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) cross-cut 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	

https://doi.org/10.1515/9783110733853-004

Table 4.1 (continued)

Major parts of speech	Main subtypes	Minor subtypes
Postpositions	Cliticized	Case markers
	Local	Possessed
		Unpossessed
Verbs (various suppletion classes)	Transitive	Continuous
		Punctual
	Intransitive	Continuous
		Punctual
	Positional	
Adverbs	Deictic	
	Manner	
Adjectives	Primary	
	Derived	
Verbal Proclitics	Core TAMP	Punctual
		Continuous
	Deictic, Evidential	
	Negative	
	Counterfactual	
Verbal Enclitics		
	Core TAMP	Transitive
		Intransitive
	Conditional	
Connectives	Conjunctions	
	Subordinating	Temporal
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 *ndîî-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* → *ntipi* 'food-performer, i.e. good farmer' (Henderson 1995: 77).
iii. Homorganic nasalization of the first segment of a nominal to indicate 2nd 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, 2nd person nasal assimilation or by *u NP* (where *u* is the 3rd 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 3rd 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' ~ *piy:e* 'in a basket',
ndê 'fire' ~ *ndiya* 'in the fire',
chii 'the bush' ~ *dny:ii* 'in the bush',
p:aa 'village' ~ *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, mu, wu,* anaphoric *yi,* 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. . .'. 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 knî* '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 ntîî-ni* 'man big-SPEC' (but not **pini pââ ntîî 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 *ngmê*	+	–
augmentative *knî*	+	+
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 2b 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 *'nmo – 'nmeeni* '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.)

(14) *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:ââ – d:ââmu 'pot; moon'
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/:
nt:ii – njini 'sea; salt water'
wuwo – wééni 'coral head'
kmo – kmini ('stomach' – but Specified form seems obligatory only in the 2nd 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-kpaapît-p: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 *knî*:
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)
pê pê	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:

(17)

w:uu	'ball, seed, flock'	e.g. *te w:uu* 'school of fish'
dmi	'bundle'	e.g *ghipe dmi* 'broom, bundle of fibres', *puku dmi* 'book'
pê	'long thing'	e.g. *nee pê* 'canoe long, i.e. hull'
pee	'piece'	
kîgha	'ripe fruit'	
nt:uu	'body, fruit (not ripe)'	e.g. *ghêêpê nt:uu* 'axe-head', *ngwolo nt:uu* 'eye ball'
vyi	'bunch'	
mtyé	'bunch; branch of; cluster'	e.g. *t:aa mtyé* branch of betel nuts
pââ	'body; hull'	e.g. *yi pââ* 'tree trunks'
ch:ênî	'hand (of e.g. bananas)'	
dyuu	'small.pile'	
mbwó	'large pile'	
d:uu	'roll'	
vyi	'bunch'	

mbwii	'stick, spine'	
pââ	'body, trunk'	
kn:ââ	'base'	
kpââ	'flat thing'	e.g. *chêêpî kpââ* 'flat stone'
m:a	'round thing' (of stones)	e.g. *chêêpî m:a* 'round stones'
dumu	'roll, full container'	e.g. *têpwâ dumu* 'tobacco roll, cigarette', *mbwaa dumu* 'full water (bottle)'
ghi	'part'	

For measuring masses or particles:

