a natural history theme (the cliff, the lizard, the river, the grasshopper, etc.). Repetition of key polysemous words, playing on the different meanings, plays an important structural role. The following example gives the flavour. It comes from the tpile wee Mgopópó (name of a legendary figure), or Mbéépi km:ee tp:ee (lizard sp.), composed by the late

Thomas Keleta and Raymond Y:emwe. Notice the two tokens of nkoo with different meanings 'bush' and 'inside', echoed in the next line by nkoo 'prow'; similarly in the first line chii 'wander', is echoed in the next line by chii liy:a 'slip'; in the first line kpiki and dodo are distinct shrub species but in the second line the kpiki dodo denotes a broader shrub category. This gives a sense of the complex structure of Rossel verse.
(581) mu nkoo mwaa nkoo dî n:aa chii dê, kpîkî kpîkî dodo dodo y:i dê n:aa lê that bush rock inside 1sPstAway wander shrub ${ }_{1}$ shrub $_{2}$ there 1sPstAway go 'I wandered to that inland and to that bedrock, kpîkî and dodo shrubs I went through there'
ghîp̂̂ chêêpê nkoo mbêmê até d:a chii liy:a, kpîkî dodo nênê u l:uu a nê slippery stone prow on sudden 1sPst slip shrub-type flower its tune 1sPrs yiye n: aa kaapi,
put 1s stand.up
'on top of the slippery stone I slipped, I am putting the tune on the flower of the shrub'

Yo ghe pwil: a knı̂ pye daa ny:ee too
Yo area shout AUG 1plNEG NEG hearing MFS3plOREM
'There were shouts in the Yo area, we did not hear them'
Yepe yuu wuwó mbiye mu wee ntééntéé,
Yepe foot Pitta.bird cooing that area floating
'In the Yepe area the cries of the wuwó bird are floating'
mbéépi km:ee tp:ee apuи!
tree.sp shade child [=lizard sp.] taboo!
'The mbéépi.tree lizard, don’t touch!' [REFRAIN]
ye vyapê u wupu mwéli ngê a té vyâ, mwapê komo kpîki nênê lépi a té vy:oo ngê, 'The gust of wind has killed that area Vyapê's bee (i.e. Pius), He has already sucked the flower of kpîki shrub, the woman, at Myapê Komo,'
mwaa nkwodo mbwini dini mu yiyé,
there on the cliffy mountain
yo ghe u wupu, pyidi vyuwo a dîpwii, mwaa nyii mê vyuwo,
Yo area's bee (=man), he came out at Pyidi Vyuwo (searching for woman), at Mwaa nyii he is looking
ghîp̂̂ chêêpî u mêknâpwo w:êêmî dini a da ghodo, tepe yuu mê dpudu, under the slippery stone, it spoils the calm of W:êêmî area, making noise in Tepe Yuu,
mbéépi km:ee tp:ee apuu! [REFRAIN]

These two verses, separated by the refrain of the name of the tpile wee, have been compiled into the mwaa 'bedrock' section of the whole performance. They - or at least the second - was in fact composed earlier by Pius Dâch:aa, to commemorate how he was hit on the head by his own brother's widow when he proposed to her (in the end she accepted him). It expresses self-mockery by veiled allusion. In this way, tpile wee verses combine both lyrical pastoral on one level and witty allusion to people and events on another. The verses employ a poetic register, with many words of very low frequency, some of them archaic or from other dialects (e.g. kukmono for elders, grandparents, used in Eastern dialect songs but a Western dialect word). Grammatical words may be altered euphonically to enhance singability, e.g. the plural té with high short vowel may be pronounced like tee. Despite the marathon all night performances, the audience clings to the words, asking for encores of particular verses to appreciate their subtlety. Incidentally, the performed verse never ends on the refrain but repeats the first line again.

The islanders are a people who make no visual representations; none of the carvings, masks and ritual paraphernalia found elsewhere in Melanesia will be found on Rossel. They make no pottery, and have only simple functional crafts. Their art is almost entirely verbal and it is here they invest their intellectual play and display their refined aesthetic. Perhaps the complexity of the grammar also reflects this interest in verbal art. It will take a native speaker to unravel the complexities and explain them fully to an external audience.

