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A grammar of Belep
by

## Chelsea Leigh McCracken

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Approved, Thesis Committee:


Assistant Professor of Linguistics


Fred Oswald
Professor of Psychology

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#### Abstract

A Grammar of Belep

\section*{by}

\section*{Chelsea McCracken}

This dissertation is a description of the grammar of Belep [yly], an Austronesian language variety spoken by about 1600 people in and around the Belep Isles in New Caledonia. The grammar begins with a summary of the cultural and linguistic background of Belep speakers, followed by chapters on Belep phonology and phonetics, morphology and word formation, nouns and the noun phrase, verbs and the verb group, basic clause structure, and clause combining.

The phonemic inventory of Belep consists of 18 consonants and 10 vowels and is considerably smaller than that of the surrounding languages. This is due to the fact that Belep consonants do not contrast in aspiration and Belep vowels do not contrast in length, unlike in Belep's closest relative Balade Nyelâyu. However, like-vowel hiatuses-sequences of heterosyllabic like vowels-are common in Belep, where the stress correlates of vowel length, intensity, and pitch do not generally coincide. Belep morphology is exclusively suffixing and fairly synthetic; it is characterized by a large disconnect between the phonological and the grammatical word and the existence of a number of proclitics and enclitics. Belep nouns fall into four noun classes, which are defined by their compatibility with the two available (alienable and inalienable)


possessive constructions. Belep transitive verbs are divided into bound and free roots, while intransitive verbs are divided between those which require a nominative argument and those which require an absolutive argument. While the surrounding languages have a split-ergative argument structure, Belep has an unusual split-intransitive nominativeabsolutive system, with the further complication that transitive subjects may be marked as genitive depending on the specificity of the absolutive argument. Belep case marking is accomplished through the use of cross-linguistically unusual ditropic clitics; clitics marking the function of a Belep noun phrase are phonologically bound to whatever element precedes the noun phrase. In general, Belep lacks true complementation, instead making use of coordinate structures with unique linkers as a complementation strategy.

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## List of Abbreviations

| 1 | first person |
| :---: | :---: |
| 2 | second person |
| 3 | third person |
| A | anaphoric |
| ABS | absolutive case |
| AC | associative plural |
| ACT | actual |
| ADD | additive |
| ADU | associative dual |
| AGT | agentive |
| CAUS | causative |
| CL | numeral classifier |
| COMPL | completive |
| CONT | continuative |
| CTF | centrifugal (away from the speaker) |
| CTP | centripetal (toward the speaker) |
| D | deictic |
| DA | differential absolutive |
| DAT | dative case |
| DC | deictic center |
| DEM | demonstrative pronoun |
| DET | determiner |
| DETR | detransitive |
| DH | downhill |
| DIM | diminished |
| DIR | directional |
| DST | distal |
| DU | dual number |
| DUB | dubitative |
| DYAD | dyadic |
| EX | existential |
| EXCL | exclusive |
| GE | general extender |
| GEN | genitive case |
| GNO | gnomic |
| GNR | generic |
| HAB | habitual |
| IA | inanimate |
| IDF | identifiable |
| IMPER | imperative |
| INCL | inclusive |
| INDEP | independent pronoun |
| INSTR | instrumental |
| IRR | irrealis |


| ITER | iterative |
| :---: | :---: |
| LK | linker |
| LN | loanword |
| LOC | locative |
| MAN | manner |
| MDS | medial-distal |
| MPX | medial-proximal |
| NDR | unmarked for direction |
| NEC | necessative |
| NEG | negative |
| NEW | new |
| NOM | nominative case |
| NSG | nonsingular |
| NTR | intransitive |
| ORD | ordinal |
| PA | paucal number |
| PL | plural number |
| POSS | possessive |
| PRES | presentative |
| PRF | perfect |
| PROG | progressive |
| PRX | proximal |
| PUNCT | punctual |
| Q | interrogative |
| RA | reduced agentive |
| REAL | realis |
| RECP | reciprocal |
| REL | relativizer |
| RESULT | resultative |
| SBJ | subjunctive |
| SG | singular number |
| SPC | specific |
| SUBJ | subject agreement |
| TR | transitive |
| TV | transverse |
| UH | uphill |
| VBLZ | verbalizer |

## Preface

The following is a message for future generations of Belema from TEANYOUEN

Philippe, the catechist of Belep in 2011.

TEANYOUEN Philippe, 14 September 2011
Waala, Belep
Enyixi yena to la comuli puluac, pulu Belep, ka âyuang ngi ame jua yavia wa înau ma a înaôeni puluac. Ka puluac, ka jia, tere jia ulayama lami cêboac, nilaac, lami ô cavac ka najiac. La cavac ka najiac ka naji pulu. Ka te ô ki a tao kâye pulu, ma te tao ce la puluac, te tao pan na puluac. Ma yena to name tiu u leac, ma te ô ki a jua yamayaap ma a înaôen, yamayaap ma a înaôeni puluac, yamayaap ma a comu la na puluac, ka tao kâye puluac, ma teme tao pan, ka u le lami me tame mwa la mon. Toven.

Yal-14092011-PT2-avenir
'If your language, the Belep language, is being studied, I would like you to truly search for a way to be an expert at your language. For your language, it is a gift-a true gift from your elders, your grandparents and great-grandparents, those who have gone away and left you. They went away and left you and left behind the language. So you must always keep your language, so that your language will always survive, always... your language will always continue. Now, as I am writing to you, you must truly concentrate on becoming experts, concentrate on becoming experts in your language, concentrate on exploring your language, and always keep your language, so that it will always continue, for all of those who will come after you. That's all.'
(1) Enyixi yena to la comuli puluac, pulu Belep,

| enyixi | yena=ro <br> if | la $=$ <br> now=when | 3PL.SUBJ $=$ | comu-li <br> learn-TR | pulu-ac <br> language-2PL.POSS |
| :--- | :--- | :--- | :--- | :--- | :--- | | pulu |
| :--- |
| language |$\quad$| Belep |
| :--- |
| Belep | 'If your language, the Belep language, is being studied,'

(2) ka âyuang ngi ame jua yavia

| ka | âyua-ng=i | a=me | jua |
| :--- | :--- | :--- | :--- |
| LK | desire-1SG.POSS=GEN | yavi-a |  |
| 2PL.SUBJ=IRR | very | search.TR-DA.IN |  |

'I would like you to truly search for'
(3) wa înau ma a înaôeni puluac.

| $\mathbf{w a}=$ | îna-u | ma | a= | înaôen-i | pulu-ac |
| :--- | :--- | :--- | :--- | :--- | :--- |
| RESULT $=$ | make-DETR | LK4 | 2PL.SUBJ= | be.expert-TR | language-2PL.POSS |

'a way to be an expert at your language.'
(4) Ka puluac, ka jia, tere jia ulayama
ka pulu-aya=xa jia te=re jia ulaya-ma

LK language-2PL.POSS=LK gift 3SG.SUBJ=ACT gift old.man-AC
'For your language, it is a gift-a true gift from your elders'
(5) lami cêboac, nilaac,
la-mi cêbo-ac nila-ac
DEM.PL-DET.A.DST
grandparent-2PL.POSS
great.grandparent-2PL.POSS
'your grandparents and great-grandparents,'
(6) lami ô cavac ka najiac.

| la-mi | $\hat{\mathbf{o}}$ | cavac | ka | naji-ac |
| :--- | :--- | :--- | :--- | :--- |
| DEM.PL-DET.A.DST | REAL | depart | LK | leave-2PL.ABS |

'those who have gone away and left you.'
(7) La cavac ka najiac ka naji pulu.

| $\mathbf{l a}=$ | cavac | ka | naji-ac | k |  | naji |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3PL.SUBJ= | depart | LK | leave-2PL | LK |  | leav |  |  |  |  |
|  |  |  | you and |  |  |  |  |  |  |  |

(8) Ka te ô ki a tao kâye pulu,

| ka | te $=$ | $\hat{\mathbf{o}=\mathbf{x i}}$ | $\mathbf{a}=$ | tao= | kâye |
| :--- | :--- | :--- | :--- | :--- | :--- | pulu

'So you must always keep your language,'
(9) ma te tao ce la puluac, tao...

| $\boldsymbol{m a}=\mathbf{r e}=$ | $\boldsymbol{t a o}=$ | $\mathbf{c e}=\mathbf{l a}$ | pulu-ac | $\mathbf{t a o}=$ |
| :--- | :--- | :--- | :--- | :--- |
| LK4 $=3$ SG.SUBJ $=$ | $\mathrm{HAB}=$ | settle=NOM | language-2PL.POSS | $\mathrm{HAB}=$ |

'so that your language will always survive, always...'
(10) te tao pan na puluac.
te= tao $=$ pan=a pulu-ac
3SG.SUBJ= HAB $=$ go.TV=NOM language-2PL.POSS
'your language will always continue.'
(11) Ma yena to name tiu u leac,

| ma | yena=ro <br> LK4 | na=me <br> now=when | 1SG.SUBJ=IRR |
| :--- | :--- | :--- | :--- | :--- |$\quad$| ti-u |
| :--- |
| prick-DETR |$\quad$| $\mathbf{u}=\mathbf{l e - a c}$ |
| :--- |
| toward=DAT-2PL.POSS |

'Now, as I am writing to you,'
(12) ma te ô ki a jua yamayaap ma a înaôen,

| ma | te $=$ | $\hat{\boldsymbol{o}=\mathbf{x i}}$ | $\mathbf{a}=$ | jua | yamayava | ma | a= | înâen |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| LK4 | 3SG.SUBJ= | be.good=REL | 2PL.SUBJ= | very | concentrate | LK4 | 2PL.SUBJ= | be.expert | 'you must truly concentrate on becoming experts,'

(13) yamayaap ma a înaôeni puluac, yamayava ma $a=$ înaôen-i pulu-ac concentrate LK4 2PL.SUBJ= be.expert-TR language-2PL.POSS 'concentrate on becoming experts in your language,'
(14) yamayaap ma a comu la na puluac, yamayava ma $a=\quad$ comu=la na pulu-ac concentrate LK4 2PL.SUBJ= learn=LOC interior language-2PL.POSS 'concentrate on exploring your language,'
(15) ka tao kâye puluac, ma teme tao pan,
ka tao $=$ kâye pulu-ac ma teme tao= pan LK HAB= keep language-2PL.POSS LK4 3SG.SUBJ=IRR HAB= go.TV 'and always keep your language, so that it will always continue,'
(16) ka u le lami me tame mwa la mon.
ka u=le la-mi me ta=me mwa=la mon LK toward=DAT DEM.PL-DET.A.DST IRR go.UH=CTP again=LOC side.DH 'for all of those who will come after you.'
(17) Toven.
toven
finish
'That's all.'

## Chapter 1 Background information

### 1.0 Introduction

This work is a reference grammar of the Austronesian language variety known as Belep, Yalayu, or Nyelâyu of Belep ([yly]), which is spoken by approximately 1600 people in New Caledonia (Kanaky), primarily on the island of Art. This introductory chapter will discuss the cultural context and history of the speakers of the Belep language variety (§1.2), differentiate Belep from other closely-related language varieties, and describe its unique characteristics (§1.5). Section $\S 1.3$ situates Belep with respect to the Austronesian language family as a whole; section $\S 1.6$ focuses on the sociolinguistic situation of Belep speakers; section §1.4 enumerates currently available scholarship on this language variety, and $\S 1.7$ discusses the methodology used for the collection of data for the reference grammar.

### 1.1 Belep and its speakers

The approximately 1600 speakers ${ }^{1}$ of the Belep language variety, who are known as Belema, live in the archipelago of New Caledonia (Nouvelle-Calédonie), a French colony in the South Pacific located 1500 km east of Australia and 2000 km north of New

[^0]Zealand. ${ }^{2}$ New Caledonia, which is often referred to as Kanaky ${ }^{3}$ by independentists, ${ }^{4}$ consists of a main island (Grande-Terre, or 'Mainland'), the Loyalty Islands to the northeast, the Isle of Pines to the southeast, and the Belep Isles, located approximately 50 km off the northwest tip of the Mainland. The Belep Isles are the ancestral home of the Belema, and consist of: the main islet $\mathrm{Art}^{5}$ (with an area of about 70 square km ), where about 800 Belema live permanently (J.-B. Moilou, p. c., August 9, 2010); the abandoned islet of Pott ${ }^{6}$ to the northwest of Art, which still houses many active Belema plantations and sacred sites; and three uninhabitable islets to the southeast of Art (Dubois 1985). See Figure 1 for a detailed map of this area. The other approximately 800 Belema live on the Mainland-two permanent communities of Belema exist in Mont-Dore and the Jardins de Belep in the South, and many individual Belema live scattered throughout the rest of the country for school or work, or because they have married into a different community.

[^1]Figure 1: Map of the Far North, New Caledonia


### 1.2 The Belema people

The culture of New Caledonian Kanaks sits at a crossroads between Melanesia and Polynesia, just as the archipelago itself sits at a nexus of these areas. New Caledonia was originally settled by Austronesians, though European observers (e.g. Dubois 1975a, Bensa 1988) have long sought evidence for earlier inhabitants. This search was largely motivated by Europeans' preoccupation with race-they were driven to posit that Melanesia and Polynesia were populated by different groups in order to explain the differing physical appearances of their inhabitants. Anthropologists are still divided over whether the distinction between Melanesia and Polynesia is a meaningful one, but have largely come to believe that a prolonged period of multifaceted interaction between the two regions and the existence of communities of practice among the peoples of the Pacific-rather than a single migration and subsequent divergent evolution-produced the large amount of cultural variation found in places such as New Caledonia (Thomas et al. 1989, Clark 2003).

Belep's location off the northwest tip of the Mainland (see Figure 1 above) places it within the purview of the colonially administrated Northern Province, a somewhat arbitrary French governmental division. Belep is incorporated as a commune (i.e. a 'town', with its own postal code) and has its own mayor elected from and by the local populace. Belep is also part of the Hoot ma Waap ${ }^{7}$ aire coutumière 'customary area'that is, a division chosen by Kanaks which more accurately reflects linguistic and cultural regions (this region is shaded on Figure 2 below).

[^2]Figure 2: Map of New Caledonia


Belep is one of many tribus 'tribes' in New Caledonia-a French word used by New Caledonians to mean 'reservation'. That is, in this nonstandard usage, tribu refers to 'a particular piece of land which is administered by Kanaks,' rather than to 'the people who live there'. Each tribu is under the authority of a distinct chieftain and contains the ancestral lands of several clans 'families'. Though several tribus may share a language, there is no Kanak term either for a tribu or for 'a group of people who share a language'. Language is a salient part of a person's identity, but it is most important as a signifier of his or her birthplace and natal clan-and thus as an indicator of which chieftain he or she is subject to. As a result, the ethnonyms used by the Belema consist largely of a chieftain's name followed by the suffix -ma (§4.2.1), which in this context indicates a
group of people associated with the chieftain. For example, the Bele-ma are the subjects of Teâ Belep, ${ }^{8}$ the high chief of Belep; the Pu-ma are the subjects of Teâ Puma, ${ }^{9}$ the high chief of Balade; the Nene-ma are the subjects of Teâ Nenemwa, the high chief of Poum. There is no grammaticalized way to refer to a group of people who live in a particular place; for example, Belep speakers use the periphrastic âju la Pwewo 'people in Pouébo' to refer to all residents of Pouébo, where the high chief's dynasty is Mwelebeng.

It seems likely, then, that in Kanak society, a person's insoluble bonds to clan and family (and associated ancestral lands) are more important to his or her identity than the place he or she happens to live. Pre-colonized New Caledonia "was cross-cut geographically by long-standing patterns of alliance and enmity, which provided a context for constant small-scale movements of people and interrelationships of marriage and exchange," a state of affairs which at least existed in the Hoot ma Waap region, where Belep is located (Douglas 1990:26). These exchange networks were reinforced by patrilineal and patrilocal land ownership, as well as by a preference for exogamy in marriage. In the North, "clans were divided between two mutually and permanently hostile networks [Hoot and Waap ${ }^{10}$ ], labeled 'phratries' by Guiart [(1957). W]ives frequently belonged to enemy clans" (Douglas 1982:393). This situation is a likely contributor to the amount of linguistic diversity in New Caledonia (Grace 1991, 1995), and the maintenance of so many distinct language varieties in such a small area-there are at least 39 living languages in New Caledonia (Lewis 2009). Stanford (2007:45-47)

[^3]discusses several examples of linguistic exogamy contributing to the maintenance of distinct language varieties, including for the Sui people in China and several groups in Amazonia (Aikhenvald 2003). A comparable situation also exists among some groups in Arnhem Land (Warner 1937, Keen 2002, Hiscock 2008).

Within the wider culture of New Caledonia, Belep is often overlooked, left off of maps, and generally derided for its backwardness and independentism. For example, the website which advertises tourism in the Northern Province describes Belep thusly: "Far from everything, this little commune exists in a state of quasi-autarky, which has permitted it to remain authentic and to always champion a certain idea of independence." The article goes on to warn visitors of the lack of accommodations (Anonymous 2012). ${ }^{11}$ In fact, Kanak culture is more strongly preserved in Belep than almost anywhere else in the country: most young Belema children are monolingual in Belep, nearly everyone still cultivates their ancestral yam plantations, and the cultural practices of la coutume (§1.2.2) are a major part of life. As the Northern Province website describes, "traditions are stronger [there] than elsewhere...,12

### 1.2.1 The clan in Belep

The basic unit of social organization in Belep society is the clan or extended family. The Belep word âma naen may be used narrowly to mean an individual nuclear family, with two parents and their children, or in its broader sense to mean a clan, a group of people sharing a last name and, crucially, a totem (Belep janu 'spirit'). Totems are

[^4]normally animals; their names are secret knowledge within the clan. ${ }^{13}$ The Belep clan names (Belep mewu- 'variety') ${ }^{14}$ are shown in Table 1, which is adapted from various sources (Menu et al. 2007-2008, L. Giordana, p.c., September 7, 2010). ${ }^{15}$

[^5]Table 1: Clans of Belep

| Clan name | Belep form | Phonetic form | Possible etymology |
| :---: | :---: | :---: | :---: |
| Bealo | Bealo | [ ${ }^{\text {m}}$ bealo] |  |
| Belep | Belep | [ ${ }^{\text {m}}$ belcp] |  |
| Bouanaoue | Bwa na we | [ ${ }^{\text {b }}{ }^{\text {wa anãwe }}$ ] | bwa na we 'head in water' |
| Bouedaou | Bwe dau | [ ${ }^{\mathrm{m}} \mathrm{b}^{\mathrm{w}} \mathrm{e}^{\mathrm{n}}$ dau] | bwe dau 'on an island' |
| Dawilo | Dawilo | [ ${ }^{\text {d dawilo] }}$ |  |
| Daye | Daye | [ ${ }^{\text {daje] }}$ |  |
| Gueleme | Geleme | [ ${ }^{1}$ gelemẽ] |  |
| (Guele) | Gele | [ ${ }^{1}$ gele] |  |
| Moilou | Mwalu | [mwãlu] |  |
| Oualairi | Walairi | [walairi] |  |
| Ouimo | Wimo | [wimõ] |  |
| Pidjo | Pijo | [pi ${ }^{\text {¹ }}$ ¢о] |  |
| Piguiepat | - | - | - |
| Poithili | Pwa cili | [ $\mathrm{p}^{\mathrm{w}}$ a cili] | pwa cili 'fruit of the thatch' or pwa tili 'fruit of attachment' |
| Shouene | Cuen | [cuen] |  |
| Teanyouen | Teâ yuen | [teãjucn] | teâ yuen 'chief Yuen' |
| Teamboueon (de Pairoome) | Teâ bwe ôn | [teã ${ }^{\text {m }}{ }^{\text {w }}$ eõn] | teâ bwe ôn 'chief on the sand' |
| Teamboueon (de Waala) | Teâ bwe ôn | [teã ${ }^{\text {m }}{ }^{\text {w }}$ eõn] | teâ bwe ôn 'chief on the sand' |
| Thale | Cale | [cale] |  |
| Wahoulo | Wa ulo | [waulo] | wa ulo [ $\mathrm{NOM}=$ red] 'redness' |
| Yarik | Yarik | [jariq] |  |

Each clan owns its own lands throughout the Belep Isles, and these traditional homesteads (referred to as plantations in French and nana pwang 'bays' in Belep) are the sites where traditional agriculture and the transmission of folkways continue. The plantations are endowed with a mystical significance-a person cannot truly be a Kanak unless he plants and cultivates his own ancestral yam fields. This contrasts with the view of the clan's land holdings within the eight neighborhoods or tribus of Waala, which represent their (somewhat stifling) French identities, linked to the church, the school, and the government (L. Giordana, p.c.). The yam (Dioscorea sp.), ${ }^{16}$ called $u v i$ in Belep, is the most important crop for the Belema, and the cycle of the year is organized around its

[^6]cultivation using swidden agriculture (Haudricourt 1964). A number of important strictures govern the cultivation of the yam due to its sacred nature and its symbolism (the yam symbolizes 'man', just as the $n u$ 'coconut tree' symbolizes 'woman'). Yams cannot be wasted (leftovers must not be thrown away) and in older days it was forbidden to cut one with a knife. If a person 'insults' the yam by neglecting to follow these strictures, one's yam fields could be cursed to never produce again, thus making a person unable to participate in cultural exchange networks (where yams are a necessity for wealth and status). Other major staples of traditional Belep agriculture are the walei 'lesser yam', taro, kumwala 'sweet potato', cassava (manyook 'manioc'), and bolao 'banana'. This starchy diet was traditionally supplemented with fish and seafood, bwak 'flying fox' (French roussette), ${ }^{17}$ and puaxa 'pork' from semi-domesticated pigs, likely a Polynesian import (Geraghty 1994). Kava was unknown in New Caledonia prior to French colonization, though its use is now common (Russmann et al. 2003).

The traditional governance structure of Belep persists, despite the co-existence of French governance. Each clan has a male elder-a chef de clan (Belep teâ 'prince')—and a younger male representative. These two representatives from each clan serve in the Conseil des anciens (Belep cuuyama, from cuuc 'sage, judge'), the legislative body which supports the grand-chef (Belep teâmaa 'high chief'). Chieftaincy is hereditary in the Wahoulo clan, so-called because the legendary ancestor Teâ Belep was said to be red-headed. ${ }^{18} \mathrm{~A}$ few other clans also have special roles in governance: the Thale serve as the official porte-paroles 'spokesmen' of the chief (Belep teâ pulu 'chief of words'); the Poithili hunt the sacred modap 'manatee' and supply it to the chief; the BOUEDAOU

[^7]are the guardians of the chefferie (Belep kavebu 'chief's home') and supply a new chief if there is a crisis of succession (A. Wahoulo, p.c., 20 Sept. 2011). In activities such as the construction of a new ceremonial hut for the kavebu and the yearly yam festival Dao uvi, all clans contribute or participate in some way. This balance between, on the one hand, the chief's absolute spiritual authority, and, on the other, his role as merely the 'first among equals', is found throughout New Caledonia (Bensa \& Goromido 1997). The traditional Belep system of government is thus representative of both Polynesian and Melanesian traditions-hereditary chiefdom is a characteristic of Polynesia, while egalitarian societies depending on exchange networks are characteristic of Melanesia (Spriggs 1997).

New Caledonian custom is to write personal names in the format [CLANNAME Givenname] (nara- 'given name'). Many Belema have both an official French given name and a 'nickname' in the Belep language; however, some Belema have only one given name which suffices in both languages. Table 2 shows a few examples of given names.

Table 2: Examples of given names in Belep

| French | Belep |
| :--- | :--- |
| Marie-Odile | Pato |
| Benjamin | Korowi |
| Jean-Baptiste | Gerâ |
| Hortense | Jajani |
| Albert | Weli |
| Magali | - |
| Eliane | - |
| - | Weloo |
| - | Dao nu |
| Philippe | Pilip |
| Yasmine | Mina |
| Cassandra | Kacaca |
| Gal | Gan |
| Ignacia | Acia |
| Alice | Aliic |

Note that there is a phonetic correspondence between some of the pairs (e.g. French Alice [alis] and Belep Aliic [aliic]; French Philippe [filip] and Belep Pilip [pilip]), while others do not appear to be related. Belep names which also have lexical meanings tend to be bird names or other animal names (e.g. Ileli 'snipe', Kolori 'dark brown honeyeater', Caivak 'rat', Gom 'type of sea cucumber'). The children of the chief always receive the same names: the first son is Teâ, the second son is Mweau; the first daughter is Kawo, the second daughter Ixe; the last child is Jegoloc. In the past, it was taboo for Belema to say the given name of their opposite-sex sibling or cousin, and many elderly speakers still practice this custom. ${ }^{19}$

In Belep, a woman's children born before her marriage belong to her clan (they are usually formally adopted and raised by her maternal uncle or another male relative). When a woman marries, her husband's clan purchases her from her clan-she becomes a member of her husband's clan, and her subsequent children belong to her husband's clan.

[^8]A person is seen as 'belonging' to his or her maternal uncle (French tonton), such that at death his or her clan makes a large ceremonial gift to the clan of the tonton (as elsewhere in New Caledonia; see Bensa \& Goromido 1997). Given the importance of the tonton to Belep social structure, we would expect that there would be a unique word for this person (especially considering that the tantine - the wife of the tonton or the father's sister-has a special name, âno 'aunt'); however, most Belema use only the French term tonton, and one speaker told me that the maternal uncle is called nya- 'mother' in Belep. Dubois (1975f) seems to have found a different word wânairiye-, as shown in the chart of kin terminology in Figure 3, though it is no longer in use. The importance of the maternal uncle is a Melanesian characteristic (Panoff 1976).

Figure 3 shows that mother's sisters are mothers (nya- 'mother'), and father's brothers are fathers (cama- 'father'). Mothers, fathers, and grandparents each have a separate vocative form: mother is nyanya or mami, father is caya, and grandparent is wa. Parallel cousins are siblings (ava- 'sibling or parallel cousin', often referred to as cousins germains 'first cousins' in French), while cross-cousins (bega- 'cross-cousin') are noted by Dubois (1975f) as preferential spouses, a practice which seems to have fallen out of favor today, likely due to Christianization. Sibling's spouse and spouse's sibling are the same (bee- 'sibling-in-law'), and child's spouse and spouse's parent are the same (moo-'parent/child-in-law'). Belep kin terms do not distinguish between males and females; if this is necessary for clarity, speakers may modify a kin term with tamwa 'female' or âc 'male' as in e.g. avang âc [sibling-1 SG.POSs male] 'my male sibling'.

Figure 3: Kin terms in Belep


0 female
$\Delta$ male

After Dubois (1975f)

### 1.2.2 La coutume

While the most important societal unit in Belep is the clan, the most important principle of social life is referred to in French as la coutume. This translates literally into English as 'the custom' (see similarities with Kastom in Vanuatu (Keesing 1982)) but there is no word in Belep for it. This is due to the fact that the French term la coutume subsumes a vast array of interrelated cultural practices in Belep society.

A great deal of anthropological literature describes exchange networks in Melanesia (Kirch 1991, Gell 1992, Brunton 1971, etc.). These networks are sustained by ritual gifting of culturally significant objects. In New Caledonia, "Melanesians set far greater store by acts of exchange and the relationships and meanings they mediated and expressed than by the objects as such, though objects were essential to maintain the flow and symbolize the rhythm of exchange relationships" (Douglas 1992:109).

La coutume places objects, and the social relationships they represent, in a constant flow of possession and reciprocity. Among New Caledonian Kanaks, to exchange ritual gifts is to faire la coutume 'to do the custom' (see $\S 1.6$ on the relationship between French and Belep), and it typically occurs in conjunction with all important social interactions: visiting someone's home, leaving someone's home, asking permission for something, asking for a favor, begging forgiveness, gathering to discuss something, gathering to have fun, etc. Kanaks believe, however, that it is not the gift itself which is important (this is merely a geste 'gesture' in French), but rather the words one speaks during the ritualized act of giving. Speech in la coutume is thus viewed as sacred.

In Belep, a specific set of discourse norms constrain such speech. ${ }^{20}$ Speakers (as well as observers) in la coutume bow their heads, clasp their hands behind their backs (to indicate a lack of hostile intent), and lower their voices to just above a whisper, even if they are addressing a large crowd. This posture is intended as a gesture of respect to the $j a n u$ 'spirits' of the ancestors, who are present whenever someone decides to faire la coutume. Public coutumes are limited to male speakers only, although women practice similar rituals in private among each other. Speakers begin a coutume by addressing and naming their audience and describing the purpose of the coutume - that is, which social relationships and functions it is intended to address. Then they move into the functional portion, where they express their emotions about the relationship with brutal honesty. Finally, speakers mention their ritual gift, with a hope that it will be accepted as a token of their emotion, and terminate the coutume by saying yet, toven [end finish] 'that's all, I'm done'. The crowd of observers responds with ole [thank] 'thank you'. In all but the most fraught of circumstances, the speaker's gift will be accepted with a similar speech by his addressee; this may also be accompanied by a reciprocal gift. This 'return of $l a$ coutume' is called yayila in Belep. ${ }^{21}$

Though there is not one individual word in Belep which subsumes all cultural practices referred to by la coutume, a number of words exist to identify particular types of coutume. A daxu is a small coutume, as one might give to ask permission to enter the home of a person or a sacred site, or to beg forgiveness for a small slight. This minimally consists of a bolt of fabric and a small amount of money, and often includes tobacco as

[^9]well. Figure 4 shows the acceptance of such a coutume by the grand-chef WAHOULO
Amabili.

Figure 4: A coutume to ask permission to enter. Photo by L. Giordana, 2009.


One type of daxu is the pwawak or âna pwawak, where a visitor to a sacred site (such as
Pott) offers tribute to the spirits of that site to avoid offending them. For example, one speaker described his tribute to the spirits of $\operatorname{Pott}^{22}$ as sandals, a t-shirt, cigarettes, matches, and clothing. "I took them and placed them [on a sacred rock] like this, and said 'May you return the Tahitian that you took', and left them there., ${ }^{23}$ As this story shows, people who do not perform a pwawak will be punished by the spirits; such a person is wac 'a denier, disrespectful of la coutume'.

[^10]A pwaxu is a large coutume, such as those assembled for major events like marriages and funerals.

Figure 5: A coutume for a wake in Belep. Photo by L. Giordana, 2009.


Figure 5 shows the presentation of numerous yams as part of the ola nuyan, the gift from the deceased person's clan to the clan of his or her maternal uncles, a week after the person's death. The related auvaa is a ceremony which occurs at the end of a clan's official yearlong mourning period. This word is a loan from Nêlêmwa with the meaning 'good speech' and is performed by the grand-chef.

Figure 6: A coutume for a wedding in Balade, 2010.


Figure 6 shows a buac, which is given by the man's clan to reserve a woman for marriage. ${ }^{24}$ For such large coutumes, each person or family unit within a clan contributes his or her paa-n 'obligation-3SG.POSS', a small amount of rice, sugar, coffee, tea, yams, bananas, etc. which will be combined to form the large clan gift.

A modern French expression used often in Belep is: on vit dans la coutume 'we live in la coutume'. For the Belema, such cultural exchanges are seen not as confined to special occasions; they make up the fabric of daily life, securing and reifying people's social relationships and economic well-being, which are indistinguishable in Belema culture.

[^11]
### 1.2.3 History of Belep

New Caledonia is believed to have been originally settled by the Austronesians around 1200 BCE , as suggested by Lapita ${ }^{25}$ pottery evidence. By the first century of the Common Era, the long-distance exchange networks that characterized Austronesian settlement in Melanesia had ceased to operate (Spriggs 1997). Following this period in Belep, oral histories suggest that the clans were largely autonomous, with independent governance and war between clans: in one story, Teâ Boa (presumably the chieftain of clan Boa) was killed by Teâ Polo, who later became the leader of several unified clans with his seat at Bweo (Dubois 1975d). At some point in the dynasty of Teâ Polo, a tsunami devastated the northeast coast of Art, destroying a village at Ono (Sousmarin). This may have been linked to the massive volcanic eruption of Kuwae in Vanuatu in 1452 CE (Spriggs 1997).

Around 1300 CE, power struggles in Polynesia led disaffected Polynesians to voyage west (Spriggs 1997). Oral histories suggest that some landed in New Caledonia near Hienghène (on the northeast coast of the Mainland) and dispersed to the north (Dubois 1985). Around 1540 CE , as a result of these migrations, Teâ Belep, the younger brother of a chief of Gomen (on the northwest coast of the Mainland), traveled north to Belep with two of his subjects after a dynastic struggle. Teâ Polo's alliance was still in effect in Belep; after a war between Teâ Polo and Teâ Belep, the two agreed to split the territory on the island of Art-Belep establishing his seat at Pairome-and rename the island group in Belep's honor (Dubois 1985, AW6).

[^12]Belep expanded his rule through marriage alliances, including one with the daughter of Teâ Pûnivaac, the clan chief of Mwan on the islet of Pott. Belep's son gained further dominance for the Belep dynasty by conquering Teâ Polo. By the 1700s CE, according to oral histories, the Belep dynasty had solidified its rule over all the clans of Art, and the chief began to call himself teâmaa 'high chief' (Dubois 1985).

Chief Waulo Chahup II Amabili, who lived from 1815 to 1877, led the united clans of Art in war against other groups on the Mainland, including the people of Balabio, Gomen, Koumac, and Hienghène. Around 1845-1850, Chahup also brought Pott under his rule when he killed Teâ Pûnivaac. Rejected by his people, Chahup fled to Balade, where he encountered the French missionaries Père Lambert and Père Montrouzier (Kasarhérou et al. 2007:33-34). (New Caledonia had been claimed as a French colony in 1853 (IEOM 2011).) On 9 January 1856, Chahup and the missionaries landed in Belep. Chahup moved his seat from Bweo to Waala, where a mission church was built, and was baptized in 1859 , also encouraging his subjects to be baptized (Dubois 1975a).

The century that followed the first contact with European colonials was a painful and difficult one for the Belema, as shown by various historical records. From 18641897, about 22,000 French convicts and political prisoners arrived in New Caledonia (IEOM 2011). Under Chahup's successor, Alphonse Yââma Mweau (1842-1913), the islet of Pott was appropriated by the French government for colonization (from 19601975, the Belema would work to accumulate enough money to buy it back). In 1878,350 dissidents from Boulouparis (on the Mainland) were exiled to Belep. From 1892-1898, the Belema were themselves exiled to Balade when Belep was designated as a leper
colony (Kasarhérou et al. 2007). Leprosy among the returned Belema was not eliminated until the 1950s (Dubois 1975g:137).

In the past fifty years, the standard of living in Belep has risen considerably, with both an increase in colonial influence and the rise of a nascent Kanak identity. Around 1955, an airstrip was built in Waala (Dubois 1975a). A modern medical clinic, serviced by a French doctor and nurses, was also built. In 1961, Belep became a commune; its first mayor was elected in 1969 (Kasarhérou et al. 2007). In the 1980s, the movement for Kanak independence became violent (during a period called Les Evènements 'the Events'), and—according to my consultants-many Belema emigrated to the Mainland due to political divisions.

Today Belep struggles to obtain resources from the French colonial government (the boats and airplanes which service Belep are irregular at best), to provide support for its children (who must attend boarding school on the Mainland after age 12, a situation which causes many psychological and academic difficulties), and to establish more permanent settlements throughout Art. The enclavement 'ghettoization' of the entire population into the village of Waala-due to the presence there of the only church, school, and grocery stores-is viewed by the Belema as contributing to the widespread alcoholism and discontent among the population (as described in Hamelin et al. 2009).

### 1.3 Belep within the Austronesian language family

The language variety spoken in Belep (referred to here as 'Belep'; see $\S 1.5 .1$ ) is a member of the Remote Oceanic branch of the Austronesian language family. The languages of Melanesia have been called "aberrant" due to the irregularity of sound changes from their presumed common ancestor with the Polynesian languages, Proto-

Oceanic (Grace 1991). Subgrouping within these languages using the comparative method of phonological innovation has proved difficult in many cases, so linguists have used limited correspondence sets such as pronouns, kinship terms, and morphological affixes to make their hypotheses (Lynch \& Tryon 1985, Geraghty 1988, Lynch \& Ozanne-Rivierre 2001).

Several explanations have been put forward for the reasons behind this apparent resistance by Melanesian languages to the use of the comparative method. Early lexicostatistic argumentation by Dyen (1965) in particular claimed that Melanesia was in fact the homeland of the Austronesian family; this view has been discredited (Campbell 2004). Other theories (Ray 1926, Capell 1962) tried to explain the aberrancy through the substratum influence of nearby language families (chiefly Papuan) and the idea of 'mixed' languages that were no longer Austronesian. This view has also been refuted (Grace 1985). The most likely explanation at this point seems to be that of Grace (1985)-that the Melanesian languages form a Sprachbund or a series of linguistic areas as well as being genetically related, and that this lack of boundaries between languages and between dialects has led to heavy borrowing and code-switching to the point that the original lines of descent are blurred. The obscuring of linguistic boundaries is also reflected in the fact that current disagreements exist over the precise number of languages in New Caledonia.

It seems fairly widely accepted that the languages of Mainland New Caledonia form two subgroups, North and South (Leenhardt 1946, Haudricourt 1971), where the North has been further divided into subgroups (Ozanne-Rivierre 1992, 1995, Rivierre 1993) and the South cannot be further subdivided based on current knowledge (Grace

1991, 1992, 1995). Ozanne-Rivierre's (1995) subgrouping of the Northern languages uses the comparative method to classify these languages into two subgroups, Far North and North. Of the five Far North languages, Nyelâyu alone in its subgroup underwent a number of phonological changes that its neighbors (Nêlêmwa/Nixumwak, Caaàc, and Yuanga) do not share ( ${ }^{*} \mathrm{k}>\emptyset$, ${ }^{*} \mathrm{c}>\mathrm{y}{ }^{*} \mathrm{t}>\mathrm{c}$ ) (Ozanne-Rivierre 1995:62). The most widely accepted subgrouping of the New Caledonian languages is summarized in Figure 7. Belep is presumed to equate with Nyelâyu in this classification; it is represented in parentheses.

Figure 7: Subgrouping of New Caledonian languages


Little documentation exists on most of the languages of New Caledonia, and the Northern languages are particularly sparsely documented. Bril (2002) and Rivierre (1980) are the only complete reference grammars describing Northern languages (Nêlêmwa-Nixumwak and Cèmuhî respectively). A few other Northern languages have sketch grammars-the Voh-Koné varieties (Rivierre \& Ehrhart 2006), 45 pages; Caaàc and other varieties spoken in the commune of Pouébo (Hollyman 1999), 18 pages; the
languages of Hienghène: Pije, Fwâi, Nemi, and Jawe (Haudricourt \& Ozanne-Rivierre 1982), 59 pages total; Yuanga (Bretteville 1993), 16 pages; Balade Nyelâyu (OzanneRivierre et al. 1998), 42 pages. Rivierre (1983), a dictionary of Paicî, contains no grammatical information.

### 1.4 Previous research on the Belep language

Prior to this research project, all linguistic data collection in the Belep Isles has been conducted by Marist missionaries of the Roman Catholic Church. The first text published in a Kanak language was the Belep narrative "Le chef de Touho", which was transcribed by one of the first missionaries to Belep, Père Pierre Lambert (who served from 1856-1863), and published in 1900 without glosses. Lambert also published a book of Belema religion and mythology (Lambert 1900) and kept a journal from 1855-1875 (Lambert 1855-1859, 1860-1875). These journals are stored on microfilm in the Archives of New Caledonia. Other texts, including a translated catechism, were transcribed by Lambert and his fellow missionaries in a mix of Belep and Balade Nyelâyu. These were copied in 1940 by Père Marie-Joseph Dubois. All of Dubois' copies but one were burned in 1955 by a "zealous priest" (since recitation of the Mass in the vernacular was officially forbidden prior to the Second Vatican Council, 1962-1965). Dubois's single surviving copy was given to Père Jean-Baptiste Neyret, who was still serving as priest there in 1973 when Dubois was sent to Belep on an ethnolinguistic mission by the Centre national de la recherche scientifique (CNRS), France's largest governmental research body.

A microfilmed manuscript collection catalogued under Neyret's name includes a year's worth of Masses, glossed and translated; a Belep/French dictionary; and a hymnal of translated hymns, which was also published in book form and is owned by most
members of the Belema community. It is unclear how much of this work Neyret did himself, and how much of it is Lambert's work, if any (Neyret 1974 a-c). This collection is owned by a few libraries, most of them in Australia, and is generally non-circulating.

Dubois's work, based on three field trips to Belep, was microfilmed as a manuscript collection in an edited version in 1975. This collection, a copy of which is owned by a few US libraries, includes: a Belep/French dictionary, a corpus of roughly glossed texts based on 8 hours of recordings on magnetic tape (the original recordings have not been located as of this writing), a dictionary of proper names of Belep, a genealogy of Belep, and a historical sketch (Dubois $1975 \mathrm{a}-\mathrm{g}$ ). Various parts of these manuscripts were combined in a published book (Dubois 1985). Dubois's work also references the parish records of the Belep Mission (n.d.), which have not been located.

A few digital recordings of Far North languages are held in the Tjibaou Cultural Center in Nouméa. They include: a reading of a few lines from a well-known text that was part of Leenhardt's 1956-1958 linguistic survey, read by speakers from Belep, Pott, Poum, Tiari, and elsewhere (Leenhardt 1958); and recordings of several Belema music and dance performances interspersed with some Belep discourse (Dahl 1984, Ammann 1994, Nomoigne 1994).

In addition to these works on Belep, a great deal of other work has been done on the variety of Nyelâyu (§1.5.1) spoken in Balade, the site of the first European landing and the first Catholic Mission. Balade priests produced a constant stream of work on the local language beginning in the mid- $19^{\text {th }}$ century-mainly word lists and translations of Catholic texts into the vernacular. Many of these documents were reprinted in Ozanne-

Rivierre et al. (1998), and those that were not reprinted were incorporated into the dictionary section of that work.

In the $20^{\text {th }}$ century, historical reconstruction of Proto-New Caledonian and the establishment of its relationship to Proto-Oceanic has been one of the main focuses of linguists' research on the languages of New Caledonia. The researchers carrying out this task have been mainly French linguists working for CNRS.

Leenhardt (1946) and Haudricourt (1971) are comprehensive surveys of all the languages of New Caledonia. Each spends only a few pages discussing the Far North languages as a whole, and neither provides any specifics about Belep or Balade Nyelâyu.

Ozanne-Rivierre and Mazaudon wrote a lexicon of Nyelâyu in 1986, but it is unpublished and stored only in the CNRS archive. Presumably ${ }^{26}$ the data it contained was included in Ozanne-Rivierre et al. (1998), a 44-page sketch grammar, plus a dictionary and a collection of 6 texts (5 with interlinear glosses) in Balade Nyelâyu. This work contains useful information on phonology, although the grammatical sketch is understandably lacking in detail; as an illustration, the example sentences clearly show the language to be split-ergative, but there is no discussion of argument structure in the sketch grammar. Ozanne-Rivierre does, however, call the language split-ergative in her later article on complex predicates in Oceanic languages (2004).

Ozanne-Rivierre (1992, 1995, 2000), Rivierre (1993), and Ozanne-Rivierre \& Rivierre (1989) primarily discuss the subgrouping of the New Caledonian languages, incorporating a few lexical items and data from Balade Nyelâyu. Hollyman (1999) is a collection of essays on the Far North languages, in particular on Polynesian loanwords in New Caledonia and the difference between personal and non-personal possession.

[^13]
### 1.5 The Belep language

The Belema believe their language is extremely important for the preservation of cultural traditions and the wisdom of the elders. Speakers also believe their language is "easy to learn". In 1999, a committee of Belep teachers was formed in order to develop and formalize a writing system for use in the elementary school. ${ }^{27}$ This Comité de langue 'Language Committee', though directed by the school, also had representatives from the chefferie, ${ }^{28}$ the mairie, ${ }^{29}$ and the church. The Committee adopted an official alphabet (based on orthographies developed for surrounding languages) and collected several wordlists, but was stymied in its efforts to continue by a delay in communication with the Académie des langues kanak (ALK) and the government of the Northern Province. In 2011, the ALK made its first official visit to Belep and gave its official sanction to the work of the Committee, stipulating that the Committee should become autonomous and open to all Belema. This was the first public recognition of the right of the Belema to linguistic self-determination.

### 1.5.1 Language name

The name of the language variety spoken in Belep is not agreed upon by all parties. In most authoritative existing literature, the Belep variety is classified as a dialect of Nyelâyu (or Nyâlayu, Yalayu [yly]), the language spoken in the Mainland villages of Balade, Arama, and Tiari (Lewis 2009, Ozanne-Rivierre et al. 1998, Bril 2002). This classification is based on the findings of a linguistic survey of New Caledonia conducted in the 1970s; the results were published in Haudricourt (1971) and Haudricourt et al.

[^14](1979). The Belep data collected for that survey were gathered by Père Dubois, an ethnographer and priest with some training in linguistics, who made two field trips to Belep between 1940 and 1943 and another in 1973. His manuscript collection contains an account (Dubois 1975a) of his realization that the religious dialect he had learned was different from the language that the people were speaking in their daily communication, which they called pulu Belep 'language of Belep'. It is unclear how Dubois's findings were interpreted to posit an analysis whereby Belep was considered a dialect of Nyelâyu. Hollyman (1999), corroborating Leenhardt (1946), lists Belep and Nyelâyu as separate languages, with the latter being spoken in both Balade and Belep. This interpretation fits best with my findings.

Certainly, considerable cultural, religious, and familial ties exist between Belep and Balade. Balade was the site of the first Catholic mission in New Caledonia, and the priests who converted the Belema were sent from there (the surrounding villages of Koumac and Poum are, by contrast, largely Protestant). Marriage and familial ties between Belep and Balade date from at least the mid-1800s-the missionary translators of the catechism and other religious texts into the Belep vernacular used a Puma consultant (that is, someone originating from Balade; she was the mother of the teâmaa of Belep), which led to their being written in a mixed language variety (Dubois 1975a). Marriage ties may be more ancient, however; cultural practice encourages Kanaks to marry outside their phratry, and the Belema (who belong to the Or phratry) differ from the Puma (who belong to the Waap phratry), though this division (Dubois 1975a) is less clear today. From 1892-1898, the population of Belep was exiled to Balade to make way for a leper colony, further strengthening the relationship between the two groups
(Kasarhérou et al. 2007). Ozanne-Rivierre's main consultant for the Balade variety (Ozanne-Rivierre et al. 1998), BOIGUIVIE Scholastique (the representative académicienne of the ALK in the Hoot ma Waap customary area), is a relative of several of my consultants in Belep. During Mme. Boiguivie's official visit to Belep in 2011, her speech (in the Balade variety) before the Belep Language Committee was easily comprehensible for the Belema.

However, many differences exist between the two varieties. A cursory dictionary comparison ${ }^{30}$ yields about one quarter of basic vocabulary that differs between the two varieties; Belep has a much reduced phonemic inventory from Balade Nyelâyu, and they have different basic word order, argument structure, and morphosyntactic organization. In 2010, I recorded speech in Balade and played it for several young people in Belep who lack significant ties to Balade; they could not understand it. Belema are fairly evenly divided on whether or not the varieties are "the same language"-consultants agree that a child from Balade and a child from Belep who have never visited the other place would not be able to communicate; however, many speakers feel strongly that the two varieties should be considered to be the same as a marker of identity.

My own observation is that, while the two varieties are not mutually intelligible to monolinguals, many speakers with familial ties to the other place learn both varieties from an early age, not realizing that they are learning multiple varieties. Thus, while purely linguistic evidence suggests that Belep and Balade should be classified as separate varieties, the decision whether to identify them as separate 'languages' is an ideological

[^15]one which may take many other factors into account. Ultimately, it is the political responsibility of the Belep Language Committee, in consultation with the ALK, to decide the official standing and designation of their language variety in relation to Balade Nyelâyu.

Though some have proposed that the Belep variety should be called Belep Nyelâyu, I will refer to it only as 'Belep' throughout this work. This choice is based on current usage in Belep, in which Belep occurs as an autonym and in parallel to designations for other languages, as in (1) and (2).

## (1) Mo tao pulu Belep!

mo tao= pulu Belep
LK3 HAB= speak Belep
'Hey, keep speaking Belep!'
(2) Wara pulu français, pulu Belep !
wara $=$ pulu [prãje] pulu Belep
NEG.IMPER= speak French.LN speak Belep 'Don’t speak French, speak Belep!'

Speakers may also use pulu Belep as an autonym, as in (3).

## (3) Iva naramw mwa na pulu Belep?

 iva nara-mw=a na pulu Belepbe.where.GNR name-2SG.POSS=LOC interior speech Belep 'What's your name in the language of Belep?'

Only Belep speakers who have read the existing literature on New Caledonian linguistics refer to their language variety as Nyelâyu. For these reasons, I will use 'Nyelâyu' in this description to refer strictly to the variety spoken in Balade. The term 'Belep' will refer to the variety spoken by the consultants who contributed to this study.

### 1.5.2 Linguistic profile of Belep

Belep grammar has much in common with that of other New Caledonian languages, as well as other neighboring languages of Island Melanesia and Fiji. It also
has many characteristics that mark it as unusual, both cross-linguistically and within its subgroup (see §1.3) of Far North New Caledonian languages.

Belep has eighteen contrastive consonants and ten contrastive vowels in its phonology. This is a dramatically smaller number than in its sister languages-for example, Nêlêmwa has thirty consonants and twelve vowels (Bril 2000); Balade Nyelâyu has thirty-three consonants and twenty vowels (Ozanne-Rivierre et al. 1998). The major difference is that Belep lacks the aspiration contrast in voiceless stops, nasals, and approximants which exists in these other languages. Vowel-length contrasts do exist in Belep; however, "long" vowels should be considered to be sequences of like vowels. Belep is noteworthy for its unusual intonation pattern (referred to by observers as a "singing" intonation) whereby the first syllable carries the intensity peak, the penultimate syllable carries stress and stress-induced vowel lengthening, and the final syllable carries the pitch peak.

Belep morphology is considerably more complex than that of its neighboring languages, which are largely isolating. Belep morphosyntax relies heavily on clitics of three types: enclitics, which are phonologically indistinguishable from suffixes except that they may attach to various types of host; proclitics, which are indistinguishable from complete phonological words except for the fact that they do not carry stress and may only occur bound to a host; and ditropic enclitics (used solely for case-marking), a typologically unusual phenomenon whereby a clitic precedes its host but is bound phonologically to the word it follows. Belep is exclusively suffixing.