(18) *kuu* '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 *yi* 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 dyuu* '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 3rd person possessive forms or an exceptional unmarked or zero-possessor form in 1st and 3rd 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 1st person or unmarked form, next the 2nd person forms formed by general rule of assimilating nasal, then the 3rd person forms which are sometimes suppletive and sometimes allow an optional 3rd 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 *kwo*, 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 *yu* ('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	1st person (preceded by *a*)/ Unmarked form	2nd person 'your X'	3rd person '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*	*ngêê*	*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** *yodo pee dê* = chest 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*	*nyópu*	*u chópu*	
neck	*mbwamê*	*mwamê*	*mbwamê*	*nódo*
Throat	*nuu*	*nuu*	*(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	1st person (preceded by *a*)/ Unmarked form	2nd person 'your X'	3rd person 'his X'	Locative form**
tooth	*nyóó/ nyóó tii dmi* = whole set	*nyóó*	*u nyóó*	
nose	*'n:uu*	*'n:uu*	*u'n:uu*	*'nuwo*
nostril	*'n:uu puu*			
hair	*gh:aa*	*ng:aa*	*u gh:aa*	
vagina	*tpe*	*'nmoo*	*u tpoo*	
penis	*mdî*	*nmê*	*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	*nkê*	*ngê*	*u nkê*	
hip (with extension to waist)	*pa*	*ma*	*u pa*	*paa*
Compound terms				
elbow 'arm cover'	*kêê dópó(kn:ââ)*	*ngêê dópó*	*kóó dópó*	
upper 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:êê yu*	*u m:êê yu*	
shoulder '?? butt'	*nkene kn:ââ 'n:uu kn:ââ* (lit. 'nose butt' or 'wings')	*ngene kn:ââ*	*u nkene kn:ââ*	*nkêlê*
back of hand 'arm hill'	*kêê kpâpu*	*ngêê 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	1st person (preceded by *a*)/ Unmarked form	2nd person 'your X'	3rd person 'his X'	Locative form**
uvula (?also voice box)	*nkêmî tp: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 ng:oo dmi*	
buttock 'butt piece'	*kn:ââ, knââ pee dê*			
(head) hair	*(mbodo) gh:aa*	*(modo) ng:aa*	*(mbodo) gh:aa*	
anus	*kn:ââ puu*	*ng:ââ puu*	*u kn:ââ puu*	
thumb 'arm taro woman'	*kêê k:aa pyââ*	*ngêê k:aa pyââ*	*kóó k:aa pyââ*	
big toe	*yi k:aa pyââ*	*nyi k:aa pyââ*	*yu k:aa pyââ*	
small finger	*kêê tpuu pyââ*	*ngêê tpuu pyââ*	*u kêê tpuu pyââ*	
bottom/rump	*kn:aadi tpi*	*ng:aadi tpi*	*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	*mdî gh:aa tpoo gh:aa*			
testicle (dual)	*vyóóma (dê)*	*nmyóóma (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	1st person (preceded by *a*)/ Unmarked form	2nd person 'your X'	3rd person 'his X'	Locative form**
back of sole, ball of foot and heel	*yi kn:ââ*	*nyi kn:ââ*	*yu kn:ââ*	
clavicle hollows	*'nt:oo vyuwo*	*'n:oo vyuwo*	*u 'nt:oo 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 yu*)
**These also have 2nd 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:êê 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).