## Appendix I Places of major locations




## Appendix II Sample text

## The story of Emma - the boy of the dogs

Story told by Ghaalyu Yidika tp:oo about the death of his FBWZS, Kpâputa, nicknamed Emma, recorded Friday, August 26, $2016^{50}$
(1) n:aa danêmbum, okay êê p:êê Emma mu pwene 1sImmFUTC telling, okay, eh, story Emma that dying "I'm going to tell, okay, the story of Emma dying
(2) $u$ p:êê nênê nj:ii, nyinté w:ââ w:uu lonté 3POSS story 1sImmFutContCLS tell like.this dog pack how dpê y:eey:ee
3sHABCI go.around
I'll tell his story, about how he would go around with a pack of dogs
(3) Emma mu pwene, atê loo l:âmo mu mênê ngê paa wo Emma that dying then go.REM lost that inside ADV go 3sREM Emma's dying - then he went and got lost in the bush
(4) mw:aandiye Pene paa
in.morning Pene river.area in the morning, in the Pene district.
(5) Pene paa m- mboo vyîmî Pene area - betel.nut.palm climbed In the Pene area, he climbed a betel nut palm
(6) mboo vyîmî têdê betel.nut.palm plantation place in a betel nut plantation.
(7) $n m \hat{\imath}$ lama daa tóó, apê, nkwépi ngê mgwópu, 1PLPOSS knowledge NEG sitting, perhaps sorceror ERG sorceried We don't know (how), perhaps, a sorceror sorceried him,

[^24](8) ó apê chóó a ghay wo or perhaps self 3PST fall 3sREM or he himself fell down.
(9) mbwódo mê dyimê wo, mbwaa l:êê kwo ntóó on.ground 3sREP fall 3sREM fresh.water pool in.liquid corpse He fell down on the ground, the body went down
(10) $y: i$ ghay wo
there fall 3sREM.
into a river pool.
(11) u kuwó dini ghi ngê, ntumokwodo dnyi póópóó 3POSS after time part ADV afternoon 3PLREMCI asking ngmênê
but
Then in the afternoon they (the village) were asking for him, but
(12) daa taa wo. u kuwó dini ghi ngê Dolopw:e NEG arrive 3sREM. 3POSS after time part ADV woman's.name he didn't arrive. Then (his mother) Dolopw:e
(13) ghee knî y:oo, pi a dê dyââ ngmê with.child AUG ERG.PL word CLS 3IMM send PFS3sOProx with her children, they immediately sent word
(14) ‘Noyâ ka, kwo, a pwiyé, kwo Emma ka Man's.name DAT, QUOT.3>3s CLS come QUOT.3>3s Emma DAT they sent word to 'Noyâ, they said, "Come here", they said to him
(15) vyuwo ngê nyi d:uu kó yed:o dnye n:aa nmy:uu. looking ADV 2s doing 2sIMP? Then 3PLREMCI MOT looking.for "You go and search for Emma". Then they went looking for him.
(16) yed:o dpuwo wêê tumo. u kuwó dini Then conch blow.conch PFS.3PLO.CIREM 3POSS after time ghi ngê
part ADV
Then they blew conch shells. After that
(17) Cheme pi atê mê ghêpê wo.

Village.name word then REP descend 3sREM the word came down to Cheme.
(18) yoo atê nyaa ngópu Kîmbêkpâpu. people then get PFS3sO.REM village.name They came and got the people from Kîmbêkpâpu.
(19) yoo loo. yoo yintómu Yélỉnuwo mu loo, people go.REM, people all Rossel.point there go.REM Nkalmbêmbêmê
village.name
They went. Everybody went to East Point (district), to Nkalmbêmbêmê.
(20) u kuwó dini ghi ngê Pene paa atê lee 3POSS after time part ADV river.name bank then go.FOL dmi
PLSIMM
After that, they went to the Pene river area.
(21) mbwaa paa mbwaa lêê u kwo,
fresh.water bank fresh.water pool 3POSS in.liquid In the river, in a pool,
(22) apê, ntóó keme mwa y:i kwo QUOT3sS>any.REM corpse upside.down CLS there.anaph standing they said (to each other), "The body is lying face down over there".
(23) u kuwó dini ghi ngê ntóó y:i a