A major feature of Belep morphophonemics is the widespread existence of both 'bound' and 'free' forms of phonological words throughout the lexicon. This is realized
in 'phase shift', wherein a word changes form depending on its position in the clause; it is also realized in the existence of meaningful alternations in nominal and verbal morphology. Many nouns have both possessed ('bound') and unpossessed ('free') phonological forms, and many transitive verbs are inherently 'bound' in that they cannot occur without a nominal or pronominal reference to their semantic patient. Other 'free' verbs inflect for whether the patient is generic or specific. In fact, the distinction between generic and specific NPs is highly grammaticalized in Belep into many aspects of the grammar; noun possession also distinguishes generic vs. specific possessors, and casemarking sometimes depends on the specificity of the NP.

Noun classes are distinguished based on whether their members are compatible with inalienable or alienable possession, a common characteristic of Pacific Rim languages (Bickel \& Nichols 2007). Many nouns are also inherently possessed; a nominal or pronominal reference to their possessor is obligatory. Determination of noun phrases is extremely complex as well, with demonstratives and determiners marking the number, animacy, proximity, direction, and discourse relevance of their referents.

The most commonly marked verbal category in Belep is modality (with a highly grammaticalized distinction between realis and irrealis), and verbal aspect is also fairly complex. Tense is unmarked. Subordination of clauses is accomplished almost entirely by the semantics of particular linkers-the morphosyntax of main clauses and subordinated clauses is largely indistinguishable.

Belep has an unusual system for argument structure which differs from the splitergative systems of its close relatives. In Belep, there is no ergative marker. Instead, most S arguments of intransitive verbs, as well as agent NPs in transitive clauses (if the patient
is generic), are marked as in the nominative case. Meanwhile, the patient NP of a transitive verb is unmarked for case, as is the S argument of a limited number of intransitive verbs (these arguments are identified in this work as 'absolutive'). This system thus qualifies as split-intransitive or split-S system of grammatical relations. Agent NPs in transitive clauses with a specific patient are marked as genitive.

Belep has a number of typologically unusual features. These include the fixed basic word order VOS (other word-order correlates are consistent with a head-initial language), and the ditropic clitics mentioned above. Belep's pronominal system is especially remarkable for its first-person inclusive/exclusive distinction (shared by its neighbors) and its four numbers-singular, dual, paucal, and plural-which are unique in its geographical area (none of Belep's neighbors has a paucal number). Furthermore, Belep shares with its neighbors an unusual grammaticalized spatial system, where verbs, directionals, and noun determination all use the same three-way distinction between 'up', 'down', and 'transverse' axes-there is no basic verb 'to go', but rather three verbs 'to go up', 'to go down', and 'to go transverse'. Belep negation strategies are also fairly unusual, with a number of negative verbs: a negative locative verb, a negative existential verb, a verb meaning 'to not want', a verb meaning 'to not know', etc.

### 1.6 Sociolinguistic situation

The following sections discuss linguistic variation within the Belep community and the social factors which influence that variation.

### 1.6.1 Sociolinguistic variation

Age is the most salient sociolinguistic variable for Belep speakers. Young people's language use is remarked on by many speakers as different from that of other
age groups (this was also noted by Dubois 1975c). The primary markers of young people's speech, according to Belep speakers, are increased code-mixing (see §1.6.2) and more frequent use of the characteristic 'singing' intonation pattern (§2.7). There are some lexical differences as well; speakers often cite elders' use of pana manya 'wait!', while young people use waramen 'wait!'. Young people also use argot from an invented language game (similar to Ubbi Dubbi in English) where $/ \mathrm{ay} /$ or $/ \mathrm{a}^{\mathrm{\eta}} \mathrm{~g} /$ is inserted before the rime of each syllable.

Other, less salient differences between the speech of older and younger speakers include: final [ $t$ ] in older speakers is regularized to final [ $r$ ] in younger speakers; medial $[\chi]$ for older speakers is medial [ъ] for younger speakers; and younger speakers are more likely than older ones to use the stylish [s] and [ t ] pronunciations of /c/ (see chapter 2 for more information). Older speakers also have much larger vocabularies in Belep than do younger speakers, who are unlikely to know species names for flora and fauna, as well as words for certain cultural practices. Other relevant identity-based categories of sociolinguistic variation include gender, ${ }^{31}$ clan background, and educational background/level of assimilation into French society. Though differences are noticeable within each of these variables, I was not able to collect data from a large enough sample size to be able to describe the differences conclusively.

Another source of sociolinguistic variation is register-based. Belep slow speech and fast speech differ to some degree, a common cross-linguistic phenomenon (Zwicky 1972) also noted by Dubois (1975c). This includes the reduction of approximants in fast speech: maya- [mãja] 'part' is often produced as [mãe] in fast speech; ulayar 'to be big'

[^16]is often reduced to [ulaar] in fast speech. Belep nasals may occasionally be affected by fast speech as well, being produced as prenasalized stops. For example, naerama lami 'those children' may be produced as [nãẽra ${ }^{\text {mblamĩ], which also contains an instance of }}$ deletion of an unstressed vowel, another characteristic of fast speech.

Choice of code is also a salient variation in register. Diglossic Belep speakers tend to use French (High) to refer to politics, economics, and education, while references to family, relationships, and cultural activities occur in Belep (Low) (see §1.6.2). However, this is not a hard and fast rule, and speakers use both of these codes in a complex interplay of the identities that they represent at any given moment.

La coutume (§1.2.2) is a particular speech genre that has its own sociolect. A considerable subset of Belep vocabulary is marked as normally occurring only in $l a$ coutume, such as the numerical classifiers (§4.3.1) which refer to quantities of ritual gifts such as yams and sugar cane. Some words have euphemistic counterparts for use in la coutume; for example, one speaker avoids use of the word mwany 'bad' in his coutumes, instead substituting the word geek 'dirty'. The honorific $\hat{a} \hat{o}$ 'great one' is used to refer to the grand-chef in la coutume rather than the usual teâmaa used in everyday speech. It is possible that la coutume is characterized by phonological or morphosyntactic patterns as well as these lexical ones-this would be a productive topic for further study.

### 1.6.2 Multilingualism and language contact

The Ethnologue lists 39 living languages for New Caledonia; of those, 32 belong to the New Caledonian language family (Lewis 2009). By the time they are adults, most Belema speak more than one Kanak language.

A number of factors contribute to Kanak multilingualism. First, throughout New Caledonia, it is very common for women to leave their birthplace to marry outside their language group (§1.2). This means that many adult women in Belep were born elsewhere and moved to Belep when they married; Belep may be their second or third language. It also means that many women for whom Belep was a first language-but who now normally speak a different Kanak language with their families-live scattered throughout the country, returning to Belep for important cultural events such as weddings and funerals. As a result, Belep children may grow up with a familiarity with both their mother's and their father's language-or perhaps even more languages, since many are raised by adoptive parents or grandparents. Second, Belema children must leave Belep at age 12 to attend school on the Mainland. Most attend the boarding school in Poum, but many are sent elsewhere, and successful students may go on to attend high school in yet another Mainland location. In each of these schools, the Belema child is immersed in a community which speaks a different local language, and he or she may live with a distant relative who does not speak Belep at all. Finally, Belema adults may choose to work in Mainland communities and learn the local language so that they can be friendlier with their coworkers.

The prevalence of Kanak multilingualism does not appear to be a recent innovation. In fact, elderly Belema tend to speak more languages than young people, and oral histories of long voyages, exogamous marriages, and warfare between language areas-as well as archeological evidence (Sand \& Sheppard 2000)—suggest that similar patterns of inter-lingual movement existed in Kanak culture prior to European colonization. Multilingualism is thus an important facet of Kanak culture-with the
major caveat that one should speak the language appropriate to the particular local context in which one finds oneself. A multilingual person ought to speak Belep in Belep and Balade Nyelâyu in Balade, for example. Language mixing is strongly disfavored.

This attitude towards language use becomes more complex when French is considered as well. French is the national language of New Caledonia ${ }^{32}$ and, with such a large amount of linguistic diversity among Kanak people, French's status as the lingua franca is unchallenged (Charpentier 2006). "[French] is needed for participation in the modern political and economic life of the territory, and most school-based education is only available in French" (Gordon \& Maddieson 2004:296-297). In Belep, 582 of the 584 people over age 14 who responded to the 1996 census reported speaking French, with only slightly lower numbers for those who could read and write in French (ISEE 1996). In my observation, all adult Belema are fully bilingual in Belep and French.

However, the preferred usage of these two languages is to limit each to its respective sphere: "French is the high and prestige language of government and of upward social movement, while [Kanak languages represent] traditional life. French and the Kanak languages are associated with different semio-cultural worlds" (Cunningham et al. 2006). This diglossia is perpetuated in Northern New Caledonia by the closeness and multiplexity of social networks (Schooling 1990). A similar situation persists in rural Vanuatu, where diglossic speakers reserve the colonial languages for school and government, while a local vernacular or lingua franca is used for social interaction (Crowley 1995).

Though Belep speakers value both French and Belep, they consider code-mixing to be a pollution of both languages. The Belep Language Committee opposes the

[^17]inclusion of French borrowings in the Belep dictionary; when glossing texts, speakers substitute Belep words for the French ones actually present in the text, and are surprised and disappointed to discover that this is necessary. Belep speakers' chief complaint and worry about the future of their language is its dilution with an influx of French words and code-mixing, a problem perceived primarily in the speech of young people but also present among elders.

This strong bias against code-mixing belies actual linguistic practice in Belep, where skill at code-mixing is necessary for native-like fluency. Many scholars (e.g. Muysken 2004) distinguish code-mixing from code-switching based on whether alternations occur intrasententially (code-mixing) or intersententially (code-switching). Though this binary distinction has been challenged (Tay 1989), the speech patterns demonstrated by Belep speakers show a clear bias towards intrasentential and intraconstituent bilingualism, so I refer to it in this work as code-mixing. In current Belep linguistic practice, French words and constituents are 'inserted' into Belep morphosyntax, creating examples of code-mixing like those shown in (4) - (6).

## (4) jename ta ka mae la na grotte-ixeda.

 jena=me ta=xa mae=la na [grot]i-xeda 1TR.INCL.SUBJ=IRR go.UH=LK sleep=LOC interior cave.LN-DET.UH "We're going to go up and sleep in that cave up there.""Yal-19092011-PA_0039

In (4), the French noun grotte [gбоt] 'cave' is inserted into Belep morphosyntax. The Belep suffix -xeda ' UH ' is attached to it, and at the morpheme boundary a Belep morphophonemic process occurs whereby an epenthetic [i] is inserted to avoid consonant hiatus (see §3.1.1.4). This usage is not a clear instance of borrowing, since grotte violates Belep phonology (§2.8.3). In (5), the French verb gagner [gane] 'to win' is inserted into Belep morphosyntax.

## (5) te gagner li wayap.

te $=$ [gaje]-li wayap
3SG.SUBJ= win.LN=GEN war
'He won the war.'
Yal-20092011-AW3_0088

Here, the verb gagner is marked with the Belep subject proclitic $t e=$ ' 3 SG.SUBJ' and the transitivizing suffix -li 'TR'. When code-mixing with French verbs occurs, the verbs are inserted in their infinitive form (the French third person singular inflected form of gagner 'to win' is gagne $[\operatorname{gan}(\partial)])$.
(6) Et pourtant yo âju to âri yo ô.
[e purtã] ${ }^{2} \mathbf{y}=$ âju=ro $\hat{\text { anri }}=\mathbf{y o}=\hat{\boldsymbol{o}}$
and.LN nonetheless.LN 2 SG.SUBJ= person=when NEG= 2 SG.SUBJ $=$ good
'And nevertheless you do not do what is right.'
Yal-25072010-PT-homily_0064
In (6), the clause-initial linker marking the clause's relationship with the rest of discourse is French et pourtant 'and nonetheless', while the clause itself is in Belep. These instances of code-mixing seem to be motivated primarily by a lack of a good correspondence between the French word used and any existing Belep words, although the discourse function of code-mixing in Belep merits further study.

A disconnect between language attitudes and linguistic practice in terms of various types of language mixing is not uncommon cross-linguistically. In one study of language attitudes among Chilean adolescents in Sweden, "participants indicated that code-switching was an integral part of their language use..., but when asked directly to evaluate code-switching, they overwhelmingly rejected it." (King \& Ganuza 2005:190191). Lawson and Sachdev's (2000) study of Tunisian multilingualism found that Tunisians' attitudes towards code-switching were largely negative-a finding not inconsistent with the other negative attitudes they cite in Norwegian (Haugen 1977), "Morocco (Bentahila 1983), India (Pandit 1986), Hong Kong (Gibbons 1987), and the

United Kingdom (Romaine 1995)" (Lawson \& Sachdev 2000: 1344-1345). In this context, the contrast between Belep attitudes and linguistic practice indicates the multiplicity of identities that Belep speakers negotiate with their choice of language.

### 1.6.3 Endangerment status and revitalization

According to the typology of language death presented in Fishman (1991), Belep is in stage 6 of 8 (where 8 is moribund). This stage is characterized by "the attainment of intergenerational informal oralcy and its demographic concentration and institutional reinforcement" (Fishman 1991:92). Belep is not immediately endangered; it still has enthusiastic, monolingual child speakers, is used for most types of social interaction among all ages, and its importance and usage is upheld by the Belep school, church, chefferie, and mairie. Crucially, Belep is still vital for the young: most children speak no French before attending school (unlike in other communes on the Mainland).

The Belep school today plays a particularly important role in the reinforcement of the Belep language variety. Because most children enter the school system as Belep monolinguals, ${ }^{33}$ all preschool and kindergarten classes are taught in Belep, with gradual phasing in of French throughout elementary school until students have learned enough to succeed in Mainland secondary school. The majority of educators are Belep native speakers, and they have been following a policy of institutionalizing the Belep language at least since 1999, when the Belep Language Committee was founded and developed its first standardized orthography. The work of BOUEDAOU Thérèse, the school principal, is particularly noteworthy; under her direction, schoolchildren take linguistic field trips to

[^18]study particular semantic fields (such as shells or trees), and learn to read in Belep before they develop French literacy.

However, as Fishman argues, "The family (and even the immediate community) may not be enough for RLS [reversing language shift; that is, language revitalization] to be attained, particularly where outside pressures are both great and hostile" (Fishman 1991: 94). These outside pressures may increase in the coming years as Belep becomes more connected to the rest of the world. Most younger speakers lack the rich cultural vocabulary of the elders, a situation that may deteriorate as traditional folkways are lost. The limited number of economic activities on Belep, combined with the rapidly increasing population, is already contributing to widespread dissatisfaction with life in Belep. These factors may contribute to the decline of the language in the near future. "[T]he number of speakers [of Kanak languages] might well be expected to decline in future years, even as the ethnic population grows" (Gordon and Maddieson 2004:296297).

The persistence of Kanak languages has occurred largely in spite of colonial efforts to extinguish them. Usage of Kanak languages in Catholic missionary schoolsthe only schools available for most Kanaks-was forbidden in 1863 by decree of the governor Guillain, and writing in Kanak languages was severely punished until 1970. Elderly Belep speakers describe their school experiences as exceedingly severe, and demonstrate shame towards their largely self-taught level of Belep literacy. Although institutional linguistic prejudice has gradually been withdrawn since 1970 (Moyse-Faurie 2003a), this process is by no means complete. The Nouméa Accords of 1998, which set out the plan for New Caledonian independence in 2013 or 2018, state that "The Kanak
languages, together with French, are languages of education and culture in New Caledonia. Their place in school curricula and in the media should therefore be increased" (Australasian Legal Information Institute 2002). However, even today some French secondary school officials in Nouméa view Kanak languages as unworthy of study (V. Fillol, p.c., 2009).

Since 2006, Kanak languages have been taught in nursery schools while bilingual instructors are trained for the higher grades. The Academy of Kanak Languages (ALK), whose goal is "the preservation of the cultural identity of linguistic communities" and to inform people about "the importance of preserving and using vernacular languages", was created in 2007 (Anonymous 2008, September 10). Weniko Ihage, the director of the ALK, personally gave his permission and approval to my project, and Belep had its first official liaison with the ALK in 2011 when BOIGUIVIE Scholastique, the academician in charge of the ALK's Hoot ma Waap branch, visited Belep.

### 1.7 Methodology

The data collected for this grammar were obtained over the course of three trips to New Caledonia from 2009 to 2011, totaling about seven months in Belep and two months in Nouméa, the capital. I also spent roughly a week each in Koumac, Poum, and Balade.

Belep is fairly remote and travel there is unpredictable. After flying into Nouméa, one must fly to Koumac, and then either take a small propeller plane or a boat to Belep. Flights are scheduled two days a week, but they can be cancelled due to bad weather; a cargo barge and tourist catamaran also make weekly trips, but these are frequently cancelled for long periods if the boat needs repair. Upon reaching Belep, I contacted my
host family or the mairie so that they could arrange for someone with a car to transport me to my lodgings.

I spent nearly all of my time in Belep in the village of Waala, with short one- or two-day trips to the plantations in Bweo, Âjeeni, Pairoome, and Paave. While Waala has running water, electricity, cellular phone service, and internet access at the mairie and the clinic, plantation sites often do not have any of these. About half the time I spent in Belep was in a guest house constructed for Westerners, while the other half was spent in a case, a Kanak hut made of coconut leaves. As much as possible, I tried to integrate myself into the community, so that my increased understanding of the culture and the language would reinforce each other. I lived with two 'adoptive' families, eating meals with them when I could and attending social and cultural events such as church, bingo, weddings and funerals.

Early in my field work, my major challenge was in finding Belema speakers who would agree to meet me and answer my questions. Though most of my contacts were pleased that I was doing this work, they did not have much free time to meet with memost had jobs and families, as well as social responsibilities. Eventually, I assembled a large enough number of consultants that I could cycle through them, not overburdening anyone in particular, and tailoring tasks to consultants with particular skills. I achieved conversational fluency by the beginning of my third field trip, and was able to gather much more data from listening to conversations around me and asking questions in Belep.

My choice of consultants was governed almost entirely by their availability; I also privileged consultants suggested by the Belep Language Committee. My principal
consultants were TEANYOUEN Philippe, the church catechist; GUELEME Yasmine, my neighbor; POITTHILI Albert, an adjunct at the mairie; and YARIK Darine, a Beleplanguage instruction kindergarten teacher. I also benefited greatly from the insights of BOUEDAOU Théresè, the school principal, and DAYE Alice and MOILOU Ignacia, my two host mothers. Most of the recorded texts from which examples throughout this work are drawn were shared with me by GUELEME Benjamin and Marie-Clothilde, an elderly couple who spend most of their time in Pott; and WAHOULO Amabili, the grand-chef. More than twenty other Belema met with me once or twice and allowed me to record them.

The theoretical approach espoused by this grammar is largely functionaltypological (Shopen 2007, etc.), and phonetic and phonological analyses are enhanced by the use of Praat (Boersma \& Weenik 2007). Explanations for linguistic phenomena are sought in common cross-linguistic patterns of human interaction and cognition, and when possible are placed in a Belep historical and cultural context. In this approach, language is viewed as one interconnected part of a complex web of human social interaction, and instantiations of a particular linguistic phenomenon, recorded in natural discourse, are considered to be evidence for an analysis. Belep is also frequently compared with, when possible, Balade Nyelâyu and Nêlêmwa-closely related languages that are also geographically close-and other languages in the Oceanic family.

Most examples in this grammar consist of four lines. The top line is written in bold italics in the Belep orthography (§2.5), with rules developed in conjunction with the Belep Language Committee. The second line is written in bold using the romanization system developed by the Committee, but with a more phonetic transcription (e.g. words
are shown as uttered in incomplete phase; see §2.4.2) and morpheme breaks indicated. Suffixes (§3.1.2.5) are marked with '-’; clitics (§3.1.2.6) are marked with ' $=$ '; there is no orthographic space between an enclitic and its host, while an orthographic space follows all proclitics (indicating that they have some degree of phonological independence from their host). In a few cases, an IPA transcription in the second line is necessary; IPA transcriptions are surrounded by brackets []. The third line contains English glosses; see the morpheme index in Appendix A. The fourth line contains a free translation into English.

Examples in this grammar come from a variety of sources. Whenever possible, they are drawn from a recorded text—often traditional legends and personal narratives, but also conversations, games, songs, sermons, procedural texts, and public speeches. Each example drawn from natural discourse is marked with a unique marker indicating the text it was drawn from, the speaker, and a time-code so that the reader may listen to the example (see Appendix B for these codes and a description of each text). Examples are also drawn from elicited translations, grammaticality judgments, and wordlists; these are used as little as possible, and are marked with the date and the speaker. Speakers are identified by their initials throughout the text (see Appendix C).

Most recordings were made with an Edirol R-09, recording at $44.1 \mathrm{KHz}, 16$-bit PCM wav format. A few recordings were conducted with a PC using Audacity ${ }^{34}$ after the Edirol's microphone jack broke. Most recordings used Audio-Technica AT831b lavalier microphones. Some data also were video recorded using a Panasonic PV-GS320 Digital Video Camera. Recordings were transcribed, time-aligned, and glossed using primarily

[^19]Transcriber, ${ }^{35}$ Toolbox, ${ }^{36}$ and ELAN, ${ }^{37}$ and some file conversions used Linguistic Software Converters. ${ }^{38}$ All of this software is freely downloadable, non-proprietary, and open-source.

I have tried wherever possible to make my corpus and collected data available to the Belema and other Kanaks who wish to benefit from them. I have left copies of my electronic dictionary, scans of Dubois's (1975a-f) and Neyret's (1974a-c) manuscripts, and my recorded corpus with several consultants in Belep who own computers. Copies of my recordings have also been deposited in Nouméa with the Tjibaou Cultural Center and the Académie des langues kanak. I also have plans to archive my data in the CRDO archive administered by CNRS, which is a member of the Open Language Archives Community (OLAC) (Bird \& Simons 2003). This archive contains data from several other New Caledonian languages and allows recordings and data to be viewed online. Copies of this grammar (translated into French) and DVD corpus will be distributed to Belep community members and placed in major libraries throughout New Caledonia.

This grammar is composed of a total of seven chapters. Chapter 2 provides a description of Belep phonology and phonetics. Chapter 3 focuses on morphology. In chapter 4, the word class of nouns and nominal morphology is discussed, while chapter 5 covers verbs and their constituent morphology. Chapter 6 describes basic word order, grammatical relations, and clause structure. Finally, in Chapter 7, speakers' methods of combining clauses are discussed. A sample interlinearized text is provided in Appendix E.

[^20]
## Chapter 2 <br> Phonetics and phonology

### 2.0 Introduction

In this chapter, I describe the Belep sound system. In comparison with other Northern New Caledonian languages, Belep has a fairly small phonemic inventory. This is largely due to the lack of aspiration contrasts for any consonant-an important feature of other Northern languages. ${ }^{39}$ Rather than possessing a phonemic vowel length distinction and diphthongs, Belep treats all sequences of vowels as heterosyllabic instances of hiatus. ${ }^{40}$ The segmental inventory of Belep, like that of other languages of Northern New Caledonia (Ozanne-Rivierre et al. 1998, Bril 2000) is characterized by a high degree of phonetic and phonemic nasality in both consonants and vowels. This is a distinguishing characteristic of the languages of New Caledonia as a whole that sets them apart from the rest of the Austronesian family (Gordon \& Maddieson 2004).

A number of interesting morphophonemic processes occur in Belep, including the obligatory lenition of voiceless stops in word-medial position and an alternation between

[^21]'complete' (final) and 'incomplete' (nonfinal) phonetic forms of words. ${ }^{41}$ To both native speakers of Belep and speakers of surrounding languages, Belep has a unique and characteristic intonation pattern described as 'songlike'. This intonation pattern is largely the result of the complicated interaction between stress correlates (vowel length, intensity, and pitch). Belep has a prosodic system of fixed stress on the penultimate syllable (with some exceptions), while the final syllable contains the pitch peak.

I discuss the phonemic inventory of Belep in §2.1 and argue for the phonemic status of various sets of phonemes in §2.2. In §2.3 I describe Belep phonemes’ acoustic phonetic realizations and discuss patterns of allophony in Belep. In $\S 2.4$ the major morphophonemic processes are described, and $\S 2.5$ lists the set of correspondences between Belep phones and the orthographic symbols used to write them throughout the rest of this work. Phonotactics (syllable structure) and prosody (stress assignment) are covered in $\S 2.6$ and $\S 2.7$, respectively, while $\S 2.8$ contains a discussion of borrowings and other atypical phonological elements in Belep. All words cited in §2.1-§2.4 are given in phonemic transcription using the International Phonetic Alphabet (IPA); in some cases, slash brackets // are added to clarify that a transcription is phonemic. In cases where a phonetic transcription is also provided, square brackets [] are used. The orthographic conventions described in $\S 2.5$ are used elsewhere throughout this work.

### 2.1 Phonemic inventory

Belep has 28 phonemes, including 18 consonants (Table 3) and 10 vowels (Table 4). Table 3 shows the Belep consonant phonemes. In places of articulation where there is a voicing contrast, voiceless consonants are shown in the left column, while prenasalized

[^22]consonants are shown in the right column. Minimal pairs illustrating the phonemic contrasts between the consonants are presented in §2.1.1.

Table 3: Consonant inventory

|  | Labiovelar |  | Bilabial |  | Alveolar |  | Palatal |  | Velar |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plosive | $\mathrm{p}^{\mathrm{w}}$ |  | ${ }^{\mathrm{m}} \mathrm{b}^{\mathrm{w}}$ | p | ${ }^{\mathrm{m}} \mathrm{b}$ | t | ${ }^{\mathrm{n}} \mathrm{d}$ | c | ${ }^{\mathrm{n}} \mathrm{J}$ |  |
| k | k | ${ }^{\mathrm{n}} \mathrm{g}$ |  |  |  |  |  |  |  |  |
| Nasal | $\mathrm{m}^{\mathrm{w}}$ |  | m |  | n |  | n |  | y |  |
| Approximant | w |  |  | l |  | j |  |  |  |  |

Table 4 shows the Belep vowel phonemes. Section §2.1.2 contains examples of minimal pairs which demonstrate the contrasts between the vowels.

Table 4: Vowel inventory
ORAL
NASAL

|  | Front | Central | Back | Front | Central | Back |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| High | $\mathrm{i}(\mathrm{y}){ }^{42}$ |  | u | $\tilde{1}$ |  | $\tilde{\mathrm{u}}$ |
| Mid | e |  | o | $\tilde{\mathrm{e}}$ |  | $\tilde{\mathrm{o}}$ |
| Low |  | a |  |  | $\tilde{\mathrm{a}}$ |  |

### 2.1.1 Consonants

The consonants of Belep are divided into voiceless stops, prenasalized stops, nasal stops, and approximants at five places of articulation-labiovelar, bilabial, alveolar, palatal, and velar. All consonants may appear syllable-initially (see $\S 2.6$ for more on the syllable in Belep), although words beginning with $/ 1 /, / \mathfrak{n} /$ and $/ \mathfrak{y} /$ are unusual. A reduced consonant inventory (which excludes the prenasalized stops and approximants) may occur syllable-finally. Consonant clusters do not occur. Neither labiovelar (§2.2.1.1) nor prenasalized (§2.2.1.3) stops are considered to be clusters.

With only 18 phonemic consonants, Belep has a dramatically smaller consonant inventory than most languages in its subgroup, the Far North languages of New Caledonia (see §1.4). Other Far North languages contain nearly twice as many

[^23]consonants: there are 36 in Nêlêmwa (Bril 2002), 32 in Balade Nyelâyu (Ozanne-Rivierre et al. 1998), and 37 in Yuanga (Schooling 1992:100). Even in less-closely related Northern subgroup languages, phoneme inventories are comparably large, as in Pije (37 consonants), Fwai (26 consonants), Nemi (43 consonants), Jawe (35 consonants) (Haudricourt \& Ozanne-Rivierre 1982); and Bwatoo, which has 38 consonants (Rivierre \& Ehrhart 2006). The reason for this discrepancy is that most Northern languages contain two series each of voiceless stops, approximants, and nasals, which are classified as either 'aspirated' and 'unaspirated'. No comparable aspiration contrast exists in Belep (see §2.2.1.2). In consonant inventory size, Belep is most similar to Paicî, a Northern language which has 17 consonants and also lacks aspiration contrasts (Gordon \& Maddieson 2004).

The examples that follow illustrate minimal or near-minimal pairs for the Belep labial (§2.1.1.1), alveolar (§2.1.1.2), palatal (§2.1.1.3), velar (§2.1.1.4), nasal (§2.1.1.5), and approximant (§2.1.1.6) consonants. True minimal pairs are somewhat rare in Belep; this may be attributable to language loss (see §1.6.3). ${ }^{43}$

### 2.1.1.1 Labial consonants

The labial consonants in Belep include labiovelars ${ }^{44} / \mathrm{p}^{\mathrm{w}} /, \mathrm{m}^{\mathrm{m}} \mathrm{b}^{\mathrm{w}} /$, and $/ \mathrm{m}^{\mathrm{w}} /$; bilabials $/ \mathrm{p} /, /^{\mathrm{m}} \mathrm{b} /$, and $/ \mathrm{m} /$, and approximant $/ \mathrm{w} /$. These phonemes are contrastive in word-initial position before a non-back vowel, as shown in (1). Before back vowels and in wordmedial environments, some of these contrasts are neutralized (see $\S 2.2 .1 .5$ ).

[^24](1)

| $p^{\text {wa }}$ | 'hole' |
| :---: | :---: |
| ${ }^{\text {m }}{ }^{\text {w }}$ a- | 'head' |
| $\mathrm{m}^{\mathrm{w}} \mathrm{a}$ | 'house' |
| pa | 'to take' |
| ${ }^{\text {m}} \mathrm{ba}$ | 'to kiss' |
| ma | 'LK4' |
| wa | 'grandparent' |

Sets of contrasting minimal or near-minimal pairs for the labial consonants are shown in (2) - (6). The examples in (2) show the contrasts between the labiovelar stops $/ \mathrm{p}^{\mathrm{w}} / \mathrm{I}^{\mathrm{m}} \mathrm{b}^{\mathrm{w}} /$, and $/ \mathrm{m}^{\mathrm{w}} /$.
(2) $p^{w}$

| $\mathrm{p}^{\mathrm{w}}$ a | 'hole' | ${ }^{\text {m }}{ }^{\text {w }}{ }^{\text {a }}$ - | 'head' | $\mathrm{m}^{\mathrm{w}} \mathrm{a}$ | 'house' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{p}^{\mathrm{w}} \mathrm{ac}$ | 'habitation' | ${ }^{\mathrm{m}} \mathrm{b}^{\mathrm{w}}$ ac | 'dowry' | $\mathrm{m}^{\text {waak }}$ | 'rabbitfish' |
| $p^{w} a^{n}{ }^{\text {gi- }}$ | 'to tense' | ${ }^{m} \mathrm{~b}^{w} \mathrm{a}^{\text {¹ }}$ ge- | 'to return' | $\mathrm{m}^{\text {w }}{ }^{\text {n }}$ ga- | 'bend' |
| $p^{\text {wala }}$ | 'to steer' | ${ }^{\text {m }}{ }^{\text {wala- }}$ | 'head' | $\mathrm{m}^{\text {wana- }}$ | 'house' |
| $p^{\text {walu }}$ | 'to be heavy' | - |  | $\mathrm{m}^{\text {walu }}$ | 'Moilou' ${ }^{45}$ |
| $p^{\text {wãn }}$ | 'to push' | ${ }^{m} \mathrm{~b}^{\mathrm{w}}$ an | 'night' | $\mathrm{m}^{\text {wan }}$ | 'Mwan' ${ }^{46}$ |
| $\mathrm{p}^{\mathrm{w}} \mathrm{ec}$ | 'to be born' | ${ }^{\mathrm{m}} \mathrm{b}^{\mathrm{w}} \mathrm{e}$ - | 'top' | $\mathrm{m}^{\text {w }}$ ek | 'to be twisted |
| $\mathrm{p}^{\mathrm{w}} \mathrm{i}$ | 'net' | ${ }^{\text {m }}{ }^{\text {w }}$ i | 'to be blind' | $\mathrm{m}^{\mathrm{w}}{ }^{\text {n }}{ }^{\text {a }}$ | 'thing' |

The examples in (3) show the contrasts between the bilabial stops $/ \mathrm{p} /, /^{\mathrm{m}} \mathrm{b} /$, and $/ \mathrm{m} /$.

| pa | 'to take' | ${ }^{\mathrm{m}}$ ba | 'to kiss' | ma | 'LK4' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| pandaan | 'to fry' | - |  | $\mathrm{ma}^{\text {n }}$ daan | 'weather' |
| pe | 'stingray' | ${ }^{\mathrm{m}}$ be | 'worm' | me | 'IRR' |
| pia- | 'nail' | - |  | mia | 'to be ripe' |
| $\mathrm{pi} \mathrm{i}^{\mathrm{I}} \mathrm{gi}$ | 'to be stuck' | ${ }^{\mathrm{m}} \mathrm{bi}^{1} \mathrm{l}^{\text {gi- }}$ | 'to screw' | $\mathrm{mi}^{\text {h }} \mathrm{gi}-$ | 'to hold' |
| piin | 'thread' | ${ }^{\text {mbiin }}$ | 'to be skinny' | - |  |

The examples in (4) show minimal or near-minimal pairs for $/ \mathrm{p} w /, / \mathrm{p} /$, and $/ \mathrm{w} /$.

| $\mathrm{p}^{\text {wa }}$ | 'hole' | pa | 'to take' | wa | 'grandparent' |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathrm{p}^{\text {wac }}$ | 'habitation' | paac | 'war' | wac | 'to be dishonorable' |
| $\mathrm{p}^{\text {walu }}$ | 'to be heavy' | palu | 'to be miserly' | wala | 'Waala'47 |
| $\mathrm{p}^{\text {wan }}$ an | 'bay' | pan | 'to go.TV' | wan | 'sea turtle' |
| $\mathrm{p}^{\text {wec }}$ | 'to be born' | pe | 'ray' | we | 'water' |
| $\mathrm{p}^{\text {winit }}$ | 'to be smallest' | pinau | 'watermelon' | wimawo | 'ironwood' |

[^25]The contrast between $/{ }^{\mathrm{m}} \mathrm{b}^{\mathrm{w}} /$ and $/{ }^{\mathrm{m}} \mathrm{b}$ / in word-initial and word-medial position is demonstrated in the examples in (5).

| ${ }^{m}{ }^{\text {w }}$ a- | 'head' | ${ }^{\text {m }}$ ba | 'to kiss' |
| :---: | :---: | :---: | :---: |
| ${ }^{m} b^{w} a^{n} \mathrm{ge}$ - | 'to return' | ${ }^{\text {m }}$ ba ${ }^{\text {n }}$ ge- | 'to rub' |
| ${ }^{m} \mathrm{~b}^{\mathrm{w}}$ e- | 'top' | ${ }^{\text {mbe }}$ | worm' |
| ${ }^{\text {m }} \mathrm{b}^{\text {wi }}$ | 'to be blind' | ${ }^{\text {mbi }}$ | channel' |
| $\tilde{a}^{m} b^{w}{ }^{\text {a }}$ | 'to raise' | $\tilde{a}^{\text {m }} \mathrm{ba}$ - | 'plate' |
| $\tilde{o}^{\text {m }} \mathrm{b}^{\text {wac }}$ | 'to watch' | $\tilde{o}^{\text {m }}$ ba- | 'scale' |

The examples in (6) show minimal or near-minimal pairs for $/ \mathrm{m}^{\mathrm{w}} /$ and $/ \mathrm{m} /$ in word-initial and word-medial position.

| $\mathrm{m}^{\mathrm{w}} \mathrm{a}$ | 'house' | ma | 'LK4' |
| :---: | :---: | :---: | :---: |
| $\mathrm{m}^{\text {w }} \mathrm{a}^{\mathrm{n}} \mathrm{ga}$ - | 'bend' | ma ${ }^{\text {y }} \mathrm{gao}$ | 'air' |
| $\mathrm{m}^{\mathrm{w}} \mathrm{ek}$ | 'to be twisted' | meek | 'mango.LN' |
| $\mathrm{m}^{\text {w }}{ }^{\mathrm{n}} \mathrm{g} \mathrm{g}$ | 'to play' | $\mathrm{mi}^{\text {h }} \mathrm{gi}-$ | 'to touch' |
| $\mathrm{m}^{\mathrm{w}} \mathrm{i}^{\mathrm{n}} \mathrm{J}^{\text {a }}$ | 'thing' | $\mathrm{mi}^{\mathrm{n}} \mathrm{a}-$ | 'to pinch' |
| ãm ${ }^{\text {wa }}$ - | 'gesture' | ãma= | 'DYAD' |
| cẽm ${ }^{\text {e }}$ - | 'to gut' | cemae | 'fatigue' |
| $\operatorname{tam}^{\text {w }}$ a | 'woman' | ta-ma | 'woman-AC' |

Note that, unlike in Nêlêmwa (Bril 2000) and Balade Nyelâyu (Ozanne-Rivierre et al. 1998), Belep labiovelars also contrast with bilabials in syllable-final position. The contrast between $/ \mathrm{p}^{\mathrm{w}} /$ and $/ \mathrm{p} /$ syllable-finally is illustrated in (7). The contrast between syllable-final $/ \mathrm{m}^{\mathrm{w}} /$ and $/ \mathrm{m} /$ is shown in (8). Note that approximant $/ \mathrm{w} /$ and prenasalized stops $/{ }^{m} b^{w} /$ and $/{ }^{m} b /$ do not occur syllable-finally.
(7) ãp ${ }^{w}$ 'to laugh' nap 'sail' $n{ }^{m} b^{\text {ww }}{ }^{2}{ }^{w}$ 'to provoke' wap 'low tide' ndep ${ }^{w}$ 'deck' cep 'to build boats'
(8) ijam 'tomorrow' jam ${ }^{w}$ 'to marry' nam 'to disappear' na-mw 'feces-2SG.POSS' „fem 'mangrove crab' cem ${ }^{\text {w }}$ 'to sprout'

### 2.1.1.2 Alveolar consonants

The alveolar consonants in Belep include stops $/ \mathrm{t} /, / \mathrm{n} \mathrm{d} /$, and $/ \mathrm{n} /$, as well as approximant $/ 1 /$. These phonemes are contrastive in word-initial position, as shown in (9).
(9) ta 'to go.UH'
${ }^{\text {nda }}$ 'blood'
na- 'interior'
la '3PL.INDEP'

Sets of contrasting minimal or near-minimal pairs for the alveolar stop consonants are shown in (10) - (12). The examples in (10) show contrasts between $/ \mathrm{t} /$, $\mathrm{n} \mathrm{d} /$, and $/ \mathrm{n} / \mathrm{in}$ word-initial position.

| taac | 'bowl.LN' | ndaac | 'farm' | nac | 'to be surrised' |
| :--- | :--- | :--- | :--- | :--- | :--- |
| tao | 'to hurt' | ndao- | 'leaf' | nao | 'to sing' |
| taat | 'to flee' | ndaat | 'skirt' | naat | 'oven' |
| te- | 'breast' | nde | 'fork' | - |  |
| tep | 'to click' | ndepw | 'deck' | nep | 'dream' |
| ti | 'who?' | ndi | 'black bean' ${ }^{\text {nd }}$ | nic | 'shark' |
| - |  | ndiju | 'coins' | niju | 'thunder' |
| to | 'to call' | ndo | 'spear' | no | 'fish' |
| tu | 'to go.DH' | ndu | 'bone' | nu | 'coconut tree' |

The examples in (11) show contrasts between syllable-initial $/ \mathrm{t} /, / \mathrm{n} \mathrm{d} /$, and $/ \mathrm{n} /$ in wordmedial position.

| ata | derside’ | $\tilde{a ̃}^{\text {n }}$ da | 'alone' | ãna- | 'contents' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| pata | 'to tell' | $\mathrm{pa}^{\text {n }}$ da | 'type of seaweed' | ${ }^{\text {7 }}$ gana- | 'color' |
| - | 'to escape' | ${ }^{\text {nd }}$ dande | 'chaste tree' | tãne | 'spearhead' |
| ati- | 'to congratulate' | - |  | mani | 'bird' |
| ati- | 'to attach' | wãndi- | 'to spank' | - |  |
| o- | 'husband' | $\mathrm{ma}^{\text {n }}$ do | 'emperor bream' | ãno | 'child' |
| utu | 'wind' | $u^{\mathrm{n}} \mathrm{du}$ | 'to lower' | kũnu | 'to be amputated' |

The contrast between $/ \mathrm{t} /$ and $/ \mathrm{n} /$ in syllable-final position is shown in (12). Neither the prenasalized stop $/ \mathrm{n} \mathrm{d} /$ nor the approximant $/ \mathrm{l} /$ occurs syllable-finally.

[^26]| ${ }^{\text {n }}$ dat | 'coral' | ${ }^{\text {n }}$ dan | 'sky' |
| :---: | :---: | :---: | :---: |
| $p^{\text {wat }}$ | 'red snapper'49 | $p^{w a} n$ | 'to push' |
| wat | 'type of sardine, ${ }^{50}$ | wan | 'sea turtle' |
| jaat | 'to disembark' | jaan | 'spangled emperor, ${ }^{51}$ |
| jet | 'pot' | jen | 'breadfruit' ${ }^{52}$ |
| ot | 'to spill' | õn | 'sand' |
| koot | 'to be soft' | koon | 'to be unable' |
| tuut | 'to fart' | tũũn | 'to rub' |

The lateral approximant $/ 1 /$ is very uncommon in word-initial position. Only the Belep words listed in (13) have been identified as beginning with $/ 1 /$, and, as the glosses show, two are borrowings and three are pronominal.

| lañ dan | 'type of fish' |
| :--- | :--- |
| lolo | 'oarlock' |
| layen | 'eczema' |
| loloi | 'bougna.LN', ${ }^{53}$ |
| lakau | 'papaya.LN' |
| le | '3DU.INDEP' |
| len | '3pa.INDEP' |
| la | '3PL.INDEP' |

The phoneme /l/ is much more common in word-medial position; this is a characteristic shared by the Northern language Paicî (Gordon \& Maddieson 2004). The examples in (14) show the contrast between $/ \mathrm{t} /$ and $/ 1 /$.

[^27]| ata- | 'underside' | ala- <br> mbalap | 'container' |
| :--- | :--- | :--- | :--- |
| mbatap | 'to exceed' | 'to move' |  |
| keta- | 'trace' | kela | 'to slide' |
| ota | 'to rain' | ola | 'shellfish' |
| pota | 'to massage' | pola | 'to pluck' |
| tata | 'to scoop' | tala- | 'bed' |
| ete | 'to be elsewhere' | ele | 'knife' |
| yate- | 'to disembark' | yale | 'kudzu' |
| poto | 'to be white' | polo- | 'to interrupt' |
| uto | 'to be bald' | ulo | 'to be red' |
| tutu- | 'to hide' | tulu | 'twine' |

See §2.2.1.5 for information on the contrast between $/ 1 /$ and $/ n /$.

### 2.1.1.3 Palatal consonants

The palatal consonants in Belep include stops $/ \mathrm{c} /,^{\beta} /{ }^{\beta} /$, and $/ \mathrm{n} /$, as well as approximant $/ \mathrm{j} /$. These phonemes are contrastive in word-initial position, as shown in (15). In word-medial environments, some of these contrasts are neutralized (see §2.2.1.5).

| (15) | ca | 'to be how?' |
| :--- | :--- | :--- |
|  | $\mathrm{\jmath} \mathrm{fa}$ | '1PL.INCL.INDEP' |
|  | na- | 'mother' |
|  | ja | 'tuber,' ${ }^{54}$ |

Sets of contrasting minimal or near-minimal pairs for the alveolar stop consonants are shown in (16) - (18). The examples in (16) show contrasts between word-initial /c/, $\mathrm{A}_{\mathcal{J}} /$, and $/ \mathrm{n} /$.

| caay | 'to steal' | ${ }^{\text {jay }}$ | 'to measure' | na-n | 'mother-1sG.POSS' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ci | 'to sit' | ${ }^{\text {f }}$ i | '1DU.INCL.INDEP' | ni- | 'shape' |
| co | 'whale' | ${ }_{\text {¢ }}$ | 'chicken' | no- | 'tentacle' |
| cu- | 'to overwhelm' | ${ }^{\text {Jua }}$ | 'very' | nu | 'anchor' |

The examples in (17) show contrasts between word-initial $/ \mathrm{c} / \mathrm{and} / \mathrm{j} /$.

[^28](17)

| caan | 'to steal' | jaan | 'to search' |
| :--- | :--- | :--- | :--- |
| cẽẽk | 'swamp harrier' | jeek | 'plant, tree' |
| cen | 'salt.LN' | jen | ''breadfruit' |
| cewa- | 'relationship' | yewa- | 'season' |
| co | 'whale' | jo | '2SG.INDEP' |
| cu- | 'to stand' | ju- | 'to dig' |
| cuuc | 'councilman' | juuc | 'mangrove crab' |

The contrast between syllable-final $/ \mathrm{c} /$ and $/ \mathrm{n} /$ is illustrated in (18). Note that $/^{\mathrm{I}} /$ and $/ \mathrm{j} /$ do not occur syllable-finally.

| ãc | 'man' |
| :--- | :--- |
| caac | 'immature (shellfish)' |
| ndaac | 'farm' |
| keec | 'to reproduce' |
| kic | 'liver' |
| poc | 'Poc' ${ }^{\text {n }}$ |
| ${ }^{\text {m }}$ buc | 'pawn' |


| ãn | 'rudder' |
| :--- | :--- |
| cãn | 'to seize' |
| n'dan | 'white-bellied goshawk, ${ }^{55}$ |
| 'geen | 'to regret' |
| kin | 'type of bird' |
| pon | 'beam' |
| mbun | 'great crested tern, ${ }^{57}$ |

### 2.1.1.4 Velar consonants

The velar consonants in Belep include stops $/ \mathrm{k} /, /^{\mathrm{g}} \mathrm{g} /$, and $/ \mathrm{y} /$. These phonemes are contrastive in word-initial position, as shown in (19).

| ka- | 'leg, foot' |
| :--- | :--- |
| ${ }^{\text {nga- }}$ | 'sympathy' |
| $\mathrm{ga}^{58}$ | 'to creak' |

Sets of contrasting minimal or near-minimal pairs for the velar stop consonants are shown in (20) and (21). The examples in (20) show contrasts between $/ \mathrm{k} /,{ }^{/ 7} \mathrm{~g} /$, and $/ \mathrm{y} /$ in word-initial and word-medial position.

| $\mathrm{ka}^{\mathrm{m}}$ beat | 'jellyfish' | ${ }^{\mathrm{y}} \mathrm{ga}{ }^{\mathrm{n}} \mathrm{ga}$ | 'ghost' | ya ${ }^{\text {y }}$ gato | 'spider conch' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| k | 'radius' | ${ }^{\text {º }}$ gao | 'bamboo' |  |  |
| cake | 'to be ashame | ca ${ }^{\text { }}$ ge- | to steal.TR' | caye | to sw |

The syllable-final contrast between $/ \mathrm{k} /$ and $/ \mathrm{y} /$ is shown in (21). Prenasalized $/ \mathrm{p} \mathrm{g} /$ does not occur syllable-finally.

[^29]

### 2.1.1.5 Nasal consonants

The nasal consonants in Belep include $/ \mathrm{m}^{\mathrm{w}} /, / \mathrm{m} /, / \mathrm{n} /, / \mathrm{n} /$ and $/ \mathrm{n} /$. These phonemes are contrastive in syllable-initial position (word-initially and word-medially) as shown in (22), and in syllable-final position (23).
(22) $\mathrm{m}^{\mathrm{w} a}$ 'house'
ma 'LK4'
na- 'interior'
na- 'mother'
ya 'to creak'
(23) ${ }^{\text {ã-mw }}$ 'cutting-2SG.POSS'
ãm 'plate'
ã-n 'cutting-3SG.POSS'
ãn 'rudder'
ã-y 'cutting-1SG.POSS'
Sets of contrasting minimal or near-minimal pairs for the nasal consonants are shown in (24) and (26). The contrast between $/ \mathrm{m}^{\mathrm{w}} /$ and $/ \mathrm{m} /$ was demonstrated above in §2.1.1.1. The examples in (24) show contrasts between $/ \mathrm{n} /, / \mathrm{n} /$, and $/ \mathrm{n} /$ in word-initial and wordmedial position.

| nia | 'duck' | ni- | 'shape' | - |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| no | 'fish' | no- | 'tentacle' | - |  |
| nu | 'coconut tree' | nu | 'anchor' | - |  |
| canan | 'to be sour' | cãni- | 'to faint' | cane- | 'to change' |
| mani | 'bird' | manina- | 'CL.yam' | mani- | 'to be disgusted' |

[^30]Note that phonemes $/ \mathfrak{y} /$ and $/ \mathfrak{y} /$ are considerably rarer than the other nasal consonants, particularly initially and medially. Only three Belep words beginning with $/ \mathfrak{y} /$ have been identified (25).

| ya $^{\text {¹ }}$ gato | 'spider conch' |
| :--- | :--- |
| ya | 'to creak' |
| yini- | 'to not see' |

The syllable-final contrast between $/ \mathrm{n} /, / \mathrm{n} /$, and $/ \mathrm{y} /$ is shown in (26).

| cen | 'salt.LN' | cãn | 'to seize' | caan | 'to steal' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{\mathrm{n}}$ dan | 'sky' | ${ }^{\text {n }}$ day | 'goshawk' ${ }^{60}$ | ${ }^{\text { }}$ ¢ ${ }^{\text {a }}$ | 'to measure' |
| $p^{\text {wãn }}$ | 'to push' | $\mathrm{m}^{\text {wan }}$ | 'to be bad' | $p^{\text {wa }}$ a | 'bay' |
| paan | 'screwpine' | pããy | 'sow thistle' | tããy | 'to scrape' |
| jãn | 'ciguatera' ${ }^{\text {' }}$ | - |  | jããy | 'to gather' |

Unlike most other Northern languages (Ozanne-Rivierre et al. 1998), Belep does not distinguish between so-called "aspirated" nasals (i.e. voiceless nasals) and plain nasals.