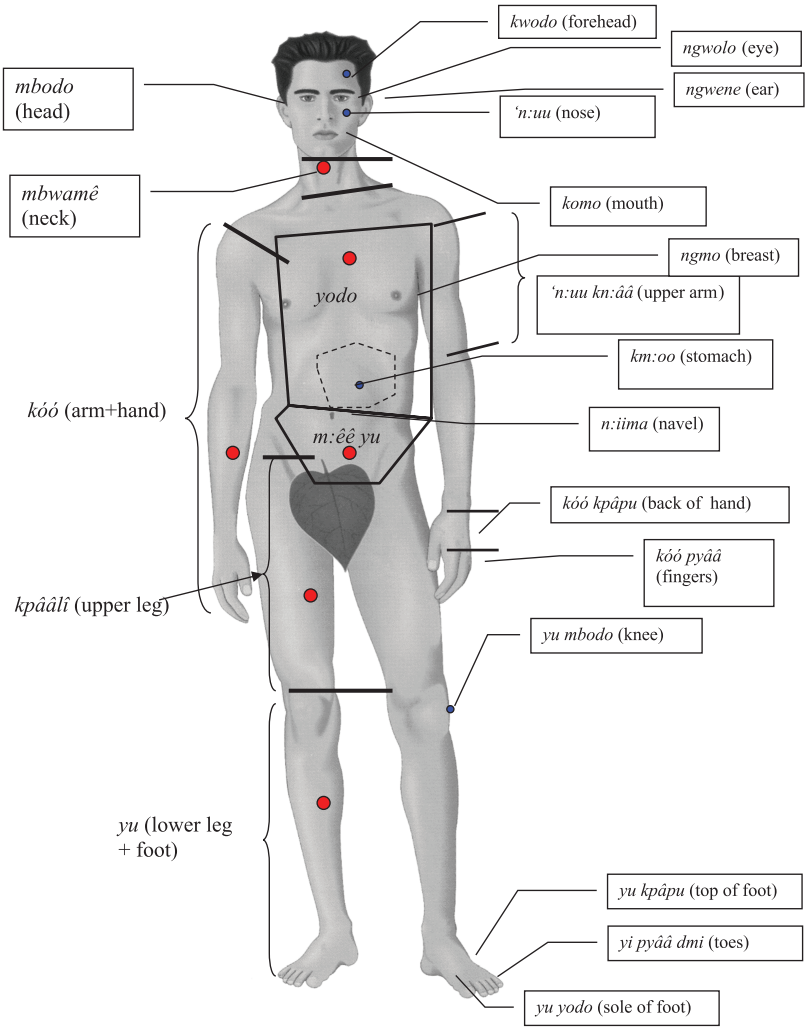


Figure 4.1: Yélî Dnye body part terminology (after Levinson 2006d).

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	1st person/Unmarked form	2nd person 'your X'	3rd 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 3rd 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) *nmî* *mo* *nmo* *pyile* *knî* *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:oo* (dual/plural, when 3rd 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* *knî* *y:oo* *apu,* *nê* *ngê* *kî* *nténi* *dî* *ma*
people PL PL-ERG QUOT 1s ERG that food 1sIMM.P ate
'People are saying: I ate this food'

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).

(28) *nyi ngê chóó dê vy:a*
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 one-word 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	*nê*	*nyo*	*nmo*	1	*a*	*nyi*	*nmî*
2	*nyi*	*dp:o*	*nmyo*	2	*N*	*dpî*	*nmyi*
3	*Ø*	*Ø*	*Ø*	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:oo*)*				**Instrumental forms: (NP+*ngê/y:e*)**		
	sing	**dual**	**pl**		**sing**	**dual**	**pl**
1	*nê ngê*	*nye y:oo*	*nmo y:oo*	1			
2	*nyi ngê*	*dpo y:oo*	*nmye y:oo*	2			
3	*ngê*	*y:oo*	*y:oo*	3	*u ngwo*	*y:e*	*y:e/y:oo*

*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 §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:uu* in 2nd person singular declaratives – see §5.2.1.) Note that there are no unmarked 3rd 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 3rd 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) *tuu* *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 3rd person Dual/Plural pronoun. The Plural Ergative case marker *y:oo* is also related to the 3rd Person possessive pronoun *yi*.

Reflexivity is expressed by possessive pronominals with nominal emphatics that in the 2nd 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*	*nmî chóóchóó*
2.	*nyóóchóó*	*dpî chóóchóó*	*nmyi chóóchóó*
3.	*(u) chóóchóó*	*yi chóóchóó*	*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	*ala*	*ye*
Medial (Neutral)	*kî*	-
Distal	*mu* (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 *yi*, 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*	*al:ii*	'here'
Medial (Neutral)	*kî n:ii*	*k:ii*	'there'
Distal	*mu n:ii*	*mwi*	'yonder'
Anaphoric	*yi n:ii*	*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

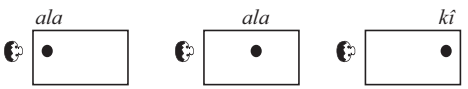


Figure 4.2: Demonstratives used (with pronoun *n:ii*) for single objects on a table.

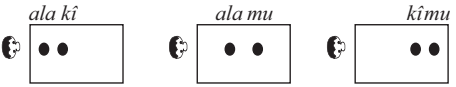


Figure 4.3: Demonstratives used (with pronoun n:ii) for two objects on a table.

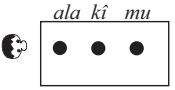


Figure 4.4: Demonstratives used (with pronoun *n:ii*) for three objects on a table.

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 *mu* (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 *mu* can (but need not) be equally well designated *ye* 'near addressee':

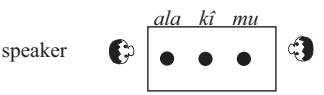


Figure 4.5: When addressee is opposite speaker.

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
kî	'in sight'	
wu	'out of sight'	anaphoric
ala	'close to speaker'	cataphoric
ye	'close to hearer (addressee)'	anaphoric
yi	'previously discussed'	anaphoric
mu	'the other'	cataphoric

The full adverbial paradigm is thus as in Table 4.10:

Table 4.10: Full adverbial demonstrative paradigm.