3POSS after time part ADV corpse there.anaph CLS3REM dnyene ngópu
carry PFS3sOREM
Then they carried the body from there,
(24) t:aa ya pee mbêmê a yé ngópu
betel.nut platform piece on CLS3REM put PFS3sOREM they put him on a stretcher made of betel nut,
(25) nee k:oo a wuwo dniye
canoe inside CLS3REM load.canoe PLSREM.IV
they loaded him in a canoe.
(26) Pene pye a 'nuwo ngópu

River.name salt.water.reach CLS3REM bring.REM PFS3sOREM They brought him down (by canoe) to Pene river mouth,
(27) Nkalmbêmbêmê lyokó y:i mê taa ngópu, Village.name canoe.harbour there REP arrive.fol PFS3sOREM machedê.
finished
at the canoe harbour for Nkalmbêmbêmê, there they arrived and stopped.
(28) ntóó $y: i \quad$ kîgha dpê ya, ya
corpse there.anaph on.shoulder ?3dNrPSTCI staying, platform nkwodo
on.top
The body was on their shoulders on the stretcher.
(29) Mm, Nkalîmbêmbêmê p:oo mu mê taa
er Village.name home.village there REP arrive.fol
dniye
PLSREM.IV
Er, they arrived back at Nkalîmbêmbêmê his home village.
(30) ntóó kwede ngópu, wêê 'nuwo dê chii corpse wrap.corpse PFS3sOREM blood nose.tip Dual wandering té PLS.IV.PROX
They wrapped the body, blood was dripping from his nostrils.
(31) u kuwó dini ghi ngê, Friday ngê, ntóó kmênê 3POSS after time part ADV Friday ADV corpse bury ngópu
PFS3sOREM
Afterwards, on a Friday, they buried him.
(32) Okay, awêde, u w:ââ kn̂̂ yi p:uu yil:i

OK today 3POSS dog AUG 3plPOSS attached 3plPOSS $a \quad t: a$
CLS3REM hanging
OK today, his dogs have their boundary (today there's no hunting there).
(33) dini ghi n:ii ngê w:ââ u ch:ii mênê 'nuw:o time part REL ADV dogs 3sPOSS bush inside bring ngmê
PFS3sOHABPI
At that time when they took his dogs (hunting),
(34) yi w:ââ w:uu, w:ââ knî y:oo

ANAPH dog pack dog AUG ERG.PL
that dog pack, those dogs
(35) mbwêmê dp̂̂ m:uu ngmê, ngmênê mbwêmê daa
pig 3HABPI see PFS3sOHABPI but pig NEG
wa kp:anê ngmê
IRR3 catch PFS3sOHABPI
they used to see the pig, but they wouldn't catch it (they were no good for hunting, spooked).
(36) yi kópu u dîy:o awêde nmyi ka ANAPH matter 3POSS reason today 2PLCIPROX CERT3HABCI For that reason today they (the people) are still seeing Emma
(37) m:uиm:uи 'ne'ne ngmê
seeing again\&again PFS3sOHABPI, again and again.
(38) Pene paa mbwaa paa dpî atê mbêka river.name bank freshwater bank 3HABPI ?suddenly jump at the bank of the Pene river he (his spirit) will jump out suddenly,
(39) dpê kóó ghi w:i a m:ii

QUOT3plHAB his.hand part there 3HABCI going.around they say his truncated hand (he lost the fingers) is inhabiting there,
(40) mu kópu kóó ntóó
that matter his.hand dead because his hand was dead (useless).
(41) w:ââ knı̂ ye mb:aamb:aa ngê dpîmo vyuwo dog AUG 3Pl.DAT good ADV 3s/dHABDISTCI look.after He used to look after the dogs well,
(42) w:ââ w:uu kwéli dpîmo m:ii, y:i mye dog pack place.where 3s/dHABDISTCI going.around there ALSO wherever the dogs went he also
(43) dpîmo m:ii :êê,

3s/dHABDISTCI going.around er went there. Er. . .
(44) dpîmo n:aa mbwêmê vyuwo, mê dpîmo

3s/dHABDISTCI MOT pig look.for REP 3s/dHABDISTCI
diyédiyé
returning
He used to hunt pig, he used to come back again,
(45) w:ââ dpîmo y:eey:ee té yâpwo têdê
dog 3s/dHABDISTCI wander PLSCIPROX garden place
he used to go around with the dogs, when he went
(46) dpîmo lepî. nt:ee