For example, Balade Nyelâyu contrasts $n u$ 'coconut palm' with $n h u$ 'hot', while in Belep the words are homophonous: Belep [nu] is 'coconut palm' or 'hot'.

### 2.1.1.6 Approximants

The Belep approximants are $/ \mathrm{w} /$, $/ \mathrm{j} /$, and $/ \mathrm{l} /$. These phonemes are contrastive in syllable-initial position, as shown in (27). They do not appear in syllable-final position. See §2.1.2.4 for a justification for classifying $/ \mathrm{w} / \mathrm{and} / \mathrm{j} /$ as consonants in Belep.

```
wa 'grandparent'
ja- 'tuber'
la '3PL.INDEP'
```

As noted above in $\S 2.1 .1 .2, / 1 /$ is very rare in word-initial position. The examples in (28) show word-initial contrasts between $/ \mathrm{w} /, \mathrm{j} /$, and $/ \mathrm{l} /$.

[^31]| waan | 'boat' | jaan | 'to search' | - |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| wala | 'Waala',62 | jala | 'to shake' | - |  |
| wẽẽk | 'tobacco' | jeek | 'plant' | lee-k | 'DEM.DU-DET.D.PRX' |
| wo | 'to weave' | jo | '2SG.INDEP' | - |  |

Medial [w], [j], and [l] also contrast with one another as shown in the minimal and nearminimal sets in (29). See §2.2.1.5 for more on the neutralizations which make their phonemic forms impossible to reconstruct.

| (29) | [awaa] | 'mat' | [aja-] | 'CL.twenty' | [ala-] | 'container' |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [tawa] | 'to cut' | [tajamõ] | 'old woman' | [tala-] | 'bed' |
|  | [cawanẽ-] | 'mast' | [caja] | 'dad' | [calac] | 'to brush' |
|  | [kewe-] | 'to chase' | [ceje] | 'to believe' | [keler] | 'coffin' |
|  | [iwi-] | 'to file' | [iji] | 'louse' | [tili-] | 'to knot' |
|  | [pußu ${ }^{\text {n }}{ }^{\text {di] }}$ | 'to be oval' | [ ${ }^{\text {m}}$ buju] | 'sea purslane' | [pulu] | 'to speak' |

Unlike in the other Northern New Caledonian languages, Belep approximants do not contrast in aspiration. For example, Balade Nyelâyu contrasts wan 'turtle' and whan 'species of sugar cane'; yen 'breadfruit' and yhen 'to dig, harvest'; and lhe '3DU.INDEP' with -le '3DU.OBJ' (Ozanne-Rivierre et al. 1998), while in Belep these forms are homophonous.

### 2.1.2 Vowels

Belep has five ${ }^{63}$ oral and five nasal vowels: /i/, /e/, /a/, /o/, /u/ and /ĩ/, /ẽ/, /ã/, /̃o/, $/ \tilde{\mathbf{u}} /$. All of these vowels may occur in open or closed syllables (§2.6). Note that Belep does not have a phonemic distinction in vowel length, unlike Balade Nyelâyu (OzanneRivierre et al. 1998). ${ }^{64}$ Low mid vowels occur most frequently, while high vowels are less common. The vowel inventory of Belep is largely comparable with that of other Far North New Caledonian languages. Nêlêmwa (Bril 2000) has the same ten vowels, plus

[^32]two central vowels $/ \mathfrak{u} /$ and $/ \varnothing /$ which occur in a few words; the same vowel qualities are found in Balade Nyelâyu (Ozanne-Rivierre et al. 1998). Yuanga (Schooling 1992) has ten vowels (five oral and five nasal), plus $/ \varepsilon /$ and $/ \rho /$. Other Northern languages have somewhat different vowel inventories; for example, there are ten oral and seven nasal vowels in Paicî (Gordon \& Maddieson 2004).

The examples in (30) below show minimal and near-minimal pairs for the five oral vowels in Belep. Minimal pairs for the five nasal vowels are shown in (31). See §2.2.2 and §2.3.2 for more information on the phonological and phonetic characteristics of Belep vowels.

| (30) | ti | 'who' | te- | 'breast' | ta | 'to go.UH' | to | 'to call' | tu | 'to go.DH' |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | pi- | 'to cook' | pe | 'ray' | pa | 'to take' | po | 'to lie' | pu- | 'side' |
|  | ci | 'to sit' | ce | 'to settle' | ca | 'to be how?' | co | 'whale' | cu- | 'to stand' |
|  | tic | 'to defecate' | tep | 'to click' | cap | 'type of dance' | top | 'to melt' | tup | 'to dive' |
|  | pi-n | 'cook-DA.NSG' | - |  | pan | 'to go.TV' | pon | 'loach' | pu-n | 'pick-DA.NSG' |
|  | i-t | 'skin- | e-t | hand- | at | 'sun' | ot | '2DU.INDEP' | - |  |
|  | ${ }^{\text {m }}$ biin | 'to be skinny' | ${ }^{m}$ been | 'to be wet' | paan | 'screwpine' | - |  | - |  |
|  | - |  | keec | 'to reproduce' | kaac | 'to be bitter' | koot | 'to be soft' | kuuc | 'few' |
| (31) | $\tilde{1}^{\mathrm{n}} \mathrm{y}^{1}$ | 'ant' | - |  | $\tilde{a}^{\mathrm{n}} \mathrm{J}$ | 'to hunt troca' | - |  | $\tilde{u}^{n}$ Јер | 'sugar cane' |
|  | ĩna | 'to make' | ẽna | 'to know' | ãna- | 'contents' | õni | 'pisonia' | $\tilde{u}^{\mathrm{n}} \mathrm{du}$ | 'to drink' |
|  | tĩni- | 'to burn' | tẽno | 'type of shell' | tãna | 'to hear' | tõnok | 'mucus' | pũnu | 'to lower' |
|  | kĩn | 'woodswallow' | - |  | cãn | 'to seize' | põn | 'hair' | kũj | 'to sweat' |
|  | nawĩ | 'ironwood' | pẽ | 'bread.LN' | ciã | 'flea' | õ | 'to be good' | pũ | 'dropseed' |
|  | kĩ̃t | 'to be loud' | wẽẽk | 'tobacco' | kããk | 'to yell' | kõõk | 'heron' | kũũt | 'to grunt' |

Belep oral and nasal vowels contrast in all positions except for following a prenasalized stop (§2.2.1.3) or a nasal phoneme (a consonant or vowel). In these positions, the contrast between oral and nasal vowels is neutralized (see §2.1.1.5, §2.2.2.3). Some examples of minimal and near-minimal pairs demonstrating the contrast between oral and nasal vowels are shown in (32).

| (32) | $\mathrm{i}^{\mathrm{n}} \mathrm{da}$ - | 'lineage' | kĩ ${ }^{\text {n }}$ da | 'tropical almond' |
| :---: | :---: | :---: | :---: | :---: |
|  | tilie | 'to knot' | tinne ${ }^{65}$ | 'to burn' |
|  | wee-y | 'food-1SG.POSS' | wẽey | 'to organize' |
|  | cen | 'salt.LN' | cẽnee | 'to swallow' |
|  | $p^{w} a y$ | 'bay' | $p^{w a ̃}$ | 'inflorescence of coconut palm' |
|  | apa | '2PL.EXCL.INDEP' | ãpa | 'to fish' |
|  | kon | 'to cough' | kõnat | 'maggot' |
|  | kopa | 'to come out' | kõpak | 'black heron' |
|  | $\mathrm{u}^{\mathrm{n}} \mathrm{du}$ | 'to bend' | $\tilde{u}^{\text {n }}$ du | 'to drink' |
|  | pu- | 'side' | pũ | 'beach dropseed' |

Traditionally, Northern New Caledonian grammars draw a distinction between phonemically long and phonemically short vowels (Ozanne-Rivierre et al. 1998, Bril 2000). In this work, I argue that Belep does not contrast phonemically long and short vowels; sequences of identical vowels are heterosyllabic and behave like sequences of unlike vowels (see §2.2.2.2). All vowel sequences may occur, except for those where an oral vowel follows a nasal vowel.

### 2.2 Description of phonemes

In this section, I describe the phonetic realization of various phonemes in Belep and argue for their phonemic status. Consonants are discussed in §2.2.1 and vowels are discussed in §2.2.2.

[^33]
### 2.2.1 Consonants

In §2.2.1.1, I argue for the phonemic status of labiovelar consonants and provide some acoustic phonetic detail about their realization. In §2.2.1.2, I describe the results of a phonetic study on voice onset time in Belep voiceless stops. I conclude that there is no aspiration contrast for these stops-an unusual characteristic for a Far North language. In §2.2.1.3, I argue for the phonemic status of prenasalized stops and also provide acoustic phonetic evidence for this assertion. In §2.2.1.4, I argue for the phonemic status of approximants $/ \mathrm{w} /$ and $/ \mathrm{j} /$. In $\S 2.2 .1 .5$, I discuss a number of neutralizations which occur in various phonemic environments in Belep.

### 2.2.1.1 Labiovelar consonants

The contrast between labiovelars and bilabial consonants is a common feature of Oceanic languages, including many New Caledonian languages (Lynch 2002). ${ }^{66}$ For example, in Nêlêmwa, initial labiovelars contrast with sequences of vowels, as in bua 'admire' and $b^{w} a$ 'above' (Bril 2000).

In Belep, labiovelar stops $/ \mathrm{p}^{\mathrm{w}} /, /^{\mathrm{m}} \mathrm{b}^{\mathrm{w}} /$, and $/ \mathrm{m}^{\mathrm{w} /} /$ contrast with bilabial stops $/ \mathrm{p} /, /^{\mathrm{m}} \mathrm{b} /$ and $/ \mathrm{m} /$ before non-back vowels $/ \mathrm{i} /$, /e/, and $/ \mathrm{a} /$ in word-initial position (§2.1.1.1) and in a limited number of other environments (see §2.2.1.5). Labiovelars do not occur before /u/ or /o/. It is common for "Oceanic languages [to] vary as to the possible combinations of labiovelars with rounded vowels" (Lynch 2002:311); Lynch cites Lewo and Lau as other languages where labiovelars rarely, if ever, occur before $/ \mathrm{u} /$ and $/ \mathrm{o} /$.

As /w/ is also a phoneme in Belep (§2.1.1.6, §2.2.1.4), one could hypothesize that the Belep labiovelars are, in fact, consonant clusters rather than phonemes. A considerable amount of evidence exists to counter this hypothesis. Labiovelars in Belep

[^34]contrast with sequences of the form BILABIAL STOP $+/ \mathrm{u} /$, as shown in the minimal and near-minimal pairs in (33).

| $p^{\text {waka }}$ | 'to wash' |
| :---: | :---: |
| $p^{\text {w }}$ ec | 'to be born' |
| ${ }^{\text {m}}{ }^{\text {w }}$ a- | 'head' |
| ${ }^{\text {m }}{ }^{\text {wan }}$ an | 'night' |
| $\mathrm{m}^{\mathrm{w}} \mathrm{a}$ | 'house' |
| $t a^{m} b^{w}{ }^{\text {a }}$ | 'to attach' |


| puaka | 'pig' |
| :--- | :--- |
| puet | 'to prepare food' |
| mbua | 'to drown' |
| mbuãn | 'rock' |
| mua- | 'flower' |
| ta ${ }^{\text {m}}$ bua | 'to break' |

If clusters with /w/ as the second element existed, we would expect a variety of consonants to be able to serve as the first element; however, non-labial consonants in Belep cannot be labialized (e.g. there is no ${ }^{*} / \mathrm{n}^{\mathrm{w}} \mathrm{a} /$ or ${ }^{* /{ }^{\mathrm{p}} \mathrm{g}^{\mathrm{w}} \mathrm{a} / \text { ). No other clusters exist in }{ }^{2} \text {. }}$ the language. Finally, there are phonotactic and prosodic differences between sequences of the form LABIOVELAR STOP + VOWEL and sequences of BILABIAL STOP + / $\mathrm{u} /+$ VOWELin particular, while the former is monosyllabic, the latter is disyllabic.

For example, monosyllabic /pwa/ 'hole' contrasts with disyllabic /pua-/ 'side', which is syllabified by speakers as [pu.a]. Spectrograms for these two words are shown in Figure 8 and Figure 9.



Figure 8 shows a representative realization of the labiovelar consonant $/ \mathrm{p}^{\mathrm{w}} /$ occurring in the word $/ \mathrm{p}^{\mathrm{w}} \mathrm{a}$ / 'hole'. The third and fourth formants remain flat through the entire vowel and the pitch curve is flat and roughly parallel to the intensity curve. The total length of the vowel is approximately 210 ms ; the initial portion which has the quality of [ u ] (due to the labialization of the consonant) is extremely short, approximately 17 ms .

By contrast, in the vowel sequence of /pua-/ 'side' (shown in Figure 9), the total length of the vowel sequence is 410 ms (nearly twice as long as the single vowel/a/ in Figure 8). The vowel is divided into two distinct portions, [u] and [a], with changes in all four formants between the two portions. The [u] portion of the vowel is approximately 144 ms , which is much longer than the corresponding [u] portion in Figure 8. As with all disyllabic words in Belep, the first vowel $/ \mathrm{u} /$ carries the intensity peak and the second vowel /a/ carries the pitch peak, forming the characteristic overlapping pitch/intensity curves discussed in §2.7.1.

Figure 9: Consonant + /u/sequence in /pua-/ 'side'


Time (s)
A final piece of evidence for considering Belep labiovelars to be phonemes is that they contrast word-finally with bilabials (§2.1.1.1).

### 2.2.1.2 Voiceless stops

The voiceless stop phonemes in Belep are $/ \mathrm{p}^{\mathrm{w}} /, / \mathrm{p} /$, /t/, /c/, and $/ \mathrm{k} /$. They undergo a considerable amount of allophony based on their position in the phonological word (see §2.3.1.2). According to my measurements of the voice onset time (VOT) of these consonants in word-initial position (based on Cho \& Ladefoged 1999, a cross-linguistic study of VOT), they are unaspirated (see the mean VOT values in Table 5). ${ }^{67}$

Table 5: Mean VOT by place of articulation

| Bilabial | 19 ms |
| :---: | :---: |
| Alveolar | 15 ms |
| Palatal | 39 ms |
| Velar | 29 ms |

A VOT of 29 ms for the Belep velar stop is typical of an unaspirated stop (Cho \& Ladefoged 1999). The bilabial (19 ms) and alveolar ( 15 ms ) stops have shorter VOT than the velar; they are unaspirated as well. Figure 10 shows a comparison of VOT by place of articulation.

Figure 10: Mean VOT by place of articulation


The short alveolar VOT and very long palatal VOT (39 ms) observed for Belep (Figure 10) were also noted in other languages of New Caledonia such as in Iaai (Maddieson \& Anderson 1994) and Ndumbea (Gordon \& Maddieson 1999).

[^35]Belep is unlike other Northern New Caledonian languages in that it does not contrast aspirated and unaspirated voiceless stops in initial position. For example, Ozanne-Rivierre et al. (1998:19) lists minimal pairs such as pe 'ray' vs. phe 'file'; ta 'to go up' vs. tha 'bald'; and con 'to cook in an oven' vs. chon 'to carry on the shoulder' for Balade Nyelâyu. Belep speakers, though they recognize most of these words, do not acknowledge a difference in pronunciation.

In a case study of voice onset time in Belep, I measured two sets of words: those with reflexes of initial $/ \mathrm{p} /$ and those with reflexes of initial $/ \mathrm{p}^{\mathrm{h}} /{ }^{68}$ In this study, one speaker was recorded-a male in his 60s who is high-ranking and respected among the Belema. The speaker read from a wordlist written in the locally developed orthography. ${ }^{69}$ The VOT for each initial stop was measured on a PC using Praat software (Boersma \& Weenink 2010). Boundaries were marked only at zero crossings (Smith 1978). ${ }^{70}$

The software program PASW was used to conduct statistical analyses. A data instances model (Quene and van den Bergh 2004) with a mixed between- and withinsubjects design was used. The between-subjects independent variables were the place of articulation of the stop (bilabial, alveolar, palatal, or velar), the following vowel (either $/ \mathrm{a} /$, /e/, $/ \mathrm{i} /, / \mathrm{o} /$, or $/ \mathrm{u} /$ ), and the reconstructed aspiration class based on dictionary comparison. The within-subjects independent variable was the phonemic environment of

[^36]the stop (whether it was produced in isolation or in a carrier phrase). ${ }^{71}$ The mixed-design ANOVA was conducted on the average across the trials for the corrected VOT. ${ }^{72}$

There was no significant main effect of aspiration class $(F(2,5)=1.2, p=.38)$, as shown in Figure 11 below.

Figure 11: Mean corrected VOT by aspiration class


Figure 11 shows a lack of significant difference in VOT between consonants which are reconstructed as aspirated and those that are reconstructed as unaspirated. In fact, historically unaspirated stops had a longer mean VOT than historically aspirated ones, which is the opposite of what we would expect. These means are given in Table 6 below.

Table 6: Mean corrected VOT by aspiration class

| Historic aspiration class | Mean corrected VOT |
| :--- | :--- |
| aspirated | 0.13 |
| unaspirated | 0.20 |
| unknown | 0.14 |

Table 6 shows that the mean corrected VOT for aspirated stops was .13 , which was not found to be statistically different from the mean corrected VOT for unaspirated stops, .2.

[^37]This indicates that Belep is not representative of the set of Northern languages which do maintain a contrast between aspirated and unaspirated stops.

The most likely explanation for the loss of an aspiration contrast in Belep initial voiceless stops is that it is simply an extreme extension of an existing trend in the Northern languages. Table 7 shows that many Northern languages have already lost their contrast for aspiration in oral stops in one or more places of articulation. ${ }^{73}$

Table 7: Loss of aspiration contrasts in Northern languages

| Language | Notes | Source |
| :--- | :--- | :--- |
| Nêlêmwa- <br> Nixumwak | In Nêlêmwa, aspirated stops <br> became fricatives | Bril (2000) |
| Yuanga | $/ \mathrm{c}^{\mathrm{h}} /$ is rare | Bretteville (1993), Schooling (1992) |
| Nemi | No /ch | Haudricourt \& Ozanne-Rivierre (1982) |
| Pije | No /ch | Haudricourt \& Ozanne-Rivierre (1982) |
| Fwâi | Voiceless stops are rare and <br> only found in borrowed words | Haudricourt \& Ozanne-Rivierre (1982) |
| Jawe | $/ \mathrm{c}^{\mathrm{h}} /$ found only before <br> nasalized vowels | Haudricourt \& Ozanne-Rivierre (1982) |
| Bwatoo, <br> Haeke, <br> Haveke <br> (Voh-Koné)Only $/ \mathrm{t} /$ is a productive <br> aspirated phoneme; very few <br> lexical items use $/ \mathrm{p}^{\mathrm{h}} /, / \mathrm{c}^{\mathrm{h}} /$, or <br> $/ \mathrm{k}^{\mathrm{h}} /$ | Rivierre \& Ehrhart (2006) |  |

In Nêlêmwa-Nixumwak, aspirated stops have been replaced by fricatives in the Poum and Tiabet dialects. In Bwatoo (and other Voh-Koné varieties), only the aspirated alveolar is productive; the other aspirated stops have been replaced by fricatives. In Yuanga, Nemi, Pije, and Jawe, the aspirated palatal is rare or only occurs in limited environments. Belep may simply be an extreme example of this change.

### 2.2.1.3 Prenasalized stops

Cross-linguistically, both phonemic and phonetic evidence is used to justify classifying a nasal-consonant (NC) sequence (Riehl 2008), also called a nasal+stop

[^38]sequence (Ladefoged \& Maddieson 2006), as a prenasalized phoneme. In this work, I analyze Belep NC sequences as phonemically prenasalized stops $/{ }^{\mathrm{m}} \mathrm{b} / \mathrm{w} /, /^{\mathrm{m}} \mathrm{b} /, /^{\mathrm{n}} \mathrm{d} /, /^{\mathrm{n}} \mathrm{J} /$, and $/{ }^{\mathrm{p}} \mathrm{g} /$.

There is considerable phonemic evidence for this assertion. First, plain voiced stops do not occur in Belep independently of the nasal portion. NC sequences occur initially and medially, while coda consonants are not permitted except word-finally (34).

```
/pan/ 'to go.TV'
/panda/ 'type of seaweed'
*/panta/
/pata/ 'to tell'
/nda/ 'what?'
*/nta/
/ta/ 'to go.UH'
```

Belep speakers sometimes produce French voiced stops with prenasalisation (35).
(35) French l'eau béni [lo beni] 'holy water' produced as Belep [ $10{ }^{\mathrm{m}}$ beni]

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No consonant clusters occur in Belep. In fact, when Herbert (1986) argues that there is no need to consider NC sequences in any language as single phonemic segments, he excludes the set of New Caledonian languages with prenasalized stops from this assertion, claiming that these are simply phonemically voiced stops with phonetic prenasalization. ${ }^{74}$ Prenasalized stops have phonemic status in Balade Nyelâyu (OzanneRivierre et al. 1998), Nêlêmwa (Bril 2000), and Paicî (Gordon \& Maddieson 2004), among others. ${ }^{75}$ In this work, I analyze all Belep NC sequences as phonemic prenasalized stops.

[^39]Cross-linguistic phonetic evidence for prenasalization has been somewhat more controversial. Ladefoged \& Maddieson (1996) showed that a language can be classified as either containing NC clusters or prenasalized stops, but not both. Riehl (2008) summarizes three types of phonetic evidence that existing studies use to identify prenasalized stops: the duration of the segment; the degree of nasalization in the preceding vowel; and the duration of the preceding vowel (compensatory lengthening). Her study on Tamambo and Erromangan of Vanuatu, and Pamona and Manado Malay of Indonesia, found that the latter two types of evidence were not good predictors. Only segmental duration in comparison with the duration of nasals-where prenasalized stops are comparable in duration to nasals, while NC clusters are longer than nasals-was found to be a significant distinguishing factor (Riehl 2008). However, Maddieson (1989) found that prenasalized stops in Fijian have a similar duration to non-nasal segments in that language, namely, /t/, /k/, and /l/.

In the rest of this section, I present an acoustic phonetic analysis of Belep NC sequences. To determine the status of these sequences, I compared the duration of prenasalized stops with that of both voiceless stops (similar to Maddieson 1989) and nasal segments (commensurate with Riehl 2008). I found that Belep NC sequences were shorter in duration than both voiceless stops and nasal consonants-a finding which provides further evidence for the analysis of Belep NC sequences as prenasalized phonemes rather than consonant clusters.

[^40]Figure 12 shows a graph of the duration of Belep NC sequences, divided into their nasal and stop portions. ${ }^{76}$

Figure 12: Mean raw duration of nasal and stop portions by place of articulation


Figure 12 shows that, in general, the overall duration of the segment decreases as the place of articulation moves back, but that this trend is more attributable to the decrease in duration of the stop portion than to the nasal portion. As in Ndumbea (Gordon \&

Maddieson 1999), the bilabial prenasalized segment is the longest. However, unlike in Ndumbea, where the stop portion makes up on average $29 \%$ of the segment, in Belep the stop portion makes up $39 \%$ of the segment. This data is also represented in Table 8.

Table 8: Mean duration of nasal and stop portions by place of articulation

| Place of Articulation | Nasal portion | Stop portion | Total |
| :--- | :--- | :--- | :--- |
| Bilabial | 64.47 ms | 53.53 ms | 121 ms |
| Alveolar | 72 ms | 44.84 ms | 116.84 ms |
| Palatal | 64.58 ms | 35.18 ms | 99.76 ms |
| Velar | 69.31 ms | 38 ms | 107.31 ms |
| Average | $\mathbf{6 8 . 3 4} \mathbf{~ m s}$ | $\mathbf{4 2 . 8 9} \mathbf{~ m s}$ | $\mathbf{1 1 1 . 2 3} \mathbf{~ m s}$ |

[^41]Table 8 shows that the mean duration of the nasal portion is 68 ms and the mean duration of the stop portion is 43 ms , for a total segment duration of 111 ms . The mean duration results are consistent with values reported for Fijian, another Oceanic language, where the mean duration across places of articulation is 123 ms (Maddieson 1989), and for Ndumbea, where the mean duration is 116 ms (Gordon \& Maddieson 1999).

I compared these segment durations with the duration of voiceless stops. Using only tokens produced in a carrier phrase, I conducted a between-subjects ANOVA on segment duration (averaged across tokens of a word) where the independent variables were place of articulation, following vowel, and whether the segment was a voiceless stop (stop portion + VOT) or a prenasalized stop (nasal portion + stop portion). Figure 13 is a graph showing duration by place of articulation.

Figure 13: Mean raw duration of voiceless and prenasalized stops (in a carrier phrase) by place of articulation


The graph in Figure 13 shows that prenasalized stops are shorter than voiceless stops at all places of articulation. This observation was confirmed statistically by the results of the ANOVA, which shows that prenasalized stops are significantly shorter than voiceless stops, $F(1,18)=75.26, p<.001$. Their means are represented in Table 9.

Table 9: Mean raw duration of stops (in a carrier phrase) by place of articulation

| Place of Articulation | Voiceless | Prenasalized |
| :--- | :--- | :--- |
| Bilabial | 147.56 ms | 121.23 ms |
| Alveolar | 136.96 ms | 105.16 ms |
| Palatal | 137.6 ms | 86.5 ms |
| Velar | 141.46 ms | 106.53 ms |
| Average | $\mathbf{1 4 0 . 9} \mathbf{~ m s}$ | $\mathbf{1 0 4 . 8 6} \mathbf{~ m s}$ |

Table 9 shows that the mean duration of voiceless stops is 141 ms while the mean duration of prenasalized stops is 105 ms . This finding differs from Maddieson’s (1989) study on Fijian, which found that prenasalized segments were comparable in duration to $/ \mathrm{t} /$, $/ \mathrm{k} /$, and $/ \mathrm{l} /$, which averaged 119 ms . However, it is not surprising, given that several studies have demonstrated that voiced consonants are typically shorter than comparable voiceless consonants (Lehiste 1970, Klatt 1976, Zue and Laferriere 1979). This finding provides further evidence that Belep NC sequences should be considered to be single segments.

Next, I compared the duration of NC sequences with that of nasal consonants. Using only tokens produced in a carrier phrase, I conducted a between-subjects ANOVA on segment duration (averaged across tokens of a word) where the independent variables were place of articulation, following vowel, and whether the segment was a nasal (prestopped portion + nasal portion) or a prenasalized stop (nasal portion + stop portion).

Figure 14 is a graph showing duration by place of articulation.

Figure 14: Mean duration of nasals and prenasalized stops (in a carrier phrase) by place of articulation


The graph in Figure 14 shows that prenasalized stops are shorter than nasals at all places of articulation. This observation was confirmed statistically by the results of the ANOVA, which shows that prenasalized stops are significantly shorter than nasals, $F(1$, $13)=43.72, p<.001$. Their means are represented in Table 10.

Table 10: Mean raw duration of nasals and prenasalized stops

| Place of Articulation | Nasal | Prenasalized |
| :--- | :--- | :--- |
| Bilabial | 132.79 ms | 120.72 ms |
| Alveolar | 138.08 ms | 106.9 ms |
| Palatal | 141.71 ms | 86.53 ms |
| Velar | 144.5 ms | 106.53 ms |
| Average | $\mathbf{1 3 9 . 2 7} \mathbf{~ m s}$ | $\mathbf{1 0 5 . 1 7} \mathbf{~ m s}$ |

Table 10 shows that the mean duration of nasal segments is 139 ms , while the mean duration of prenasalized segments is 105 ms . Riehl (2008) found that phonemically prenasalized segments were comparable in duration to nasals, while NC clusters were longer, since Belep prenasalized segments are shorter than nasals, this is evidence for their phonemic status as prenasalized segments rather than clusters.

In summary, the duration of prenasalized stops in Belep is comparable to that found in other languages. In a manner consistent with other languages containing
prenasalized stops, the stop portion of the prenasalized segment in Belep is longest for bilabials. Unlike in Fijian, prenasalized stops in Belep are shorter than voiceless stops; however, this is not unusual cross-linguistically. A comparison with the duration of nasals shows that prenasalized segments are shorter than nasals, which indicates their status as phonemes rather than clusters.

### 2.2.1.4 Approximants

Though they are vowel-like, the two central approximants $/ \mathrm{w} /$ and $/ \mathrm{j} /$ fall into the phonemic category of consonants in Belep. They cannot occur in clusters with other consonants, and sequences of Approximant + Vowel contrast with sequences of vowels, as shown in Table 11.

Table 11: Central approximant contrasts with sequences of vowels

| wa | 'grandparent' | ua- | 'portion to suck' |
| :--- | :--- | :--- | :--- |
| we | 'water' | u-e | 'remove-SPC' |
| n'diju | 'coins' | ndi-u | 'give-DETR' |
| piji-e | 'delouse-3SG.ABS' | pi-e | 'cook-3SG.ABS' |

The sequences of Approximant + Vowel in the first column of Table 11 are identified by speakers as a single syllable, while the contrasting vowel sequences in the third column are identified as multi-syllabic. Furthermore, both /w/ and /j/ undergo allophonic alternation to more clearly consonantal sounds (§2.3.1.4).

A final piece of evidence that $/ \mathrm{w} /$ and $/ \mathrm{j} /$ are consonantal in Belep is that their presence blocks the phonetic nasalization of vowels following a nasal segment (§2.4.3). For example, consider the minimal pair /mia/ 'ripe' and /mija/ 'Mass' (a Latin loan from $m i s s a$ ). The pronunciation of $/ \mathrm{mia} /$ as [mĩã] reveals nasal spreading across both vowels of the vowel sequence. By contrast, $/ \mathrm{mija}$ / is produced [mĩja]; the consonant $/ \mathrm{j} /$ blocks the nasal spreading.

### 2.2.1.5 Neutralizations

There are a number of consonantal neutralizations which occur in Belep. These include the neutralization of: the labiovelar vs. bilabial contrast before back vowels; the contrast between $/ \mathrm{p}^{\mathrm{w}} / \mathrm{vs}$. /w/ , and $/ \mathrm{c} / \mathrm{vs}$. $/ \mathrm{j} /$, word-medially; and the contrast between /l/ and $/ \mathrm{n} / \mathrm{in}$ some environments.

The contrast between labiovelars $/ \mathrm{p}^{\mathrm{w}} /, /^{\mathrm{m}} \mathrm{b}^{\mathrm{w}} /, / \mathrm{m}^{\mathrm{w}} /$ and bilabials $/ \mathrm{p} /, /^{\mathrm{m}} \mathrm{b} /, / \mathrm{m} /$ is neutralized before back vowels $/ \mathrm{o} /$ and $/ \mathrm{u} /$; no minimal pairs exist in this environment

| po | 'to tell lies' | mbo | 'to stink' | mo | 'to live' |
| :--- | :--- | :--- | :--- | :--- | :--- |
| pot | 'to be boiling' | mbot | 'to be shipwrecked' |  |  |
| pu- | 'side' | 'sbu | 'fishhook', | mu | 'to moor' |
| pua | 'chinese lantern tree' | mbua <br> puc | 'to drown' | mua- | 'flower' |
| plo | 'buc | 'pawn' |  |  |  |
| puja | 'to uncover' | mbuja | 'to agree' |  |  |

It is common for "Oceanic languages [to] vary as to the possible combinations of labiovelars with rounded vowels" (Lynch 2002:311); Lynch cites Lewo and Lau as other languages where labiovelars rarely, if ever, occur before $/ \mathrm{u} /$ and $/ \mathrm{o} /$. This cross-linguistic evidence, as well as speaker intuitions, indicate that the consonants which occur before $/ \mathrm{o} /$ and $/ \mathrm{u} /$ are phonemically bilabial. ${ }^{77}$

The contrast between $/ \mathrm{p}^{\mathrm{w}} /$ and $/ \mathrm{w} /$ is neutralized word-medially. Only phonetic [w] occurs in this environment. There is morphophonemic evidence that / p w/ alternates with [w], as in (37).

| ${ }^{\text {n }}$ dep ${ }^{\text {w }}$ | 'deck' | [ ${ }^{\text {d dewa-] }}$ | '(something's) deck' |
| :---: | :---: | :---: | :---: |
| $n{ }^{\text {m }} \mathrm{b}^{\text {w }} \mathrm{ap}^{\text {w }}$ | 'to provoke' | [ $\tilde{n o ~}^{\text {m }}{ }^{\text {b }}$ awi-] ${ }^{\text {a }}$ | 'provoke.TR' |
| ãpw | 'to laugh' | [ãwi-] | 'laugh.TR' |

[^42]However, in cases where there is no morphophonological alternation (38), it is impossible to categorize medial [w] as $/ \mathrm{p}^{\mathrm{w} /}$ or $/ \mathrm{w} /$.

| va-] | heek' | 硣 |
| :---: | :---: | :---: |
| [ ${ }^{\text {b }}{ }^{\text {wawawa] }}$ | 'to remove' | $/{ }^{\text {m }} \mathrm{b}^{\text {wawawa/ or }}{ }^{\text {m }} \mathrm{b}^{\text {wapapwa/ }}$ |
| [cawi] | 'hunger' | /cawi/ or /cap ${ }^{\text {wi/ }}$ |
| ["gawaar] | 'day' | /]gawaat/ or / ${ }^{\text {g }}$ gap ${ }^{\text {waat }}$ |
| [nãwe-] | 'to leave' | /nawe/ or /napwe/ |
| [pawi] | 'hibiscus' | /pawi/ or /papwi/ |

In words such as those in (38), speakers have chosen to use grapheme $<\mathrm{w}>($ (2.5) for orthographic consistency.

Word-initial /w/ has the allophone [ $\beta$ ] before back vowels /o/ and /u/ (§2.3.1). The contrast between word-medial [w] (which is impossible to categorize as either / $\mathrm{p}^{\mathrm{w} /} / \mathrm{or} / \mathrm{w} /$ ) and word-medial $/ \mathrm{p} /[\mathrm{v}]$ is neutralized before back vowels $/ \mathrm{o} /$ and $/ \mathrm{u} /$. Only phonetic $[\beta]$ appears word-medially before a back vowel. There is morphophonemic evidence that $/ \mathrm{p}$ w/ and $/ \mathrm{p} /$ both alternate with $[\beta]$, as shown in (39).


However, in cases where there is no morphophonological alternation (40), it is impossible to categorize medial $[\beta]$ as $/ \mathrm{p}^{\mathrm{w}} /$, $/ \mathrm{p} /$, or $/ \mathrm{w} /$.
(40) [aßonõ] 'cemetery’ /apwono/ or /apono/ or /awono/
[ãßur] 'wave' /ãpwut/ or /ãput/ or /ãwut/
[kaßu-] 'guardian' /kapwu-/ or /kapu-/ or /kawu-/
[taßo] 'sea cucumber' /tap ${ }^{\mathrm{w} o / ~ o r ~ / t a p o / ~ o r ~ / t a w o / ~}$
[teßuur] 'to begin' /tepwuut/ or /tepuut/ or /tewuut/
[waßo] 'tide' /wapwo/ or /wapo/ or /wawo/
In words such as those in (40), speakers have chosen to use grapheme $<\mathrm{w}>$ for consistency.

The contrast between $/ \mathrm{c} /$ and $/ \mathrm{j} /$ is neutralized word-medially. Only phonetic [j] occurs in this environment. There is morphophonemic evidence that/c/ alternates with [j], as in (41).
(41)

| kic | 'liver' | [kije-] | '(someone's) liver' |
| :---: | :---: | :---: | :---: |
| $\tilde{o}^{\text {m }}{ }^{\text {w }}$ ac | 'to watch' | [õ' ${ }^{\text {m }}{ }^{\text {wajaji-] }}$ | 'watch.TR' |
| paac | 'smokehouse' | [paja-] | '(something's) smokehouse' |
| ãc | 'man' | [ãjii-k] | 'man-DET.D.PRX' |
| capac | 'to depart' | [cavaja $={ }^{\text {n }}$ du] | 'depart=DIR.DH' |

However, in cases where there is no morphophonological alternation (42), it is impossible to categorize medial [j] as $/ \mathrm{c} /$ or $/ \mathrm{j} /$.

| [ãja] | 'to fear' | /ãca/ or /ãja/ |
| :---: | :---: | :---: |
| [ ${ }^{\text {b bojãm] }}$ | 'to bathe' |  |
| [caja-] | 'father' | /caca-/ or /caja-/ |
| [iju] | 'to sell' | /icu/ or /iju/ |
| [ ${ }^{\text {¹ajo] }}$ | 'milk tree' |  |
| [kojap] | 'type of lobster' | /kocap/ or /kojap/ |
| [рејеге] | 'to brawl' | /pecete/ or /pejete/ |

In words such as those in (42), speakers have chosen to use grapheme $<\mathrm{y}>$ (§2.5) for orthographic consistency.

The contrast between $/ \mathrm{n} /$ and $/ 1 /$ is neutralized in some word-medial environments.
Only phonetic [1] occurs after an oral vowel, and only phonetic [n] occurs after a nasal vowel, as in (43). ${ }^{78}$ Unlike in Balade Nyelâyu, the production of medial [n] as [1̃] is unacceptable to Belep speakers.

[^43]| (43) | [ala-] | 'container' | [ãnã-] | 'contents' |
| :---: | :---: | :---: | :---: | :---: |
|  | [ ${ }^{\text {m}}$ balap] | 'to move' | [ãnãp] | 'to lie down' |
|  | [cili-] | 'to thatch' | [cinnĩk] | 'fifteen' |
|  | [ele] | 'knife' | [ẽnẽ-] | 'point of reference' |
|  | [kela] | 'to slide' | [kẽnãva-] | 'tongue' |
|  | [pola] | 'to pluck' | [põnã-] | 'tail' |
|  | [polo-] | 'to interrupt' | [tõnõk] | 'snail' |
|  | [tala-] | 'bed' | [tãnã] | 'to hear' |
|  | [tulu] | 'twine' | [kũnũ] | 'to be amputated' |

In words containing [1] and [n], speakers have chosen to use grapheme $<1>$ after an oral vowel and grapheme $<\mathrm{n}>$ after a nasal or nasalized vowel (see §2.5).

Note that Belep vowels are phonetically nasalized after nasal phonemes and phonetically oral after prenasalized stops (§2.2.2.4). Since the oral vs. nasal contrast for vowels is neutralized in this position, $/ 1 /$ and $/ \mathrm{n} /$ may contrast medially after an open syllable with a nasal or prenasalized stop onset. For example, $/{ }^{19}$ gana-/ 'color' contrasts with /"ga-la/ 'sympathy-3PL.POSS'. Some examples of near-minimal pairs are shown in (44).

| ${ }^{\text {m}}$ bane- | 'companion' | ${ }^{\text {m}}$ bala- | 'end' |
| :---: | :---: | :---: | :---: |
| ${ }^{\text {m}}{ }^{\text {w }}$ ena | 'type of lizard' | ${ }^{\text {mbela }}$ | 'to crawl' |
| ${ }^{\text {m}}$ bonu | 'type of cowrie' | ${ }^{\text {m}}$ bolao | 'banana tree' |
| ${ }^{\text {n }}$ dana- | 'path' | ${ }^{\text {n dalap }}$ | 'cloth of gold cone snail' |
| ${ }^{\text {j }}$, ${ }^{\text {anu }}$ | 'spirit' | ${ }^{\text {j }}$ Julã | 'fish-poison tree' |
| pumwane- | 'whorl' | kum ${ }^{\text {ala }}$ | 'sweet potato' |
| mwanok | 'moon' | malom | 'immaculate' |
| mina | 'fallow' | nila- | 'great-grandparent' |

It is likely that medial $[\mathrm{n}]$ is in the process of becoming phonemic in these instances. Dubois (1975c) lists ["£ale-] 'ear' and [nõle] 'type of sumac', but I only ever observed the pronunciations [ ${ }^{\mathrm{n}} \mathrm{J}^{\mathrm{an}}$-] $]$ and [nõnẽ].

The contrast between $/ \mathrm{n} /$ and $/ \mathrm{n} /$ is neutralized at some morpheme boundaries before /i/. For example, the phonemically alveolar nasal in /topen=i cao/ [tovenĩ cçao] 'to
finish working' becomes phonetically palatal when followed by genitive enclitic $=i$ (see §6.3.3).

### 2.2.2 Vowels

In §2.2.2.1, I present acoustic phonetic descriptions of the five canonical oral vowel qualities in Belep. In §2.2.2.2, I describe hiatus in Belep vowel sequences, which may be sequences either of like or unlike vowels. Section §2.2.2.3 presents the phonological and phonetic characteristics of Belep nasal vowels.

### 2.2.2.1 Vowel quality

There are five basic vowel qualities in Belep: low central vowel /a/, which is by far the most common vowel; close mid vowels $/ \mathrm{e} /$ and $/ \mathrm{o} /$; and high vowels $/ \mathrm{i} / \mathrm{and} / \mathrm{u} /$, which are fairly uncommon. Figure 15 and Figure 16 show the respective vowel spaces of a male speaker (age 70) and a female speaker (in her 20s) for vowels in an open syllable. ${ }^{79}$ These vowel spaces show that vowel tokens tend to cluster closely together, particularly for the back vowels and /a/. The mid vowels /e/ and /o/ are phonetically fairly high, or 'close'. Also of note is the fact that the female speaker's /u/ vowel is considerably more fronted than the male speaker's, and the /a/ vowel is more dispersed. It is unknown whether these differences are the result of the influence of a sociolinguistic variable.

[^44]Figure 15: Vowels before [r], male speaker (age 70), in $\mathbf{H z}$


Figure 16: Vowels before [r], female speaker (age 20s), in $\mathbf{H z}$


Figure 17 and Figure 18 below, which depict formant values averaged across all instances of the vowel, ${ }^{80}$ show that the phonetic quality of a Belep vowel differs depending on whether it occurs in a closed or open syllable. In general in Belep, vowels in a closed syllable tend to be more centralized, as can be seen for a female speaker in her 20s in Figure 17.

[^45]Figure 17: Average formant values, female speaker (age 20s), in Hz


Figure 18 shows the vowel space of a male speaker (age 70). Curiously, his vowels are more peripheral in closed syllables than in open syllables.

Figure 18: Average formant values, male speaker (age 70), in Hz


The case of /e/ is of particular note here. For the female speaker (Figure 17), /e/ in a closed syllable is lowered and backed, making its value similar to [ $\varepsilon$ ]. Nêlêmwa/e/ is likewise centralized to $[\varepsilon]$ in a closed syllable (Bril 2000:34). For the male Belep speaker (Figure 18), /e/ is higher and fronter in closed syllables, giving it a value of [r]. This variation is found throughout the population, though whether it has any correlation with sociolinguistic variables has yet to be determined. Throughout this work, /e/ in a closed syllable will generally be phonetically transcribed as $[\varepsilon]$.

### 2.2.2.2 Vowel hiatus

In Belep, sequences of heterosyllabic vowels are very common. ${ }^{81}$ These vowel sequences may include two copies of the same vowel, or two (or more) different vowels. Since sequences of like vowels in Belep are analyzed as heterosyllabic, Belep cannot be said to have a vowel length distinction (i.e. there is not enough evidence to claim the existence of two contrasting phonemes $/ \mathrm{a} /$ and $/ \mathrm{a}: /$ on the basis of duration). Since sequences of unlike vowels are heterosyllabic, Belep cannot be said to have diphthongs. Instead, both types of vowel sequence will be labeled instances of hiatus, defined by Matthews (2007) as "a division between vowels belonging to different...syllables" (see §2.6). In this section, hiatus of both like and unlike vowels will be discussed. I suspect that sequences of unlike vowels are comparable in duration to sequences of like vowels; this is a topic for further research.

The traditional position held by scholars of New Caledonian languages is that vowel length distinctions are an important aspect of phonology in languages of that region. For example, Ozanne-Rivierre et al. (1998) analyze Balade Nyelâyu as having twenty phonemic vowels in total: five short oral vowels, five short nasal vowels, and the long counterparts of each. One might be tempted to draw a similar conclusion for Belep based on the existence of contrasting pairs such as /pan/ 'to go.TV' and /paan/
'screwpine'; many other examples are shown in (45).

[^46]| pi-n | 'cook-DA.NSG' | pii-n | 'fingernail-3SG.POSS' |
| :--- | :--- | :--- | :--- |
| nde | 'fork' | ndee | 'blacksaddled coral grouper' |
| ka-t | 'leg-3GNR.POSS' | kaat | 'butterfly fish' |
| top | 'to melt' | toop | 'field' |
| puc | 'to fly' | puuc | 'dust' |
| pic | 'Alexandrian laurel' | kiñt | 'to be loud' |
| wẽ ${ }^{\text {n }}$ ga- | 'charity' | wẽẽy | 'to organize' |
| jãn | 'ciguatera' | jããy | 'to gather' |
| kõk | 'to overflow' | kõ̃̃k | 'cinnamon night-heron' |
| pũm ${ }^{\text {w }}$ | 'smoke' | pũũy | 'to assemble' |

However, it is possible to interpret vowels of long duration, which occur crosslinguistically, either as a single unit which is marked for length, or as two copies of the same vowel occurring next to each other (Maddieson 2011). In Belep, words such as those in (45) should be considered to contain heterosyllabic sequences of two like vowels; that is, hiatus. As such, the term 'long vowel' will not be used in this work, since it does not accurately describe a phonemic distinction that exists in Belep.

There is considerable phonemic evidence for considering vowels such as /aa/ in /kaac/ 'to be bitter' to be instances of hiatus rather than 'long vowels'. First, speakers have no intuition regarding the 'length' of a vowel; however, they can easily split a word into syllables, and they reliably split sequences of like vowels into two separate syllables (§2.6). Some examples of this syllabification are shown in (46), where [.] indicates a syllable break.
a.wa.a 'mat'
mbe.en 'to be wet'
mbi.in 'to be skinny'
ca.a\eta 'to steal'
ndo.o 'earth'
ko.ot 'to be soft'
mu.u-t 'flower-3GNR.POSS'
na.ap 'fire'
pa.ac 'smokehouse'
pu.up 'to swell'
te.ec 'to burn'
wẽ.ẽy 'to organize'

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Another major piece of phonemic evidence is found in the distribution of like-vowel hiatus. If sequences of like vowels were single phonological segments, we might expect them to occur in any position where a vowel may occur. However, these sequences have a limited distribution in that they may occur only in the two final syllables of a phonological word (§2.6), a condition which holds for all of the examples in (45). In other words, though there are many Belep words of the form \(\mathrm{CV}_{1} \cdot \mathrm{CV}(\mathrm{C})\), there are none of the form \(\mathrm{CV}_{1} \cdot \mathrm{~V}_{1} \cdot \mathrm{CV}(\mathrm{C})\). However, those of the form \(\mathrm{CV} \cdot \mathrm{CV}_{1} \cdot \mathrm{~V}_{1}(\mathrm{C})\) are common. A few examples are shown in (47).
\begin{tabular}{llll} 
mba.tap & 'to exceed' & \({ }^{\text {m}}\) ba.ta.ap & 'evening' \\
ca.ke & 'to be ashamed' & ca.ke.-e & 'fish with a net-3SG.ABS' \\
a.te- & 'gallbladder' & ã.te.-e & 'dry-3SG.ABS' \\
a.ti & 'sandbar' & a.ti.i & 'rice.LN'
\end{tabular}

A final piece of phonemic evidence that sequences of like vowels are instances of hiatus rather than single 'long vowel' phonemes is found in the morphophonemic process of phase shift, discussed in detail in §2.4.2. Briefly, when a word containing an instance of like-vowel hiatus is used in the middle of an intonation unit or with some morphosyntactic modification, only the first (stressed) vowel from the vowel sequence is present. For example, though the words /kõk/ 'to overflow' and /kõõk/ 'cinnamon night-
heron' contrast in isolation or at the end of an intonation unit, they are homophonous as [kõқ] in the invented phrases in (48) and (49) (see \(\S 2.5\) for more information on orthographic conventions in this work).
(48) Te kôk xa bwe mar.
te= kôx=a bwe mar
3SG.SUBJ= overflow=LOC top seashore 'S/he threw up on the beach.'
(49) Tuи kôôk xa bwe mar.
tu kôx=a bwe mar
EX.SPC heron=LOC top seashore
'There is a cinnamon night-heron on the beach.'
If 'vowel length' were a phonemic distinction, we would expect it to be relevant in many more speech contexts than it is.

There is also evidence in stress assignment and prosody for like vowel sequences to be considered a type of hiatus. In disyllabic words in Belep, the first syllable carries the intensity peak and the word stress, while the last syllable carries the pitch peak (§2.7.1). An example is shown in Figure 19, which depicts intensity and pitch contours for the disyllabic word /pata/ [para] 'to tell'.

Figure 19: Intensity and pitch contours for /pata/ 'to tell'


In Figure 19, note that the intensity curve peaks in the first syllable /pa/, while the pitch curve peaks in the second syllable /ta/. In a disyllabic word containing a sequence of like vowels, a similar intonation pattern occurs. For example, in Figure 20, the spectrogram of the word \(/ \mathrm{kaac} /[\mathrm{kaac}]\) 'to be bitter' shows an intensity peak in the first syllable \(/ \mathrm{ka} /\) and a pitch peak in the second syllable /ac/.

Figure 20: Intensity and pitch contours for /kaac/ 'bitter'


A statistical analysis further shows that sequences of like vowels (such as \(/ \mathrm{aa} / \mathrm{in}\) \(/ \mathrm{kaac} /\) 'to be bitter') are significantly longer \((F(1,29)=33.36, p<.001)\) than even the longest single vowels-that is, vowels which have undergone stress-induced vowel lengthening (see §2.3.2.1). Table 12 shows the mean durations of lengthened single vowels ( 177 ms ) and sequences of like vowels ( 243 ms ).

Table 12: Mean duration of vowels
\begin{tabular}{|l|l|l|l|l|}
\hline & Mean duration & \multicolumn{3}{|l|}{ Example } \\
\hline \begin{tabular}{l} 
Single vowels \\
(stress-lengthened)
\end{tabular} & 177 ms & \(/ \mathrm{ke} . \mathrm{la} /\) & ['ke:la] & 'to slide' \\
\hline Like vowel hiatus & 243 ms & \(/ \mathrm{ke} . \mathrm{ec} /\) & ['keec] & 'to have children' \\
\hline
\end{tabular}

Sequences of unlike vowels are another type of hiatus that occurs frequently in Belep. This pattern is identical to that in Nêlêmwa (Bril 2000), where the term 'vowel sequence' rather than 'diphthong' is used-Belep vowel sequences are not diphthongs, since they are heterosyllabic. All possible sequences of two unlike vowels occur.