	Pronouns	Adverbs	
Proximal	*ala n:ii*	*al:ii*	'here'
Medial (Neutral)	*kî n:ii*	*k:ii*	'there'
Distal	*mu n:ii*	*mwi*	'yonder'
Anaphoric	*yi n:ii*	*y:i*	'there as mentioned'
Out of sight	*wu n:ii*	*w:ii*	'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:

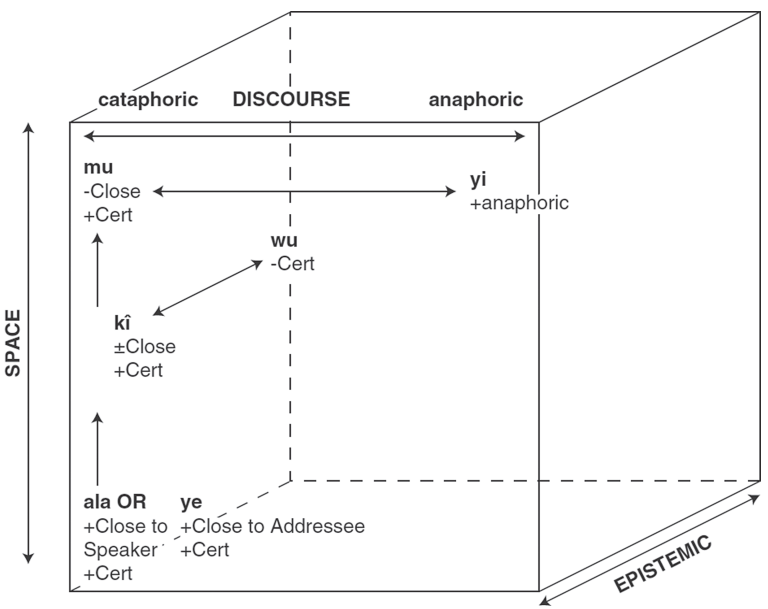
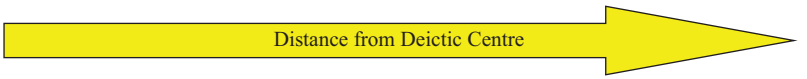


Figure 4.6: The three dimensions of Yélî Dnye deictic determiners (from Levinson 2018:325).

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, *mu* 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 *yi* 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.



	+CLOSE to S, +ATTENTION	+CLOSE to A +ATTENTION	UNMARKED	+DISTANT FROM SPEAKER	+DISTANT FROM SPEAKER	+UN CERTAIN (to S & A)
SPKR	*ala*	*ala/kî*	*kî*	*kî / mu*	*mu*	*wu*
ADDR	ye	*ye/ kî*		(or *ye*)	(or *ye*)	

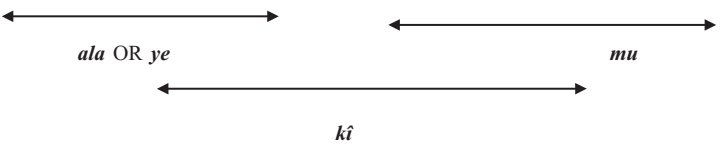


Figure 4.7: Yélî Dnye demonstratives and distance from deictic centre (speaker in the top row, or addressee in the bottom row; arrows below show normal range of extensions of primary deictics).

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 *mu* 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:

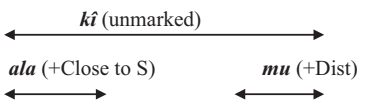


Figure 4.8: Speaker-based demonstratives.

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 *mu* 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	Quantifiers proper	Augmentative	Case
ngmê 'one, some'	*yilî* 'many'	*yintómu* 'all' *dê* 'dual' *limi* 'five', etc.	*knî* 'augmented', 'more than two', 'some'	various cases

These may occur together, despite the glosses, as in e.g. *pini yilî yintómu* 'all the many people', or *pi limi knî* 'five people together', matters taken up in §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'

f. *pi mdoo doo n:ee* **'few'**
person many.NegPol NEG go.Neg
'Not many/few came'
(*mdoo* is negative polarity item)
pi pyile njini da lê
person few 3IMMPI.CLS go
'Few people came'

g. *daa pi yilî dê kee* **'not many'**
NEG person many 3IMMPI go.up
'Not people many came'

h. *daa pi yintómu da n:ee* **'not all'**
not everyone 3s go.REM.NegPol
'Not everyone came'