3s/dHABDISTCI going sea.LOC
to the garden. At the seaside
(47) ghêêdê mênê kighe yamuyamu têdê dpîmo
mangrove inside lizard.sp hunting place 3s/dHABDISTCI
'ne’ne té
taking MFS3plO
he would take (the dogs) for hunting for lizards in the mangroves.
(48) d:oo, Emma kwéli dpîmo m:ii,
thus boy's.name place.where 3s/dHABDISTCI going.around So wherever Emma went,
(49) w:ââ w:uu dpîmo y:eey:ee
dog pack 3s/dHABDISTCI taking.around
he always took the pack of dogs.
(50) dini ghi n:ii ngê kada yedê y:ângo, dêpwo
time piece REL ADV ahead ANAPH3sPROXPI leave NONE.REM ya
staying
At that time, he left ahead (of us), he's not around anymore.
(51) yed:o w:ââ w:uu u kuwo diyé kele pyódu Then dog pack 3POSS behind returning keep.doing became Then behind him (after his death) the dogs kept on coming and going (perhaps looking for him, following his spirit)
(52) u kuwó dini ghi ngê, awêde yi w:ââ w:uu 3POSS after time part ADV today ANAPH dog pack After that, now today, that dog pack
(53) mê daa kwo nê; m:iituwo kê vy:a REP NEG standing PART day.before.yesterday CERT kill tumo
PFS3plOREM
they are no more, some time ago they killed them,
(54) 'Noyâ ngê kê vy:a too

Man's.name ERG CERT kill MFS3plOREM
'Noyâ killed them.
(55) yed:o w:ââ kaamî w:uu mê yi kââkââ ngmê
then dog new pack REP ANAPH raising PFS3sOPROX So they are rearing new dogs.
(56) chii u mênê mbwêmê vyuwo têdê, al:ii nye bush 3POSS inside pig looking.for place, here 1plHABCI ndê
come.from
When hunting pigs in the bush, we go up from here (this side)
(57) chii mênê, nye lee Yélìnuwo
bush inside 1plHABCI going area.name
inside the bush, (when) we go to East Point (not the way he used to go).
(58) w:ââ w:uu dini ghi n:ii ngê, a mbêpê nyédi, dog pack time part REL ADV 3HABCI running PLSHABPROXCI Whenever the dog packs were running
(59) yi vy:o myi kwo yédi, myi mbêpê ANAPH among ALSO standing SingSHABPROXCI also running yédi
SingSHABPROXCI
he used to be among them running too.
(60) ngmênê, lónté ndoo apê a m:ii nê But how perhaps 3CIPRES going.around PART But whether perhaps he (his spirit) is still around,
(61) ó lee wo, nmî lama daa tóó or go.fol 3sREMPI 1PLPOSS knowkledge NEG sitting or he went (to Yêmî, mountain of the dead), we don't know
(62) $w a$, danêmbum $u$ dî PART story 3POSS end That's the end of the story."

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zero marking $33,39,90,127,167,168,169,215$,
231, 249, 289, 294, 305, 319, 385, 400, 493


[^0]:    1 The first published work on Yélî Dnye is MacGregor (1890), followed by the anonymous report in the Annual Report on British New Guinea, 1893-4, pp. 116-12. Ray (1895) provides some comparative vocabularies, with further notes by Armstrong in Annual Report, Papua, 1921-22, and in Ray (1938). Besides the works by the Hendersons and the present author (see references), the only other known material of value is a typescript by A. Capell, with notes by the Rev. B. Baldwin, in the SIL archives in Ukurumpa.

[^1]:    2 https://hdl.handle.net/1839/0eef0ca4-fcb9-4f0d-80bd-636ebcc7670f

[^2]:    3 https://hdl.handle.net/1839/8c915b82-3c51-4333-ad02-d107a9baa5e1

[^3]:    4 See Levinson (2006a) on cyclone adaptations. I am grateful to Father Sims for providing weather measurements made over 25 years.
    5 See Shaw (2016:Ch.3) and http://www.ga.gov.au/corporate_data/12352/Rec1969_093.pdf
    6 Exploration licenses have been obtained by the Malaysian RHG and the Australian Siburan mining companies.