Examples are given in

Table 13 below.
As with like vowels, Belep sequences of unlike vowels are always heterosyllabic; speakers consistently place a syllable boundary between them when asked to syllabify, as shown in (50).
(50) mi.a 'to be ripe'
ca.e 'coral reef'
mbo.la.o 'banana tree'
„fi.tu.a 'bow’
Heterosyllabic sequences of three vowels are also permitted in Belep (51), though they are less common.
(51) /ndu.a.e-/ 'health'
/ku.a.u/ 'cat'
/ci.a.-e/ 'NEG.LOC-SPC'
Hiatuses where the first vowel is oral and the second vowel is nasal also occur; for example /ciã/ 'flea', /tuã̃'da/ 'throwing spear'. The converse-where the first vowel is nasal and the second is oral-do not occur (see §2.4.3).

Table 13: Sequences of unlike vowels


Phonologically, sequences of unlike vowels differ somewhat from sequences of like vowels. While sequences of like vowels may only occur in the final two syllables of a word, sequences of unlike vowels may occur anywhere within the word. However, in cases where sequences of unlike vowels occur outside the final two syllables, speakers may disagree as to the underlying phonemic form. For example, for some Belep speakers the underlying form of the verb 'to cut' is trisyllabic /tiawa/, while for others it is disyllabic /tawa/. A few other examples are shown in (52).
/ni.a.jo/ or /na.jo/ 'type of tree'
\(/ p^{\text {w }}\) a.i.na. \({ }^{7} \mathrm{gac} /\) or \(\left./ \mathrm{p}^{\mathrm{w}} \mathrm{e} . \mathrm{na} .{ }^{\mathrm{g}} \mathrm{gac}\right] \quad\) 'to be beautiful'
/ti.u.ri.en/ or /tu.ri.en/ 'to pray'
Another contrast between sequences of like and unlike vowels is that phase shift (§2.4.2) has no effect on sequences of unlike vowels.

\subsection*{2.2.2.3 Vowel nasality}

The languages of Northern New Caledonia are noted for their preponderance of nasal vowels, a feature which is rare in the rest of the Austronesian language family (Gordon \& Maddieson 2004) and highly salient to monolingual French speakers (Ozanne-Rivierre et al. 1998). Both phonemically nasal and phonetically nasal vowels occur.

Phonemic oral and nasal vowels contrast in a variety of environments, including preceding a consonant and following a voiceless stop or approximant (§2.1.2). The contrast between oral and nasal phonemic vowels is neutralized after nasal phonemes and prenasalized stops (see §2.2.2.4). Word-final phonemic nasal vowels are unusual; this is commensurate with the findings of Ruhlen (1973) and Schourup (1973) that nasalization is more common cross-linguistically in closed syllables. Of the phonemic nasal vowels,
\(/ \tilde{\mathbf{a}} /\) is by far the most common, followed by /õ/ and /ẽ/. High vowels \(/ \tilde{\mathbf{u}} /\) and \(/ \tilde{\mathbf{1}} /\) are quite rare. \({ }^{82}\) This is not uncommon; Chen (1975) and Chen and Wang (1975) argue that low nasal vowels are cross-linguistically more common than high nasal vowels.

In general, phonemically nasal vowels in Belep tend to occur in instances of vowel hiatus (§2.2.2.2) rather than singly. This is unsurprising given that nasality and vowel length tend to be linked cross-linguistically (Hajek 1997, Whalen \& Beddor 1989, Beddor 1993). Some examples are shown in (53).
(53) kãak 'to shout'
pãan 'sow thistle'
tãay 'to scrape'
wẽek 'tobacco'
pĩik 'static'
tõon 'to sail with the wind'
tũun 'to rub'
kũut 'to grunt'
kiãk 'purple swamphen'
\({ }^{m}\) buãn 'stone'
ão-n 'vine-3SG.POSS’
kẽap 'slab’
According to Bhat (1975), nasal vowels tend to be higher than oral vowels crosslinguistically. This pattern is not borne out in the Belep data, shown in Figure 21 and Figure 22.

\footnotetext{
\({ }^{82}\) A similar pattern holds for oral vowels.
}

Figure 21: Oral vs nasal vowels for male speaker (age 70), in \(\mathbf{H z}\)


Figure 22: Oral vs nasal vowels for female speaker (age 20s), in \(\mathbf{H z}\)


Figure 21 and Figure 22 show that Belep nasal vowels other than /ã/ tend to be more peripheral than the corresponding oral vowel, while the pattern is reversed for / ã/.

\subsection*{2.2.2.4 Neutralizations}

The phonemic contrast between oral and nasal vowels is neutralized after a prenasalized stop (§2.2.1.3). All vowels following prenasalized stops are phonetically oral \({ }^{83}\) and there are no minimal pairs in this position. Note that this neutralization only holds within the syllable; a heterosyllabic (§2.2.2.2) nasal vowel may follow a phonetically oral vowel that has been neutralized (54).
```

mbu.ãn 'stone'
nde.ã 'type of fly'
ndu.ãc 'spine'

```

\footnotetext{
\({ }^{83}\) There may be a few exceptions. For example, some speakers produce /na/ 'to creak' as [ \(\left.{ }^{\mathrm{n}} \mathrm{gã}\right]\); some speakers may produce /tãnac/ 'ocean' as ['dãnac].
}

The phonemic contrast between oral and nasal vowels is also neutralized following a nasal phoneme, either a nasal stop (§2.1.1.5) or a nasal vowel (§2.1.2). All vowels are phonetically nasalized following a nasal phoneme, a phenomenon known as nasal spreading (see §2.4.3). Nasal spreading crosses syllable and morpheme boundaries. There are no minimal pairs for oral and nasal vowels following a nasal phoneme.

A similar neutralization occurs in the Southern New Caledonian language Ndumbea (Rivierre 1973), where "only oral vowels follow prenasalized stops and only nasal vowels occur after nasals" (Gordon \& Maddieson 1999:72).

\subsection*{2.3 Allophony}

Some variation in the production of consonants (§2.3.1) and vowels (§2.3.2) is phonetic rather than phonemic, and does not contribute to neutralizations (discussed above in \(\S 2.2 .1 .5\) and \(\S 2.2 .2 .4\) ). Table 14 shows an inventory of all phonetic consonants which appear in Belep.

Table 14: Phonetic consonant inventory


\subsection*{2.3.1 Consonants}

In this section I discuss phonetic labialization (§2.3.1.1), allophony in voiceless stops based largely on word position (§2.3.1.2), allophonic prestopping of nasals
(§2.3.1.3), and vowel-conditioned allophony in approximants (§2.3.1.4).

\subsection*{2.3.1.1 Phonetic labialization}

When a bilabial consonant \(/ \mathrm{p} /, / \mathrm{m} \mathrm{b} /\), or \(/ \mathrm{m} /(\S 2.1 .1 .1)\) precedes a back vowel \(/ \mathrm{o} /\) or \(/ \mathrm{u} /\), it is phonetically labialized. Some examples are shown in (55).
\begin{tabular}{|c|c|c|}
\hline /po/ & [ \(\mathrm{p}^{\mathrm{w}} \mathrm{O}\) ] & 'to tell lies' \\
\hline / \({ }^{\text {m}} \mathrm{bo} /\) & [ \({ }^{\mathrm{m}} \mathrm{b}^{\mathrm{w}} \mathrm{o}\) ] & 'to smell' \\
\hline /mo/ & [ \(\mathrm{m}^{\mathrm{w}} \mathrm{O}\) ] & 'to live, stay' \\
\hline /mon/ & [mwon] & 'side. DH' \\
\hline /puu/ & [ \(p^{\text {w }} \mathrm{uu}\) ] & 'to be in heat' \\
\hline \(/ \mathrm{m}\) bu/ & [ \({ }^{\mathrm{m}} \mathrm{b}^{\mathrm{w}} \mathrm{u}\) ] & 'fishhook' \\
\hline /mu/ & [mwu] & 'to moor' \\
\hline
\end{tabular}

Labiovelar approximant /w/ also undergoes allophony before back vowels; see §2.3.1.4 below.

\subsection*{2.3.1.2 Voiceless stops}

The Belep voiceless stops \(/ \mathrm{p}^{\mathrm{w}} /\), \(/ \mathrm{p} /\), /t/, /c/ and \(/ \mathrm{k} /\) undergo a considerable amount of allophony depending on their position in the phonological word. In general, these phonemes are produced as unaspirated stops in word-initial position (§2.2.1.2); as fricatives or approximants in word-medial position (see §2.4.1 for a description of the morphophonemic process of lenition); and as unreleased stops in word-final position. Each phoneme will be discussed in detail in this section.

The phonetic characteristics of the word-initial allophones of labiovelar \(/ \mathrm{p}^{\mathrm{w} /}\) and bilabial / p / (that is, \(\left[\mathrm{p}^{\mathrm{w}}\right]\) and \([\mathrm{p}]\) respectively) were discussed in §2.2.1.1. Word-medially, \(/ \mathrm{p}^{\mathrm{w} /}\) has the allophone [w] (see §2.2.1.5), while /p/ has the allophone [v]. The [p] allophone of /p/ does not occur word-medially (56).
```

/apa-/ [ava-] 'sibling'
/capac/ [cavac] 'to depart'
/papay/ [pava\eta] 'to prepare'
/topen/ [toven] 'to finish'

```

Some examples of the morphophonemic correspondence between phonemic \(/ \mathrm{p} /\) and phonetic [v] are shown in (57).
\begin{tabular}{llll} 
(57) & /naap/ & 'fire' & /nape-/ [nãve-]
\end{tabular}\(\quad\)\begin{tabular}{l} 
'(someone's) fire' \\
/kẽnap/
\end{tabular}

Word-finally (at the end of an intonation unit; see §2.4.2), / \(\mathrm{p}^{\mathrm{w} /}\) and \(/ \mathrm{p} /\) have the
allophones [ \(\mathrm{p}^{\mathrm{w}}\) ] and \(\left[\mathrm{p}^{`}\right]\), respectively. A sample spectrogram of an unreleased final \(/ \mathrm{p} /\) [ \({ }{ }^{`}\) ] is shown in Figure 23.

Figure 23: Spectrogram of final unreleased /p/ in /cep/ 'to build boats'

Figure 23 shows a spectrogram of the word /cep/ [cep'] 'to build boats', produced in isolation. No release is visible. Final \(\left[p^{w}\right]\) and \(\left[p^{\imath}\right]\) are often phonetically distinguishable solely by a final closure with rounded lips versus a final closure with flat lips.

The only word-initial allophone of \(/ t /\) is \([t]\). Word-medially, \([t]\) does not occur; instead, speakers produce tap [r], trill [r], or approximant [.I] as a word-medial allophone of \(/ t /{ }^{84}\) The inter- and intra-speaker variation between these two allophones may be

\footnotetext{
\({ }^{84}\) In this work, I use [r] to refer to the most common pronunciation of a medial /t/, in which the tip of the tongue makes a single contact with the alveolar ridge. I use [r] to refer to instances where the tongue tip makes multiple contacts. This is not entirely consistent with Ladefoged's contention that, "In a typical [trill,] even in cases where there is only a single contact with the roof of the mouth, the action is physiologically (but perhaps not auditorily) quite distinct from that of a tap" (Ladefoged 1971:50). It has not been determined whether the Belep single-contact allophone and the multiple-contact allophone use different physiological mechanisms. However, cross-linguistically, trills typically have three contacts with the alveolar ridge (Ladefoged 1971:50), while Belep pronunciations of medial /t/ typically have one. I have thus chosen not to group both Belep [r] and [r] under the category of [r].
}
conditioned by social factors. Figure 24 shows the production of medial /t/ as [r], a single tap.

Figure 24: Spectrogram for /potae/ 'to massage'


Figure 24 shows a spectrogram of the word /pota-e/ [pora-e] 'massage-SPC', as produced in isolation by a female speaker in her twenties. The same speaker also produced medial /t/ as [r], a trill with two (Figure 25) or three (Figure 26) taps.

Figure 25: Spectrogram for /poto/ [poro] 'to be white'


Figure 25 shows a spectrogram of the word /poto/ [poro] 'to be white', as produced in isolation by a speaker in her twenties. This instance of [r] contains two instances where the tongue contacts the alveolar ridge. In the production of the word /puti/ [puri] 'snake' in Figure 26, the speaker's tongue contacts her alveolar ridge three times.

Figure 26: Spectrogram for /puti/ [puri] 'snake'


Another medial allophone of \(/ \mathrm{t} / \mathrm{is}[\mathrm{I}]\), an alveolar approximant. An example of this pronunciation is given in Figure 27.

Figure 27: Spectrogram of /tetae/ [te.aae] 'to stop'


Figure 27 shows a spectrogram for the word /teta-e/ [te.a-e] 'stop-SPC', produced in isolation by a male speaker, age 70 .

Word-finally, the most common allophone of \(/ \mathrm{t} / \mathrm{is}[\mathrm{r}]\) or [r]. An example is given in Figure 28, which shows a spectrogram of the word /cuut/ [cçuur] 'to stand' produced by a speaker in her twenties.

Figure 28: Spectrogram showing final [r] in the word /cuut/ 'to stand'


Another allophone of final \(/ \mathrm{t} /\) is apical [ t '], as shown in Figure 29, which shows a spectrogram of the word /cuut/ [cçuut'] 'to stand' produced by an elderly speaker (age 70).

Figure 29: Spectrogram showing final [t'] in the word/cuut/ 'to stand'


The final [ \(t\) ] pronunciation is most common among elderly speakers. It is also preserved for most speakers in a few lexical items, namely /jet/ [jet], a highly productive discourse particle meaning 'that's it, that's all'. In Balade Nyelâyu, an identical change is in progress, where the older [ t ] pronunciation of final / t / has almost completely given way to [r] (Ozanne-Rivierre et al. 1998).

The palatal stop /c/ in word-initial position is usually realized as affricate [cç]; it is typically characterized by a large amount of high-frequency noise, as shown in Figure 30.

Figure 30: Spectrogram and waveform for Belep co 'whale'


In Figure 30, the lack of a high-amplitude release burst on the waveform, and the highfrequency noise before the periodic voicing of the vowel begins, are indicators of affrication.

In word-medial position, /c/ has the allophone [j] (see §2.2.1.5); [c] does not occur intervocalically. Final /c/ usually has the allophone [c]; in these instances, speakers may produce co-articulatory lip movements to indicate the palatal place of articulation (by contrast with the alveolar). These lip movements normally include the drawing down and back of the corners of the mouth to expose the lower teeth.

Another word-final allophone of \(/ \mathrm{c} /\) which occurs is affricate [cç], as shown in Figure 31.

Figure 31: Spectrogram of final affricate [ \(\overline{\mathrm{c}}]\) ] in /pic/ 'Alexandrian laurel'


Figure 31 shows a spectrogram of the word /pic/ [picç] 'Alexandrian laurel' produced in isolation.

In a small subset of words, initial and final /c/ may also have the allophone [s], as in the examples shown in Table 15.

Table 15: Production of /e/ as [s]
\begin{tabular}{|c|c|c|c|c|}
\hline Phonemic form & Phonetic form & Stylized phonetic form & Gloss & Source \\
\hline /caket/ & [сс̧аьعг] & [sавєг] & 'winkle' & \\
\hline /cekeen/ & [сс̧екееп] & [seкеen] & 'holy' & \\
\hline /cãn \({ }^{\text {n }}\) een/ & [ç̧ã̃] Cl ] & [sã̃yeen] & 'to believe' & Dubois \\
\hline /ci/ & [cçi] & [si] & 'to sit' & Dubois \\
\hline /co \({ }^{\mathrm{n}} \mathrm{JO} /\) & [çço \({ }^{\mathrm{n}} \mathrm{O}\) ] & [so \({ }^{\mathrm{n}} \mathrm{Jo}\) ] & 'to be dirty' & Dubois \\
\hline /calakina/ & [cçalasinã] & [cçalasinã] & 'whistling kite' & Neyret \\
\hline
\end{tabular}

The forms shown in Table 15 are compiled from my own recordings and from the manuscripts of Dubois (1975c:318) and Neyret (1974a:640). The [s] pronunciation seems to be a sociolinguistically marked one-it originated in religious jargon (the French
missionaries could not pronounce [c]), as evidenced by some of the words in Table 15, and it is still the preferred pronunciation in many hymns and prayers. However, it has since expanded in usage to occur in proper names, and it is also used more frequently in discourse by teenagers and young people. More research would be necessary to determine what social factors condition the [s] allophone of \(/ \mathrm{c} /\).

In initial position, the only allophone of \(/ \mathrm{k} /\) is \([\mathrm{k}]\). Medially, \(/ \mathrm{k} /\) has a number of allophones. Its most common medial allophone is uvular approximant/voiced fricative [к], as represented in Figure 32.

Figure 32: Spectrogram of /cekeen/ 'sacred'


Figure 32 shows a spectrogram of the word /cekeen/ [cçeкеen] 'sacred', produced by a speaker in her twenties. \({ }^{85}\) Another available allophone, used particularly by older speakers, is a voiced velar fricative [ x ]. An example is given in Figure 33.

Figure 33: Spectrogram of /makeek/ (a person's name)


Figure 33 shows a spectrogram of the personal name /makeek/ [mãyeeq], produced by a male speaker in his 70s. Medial \(/ \mathrm{k} /\) may also be pronounced as voiceless uvular fricative [ \(\chi\) ] by some speakers, particularly younger women, as shown in Figure 34.

\footnotetext{
\({ }^{85}\) The availability of the \([\mathrm{b}]\) allophone of \(/ \mathrm{k} /\) occasionally causes some confusion for speakers, especially children, between French and Belep; /b/ is also a phoneme in French, where it is written \(\langle\mathrm{r}\rangle\).
}

Figure 34: Spectrogram of /kaki/ 'to look'


Figure 34 shows a spectrogram of the word /kaki/ [kaxi] 'to look', produced by a speaker in her twenties. Some speakers also reportedly produce trilled uvular [R], though I have no examples of this.

Final \(/ \mathrm{k} /\) normally has the allophone [ \(\mathrm{q}^{`}\) ] for all speakers. An example in Figure 35 shows a spectrogram of the word /jeek/ [jeeq] 'plant', produced in isolation.

Figure 35: Spectrogram of uvular place of articulation in /jeek/ 'plant'


Note that there is a slight lowering of F2 before the stop closure; this is noted by Ladefoged and Maddieson (2006) as a pattern characteristic of uvulars, while one might expect a slight convergence of F2 and F3 before a velar (Stevens 1998:367).

\subsection*{2.3.1.3 Prestopped nasals}

Prestopped nasals occur in several Australian languages; Ladefoged and Maddieson (2006) cite Diyari, Arabana, Wangganuru, Olgolo, and Arrernte as examples of languages which contain prestopped nasals. In most of these languages, prestopped nasals do not occur word-initially; however, they are permitted in Arrernte.

In Belep, initial nasals are prestopped for some speakers. A sample spectrogram showing prestopping is shown in Figure 36.

Figure 36: Spectrogram for / \(\mathrm{ma}^{\mathrm{m}} \mathrm{bo}\) / 'honey'


Figure 36 shows a spectrogram of the phrase /na ãti ma \({ }^{m}\) bo/ [nã ãri \({ }^{\text {b }}\) mã \(^{m}\) bo] 'I say "honey"", as produced by a male speaker, age 70 . The initial \(/ \mathrm{m} /\) of \(/ \mathrm{ma}{ }^{\mathrm{m}} \mathrm{bo}\) / 'honey' is produced as a prestopped [ \({ }^{\mathrm{b}} \mathrm{m}\) ], where an approximately 60 ms stop [b] precedes an approximately 70 ms nasal. Nasal formants are visible on the spectrogram only in the second part of the consonant.

Figure 37 shows another example of a prestopped nasal.

Figure 37: Spectrogram for/mwanok/ 'moon'


Figure 37 shows a spectrogram of the phrase /na ãti mwanok/ [nã ãri \({ }^{\text {b }} \mathrm{m}^{w}\) ãnõq] 'I say "moon"", as produced by a female speaker in her 20 s . The initial \(/ \mathrm{m}^{\mathrm{w}} / \mathrm{of} / \mathrm{m}^{\mathrm{w}}\) anok/ 'moon' is produced as a prestopped \(\left[{ }^{\mathrm{b}} \mathrm{m}^{\mathrm{w}}\right]\), with nasal formants only visible during the second part of the consonant. A more thorough analysis of this phenomenon, including environments in which it occurs and variation among speakers, is a topic for further study.

\subsection*{2.3.1.4 Approximants}

Approximants \(/ \mathrm{w} /\) and \(/ \mathrm{j} /\) undergo allophony based on the vowel environment, as also happens in Nêlêmwa (Bril 2000).

Phonemic /w/ has two allophones; it is realized as approximant [w] before the vowels \(/ \mathrm{i} /\), /e/, and \(/ \mathrm{a} /\), but is produced as voiced fricative \([\beta]\) before back vowels \(/ \mathrm{o} /\) and \(/ \mathrm{u} /\). An example of phonemic \(/ \mathrm{w} /\) realized as phonetic [ \(\beta\) ] before \(/ \mathrm{o} /\) is shown in Figure 38.

Figure 38: Pronunciation of \(/ \mathbf{w o}^{m} b^{w}\) an/ 'tomb-3SG.POSS' showing fricated initial [ \(\beta\) ]


Figure 38 shows the word \(/ w^{m} b^{w} \mathrm{a}-\mathrm{n} /\) 'tomb-3SG.POSS' produced as [ \(\beta \mathrm{o}^{\mathrm{m}} \mathrm{b}^{\mathrm{w}}\) an]. Note that this allophony also occurs word-medially, where \([\beta]\) cannot be identified as \(/ \mathrm{w} /, / \mathrm{p}^{\mathrm{w}} /\), or \(/ \mathrm{p} /(\) see \(\S 2.2 .1 .5)\).

Phonemic /j/ also has two allophones; it is realized as approximant [j] before the vowels /e/, /a/, and /o/, while the voiced fricative [j] allophone occurs before high vowels \(/ \mathrm{i} /\) and \(/ \mathrm{u} /\). An example of phonemic \(/ \mathrm{j} /\) realized as phonetic [j] before \(/ \mathrm{u} /\) is shown in Figure 39.

Figure 39: Spectrogram for /la= juu-n/ [lajuun] '3PL.SUBJ= dig-DA.NSG'


Figure 39 shows the verb group /la= juu-n/ 'they dug', glossed '3PL.SUBJ= dig-DA.NSG', as produced by a female speaker in her 70s. Phonetic \(/ \mathrm{j} / \mathrm{in} / \mathrm{juu} /\) 'to dig' is produced as fricative [j], some high frequency vibration is visible on the spectrogram. Note that this allophony also occurs for word medial [j], which cannot be identified as \(/ \mathrm{j} / \mathrm{or} / \mathrm{c} /(\) see \(\S 2.2 .1 .5)\). An example is shown in Figure 40, where there is a great deal of high frequency noise in the production of voiced fricative [j] before \(/ \mathrm{u} /\).

Figure 40: Spectrogram of /piju/ 'star' showing fricative [j]


Figure 40 shows a spectrogram of the word /piju/ [piju] 'star' where the high frequency noise during the production of [j] is clearly visible.

\subsection*{2.3.2 Vowels}

In \(\S 2.2 .2 .1\), I discussed phonetic variation in the quality of vowels depending on whether the syllable is open or closed. The following sections will discuss other allophonic variation in vowels, namely duration (§2.3.2.1) and voice quality (§2.3.2.2)

\subsection*{2.3.2.1 Stress-induced vowel lengthening}

I conducted a statistical analysis of Belep vowel duration. Tokens were collected from two speakers - a male speaker, age 70, and a female speaker in her 20s. The speakers read from wordlists written in the locally developed orthography. \({ }^{86}\) Vowel

\footnotetext{
\({ }^{86}\) They were recorded using an Edirol R-09 at 44.1 KHz , 16-bit PCM wav format. Belep words were written beside their French glosses. Each word appeared in at least three wordlists, in a randomized order. Each time a word appeared in a wordlist, the speaker was asked to produce it twice: once in isolation and once in a carrier phrase.
}
duration was measured on a PC using Praat software (Boersma \& Weenink 2010).
Boundaries were marked only at zero crossings where possible (Smith 1978). The software program PASW was used to conduct statistical analyses. A data instances model (Quene and van den Bergh 2004) with a mixed between- and within-subjects design was used. The between-subjects independent variables were the vowel quality (/i/, /e/, /a/, /o/, and \(/ \mathrm{u} /\) ) and the syllable type (whether stressed, unstressed, closed, open, etc). The within-subjects independent variables were speaker and whether the token was produced in isolation or in a carrier phrase. The mixed-design ANOVA was conducted on the average across the trials for the duration of the vowel.

Based on my analysis, there is no significant difference in duration between unstressed vowels in an open syllable ( 109 ms ), stressed vowels in a closed syllable (129 \(\mathrm{ms}),{ }^{87}\) and unstressed vowels in a closed syllable ( 131 ms ). However, stressed vowels in an open syllable-that is, vowels which occur in the penultimate syllable of a word (see §2.7.1)—are significantly longer in duration \((177 \mathrm{~ms}) .{ }^{88}\) I refer to this pattern as stressinduced vowel lengthening and mark it in phonetic transcription with [:] where it is relevant to the analysis. Table 16 gives some examples of words containing each type of vowel.

\footnotetext{
\({ }^{87}\) Note that stressed closed syllables can only occur in monosyllabic words. See \(\S 2.6\) and \(\S 2.7\) for more information.
\({ }^{88}\) According to the results of statistical contrasts, stressed vowels in an open syllable are significantly longer than unstressed vowels in an open syllable \((F(1,29)=32.00, p<.001)\) and stressed vowels in a closed syllable \((F(1,29)=21.70, p<.001)\).
}

Table 16: Mean duration of vowels
\begin{tabular}{|c|c|c|c|c|}
\hline & Mean duration & \multicolumn{3}{|l|}{Example} \\
\hline Single vowels & \[
\begin{aligned}
& 109 \mathrm{~ms} \\
& 129 \mathrm{~ms} \\
& 131 \mathrm{~ms}
\end{aligned}
\] & /ke.tae/ /cep/ /ta.lep/ & [ke'rae] ['ç̧cp] ['talep] & \begin{tabular}{l}
'to brush' \\
'to build boats' \\
'to sweep'
\end{tabular} \\
\hline Single vowels (stress-lengthened) & 177 ms & /ke.la/ & ['ke:la] & 'to slide' \\
\hline
\end{tabular}

\subsection*{2.3.2.2 Devoicing and ingressive airstream}

In some circumstances, Belep speakers stop all voicing in the middle of an utterance and continue the rest of the utterance with an ingressive airstream mechanism. The sociolinguistic motivation behind this speech style has not yet been determined, though it may be related to the similar South Efate practice of devoicing sensitive topics (Thieberger 2006). It is most commonly practiced by women. For example, Figure 41 shows a spectrogram of ingressive airstream by a female speaker in her 20s.

Figure 41: Spectrogram for ingressive airstream


In Figure 41, the speaker ends an intonation unit with an ingressive airstream mechanism.
In the clause shown in (58) (note that orthographic conventions are used here; see §2.5),
 ingressive airstream.
(58) Nyami laô besoin de la yagelija la paboja.
\begin{tabular}{lll} 
nya-mi & \(\mathbf{l a = \hat { 0 }}\) & [bəzwz̃də] \\
DEM.IDF-DET.A.DST & 3PL.SUBJ=REAL & need.LN
\end{tabular}
\begin{tabular}{lll}
\(\mathbf{l a}=\) & yage-li-ja=la & pabo-ja \\
3PL.SUBJ \(=\) & help-TR-1PL.INCL.ABS=NOM & grandchild-1PL.INCL.POSS
\end{tabular}
'When our grandchildren will need to help us.' (lit. 'When they will need that our grandchildren help us')
Yal-27092011-LPLY

Another type of vowel allophony that occurs in Belep is that word-initial nasal vowels may be preceded by a nasal fricative burst in careful speech. This is more common when the nasal vowel is a front vowel /î/ or /ẽ/. For example, /ẽna/ 'to know' may be produced [hẽnã], and \(\tilde{i}^{n} \mathfrak{f} \mathrm{i}\) / 'ant' may be produced [hî̀ \(\mathfrak{f}\) ].

\subsection*{2.4 Morphophonemic processes}

The most significant morphophonemic processes in Belep are the lenition of voiceless stops in word-medial position (§2.4.1), phase shift (§2.4.2), and nasal spreading (§2.4.3).

\subsection*{2.4.1 Lenition}

Under some circumstances, Belep phonemic voiceless stops (§2.2.1.2, §2.3.1.2) obligatorily undergo the morphophonemic process of lenition. Belep lenition is characterized by the correspondence between voiceless stops \(/ \mathrm{p}^{\mathrm{w}} / \mathrm{h} / \mathrm{p} /, / \mathrm{t} /, / \mathrm{c} /\) and \(/ \mathrm{k} /\) and their allophones [w], [v], [r], [j], and [6], respectively, in certain environments. \({ }^{89}\) Note that of these lenited phonetic consonants, [w] and [j] are approximants, [v] and [к] are

\footnotetext{
\({ }^{89}\) In some cases in South Efate, intervocalic consonants are allophonically lenited; for example, /k/ is realized as [h]. However, this process is optional in South Efate (Thieberger 2006:48), unlike in Belep.
}
voiced fricatives, and [r] is a tap. \({ }^{90}\) All medial allophones of voiceless stops are higher in sonority than their voiceless stop counterparts, where sonority is defined as "the loudness [of a sound] relative to that of other sounds with the same length, stress, and pitch" (Ladefoged 1993:245).

The term 'lenition' is often used in the literature to describe historical processes of sound change; for example, it is defined as "a shift from less sonorous to more sonorous sounds" (Crowley 1997:25). The term may also refer to synchronic processes, "such as initial consonant mutations in the Celtic language[s], but these are called 'lenitions' by an extension of the term from diachrony" (Bauer 1988:381). Belep lenition has both synchronic and diachronic aspects, as I will show.

Synchronically, Belep lenition occurs when a word ending in a voiceless stop is marked with a suffix or enclitic (see §3.1.2.5, §3.1.2.6). As the voiceless stop is now in medial position within the phonological word, it is phonetically realized as one of its medial allophones (§2.3.1.2). Some examples are shown in (59).

\footnotetext{
\({ }^{90}\) As mentioned in §2.3.1.2 and §2.3.1.4, [ \(\left.\mathrm{\gamma}\right]\) may also be the lenited form of \(\left./ \mathrm{k} / ; \mathrm{r}\right]\) and \([\mathrm{x}]\) may occur as lenited forms of \(/ \mathrm{t} /\); lenited \(/ \mathrm{p}^{\mathrm{w}} /\) and \(/ \mathrm{p} /\) may be phonetically \([\beta]\); and lenited \(/ \mathrm{c} /\) may be [j].
}
\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{2}{*}{\(/ \mathrm{p}^{\mathrm{w}} / \mathrm{l}\) [ w\(]\)} &  & + /-k/ 'DET.D.PRX' & [ \({ }^{\text {n dewiiq] }}\) \\
\hline &  & \[
\begin{align*}
& \text { 3SG.SUBJ= laugh=NOM child- }  \tag{59}\\
& \text { 1SG.POSS }
\end{align*}
\] & [te ãwa nãẽy] \\
\hline \multirow[t]{3}{*}{\(/ \mathrm{p} />\) [v]} & /alap/ 'beach' & + /-na/ 'DET.D.MPX' & [alavinã] \\
\hline & /ba= talep=i-nao/ & \(\mathrm{INSTR}=\mathrm{sweep}=\) GEN \(-1 \mathrm{SG} . \mathrm{ABS}\) & [ \({ }^{\text {b ba talยvinãõ] }}\) \\
\hline & /te= molep \(=\) a cama-n/ & \[
\begin{aligned}
& \text { 3SG.SUBJ= be.alive=NOM } \\
& \text { father-3SG.POSS }
\end{aligned}
\] & [te mõleva cçamãn] \\
\hline \multirow[t]{3}{*}{\(/ \mathrm{t} / \mathrm{>}\) [ r\(]\)} & /mat/ 'seashore' & +/-k/ 'DET.D.PRX' & [maniiq] \\
\hline & /jet=i-e/ & pot-GEN-3SG.ABS & [jerie] \\
\hline & /te= ot=a \({ }^{\text {n }}\) da-n/ & 3SG.SUBJ= spill=NOM blood3SG.POSS & [te ora \({ }^{\text {n }}\) dan] \\
\hline \multirow[t]{3}{*}{/c/ > [j]} & /capac/ 'to depart' & \(+/={ }^{\mathrm{n}} \mathrm{du} /{ }^{\text {'DIR.DH' }}\) & [cçavaja \({ }^{\text {n }}\) du] \\
\hline & /ãc/ 'man' & +/-mi/ 'DET.A.DST' & [ãimĩ] \\
\hline & /te= ulac=a apa-n/ & \[
\begin{aligned}
& \text { 3SG.SUBJ= be.old=NOM } \\
& \text { sibling-3SG.POSS }
\end{aligned}
\] & [te ulaja avan] \\
\hline \multirow[t]{3}{*}{\(/ \mathrm{k} />\) [ b\(]\)} & /mwanok/ & +/-k/ 'DET.D.PRX' & [mª̃nõğiiq] \\
\hline & /jeek=i-nao/ & plant-GEN-1SG.ABS & [jerinãõ] \\
\hline & /na= pa= mwek \(=\) i-e/ & \(1 \mathrm{SG} . \mathrm{SUBJ}=\mathrm{CAUS}=\) & [nã pa \(\mathrm{m}^{\mathrm{w}}\) ¢彑彑ie] \\
\hline
\end{tabular}

Synchronic lenition also operates during phase shift (see §2.4.2 below), and on codemixing and words borrowed from French (see \(\S 2.5 .3\) ). Some examples are shown in (60).
(60) \(/ \mathrm{p} />\) [v] Fr. papier [papie] \(>\) B. [pwavie] 'paper'
\(/ t />[r] \quad\) Fr. couteau [kuto] \(>\) B. [kuro] 'knife'
Fr. pantalon [pãtalõ] > B. [paçanõ] 'pants'
\(/ \mathrm{c} />\) [j] Fr. français [fкãse] \(>\) B. [prãje] 'French'

\(/ \mathrm{k} />\) [к] Fr. tricot [triko] \(>\) В. [terigo] 't-shirt'
There is also diachronic evidence for lenition. Many Belep nouns (§4.1.3) and verbs (§5.1.5.1) undergo unpredictable stem modification depending on the morphosyntactic context. These fossilized forms show evidence of lenition having operated at some point in the past. Some examples are shown in (61) and (62).
\[
\begin{align*}
& / \mathrm{p}^{\mathrm{w} /}>\text { [w] } \mathrm{I}^{\mathrm{n}} \mathrm{dep}^{\mathrm{w} /} \text { 'deck' [ }{ }^{\mathrm{n}} \text { dewa-] '(something's) deck' }  \tag{61}\\
& / \mathrm{p} />[\mathrm{v}] \quad / n a a p / \text { 'fire' [nãve-] '(someone's) fire' } \\
& \text { /toop/ 'field' [tova-] '(someone's) field' } \\
& / t />[r] \quad /^{n} \text { Jet/ 'stomach' [n〕era-] '(someone's) stomach' } \\
& / \mathrm{c} />[\mathrm{j}] \quad \text { kic/ 'liver' [kije-] '(someone's) liver' } \\
& \text { /teec/ 'burn' [teja-] '(someone's) burn' } \\
& \text { /k/>[к] /pek/ 'flesh' } \\
& \text { [рева-] '(someone's) flesh' } \\
& \text { /tõnok/ 'mucus' } \\
& \text { [tõnõга-] '(someone's) mucus' } \\
& / \mathrm{p}^{\mathrm{w} />}[\mathrm{w}] \quad / \mathrm{ã} \mathrm{w} \text { / 'to laugh' [ãwi-] 'laugh.TR' }  \tag{62}\\
& / n o^{m} b^{w} a^{w /} / \text { to provoke' } \quad\left[n^{m}{ }^{m} b^{w}\right. \text { awi-] 'provoke.TR' } \\
& \text { /p/ > [v] /waap/ 'to topple' [wave-] 'topple.TR' } \\
& \text { /jaap/ 'to search' [javi-] 'search.TR' } \\
& / t />[r] \quad \text { /at/ 'to paddle' [are-] 'paddle.TR' } \\
& \text { /taat/ 'to flee' [tare-] 'flee.TR' } \\
& / \mathrm{c} />[\mathrm{j}] \quad / \mathrm{nac} / \text { 'to be surprised' [nãji-] 'be.surprised.TR' } \\
& / \tilde{o}^{\mathrm{m}} \mathrm{~b}^{\mathrm{wac}} / \text { 'to watch' } \quad\left[\tilde{o}^{\mathrm{m}} \mathrm{~b}^{w}\right. \text { aji-] 'watch.TR' } \\
& / \mathrm{k} />\text { [б] /nook/ 'to solicit' [nõге-] 'solicit.TR' } \\
& \text { /cak/ 'to fish with a net' [cçare-] 'fish.with.net.TR' }
\end{align*}
\]

In many other New Caledonian languages, lenited consonants have phonemic status (Ozanne-Rivierre et al. 1998, Bril 2000) in that they contrast with voiceless consonants. This is not the case for Belep (§2.2.1.2, §2.3.1.2), although Belep speakers prefer to use different graphemes for voiceless stops and their lenited forms (§2.5).

\subsection*{2.4.2 Phase shift}

Many Belep words have two different forms: the 'complete' phase, which occurs in isolation and at the end of an intonation unit, and the 'incomplete' phase, which occurs in most other environments. \({ }^{91}\) The phonological correspondence between the complete and incomplete phases of a word relies on its syllabic structure. If the final syllable of the complete phase is open (V or CV ), the incomplete phase is identical. Some examples are shown in Table 17.

\footnotetext{
\({ }^{91}\) This terminology is based on that coined for a similar phenomenon in Rotuman (Churchward 1939). In Rotuman, each word has two forms or 'phases', a longer 'complete' phase and a shorter 'incomplete' phase, which are distributed such that only the complete phase may occur at the end of an intonation unit or word, and all other words occur in the incomplete phase (Blevins 1994).
}

Table 17: Complete and incomplete phases, type 1
\begin{tabular}{|c|c|c|c|}
\hline Complete & & Incomplete & \\
\hline [õ] & 'to be good' &  & 'it is well with us all' (homily_0092) \\
\hline [tu] & 'to go.DH' & [avena \(=\underline{\text { tu }}=\) la awe] & 'we went down to Awe' (weekend_0002) \\
\hline [kova] & 'to leave' & [ave= kova=la mãr] & 'we left the shore' (tahitien_0184) \\
\hline [ãva] & 'to fish' & [nã \({ }^{\text {m}}{ }^{\text {w }}\) a ãva \(p^{\text {walaic }}\) ] & 'fishing hole' (hamecon_0064) \\
\hline [cçao] & 'to work' & [te \(=^{n}\) Jua cçao \(\mathrm{p}^{\text {walu }}\) ] & 'it is very hard work' (homily_0067) \\
\hline
\end{tabular}

If the final syllable of the complete phase is closed (VC or CVC), the incomplete phase adds \(/ \mathrm{a} /\) to the end of the word. This places the consonant which was previously wordfinal in a word-medial position, and it is obligatorily lenited (see §2.3.1.2, §2.4.1). Thus, a final closed syllable in the complete phase corresponds to two open syllables in the incomplete phase. In Table 18, some examples of this type of phase shift are shown; the additional \(/ \mathrm{a}\) / in the incomplete phase is underlined.

Table 18: Complete and incomplete phases, type 2
\begin{tabular}{|c|c|c|c|}
\hline Complete & & Incomplete & \\
\hline [ãc] & 'man' & [pa \({ }^{\text {mb }}\) bo-yã ãja \(p^{\text {walaic }}\) ] & 'one of my grandsons' weekend_0030 \\
\hline [t¢p] & 'to crackle' & [teva=mẽ \(=1 \mathrm{a}^{\mathrm{m}} \mathrm{b}^{\mathrm{w}}\) e \(\left.\mathrm{m}^{w_{i}^{n}} \mathrm{~J} \mathrm{a}\right]\) & 'spit (a hot coal) onto it' AP1_0082 \\
\hline [ãßur] & 'wave' & [ãßura \(\mathrm{p}^{\mathrm{w}}{ }^{\mathrm{n}} \mathrm{du}\) ] & 'two waves' sousmarin_0063 \\
\hline [wãnẽm] & 'to walk' & [nãra wa wãnẽmã=roven] & 'in all (our) walking' homily_0007 \\
\hline
\end{tabular}

If there is like-vowel hiatus ( \(\S 2.2 .2 .2\) ) in the last two syllables of the word (note that this is the only environment where like-vowel hiatus may occur), like-vowel hiatus in the complete phase corresponds to a single vowel in the incomplete phase. The rules relating to the syllable structure of the final syllable also apply. A few examples are shown in

Table 19; the altered vowels are underlined.

Table 19: Complete and incomplete phases, type 3
\begin{tabular}{|c|c|c|c|}
\hline Complete & & Incomplete & \\
\hline [tuu] & 'EX.SPC' & [tu a \({ }^{\text {n }} \mathrm{fu} \mathrm{p}^{\text {walaic] }}\) & 'there is one person' AW1_0134 \\
\hline [teãmãã] & 'high chief' & [teãmã=la kumwã:k] & 'the high chief of Koumac' AW4_0009 \\
\hline [toop] & 'field' & [la= ĩnã-ẽ tova-mãle] & 'they made the two fields' AW6_0085 \\
\hline [ \({ }^{\mathrm{m}}\) baraap] & 'evening' & [ka=õ tu=li \({ }^{\text {m }}\) barava \(\mathrm{p}^{\text {walaic }}\) ] & 'then, one evening,' lune_0018 \\
\hline
\end{tabular}

Words whose complete form contains a like-vowel hiatus in the last two syllables are thus divided into two categories: those whose final syllable is open, and which therefore 'lose' a syllable in their incomplete form; and those whose final syllable is closed, which therefore contain the same number of syllables in their complete and incomplete forms. For example, Table 19 shows the complete form of /teãmaa/ [teãmãã] 'high chief' (4 syllables) and its incomplete form [teãmã] (3 syllables). In contrast, the complete form of /toop/ [toop] 'field' is two syllables, and its incomplete form [tova] \({ }^{92}\) is also two syllables. The penultimate syllable, which carries stress (§2.7), is unaffected by phase shift, and it remains the penultimate syllable despite phase shift in all cases.

Note that phase shift may cause words which are not homophonous in complete phase, such as /toop/ 'field' and /top/ 'to melt', to become homophonous in connected speech; the incomplete phase of both words is [tova].

\subsection*{2.4.3 Nasal spreading}

Nasal spreading from left to right \({ }^{93}\) is the primary cause of phonetic nasalization of vowels in Belep. Nasal consonants (§2.1.1.5) and phonemically nasal vowels (§2.2.2.3) both spread nasality to the following segments, as the examples in (63) show.

\footnotetext{
\({ }^{92}\) The process by which [tova] is derived from /toop/ is the following:
\begin{tabular}{lll} 
1) & /toop \(/>\) top & like-vowel hiatus rule \\
2) & top \(>\) topa & since final syllable ends in consonant, final \(/ \mathrm{a} /\) is added to the end of the word \\
3) & topa \(>\) [tova] & word-medial consonant undergoes lenition
\end{tabular}
}

Sequences of Nasal consonant + Oral vowel and sequences of Nasal vowel + Oral vowel do not occur in Belep (see §2.2.2.4).
\begin{tabular}{lll}
\(/ \mathrm{m}^{\text {wa }}{ }^{\mathrm{n}}\) de-/ & {\(\left[\mathrm{m}^{\text {wã }}{ }^{\text {n }}\right.\) de- \(]\)} & 'nose' \\
\(/ \mathrm{nu} /\) & {\([\) nũ \(]\)} & 'coconut palm' \\
/ãota-/ & {\([\) ãõra- \(]\)} & 'instance' \\
/tũa-e/ & {\([\) tũã-ẽ \(]\)} & 'to fool-GNR'
\end{tabular}

Nasality spreads through single vowels and both types of vowel hiatus (§2.2.2.2) as shown in (64).
\begin{tabular}{lll} 
/mia/ & [mĩã] & 'to be ripe' \\
/nao/ & [nãõ] & 'to sing' \\
/teãmaa/ & [teãmãã] & 'high chief'
\end{tabular}

Nasality also spreads across morpheme boundaries (65).
(65) /topen=i cao/ [toven=ĩ cçao] 'to finish working'
/cẽne-e/ [ççẽnẽ-ẽ] 'to swallow'
/nanami-u/ [nãnãmĩ-ũ] 'think.TR-DETR'
Nasal spreading is stopped by all consonants, even approximants \(/ \mathrm{w} /\), \(/ \mathrm{j} /\) and \(/ \mathrm{l} /\), as shown in (66).


Some scholars of Northern New Caledonian languages posit different degrees of vowel nasality in contexts where it is not phonemic (Bril 2000). In Balade Nyelâyu, back vowels are more nasalized than non-back vowels; /a/ is more nasalized after the labiovelar nasal than after the bilabial; long vowels are more nasalized than short vowels; and vowels followed by an oral consonant are more nasalized than vowels followed by a nasal consonant (Ozanne-Rivierre et al. 1998:27). Though I have observed similar patterns for Belep, Chen (1997) argues that the degree of vowel nasality can be measured
using the amplitude of the nasal formants. \({ }^{94}\) The systematic investigation of the degree of nasalization of Belep vowels will be a topic of further study.

\subsection*{2.5 Orthographic conventions}

The rest of this grammar will eschew phonetic and phonemic transcriptions for most examples, unless it is necessary for explanation. Instead, examples will be written in the official Belep orthography, which was developed by the Belema Language Committee for use in the school in 1999 and presented to the community in 2011. Though many orthographic rules are still under consideration by the Committee, this work will make use of the rules which have been suggested as of this writing.

Table 20 shows equivalent IPA and Belep graphemes. Belep orthographic words and graphemes cited in the text will be in italics.

\section*{Table 20: Orthographic equivalents}
\begin{tabular}{|c|c|c|c|}
\hline IPA & Grapheme & IPA & Grapheme \\
\hline /i/ & , & /pw/ & \(\mathbf{p w}\) (initial and final), \(\mathbf{w}\) (medial) \\
\hline /e/ & e & /p/ & \(\mathbf{p}\) (initial and final), \(\mathbf{v}\) (medial) \\
\hline /a/ & a & /t/ & \(\mathbf{t}\) (initial), \(\mathbf{r}\) (medial and final) \\
\hline /o/ & 0 & /c/ & \(\mathbf{c}\) (initial and final), \(\mathbf{y}\) (medial) \\
\hline /u/ & u & /k/ & \(\mathbf{k}\) (initial and final), \(\mathbf{x}\) (medial) \\
\hline /1/ & ̂̂ & / \(\mathrm{m}^{\text {w/ }}\) & bw \\
\hline /e/ & \(\hat{\mathbf{e}}\) & /mb/ & b \\
\hline /ã/ & â & \({ }^{\text {/nd }}\) / & d \\
\hline /õ/ & o & \(\beta^{1} /\) & j \\
\hline /ũ/ & û & \(1 \mathrm{~g} /\) & g \\
\hline & & \(/ \mathrm{m}^{\mathrm{w}}\) / & mw \\
\hline & & /m/ & m \\
\hline & & /n/ & n \\
\hline & & /n/ & ny \\
\hline & & /n/ & ng \\
\hline & & /1/ & \\
\hline & & /w/ & w \\
\hline & & /j/ & y \\
\hline
\end{tabular}

\footnotetext{
\({ }^{94}\) She found that the formula A1-P1 (where A1 is the amplitude of the first formant and P1 is the amplitude of the highest peak harmonic around 950 Hz ) is a good estimator of the degree of nasality, where a higher difference indicates less nasality and a low or negative difference indicates more nasality (Chen 1997).
}

Note that Belep speakers prefer different graphemes for voiceless stops and their lenited (§2.4.1) allophones. Vowel hiatus (§2.2.2.2) will be written with separate graphemes, e.g. teec /teec/ [teec] 'to burn'. Nasalization will not be indicated on vowels which are phonetically nasalized due to nasal spreading (§2.4.3), e.g. mwanok/mwanok/ [mwãnõq] 'moon'. Initial \(/ \mathrm{w} /\) and medial \([\mathrm{w}]\) will always be written \(w\) before \(o\) and \(u\), even though there is no phonological basis for differentiating medial \([\mathrm{w}]\) from [ v ] in this environment (§2.2.1.5).

Note that there are several digraphs: \(p w / \mathrm{p}^{\mathrm{w}}, b w / \mathrm{m}^{\mathrm{b}} /, m w / \mathrm{m}^{\mathrm{w}} /, n y / \mathrm{n} /, n g / \mathrm{y} /\). Prenasalization of \(b w, b, d, j\), and \(g\) is not indicated orthographically. Phonemic \(/ \mathrm{j} /\) is written \(y\), while phonemic \(\mu_{\mathrm{J}}^{\mathrm{I}} /\) is written \(j\). Another potential source of confusion is between phonemic \(g{ }^{/ 7} g /\) and \(n g / \mathrm{y} /\); for example, cangee /caye-e/ 'to switch' contrasts with cagee /ca \({ }^{\mathrm{n}}\) gee/ 'to steal'.

Most example sentences in this reference grammar will make use of a four-line format as in (67), where the first line is orthographic, the second line is morphemic, the third line provides an English gloss, and the fourth line is a free translation into English. A phonetic transcription is also provided here for reference.