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:

(32) a. *tp:eema yintómu knî y:oo nee*
boy.PL all AUG ERG.PL canoe
pââ da kêêlî ngmê
body 3s/d/pl.IMM.PI+CLS finish PFS_3sOProx
'All the boys finished the hull of the canoe' (understood naturally as one canoe)

b. *Pi yintómu knî y:oo nee pââ da*
person all AUG ERG.PL canoe body 3s/d/pl.IMM.PI+CLS
kêêlî d:oo
finish PFS.3dO.PI.PROX/Hab
'Every man has finished a canoe' (not necessarily the same one)

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* *dmââdî* *yilî* *knî* *y:oo* *exam* *pass*
boy girl many AUG ERG.PL exam pass
kalê *ngmê,* *ngmê* *yilî* *knî* *y:oo* *doo*
cause PFS.sO.PROXPI but many AUG ERG.PL NEG
pass *kale* *ngópu*
pass cause PFS.sO.PROX-NegPolPI
'Many children passed the exam, but many didn't'

There are special ways of describing distributive meanings. Reduplicated quantifiers and numerals indicate such notions as 'one by one', etc:

(34) a. *Mwonî* *ngê* *k:aa* *woo* *ngmêngmê* *ka* *kaapî*
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
pîpî *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 3sNrPST.PI give.to.3
'The teacher gave three to each child'

b. *Teacher ngê tp:ee dmââdî ma y:e pen ntémwintémwi*
Teacher ERG boy girl PL 3PL.DAT pen DISTRIB
yilîyilî dê y:oo
many.many 3sNrPST.PI give.to.3
'The teacher gave many to each child'

c. *Teacher ngê tp:ee dmââdî ma y:e pen ntémwintémwi*
Teacher ERG boy girl PL 3PL.DAT pen DISTRIB
ngmêngmê dê y:oo
one.one 3sNrPST.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:oo
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 *–vari*). 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' (note the implicit bracketing of the system: the 10^{th} instance of the 10^{th} 10, or (10*(10*10))).

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, *kai*	*mwiyé* 'first'	*ng:êêntómu* 'once'
2	*miyó*	**rua*	my *:oo/myo*mo '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 mê ngmê*		*mê ngmê (ni)*	
12	*y:a mê miyó*		(cardinal + *ni*)	
13	*y:a mê pyi*	le		
20		*my :oo y:a* (2 x 10)		
22	*my:oo y:a mê miyó*			
30	*pyolo y:a*	(3rd 10)		
40	*podo y:a*	(4th 10)		
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*	(10th 10)		
105	*yono y:a mê lîmî*	(10th 10 plus 5)		
150	*yono y:a mê lumo y:a*	(10th 10 plus 5th 10)		
200	*my:oo yono y:a*	(2nd 10th 10)		

21 Lynch et al. (2002:72)

Table 4.12 (continued)

	Cardinals	Proto-Oceanic cognates[21]	Ordinals	Number of Times
300	*pyolo yono y:a*	(3rd 10th 10)		
1000	*yono yono y:a*	(10th (10th 10))		
10,000	*yono yono 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) 10th 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 Proto-Oceanic 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	*mââ*	(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:oo mye mââ*	
12	*y:oo mye m:ii*	
13	*y:oo mye pyêmê*	
20	*y:oo 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 *Ø/dê/dé* respectively, or in many nouns by suppletion, as shown in Table 4.14:

Table 4.14: Lower numerals and number marking.

kî pini	'this (one) person'
kî tpódu	'these two people'
kî tpóknî	'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', *u pywuu mb:aamb:aa* 'its price good', *pi kpêdêkpêdê* 'man black', *wo mb:aa* 'day good'.
(iv) They form adverbs with enclitic adverbializer *ngê*.
(v) They form nouns when suffixed with *-ni*, 'specifier', with the meaning 'the X one', as in *ndîî-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 daadîî* '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) ndîî	'big'
ntâkopeedi	'giant'
têdê	'small'
tp:oo	'small'
daadîî	'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.