[^4]:    7 See https://www.nla.gov.au/pub/nlanews/2012/sep12/the-rossel-island-massacre.pdf
    8 There was a landing strip in the 1970s at Pambwa, where a government station was built - but this is far from population centres and no government official likes to stay there. The strip has since returned to jungle and been irreversibly degazetted, and the wharf has collapsed.

[^5]:    9 The first comes from Armstrong (1928), the rest from records of local census returns kept by Father English and Father Sims, except the last from Shaw (2015:77).

[^6]:    12 There are a few (bi-morphemic) words where a contrast is maintained. For example, ma/mæ̃/ 'yesterday, eat' contrasts with $m a / \mathrm{mæ/}$ 'your side', which is derived from a root with a long vowel (2 $2^{\text {nd }}$ possessive $N+p a a$ ). In general, nasalization of short vowels appears to be distinctive after prenasalized or nasally released stops, and is only non-phonemic after the nasal continuants proper (Table 3.4).

[^7]:    15 Sh5Ross4.db
    16 Counts were done using Shoebox filters on a lexical database built primarily from texts. A number of features of this lexicon (e.g. multiple lexemes with same wordform, multi-word entries) make it hard to compute precise frequencies of word forms - the following figures should therefore only be taken as approximate indications of distributions.

[^8]:    19 One could possibly claim that, despite their possible coreference with subjects of transitive verbs, these forms are basically Absolutive in character, in line with their unmarked status. Some evidence in favour of that position is that the same unmarked forms sometimes clearly occur in Absolutive positions, e.g. as objects of Experiencer subjects (see §7.5).

[^9]:    22 The table in Henderson (1995:38) also suggests that the same pattern extends to the Continuous Habitual Proximal. Henderson is right that the enclitics for transitive verbs are the same in the Punctiliar Remote Past and the Continuous Proximal Habitual for weak verbs (Monofocal Subject/3s Object ngê, Polyfocal Subject/3s Object ngópu), but the opposition Strong/Weak is not operative in the Continuous aspect, since there are no strong forms of continuous roots (i.e. roots that change just in the 3sg Remote Past).

[^10]:    28 This table is derived from Jim Henderson's fieldnotes, with corrections by myself in the field.

[^11]:    $\dagger$ Some speakers may generalize these forms to the Continuous Indicative also
    *e.g vy:a nédi 'hit me!'
    dpî vy:a nyédi 'you2 must hit us2'
    paa vy:a nyi 'We2/3 should have hit you1'

[^12]:    $\dagger$ Negative forms of weak verbs do not take the weak ngê, but instead inflect with zero.

[^13]:    * dé is correct, té incorrect unlike in Present tense

[^14]:    39 A verb inflected in the plural can make the oblique role of lama clearer:

[^15]:    40 The ergative marker may be dispensed with in a list of three or more names.

[^16]:    *The second forms were suggested by me, and found acceptable, but not volunteered

[^17]:    *as in nté mb:aamb:aa ngê w:ee pîpî ngê, mb:aamb:aa ngê pichi k:aa 'If you had habitually eaten well (Continuous), you would have grown up well (Punctual)'

[^18]:    *Some of the vowels in these forms centralize in actual use: e.g. ngadê is often realized as ngêdê

[^19]:    a. Weta ngê nyedoo, kîdîngê vy:a dp:o Man's.name ERG 3s>1d.HAB.QUOT 1sNEGIMP hit 2dO.HABPI 'Weta used to say to us2, I must not hit you2'

[^20]:    43 'We used to tell each other/ourselves'

[^21]:    a. Mwon̂̂ ngê Weta ka kwo: k̂̀ nê dp̂̂ Mwonî Erg Weta DAT 3>3QUOT CERT 1s sleeping 'Mwonî told Weta: I was sleeping' i.e. that Mwonî (not current speaker) was sleeping

[^22]:    *Note: Habitual PROXimal and Habitual Distal use same forms
    **nyóó a nyi kapî has additional obligation force: 'you must habitually . . .'
    ***the yinê here apparently likewise adds deontic force

[^23]:    (a) Imperatives are universally the same construction for transitive and intransitive verbs, so that e.g., "imperatives in every language have a second person as (stated or understood) S or A NP" (Dixon 1994: 131)

[^24]:    50 https://hdl.handle.net/1839/b7538f0d-ce78-4aec-9cab-f0b7f669c12c

[^25]:    * $=$ Useful references on the area not cited in text