> [nã 'mãji 'cçaam]
67) Na maac yi caam.
na= may=i caam
1SG.SUBJ= die=GEN cold
'I'm cold.' (lit. 'I'm dying of cold.')
At the orthographic level, Belep words will always be written in their complete phases, even when they should be pronounced in their incomplete phases, e.g. gawaarimi /"gawaat-mi/ [ \({ }^{\mathrm{g}}\) gawarimi] 'day-DET.A.DST’. Ditropic clitics (§6.3) will be preceded by an orthographic space, and lenition will not be indicated on the word preceding a ditropic
clitic. Instead, ditropic clitics will change orthographic form depending on the preceding phone. For example, (67) uses the ditropic clitic \(=l i\) or \(=i\) ' GEN', \(^{\prime}\), but it is written \(y i\) in this case because it is preceded by \(c\). Proclitics (§3.1.2.6) will always be followed by an orthographic space. Enclitics (other than the locationals in §5.11, which follow the orthographic pattern of ditropic clitics) will not be preceded by an orthographic space, and furthermore consonants preceding an enclitic will be written in their medial form, e.g. cavac 'to depart' but cavayadu \(/ \mathrm{capac}={ }^{\mathrm{n}} \mathrm{du}\) / 'to depart=\(=\) DIR.DH'.

Glosses at the morpheme level will also use Belep graphemes. Here, Belep words will appear in an orthographic representation of their incomplete phase if they do so in the speech event. Lenitions at morpheme boundaries will use graphemes for lenited forms of consonants. For example, in (67), maac 'to die' is used in its incomplete form, so only one \(<\mathrm{a}>\) is used in the morphemic transcription. Furthermore, the addition of ditropic clitic \(=i\) makes the preceding /c/ consonant word-medial, provoking lenition to [j], which is written \(<\mathrm{y}>\).

\subsection*{2.6 Phonotactics}

Both open and closed syllables occur in Belep. Only simple onsets are available, and coda consonants are only found word-finally. Table 21 shows the only acceptable syllabic units in Belep.

Table 21: Monosyllabic structures in Belep
\begin{tabular}{|l|l|}
\hline V & \(\hat{o}\) 'to be good', \(i\) 'type of crab', \(u\) - 'to tease', \(e\) - 'hand' \\
\hline CV & \(n o\) 'fish', \(t u\) 'to go.DH \({ }^{95}\) \\
\hline VC & \(u c\) 'straw', \(\hat{\text { ' }}\) 'to be deaf' \\
\hline CVC & pan 'to go.TV', top 'to melt' \\
\hline
\end{tabular}

\footnotetext{
\({ }^{95}\) Words of the form \(\mathrm{C} \tilde{\mathrm{V}}\) (where the nasalization is phonemic rather than phonetic) are very rare.
}

Table 21 shows that the maximal syllable in Belep is CVC; it must contain one vowel and may be open or closed. No consonant clusters are permitted in Belep. Sequences of vowels, whether they are like or different, are always heterosyllabic (§2.2.2.2).

Disyllabic words are the most common type of monomorphemic word in Belep.
Table 22 shows examples of all possible syllable structures for disyllabic words. Note that in words of two syllables, the first syllable always receives primary stress (§2.7).

Table 22: Disyllabic structures in Belep
\begin{tabular}{|l|l|}
\hline V.V & êe 'yes', âo- 'vine', uo 'to reminisce' \\
\hline CV.V & mia 'to be ripe', cae 'reef', doo 'dirt', Nii (name of a place) \\
\hline V.VC & aom 'peaceful' \\
\hline CV.VC & duup 'to be dense', kiâk 'purple swamphen' \\
\hline V.CV & ano 'aunt', uya 'to arrive' \\
\hline V.CVC & elac 'noni tree', addap 'calm' \\
\hline CV.CV & taxa 'to harvest',piyu 'star' \\
\hline CV.CVC & texec 'grass', nibwan 'type of snake' \\
\hline
\end{tabular}

Words longer than two syllables in Belep tend to be morphologically complex. However, all trisyllabic combinations may occur (except those with like-vowel hiatus listed in Table 27 as impossible; see §2.7.3.1). Table 23 lists examples of trisyllabic words which are monomorphemic. Note that not all possible combinations are attested in the current corpus; further study is required to determine the reason for this gap. \({ }^{96}\)

\footnotetext{
\({ }^{96}\) The unattested structures are attested in multimorphemic words. For example:
VVV ua-e 'suck-3sG.ABS'
VVVC âo-or 'vine-2Du.poss'
CVVVC duae-n 'health-3sG.Poss'
VVCVC ua-len 'suck-3PA.ABS'
}

Table 23: Trisyllabic structures in Belep
\begin{tabular}{|l|l|}
\hline V.V.V & - \\
\hline V.V.VC & - \\
\hline CV.V.V & kuau 'cat', duae- 'health', Weaa (name of a place) \\
\hline CV.V.VC & - \\
\hline V.V.CV & auva 'end of mourning', âora- 'instance' \\
\hline V.V.CVC & - \\
\hline CV.V.CV & joâye 'golden-spot hogfish, Bealo (clan name) \\
\hline CV.V.CVC & caivak 'rat' \\
\hline V.CV.V & awaa 'mat', arii 'rice.LN' \\
\hline V.CV.VC & oyaap 'to reel', alaar 'rabbitfish' \\
\hline V.CV.CV & ileli 'snipe' \\
\hline V.CV.CVC & ulayar 'to be big' \\
\hline CV.CV.V & waxoe 'type of lizard', pinyau 'watermelon' \\
\hline CV.CV.VC & cexeen 'sacred', gawaar'day' \\
\hline CV.CV.CV & kumwala'sweet potato' \\
\hline CV.CV.CVC & boriric 'type of bird', kewowor 'to snore' \\
\hline
\end{tabular}

All consonants in the phonemic inventory (§2.1.1) may be syllable onsets.
Examples are shown in Table 24.

\section*{Table 24: Attested consonant onsets}
\begin{tabular}{|c|c|c|c|c|}
\hline & \multicolumn{2}{|l|}{Word-initial} & \multicolumn{2}{|l|}{Word-medial \({ }^{97}\)} \\
\hline pw & pwa & 'hole' & - & \\
\hline \(p\) & pa & 'to take' & cavac & 'to depart' \\
\hline \(t\) & \(t a\) & 'to go.UH' & uru & 'wind' \\
\hline c & ca & 'to be how?' & - & \\
\hline \(k\) & ka- & 'foot' & taxa & 'to harvest' \\
\hline \(b w\) & bwa- & 'head' & nabwa- & 'imprint' \\
\hline \(b\) & \(b a\) & 'to kiss' & coba & 'to hide' \\
\hline d & \(d a\) & 'blood' & muda & 'acne' \\
\hline \(j\) & ja & '1PL.INCL.INDEP' & aja & 'to hunt troca' \\
\hline \(g\) & \(g a\) - & 'sympathy' & ôgo & 'mountain' \\
\hline mw & mwa & 'house' & tamwa & 'woman' \\
\hline \(m\) & \(m a\) & 'LK4' & arama- & 'face' \\
\hline \(n\) & na- & 'interior' & âna- & 'contents' \\
\hline ny & nya- & 'mother' & pinye- & 'to start a fire' \\
\hline \(n g\) & ngagaro & 'spider conch' & cange- & 'to choose' \\
\hline w & wa & 'grandparent' & awaa & 'mat' \\
\hline \(l\) & la & '3PL.INDEP' & alap & 'beach' \\
\hline \(y\) & ya- & 'tuber' & uya & 'to arrive' \\
\hline
\end{tabular}

\footnotetext{
\({ }^{97}\) Note that the contrast between \(/ \mathrm{p}^{\mathrm{w} /}\) and /w/ is neutralized word-medially, as is the contrast between \(/ \mathrm{c} /\) and \(/ \mathrm{j} /\); see §2.2.1.5.
}

All vowels in the phonemic inventory (§2.1.2) may serve as syllable onsets, both wordinitially and word-medially (Table 25).

Table 25: Attested vowel onsets
\begin{tabular}{lllll} 
& Word-initial & \multicolumn{2}{l}{ Word-medial } \\
\(i\) & ipw & 'to be moldy' & caivak & 'rat' \\
\(e\) & elac & 'noni tree' & cae & 'reef' \\
\(a\) & alap & 'beach' & pia- & 'fingernail' \\
\(o\) & ola & 'shellfish' & gao & 'bamboo' \\
\(u\) & uru & 'wind' & dau & 'islet' \\
\(\hat{l}\) & \(\hat{i j i}\) & 'ant' & kî̂r & 'to be loud' \\
\(\hat{e}\) & êna & 'to know' & wêêk & 'tobacco' \\
\(\hat{a}\) & ano & 'aunt' & deâ & 'type of fly' \\
\(\hat{o}\) & \(\hat{o} g o\) & 'mountain' & yâôva & 'rigging' \\
\(\hat{u}\) & \(\hat{u} d u\) & 'to drink & kûurr & 'to grunt'
\end{tabular}

A limited consonant inventory is permitted in coda position. Codas only occur wordfinally. Some examples are shown in Table 26.

Table 26: Attested coda consonants
\begin{tabular}{lll} 
pw & âpw & 'to laugh' \\
\(p\) & nep & 'dream' \\
\(t\) & tuur & 'to fart' \\
\(c\) & uc & 'straw' \\
\(k\) & mwanok & 'moon' \\
\(m w\) & pûmw & 'smoke' \\
\(m\) & wânem & 'to walk' \\
\(n\) & dan & 'sky' \\
\(n y\) & geeny & 'to regret' \\
\(n g\) & waang & 'boat'
\end{tabular}

Despite the existence of both onset and coda consonants, Belep speakers use a number of strategies to avoid the occurrence of consonant clusters at morpheme and word boundaries. Within a phonological word, roots with a final nasal consonant may be modified by dropping this consonant, e.g. wânem 'to walk' \(+=d a\) 'DIR.UH' becomes wâneda; pan 'to go.TV' \(+=m e\) 'CTP' becomes pame. For roots with a final voiceless stop,
an epenthetic vowel (usually \(/ \mathrm{i} /\) or \(/ \mathrm{a} /\) ) is inserted between the consonants to avoid a cluster; the voiceless stop is then realized as a lenited allophone (§2.4.1). For example, cavac 'to depart \(+=d u\) 'DIR.DH' becomes cavayadu; jec 'brush' \(+-k\) 'DET.D.PRX' becomes jeyiik. Between phonological words, the first word undergoes phase shift, appearing in its incomplete form (§2.4.2), which always ends with a vowel.

\subsection*{2.7 Prosody}

Phonological words in Belep receive stress. According to the typology of stress systems described by Van Zanten \& Goedemans (2007), Belep has primarily fixed stress on the penultimate syllable. This is complicated by a large amount of extrametricality of formatives, and by some degree of lexical stress. Furthermore, the traditional crosslinguistic correlates of stress-vowel duration, intensity, and pitch (Lehiste 1970)— behave independently in Belep, making stress difficult to identify in many cases, both instrumentally and to native speaker judgments.

In §2.7.1, I discuss disyllabic words, whose stress patterns are most clearly identifiable both by speaker intuition and by phonetic stress correlates. In §2.7.2, I go into greater phonetic detail about these stress correlates and situations where they do and do not coincide. In §2.7.3, I present evidence that Belep primary stress falls on the penultimate syllable. In \(\S 2.7 .4\) and \(\S 2.7 .5\), exceptions to this pattern (extrametricality and lexical stress, respectively) are discussed.

\subsection*{2.7.1 Disyllabic words}

In all Belep disyllabic words (the most common word type), stress falls on the first syllable. Stress in disyllabic words is easier to identify than in other Belep words, since this is the only environment in which the stress correlates of vowel duration and
intensity coincide. In disyllabic words, the penultimate syllable is stressed-it contains a vowel of longer duration (§2.3.2.1) and the word's intensity peak-while the final syllable is unstressed and contains the pitch peak. A similar division of stress correlates is observed for other Oceanic languages including Gilbertese, which has primary stress on the penultimate mora \({ }^{98}\) and high pitch on the antepenultimate mora; and for Ponapean, which has high pitch on the penultimate mora and primary stress on the final mora (Rehg 1993).

A few examples of the stress pattern for disyllabic words are given in (68). Note that ['] precedes a stressed syllable which is marked as lengthened with [:], while ['] is marked on vowels to indicate a higher pitch than the surrounding segments.
\begin{tabular}{lll} 
alap & ['a:láp'] & 'beach' \\
calu & ['cça:lú] & 'to unbalance' \\
ere & [':'é] & 'to be different' \\
mada & ['mã: 'dá] & 'cloth' \\
pulu & ['pu:lú] & 'to speak' \\
tolam & ['to:lám] & 'basket' \\
wânem & ['wã:nẽ́m] & 'to walk'
\end{tabular}

Figure 42 shows a spectrogram of the characteristic crisscross intensity and pitch curves of a disyllabic Belep word.

\footnotetext{
\({ }^{98}\) Note that in Belep each syllable is assigned one mora.
}

Figure 42: Spectrogram for /titu/ [tiru] 'stake'


Figure 42 shows a spectrogram for the word /titu/ ['ti'rú] 'stake' produced in isolation by a male speaker, age 70. The first syllable /ti/, which is stressed, is of longer duration and higher intensity, while the second syllable /tu/ is unstressed and of higher pitch. Speakers consistently identify the first syllable in disyllabic words as stressed. \({ }^{99}\) As discussed in §2.3.2.1, the stressed vowel in a disyllabic word is significantly longer than any other single vowel syllable.

In disyllabic words which contain vowel hiatus (§2.2.2.2), the stress pattern is identical-the first vowel carries the intensity peak while the second vowel carries the pitch peak (69).

\footnotetext{
\({ }^{99}\) To identify speaker intuitions about stress, I asked "Which syllable do you hear the strongest?"
}
\begin{tabular}{lll} 
ciâ & ['cçiáá] & 'flea' \\
kaac & ['kaác] & 'to be bitter' \\
mae & ['mãẽ] & 'to sleep' \\
puer & ['puéc] & 'to prepare food' \\
waup & ['waúp'] & 'to be toothless' \\
yoor & ['joór] & 'to wade'
\end{tabular}

The total duration of the vowel sequence is significantly longer than a single stresslengthened vowel; however, more research remains to be done to determine whether or not the first vowel in a vowel hiatus undergoes stress-induced lengthening. Figure 43 shows the characteristic crisscrossing intensity and pitch curves of the disyllabic word nao ['nãõ] 'to sing', which contains a vowel hiatus.

Figure 43: Spectrogram for nao 'to sing'


\subsection*{2.7.2 Stress correlates}

In words containing more than two syllables, stress assignment is more complex-intensity, duration, and pitch all act independently. This is not unknown crosslinguistically; in Hungarian, for example, Fónagy (1958, cited in Lehiste 1970) found that
there were no unambiguous cues to stress-there were unstressed syllables that were longer and had greater intensity and higher frequency than a stressed syllable.

In the trisyllabic Belep words represented in (70) and (71), the intensity peaks on the first syllable, while the penultimate syllable is generally of longer duration and the final syllable contains the pitch peak. Here, [.] precedes a syllable to mark it as having the highest intensity, while ['] occurs over a vowel to mark the syllable with the highest pitch. The penultimate syllable is followed by a length marker [:] which indicates vowel lengthening (§2.3.2.1). An example spectrogram, using the word baraap [, \({ }^{\text {m }}\) bara:áp] 'evening' is shown in Figure 44.

Figure 44: Spectrogram for baraap 'evening'


Speakers do not consistently identify stress in trisyllabic words. The words in (70) were identified by speakers as stressed on the penultimate syllable, while the words in (71) were identified as stressed on the first syllable. Note that the intonation pattern is the
same for all words in (70) and (71); at issue is whether the speakers perceive stress on the intensity peak or on the penultimate syllable.
\begin{tabular}{|c|c|c|}
\hline cexeen & [, ç̧ere:én] & 'to be sacred' \\
\hline baraap & [, \({ }^{\text {mbara:áp] }}\) & 'evening' \\
\hline waxoe & [.шако:é] & 'type of lizard' \\
\hline pinyau & [.pinã:ú] & 'watermelon' \\
\hline kumwala & [.kumwã:lá] & 'sweet potato' \\
\hline boriric & [, mbori:ríc] & 'tern' \\
\hline peyere & [.pere:jé] \({ }^{100}\) & 'to brawl' \\
\hline
\end{tabular}
\begin{tabular}{lll} 
bolao & [, \({ }^{\text {m}}\) bola:ó] & 'banana tree' \\
tewuur & [,te \(\beta\) u:úr \(]\) & 'to begin' \\
ulayar & [,ula:jár] & 'to be big' \\
nyiraic & [,nĩra:íc] & 'midpoint' \\
woyino & {\([, \beta\) oji:nố \(]\)} & 'to hang'
\end{tabular}

Yal-18102011-DY1.wav and Yal-18102011-DY2.wav
For phonological reasons, I will consider the penultimate syllable to be the locus of stress in these trisyllabic words, despite the intensity peak on the first syllable and speaker uncertainty as to the location of stress. \({ }^{101}\)

\subsection*{2.7.3 The penultimate stress rule}

Several phonological factors influence the choice to consider the penultimate syllable as the carrier of stress. First, the phenomenon of phase shift (§2.4.2) provides evidence that the penultimate syllable receives primary stress. Phase shift, which alters or deletes final syllables, does not affect the onset or nucleus of penultimate syllables. The following sections will discuss two other arguments for penultimate stress: the fact that like-vowel hiatuses are limited in their distribution to occur only in the final two syllables

\footnotetext{
\({ }^{100}\) Note: /pejete/ 'to fight' has undergone metathesis for many speakers, being produced as [pereje].
\({ }^{101}\) Fontinelle (1976) argues that for Ajië, a Southern New Caledonian language, stress occurs on the first syllable of lexical words, except if the second syllable or mora is long, in which case it may receive lexical stress. This differs from my analysis in that Fontinelle places stress on the first syllable of words (with some exceptions), while I place it on the penultimate syllable (with some exceptions).
}
of words (§2.7.3.1) and the fact that penultimate syllables in 'compounded' words still maintain secondary stress despite losing primary stress (§2.7.3.2).

\subsection*{2.7.3.1 Distribution of like-vowel hiatus}

Like-vowel hiatuses-that is, disyllabic sequences of two like vowels
(§2.2.2.2)-have a limited distribution in Belep: they are only permitted in the final two syllables of a phonological word.

Disyllabic words with like-vowel hiatus are very common (72).
(72) kââk 'to shout'
naap 'fire’
neen 'when?'
koor 'to be soft'
jiin 'underlayer of a roof'
duup 'to be dense'
Trisyllabic words with like-vowel hiatus are also quite common (73).
\begin{tabular}{ll} 
belooc & 'to be puny' \\
kareec & 'type of clam' \\
biluup & 'type of hibiscus' \\
madaan & 'weather' \\
keloop & 'hat' \\
nodeec & 'to daydream'
\end{tabular}

There are even a few words with four or more syllables which contain a like-vowel hiatus
\begin{tabular}{ll} 
karavaa & 'pirogue' \\
kaladeen & 'to be distracted' \\
kawolook & 'tout-tout' \\
pavadaa & 'noise' \\
adeweaa & 'belligerent rock shell'
\end{tabular}

However, there are no Belep words with the syllable structures represented in Table 27.

Table 27: Impossible phonotactic structures
\begin{tabular}{|l|}
\hline \(\mathrm{V}_{1} \mathrm{~V}_{1} \mathrm{CV}\) \\
\hline \(\mathrm{V}_{1} \mathrm{~V}_{1} \mathrm{CVC}\) \\
\hline \(\mathrm{CV} \mathrm{V}_{1} \mathrm{CV}\) \\
\hline \(\mathrm{C} \mathrm{V}_{1} \mathrm{~V}_{1} \mathrm{CVC}\) \\
\hline \(\mathrm{CV} \mathrm{V}_{1} \mathrm{~V}_{1} \mathrm{~V}_{2}{ }^{102}\) \\
\hline \(\mathrm{CV} \mathrm{V}_{1} \mathrm{~V}_{1} \mathrm{~V}_{2} \mathrm{C}\) \\
\hline
\end{tabular}

Such word structures, in which a like-vowel hiatus occurs outside of the two final syllables, are impossible in Belep. This limiting of the distribution of like-vowel hiatuses to the final foot of a word is an argument for placing the locus of stress in the final foot as well. And the only available position for stress in the final foot is in penultimate position.

\subsection*{2.7.3.2 'Compounding' stress patterns}

There is no formal distinction in Belep between nouns in the dependent possessive construction (§4.1.2.1) and noun compounds (§3.6). However, nouns in the dependent possessive construction differ in their stress pattern depending on whether their possessor is pronominal or nominal. For example, consider the word tala- 'bed' in (75).
\begin{tabular}{|c|c|c|}
\hline tala- & & 'bed' \\
\hline tala-n & ['ta:la-n] & 'bed-3SG.POSS' ('his/her bed') \\
\hline tala pabo-ng & [, tala 'pa: \({ }^{\text {m }}\) bo-п] & 'bed grandchild-1sG.POSS' \\
\hline & & ('my grandchild's bed') \\
\hline
\end{tabular}

Example (75) shows that, when tala- has a pronominal possessor, it receives primary stress-including stress-induced lengthening-on the penultimate syllable, as with any disyllabic word. However, when it has a nominal possessor, the primary stress in the phonological phase falls on the penultimate syllable of the phrase, leaving both syllables in [tala] without a primary stress and thus without stress-induced lengthening (§2.3.2.1).

\footnotetext{
\({ }^{102}\) Some speakers contrast [nãõ] '1SG.INDEP' with [nã:õ] 'to sing', though others do not; this may simply be an instance of typical disyllabic stress on the lexical word nao 'to sing', while the pronoun is not as strongly stressed.
}

However, the penultimate syllable of [tala] still carries the intensity peak for the word, marked by [.]. This process is similar to the one found in English compounds, where a rhythmic clash between compounding elements allows "the original primary accent [to shift] to the place of the original secondary accent, and [become] subordinated to the primary accent of the right-hand element of the whole phrase" (Ewen \& Van Der Hulst 2001:214-215). A similar process occurs with finite verb forms (76).

> na coba na coba-e na coba ava-ng
[nã= 'çço: \({ }^{\text {m }} \mathrm{ba}\) ] 'I'm hiding'
na coba-e [nã= \(\left.\overline{\mathrm{ccco}},{ }^{\text {m }} \mathrm{ba}:-\mathrm{e}\right] \quad\) 'I'm hiding (from him/her)'

In (76), the intransitive verb coba 'to be hiding' receives primary stress ['] on the penultimate syllable, inducing vowel lengthening [:]. Used transitively but without a nominal absolutive argument, coba-e 'to hide from someone' carries both the intensity peak [.] and vowel lengthening in its penultimate syllable, which can thus be unambiguously identified as stressed. However, when a nominal absolutive argument (§6.3.1) is present, that noun receives the primary stress correlates of a disyllabic word (an intensity peak and stress-induced vowel lengthening), while coba now receives only an intensity peak and does not undergo vowel lengthening.

The behavior of the stress correlates of intensity and duration in these bound roots provides further evidence for penultimate stress. Even when a penultimate syllable loses its stress-induced vowel lengthening to a superordinate element, it still maintains its intensity peak and thus 'secondary stress'.

\subsection*{2.7.4 Extrametricality}

Most Belep suffixes and clitics are extrametrical, as defined by Van Zanten and Goedemans (2007); that is, they are blind to stress assignment based on the penultimate
stress rule. These include: noun quantifier suffixes (§4.2), case enclitics ( \(\S 6.3\) ), aspectual proclitics (§5.4), mood clitics (§5.5), bound absolutive suffixes (§5.6), subject agreement proclitics (§5.7), deictic directional enclitics (§5.11), and the linkers when they are encliticized (§3.2.4). For example, (77) - (79) show morphologically complex phonological words which appear to violate the penultimate stress rule.
\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{3}{*}{(77)} & pa-e & ['pa:-e] & 'take-SPC' \\
\hline & \(p a-e=m e\) & ['pa:-e=mẽ] & 'take-SPC=CTP' \\
\hline & \(p a-e=m e=l a\) & ['pa:-e=mẽ=la] & 'take-SPC=CTP \(=\) NOM \({ }^{\text {, }}\) \\
\hline \multirow[t]{3}{*}{(78)} & ava & ['a:va] & '1PL.EXCL.INDEP' \\
\hline & avaxa & ['a:va= ¢а] & '1PL.EXCL.SUBJ=ADD' \\
\hline & avaxaô & ['a:va=ヶа=õ] & '1 PL.EXCL.SUBJ=ADD=REAL' \\
\hline \multirow[t]{2}{*}{(79)} & bwage- & [ \({ }^{\text {m }} \mathrm{b}^{\mathrm{w}} \mathrm{a}:{ }^{\text {] }} \mathrm{ge}\) ] & 'to return' \\
\hline & bwage-nao & [ 'mbwa \({ }^{\text {² }}\) ge-nãõ] & ] 'return-1SG.ABS' \\
\hline
\end{tabular}

These examples are not violations of the rule since the lexeme they are derived from maintains its penultimate stress pattern; the suffixes and enclitics which are attached to them simply do not participate in stress assignment.

Not all Belep formatives are extrametrical, however. Formatives which participate in the assignment of stress to the penultimate syllable include: possessive suffixes (§4.1.2.2), nominal determiner suffixes (§4.3.2), and the specific suffix (§5.1.4).

Examples (80) and (81) show stress changes provoked by possessive and determiner suffixes, and example (82) shows changes caused by the specific suffix.
\begin{tabular}{|c|c|c|c|}
\hline (80) & mada & ['mã: \({ }^{\text {n }} \mathrm{da}\) ] & 'sadness' or 'cloth' \\
\hline & madaa-n & [mã'n \({ }^{\text {da:a-n] }}\) & 'sadness-3SG.Poss' \\
\hline & mada-or & [mã'n da:-or] & 'sadness-2DU.POSS \\
\hline & mada-yeda & [mã \({ }^{\text {da- }}\) 'je: \({ }^{\text {n }}\) da] & 'cloth-DET.DIST.UH' \\
\hline
\end{tabular}

Yal-12102011-DY.wav
\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{5}{*}{(81)} & ulac & ['u:lac] & 'old man' \\
\hline & ulayii-k & [ula'ji:i-q] & 'old man-DET.D.PRX' \({ }^{103}\) \\
\hline & gawaar & [ \({ }^{19} \mathrm{ga}\) 'wa:ar] & 'day' \\
\hline & gawaarii-k & [ \({ }^{\text {g gawa'ci:i-q] }}\) & 'day-DET.D.PRX' \\
\hline & & & Yal-24102011-YG1.wav - Yal-2410wo11-YG6.wav \\
\hline \multirow[t]{4}{*}{(82)} & êna & ['ẽ:nã] & 'to know' \\
\hline & êna-e & [ẽ'nã:-ẽ] & 'know-spC' \\
\hline & coba & ['cço:' \({ }^{\text {mba] }}\) & 'to be hiding' \\
\hline & coba-e & [cçco 'mba:-e] & 'hide.from-SPC' \\
\hline
\end{tabular}
Yal-12102011-DY.wav

The existence of such examples reinforces the presence of the penultimate stress rule.

\subsection*{2.7.5 Lexicality}

Belep also has some degree of lexical stress, despite its generally applicable penultimate stress rule. It is not cross-linguistically unusual for a language to combine fixed stress and lexical stress; for example, this also occurs in Dutch (Langeweg 1988), where a small number of words disobey the penultimate stress rule. In Belep, most words which disobey the fixed stress rule assign stress to the first syllable (83).
\begin{tabular}{|c|c|c|}
\hline âria & ['ãria] or ['ãra] & 'NEG.EX' \\
\hline bwaêdan & ['mbayẽ \({ }^{\text {n }}\) dan] & 'morning' \\
\hline cobala & ['cço \({ }^{\text {m }}\) bala] & 'bridge' \\
\hline
\end{tabular}

Other words with an exceptional stress pattern may signal word-boundary phenomena such as compounding (84).
\begin{tabular}{ll} 
uru ['uru] & 'wind' \\
acc \(\quad\) ['ãc] & 'man' \\
uruâny [uru'ãn] & 'hurricane' (lit. 'man-made wind') \({ }^{104}\)
\end{tabular}

Some formatives (as defined in chapter 3) also carry stress. \({ }^{105}\) These include: the spatial directional clitics (§5.11), which descend etymologically from lexical verbs; the adverbial

\footnotetext{
\({ }^{103}\) See \(\S 4.3 .2 .1\) on determiner \(-k\) and the stem allomorphy it provokes.
\({ }^{104}\) In Belep belief, hurricanes are created by a particular ancestral spirit on the northern island of Poc, who sends hurricanes when he is angry.
}
clitic =roven 'all', which is related to the lexical verb toven 'to finish' (§4.2.4); and the derivational proclitics (§3.5). Example (85) illustrates the usage of the stressed spatial directional enclitic \(=d a\) 'DIR.UH'.

```

Avaxaô bwagedava - bwagevadame la bwe Waala.
ava $=\mathbf{x a}=\hat{\mathbf{o}} \quad$ bwage=da-va -
1PL.EXCL.SUBJ=ADD=REAL return=DIR.UH-1PL.EXCL.ABS
bwage-va $=$ da $=$ me $=$ la bwe Wala
return-1PL.EXCL.ABS=DIR.UH=CTP=LOC top Waala
'And we went up back- went back up to Waala.'

```

Yal-17072009-TB-weekend_0042
In example (85), the speaker makes a speech error-she mixes up the order of the absolutive suffix \(-v a\) ' 1 PL.EXCL.ABS' and the enclitic \(=d a\) 'DIR.UH', placing \(=d a\) in penultimate position and producing it with stress. Immediately she corrects her error, placing \(=d a\) in antepenultimate position within the phonological word. However, the relocated \(=d a\) still carries stress, indicating that the stress is lexical in the case of this formative.

\subsection*{2.8 Other phonologies}

Prior to this section, I have discussed the phonology of native Belep words; that is, basic vocabulary words believed to be in use prior to French colonization. However, adult Belep speakers make use of a variety of other phonologies in their daily interactions (see §1.6.2 on Belep multilingualism). These include sound-symbolic forms; partiallyassimilated Latin borrowings; and words of French origin with varying degrees of assimilation. As such, I hypothesize that there is a stratified lexicon in Belep (Saciuk 1969), though this grammar will not otherwise engage the framework of Lexical

\footnotetext{
\({ }^{105}\) This is similar to the Southern New Caledonian language Ajië, where some suffixes are inherently stressed or provoke stress changes in the word to which they affix (Fontinelle 1976).
}

Phonology in which most scholars who posit lexical strata operate (for example, McCawley 1968). I define lexical strata here merely as subsets of the lexicon where different phonological rules apply. The preceding sections have focused on the native Belep stratum, while the Belep Special (§2.8.1), Latin (§2.8.2), and French (§2.8.3) strata will be discussed below.

\subsection*{2.8.1 Belep SPECIAL stratum}

A small subset of words in Belep violate normal phonotactics by allowing phonetically voiceless stops in word-medial position (in BELEP phonology, phonemic voiceless stops in this position are obligatorily lenited; see §2.4.1). These words can be divided into two categories: sound-symbolic forms, and proper names.

\subsection*{2.8.1.1 Sound symbolism}

Some sound-symbolic forms are represented in Table 28. Words accompanied by (\#) have been observed in both the expected form and the form that preserves the medial voiceless stop.

Table 28: Sound symbolic forms
\begin{tabular}{|c|c|c|c|}
\hline Phonemic form & Expected form & Phonetic form & Gloss \\
\hline /kũkũũt/\# & [kũкũũc] & [kũkũũc] & 'to murmur' \\
\hline /pipilo/\# & [pivilo] & [pipilo] & 'swiftlet' \\
\hline /popot/ & [povor] & [popor] & 'porcupinefish' \\
\hline /pupu \({ }^{\text {di/ }}\) /\# & [pußu \({ }^{\text {did }}\) ] & [pupu \({ }^{\text {di] }}\) ] & 'symmetrical' \\
\hline /makajawa/ & [mãsajawa] & [mãqajawa] & 'masked booby' \\
\hline /watepwe/ & [warewe] & [warep \({ }^{\text {w }}\) ] & 'brown booby' \\
\hline /polipo \({ }^{\text {n }}\) da/ & [poliwo \({ }^{\text {n }}\) da] & [polipo \({ }^{\text {n }}\) da] & 'butterfly' \\
\hline /tuci/ \({ }^{106}\) & [tuji] & [tuci] & 'porpoise' \\
\hline
\end{tabular}

As shown in Table 28, most of the words which violate the medial lenition rule are animal names. The first four words in Table 28 appear to be reduplicated (see §3.7);

\footnotetext{
\({ }^{106}\) This word is listed in Dubois (1975c) as both /tuci/ and \(/ \mathrm{tu}^{\mathrm{n}} \mathrm{y} \mathrm{i} /\); the latter form would be in accord with usual Belep phonology.
}
makayawa 'masked booby' and warepwe 'brown booby' may be onomatopoetic (it is unknown whether the calls of these birds are similar to their names); and polipoda 'butterfly' and tuci 'porpoise' are possibly compounds \({ }^{107}\) that have maintained their medial stops for sound-symbolism. Some of these words may also be borrowings from other New Caledonian languages.

\subsection*{2.8.1.2 Proper names}

Many proper names in Belep also preserve phonemic medial voiceless stops in their phonetic form. For these names, the expected lenited pronunciation is ungrammatical. Table 29 shows a few examples of Belep names with their corresponding French names (see §1.2.1 for more on proper names in Belep).

\section*{Table 29: Proper names}
\begin{tabular}{|c|c|c|c|c|}
\hline Phonemic form & Expected form & Phonetic form & French name & \\
\hline /pato/ & *[paro] & [pato] & Marie-Odile & [maxiodil] \\
\hline /acia/ & *[ajia] & [acia] & Ignacia & [inasia] \\
\hline /iko/ & * [іко] & [iko] & Rodérick & [rodeхik] \\
\hline /kacaca/ & *[kajaja] & [kacaca] & Cassandra & [kasãdqa] \\
\hline /tete/ & *[tere] & [tete] & Thérèse & [tex<z] \\
\hline /apo/ & *[aßo] & [ \(\mathrm{ap}^{\mathrm{w}}\) o] & Apollonie & [apoloni] \\
\hline /luci/ & *[luji] & [luci] & Lucie & [lysi] \\
\hline
\end{tabular}

It is likely that these SPECIAL stratum words are learned simply as exceptions to the lenition rule.

\subsection*{2.8.2 Religious jargon}

When the first Catholic missionaries arrived on Belep, they coined a number of new Belep words to communicate the Catholic faith to the Belema. As the language of the Church was Latin at the time, Belep contains a number of Latinate borrowings which

\footnotetext{
\({ }^{107}\) polipoda 'butterfly' contains the syllable da, which often carries the meaning of 'up', while tuci 'porpoise' contains \(t u\) 'to go.DH'.
}
are used in sermons, hymns, prayers, and discussions of religious life. Many of these forms are fully compatible with BELEP phonology (Table 30), and as such hypothesized phonemic forms for each word are indicated in the left column.

Table 30: Religious jargon in Belep phonology
\begin{tabular}{|c|c|c|c|}
\hline Phonemic form & Phonetic form & Latin origin & Gloss \\
\hline /ãjelo/ & [ãjelo] & angelō & 'angel' \\
\hline /capato/ & [cçavaro] & sabbatō & 'sabbath' \\
\hline /cãto/ & [ç̧ãro] & sānctō & 'sainted' \\
\hline \({ }^{\text {/ }}\) demonio/ & [ \({ }^{\text {d }}\) (emõniõ] & daemōn̄̄ & 'demon' \\
\hline \(\beta_{\text {jeopa/ }}\) & [ \({ }^{\text {jeova] }}\) & iehova & 'Jehovah' \\
\hline /katejita/ & [karejira] & catēchista & 'catechist' \\
\hline /kutuje/ & [kuruje] & cruces & 'cross' \\
\hline /matimonio/ & [mãrimõnĩõ] & mātrimōniō & 'wedding' \\
\hline /mija/ & [mĩja] & missa & 'Mass' \\
\hline /pekato/ & [рекаго] & peccātō & 'sin' \\
\hline /putieen/ & [purieen] & preces & 'prayer' \\
\hline
\end{tabular}

However, many other religious words used in Belep are not compatible with Belep phonology. There are three main differences between BELEP phonology and the phonology of this LATIN stratum:
(A) As in the Belep Special stratum, medial voiceless consonants are permitted, and contrast with medial lenited consonants. This results in \(/ \mathrm{f} /\) and \(/ \mathrm{v} /\) having phonemic status independent from \(/ \mathrm{t} /\) and \(/ \mathrm{p} /\).
(B) Consonant clusters are permitted, as long as one of the consonants is \(/ \mathrm{f} / \mathrm{or} / \mathrm{s} /\). (C) \(/ \mathrm{s} /\) has phonemic status.

Table 31 shows a few examples of words that fall into this stratum, with their violations of BELEP phonology indicated in the left column. Some of these words have undergone a semantic shift.

Table 31: LATIN stratum
\begin{tabular}{|c|c|c|c|}
\hline \multirow[b]{2}{*}{\[
\begin{aligned}
& (\mathrm{A}),(\mathrm{B}), \\
& (\mathrm{C})(\mathrm{A})(\mathrm{A})(\mathrm{A})
\end{aligned}
\]} & Phonetic form & Latin origin & Gloss \\
\hline & [apostolo] & apostolō & 'apostle' \\
\hline (A) & [karitate] & cāritāte & 'charity' \\
\hline - & [kirianõ] or & christiānō & 'Christian' \\
\hline (A), (B) , (C) & [kristianõ] & & \\
\hline (A), (B) & [martiir] & martyr & 'martyr' \\
\hline (C) & [para \({ }^{\text {n diso] }}\) & paradīsō & 'Paradise' \\
\hline (A), (B) & [patriaka] & patriarcha & 'ancestors' (Latin 'patriarchs') \\
\hline (C) & [seer] & soror & 'girl friend' or 'nun' (Latin 'sister') \\
\hline (A), (B) & [virginẽ] & virgine & 'Virgin' \\
\hline (A), (B) & [vistute] & virtūte & 'to shine' (Latin 'virtue') \\
\hline
\end{tabular}

In general, speakers are not entirely aware of these words' non-Belep origins.

\subsection*{2.8.3 FRENCH stratum}

As all adult Belema are fully bilingual in Belep and French, and children as young as three-who are by no means fluent French speakers-frequently use French words with French phonology (for example, beurre [bœк] 'butter' or petit [pəti] 'little'), it is a nontrivial task to tease apart which words of French origin are truly borrowings and which are instances of code-switching.

Wohlgemuth (2009) distinguishes borrowings, nonce borrowings, and codeswitching. Borrowings are "the attempted reproduction in one language of patterns previously found in another" (Haugen 1950). Nonce borrowings occur only once in a corpus, and their "frequency and acceptability criteria are unclear or nonexistent" (Poplack et al. 1988: 52). Instances of code-switching are "instantiations of transfer, but are neither understood nor shared by other speakers of the host language who do not happen to be bilinguals" (Wohlgemuth 2009). Both nonce borrowings and borrowings share the characteristics of "morphological and syntactic integration" (Sankoff et al. 1990:94).

The words represented in Table 32 are the clearest instances of borrowings; they are fully assimilated into BELEP phonology, speakers are not always aware of their French origin, and some of them have undergone semantic shift. All these words occurred frequently in their conventionalized forms over the course of my field work. Hypothesized Belep phonemic forms are listed in the leftmost column.

Table 32: French borrowings into BELEP
\begin{tabular}{|c|c|c|c|}
\hline Phonemic form & Phonetic form & French origin & Gloss \\
\hline /atii/ & [arii] & ris [кі] & 'rice' \\
\hline /cak/ & [cçaq] & sac [sak] & 'bag' \\
\hline /cen/ & [ç̧en] & sel [scl] & 'salt' \\
\hline /cepeto/ & [cçevero] & chevre [ \(\int \mathrm{Ev} \chi\) ] & 'goat' \\
\hline /cimii/ & [cçimĩi] & chemise [Jəmiz] & 'clothes' (French 'shirt') \\
\hline /cikate/ & [ç̧ibare] & cigarettes [sigabet] & 'cigarettes' \\
\hline /copan/ & [cçovan] & cheval [ [əval] & 'horse' \\
\hline /cuuk/ & [ç̧uuq] & sucre [syk \(\chi\) ] & 'sugar, sweet' \\
\hline /'dotot/ & [ \({ }^{\text {n doror] }}\) & docteur [doktœи] & 'doctor' \\
\hline 1 / geteec/ & [ \({ }^{\text {g }}\) ereec] & graisse [gbes] & 'rich, greasy' (French 'fat') \\
\hline /kape/ & [kave] & café [kafe] & 'coffee' \\
\hline /kilat/ & [kilar] or [kular] & culottes [kylot] & \begin{tabular}{l}
'underwear' \\
(French 'trousers')
\end{tabular} \\
\hline /kotoje/ & [koroje] & crochet [krofe] & 'hook' \\
\hline /kulieen/ & [kulieen] & cuillère [kчijधь] & 'spoon' \\
\hline /kuto/ & [kuro] & couteau [kuto] & 'knife' \\
\hline /kupetu/ & [kuveru] & couverture [kuvestyк] & 'blanket' \\
\hline /majin/ & [mãjin] & machine [mafin] & 'any motorized device' (French 'machine') \\
\hline /otoop/ & [oroop] & robe [ков] & 'dress' \\
\hline /pããc/ & [pããc] & pinces [pžs] & 'tongs' \\
\hline /patano/ & [paranõ] & pantalon [pãtalõ] & 'pants' \\
\hline /patin/ & [parin] & farine [fакin] & 'flour' \\
\hline /pẽ/ & [pẽ] & pain \([\mathrm{p} \tilde{\varepsilon}]\) & 'bread' \\
\hline /pet/ & [per] & fête [fıt] & 'party' \\
\hline /pimay/ & [pimãy] & piment [pimã] & 'hot peppers' \\
\hline /poc/ & [poc] & poche [pof] & 'pocket' \\
\hline /pooc/ & [pooc] & poste [post] & 'post office' \\
\hline /poliic/ & [poliic] & police [polis] & 'enforcer' (French 'police') \\
\hline /puut/ & [puur] & four [fuк] & 'oven' \\
\hline /pwavie/ & [pwavie] & papier [papie] & 'paper' \\
\hline /taac/ & [taac] & tasse [tas] & 'bowl' (French 'cup') \\
\hline /taap/ & [taap] & table [tabl] & 'table' \\
\hline /te/ & [te] & thé [te] & 'tea' \\
\hline /tetiko/ & [teriso] & tricot [triko] & 't-shirt' (French 'knit fabric') \\
\hline
\end{tabular}

However, the words of French origin in the following sections are less clear instances of borrowing. Though many of them undergo some phonological assimilation into Belep, all violate some rule of BELEP phonology.

\subsection*{2.8.3.1 Phonemic differences}

The French stratum expands on the phonotactic rules of the LATIN stratum.
(D) Medial voiceless consonants are permitted, and contrast with medial lenited consonants. This results in/s/and \(/ \mathrm{v} /\) having phonemic status independent from \(/ \mathrm{t} /\) and \(/ \mathrm{p} /\); they may occur word-initially.
(E) Consonant clusters are permitted, as long as one of the consonants is \(/ \mathrm{f} / \mathrm{h} / \mathrm{s} /\), or \(/ \mathrm{l} /\).
(F) \(/ \mathrm{s} /, / \tilde{\varepsilon} /, / œ /, / \partial /, / \mathrm{y} /, / \mathrm{z} /\), and \(/ \overline{3} /\) have phonemic status.

Table 33 shows a number of examples of words in the French stratum. Many of these words are nonce borrowings (occurring only once in my corpus), while others are more conventionalized borrowings used frequently by all speakers. Their feature(s) which violate BELEP phonology are listed in the left-hand column.

Table 33: French stratum
\begin{tabular}{|c|c|c|c|}
\hline & Phonetic form & French origin & Gloss \\
\hline (D), (E) & [ \({ }^{\text {m}}\) bopreer] & beau-frère [bofqєк] & 'brother-in-law' \\
\hline (D), (E) & [klakst] & claquettes [klakst] & 'flip-flops' \\
\hline (E) & [ргãje] & français [f̌ãse] & 'French' \\
\hline (E) & [ргããc] & France [fzãs] & 'France' \\
\hline (F) & [pyzi] & fusil [fyzi] & 'gun' \\
\hline (F) & [3œn] & jeune [3œn] & 'youth' \\
\hline (D) & [loto] & l'auto [loto] & 'car' \\
\hline (F) & [mã \({ }^{\text {gaja }}\) ] & magasin [magazž] & 'store' \\
\hline (E) & [plaji] & place [plas] & 'space, area' \\
\hline (E) & [ploy] & plomb [plõ] & 'lead weight' \\
\hline (F) & [ка \({ }^{\text {n }}\) do] & radeau [sado] & 'raft' \\
\hline (D) & [vakããc] & vacances [vakãs] & 'vacation, holiday' \\
\hline (F) & [vaji] & vache [vaf] & 'cow' \\
\hline
\end{tabular}

If words of French origin were considered to be part of the same phonology as
BELEP, it would be necessary to posit a much larger phonemic inventory for Belep. For example, while no minimal pair for \([\mathrm{p}]\) and [ v\(]\) exists in BELEP words, if we include words of French origin we find the following minimal pair:
/paci/ [paji] 'tomahawk' /vaci/ [vaji] 'cow' < French vache [vaf]

For these reasons it is best to consider the French stratum as separate from the Belep stratum.

\subsection*{2.8.3.2 Phonetic influences}

The influence of French also has phonetic effects on Belep. The most salient one of these is the effect on rhotics. Standard French has orthographic \(<\mathrm{r}>\), which is realized as \([\mathrm{\kappa}],[\chi]\), or \([\mathrm{R}]\) in Standard dialects. In the French spoken by many adult Belema, orthographic \(<\mathrm{r}>\) is realized as [ r\(]\), though the more highly educated may produce [ь]. Meanwhile, Belep has phonemic /t/ which is medially and finally realized as [r], and phonemic \(/ \mathrm{k} /\) which is medially realized as [ь].

For many Belep children, who are still learning both Belep and French, these rhotics overlap. Some Belep children produce all French \(<\mathrm{r}>\) as \([\mathrm{ь}]\), as well as all Belep [г] and [ь] as [ь]. For example, a three-year-old child might produce Belep /ãti/ [ãгi] 'to say' as [ãкi]. By the time they leave elementary school, however, Belep children have generally teased apart their rhotics, producing Belep /t/ and French \(<\mathrm{r}>\) as \([\mathrm{r}]\) and Belep \(/ \mathrm{k} /\) as \([\mathrm{b}]\) as the adults do.

Belep stress patterns are also applied strongly to French borrowings. To use some examples from Table 33 above:
(87) French claquettes [kla 'ket] 'flip-flops’

French l'auto [lo'to] 'car'
French français [fьã'se] 'French'

Belep ['kla:ket]
Belep ['lo:to]
Belep ['prã:je]

Example (87) shows that French words which are stressed on the second syllable are often borrowed into Belep with the stress on the penultimate syllable, which then undergoes stress-induced lengthening (§2.3.2.1).

\subsection*{2.8.3.3 Morphophonemics}

Many words of French origin which occur in Belep maintain the entirety of their French phonology; however, they are distinguished from code-switching by their degree of morphosyntactic integration into the stream of speech. Because of this, they should best be considered borrowings or nonce borrowings. A few examples are given in (88) and (89).
(88) French grotte [gкоt] 'cave' \(+\quad\) Belep [-ве \({ }^{\text {n da] }}\) 'DET.UH' \(>\quad\left[g^{2}+\operatorname{lime}^{\mathrm{n}} \mathrm{da}\right]\) 'the cave up there'
(89) French jeune [3œn] 'youth' + Belep [-mã] 'AC'
\(>\quad\) [3œnãmã] 'teenagers'
In these examples, French and Belep phonology interact at morpheme boundaries. In (88) and (89), word-final consonants in the French word provoke the Belep suffix's allophone for consonant-final Belep words.

\subsection*{2.9 Summary}

In this chapter, I have presented the phonemic inventory of Belep (§2.1) with a description of the phonemes (§2.2) and their allophones (§2.3). In §2.4 I described the main morphophonemic processes that occur in Belep, and in \(\S 2.5\) the orthographic conventions used in the rest of this work were discussed. The following sections described the phonotactics (§2.6) and prosody (§2.7) of Belep. The chapter concluded with a discussion of subsections of the lexicon where different phonological rules apply (§2.8).

\section*{Chapter 3 \\ Architecture of the word}

\subsection*{3.0 Introduction}

Wordhood in the languages of New Caledonia is not comprehensively addressed in the literature. These languages are characterized by a large number of formatives \({ }^{108}\) which display some phonological but little morphological independence. Scholars of the area have in most cases chosen not to justify classifying these formatives variously as particles, clitics, or affixes, \({ }^{109}\) which has led to a fairly uneven characterization of these languages in terms of Comrie's (1989) indexes of synthesis and fusion.

Most scholars of New Caledonian languages, when they address the question, characterize these languages as highly isolating (e.g. Nêlêmwa, "whose morphology is not very complex, is characterized by the presence of numerous transcategorial and polyfunctional morphemes" \(\left(\right.\) Bril 2002: 18) \(\left.{ }^{110}\right)\). This is not an accurate description of

\footnotetext{
\({ }^{108}\) This work will adopt Bickel and Nichols' (2007) definition of formatives as morphological rather than syntactic entities.
\({ }^{109}\) For example, Bril (2002) characterizes the TAM markers in Nêlêmwa as lexemes (the analogous Belep forms are discussed in §5.4), while the Nêlêmwa subject agreement markers (see \(\S 5.7\) for the Belep analogues) are classed as dependent morphemes and object agreement markers (see §5.6) are classed as suffixes. No argumentation is made for any of these classifications.
110 "Cette langue, dont la morphologie est peu complexe, se caractérise par la présence de nombreux morphèmes transcatégoriels et polyfonctionnels" (Bril 2002: 18; translation mine).
}

Belep, which is very low on the index of fusion (agglutinating) but is somewhere in the middle on the index of synthesis (synthetic).

This chapter will attempt to define the word in Belep (§3.1). I will then enumerate the word classes and their determining features (§3.2), divide the formatives into inflectional and derivational categories (§3.3, §3.4 and §3.5), and discuss other morphological operations (§3.6 and §3.7).

\subsection*{3.1 Definition of the word}

In this section I will show that a distinction between the phonological and grammatical word in Belep (as distinguished by Dixon and Aikhenvald (2002)) provides a useful method for characterizing the morphology of the language. I will show that there is an extreme disconnect in Belep between the phonological word and the grammatical word, which, if it were true for other languages of Melanesia, might contribute to the widespread inconsistency in the categorization of formatives.