daadyîî vs. *dêêkwédi*	long vs. short
pââ-ndîî vs. *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'
kîîkîî	'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 *kîîkîî* 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 or spiced'	perhaps from *nj:ii* 'a tree species' 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 yââ* '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:

(39) 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' → *lîmîlîmî* → *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 3rd singular Remote Past, and 'paranoid' (or 'followed root') verbs have a special form of the root if there is a non-zero 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 Deictic in Proclitic
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:êê* '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/puwâ*	Punct. prox. past	*pwópu*
Punct. rem.past	*pwââ/puwâ*	Punct. rem. past	***pwaa** wo*
Followed root	***pwaa** wo*	Followed root	***pwaa** wo*
Continuous	*pwââ*	Continuous	*pwópupwópu*

(43) a. Trans, Punct: *d:ûû dê pwûû*
pot 3sIMMPI breakTV.P
'(He) broke the pot today'

b. Intrans, Punct: *d:ûû dê pwópu*
pot 3sIMMPI breakIV.P
'The pot broke today'

c. Trans, Contin: *a pwapî dé*
3ImmFUTCI break.TV.C 3PlObj.Trans
'He's going to break them up'

d. Intrans, Contin: *yi a pwópupwópu*
ANAPH 3sImmFUTCI break.IV.C
'It (the ladder) is going to break'

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	*tpûâlî*
Punct. imperative	*tpaa ngi*	Punct. Imperative	(gap)
Punct.prox.past	*tpaa*	Punct.prox.past	*tpûâlî*
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 tpûâlî*
canoe 3sNrPSTCI turn.IV.PI
'The canoe overturned (yesterday)'

c. Trans, Punct: *yópu ngê nee tpólu*
wind ERG canoe turned.TV.REMPI
'The wind overturned the canoe (before yesterday)'

d. Trans, Cont: *a* *tpiyé*
3FUTPI overturn.TV.C.
'He's going to overturn it, he's overturning it'

e. Trans, Cont: *a* *tpiyé* *ngê*
3HABCI overturn.TV.C. MFS.3sO.C.HAB.PROX
'He's always overturning (his canoes)'

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. *talî* '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*)
vy: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'
ma vs. *kmaapî* 'eat something' vs. 'dine'
ng:êênî vs. *ng:aa* 'listen to something, hear' vs. 'listen'
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)		**'become, wake up' (intransitive)**	
V TV	*pyódu*	V IV	*pyódu*
imp	*pyédi/pyódu ngi*	imp	*pyaa we*
proxpast	***pyódu***	proxpast	***pyódu****/pyaa knî*
followed	*??*	followed	*pyaa*
rempast	*pyódu ngê*	rempast	*pyodo/pyaa wo*
CI	*pyépi*	CI	*pyodopyodo*

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' → *pw:ii* 'get something out'	*kee* 'enter' → *knî* 'make enter'
ghay 'fall' → *gh:ay* 'make fall down'	*tóó* 'sit' → *yé* 'make sit, put'
mbumu 'cry' → *mb:uu* 'make him cry'	*t:a* 'hang' → *t:oo* 'cause to hang'
nyââ 'wake up' → *ny:ââ* 'wake him up'	
ghee 'be peeling (food)' → *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, transitive	Continuous root, intransitive	Continuous transitive (part of *ma*)
Imperative	*ndii*	*(chi) kmaapî*	
Unmarked root	*ma*	*kmaapî*	*pîpî*
Followed root	*ma*	*kmaapî*	*pîpî*
Remote Past root	*ndîî*	*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:

(45) 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:ii* '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 3rd 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 (1st person or singular) and 3rd 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':

(46) a. *dê* *lê* *Ø*
3sIMM.PI go.PI 3sPROX
'He went (earlier today)'
b. *dê* *lee* *knî*
3sIMM.PI go.PI.FOL DS.Intrans.PROX
'They two went (earlier today)'

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: 3rd singular Remote Past

Again, following Henderson's (1995:30) observations and terminology, some punctual verbs behave in a special way in the 3rd 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 3rd singular Remote Past, as in c.