In fact, the majority of word-forms in Belep can be characterized as either: (a) a grammatical word consisting of more than one phonological word-a phenomenon that also occurs in the Pama-Nyungan language Yidin and the Papuan language Yimas, as well as in the Melanesian language Fijian (Dixon and Aikhenvald 2002: 28); or (b) a phonological word which does not consist of a whole number of grammatical words. This also occurs in Fijian (Dixon and Aikhenvald 2002: 29-31), where a formative associated with one grammatical word is attached to another phonological word, and many examples from other languages are given in Cysouw (2005) under the name ditropic clitics. The Belep ditropic clitics are defined in §3.1.2.6 and discussed in detail in §6.3.

The Belep preface (see §5.2) is another example of a phonological word which does not consist of a whole number of grammatical words.

The wide disconnect in Belep between the phonological and the grammatical word most likely contributes to the lack of a Belep cultural conception of the 'word' as a unit. The Belep lexeme pulu has a number of senses: as a verb, it means 'to speak'; as a noun, it may mean 'language' (such as pulu Belep 'the language of Belep') or 'speech, utterance' (as in â pae pulu 'speech-carrier, spokesman'). The Belema do not have a specific way of referring to a 'word'; if, for instance, a teacher asks a student to repeat what he or she just said, she might use the form maya pulu 'section of speech', but this is not a fixed expression or collocation; many speakers would not say or recognize this. The Belep lexeme nara- 'name' is commonly used in conversation when defining a word, as in (1), and the term coined for the alphabet is ba ina naraja 'thing for making our names'. It is common for languages spoken by small numbers of speakers in Australia, Amazonia, and New Guinea to have a lexeme for 'name' but none for 'word' (Dixon \& Aikhenvald 2002:3).
(1) BG: Wîli yeek, bu lila yeek.
wîlli yeek bu=li-la yeek
DEM.IA-DET.A.PRX wood fishhook=GEN-3PL.ABS wood 'That wooden thing, their wooden fishhook.'

2 MCG: Iva naran?
iva nara-n
be.where.GNR name-3SG.POSS
'What's its name?'
3 BG: Hein?
ââ
eh?
'Eh?'
MCG: Ivi naran?
ivi nara-n
be.where.SPC name-3SG.POSS
'What's its name?'
BG: Na koni nara bu lila,
\begin{tabular}{llll} 
na \(=\) & koni & nara \(\mathbf{b u = l i - l a}\) \\
1SG.SUBJ \(=\) & be.unable.TR & name & fishhook=GEN-3PL.ABS
\end{tabular}
âri na ênae naran.
âri= na= êna-e nara-n
NEG= 1SG.SUBJ= know-SPC name-3SG.POSS
'I couldn't say what the name of their fishhook was, I don't know its name.'

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Example (1) shows several instances of the noun nara- 'name' being used to mean 'word'. It is used twice by speaker MCG (in lines 2 and 4) to ask for the word for a type of fishhook, and it is used twice by speaker BG (lines 5 and 6) to disclaim knowledge of the sought-after word.

The Belema also vary widely in their interpretation of the orthographic 'word'.
When writing their language, some Belep speakers place spaces between each formative, while others use the character '-'. For example, (2) and (3) show several uses of the genitive enclitic \(=l i\) or \(=i\) (§6.3.3) written variably attached to the orthographic word
preceding it, the word following it, and alone. In example (2), drawn from a word- and phraselist composed by one Belep speaker, the genitive enclitic \(=i\) is written attached to the following orthographic word.
(2) < nâ wa môlep vinâôo ka nâ tegelac>

Na wa molep vinao, ka na tegelac.
na wa= molev=i-nao ka na= tegelac interior RESULT= live=GEN-1SG.POSS LK 1SG.SUBJ= fail
'In my life I have failed. \({ }^{111}\)
PT handout
In example (3), which shows a transcription of song lyrics by another Belep speaker, the genitive enclitic \(=l i\) is surrounded by orthographic spaces in line 1 , and occurs attached to the preceding orthographic word in line 3 .
(3) < a tamé ka pilou / pilou li gawarick > A tame ka pilu /pilu li gawaariik
\begin{tabular}{lll}
\(\mathbf{a}=\) & ta=me \(\quad\) ka pilu & pilu=li
\end{tabular}\(\underset{\text { gawarii-k }}{\text { 2PL.SUBJ }=}\)\begin{tabular}{l} 
go.UH=CTP LK dance dance=GEN day-DET.D.PRX
\end{tabular}

2 <oulé naédjama / ma dja yague lila >
u le naejama / ma ja yagelila
\(\begin{array}{llll}\mathbf{u}=\mathbf{l e} & \text { nae-ja-ma } & \text { ma } & \mathbf{j a =} \\ \text { toward=DAT } & \text { child-1PL.INCL.POSS-AC } & \text { LK4 } & \text { 1PL.INCL.SUBJ= }=\end{array} \begin{aligned} & \text { yage-li-la } \\ & \text { help-TR-3PL.ABS }\end{aligned}\)
3 <bwera tchaolila>
bweer cao lila
bwe-ra cao=li-la
top-3SG.POSS work=GEN-3PL.ABS
'Come and dance / dance for this day / for our children / so that we help them / with their work'

Balade-mariage
Examples (2) and (3) show that native speakers have varied interpretations of the wordhood of formatives such as the genitive enclitic. Speakers also interpret the orthographic wordhood of derivational proclitics (§3.5.2) in various ways. For instance,

\footnotetext{
\({ }^{111}\) «Dans ma vie je suis loupé» (translation mine)
}
(4) shows an example (from a speaker-transcribed wordlist) of proclitic \(\hat{a}=\) attached to its host with a dash. \({ }^{112}\)
(4) < an-baé-maac >
â bae maac
\(\hat{\boldsymbol{a}}=\quad\) bae maac
AGT= eat dead
'cannibal' \({ }^{113}\)
PT handout

By contrast, example (5) (from speaker-transcribed song lyrics) shows the proclitic wa= separated from its host by an orthographic space.
(5) < mesi liwa djinaô dou la bwedo.> Merci li wa jinaodu la bwe doo.
[mesi]=li wa= ji-nao=du=la bwe doo
thank.you.LN=GEN RESULT= give-1SG.ABS=DIR.DH=LOC top earth
'Thank you for putting me on this earth.'
Balade-mariage
The following subsections will address inconsistencies related to wordhood and give definitions of the phonological word and the grammatical word in Belep, followed by a discussion of how these categories do (and do not) overlap.

\subsection*{3.1.1 Phonological word}

Cross-linguistically, there are many tendencies that can be used to define a phonological word. Aikhenvald (2007: 2) defines a phonological word as "a prosodic unit not smaller than a syllable." Dixon and Aikhenvald (2002) further stipulate that a phonological word usually has many characteristic cross-linguistic criteria such as internal syllabic structure and phonotactics, pause phenomena, stress and nasalization, and phonological rules applying word-internally or across word boundaries (Dixon \& Aikhenvald 2002: 13). Bauer (2003) adds that such criteria as singular, regular wordstress and vowel harmony are also characteristic (Bauer 2003: 58-60).

\footnotetext{
\({ }_{112}^{112}\) Some complex NPs in French orthography are joined with dashes.
\({ }^{113}\) «celui qui mange des morts » (translation mine)
}

The following sections will describe how these criteria can be applied to the word-form in Belep. The cluster of features which together define the phonological word in Belep include: syllable structure (§3.1.1.1), penultimate stress (§3.1.1.2), allophony conditioned by the phonemic environment (§3.1.1.3), vowel epenthesis (§3.1.1.4), morphophonemic stem alternations (§3.1.1.5), and pause phenomena (§3.1.1.6).

\subsection*{3.1.1.1 Syllable structure}

Phonological words in Belep consist of one or more syllables (§2.6). Word-initial and word-medial syllables may have the structure V or CV , while only word final syllables may have the form \(\mathrm{V}, \mathrm{CV}, \mathrm{VC}\), or CVC as shown in example (6).
\begin{tabular}{|c|c|c|c|}
\hline (6) & \(\hat{o}\) & 'to be good' & /õ/ \\
\hline & pe & 'stingray' & /pe/ \\
\hline & up & 'to breathe' & /up/ \\
\hline & сер & 'to build boats' & /cep/ \\
\hline & pao & 'outdoors' & /pa.o/ \\
\hline & pawi & 'hibiscus' & /pa.wi/ \\
\hline & kiâk & 'purple swamphen' & /ki.ãk/ \\
\hline & talep & 'to sweep' & /ta.lep/ \\
\hline & bolao & 'banana tree' & /mbo.la.o/ \\
\hline & wimawo & 'ironwood' & /wi.ma.wo/ \\
\hline & jabaang & 'Spanish mackerel' & \({ }^{\text {fa. }}{ }^{\text {m }}\) ba.ay/ \\
\hline & ulayar & 'to be big' & /u.la.jat/ \\
\hline
\end{tabular}

In multimorphemic words, processes such as vowel epenthesis and consonant deletion maintain the word-internal syllable structure of Belep (7).
(7) wânem 'to walk' \(+\quad=d a\) 'DIR.UH' \(>\) wâneda
pan 'to go.TV' \(+\quad=m e \quad\) 'СтР' \(>\) pame
jec 'brush' \(+\quad-k \quad\) 'DET.D.PRX' \(>\) jeyiik
nep 'dream' \(+\quad-n a \quad\) 'DET.D.MPX' \(>\) nevina

\subsection*{3.1.1.2 Penultimate stress}

Phonological words in Belep carry primary stress, usually on the penultimate syllable (§2.7). This stress, here marked by ['] preceding the stressed syllable, is often
accompanied by vowel lengthening (§2.3.2.1), indicated by [:]. Some examples are shown in (8).
(8) tamwa 'woman'
kоти 'hermit crab'
pulu 'to speak'
\(\hat{a} v u\) 'housefly'
nara- 'name'
jabaang 'Spanish mackerel' [ \({ }^{\mathrm{n}}{ }^{2} \mathrm{a}\) ' \(\mathrm{m} \mathrm{ba}: \mathrm{ay}\) ] cexeen 'to be sacred' [се' ве:еп]
bolao 'banana tree'
['ta:mwã]
['ko:mũ]
['pu:lu]
['ã:vu]
['nã:ca]
['mo'la:o]

The addition of some suffixes and enclitics to a phonological word changes the stress pattern (§2.7.4). For example, the stressed vowel /u/ in ulac 'old man' is normally lengthened, but if a determiner suffix (§4.3.2) is attached to the word, the stress shifts to the penultimate vowel \(/ \mathrm{i} /\) and stress-induced lengthening on \(/ \mathrm{u} /\) is no longer present (9).
\begin{tabular}{llll} 
ulac & /ulac/ & ['u:lac] & 'old man' \\
ulayiik & \(/\) ulacii-k/ & [ula'ji:iq] & 'old man-DET.D.PRX'
\end{tabular}

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Stress changes may also signal other phonological word-boundary phenomena, such as grammaticalization (10) and compounding (84).
(10) toven 'finish' ['to:ven]
=roven 'COMPL' [ro'ven]
\begin{tabular}{ll} 
uru 'wind', & ['u:ru] \\
ac & 'man' \\
uruâny 'hurricane' (lit. 'man-made wind') & ['ãn] \\
[uru'ãn]
\end{tabular}

\subsection*{3.1.1.3 Conditioned allophony}

Some conditions for allophony in Belep depend on word-level phonology, including /e/ centralization, nasal spreading, and lenition.

The vowel /e/ is frequently centralized to \([\varepsilon]\) or \([\mathrm{I}]\) (§2.2.2.1) when it occurs in a closed syllable; closed syllables only occur word-finally (§2.6). Thus, the addition of
some suffixes and enclitics may condition allophonic variation between [e] and \([\varepsilon]\), as in (12).
\begin{tabular}{ll} 
bane- 'companion' & {\([\) 'mba:ne] } \\
bane-mw [companion-2SG.POSS] & {\(\left[\right.\) 'mba:nem \(\left.{ }^{\mathrm{w}}\right]\)} \\
nawe- 'to deposit' & ['na:we] \\
nawe- \(n\) [deposit-DA.NSG] & ['na:wen]
\end{tabular}

Belep nasal spreading (§2.4.3) phonetically nasalizes all vowels following a nasal phoneme. For example, Figure 45 shows a representation of the word mwanao 'to approach' with arrows indicating the continuation of nasal formants throughout all the vowels of the word. Here, the nasal consonant \(/ \mathrm{m}^{\mathrm{w}} /\) phonetically nasalizes the following \(/ \mathrm{a} /\), while the nasal consonant \(/ \mathrm{n} /\) phonetically nasalizes the vowels \(/ \mathrm{a} / \mathrm{and} / \mathrm{o} /\) in the two syllables which follow it.

Figure 45: Spectrogram of mwanao 'to approach'


Nasal spreading also crosses suffix and enclitic boundaries. For example, in (13), the locative ditropic clitic \(=a(\S 6.3 .5)\) is phonetically nasalized because it follows the nasal consonant \(/ \mathrm{m} /\) in wânem 'walk'.
```

[ka ' }\mp@subsup{}{\mathrm{ fa wãnẽmã an mween]}}{
Ka ja wânem ma bween,
ka ja=
wânem=a bwee-n
LK 1PL.INCL.SUBJ= walk=LOC top-3SG.POSS
'and we walked on it,'

```

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Figure 46 shows a spectrogram from the utterance represented in (13), where the nasal formants (marked with an arrow) are visible throughout the enclitic \(=a\).

Figure 46: Spectrogram of nasalized =a after nasal consonant


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However, nasal spreading is blocked by a phonological word boundary, as the examples in (63) show. In each of these instances, a phonological word boundary blocks the spreading of phonetic nasality to the first vowel in the second word.
avena up
teô udu
pwaneen alaar
[avenã up]
'we smoke'
teô udu
pwaneen alaar
[teõ \(u^{n} d u\) ] 's/he bent down'
[pwanẽnã alaar] 'how many rabbitfish'
The morphophonemic process of lenition (§2.4.1)—whereby voiceless stops / \(/ \mathrm{w} /\), \(/ \mathrm{p} /\), /t/, /c/, and \(/ \mathrm{k} /\) have the intervocalic allophones [w], [v], [ r\(],[\mathrm{j}]\), and [ь], respectively—operates only within a phonological word; it does not cross phonological word boundaries. So, for instance, final voiceless stop allophones may become medial, and thus lenited, with the addition of some suffixes and enclitics (15), but initial voiceless stops are never lenited because they are preceded by a phonological word boundary (16).
(15) koyap 'lobster sp.' \(+\quad-k\) 'DET.D.PRX' \(\gg\) koyaviik
ulac 'old man' \(+\quad-m a \quad\) 'AC' \(>\) ulayama
yeek 'plant' \(+\quad=i-e \quad '=\mathrm{GEN}-3 \mathrm{SG} . \mathrm{ABS}\) ' \(>\) yeexinao

In connected speech, the presence of a voiceless stop is a signal of a phonological wordboundary.

\subsection*{3.1.1.4 Vowel epenthesis and phase shift}

Since consonant clusters are not permitted in Belep (§2.6), speakers use a variety of strategies to avoid them; however, these strategies differ somewhat depending on whether the consonant cluster occurs at a word-boundary or within a phonological word.

Within a phonological word, speakers obligatorily insert an epenthetic vowel between a root and a suffix or enclitic in order to avoid a consonant cluster. Speakers
insert the vowel /i/ before determiner suffixes (§4.3.2) and the vowel/a/ before quantifier suffixes (§4.2) and directional enclitics (§5.11). Examples are shown in (17). Note that in these instances, speakers represent the epenthetic vowels orthographically.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline (17) & \multirow[t]{5}{*}{ulac} & \multirow[t]{5}{*}{'old man'} & + & -k & 'DET.D.PRX' & \(>\) & ulayiik \\
\hline & & & + & -na & 'DET.D.MPX' & \(>\) & ulayina \\
\hline & & & + & -xeda & 'DET.UH' & \(>\) & ulayixeda \\
\hline & & & + & -li & 'DET.A.PRX' & \(>\) & ulayili \\
\hline & & & + & -ma & 'AC' & \(>\) & ulayama \\
\hline & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{cavac 'to depart'}} & + & \(=d u\) & 'DIR.DH' & \(>\) & cavayadu \\
\hline & & & + & =van & 'DIR.TV' & > & cavayavan \\
\hline
\end{tabular}

To avoid consonant clusters at phonological word boundaries, speakers use phase shift (§2.4.2), a morphophonemic process which operates at the level of the phonological word. In phase shift, words which ordinarily end in a consonant are converted into vowelfinal forms, as shown in (18) where each verb is followed by the adverb mwa 'again' (see §3.2.3). The final vowel of a word's incomplete phase is always /a/. Speakers do not represent phase shift orthographically.
\begin{tabular}{|c|c|c|c|c|}
\hline tûûn & 'to rub' & \(>\) & [tũnã mwã] & 'rub again' \\
\hline top & 'to melt' & > & [tova mwã] & 'melt again' \\
\hline ar & 'to row' & > & [ara mwã] & 'row again' \\
\hline geek & 'to be dirty' & > & [ \({ }^{\text {g gesa }} \mathrm{m}^{\text {wã }}\) ] & 'be dirty again' \\
\hline
\end{tabular}

\subsection*{3.1.1.5 Morphophonemic stem alternations}

Many possessed nouns (§4.1.2.3) undergo morphophonemic stem alternations depending on whether their possessor is indicated by a pronominal suffix (i.e. part of the same phonological word), or by a full noun phrase (i.e. a separate phonological word).

Some examples are shown in (19).
\begin{tabular}{llll} 
(19) \begin{tabular}{lll} 
bwa- & 'head' & bwaa-n \\
aro- & 'husband' & aroo-ng
\end{tabular} & 'his/her head' \\
ary & 'mysband' \\
do & 'spear' & doo-mw & 'your spear' \\
mua- & 'flower' & muu-r & 'its flower' \\
pia- & 'fingernail' & pii-n & 'his/her fingernail'
\end{tabular}

In these stem alternations, the forms on the left signal the presence of a phonological word-boundary, while those on the right signal the absence of one.

\subsection*{3.1.1.6 Pause phenomena}

Pauses in the stream of speech in Belep do not tend to occur within phonological words, but rather between them, a phenomenon noted cross-linguistically by Dixon and Aikhenvald (2002:24). For example, in my corpus, there are no instances of pauses which occur before possessive (§4.1.2.2), quantifier (§4.2), or determiner suffixes (§4.3), before the directional (§5.11) or locational enclitics (§5.12), or before ditropic clitics (§6.3). Pauses do, however, occur between a class 1 noun (§4.1.1.1) and its nominal possessor, as in (20) where the speaker pauses after the class 1 noun bwe- 'top' and performs a repair, choosing not to finish the clause she had previously begun.
(20) "Ava ca ta la bwe - Nyami la ca giva li âjuma la bwe alap,"
ava= \(\quad \mathbf{c a}=\mathbf{t a}=\mathbf{l a} \quad\) bwe nya-mi \(\quad \mathbf{l a}=\quad \mathbf{c a}=\)

1PL.EXCL.SUBJ= ITER= go.UH=LOC top DEM.IDF-DET.A.DST 3PL.SUBJ= ITER=
\begin{tabular}{lll} 
gi-va=li & \begin{tabular}{l} 
âju-ma=la \\
attack-1PL.EXCL.ABS=GEN \\
person-AC=LOC
\end{tabular} & \begin{tabular}{l} 
bwe alap \\
top
\end{tabular} \\
beach
\end{tabular}
attack-1PL.EXCL.ABS=GEN person-AC=LOC top beach
"We often go onto - When the people kill us on the beach,"" Yal-01082010-MFD_0041

Though class 1 nouns are particularly tightly bound to their possessors in terms of constituency (see \(\S 3.6, \S 4.1\) ), examples such as (20) show that pauses are a phenomenon associated primarily with the phonological word.

\subsection*{3.1.2 Grammatical word}

According to Dixon and Aikhenvald (2002), a grammatical word consists of "a number of grammatical elements which (a) always occur together, rather than scattered through the clause (the criterion of cohesiveness); (b) occur in a fixed order; (c) have a conventionalised coherence and meaning" (Dixon \& Aikhenvald 2002:19). Since this
definition is not language-specific, I will not enumerate the methods by which grammatical words are distinguished in Belep. Instead I will discuss the major types of grammatical word in Belep.

\subsection*{3.1.2.1 Grammatical words that are also phonological words}

Most phonological words in Belep-with the exception of some bound noun stems and bound transitive verb stems (see §3.1.2.3)—are also grammatical words in that they can be listed as a citation form or serve as the answer to a question-word question.

The converse is not true; there are many grammatical words in Belep which do not consist of a single phonological word (see §3.1.2.2). The set of grammatical words that are also single phonological words describes the set of words which can constitute a complete utterance all by themselves (Dixon \& Aikhenvald 2002: 24).

Nouns marked with a determiner suffix (described in §4.3.2) are phonological and grammatical words. They can constitute a complete utterance, for instance, as the answer to a question-word question (21).

\section*{(21) Q: Tili âli îna mwima laak?}
\(\mathbf{t i = l i}\) â-li îna mwi-ma laa-k who=GEN DEM.NEW-DET.A.PRX make.GNR DEM.IA-AC DEM.PL-DET.D.PRX 'Who made these things?'

\section*{A: Tamwana.}

\section*{tamwa-na}
woman-DET.D.MPX
'That woman.'
Yal-05102010-PT1.wav - Yal-05102010-PT3.wav
Nouns marked with a possessive suffix (§4.1.2.2) are also phonological and grammatical words. They may serve as the answer to a question-word question (22).

\section*{(22) Q: Yo kiyida?}
\(\mathbf{y o}=\quad\) kiyi \(=\) da
2SG.SUBJ= see.SPC=what
'What did you see?'
A: Nyang.
nya-ng
mother-1SG.POSS
'My mother.'
Yal-05102010-PT1.wav - Yal-05102010-PT3.wav

Nouns participating in the independent possessive construction (§4.1.2.4) with a pronominal possessor also constitute single phonological and grammatical words. For example, in (23), an independently possessed noun with a pronominal possessor constitutes an entire intonation unit.

\section*{(23) Euh, bu, bu lila,}
ââ bu bu=li-la
um fishhook fishhook=GEN-3PL.ABS
'Um, fishhooks, their fishhooks,'
Yal-28072010-BGMCG-hamecon_0003
Verbs with valence-changing suffix -u 'DETR’(§5.1.5.3), specific suffix -e ‘SPC’ (§5.1.4), differential absolutive suffix \(-n\) (§5.1.6.1), or an absolutive suffix (§5.6) are both grammatical and phonological words; they are often the citation forms given for verbs and can serve as an intonation unit. For example, in (24), a verb with the detransitive suffix \(-u\) constitutes an entire intonation unit.
(24) Ja âmu kiyau ka, tuya avar ki, .. înau.
\(\mathbf{j a}=\quad\) âmu= kiya-u=xa tuya avari=xi îna-u
1PL.INCL.SUBJ= PRF \(=\) see.GNR-DETR=LK EX.GNR other=REL make-DETR 'We have seen that, there are others who, make [them].'

Yal-28072010-BGMCG-hamecon_0051
In (25), the bound transitive verb gi- occurs with the absolutive suffix \(-e\); this form is
both a phonological and grammatical word and can constitute an entire intonation unit.

Lexa gie, .. gie, gie,
le=xa gi-e gi-e gi-e
3DU.SUBJ=ADD attack-3SG.ABS attack-3SG.ABS attack-3SG.ABS
'And they hit her, hit her, hit her,'

\subsection*{3.1.2.2 Grammatical words that are not phonological words}

Many grammatical words in Belep consist of multiple phonological words, or of partial phonological words.

Nouns and verbs formed by the addition of a derivational proclitic, such as a nominalizer or causativizer, etc. (§3.5) consist of multiple phonological words, but they fit all three of Dixon and Aikhenvald's criteria for grammatical words. They always occur together, rather than scattered throughout the clause-the derivational proclitic occurs closer to the root than any other proclitic. For example, in (26) there is a grammatical word \(w a=p e=\hat{a} m a=\) naen 'way of being a family' with three derivational proclitics, \(w a=\) 'RESULT', \(p e=\) 'RECP', and \(\hat{a} m a=\) 'DYAD'. These proclitics form an instance of layered (hierarchical) morphology (Bickel \& Nichols 2007: 214) in which their meaning depends on their ordering, i.e. which derivational morpheme is closer to the root.
(26) Toma puur ri wa pe âma naen nile, toma pu-r=i wa= \(\quad\) pe= âma= nae-n=i-le but origin-3GNR.POSS=GEN RESULT= RECP= DYAD= child-3SG.POSS=GEN-3DU.ABS 'But because of their family ties,' (lit. 'their way of familying themselves')

Yal-25072010-PT-homily_0052
Derivational proclitics also occur in a fixed order in Belep-the proclitic always precedes the root. And each derivational proclitic has a conventionalized meaning (27), though there is some idiosyncrasy in the application of these meanings.
\begin{tabular}{ll}
\(p a=V\) & 'cause to \(\mathrm{V} '\) \\
\(\hat{a}=V\) & 'agent who does V, \\
\(b a=V\) & 'tool for doing \(\mathrm{V} '\)
\end{tabular}

Another instance of a grammatical word that consists of multiple phonological words is the verb group (§5.2). The elements of the verb group always occur in a fixed order (they are an instance of templatic morphology; c.f. Bickel \& Nichols 2007) and cannot undergo any syntactic operations except as a unit. Most elements in a verb group are not obligatory, but when they occur they have a conventionalized meaning and occur in an obligatory order. For example, in (28), the verb group \(a v a=x a=\hat{o}\) bwage-va'and we returned' is a grammatical word. \({ }^{114}\)

\section*{Avaxaô bwagevame la pwemwa, \(\underline{\mathbf{a v a}=\mathbf{x a}=\hat{\mathbf{0}} \quad \text { bwage-va=}=\mathbf{m e}=\mathbf{l a} \quad \text { pwemwa }}\)}

1PL.EXCL.SUBJ=ADD=REAL return-1PL.EXCL.ABS=CTP=LOC village
'And we returned back to the village,'
Yal-17072009-TB-weekend_0023
Case-marked nouns and pronouns in Belep (§6.3) are grammatical words which consist of a non-whole number of phonological words. The case marker of the noun or pronoun encliticizes to the previous element, as in (29) where the grammatical word \(=a\) Cebaba '=NOM Cebaba' consists of more than one, but less than two, phonological words. \({ }^{115}\)


Yal-20092011-AW1_0205

\footnotetext{
\({ }^{114}\) It is in fact a grammatical word that consists of one-and-a-half phonological words. The phonological words in this utterance are \(a v a=x a=\hat{o}\) 'and we', bwage-v \(a=m e=l a\) 'returned back to the', and \(p w e m w a\) 'village'. The grammatical words are \(a v a=x a=\hat{o}\) bwage-va 'and we returned', verb phrase enclitic \(=m e\) 'CTP', and the locative NP =la pwemwa 'to the village'.
\({ }^{115}\) Example (29) consists of two full phonological words: the verb with case enclitic pan \(=a\), and the noun phrase Cebaba. Proclitic \(t e=\) '3SG.SUBJ' has most of the characteristics of a phonological word except that it does not carry stress; see §3.1.2.6. There are two grammatical words: verb group \(t e=p a n\) and subject noun phrase \(=a\) Cebaba. Note that there is little correspondence between the phonological and grammatical words (§3.1.2.4).
}

Case markers always immediately precede the noun phrase they mark; nothing can come between the noun phrase and its associated case marker.

The combination of a numeral classifier with a numeric determiner (§4.6.3) is a grammatical word, but it varies as to whether it is one or two phonological words since the numeric determiners have both free and bound forms. For instance, the numerical determiner \(t u\), =ru 'two' may occur in either of the ways shown in (30).
```

goru
go=ru
CL:sugar.cane=two
âôra tu
âôra tu
CL:instance two
'two times'

```
'two packets of (10 pieces of) sugar cane'

Because these forms are used fairly infrequently, the numeric determiners have varying levels of phonological integration with the numeral classifiers. \({ }^{116}\) However, this variation seems to be merely phonological; all combinations of numeral classifier and numeric determiner have the same status as grammatical words.

Bound intransitive verbs (§5.1.1.1) are another example of grammatical words which are not full phonological words; they require the presence of a directional enclitic or the suffix \(-r\) ' NDR '.

\subsection*{3.1.2.3 Grammatical words that resemble syntactic constituents}

There are two major classes of elements in Belep which should be considered intermediate forms between a grammatical word and a syntactic constituent: noun

\footnotetext{
\({ }^{116}\) The cardinal numeral pwadu 'two' is most likely the result of the lexicalization of a former numeral classifier \(p w a\) - (which occurs in many other cardinal numerals; see \(\S 4.6 .1\) ) and the numeric determiner \(t u\), \(=r u\). Though pwa- is not a classifier in Belep, it still has this function in Balade Nyelâyu, where it is used to count inanimate objects (Ozanne-Rivierre 1998:45).
}
phrases (§4.4) consisting of a dependently possessed noun stem (§4.1.2.1) and a nominal possessor; and verb phrases (§5.10) consisting of a bound transitive verb stem (§5.1.3.2) and a nominal absolutive (§6.3.1) argument.

I have already argued that (a) dependently-possessed noun stems (when followed by a nominal possessor) are phonological words; (b) dependently-possessed noun stems with a pronominal suffix are phonological and grammatical words. However, the wordstatus remains to be determined for complex NPs consisting of a dependently-possessed noun and its nominal possessor, both of them independent phonological words (§4.1.2.1). For example, in (31), ka âju 'person's foot' has the characteristics of a grammatical word but also resembles a syntactic constituent.
(31) \(k a-n\)
ka âju
\[
\begin{array}{ll}
\text { [foot-3SG.POSS] } & \text { 'his/her foot' } \\
\text { [foot person] } & \text { 'person's foot' }
\end{array}
\]

In (31), kan is a phonological word, as are \(k a\) - and \(\hat{a j u}\). Both kan and \(\hat{a j u}\) are grammatical words as well, while \(k a\) - is not a grammatical word. It remains to be determined whether \(k a\) âju is a grammatical word or a syntactic constituent.

For one thing, NPs such as \(k a \hat{a} j u\) in this construction should not be considered compounds (I discuss compounding in §3.6). They do not have idiosyncratic meanings and their parts are always composable into other possessive constructions. However, the possessed noun cannot ever occur without the possessor; given the form \(k a\)-, a possessor is obligatory, and nothing can intercede between them. Pause phenomena occur between the possessed noun and its nominal possessor; however, Dixon and Aikhenvald (2002:24) argue that these phenomena occur on the phonological rather than the grammatical word level. There is no way to question a possessed noun (32), though there is a way to question its possessor (33).

\section*{*Da pawi?}
da pawi
what hibiscus
‘*The hibiscus's what?'
(33) Weeri? \(w e=r i\) food=who 'Whose food?'
Yal-05102010-PT1.wav - Yal-05102010-PT3.wav

It seems that dependently-possessed nouns with an NP possessor should best be considered a sort of intermediate form between a grammatical word and a syntactic constituent.

I have already argued that (a) bound transitive verb stems are phonological words; and (b) bound transitive verb stems with valence-changing suffix -u 'DETR’ (§5.1.5.3), differential absolutive suffix -n (§5.1.6.1), or an absolutive suffix (§5.6) are phonological and grammatical words. However, the word-status remains to be determined for bound transitive verb stems followed by a nominal absolutive argument. For example, in (34), migi buâny 'hold a stone' has some characteristics both of a grammatical word and a syntactic constituent.
(34) Te migi buâny,
te= migi buâny
3SG.SUBJ= hold stone
'He was holding a stone,'
Yal-20092011-AW1_0254
In (34), migi- and buâny are both phonological words; the verb's citation form migi-e (which has a 3SG.ABS suffix) is also a phonological word. Both buâny and migie are grammatical words as well, while migi- is not a full grammatical word; it cannot be given as a citation form or serve as the answer to a question-word question, nor can it be uttered in isolation. Clauses such as (34) are not instances of noun incorporation, though this is
attested in other Far North languages such as Nêlêmwa (Bril 2002:64-65,151-152); Belep examples such as (34) do not have idiosyncratic meanings and their parts are always composable into other verb phrases. Pause phenomena can occur between the bound verb stem and its absolutive argument, and both the verb and the absolutive noun phrase can be questioned; \({ }^{117}\) however, the only element which can intercede between them is a differential absolutive suffix (§5.1.6). The status of migi buâny seems to be as an intermediate element between grammatical word and syntactic constituent.

\subsection*{3.1.2.4 Grammatical vs. phonological words}

As we have seen, there is little correspondence in Belep between phonological and grammatical words. Example (35) shows the overlap between these two sets.
(35) Laxaô kejadu la naerama,

GRAMMATICAL WORDS [--------VERB GROUP--------][VP][-----SUBJECT NP-----] \(\mathbf{l a}=\mathbf{x a}=\hat{\mathbf{0}} \quad\) keja=du=la nae-ra-ma 3PL.SUBJ=ADD=REAL run=DIR.DH=NOM child-3GNR.POSS-AC PHONOLOGICAL WORDS \(\mathbf{1} \mathbf{2}\) 3 'And the children ran down,'

Yal-17072009-TB-weekend_0024
In (35), there are three phonological words: \(l a=x a=\hat{o}\) 'and they', \(k e j a=d u=l a\) 'ran down the', and naerama 'children'. These are further decomposable into full phonological words keja 'run' and nae-r 'child'. The grammatical words are the verb group la=xa= \(\hat{o}\) keja 'they ran', the verb phrase enclitic \(=d u\) 'DIR.DH', and the subject \(\mathrm{NP}=l a\) nae-ra-ma 'children'.

Most utterances in Belep discourse contain a similar disconnect between the phonological and the grammatical word. This is fairly reminiscent of the situation in Fijian, another Oceanic, non-Polynesian language. Dixon (1988) defines the phonological

\footnotetext{
\({ }^{117}\) The absolutive argument may be questioned by substituting interrogative pronoun \(=d a\) 'what' \((\S 4.5 .3)\). The verb may be questioned with the question verb (§6.5.2) câmwi 'do what with', which is also a bound stem.
}
word in Fijian strictly in terms of stress and diphthong formation, while formatives can "[belong] to the same phonological word as the root; [comprise] the whole of another phonological word; [or be] part of another phonological word" (Dixon 1988: 26).

For this reason it will be necessary to define words and formatives in Belep according to their specific word-properties. This work will use the convention of marking orthographic spaces between phonological words only. Suffixes (§3.1.2.5) will be indicated with ' - '. Enclitics (§3.1.2.6) will be written with no space between them and the phonological word they attach to, and will be preceded by \({ }^{\text {' }}=\) '. Proclitics (§3.1.2.6) will be followed by ' \(=\) ' and an orthographic space, indicating that they have some degree of phonological independence from the phonological word they attach to.

\subsection*{3.1.2.5 Affixes}

Affixes in Belep will be defined as formatives which are neither phonological nor grammatical words. This definition excludes bound lexemes such as muи- 'flower', nya'DEM.IDF', and tax- 'distribute', which are neither full phonological nor full grammatical words but have a full lexical meaning. It encompasses only formatives, which "cannot govern or be governed by other words, cannot require or undergo agreement, and cannot head phrases" (Bickel \& Nichols 2007: 173).

According to this definition, Belep is an exclusively suffixing language. The suffixes are: possessive suffixes (§4.1.2.2) for dependently-possessed nouns (36); determiner suffixes (§4.3.2) on nouns and demonstrative pronouns (37); quantifier suffixes (§4.2) on nouns (38); various suffixes (§5.1.4, §5.1.5, §5.1.6) on verbs (39); and absolutive pronominal suffixes (§5.6) on verbs (40).
(36) \(k a-n g\) [foot-1SG.POSS] 'my foot, my leg'
\(k a\)-la [foot-3pL.POSS] 'their feet, their legs'
\begin{tabular}{|c|c|c|c|c|}
\hline (37) & tamwa 'woman' nya- 'DEM.IDF' & \begin{tabular}{l}
tamwaa-k \\
nya-na
\end{tabular} & \begin{tabular}{l}
[woman-DET.D.PRX] \\
[DEM.IDF-DET.D.MPX]
\end{tabular} & \begin{tabular}{l}
'this woman' \\
'that one'
\end{tabular} \\
\hline \multirow[t]{2}{*}{(38)} & ulac 'old man' & ulaya-ma & [old-AC] & \multirow[t]{2}{*}{\begin{tabular}{l}
'elders' \\
'children'
\end{tabular}} \\
\hline & nae-r \({ }^{\text {'child' }}\) & nae- \(\underline{\underline{r a}}\) - \(\underline{m a}\) & [small-3GNR.POSS-AC & \\
\hline \multirow[t]{6}{*}{(39)} & \multirow[t]{2}{*}{ina 'to make'} & \multicolumn{3}{|l|}{ina-e [make-SPC]} \\
\hline & & \multicolumn{3}{|l|}{ina-u [make-DETR]} \\
\hline & \multirow[t]{2}{*}{ti- 'to write'} & \multicolumn{3}{|l|}{ti-n \(\underline{n}\) [write-DA.NSG]} \\
\hline & & \multicolumn{3}{|l|}{ti-a \(\underline{\text { a }}\) [write-DA.IA]} \\
\hline & cu-, cuu- 'to stand' & \multicolumn{3}{|l|}{cuu-r [stand-NDR]} \\
\hline & kaxi 'to look' & \multicolumn{3}{|l|}{kaxi-li-[look-TR]} \\
\hline \multirow[t]{2}{*}{(40)} & \multirow[t]{2}{*}{\begin{tabular}{l}
tâna 'to hear' \\
migi- 'to hold'
\end{tabular}} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{ll} 
tâna-e-o & [hear-SPC-2SG.ABS] \\
migi-la & {\([\) hold-1PL.ABS] }
\end{tabular}}} & \multirow[t]{2}{*}{\begin{tabular}{l}
'hear you' \\
'hold them'
\end{tabular}} \\
\hline & & & & \\
\hline
\end{tabular}

All of these suffixes are categorized as inflectional; however, not all of them are obligatory.

\subsection*{3.1.2.6 Clitics}

It will be necessary to use the category of clitics in this work due to the wide disconnect in Belep between the phonological and grammatical word. Linguists have struggled to find a cross-linguistic definition for 'clitic' (e.g. Zwicky 1977, 1985, Haspelmath \& Sims 2010); I will define clitics in Belep according to Dixon and Aikhenvald (2002) as "something that is a grammatical word but not a complete phonological word" (Dixon \& Aikhenvald 2002:25).

Belep has both simple and special clitics, as defined by Zwicky (1977). Belep simple clitics are primarily linkers (§3.2.4; see also chapter 7) which have both a free form and a bound form. For example, in (41), linker \(k a\) may appear in either its free form \((k a)\) or bound form \((=x a)\).
\begin{tabular}{|c|c|c|}
\hline Leô tu ka âva.
\[
\begin{equation*}
\mathbf{l e}=\hat{\mathbf{o}} \tag{41}
\end{equation*}
\] & tu ka & a âva \\
\hline 3DU.SUBJ=REAL & go.DH LK & K fish \\
\hline \(\mathbf{l e}=\hat{\mathbf{o}}\) & tu=xa & âva \\
\hline 3DU.SUBJ=REAL & go. \(\mathrm{DH}=\mathrm{LK}\) & fish \\
\hline 'They went down & and fished & \\
\hline
\end{tabular}
Yal-01082010-MFD_0006

The majority of Belep clitics, however, are special clitics; their "syntactic distribution differs from that of free forms" (Haspelmath \& Sims 2010:200). Both proclitics and enclitics occur, and they behave in quite different ways. Though both proclitics and enclitics are grammatical words in Belep, there is a sharp divide between them in terms of phonological word-like properties.

Enclitics in Belep are very similar to suffixes in terms of their phonological behavior. They trigger in the word to which they are attached many of the phonological word-criteria outlined in §3.1.1, including centralization of/e/, nasal spreading, lenition, and morphophonemic alternations, and in terms of pause phenomena they belong to the phonological word to which they are attached. In other words, phonologically they behave exactly like suffixes. They differ from suffixes only in terms of selectivity: "whether they may attach to anything, or must attach to a particular kind of host" (Aikhenvald 2002:43). That is, enclitics are distinguished from suffixes in that they attach at the constituent level, rather than at the word-class level. The enclitics in Belep are: verb phrase directionals (42) (see §5.11); verb phrase locationals (43) (see §5.12); verbal mood markers (44) (see §5.5), and verb phrase focus markers (45) (see §6.8.2).
(42) Ponaoda la bwe alap.
po-nao=da=la bwe alap
load-1SG.ABS=DIR.UH=LOC top beach
'Take me up onto the beach.' \(=d a\) 'DIR.UH'
Avena panic.
avena \(=\) pan=ic
1PA.SUBJ= go.TV=CTF
'We went away.' =ic 'CTF'
(43) Le cuur rexeng.
le= cur=exeng
3DU.SUBJ \(=\) stand \(=\) LOC.DC
'They stood here.' =lexeng or =exeng 'LOC.DC'
(44) Leô pae wagale,
\(\mathbf{l e}=\hat{\mathbf{0}} \quad\) pa-e waga-le
3DU.SUBJ=REAL take-SPC boat-3DU.POSS
'They took their boat,' \(=\hat{o}\) 'REAL'
(45) Temere uya,
te=me=re uya
3SG.SUBJ=IRR=ACT arrive
'It will actually happen,' \(=r e\) ' ACT '
The Belep ditropic clitics (discussed in detail in §6.3) are a special type of enclitic. While phonologically they are bound to the element they follow (e.g. triggering nasal spreading, lenition, morphophonemic alternations, etc.), grammatically they mark the case of the noun phrase they precede. For example, in (46), the ditropic clitic \(=l a\) is phonologically bound to the preceding element \(t a=m e\), while grammatically it marks the case of mwaak. Likewise, in (47), the ditropic clitic \(=i\) is phonologically bound to the preceding element pa-er, though grammatically it marks the case of Teâ Belep.
(46) Te tame la mwaak,
te= ta=me=la mwaak
3 SG.SUBJ \(=\) go.UH \(=C \overline{T P}=\) NOM rabbitfish
'The rabbitfish came up,' \(\quad=l a\) or \(=a\) 'NOM'
(47) Te paer ri Teâ Belep.
te \(=\quad\) pa-er=i \(\quad\) Teâ Belep
3SG.SUBJ= take-3SG.ABS=GEN Teâ Belep
'Teâ Belep took her.' \(\quad=l i\) or \(=i\) ' \(G E N\) '

In most cases, enclitics in Belep occur further from the stem than suffixes. The two exceptions are when a genitive or dative argument (marked with a case marker \(=(l) i\) 'GEN' or =(l)e 'DAT', respectively; see §6.3) is indexed by a pronominal suffix-an absolutive (§5.6) or possessive (§4.1.2.2) suffix, respectively. Examples are shown in (48) and (49).

\section*{âju linaoma}
âju=li-nao-ma
person=GEN-1SG.ABS-AC
'my people'

\section*{Avexa boyu leen.}
ave=xa
boyu=lee-n
1PL.EXCL.SUBJ=ADD greet=DAT-3SG.POSS
'And we greeted him.'
In contrast to Belep enclitics, proclitics show little to no phonological link to the word-form they attach to. They do not trigger lenition (except in a few highly lexicalized cases), /e/ centralization, or phonetic nasalization; they trigger word-boundary vowel epenthesis, and pauses and repairs frequently occur between them and their hosts. In these respects, proclitics behave in most ways like independent phonological words. Belep proclitics include: derivational morphemes (50) (see §3.5); aspectual markers (51) (see §5.4); subject agreement \({ }^{118}\) markers (52) (see §5.7); and clausal negation (53) (see §6.7) and prohibitive markers (54) (see §6.6.2).
(50) pa \(=\) jajani [CAUS \(=\) be.crazy \(]\) 'to make sb. crazy' \(\underline{t u}=\) nep \(\quad[\mathrm{VBLZ}=\) dream \(] \quad\) 'to dream'

\footnotetext{
\({ }^{118}\) Note that the 3 SG subject agreement marker \(t e=\) may occasionally encliticize to a preceding linker, e.g. Jie ma te maac.
ji-e ma=re maac
give-3SG.ABS LK4=3SG.SUBJ die
'Kill him/her.' (lit. 'Give him/her that s/he die.')
This should be considered simple cliticization (Zwicky 1977); te= and \(=r e=\) appear in the same syntactic position and do not differ in meaning.
}
(51) Te tao ta,
te \(=\quad \mathbf{t a o}=\mathbf{t a}\)
3SG.SUBJ= HAB= go.UH
'He kept going up,'
La nyi cao,
\(\mathbf{l a}=\quad \underline{\text { nyi }}=\quad\) cao
3PL.SUBJ= \(\overline{\text { PUNCT }}=\) work
'They worked repeatedly,'
(52) Te wânem.
te= wânem
3 SG.SUBJ= walk
'S/he walks.'
Na pilu.
\(\underline{\text { na }}{ }^{\text {pilu }}\)
1SG.SUBJ= dance
'I dance.'
(53) Âri na pae,
âri= na= pa-e
NEG= 1SG.SUBJ= take-SPC
'I'm not taking it,'
(54) O wara maduvadu,
\(\mathbf{0}=\quad\) wara \(=\quad\) maduva \(=d u\)
2DU.SUBJ \(=\) NEG.IMPER \(=\) spit=DIR.DH
'Don't spit,'
The characteristics that distinguish proclitics from independent phonological words are that they do not carry word stress, they require a host for realization, and they always occur in the same position with respect to their host; they are not syntactically free. Furthermore, their meanings are grammatical rather than lexical.

The presence of both proclitics and enclitics in Belep leads to one set of phonological words consisting entirely of clitics. When a subject agreement proclitic is followed by a modal or focus enclitic, they combine into a full phonological word, identified in this work as the preface (55). See \(\S 5.2\) for more information.

Lexaô tume,
\(\underline{l e}=\mathbf{x a}=\hat{\mathbf{0}} \quad \mathbf{t u}=\mathbf{m e}\)
3DU.SUBJ=ADD=REAL go.DH=CTP
'And they came down,'
This formulation is reminiscent of proclitics in South Efate, a language of Vanuatu, which distinguish realis and irrealis forms (Thieberger 2006:109).

\subsection*{3.2 Word classes}

The major classes of phonological words \({ }^{119}\) in Belep are nouns and verbs. These are the only open word classes. Many scholars of New Caledonian languages (Bril 2002, Moyse-Faurie 1995, Ozanne-Rivierre et al. 1998, De La Fontinelle 1976) have remarked upon the 'verbo-nominal opposition', or lack thereof, in these languages. That is, a common feature of these languages is that many words may behave as either nouns or verbs without undergoing a derivational process. This work will adopt the position that this feature of New Caledonian languages does not pose a problem for part-of-speech identification; word class will be viewed not as an intrinsic feature of a word, but a result of the manner in which it is used in a given instance. Thus, a word like cao 'work' is a verb when it is used as a verb e.g. \(n a=c a o\) 'I work', and is a noun when it is used as a noun e.g. \(t e=p w a l u=l a\) cao 'The work is difficult'. Though many such words seem to pattern equally well as nouns and verbs, most words in Belep clearly behave more frequently as one or the other. In this case it would be best to say that
open parts-of-speech classes must be distinguished from one another on the basis of a cluster of properties, none of which by itself can be claimed to be a necessary and sufficient condition for assignment to a particular class. (Schachter \& Shopen 2007:4)

That is, nouns and verbs form a continuum, and while most words seem to gravitate toward one end or the other, many situate themselves somewhere in between.

\footnotetext{
\({ }^{119}\) See \(\S 3.1 .2\) for the classification of elements which are not phonological words.
}

There are three other closed parts-of-speech classes in Belep. These are adverbs, linkers (or conjunctions), and particles. The properties of each word-class will be discussed in the following sections.

\subsection*{3.2.1 Nouns}

This section describes the cluster of features which prototypically characterize Belep nouns. See chapter 4 for a more complete description of nominal morphology.

Nouns can be possessed in a possessive construction (§4.1.2), as are for example tolam 'basket' and âpw 'laugh' in (56).
\[
\begin{array}{llll}
\text { tolam 'basket' } & \text { tolaba-ng } & \text { [basket-1SG.POSS] } & \text { 'my basket' }  \tag{56}\\
\text { apw 'laugh' } & \hat{a} w=\text { i-nao } & \text { [laugh=GEN-1SG.ABS] } & \text { 'my laugh' }
\end{array}
\]

Nouns can be marked for case (§6.3) and serve as an argument in a clause, as are tamwa 'woman' and \(\hat{a} p w\) 'laugh' in (57).
\[
\begin{align*}
& t e=\text { pan=a tamwa [3SG.SUBJ= go.TV=NOM woman] 'the woman goes' }  \tag{57}\\
& t e=\hat{o}=l a \hat{a} p w \quad[3 \mathrm{SG} . \mathrm{SUBJ}=\text { be.good=NOM laugh] 'laughter is good' }
\end{align*}
\]

Nouns can be marked with a determiner suffix (§4.3.2) or a quantifier suffix ( \(\S 4.2\) ), as in (58).
\[
\begin{array}{llll}
\text { âc 'man' } & \text { ayi-li } & \text { [man-DET.A.PRX] } & \text { 'this man' }  \tag{58}\\
\text { ulac 'old man' } & \text { ulaya-ma } & \text { [old.man-AC] } & \text { 'elders' }
\end{array}
\]

Nouns can be replaced with a pronoun (§4.5), as in (59) where the pronoun yer
' 3 SG.INDEP' is substituted for the noun nae- 'child'.
\[
\begin{array}{lll}
t e=t a=l a ~ n a e-r & {[3 \mathrm{SG} . \mathrm{SUBJ}=\text { go.UH=NOM child-3GNR.POSS }]} & \text { 'a child goes' }  \tag{59}\\
t e=\text { ta } a=\text { la yer } & {[3 \mathrm{SG} . \mathrm{SUBJ}=\text { go.UH=NOM } 3 \mathrm{SG} . \mathrm{INDEP}]} & \text { 's/he goes' }
\end{array}
\]

Nouns can be modified with a numeral (§4.6), another noun, or a demonstrative determiner (§4.3.3), as are tamwa 'woman', we 'water', and âju 'person' in (60).
tamwa pwadu
we naam
âju-ma la-mi
[woman two]
[water plain]
[person-AC DEM.PL-DET.A.DST] 'those people'
'two women' 'fresh water'

Nouns can be the head of a relative clause (§7.3), as are âju 'person' and pulu 'speech' in (61).
(61) âju ki molep [person REL live] 'people who are alive' pulu ki âri-er [speech REL say-3SG.ABS] 'words he said'

Nouns can be conjoined with other nouns (§4.4) using le 'LK2', \(k a\) 'LK', and ma 'LK4', as are Aliic 'Alice', nae- 'child', uvi 'yam', bolao 'banana', and cama- 'father' in (62).

Aliya le nae-n uvi ka bolao
le ma cama-ng
[Aliic LK2 child-3sG.POSS]
[yam LK banana]
[1DU.INDEP LK4 father-1SG.POSS]
'Alice and her child' 'yam and banana' 'They with my father'

Nouns can be topicalized (§6.8.1), as is caivak 'rat' in (63).
(63) caivak te \(=\hat{a} v a \quad[\) rat 3 SG.SUBJ \(=\) fish \(]\) 'the rat, he goes fishing'

Nouns can undergo verbalization (§3.5.4) using \(t u=\) 'VBLZ' as in (64).
\[
\begin{array}{lll}
t u=\text { amwa }-r & \text { [VBLZ }=\text { gesture-3GNR.POSS }] & \text { 'make a gesture' }  \tag{64}\\
t u=m w e e n g & {[\mathrm{VBLZ}=\text { decoration }]} & \text { 'decorate' }
\end{array}
\]

Among the subclasses of nouns are pronouns (§4.5) and numerals (§4.6). Pronouns can be marked for case (65) or with a determiner suffix (66), be conjoined with other nouns (67), and be topicalized (68).

\section*{(65) Ka ô ta la la,}
\begin{tabular}{lll}
\(\mathbf{k a}=\hat{\mathbf{0}}\) & \(\mathbf{t a}=\mathbf{l a}\) & \(\mathbf{l a}\) \\
LK=REAL & go.UH=NOM & \(\frac{\text { a }}{3 \text { PL.INDEP }}\) \\
'And they went up,'
\end{tabular}

Yal-17092009-TB-weekend_0025
(66) "Naok!»
nao-k
1SG.INDEP-DET.D.PRX
"'Here I am!""

\section*{la ma teâmaa}

\section*{la ma teâmaa}

3PL.INDEP LK4 high.chief 'they with the chieftain'

Yal-20092011-AW3_0054
(68) «Mo ji, ji mewu,"
\begin{tabular}{lll} 
mo & \(\mathbf{j i}\) & \(\mathbf{j i =}\) \\
LK3 & 1DU.INCL.INDEP & 1DU.INCL.SUBJ= \(=\)
\end{tabular} \begin{tabular}{l} 
mewu \\
category
\end{tabular}

Yal-20092011-AW4_0033
Numerals can be marked for case (69) or with a quantifier suffix (70) and serve as the head of a relative clause (71).

\section*{(69) Le ta la pwadu.}
\begin{tabular}{lll} 
le \(=\) & ta \(=\mathbf{l a}\) & pwadu \\
3DU.SUBJ \(=\) & go.UH=NOM & two \\
'The two went up.'
\end{tabular}

Yal-03102011-NT.wav
(70) Yo pae pwaduma leek.
\begin{tabular}{lll}
\(\mathbf{y o}=\) & pa-e & pwadu-ma \\
2SG.SUBJ \(=\) & lee-k \\
take-SPC & two-AC & DEM.DU-DET.D.PRX
\end{tabular} 'You take these two.'

Yal-03102011-NT.wav
(71) Pwadu ki yo kiyile yemi.
\begin{tabular}{lllll} 
pwadu & \begin{tabular}{l} 
ki \\
two
\end{tabular} & \begin{tabular}{l} 
yo \(=\) \\
REL
\end{tabular} & \begin{tabular}{l} 
kiyi-le \\
2SG.SUBJ \(=\)
\end{tabular} & \begin{tabular}{l} 
semi \\
see.SPC-3DU.ABS
\end{tabular} \\
then
\end{tabular}
'The two you saw earlier.'
Yal-03102011-NT.wav
There is no word class of adjectives in Belep. Property concepts are divided between those expressed as verbs and those expressed as nouns (see also §6.4.3).

\subsection*{3.2.2 Verbs}

This section will describe the cluster of features which prototypically characterize Belep verbs. See chapter 5 for a more complete description of verbal morphology.

Verbs can undergo morphophonological alternations in terms of valency (72) (see §5.1.5), specificity (73) (see §5.1.4), and differential absolutive marking (74) (see
§5.1.6).

> wêeng 'to learn' wêge- 'learn.TR'
kaxi 'to look' kaxi-li- 'look-TR'
\(j i\) - 'to give' \(j i-u \quad\) 'give-DETR'
pwaxa 'to wash' pwaxa-u 'wash-DETR'
(73) tâna 'to hear.GNR' tâna-e 'hear-SPC'
pa 'to take.GNR' pa-e 'take-SPC'
kiya 'to see.GNR' kiyi 'see.SPC'
pi- 'to cook' pi-n 'cook-DA.NSG'
ina 'to make' ina-e-n 'make-SPC-DA.NSG'
yagi- 'search.TR' yagi-a 'search.TR-DA.IA'
Verbs can undergo nominalization and other derivational processes (75) (see §3.5).
\[
\begin{array}{lll}
\hat{a}=\text { pilu } & {[\text { AGT }=\text { dance }]} & \text { 'dancer' }  \tag{75}\\
b a=\text { pilu } & \text { [INSTR }=\text { dance }] & \text { 'thing for dancing' } \\
\text { wa } \text { pilu } & \text { [RESULT }=\text { dance }] & \text { 'way of dancing' } \\
p a=\text { pilu } & {[\mathrm{CAUS}=\text { dance }]} & \text { 'cause to dance' } \\
p e=\text { pilu } & {[\mathrm{RECP}=\text { dance }]} & \text { 'dance together' }
\end{array}
\]

Verbs can serve as the predicate of a clause. Most basically, this is marked by a subject agreement proclitic (76). See §5.7; for exceptions, see §5.1.2.
\[
\begin{array}{lll}
\text { te }=\text { pilu } & \text { [3SG.SUBJ }=\text { dance }] & \text { 's/he dances' }  \tag{76}\\
l a=\text { pilu } & {[3 \mathrm{PL} . \text { SUBJ }=\text { dance }]} & \text { 'they dance' } \\
n a=\text { pilu } & {[1 \mathrm{SG} . \mathrm{SUBJ}=\text { dance }]} & \text { 'I dance' }
\end{array}
\]

A verb serving as the predicate of a clause may also be indicated by the presence of one or more nominal case-marked arguments (§6.3). In (77), both pilu 'to dance' and ulayar 'to be big' are used predicatively.
\[
\begin{array}{lll}
\text { (77) } & \begin{array}{ll}
\text { te }=\text { pilu }=\text { la âc } & {[3 \mathrm{SG} . \mathrm{SUBJ}=\text { dance }=\mathrm{NOM} \mathrm{man}]} \\
\text { te }=\text { ulayar }=\text { a } u v i & \\
& {[3 \mathrm{SG} . \mathrm{SUBJ}=\text { be.big }=\mathrm{NOM} \text { yam }]}
\end{array} & \text { 'the man dances' } \\
\text { 'the yam is big' }
\end{array}
\]

Verbs can be inflected for aspect and mood (78) with a variety of morphemes.
\[
\begin{align*}
& t e=\hat{o} t a=m e  \tag{78}\\
& t e=\underline{t a o}=t a
\end{align*}
\]
[3SG.SUBJ=REAL go.UH=CTP]
[3SG.SUBJ= HAB= go.UH]
'he came up' 'he kept going up'

Verbs of motion or state can govern a VP enclitic of direction or location as in (79).
(79) Texa jin nyoonadu,
te=xa ji-na nyo-na=du
3SG.SUBJ=ADD give-DA.NSG tentacle-3SG.POSS=DIR.DH
'And he [the octopus] put his tentacles down [into the hole],
Yal-01082010-MFD_0064
Te ci lexeng,
te \(=\quad\) ci=lexeng
3SG.SUBJ= sit=LOC.DC
'It sat here,'
Yal-28072010-BGMCG-tahitian_0234
Transitive verbs can take an anaphoric object suffix (80) (see §5.6).
\(y o=t a x e-\underline{v a}\)
te \(=\) pari-nao
pa-
[2SG.SUBJ= distribute-1PL.EXCL.ABS] 'you give to us'
[3SG.SUBJ= tell.TR-1 SG.ABS] 'he told me'

\subsection*{3.2.3 Adverbs}

There is a closed set of adverbs in Belep. Some of these are represented in Table
34. The collection and description of the full set of Belep adverbs would be a productive course of future study.

Table 34: Adverbs in Belep
\begin{tabular}{|l|l|}
\hline Belep & English gloss \\
\hline âda & 'alone' \\
\hline âyu & 'whatever' \\
\hline jua & 'really' \\
\hline mwa & 'again' \\
\hline pwai & 'only' \\
\hline
\end{tabular}

Adverbs in Belep are distinguished by their ability to appear in a wide variety of positions in the clause. They can appear modifying a noun as in (81) or modifying a VP as in (82).
(81) Texa, ka yer âda, te=xa ka yer âda 3SG.SUBJ=ADD LK 3SG.INDEP alone 'And he- he alone,'

Yal-28072010-BGMCG-tahitian_0280

In (81), adverb \(\hat{a} d a\) modifies the 3 SG.INDEP pronoun yer. In (82), \(\hat{a} d a\) modifies the verb phrase name cavac 'I am going to leave'.
(82) "Mo nao, name cavac âda."
mo nao na=me cavaya âda LK3 1SG.INDEP 1SG.SUBJ=IRR leave alone ""While I, I will leave by myself."

Yal-20092011-AW1_0106
This definition of adverbs in Belep is somewhat contradictory to Schachter and Shopen's (2007) cross-linguistic definition of adverbs as "modifiers of constituents other than nouns" (Schachter \& Shopen 2007:20); however, the term 'adverb' nonetheless seems to be the best fit for the category of unrestricted modifiers in Belep.

Adverbs âda 'alone', \(\hat{a} y u\) 'whatever', and mwa 'again' tend to follow the element they modify. For example, in (83), âyu follows the verb phrase it modifies (jaar 'want'), and in (84) \(\hat{a} y u\) follows the noun phrase it modifies (buâny 'stone').
(83) Te tume ka jaar âyu,
te \(=\quad\) tu \(=m e \quad\) ka jara âyu

3SG.SUBJ= go.DH=CTP LK want whatever 'He came down and was happy with anything,' Yal-28072010-BGMCG-tahitian_0329
(84) buâny âyu buânya âyu
stone whatever 'stones wherever'

Yal-28072010-BGMCG-sousmarin_0111
In (85), \(m w a\) 'again' follows the verb phrase it modifies ( \(t u\) 'go.DH') and in (86) mwa follows the noun phrase it modifies (pwalaic 'one').

\section*{Leô tu mwa, le=ô tu mwa \\ 3DU.SUBJ=REAL go.DH again \\ 'They went down again,'}

Yal-28072010-BGMCG-tayamu_0115

\section*{pwalaic mwa \\ pwalaiya mwa \\ one again}
'one more'
Yal-28072010-BGMCG-tayamu_0179

Adverbs jua 'really' and pwai 'only', on the other hand, tend to precede the element they modify. In (87), jua 'really' precedes the verb phrase âri te ulac 'he wasn't old'; in (88) jua precedes the noun bae 'sardine'.
(87) Te bwa âno, jua âri te ulac.
 'He was still young, he wasn't old at all.'

Yal-20092011-AW3_0006
(88) jua bae
jua bae
really sardine
'true sardine' (e.g. as opposed to other types of sardine)
In (89), pwai 'only' appears in the position of an aspectual proclitic (§5.4), \({ }^{120}\) while in
(90) pwai modifies the following noun phrase dau ulayar 'the big island'.
(89) Te pwai ô la enamale.
te \(=\quad\) pwai \(\hat{\boldsymbol{o}}=\mathbf{l a} \quad\) e-na-male
3SG.SUBJ only be.good=NOM hand-3SG.POSS-ADU
'Only his hands were good.'
Yal-28072010-BGMCG-lune_0016
(90) Pwai dau ulayar, yali, pwai dau ulayar ya-li
only islet be.big DEM.LOC-DET.A.PRX
'Only the big island, that place,'
Yal-20092011-AW6_0117
It is hypothesized that the adverbs which follow the element they modify are etymologically descended from nouns, while those which precede the element they modify come from verbs. These latter adverbs have much in common with the aspectual

\footnotetext{
\({ }^{120}\) Note that this position is also available to jua 'really', e.g. \(T e=j u a\) yâno \(=\) la dan [3SG.SUBJ= really be.blue=NOM sky] 'The sky is really blue' (Yal-19092011-PA_0059).
}
proclitics, differing only in that they carry word-stress (i.e. they are full phonological words) and can modify nouns in addition to verb phrases.

Many formatives and words in other classes also serve adverbial functions in Belep; for example, temporal nouns (§6.10), verbs for property concepts (§6.4.3) such as pôben 'to be quick' and cayap 'to be slow', and aspectual proclitics (§5.4) often serve the function of adverbs, as do the noun suffix -roven 'all' (§4.2.4) and the verb suffix -roven 'COMPL’ (§5.4.11). These forms are not considered to be members of the adverb word class.

\subsection*{3.2.4 Linkers}

There is a closed word class of linkers, also called conjunctions (Schachter \& Shopen 2007), in Belep. They are shown in Table 35. Note that other words and formatives are used in clause combining as well (see chapter 7), but they do not fall into the word class of linkers.

Table 35: Linkers in Belep
\begin{tabular}{|l|l|}
\hline Linker & Gloss \\
\hline ai & 'or' \\
\hline enyi (enyixi) & 'if' \\
\hline ka, =xa & 'LK' \\
\hline ka me & 'then' \\
\hline kara & 'well' \\
\hline ki, =xi & 'REL' \\
\hline le & 'LK2' \\
\hline ma & 'LK4' \\
\hline mo & 'LK3' \\
\hline to, =ro & 'when' \\
\hline toma, =roma & 'but' \\
\hline
\end{tabular}

Linkers \(a i\) 'or’, \(k a\) 'LK’, le 'LK2', and \(m a\) 'LK4' are used to conjoin noun phrases (§4.4). All linkers in Table 35 except for le 'LK2' are also used to conjoin clauses (see chapter 7). Belep linkers may be characterized as "prepositive on the second coordinand"
(Haspelmath 2007:6); in other words, they precede the element they mark as coordinate or subordinate, whether that is a clause (91) or an NP (92).
(91) Ka ô ta la la,
\(\mathbf{k a}=\hat{\mathbf{o}} \quad \mathbf{t a}=\mathbf{l a} \quad\) la
LK=REAL go.UH=NOM 3PL.INDEP
'And they went up,'
Yal-17072009-TB-weekend_0025
(92) Âlalic mo buâny. âlalic mo buâny impossible \(\overline{\mathrm{LK} 3}\) stone 'It was impossible because of the stones.'

Yal-28072010-BGMCG-sousmarin_0111
Many linkers have both a full phonological word form and an enclitic form, making them simple clitics (as defined in Zwicky 1977). At the beginning of an intonation unit the full form tends to be used (93), while the enclitic form often occurs in the middle or at the end of an intonation unit (94).
(93) Toma yena,
toma yena
but today
'But now \({ }^{121}\),'
Yal-28072010-BGMCG-hamecon_0051
(94) Te pilu toma le gie.
te \(=\quad\) pilu \(=\) roma le \(=\quad\) gi-e
3SG.SUBJ= dance=but 3DU.SUBJ= attack-3SG.ABS
'She was dancing but they attacked her.'
Yal-28072010-BGMCG-tayamu_0253

\subsection*{3.2.5 Particles}

All languages have some sort of discourse particles, also called interjections (Schachter \& Shopen 2007:57). These form a closed class. Some of them are represented in Table 36. Several others are mentioned by Dubois (1975c:30).

\footnotetext{
\({ }^{121}\) The Belep word yena 'today, now' temporally references the period from the moment of speaking until the end of the day.
}

Table 36: Particles in Belep
\begin{tabular}{|l|l|}
\hline Belep & English gloss \\
\hline â & temporizer; 'um' \\
\hline ai & 'no' \\
\hline ai elo & marker of remembering; 'oh yeah' \\
\hline bong & response to a criticism; 'yeah right' \\
\hline ca & exclamation of frustration; 'huh, well!' \\
\hline e & exclamation to call attention; 'hey!' \\
\hline êê & 'yes'' \\
\hline elo & 'okay' \\
\hline eu & exclamation of exhaustion, regret; 'whew' \\
\hline ewe & exclamation of pain; 'ow' \\
\hline jaxa & marker of epistemicity; 'it's like, you could say that' \\
\hline manya & marker of uncertainty; 'wait a sec' \\
\hline o & exclamation of surprise; 'hey, what's this?' \\
\hline o, u & response to a call; ‘yes?, what?, here!' \\
\hline yakor & exclamation of approval; 'good for you!' \\
\hline yawe & exclamation of fatigue; 'I'm tired' \\
\hline
\end{tabular}

These particles are characterized by their ability to serve as a single intonation unit, to occur with a large amount of phonetic variation, and not to be able to serve as any other part of speech. They typically express some emotion or conversational function on the part of the speaker. Some examples are shown in (95) - (97). In (95), particle ca expresses the speaker's disgust or frustration.
(95) Ca! Wânevan ma le da pe go la bweelevan,


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In (96), particle ai elo expresses the doubt caused by a lack of knowledge or memory experienced by the animated characters.
(96) Laxa âri u le teâmaa, «Ai elo ?» \(\mathbf{l a}=x a \quad\) âri \(u=l e \quad\) teâmaa ai elo 3PL.SUBJ=ADD say toward=DAT high.chief oh.yeah 'And they said to the chieftain, "Oh yeah?"'
Yal-20092011-AW6_0079

In (97), particle \(e u\) expresses the animated character's regret and helplessness.

Texa waak xa tayamoli,
\begin{tabular}{lll} 
te=xa & wa- \(\mathbf{x}=\mathbf{a}\) & tayamo-li \\
3SG.SUBJ=ADD & DEM.MAN-DET.D.PRX=NOM & old.woman-DET.A.PRX
\end{tabular}
"Eu! Te bwi la tânema naeng ngi dooyek,"
 'And that old woman said, "Woe is me! My child's eyes were blinded by that dirt."

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The particles ai 'no', êe 'yes', and elo 'okay', which are used in answering questions, are discussed further in §6.5.3.

\subsection*{3.3 Inflection and derivation}

Scholars of New Caledonian languages (Bril 2002, Moyse-Faurie 1995, OzanneRivierre et al. 1998, De La Fontinelle 1976) have traditionally included in their grammars a section on derivational morphology but none on inflectional morphology. Individual morphemes may be identified as inflections or indexes, but in general this is not viewed as a relevant category in New Caledonian languages.

In Belep, the disconnect between the phonological and the morphological word (§3.1) poses some problems for the classification of formatives into inflectional and derivational categories-for example, if proclitics such as the subject agreement markers (§5.7) were analyzed as 'words' (as they commonly are in New Caledonian languages), they could not be said to belong to the domain of morphology and could not thus be categorized as inflectional or derivational. However, this grammar analyzes all formatives in Belep as either suffixes or clitics bound to a host, which provides a possibility of categorizing them in terms of their inflectional or derivational properties.

The notion of unambiguous categorization into two categories, inflectional and derivational, is problematic (Bybee 1985). These two notions will instead be
characterized as two ends of a continuum, where a cluster of features tends to define each end but which allows intermediate elements (Haspelmath \& Sims 2010, Aikhenvald 2002, Bickel \& Nichols 2007). This is particularly helpful since, as we will see, many of the traditional categories of inflection are absent from Belep. Table 37 divides the formatives into clearly inflectional morphemes, those which have both inflectional and derivational characteristics, and those which are purely derivational. For the purposes of this analysis, all of the intermediate elements will be considered inflectional due to their lack of resemblance to canonical derivations in Belep.

Table 37: Inflectional and derivational morphology in Belep
\begin{tabular}{|l|l|l|}
\hline Inflectional & Intermediate & Derivational \\
\hline \begin{tabular}{l} 
possessive suffixes \\
(§4.1.2.2)
\end{tabular} & determiner suffixes (§4.3.2) & ordinal proclitic (§3.5.1.1) \\
\hline case markers (§6.3) & quantifier suffixes (§4.2) & dyadic proclitic (§3.5.1.2) \\
\hline \begin{tabular}{l} 
specific verb suffix \\
(§5.1.4)
\end{tabular} & aspect proclitics (§5.4) & \begin{tabular}{l} 
nominalizer proclitics \\
\((\S 3.5 .2)\)
\end{tabular} \\
\hline \begin{tabular}{l} 
valence-changing \\
suffixes (§5.1.5)
\end{tabular} & \begin{tabular}{l} 
directional and locational \\
enclitics (§5.10, §5.11)
\end{tabular} & valence proclitics (§5.3) \\
\hline \begin{tabular}{l} 
differential absolutive \\
suffixes (§5.1.6)
\end{tabular} & & verbalizer proclitic (§3.5.4) \\
\hline \begin{tabular}{l} 
anaphoric absolutive \\
suffixes (§5.6)
\end{tabular} & & \\
\hline mood enclitics (§5.2) & & \\
\hline \begin{tabular}{l} 
subject agreement \\
proclitics (§5.7)
\end{tabular} & & \\
\hline
\end{tabular}

\subsection*{3.4 Inflectional morphology}

The features generally characterizing inflectional morphology in the world's languages include: relevance to the syntax, obligatory expression, unlimited applicability, abstract and compositional meaning, and a lack of iterability. Inflectional morphemes have little base allomorphy, trigger no change of lexeme or word-class, occur at the periphery of words, and have the possibility of cumulative expression (Haspelmath \& Sims 2010:90). Inflectional morphology is used to form a complete word and define the
characteristics of a word-class; it participates in agreement, does not show paradigm gaps, tends to form smaller systems, and is semantically regular, high frequency, and monosyllabic (Aikhenvald 2002:36). Common categories of inflection include valence, voice, aspect, tense, mood, number, person, and gender (Bybee 1985).

In Belep, there are inflectional categories of valence, aspect, mood, number, and person. Each of these will be examined in the following sections with respect to these common inflectional characteristics.

\subsection*{3.4.1 Nouns}

Class 1 nouns (§4.1.1.1) are obligatorily marked with a possessive suffix
(§4.1.2.2) if they do not have a nominal possessor (98).
(98) \(k a-n g\) [foot-1SG.POSS] 'my foot, my leg'
yawa-ng [wife-1SG.POSS] 'my wife' bwaa-ng [head-1SG.POSS] 'my head'

Nouns in Belep have "declension classes defined by allomorphy of possessive inflection", as do many other languages of the Pacific Rim (Bickel \& Nichols 2007:206207). The inflectional characteristics of these suffixes include obligatoriness, unlimited applicability (to all noun classes which can participate in the dependent possessive construction), lack of iterability, and high frequency. They are monosyllabic, paradigmatic, trigger no change of word-class or lexeme, and are necessary to form a complete word.

Nouns which serve as the argument of a clause are obligatorily marked with a ditropic clitic (§6.3) case marker (99) or are unmarked for the absolutive case.

Te tame la mwaak,
te= ta=me=la mwaak
3SG.SUBJ= go.UH=CTP=NOM rabbitfish
'The rabbitfish came up,' \(\quad=l a\) or \(=a\) 'NOM'
Te to jier ri Anthony.
te \(=\quad\) to \(\mathbf{j i - e r =}=\) [ãtoni]
3SG.SUBJ= call give-3SG.ABS=GEN Anthony
'Anthony called him.' \(\quad=l i\) or \(=i\) ' GEN '
Inflectional characteristics of these case markers include obligatoriness, relevance to the syntax (since case is governed by the verb and the semantic roles of the nouns), unlimited applicability, abstract meaning, lack of iterability, and high frequency. They trigger no base allomorphy or change of word-class or lexeme, they serve as a defining characteristic of a word-class, and they are monosyllabic.

\subsection*{3.4.2 Verbs}

Free transitive verbs (§5.1.3.1) and some intransitive verbs (§5.1.2) are obligatorily marked for the specificity of their absolutive argument (§5.1.4). Some verbs undergo stem-allomorphy to indicate whether their absolutive argument is generic or specific, while others use the regular suffix -e 'SPC' (100).
\(\left.\begin{array}{lll}\text { kiy- 'to see' } & k i y \underline{a} & \text { [see.GNR] } \\ \text { pwaxa 'to wash' } & \text { kiy } & \text { pwaxa }\end{array}\right]\) [see.SPC] \(\quad\) [wash.GNR]

The inflectional characteristics of these suffixes include obligatoriness, relevance to the syntax (since the absolutive argument triggers agreement in the verb), unlimited applicability within the class of free transitive verbs, lack of iterability, and high frequency. They do not trigger a change in word-class or lexeme, and they are necessary to form a complete word.

Transitivization of intransitive verbs (§5.1.5.1, §5.1.5.2) and detransitivization of transitives (§5.1.5.3) involves inflectional valence marking. Transitivization is accomplished with stem modification for some intransitive verbs; for the rest, the regular suffix -li 'TR' is used (101). Detransitivization with -u 'DETR' is available to all transitive verbs (102).
\begin{tabular}{|c|c|c|c|c|c|}
\hline (101) & \begin{tabular}{l}
câny \\
mwanao
\end{tabular} & & \begin{tabular}{l}
'to seize' \\
'to approach'
\end{tabular} & câje-mwanao-li- & \begin{tabular}{l}
[seize.TR] \\
[approach-TR]
\end{tabular} \\
\hline \multirow[t]{2}{*}{(102)} & pwaxa ' & to wash' & pwaxa & [wash-DETR] & \\
\hline & ti- & to write' & ti-u & [write-DETR] & \\
\hline
\end{tabular}

The inflectional characteristics of the valence-changing suffixes include relevance to the syntax (since the presence or absence of an absolutive argument triggers changes in the verb), unlimited applicability-all intransitives may be transitivized using one of the methods, and all transitives may be detransitivized-and high frequency. They do not trigger a change in word-class or lexeme, and they are necessary to form a complete word.

Many transitive verbs may be marked with an inflectional suffix-either -n 'DA.NSG' or -a 'DA.IA' (103)—which agrees with their absolutive argument in animacy (§5.1.6).
(103) pi- 'to cook' pi-n [cook-DA.NSG]
cia- 'NEG.LOC' cia-n [NEG.EX-DA.NSG]
pa 'to take' pa-e-n [take-SPC-DA.NSG]
yaap 'to search' yavi-a [search.TR-DA.IA]
The inflectional characteristics of these suffixes include relevance to the syntax (since the absolutive argument triggers agreement in the verb), unlimited applicability within the class of transitive verbs, lack of iterability, and high frequency. They do not trigger a change in word-class or lexeme, and they are necessary to form a complete word.

Pronominal absolutive suffixes on the verb (§5.6), which anaphorically index the absolutive argument, agree with it in person and number (104).
\begin{tabular}{lllll} 
(104) \begin{tabular}{l} 
tâna \\
migi- \\
\end{tabular} 'to hear' touch' tâna-e-nao & [hear-SPC-1SG.ABS] & \begin{tabular}{l} 
'hear me' \\
migi-la
\end{tabular} & [touch-3PL.ABS] & 'touch them'
\end{tabular}

The inflectional characteristics of these affixes include relevance to syntax (since they agree with the absolutive argument) and unlimited applicability to the class of transitive verbs. They trigger no change in word-class or lexeme, lack iterability, and are paradigmatic.

Mood (§5.5) is indicated by a preface enclitic within the verb group (§5.2) (105).
(105) Teme uya.
te \(=\mathbf{m e} \quad\) yya
3SG.SUBJ=IRR arrive
'It will happen.'

\section*{Leô pae wagale.}
\(\mathbf{l e}=\hat{\mathbf{0}} \quad\) pa-e waga-le
3DU.SUBJ=REAL take-SPC boat-3DU.POSS
'They took their boat.' \(=\hat{o}\) 'REAL'
The inflectional characteristics of mood in Belep include its obligatory expression (where zero-marking also has a modal meaning), unlimited applicability, abstract meaning, and high frequency. It triggers no change of word-class or lexeme, is monosyllabic, and serves as a determining characteristic of a word-class.

Subject agreement (§5.7) is indicated on the verb by a proclitic which agrees with the subject in person and number (106).
(106) Te wânem.
\(\frac{\text { te }}{3 \text { e }}=\underset{\text { Gânem }}{\text { SUBJ }}=\) walk
'S/he walks.'
Na pilu.
\(\underline{\text { na }=~ p i l u ~}\)
1SG.SUBJ= dance
'I dance.'
The inflectional characteristics of these proclitics include their relevance to syntax (since they agree with the subject), obligatory expression, unlimited applicability (except to absolutive verbs; see §5.1.2), abstract meaning, lack of iterability, and high frequency. They cause no base allomorphy or change in word-class or lexeme, are paradigmatic, and serve as a defining characteristic of a word-class.

\subsection*{3.4.3 Intermediate elements}

A number of formatives in Belep are intermediate between inflection and derivation, sharing some properties of both (see \(\S 3.4\) for characteristics of inflection and \(\S 3.5\) for characteristics of derivation).

The nominal determiner suffixes ( \(\S 4.3 .2\) ) indicate the proximity and direction of the noun (107).
\begin{tabular}{lllll} 
(107) tamwa & 'woman' & tamwaa- \(\underline{k}\) & [woman-DET.D-PRX] & 'this woman' \\
ac & 'man' & ayyi-na & [man-DET.D.MPX] & 'that man' \\
gawaar & 'day' & gawari- \(\underline{\text { gi }}\) & [day-DET.A.DST] & 'that day'
\end{tabular}

Inflectional characteristics of these suffixes include unlimited applicability and lack of word-class or lexeme change. Derivational characteristics include lack of obligatoriness (although speakers think sentences sound odd without them) and irrelevance to the syntax in that they do not trigger agreement.

The noun quantifier suffixes ( \(\S 4.2\) ) indicate the quantity of the noun (108).
\begin{tabular}{lllll} 
(108) ulac 'old man' & ulaya- \(\underline{m a}\) & [old.man-AC] & 'elders' \\
nae-r & 'child' & nae-ra- \(\underline{m a}\) & [small-3GNR.POSS-AC] & 'children'
\end{tabular}

Inflectional characteristics of the nominal suffixes include their irregular relevance to syntax (nouns with a number marker sometimes trigger verb agreement and sometimes do not), their expression at the word periphery, and the fact that they trigger no change in word-class. Derivational properties include that they are not obligatory, have limited application (only to certain semantically compatible nouns), have some noncompositional meanings, are infrequent and non-paradigmatic, and may be iterable.

Many Australian and Papuan languages categorize number marking as derivational (Aikhenvald 2007:38).

Verbal proclitics (109) are used to indicate aspect (§5.4).

\section*{(109) Te tao ta,}
te= tao= ta
3SG.SUBJ \(=\overline{\mathrm{HAB}}=\) go.UH
'He kept going up,'

\section*{La nyi cao,}
\(\mathbf{l a}=\quad\) nyi= cao
3PL.SUBJ= \(=\quad\) PUNCT \(=\) work
'They worked repeatedly,'
These proclitics have the following inflectional characteristics: applicability limited only by semantic compatibility with the verb, no change of word-class or lexeme produced, no base allomorphy, and serving as a defining characteristic of a word-class. The derivational properties of these proclitics are irrelevance to syntax, lack of obligatoriness, occasionally non-compositional meaning, iterability, fairly low frequency, and the fact that they are non-paradigmatic.

The verb phrase directional and locational enclitics (§5.10 and §5.11) indicate the direction or the location of the action or state of the verb (110).
(110) Avena panic. avena= pan=ic
1PA.SUBJ= go.TV=CTF
'We went away.' =ic 'CTF'
Le cuur rexeng.
le= cur=exeng
3DU.SUBJ= stand=LOC.DC
'They stood here.' =lexeng or =exeng 'LOC.DC'
In terms of inflection, these enclitics have unlimited applicability (to verbs of motion and stative verbs), do not change the word-class of their host, are expressed peripherally in the word, and are of fairly high frequency. In some cases, these formatives are obligatory (§5.1.1.1). However, in most cases they are optional, have a concrete meaning, may have a non-compositional meaning, can be iterable, and are not relevant to the syntax in that they do not trigger agreement. In these ways they have derivational properties.

It is unsurprising that it is difficult to draw a clear distinction in Belep between inflection and derivation. "In languages where most grammatical specification is optional it is difficult to draw the line" between them (Aikhenvald 2007:36). For the purposes of this analysis, all of the intermediate elements discussed in this section will be considered inflectional due to their lack of resemblance to canonical derivations in Belep, discussed below.

\subsection*{3.5 Derivational morphology}

The features generally characterizing derivational morphology in the world's languages include: irrelevance to syntax, lack of obligatoriness, and limited applicability. Derivational morphology may create a new lexeme, have a concrete or noncompositional meaning, and be possibly iterable. It is expressed close to the base, may trigger base allomorphy or change the word-class, and is not compatible with cumulative expression (Haspelmath \& Sims 2010:90). Derivational morphemes may derive a stem
which takes inflections, show gaps in their paradigms, form large systems, and do not participate in agreement; they are specific to a word-class, are of low frequency, and are generally longer than monosyllabic (Aikhenvald 2002:36).

All derivational formatives in Belep are proclitics (§3.1.2.6). They differ from class 1 nouns (§4.1.1.1) in that they cannot be possessed and do not carry word stress. They may derive nouns from nouns, nouns from verbs, verbs from verbs, or verbs from nouns. Each of these will be examined in the following sections with respect to the common derivational characteristics.

\subsection*{3.5.1 Denominal nouns}

\subsection*{3.5.1.1 Ordinal ba=}

The ordinal numbers (which fall into the word class of nouns) are derived from cardinal numbers (also nouns) in Belep (§4.6). They are formed by combining the derivational proclitic \(b a=\) 'ORD' with the cardinal numbers (111). This proclitic is incompatible with the numeral pwalaic 'one'.
\begin{tabular}{lll}
\(b a=p w a d u\) & {\([\mathrm{ORD}=\mathrm{two}]\)} & 'second' \\
\(b a=p\) wajen & {\([\mathrm{ORD}=\) three \(]\)} & 'third' \\
\(b a=\) toven & {\([\mathrm{ORD}=\) finish \(]\)} & 'last'
\end{tabular}

The ordinal proclitic is derivational in that it is irrelevant to syntax, not obligatory, creates a new lexeme ("adds some semantic specification to a root without changing its class" (Aikhenvald 2007:36)), and is low frequency.

\subsection*{3.5.1.2 Dyadic âma=}

The set of dyadic kin terms (Evans 2006) are class 4 nouns derived from class 1 nouns (§4.1.1.1) using the derivational proclitic \(\hat{a} m a=\) 'DYAD'. \({ }^{122}\) This proclitic carries

\footnotetext{
\({ }^{122}\) Nêlêmwa has two denominal nominalizing prefixes, shâ- 'contents of N ' and hna- 'place of N '.
}
the meaning of 'a group of kin who have reciprocal relationships with one another.' For example, in (112), \(\hat{a} m a=\) is used to indicate that the relationship of siblinghood is reciprocal between the two participants.
(112) «Mo ji, ji mewu, ji âma avan."
\begin{tabular}{lll} 
mo & \(\mathbf{j i}\) & \(\mathbf{j i =}\) \\
LK3 & 1DU.INCL.INDEP & 1DU.INCL.SUBJ \(=\)
\end{tabular} \begin{tabular}{l} 
mewu \\
genus
\end{tabular}
\(\underset{\text { 1DU.INCL.SUBJ }=}{\mathbf{j i}=} \quad \underset{\text { anma }=}{\text { DYAD }=} \quad \begin{aligned} & \text { ava-n } \\ & \text { sibling-3SG.POSS }\end{aligned}\)
""For we, we are the same, we are brothers."
Yal-20092011-AW4_0033
Some speakers disagree on the glosses of dyadic kin terms with \(\hat{a} m a=\) due to the erosion of the traditional kinship system and accompanying vocabulary loss (see §1.2.1 for a discussion of kinship in Belep). Some examples of nouns formed using \(\hat{a} m a=\) are shown in (113). Where possible, both an older gloss (from Dubois' (1975c) or Neyret's (1974a) manuscripts) and a modern gloss (from an elderly speaker) are shown.
\(\hat{a} m a=a v a-n^{123} \quad\) [DYAD \(=\) same.sex.sibling.or.cousin-3SG.POSS]
'two brothers and sisters' (PT9/2/11beige3)
'two brothers' (Neyret 1974a:21)
ama \(=\) bega-n [DYAD \(=\) cross.cousin-3SG.POSS]
'two cousins' (PT9/2/11beige3)
'two same-sex cross-cousins' (Neyret 1974a:21)
âma \(a\) bee- \(n \quad\) [DYAD \(=\) sibling.in.law-3SG.POSS]
'a man and his sister's husband, or a woman and her brother's wife'
(PT9/2/11beige3)
'two brothers-in-law' (Neyret 1974a:21)
âma= janu [DYAD= spirit]
'people in a clan who share the same totem' (PT9/2/11beige3)
'parent of great-grandparent and/or great-grandparent with great-grandchild' (Dubois 1975c:46)

\footnotetext{
\({ }^{123}\) Dubois (1975c:46) also lists \(\hat{a} m a=m w a n a-n\) [DYAD \(=\) opposite.sex.sibling.or.cousin-3SG.POSS] to mean 'brother and sister, or male and female parallel cousins'; this kin term is not familiar to modern speakers.
}
```

ama=moo-n [DYAD= parent.in.law-3SG.POSS]
'father and son-in-law, or mother and daughter-in-law' (PT9/2/11beige3)
'maternal uncle and nephew/niece, or paternal aunt and nephew/niece, or parent-
in-law and child-in-law' (Dubois 1975c:46)
ama= nae-n [DYAD= child-3SG.POSS]
'family, clan'
ama=nila-n [DYAD= great.grandparent-3SG.POSS]
'great-grandparent and great-grandchild, or two great-grandchildren of the same
person' (PT9/2/11beige3)
`great-grandparent and great-grandchild' (Dubois 1975c:46)

| $\hat{a} m a=$ pabo $-n$ | $[\mathrm{DYAD}=$ grandchild -3 SG.POSS $]$ or |
| :--- | :--- |
| arma $=$ cêbo $-n$ | $[\mathrm{DYAD}=$ grandparent-3SG.POSS] |

'grandfather and grandson' (PT9/2/11beige3)
'grandparent and grandchild' (Dubois 1975c:46)
âma= yawa-n [DYAD= wife-3SG.POSS]
'married couple'

```

The \(\hat{a} m a=\) proclitic is derivational in that it is not relevant to syntax, not obligatory, creates a new lexeme, adds a semantic specification to a root, and has a noncompositional meaning.

\subsection*{3.5.2 Deverbal nouns}

There are a number of proclitics used to derive nouns from verbs; they generally function at the constituent rather than the word level. They are distinct from dependently possessed class 1 nouns (§4.1.1.1) in that they cannot take possessive suffixes. For example, the class 1 noun nabwa- 'imprint \({ }^{124}\) should not be considered a derivational proclitic; despite its participation in constructions such as (114), it can take the generic possessive suffix \(-r\) (115) (see \(\S 4.1 .2 .2\) ). Note that in (114), wiu 'to dine' is zero-derived to act as a nominal possessor of nabwa-.

\footnotetext{
\({ }^{124}\) A related form in Balade Nyelâyu is classified as a derivational morpheme; Ozanne-Rivierre (1998) lists \(m a-V\) 'place for V '.
}

\section*{nawba wiu lie}
nabwa wiu=li-e
imprint dine=GEN-3SG.ABS
'his dining areas'
nabwar
nabwa-r
imprint-3GNR.POSS
'a scar'
Yal-23082010-IM1.wav - Yal-23082010-IM3.wav

The proclitics to be discussed include agentive \(\hat{a}=\), instrumental \(b a=\), and resultative \(w a=\). They all change the word-class of their host, create a new lexeme (with a noncompositional meaning), are irrelevant to syntax and not obligatory, occur closer to the base than any inflectional morpheme, and are fairly infrequent and non-paradigmatic.

One interesting characteristic of Belep deverbal nouns is that they often allow inflection to occur closer to the root than derivation, a fairly unusual occurrence crosslinguistically (Haspelmath \& Sims 2010:102-105).

\subsection*{3.5.2.1 Agentive \(\hat{a}=\)}

The agentive proclitic \(\hat{a}=\) 'AGT \({ }^{\prime}{ }^{125}\) creates nouns from verbs with the meaning 'person who does V ' as in (116), where it derives the noun 'organizer' from the verb wêêng 'know how to do something'.
(116) ̂̂ wêêng
\(\underline{\hat{a}}=\quad\) wêêng
AGT= organize.GEN
'organizer (e.g. of the Women's Federation)' (lit. 'someone who knows how') Yal-02092010-PT-coutume.wav

The agentive \(\hat{a}=\) can also procliticize to an entire VP with an object included, as in (117) and (118). In both of these examples, the verb is inflected to agree with its object in specificity (see \(\S 5.1 .3 .1\) ). This is evidence for a VP as a constituent (see \(\S 5.9\) ).

\footnotetext{
\({ }^{125}\) Analogous to the prefix \(a a\) - in Nêlêmwa (Bril 2002).
}
a bae maac
\(\underline{\hat{a}}=\) bae maac
AGT= bite dead
'cannibal' (lit. 'someone who eats the dead')
PT handout
â pae pulu
\(\underline{\hat{a}}=\quad\) pa-e pulu

AGT= take-SPC speech
'spokesman (of the chief), \({ }^{126}\) (lit. 'someone who carries words')
Yal-09072009-PT.wav
Other derivational morphemes can intercede between \(\hat{a}=\) and the verb. For example, in (119), the derivational causative \(p a=\) intercedes between \(\hat{a}=\) and the transitivized form of pwec 'to be born', in this case pweya- 'to birth s.b.'. This is an example of layered morphology rather than templatic (Bickel \& Nichols 2007:214).
(119) â pa pweyau
\(\underline{\hat{a}}=\quad \mathbf{p a}=\quad\) pweya-u
AGT= CAUS= be.born.TR-DETR
'midwife' (lit. 'someone who causes to give birth')
Yal-09072009-PT.wav
Some instances of \(\hat{a}=\) have lexicalized; for example, the tree species name \(\hat{a}=\) mae 'Acacia nilotica' literally means 'sleeper' (from mae 'to sleep') because it closes its leaves at night.

\subsection*{3.5.2.2 Instrumental ba=}

The instrumental proclitic \(b a=\) 'INSTR \({ }^{\prime 127}\) derives nouns from verbs with the meaning 'instrument used to do \(\mathrm{V}^{\prime}\), as in (120). The verb group that it procliticizes to may already be inflected, as with the verb turu-o [hide-2SG.ABS] 'hide yourself' in (121).

\section*{(120) ba talep}
\(\underline{b a}=\) talep
INSTR \(=\) sweep
'broom' (lit. 'tool for sweeping')
Yal-04072009-BGMCG2.wav

\footnotetext{
\({ }^{126}\) In French, porte-parole du chef.
\({ }^{127}\) Analogous to the prefix baa- in Nêlêmwa (Bril 2002).
}

\footnotetext{
"Ba turuoda?"
ba= turu-o-da
INSTR= hide-2SG.ABS-DET.Q2
""What [do you use] for a blanket?"" (lit. 'a tool for hiding yourself')
}

Yal-05092011-AP1_0078
The proclitic \(b a=\) can also attach to VP constituents, as in (122) and (123).
(122) ba îna naraja
ba= îna nara-ja
\(\overline{I N S T R}=\) make name-1PL.INCL.POSS
'alphabet' (lit. 'tool for making our names')
DY classroom
(123) ba gi âju
\(\underline{\text { ba }}=\) gi âju
INSTR \(=\) attack person
'weapon' (lit. 'tool for attacking people')
Yal-20092011-AW1_0253
Some instances of \(b a=\) may have lexicalized. For instance, bayi 'chair' may have come from \(b a=c i[\mathrm{INSTR}=\mathrm{sit}]\).

\subsection*{3.5.2.3 Resultative wa=}

The resultative proclitic \(w a=\) ' RESULT \({ }^{\prime}{ }^{128}\) is used to derive deverbal nouns with the meaning of 'the manner or result of doing V ', as in (124) where \(w a=\) is procliticized to the intransitive verb molep 'to be alive' with the resulting meaning 'way or result of being alive; life'.
```

wa molep vija
$\underline{\text { wa }}=\quad$ molev=i-ja
RESULT $=$ be.alive=GEN-1PL.INCL.ABS
'our lives'

```

Yal-25072010-PT-homily_0031
In (124), the noun wa molep 'life' which results from the derivation is independently possessed (§4.1.2.4), as is usual for nouns derived with \(w a=\). Another example of an

\footnotetext{
\({ }^{128}\) Analogous to the prefix \(u\) - in Nêlêmwa (Bril 2002).
}
independently possessed noun derived with \(w a=\) occurs in (125), where the intransitive verb is pe âma naen 'to be a family'.
(125) Toma puur ri wa pe âma naen nile, toma pu-r=i \(\underline{\text { wa }=} \quad\) pe \(=\) âma= nae-n=i-le but origin-3GNR.POSS=GEN RESULT= RECP= DYAD= child-3SG.POSS=GEN-3DU.ABS 'But because of their family ties,' (lit. 'their way of familying themselves') Yal-25072010-PT-homily_0052

In (125), the deverbal derivational proclitic \(p e=(\S 3.5 .3)\) intercedes between the denominal \(w a=\) and the predicate nominal (§6.4.1) \(\hat{a} m a=\) naen 'family, clan’ (see §3.5.1.2 above). This is an example of layered, rather than templatic, morphology (Haspelmath \& Sims 2010:214).

Derivational \(w a=\) may also procliticize to a verb group containing a transitive stem. In many cases, such verbs are inflected before the derivation takes place. For example, in (126), wa= procliticizes to the inflected inaela 'make them', which contains inflectional specific and absolutive suffixes.
\(\hat{E} \hat{e}\), tere wa înaela ule.
êê te=re wa= îna-e-la ule
yes 3 SG.SUBJ=ACT RESULT= make-SPC-3PL.ABS long.ago
'Yes, that was actually the technique for making them then.'
Yal-28072010-BGMCG-hamecon_0058
In (126) the derived noun is \(w a=\) inna-e-la [RESULT= make-SPC-3PL.ABS] 'technique for making them'. Another example occurs in (127), where the derived verb is inau 'make', which contains a detransitive inflectional suffix.

\section*{(127) Âria wa înau ma la terae wayap. \\ âria \(\frac{\text { va }}{}=\) îna-u ma la= tera-e wayap \\ NEG.EX RESULT = make-DETR LK4 3PL.SUBJ= stop-SPC war \\ 'There was no way for them to stop the war.'}

Yal-20092011-AW4_0041
In (127), wa= procliticizes to the inflected verb ina-u, with the resulting meaning of 'way of making something'. Example (128) shows another instance of \(w a=\) procliticized to an
already-inflected word form. Here, the class 1 noun (§4.1.1.1) cewa- 'relationship, \({ }^{129}\) contains an obligatory possessive suffix, -la '3PL.Poss'. It is predicated, then converted to a noun when \(w a=\) is procliticized to it.

\section*{(128) Tere wa cewala ule.}

\section*{te=re wa= cewa-la ule}

3SG.SUBJ=ACT RESULT= relationship-3PL.POSS long.ago
'That's actually how it's related to the ones from back then.'
Yal-28072010-BGMCG-hamecon_0057
Examples (126) - (128) seem to show instances of inflection (e.g. possessive suffixes, absolutive suffixes, detransitive suffixes) occurring closer to the root than derivation (with the resultative proclitic \(w a=\) ).

\subsection*{3.5.3 Deverbal verbs}

The valence proclitics discussed in detail in \(\S 5.3\)-causative proclitic \(p a=\), reciprocal proclitic \(p e=\), and reduced agentive \(p u=\)-are verbal derivations that create new, non-compositional verb lexemes from verbs (a key characteristic of derivation as distinguished from inflection). Some examples are shown in (129).
(129) noor 'to be awake' \(p a=\) noor 'to awaken'
kôe 'to be tired' \(p a=k \hat{e} \hat{e}\) 'to annoy'
\(k a\) 'to shatter' \(\quad p e=k a \quad\) 'to separate'
tue 'to find' \(\quad p e=\) tue 'to meet'
kewee 'to chase' \(\quad p u=\) kewee 'to follow'
Other derivational characteristics of these proclitics include that they are not obligatory, they have limited applicability based on their semantic compatibility with the verb stem, they are iterable, and they are limited to the word-class of verbs.

\footnotetext{
\({ }^{129}\) The class 1 noun cewa- 'relationship' may be related to the verb \(c e\) 'to settle'; a similar relationship also exists between the intransitive verb \(c i\) 'to sit' and the noun ciwa- 'seat'. I was not able to verify whether this is a productive derivational process.
}

Further evidence of the derivational status of these proclitics is that, in some cases, verbs derived with them have become lexicalized, inducing phonological changes in the stem. Some examples are shown in (130).
\begin{tabular}{llll} 
(130) \begin{tabular}{l} 
pulu \\
kela
\end{tabular} 'to speak' & pawulue slide' & paxela & 'to engage s.b. in conversation' \\
kewee & 'to chase' & pbelmoschus manihot' \({ }^{130}\) \\
& pexewe & 'to race'
\end{tabular}

The triggering of base allomorphy is another common characteristic of derivational morphology.

\subsection*{3.5.4 Denominal verbs with \(\boldsymbol{t u}=\)}

Most nouns in Belep are capable of serving as verbs with zero derivation. For example, in (131) the noun tamwa 'woman' is used as a verb simply by inflecting it for subject agreement with \(t e=\) ' 3 SG.SUBJ'.

\section*{(131) Te tamwa, bébé tamwa. \\ te \(=\) tamwa [bebe] tamwa \\ 3SG.SUBJ= woman baby.LN woman \\ 'It was a girl, a baby girl.'}

Yal-28072010-BGMCG-tayamu_0075
However, for a number of nouns, this zero derivation is not possible. Instead, the derivational proclitic \(t u=\) 'VBLZ' is used to create a denominal verb. Its derivational properties include irrelevance to syntax, lack of obligatoriness, and limited applicability. Its use also creates a new lexeme with a non-compositional meaning and changes the word-class of its host.