(47) 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 (1st person or singular) and the object is 3rd 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 +Ø		*pwene+ Ø*
			normal/followed root + *wo*	*lee wo*
Transitive	Remote Past, Monofocal Subject, 3rd Sing Object	strong root +Ø		*vyâ+ Ø*
			normal/followed root + *ngê*[22]	*kaa ngê*

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 §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):

(48) a. *daa* *kpêê* *wo*
NEG3sPI.REM wash.self.FOL sS.REM.Intrans
'He did not wash himself (before yesterday)'
b. *doo* *kpêê* *wo*
NEG3sPI.IMM wash.self.FOL sS.IMM.NEG.Intrans
'He did not wash himself (earlier today)'

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).

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 2nd and 3rd person singulars also in remote tenses:

(49) *kê* *doo* *a* *pwiyé* *knî*
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-/-nê*) 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"
1+redup	79	79 = **23%**			
1	54		54 = **16%**		
2	73			208 = **61%**	
3	58				262 = **77%**
4	42				
5+	35				
N	**341**				

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 2nd 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
3rd Person Recipient	Imperative	*yéni*	*yémi*
	Unmarked (prox. tense)	*y:oo*	*yémi*
	Followed root	*y:ee*	_
	Remote Past	*y:ângo*	*yémi*
1st or 2nd Person Recipient	Imperative	*ki*	*kuwo*
	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.

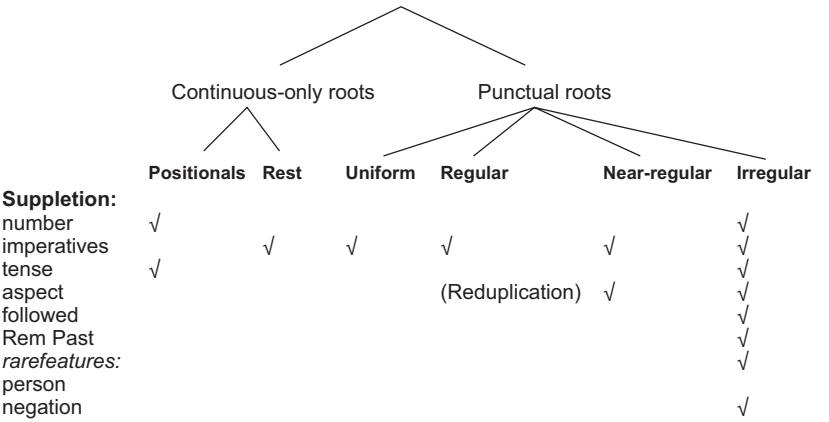


Figure 4.9: Suppletion classes in Yélî Dnye verbs (√ = can supplete).

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
N	322						

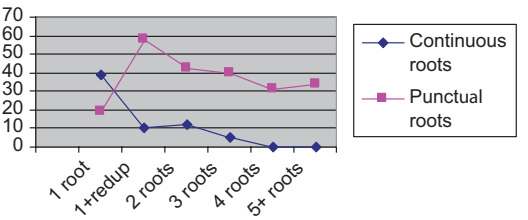


Figure 4.10: Suppletion in continuous and punctiliar roots in graph form.

Table 4.32: Suppletion by transitivity of root.

	Total	1	1+	2	3	4	5+
Intransitives	122	34	22	31	15	9	9
Transitives	220	19	58	42	40	31	25
N	342						

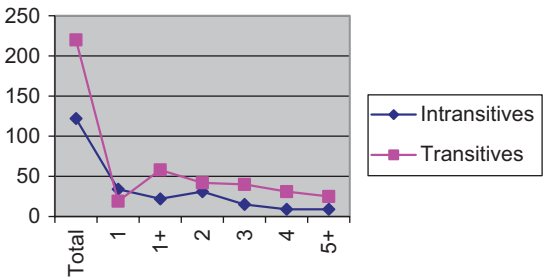


Figure 4.11: Suppletion by transitivity of root in graph form.

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 (intransitive)	Active (intransitive)	Do Causative (transitive)	Undo Causative (transitive)
kwo 'be standing'	*ghê* 'stand up'	*kââ* 'stand something up'	*y:oo* 'take something which stands'
tóó 'be sitting'	*yââ* 'sit down'	*yé* 'put something down'	*ngî* 'take something which sits'
t:a 'be hanging'	*kaalî* 'make oneself hang' (e.g. flying fox)	*t:oo* 'hang something up'	*ngee* 'take something 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 *ka* 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', *kaalî* '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?', *nyââ* 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. *ka* '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 *vyuwâ*', 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).