One set of denominal verbs which tend to use verbalizer \(t u=\) are derived from class 1 (§4.1.1.1) or class 2 (§4.1.1.2) nouns; that is, nouns that normally participate in the dependent possessive construction (§4.1.2.1). For example, in (132), \(t u=\) modifies the class 1 noun nila- 'great-grandparent', and in (133) it modifies the class 1 noun tauva-

\footnotetext{
\({ }^{130}\) An edible plant known as 'Island cabbage'.
}
'replacement'. In these examples, the class 1 noun is still obligatorily possessed, even though it has undergone verbal derivation (another possible case of inflection preceding derivation).
(132) Te jua tu nilan.
te \(=\) jua tur \(=\) nila-n
3SG.SUBJ= really VBLZ= great.grandparent-3SG.POSS
'S/he is very frightened.' (lit. 'S/he really does her great-grandparent.') \({ }^{131}\)
Yal-19082010-PT.wav
(133) Yo tu tauvan.
\(\mathbf{y o}=\quad \underline{\text { tu }}=\) tauva-n
2SG.SUBJ= VBLZ= replacement-3SG.POSS
'You serve as a replacement for him/her.'
Yal-01092010-AP1.wav - Yal-01092010-AP3.wav

In (134), \(t u=\) modifies \(m w e e n g\) 'decoration', which is a class 2 noun. The noun \(d o\) 'spear' in (135) is also a class 2 noun whose word class is changed by verbalizer \(t u=\).
(134) Te tu mweeng.
te \(=\quad \underline{\text { tu }}=\) mweeng
3SG.SUBJ= VBLZ= decoration
'S/he decorates her/himself.' (lit. 'S/he does decorations.')
Yal-04072009-BGMCG2.wav
(135) "Ji tu do."
\(\mathbf{j i}=\quad \mathbf{t u}=\quad \mathbf{d o}\)
1DU.INCL.SUBJ= VBLZ= spear
""We make peace." (lit. ""We do our spears [into the ground]."')
Yal-20092011-AW6_0166
The derivational \(t u=\) is also commonly used when deriving denominal verbs from nouns which have entered the language through borrowing (§1.6.2). For example, in (136), \(t u=\) converts the noun covan 'horse' (from French cheval [Jəval]) to a verb meaning 'to ride'.

\footnotetext{
\({ }^{131}\) The class 1 noun nila-means 'great-grandparent', who is so far back in time that he is approaching the \(j a n u\), the clan totem from which the clan is descended. When you \(t u=n i l a-n\), you have gooseflesh, presumably from a brush with the sacred.
}
(136) Mo la tao tu covan na bwe dua noon, mo la= tao= tu= covan=a bwe dua noo-n because 3PL.SUBJ= HAB= VBLZ= horse.LN=LOC top back throat-3SG.POSS 'Because they \({ }^{132}\) were riding on his neck,' (lit. 'they were horsing') Yal-28072010-BGMCG-tahitian_0257

In (137), tu= converts the noun per 'party' (from French fête [fft]) to a verb.
(137) BG: Mo avexaô tu per ra mode ...
mo ave \(=\mathbf{x a}=\hat{\mathbf{o}} \quad \underline{\text { tu }}=\) per=a mode
LK3 1DU.EXCL.SUBJ=ADD=REAL \(\overline{\text { VBLZ }}=\) party.LN \(=\) LOC together
BG: 'Because we were partying together with,'

\section*{MCG: âjuma.}
âju-ma
person-AC
MCG: 'the people.'
Yal-28072010-BGMCG-tahitian_0289-0290
In addition to verbing class 1 and class 2 nouns and French loans, \(t u=\) is also used in Belep in a number of idiomatic expressions. In these instances there is not a clear reason to suppose that \(t u=\) is not a full lexical verb \({ }^{133}\) except that speakers do not feel that this is the case. \({ }^{134}\) Speakers do not use a comparable French full verb (such as faire 'do, make') to translate \(t u=\) and do not feel this is appropriate (although it is necessary to use 'do, make' to translate the derived Belep verbs into French or English). Some examples follow in (138) - ((141).
(138) Te tu komu.
te= tu= komu
3SG.SUBJ VBLZ= hermit.crab
'I have déjà vu.' (lit. 'It did [the same thing all over again] like a hermit crab.')

\footnotetext{
\({ }^{132}\) The janu, the ancestral totems, were riding on his neck because he had failed to faire la coutume (§1.2.2) to them at Poc.
\({ }^{133}\) The comparable formative thu in Nêlêmwa is called a verb operator by Bril (2002) and is translated by French faire and English do, although she notes that "the composition of thu + NOUN constitutes an intransitive predicate and not a verb and its patient" (Bril 2002: 68).
\({ }^{134}\) It is unclear in these examples whether \(t u=\) carries word stress.
}

In (138), the noun \(k о т и\) 'hermit crab' is converted with \(t u=\) to a verb with the meaning 'to have déjà vu'. In (139) below, yuuc 'mangrove crab' is converted to a verb with the meaning 'to discuss at length, as mangrove crabs construct elaborate palaces in the sand'.
(139) Ja nyi tu yuuc ya bween,
 'We often discuss it,' (lit. 'We make [things] like the mangrove crab,') Yal-09082010-JMTresponse_0013

In (140), the interrogative pronoun \(d a\) 'what?' (§4.5.3) is converted into a verb using \(t u=\) in order to pose a question-word question (see §6.5.2).

\section*{"Ma na pan tu da?"} ma na= pana tu= da LK4 1SG.SUBJ= go.TV VBLZ= what 'Why should I go?' (lit. 'That I go and do what?')

Yal-20092011-AW1_0035
In (141), the noun pwalu 'heavy' is converted into a verb with the meaning 'to accord customary respect, as of la coutume or the chief' (see §1.2.2 on la coutume). This derived verb tu pwalu contrasts in meaning with the bound transitive verb pue 'to respect someone's person'.
(141) Na jua tu pwalu liôn.
na= jua tu \(=\) pwalu-li-ôn
1SG.SUBJ= really VBLZ= heavy-TR-2PA.ABS
'I respect you very much.' (lit. 'I make like heavy [things are on my back].') \({ }^{135}\)
Yal-09082010-coutume_0117

\subsection*{3.6 Compounding}

Scholars of New Caledonian languages remark that noun compounding occurs, but in general do not define its identifying characteristics. Bril (2002) gives four examples of noun + noun compounds in Nêlêmwa, though she does not explain her criteria for this classification. Moyse-Faurie (1995) states that, in Xârâcùù, "a compound

\footnotetext{
\({ }^{135}\) The grande case, the ceremonial house of the chief in Kanak culture, has a very low doorjamb and high lintel. To enter, one must normally bend almost double as a symbol of respect.
}
is the result of the fossilization of a syntactic constituent" (Moyse-Faurie 1995:201), \({ }^{136}\) and that the first part of a compound is generally reduced to a single syllable. However, she does not then distinguish between a nominal compound and a dependent possessive construction.

Noun compounding in Belep would be a fruitful topic for further study. As the dependent possessive construction (§4.1.2.1) involves the simple juxtaposition of two nouns, there are no morphological criteria which could conceivably distinguish nominal compounding from a possessive construction. If a distinction exists, it would have to be made on phonological, syntactic, or semantic criteria (Aikhenvald 2007:24).

Possible phonological criteria which distinguish a compound include the phonological word-marking criteria discussed in §3.1.1 such as lenition. By this criterion, the example in (142) would be a compound.
\[
\text { (142) wexaac 'ocean' }<\text { we 'water' }+\quad \text { kaac 'bitter' }
\]

A number of other words have been identified which are likely the lexicalized result of previous compounds-a common result of compounding (Aikhenvald 2007). However, not all the parts of these lexicalized compounds are still identifiable, which contradicts the definition of compounds as "the combination of at least two potentially free forms" (Aikhenvald 2007:24). I have attempted to identify their parts in (143), though the phonological reduction and fusion they have undergone makes this difficult.

\footnotetext{
136 "C'est le plus souvent le résultat du figement d'une succession syntaxique (syntagme de détermination de type possessif ou qualificatif)." (Moyse-Faurie 1995:201; translation mine)
}
```

(143) uruâny 'hurricane' <uru 'wind' +âc 'man' ${ }^{137}$
bwaêdan 'morning' <bwa- 'head' +êne- 'sign' + taan 'day' 138
kûmedan 'evening' <? kûme + taan 'day'
denaar 'daylight' $<d e$ - 'light' $\quad+a r$ 'sun' 139
mweogo 'mountaintop' <bwe- 'top' + ôgo 'mountain'
ara kalooc 'shoe, ${ }^{140}$ <ara- 'underside' $+k a$ - 'foot'/Fr. galoche 'clogs, ${ }^{141}$
câbuk 'very cold' < caam 'cold' + ? buk
pwairamwa 'girl' < ? pwai 'proud' + tamwa 'woman'
pwainagac 'beautiful' $<$ ? pwai 'proud' $\quad+$ dagac 'mask'

```

Many animal and plant names are clearly compounds on semantic criteria, although it is unclear if any other criteria may be used to distinguish them (144).
\[
\begin{align*}
& \text { bwala gom 'moray eel' <bwala- 'head' }{ }^{142}+\text { gom 'sea cucumber' }  \tag{144}\\
& \text { cuda âvan 'swamp harrier' <cu=da 'stand=DIR.UH' + âva- } n \text { 'wing-3SG' } \\
& \text { nana deâ 'maggot' <nana- 'feces' } \quad+\text { deâ 'blowfly' } 143 \\
& \text { nu li kiâk 'arrow root' <nu 'coconut'+ kiâk 'purple swamphen' } 144 \\
& \text { ulo kan 'silver gull' <ulo 'red' + ka-n 'feet-3sG.POSS' } \\
& \text { we modap 'seaweed' <we 'food' + modap 'manatee' }
\end{align*}
\]

A few other words can be characterized as compounds using semantic criteria, though it is unclear if other criteria may be used since in all other ways they are indistinguishable from a possessive construction (145).
\[
\begin{array}{ll}
\text { nae dan 'cloud' } & <\text { nae- 'child' + dan 'sky' }  \tag{145}\\
\text { nae uc 'bastard', } & <\text { nae- 'child' + uc 'straw' } \\
\text { waga ano 'cradle' } & <\text { waga- 'boat'+ ano 'child' }
\end{array}
\]

Verb compounding is discussed in §5.8.

\footnotetext{
\({ }^{137}\) This etymology is proposed by several speakers; hurricanes are believed to be the work of a single legendary sorcerer who lives on Poc.
\({ }_{138}\) An alternate form is the reduplicated mwamwaedaan 'the crack of dawn'.
\({ }^{139}\) Probably by analogy with de naap [light fire] 'firelight'. The word aar 'sun' is still used as the name of the main island in Belep, spelled <Art> in French orthography.
\({ }^{140}\) Note that compounds in Belep should be considered a single grammatical word, although they may consist of multiple phonological words.
\({ }^{141}\) The French etymology ara- 'underside' + French galoche 'clogs' was suggested in Dubois (1975c).
\({ }^{142}\) Many lexicalized forms in Belep contain bwala- 'head' instead of bwa-. It is unknown whether there is a productive distinction.
\({ }^{143}\) Lucilia caesar.
\({ }^{144}\) Porphyrio porphyrio caledonicus.
}

\subsection*{3.7 Non-concatenative morphology}

There is very little non-concatenative morphology in Belep; the most promising example of non-concatenative morphology is a very limited process of reduplication.

Bril (2002) gives two examples of nominal reduplication in Nêlêmwa, where the first syllable is reduplicated with the meaning of 'multiple types of N'. She gives several other examples of verbal reduplication (again of the first syllable) with the meaning 'be very V' or 'do V multiple times'. I have found a few plausible examples of reduplication resembling this in Belep (146).
(146) \begin{tabular}{llll} 
kûkûûr & 'to mutter, \({ }^{145}\) & \(<\) & kûûr \\
povoro & 'to be daybreak, \({ }^{146}\) & \(<\) & poro \\
'to be white' \\
torop & 'to be mushed' & \(<\) & top
\end{tabular} 'to be melted'

The other plausible examples of Belep reduplication that I have found, shown in (147) and (148), seem to be onomatopoetic or at least sound-symbolic; in many of these cases, no word form without a reduplicant has been identified.
babanu 'type of lizard'
jajani 'to be crazy'
pipilo 'swiftlet \({ }^{147}\)
tiribic 'to tremble'
boriric 'tern'
kewowor 'to snore'
nyomamar 'to whisper'
palalap 'serpentinite (type of stone)'
welolop 'type of coconut' \({ }^{148} \quad\) weloo 'type of coconut'
In general, there appear to be two types of reduplication: one where the first syllable is reduplicated (147) as in Nêlêmwa, and another where the onset and nucleus of the last

\footnotetext{
\({ }^{145}\) Note that some of these sound-symbolic words disobey the normal phonotactics of Belep in allowing medial voiceless stops; see §2.?.
\({ }^{146}\) This word was found in Dubois (1975c); it was not collected by me.
\({ }^{147}\) Collocalia esculenta, a type of bird.
\({ }^{148}\) A weloo is a green, unripe coconut. A welolop is a more mature coconut that makes a hollow sound when you thump it.
}
syllable are reduplicated (148). More work remains to be done to determine if reduplication is a productive process at all in Belep.

\subsection*{3.8 Summary}

In this chapter, I have demonstrated the wide disconnect between the phonological and the grammatical word (§3.1) and described the prototypical characteristics of the five Belep word classes (§3.2). The difference between Belep inflectional (§3.4) and derivational (§3.5) morphology was defined in §3.3. Sections §3.6 and \(\S 3.7\) have described some less common word-formation processes in Belep.

\section*{Chapter 4 \\ Nouns and the noun phrase}

\subsection*{4.0 Introduction}

Nouns in Belep form a word class whose prototypical characteristics were discussed in §3.2.1. They are divided into four noun classes based on their semantic compatibility with inalienable and alienable possession (§4.1). They can be marked with inflectional suffixes for quantity (§4.2) and determination (§4.3). Noun phrases (§4.4) are composed minimally of a head noun, which may be followed by any number of modifying nouns, including numerals (§4.6). Pronouns (§4.5) are defined as full phonological words which are capable of substituting for a noun phrase.

\subsection*{4.1 Nouns and possession}

As in many languages of the Pacific Rim, Belep nouns are divided into "declension classes defined by allomorphy of possessive inflection" (Bickel \& Nichols 2007: 206). That is, Belep nouns are divided into four classes (§4.1.1) with both a distinction between inherent and optional possession and between inalienable possession (referred to in this work as 'dependent’; see §4.1.2) and alienable ('independent') possession. These classes are defined by the ability of the nouns they contain to appear as free stems and to participate in the two available possessive constructions (§4.1.2).

Within these classes, Belep nouns undergo a considerable amount of lexeme-based flexivity using stem modification; stems vary phonologically depending on whether they are free or possessed (§4.1.3) and vary further depending on the possessor’s position (§4.1.2.3) on the topic-worthiness hierarchy (Payne 1997).

\subsection*{4.1.1 Noun classes}

Nouns in Belep are divided into four noun classes based on their compatibility with possessive constructions. Class 1 nouns (§4.1.1.1) are inherently possessed; they do not have free stems and must obligatorily index their possessor using dependent possession (§4.1.2.1). All other noun classes are optionally possessed. Class 2 nouns (§4.1.1.2) have free stems (§4.1.3), but may only be possessed using dependent (inalienable) possession. Class 3 nouns (§4.1.1.3) have free stems and may be dependently or independently (§4.1.2.4) possessed. Class 4 nouns (§4.1.1.4) have free stems and may be independently (alienably) possessed; however, they are incompatible with dependent possession (§4.1.2.1). This classification system is represented in Table 38.

Table 38: Compatibility of noun classes with possessive constructions`
\begin{tabular}{|l|c|c|c|}
\hline & Dependent possession & Free & Independent possession \\
\hline Class 1 & \(\checkmark\) & & \\
\hline Class 2 & \(\checkmark\) & \(\checkmark\) & \\
\hline Class 3 & \(\checkmark\) & \(\checkmark\) & \\
\hline Class 4 & & \(\checkmark\) & \(\checkmark\) \\
\hline
\end{tabular}

Nouns are assigned to the various noun classes based on their semantic compatibility with inalienable (dependent) or alienable (independent) possession, as well as with the notion of being free (unpossessed). Class 1 nouns are most likely to be kinship terms and lexical items describing body parts or part/whole relationships; these
concepts necessarily have a semantic possessor. Class 2 nouns represent those entities which inalienably belong to their possessor, but nonetheless may be separated from it. Class 3 nouns exist at the semantic margin between alienable and inalienable possession; a class 3 noun's ability to participate in both constructions may or may not be salient for speakers. Class 4 nouns are those which are unequivocally alienable from their possessor-such as features of the natural world—and which lack a phonological form which is compatible with the dependent construction. Lexical nouns which are phonologically identical to corresponding verbs (§3.2) tend to fall into this category, as do all loanwords which are nouns ( \(\S 2.8, \S 1.6 .2\) ).

\subsection*{4.1.1.1 Noun class 1}

Nouns in class 1 are distinguished by the fact that they are semantically inalienably possessed and cannot be separated from their possessor. It is not possible for class 1 nouns to occur outside of the dependent possessive construction (§4.1.2.1); they do not have free (unpossessed) forms (§4.1.3). Class 1 is a very large closed noun class (comprising at least 200 nouns). Some examples of class 1 nouns are shown in Table 39.

Table 39: Class 1 nouns
\begin{tabular}{|l|l|}
\hline Class 1 noun \({ }^{149}\) & Gloss \\
\hline âmwa & 'gesture' \\
\hline âô & 'vine' \\
\hline ava & 'sibling' \\
\hline bane & 'friend, company' \\
\hline cama & 'father' \\
\hline e & 'hand' \\
\hline gana & 'color' \\
\hline jivi & 'skirt' \\
\hline ka & 'foot' \\
\hline mwade & 'nose' \\
\hline nara & 'name' \\
\hline nila & 'great-grandparent' \\
\hline pabo & 'grandchild' \\
\hline pae & 'importance' \\
\hline oga & 'egg' \\
\hline wêga & 'charity' \\
\hline yada & 'belongings' \\
\hline
\end{tabular}

For example, the class 1 noun nara- 'name' may occur with either a noun phrase possessor (1) or a pronominal possessive suffix (§4.1.2.2), as in (2), where the possessor is nonsingular, and in (3) where the possessor is singular.
(1) nara ulayimi
nara ulayi-mi
name old.man-DET.A.DST
'the name of that old man'
Yal-20092011-AW6_0006
(2) narale
nara-le
name-3DU.POSS
'their names'
Yal-20092011-AW6_0057
(3) naran
nara-n
name-3SG.POSS
'its name'
Yal-20092011-AW6_0117

\footnotetext{
\({ }^{149}\) The stems in this column may be used regardless of whether the possessor is indexed by an animate or inanimate NP or a singular or nonsingular pronominal suffix.
}

If the possessor of a class 1 noun is generic/unspecified, the noun occurs with the possessive suffix \(-r\) '3GNR.POSS' as in (4) and (5).
(4) naer
nae-r
small.thing-3GNR.POSS
'a child'
Yal-28072010-BGMCG-tayamu_0133
(5) baner
bane-r
friend-3GNR.POSS
'an accompaniment'
Yal-28072010-BGMCG-tayamu_0020
Many class 1 nouns undergo stem modification depending on the type of possessor (§4.1.2.3), whether it is indexed by an animate or inanimate noun phrase or a singular or nonsingular possessive suffix. Some examples are shown in Table 40; each column shows what stem is required for the type of possessor noted in the column heading.

Table 40: Stem modification in class 1 nouns
\begin{tabular}{|l|l|l|l|l|}
\hline Inan. NP & Anim. NP & Nonsg. pron. sfx. & Sg. pron. sfx. & Gloss \\
\hline ânu & ânuu & 'beneath' \\
\hline âro & âroo & 'husband' \\
\hline bo & boo & 'odor' \\
\hline bwala & bwa & bwaa & 'head' \\
\hline dua & du & duu & 'bones' \\
\hline ga & gaa & 'sympathy' \\
\hline mua & muu & 'flower' \\
\hline nyana & nya & mu & 'mother' \\
\hline pwâna & pwa & 'fruit' \\
\hline wâna & wâ & 'root' \\
\hline
\end{tabular}

The stem modifications shown in Table 40 are properties of the lexeme and, though they follow several general patterns, are largely irregular and unpredictable.

\subsection*{4.1.1.2 Noun class 2}

Like class 1 , class 2 contains inalienably possessed nouns, and the only possessive construction with which they are compatible is dependent possession (§4.1.2.1).

However, nouns in class 2 are distinguished from nouns in class 1 in that they have free (unpossessed) forms (§4.1.3). Semantically, it is possible to separate class 2 nouns from their possessors. Table 41 shows some examples of class 2 nouns.

Table 41: Class 2 nouns
\begin{tabular}{|c|c|c|c|c|}
\hline Free stem & Inan. NP & \begin{tabular}{l}
Anim. NP/ \\
Nonsg. poss. sfx.
\end{tabular} & Sg. poss. sfx. & Gloss \\
\hline âm & \multicolumn{3}{|l|}{âba} & 'plate' \\
\hline \multicolumn{3}{|l|}{ânaju} & ânajuu & 'truth' \\
\hline \multicolumn{3}{|l|}{bwayu} & bwayuu & 'right side' \\
\hline \multicolumn{4}{|l|}{cawane} & 'mast' \\
\hline \multicolumn{3}{|l|}{da} & daa & 'blood' \\
\hline daap & \multicolumn{3}{|l|}{dawo} & 'dust' \\
\hline iyi & \multicolumn{3}{|l|}{iye} & 'louse' \\
\hline jiin & \multicolumn{3}{|l|}{jida} & 'story' \\
\hline \multicolumn{3}{|l|}{mada} & madaa & 'sadness' \\
\hline mwa & mwana & mwa & & 'house' \\
\hline nep & \multicolumn{3}{|l|}{neve} & 'dream' \\
\hline \multicolumn{3}{|l|}{pa} & paa & 'nest' \\
\hline tolam & \multicolumn{3}{|l|}{tolaba} & 'basket' \\
\hline wa & \multicolumn{3}{|l|}{wale} & 'necklace' \\
\hline waang & \multicolumn{3}{|l|}{waga} & 'boat' \\
\hline
\end{tabular}

As Table 41 shows, every class 2 noun has both a free stem (leftmost column) and at least one possessed stem. \({ }^{150}\) Possessed stems in class 2 undergo a large amount of stem modification (§4.1.2.3) depending on whether the possessor is indexed by an inanimate NP, an animate NP or nonsingular possessive suffix, or a singular possessive suffix.

There are two basic patterns for this type of stem modification. In one pattern, the free stem is also used for all types of possessors except for those indexed by a singular

\footnotetext{
\({ }^{150}\) Though it is usual to have phonological alternation between free and possessed stems for class 2 nouns, a few class 2 nouns have phonologically identical free and possessed stems, e.g. cawane 'mast'.
}
pronominal suffix (§4.1.2.2), for which a stem containing a like-vowel hiatus is used. For example, the free stem \(d a\) 'blood' (6) is also used with a noun phrase possessor (7) and a nonsingular pronominal possessive suffix (8). Only a singular possessive suffix requires a different possessed stem, daa- 'blood' as in (9).
(6) "ma yo tu ma uli da.»
\begin{tabular}{lllll} 
ma & \(\mathbf{y o}=\) & tu & ma & uli
\end{tabular}\(\quad\) da,

Yal-20092011-AW1_0256
(7) \(\quad\) ka da ulayimi,
ka da ulayi-mi
LK blood old.man-DET.A.DST
'and the blood of that old man,'
Yal-20092011-AW5_0090
(8) dala
da-la
blood-3PL.POSS
'their blood'
(9) daang
daa-ng
blood-1SG.POSS
'my blood'
Yal-02092011-PT.wav
In the other pattern, the free stem contrasts with the possessed stem, which is used for all types of possessors. For example, the free stem waang 'boat' (10) corresponds to the possessed stem waga-, which occurs with both nominal (11) and pronominal (12) possessors.
(10) Laxa po wang.
la=xa po waang
3PL.SUBJ=ADD load boat
'And they loaded the boat.'
Yal-20092011-AW3_0077
(11) Avexa pae waga ulayixedu digi, ave=xa pa-e waga ulayi-xedu digi 1DU.EXCL.SUBJ=ADD take-SPC boat old.man-DET.DH canoe 'We would take the old man's boat, a canoe,'

Yal-28072010-BGMCG-tahitian_0013
(12) «Ka ivi wagaji ?»
ka ivi waga-ji
LK be.where.SPC boat-1DU.INCL.POSS
""And where's our boat?""
Yal-01082010-MFD_0016

\subsection*{4.1.1.3 Noun class 3}

Class 3 nouns exist at the semantic margin between compatibility with alienable and inalienable possession; they form a fairly small noun class. Nouns in class 3 have free (unpossessed) stems (§4.1.3), and they may be both dependently (§4.1.2.1) and independently (§4.1.2.4) possessed. Dependently possessed class 3 nouns may undergo stem modification for the type of possessor (§4.1.2.3). Some examples of class 3 nouns are shown in Table 42.

Table 42: Class 3 nouns
\begin{tabular}{|l|l|l|l|}
\hline Free stem & NP/Nonsg. pron. sfx. & Sg. pron. sfx. & Gloss \\
\hline doo & do & doo & 'dirt' \\
\hline gawaar & gaware & 'day' \\
\hline kayor & kayola & 'barrier' \\
\hline pulu & puluu & 'speech, language' \\
\hline pwemwa & 'home, village' \\
\hline
\end{tabular}

Alternation between dependent and independent possession occurs based on a speaker's moment-to-moment conceptualization of a class 3 noun. For example, the free form pwemwa 'dwelling' is unpossessed in (13) and dependently possessed in (14), where it is translated as 'home'—a concept which the speaker conceptualizes as inalienable. When pwemwa is independently possessed in (15), it is best translated by 'village, inhabited place, locality'—a concept which speakers perceive as alienably posssessed.
(13) Teô ta la pwemwa.
te=ô ta=la pwemwa
3SG.SUBJ=REAL go.UH=LOC dwelling 'he had gone home/to the village.'

Yal-28072010-BGMCG-tahitian_0070
(14) pwemwang
pwemwa-ng
dwelling-1SG.POSS
'my home'
Yal-28072010-BGMCG-tahitian_0007
(15) pwemwa li Ono pwemwa=li Ono dwelling=GEN Ono 'the village (named) Ono'

Yal-28072010-BGMCG-sousmarin_0073
The ability of class 3 nouns to be independently possessed is not generally salient for speakers.

\subsection*{4.1.1.4 Noun class 4}

Class 4 is a very large, open noun class which contains most animal and plant names, features of the natural world, and all nominal loanwords. Nouns in class 4 have only one stem, which may occur as a free stem (§4.1.3) or be independently possessed (§4.1.2.4). Class 4 nouns are incompatible with dependent possession. Noun classifiers (§4.1.4) are also used to indicate the possessor of a class 4 noun. Some examples of class 4 nouns are shown in Table 43.

Table 43: Class 4 nouns
\begin{tabular}{|l|l|}
\hline Free stem & Gloss \\
\hline âju & 'person' \\
\hline âno & 'paternal aunt'151 \\
\hline bwena & 'type of lizard' \\
\hline câbuk & 'cold' \\
\hline danac & 'ocean' \\
\hline dilic & 'mud' \\
\hline jan & 'cord' \\
\hline jewe & 'fairy' \\
\hline koyap & 'type of lobster' \\
\hline kuro & 'knife.LN' \\
\hline maac & 'death' \\
\hline mada & 'cloth' \\
\hline mani & 'bird' \\
\hline nu & 'coconut tree' \\
\hline oroop & 'dress.LN' \\
\hline paan & 'screwpine' \\
\hline pawi & 'beach hibiscus' \\
\hline piyu & 'star' \\
\hline puaxa & 'pig.LN' \\
\hline puri & 'snake' \\
\hline wayap & 'war' \\
\hline yer & 'pot' \\
\hline
\end{tabular}

Examples (16) and (17) show the use of the class 4 noun \(\hat{a} j u\) 'person' respectively as a free (unpossessed) stem, and as an independently possessed stem.
(16) Te gi koxo âju,
\begin{tabular}{llll} 
te \(=\) & gi & koxo & âju \\
3SG.SUBJ \(=\) & attack & lots & person \\
'He killed many people,' &
\end{tabular}

Yal-20092011-AW3_0087
(17) «Name pan pan cuuri âju linaoma." na=me pana pana curi âju=li-nao-ma 1SG.SUBJ=IRR go.TV go.TV stand.TR person=GEN-1SG.ABS-AC "II am going to go and stand before my people."

Yal-20092011-AW1_0220
Class 4 nouns do not undergo stem modification for the type of possessor (§4.1.2.3).

\footnotetext{
\({ }^{151}\) A few kinship terms, such as ano 'paternal aunt', vocative wa 'grandparent', and the derived kinterms using âma = 'DYAD' (§3.5.1.2), including âma naen 'family', are class 4 nouns. It is unclear whether there is semantic justification for this or whether it is simply an irregularity.
}

\subsection*{4.1.2 Possessed nouns}

To express nominal possession, Belep speakers use two different possessive constructions, which are termed 'dependent' and 'independent' throughout this work. \({ }^{152}\) Abstract representations of these constructions are shown in Table 44; square brackets indicate phonological word boundaries.

Table 44: Types of possessive construction in Belep
\begin{tabular}{|l|l|l|}
\hline & NP Possessor & Pronominal Possessor \\
\hline Dependent & [HEAD NOUN] [NP POSSESSOR] & [HEAD NOUN-POSS. SUFFIX] \\
\hline Independent & [HEAD NOUN=GEN] [NP POSSESSOR] & [HEAD NOUN=GEN-ABS. SUFFIX] \\
\hline
\end{tabular}

Table 44 shows that the inflectional morphology used in dependent (§4.1.2.1) and independent (§4.1.2.4) possessive constructions differs depending on whether the possessor is indexed by a full noun phrase or by a pronominal formative. Dependent possession with a full NP possessor is marked by the simple juxtaposition of the noun and its possessor; whereas all independent possession requires the use of the genitive case marker \(=l i\) or \(=i\) ' \(\operatorname{GEN}\) ’ (§6.3.3). When the possessor is indexed by a pronominal suffix, nouns in the dependent construction use a possessive suffix (§4.1.2.2), while nouns in the independent construction use an absolutive suffix (§5.6). Semantically, the dependent possessive construction denotes inalienable possession, while the independent construction denotes alienable possession.

\footnotetext{
\({ }^{152}\) Scholars of Kanak languages have traditionally used the terms 'dependent' and 'independent' as names for noun classes. Inherently possessed nouns are called 'dependent nouns' by other scholars of New Caledonian languages (Bril 2002), and nouns which are not inherently possessed are called 'independent nouns'. Ozanne-Rivierre (1998) distinguishes a third class for Balade Nyelâyu, 'personal nouns', which includes proper names and certain kinship terms which behave like pronouns in terms of their casemarking. Bril further subdivides 'independent nouns' into several subclasses: those which can be modified by the possessive suffixes used for dependent nouns, and those which cannot; and those whose root undergoes phonological alternation or not when modified by the suffixes. This work will differ from previous publications on Kanak languages in using 'dependent' and 'independent' to refer to inalienable and alienable possessive constructions, respectively, rather than to particular noun classes.
}

\subsection*{4.1.2.1 Dependent possession}

In the dependent possessive construction, when the possessor is indexed by a noun phrase, the head noun immediately precedes the possessor noun, with no marking to indicate their relationship. There is no morphological distinction between the dependent possessive construction and nominal compounding (§3.6). Examples of dependent possession are shown in (18) - (21).
(18) ara ôgo
underside mountain
'the bottom of the mountain'
Yal-20092011-AW6_0139
(19) tânema cawone
eye Japanese.LN
'diving mask' (lit. 'eye of Japanese'; most diving masks are Japanese imports)
Yal-28072010-BGMCG-tahitian_0041
(20) ala karec
husk clam
'clam shell'
Yal-05092011-AP1_0096
(21) pua â mae
pua \(\hat{\mathbf{a}}=\) mae
trunk AGT= sleep
'mimosa trunk' (lit. 'trunk of sleeper, \({ }^{153}\) )
Yal-17072009-TB-weekend_0011
When the possessor is indexed by a pronominal formative, a possessive suffix
(§4.1.2.2) is used on the head noun, as in (22) and (23).
(22) pabong
pabo-ng
grandchild-1SG.POSS
'my grandchild'
Yal-17072009-TB-weekend_0030
(23) oreâva
oreâ-va
breath-1PL.EXCL.POSS
'our breath'
Yal-17072009-TB-weekend_0018

\footnotetext{
\({ }^{153}\) The tree name \(\hat{a}\) mae 'Acacia nilotica' literally means 'sleeper'; it closes its leaves at night.
}

Nouns of classes 1, 2, and 3 (§4.1.1) may participate in the dependent possessive construction.

\subsection*{4.1.2.2 Possessive suffixes}

The possessive suffixes are presented in Table 45. See \(\S 4.5 .1\) for a discussion of personal pronouns in general.

Table 45: Possessive suffixes
\begin{tabular}{|l|l|l|l|l|l|}
\hline & Singular & Dual & Paucal & Plural & Generic \\
\cline { 1 - 4 } \(\mathbf{1}\) excl & -ng & -ve & -ven & -va & \\
\cline { 3 - 5 } \(\mathbf{1}\) incl & & -ji & -jen & -ja & \\
\cline { 1 - 1 } & & -mw & -or & -ôn & -ac \\
\\
\hline \(\mathbf{3}\) & -n & -le & -len & -la & -r \\
\hline
\end{tabular}

The possessive suffixes shown in Table 45 are used primarily on nouns in the dependent possessive construction, as in examples (24) and (25).
(24) jivive
jivi-ve
skirt-1DU.EXCL.POSS
'our skirts'
(25) \(\begin{aligned} & \text { puluac } \\ & \text { pulu-ac } \\ & \text { speech-2PL.POSS } \\ & \\ & \text { 'your language' }\end{aligned} \quad\) Yal-20092011-AW4_0053

Yal-14092011-PT2-avenir_0018
They are also used to index an anaphoric dative argument after the dative case marker \(=l e\) or \(=e\) 'DAT' \((\) see §6.3.4 \()\).

The possessive suffix -r ‘3GNR.POSS' indexes a generic possessor (see §5.1.4 for more on specificity in Belep) of unspecified number, as in examples (26) - (28). It is often used in the citation form of a class 1 noun (§4.1.1.1), as in (26), or with a possessor that is a mass noun (27) or inanimate (28). It occurs with the singular pronominal form of possessed noun stems (§4.1.1).
mewuиr
mewuu-r
surname-3GNR.POSS
'surname'
Yal-06082010-DY.wav
(27) Ka naerama, la îbi jawu.
\begin{tabular}{lllll} 
ka & nae-ra-ma & \(\mathbf{l a}=\) & îbi & jawu \\
LK & child-3GNR.POSS-AC & 3PL.SUBJ= \(=\) & collect & dead.leaves
\end{tabular}
'The children, they collected trash.'
Yal-17072009-TB-weekend_0009
(28) tu ganar
tu= gana-r
VBLZ= color-3GNR.POSS
'to color' (lit. 'to do its/their colors')
Yal-13102010-AP.wav
The usage of generic \(-r\) contrasts with, for example, the usage of 3SG.Poss suffix \(-n\), which occurs when the possessor is singular, specific and directly inferable from context.

For example, in (29) and (30), the form - \(n\) indexes a specific possessor, which can be animate (29) or inanimate (30).
(29) Teô âyae teeyan.
te=ô âya-e teya- \(\underline{\mathbf{n}}\)
3SG.SUBJ=REAL sense-SPC burn-3 \(\overline{\mathrm{S} G . P O S S . S}\)
'He [the Dubageni] felt his burn.'
Yal-05092011-AP1_0085-0086
(30) La ta la bween.
\(\mathbf{l a}=\quad \mathbf{t a}=\mathbf{l a} \quad\) bwee- \(\underline{\mathbf{n}}\)
3PL.SUBJ= go.UH=LOC top-3SG.POSS.S
'They went over the top of it [the reef].'
Yal-20092011-AW2_0037
As affixes (§3.1.2.4), the possessive suffixes condition stem alternations (see
\(\S 4.1 .3, \S 4.1 .2 .3\) ) and otherwise act as part of the phonological word (§3.1.1) to which they attach. The possessive suffixes are not clitics (§3.1.2.5); they attach directly to the possessed noun rather than to the noun phrase (§4.5), as in the full noun phrases in (31) and (32).
(31) nae pabong âc pwalaic
\begin{tabular}{llll} 
nae & pabo-nga \\
small.thing \\
grandchild-1SG.POSS
\end{tabular}\(\quad\)\begin{tabular}{l} 
âya \\
'my little grandson'
\end{tabular}

Yal-17072009-TB-weekend_0030
\begin{tabular}{ll} 
weemw wan & \\
we-mwa & wan \\
food-2SG.POSS & sea.turtle \\
'your sea turtle (to eat)'
\end{tabular}

Yal-20092011-AW5_0026
In (31), the possessed noun is pabo- 'grandchild', and in (32) the possessed noun is we'food'. In both cases, the possessive suffix attaches directly to the possessed noun, rather than to the end of the noun phrase (e.g. to pwalaic in (31) or wan in (32)).

\subsection*{4.1.2.3 Stem modification for type of possessor}

Within the set of dependently possessed noun stems, irregular stem modification frequently occurs based on the position of the possessor on the topic-worthiness hierarchy, as defined in Payne (1997: 150). The conditioning factors include whether the possessor is nominal or pronominal; singular or nonsingular; animate or inanimate. \({ }^{154}\)

Many possessed noun stems have multiple phonological forms, depending on whether the possessor is indexed by a full noun phrase, a nonsingular pronominal suffix, or a singular/generic pronominal suffix (see §4.1.2.2). Some examples of possessed stem modification conditioned by animacy are shown in Table 46.

\footnotetext{
\({ }^{154}\) This stem modification occurs in classes 1,2 , and 3 (see \(\S 4.1 .1\) below).
}

Table 46: Stem modification in possessed noun stems depending on what the possessor is indexed by
\begin{tabular}{|l|l|l|l|l|}
\hline \begin{tabular}{l} 
Noun \\
phrase
\end{tabular} & \begin{tabular}{l} 
Nonsingular \\
pron. sfx.
\end{tabular} & \begin{tabular}{l} 
Singular \\
pron. sfx.
\end{tabular} & Gloss & Class \\
\hline mua & mu & muu & 'flower' & 1 \\
\hline pia & pi & pii & 'nails' & 1 \\
\hline pua & pu & puu & 'trunk' & 1 \\
\hline âro & âroo & 'husband' & 1 \\
\hline ga & gaa & 'sympathy' & 1 \\
\hline janu & januu & 'spirit' & 2 \\
\hline pulu & puluu & 'speech, language' & 3 \\
\hline we & wee & 'food'' & 1 \\
\hline
\end{tabular}

Table 46 shows that some possessed nouns have three forms, depending on whether the possessor is nominal, nonsingular pronominal, or singular pronominal. Examples (33) (35) show instances of this variation.
(33) piakan
pia ka-n
nail foot-3SG.POSS
'his/her toenail(s)'
(34) pija
pi-ja
nail-1PL.POSS
'our nails'
(35) piin
pii-n
nail-3SG.POSS
'his nail(s)'
Yal-06092011-PT.wav
Table 46 also shows examples of possessed nouns which have two forms: the stem used with a nominal possessor is identical to that used for a nonsingular pronominal possessor, while the stem used with a singular or generic pronominal possessor has a final likevowel hiatus (see \(\S 2.2 \cdot 2.2\) ). Examples (36) - (38) show this type of variation.
(36) Ga Aliic !

> ga \(\quad\) Aliic
> sympathy Alice.LN
> 'Poor Alice!'

\section*{(37) Gaji ! \\ ga-ji}
sympathy-1DU.INCL.POSS
'Poor us!'
(38) Gaamw !
gaa-mw
sympathy-2SG.POSS
'Poor you!'
A number of possessed noun stems also undergo modification for the animacy of the possessor. In these cases, a suffix (usually -na or -la \({ }^{155}\) ) occurs on the possessed stem when its possessor is an inanimate noun phrase, as in Table 47.

Table 47: Stem modification depending on what the possessor is indexed by
\begin{tabular}{|l|l|l|l|l|}
\hline \begin{tabular}{l} 
Inanimate \\
noun phrase
\end{tabular} & \begin{tabular}{l} 
Animate NP or \\
nonsingular pron. sfx.
\end{tabular} & \begin{tabular}{l} 
Singular \\
pron. sfx.
\end{tabular} & Gloss & Class \\
\hline bwala & bwa & bwaa & 'head' & 1 \\
\hline nyoda & nyo & nyoo & 'nails' & 1 \\
\hline wâna & wâ & wââ & 'root' & 1 \\
\hline mwana & mwa & 'house' & 2 \\
\hline nana & na & 'feces' & 1 \\
\hline nyana \({ }^{156}\) & nya & 'mother' & 1 \\
\hline pwâna & pwa & 'fruit' & 1 \\
\hline
\end{tabular}

As Table 47 shows, sometimes this results in three different possessed stems for the same noun, as in examples (39) - (42).

\section*{bwala gom}
bwala gom
head sea.cucumber
'moray eel' (lit. 'head of a sea cucumber') \({ }^{157}\)

\footnotetext{
\({ }^{155}\) This suffix is most likely related to the Balade Nyelâyu relator -la (Ozanne-Rivierre 1998:37) or the nasal relator attested in many New Caledonian languages (Ozanne-Rivierre 1991), including Nêlêmwa (Bril 2002: 31-32).
\({ }^{156}\) When the noun nyana- 'mother' has an inanimate possessor, it acts as a classifier meaning 'big thing'. For example, nyana buâny literally means 'mother of a stone', but is used to mean 'a big stone'.
\({ }^{157}\) Note that this is a noun compound based on semantic criteria; however, there is no morphological distinction between compounds and dependent possession (see §4.1.2.1).
}
(40) bwa âju
bwa âju
head person
'a person's head'
(41) bwala
bwa-la
head-3PL.POSS
'their heads'
(42) bwang
bwaa-ng
head-1SG.POSS
'my head'
Table 47 also shows some possessed nouns with only two forms: one used with an inanimate noun phrase possessor, and one used with any other possessor. Examples (43) (46) show this type of variation.
(43) mwana purieen
mwana purieen
house prayer
'church' (lit. 'house of prayer')
(44) mwa teâmaa
mwa teâmaa
house high.chief
'chieftain's house'
(45) mwave
mwa-ve
house-1DU.EXCL.POSS
'our house'
(46) mwan
mwa-n
house-3SG.POSS
'his/her house'
In general, stem modification for the type of possessor cross-cuts the noun classification system, although it is most common for class 1 nouns (§4.1.1.1). It is highly irregular and unpredictable in both its specific forms and in which nouns it applies to.

\subsection*{4.1.2.4 Independent possession}

The independent possessive construction is characterized by the presence of the genitive clitic \(=l i\) or \(=i\) ' \(\operatorname{GEN}\) ’ (§6.3.3) in all cases. If the possessor is indexed by a full lexical noun phrase, the possessed noun precedes the possessor noun, and the two nouns are separated by the genitive ditropic clitic (§6.3; see also §3.1.2.6). In other words, \(=l i\) or \(=i\) 'GEN' encliticizes to the possessed noun, marking the possessor noun as in the genitive case. For example, in (47), the possessed noun kiyooc 'hut' has the nominal possessor tayamo Kawo 'the lady Kawo', which is marked as genitive using \(=i\) ' GEN '.
kiyooc yi tayamo Kawo kiyoy=i tayamo Kawo hut=GEN old.woman \({ }^{158}\) Kawo 'the lady Kawo's hut'

Yal-20092011-AW1_0263
Other examples of the independent possessive construction with a full NP possessor are shown in (48) - (50). In (48), the possessed noun pwemwa 'village' has the nominal possessor Ono, which in this case is the name of the village. The genitive clitic \(=l i\) marks the possessor NP.
(48) pwemwa li Ono pwemwa=li Ono
village=GEN Ono
'the village of Ono'
Yal-28072010-BGMCG-sousmarin_0073
In (49), the possessor pwemwa 'village' is marked with genitive clitic \(=l i\).

\section*{bweroo li pwemwa bwero=li pwemwa \\ underside \(=\) GEN village \\ 'below the village'}

Yal-28072010-BGMCG-sousmarin_0076

\footnotetext{
\({ }^{158}\) The words tayamo 'old woman' and ulac 'old man' are often used as terms of respect; here, Kawo is a young woman and the wife of the chieftain.
}

In (50), the possessed noun per 'party' (from French fête [f\&t] 'party') is possessed by maac 'death'. Genitive ditropic clitic \(=i\) is used to mark the latter noun as in the genitive case.
(50) per ri maac
per=i maac
party.LN=GEN death
'wake' (lit. 'party of death')
Yal-20092011-AW1_0044
When the possessor is indexed by a pronominal formative, an anaphoric
absolutive suffix (§5.6) follows the genitive clitic, as in examples (51) - (53).
(51) bu lila
bu=li-la
fishhook=GEN-3PL.ABS
'their fishhooks'
Yal-28072010-BGMCG-hamecon_0092
(52) tauvar rija
tauvar=i-ja
punishment=GEN-1PL.EXCL.ABS
'our punishment'
Yal-20092011-AW2_0074
(53) du liva
\(d u=l i-v a\)
bone=GEN-1PL.EXCL.ABS
'our bones'
Yal-01082010-MFD_0035
Both 3SG.ABS suffixes -e and -er are used in independent possession; it is not clear what conditions the variation between them (see \(\S 5.6 .2\) ). Example (54) shows the use of \(-e\) in independent possession, while (55) shows an example of -er.
(54) karavaa lie
karava=li-e
pirogue=GEN-3SG.ABS
'his pirogue'
Yal-20092011-AW4_0062

\section*{âju lier pwalaic}
âju=li-era pwalaic
person=GEN-3SG.ABS one
'one of his people'
Yal-20092011-AW1_0174
Nouns of classes 3 and 4 (§4.1.1) may participate in the independent possessive construction.

\subsection*{4.1.3 Free (unpossessed) nouns and stem modification}

Many nouns are invariant in that they have the same phonological form whether or not they occur in a possessive construction. \({ }^{159}\) For example, the noun tayamo 'old woman' appears in (56) without a possessor; it has the same phonological form in (57), where it is independently possessed (§4.1.2.4).
(56) Mo tayamo ai ?
mo tayamo ei
LK3 old.woman TAG
'But rather an old woman, you see?'
Yal-28072010-BGMCG-tayamu_0134
(57) tayamo linao
tayamo=li-nao
old.woman=GEN-1SG.ABS
'my wife' (lit. 'my old woman')
Yal-20092011-AW1_0183
However, many other nouns undergo stem modification based on whether or not they occur in a possessive construction. \({ }^{160}\) Some examples are shown in Table 48.

\footnotetext{
\({ }^{159}\) Such nouns fall primarily into class 4 , discussed below in \(\S 4.1 .1 .4\); though some are found in all other classes.
\({ }^{160}\) These nouns are primarily found in class 2 (see §4.1.1.2), although stem modification does not occur for all class 2 nouns.
}

Table 48: Stem modification of free noun stems
\begin{tabular}{|l|l|l|l|}
\hline Free stem & Possessed stem \({ }^{\text {I6 }}\) & English gloss & \\
\hline âm & âba & 'plate' & (A), (B) \\
\hline âny & âje & 'rudder' & (A), (B) \\
\hline daap & dawo & 'dust' & (A), (C) \\
\hline depw & dewa & 'deck' & (A) \\
\hline jiin & jida & 'story' & (A), (B), (C) \\
\hline kic & kiye & 'liver' & (A) \\
\hline mweeng & mwega & 'decoration' & (A), (B), (C) \\
\hline naap & nave & 'fire' & (A), (C) \\
\hline nep & neve & 'dream' & (A) \\
\hline pôn & pône & 'hair' & (A) \\
\hline pûmw & pûmwa & 'smoke' & (A) \\
\hline teec & teya & 'burn' & (A), (C) \\
\hline tolam & tolaba & 'basket' & (A), (B) \\
\hline toop & tova & 'field' & (A), (C) \\
\hline waang & waga & 'boat' & (A), (B), (C) \\
\hline
\end{tabular}

The stem modifications shown in Table 48 indicate whether the noun is free or possessed.
Though there is no regular rule deriving possessed stems from free stems, they follow several general patterns:
(A) Possessed stems contain a suffixed vowel, usually -a or \(-e\) (see §3.1.1.4 on lenition)
(B) Final nasals in the free stem sometimes correspond to medial prenasalized stops in the possessed stem
(C) Like-vowel hiatuses in the free stem correspond to single vowels in the possessed stem

The fourth column of Table 48 indicates which of these patterns is used in the relevant free-possessed pair.

\subsection*{4.1.4 Noun classifiers}

In Belep, many class 1 nouns ( \(\$ 4.1 .1 .1\) ) can serve as noun classifiers-that is, classifiers "which are not restricted [to noun phrases including a numeral and a noun], but

\footnotetext{
\({ }^{161}\) Note that the possessed stems in Table 11 do not vary based on the type of possessor (§4.1.2.3).
}
occur freely in ordinary noun phrases" (Corbett 2007:253). Some examples \({ }^{162}\) are given in Table 49. See also \(\S 4.3 .1\) on numeral classifiers.

Table 49: Noun classifiers
\begin{tabular}{|l|l|}
\hline Classifier & Gloss \\
\hline â & 'cutting of a plant' \\
\hline ma & 'thing to chew' \\
\hline nae & 'small thing' \\
\hline nyana & 'big thing' \\
\hline ûdu, ûduu & 'beverage' \\
\hline wa & 'thing to suck' \\
\hline we, wee & 'food' \\
\hline ya, yaa & 'tuber' \\
\hline yae & 'weapon' \\
\hline yava & 'catch' \\
\hline yaya & 'unripe thing' \\
\hline
\end{tabular}

The classifiers shown in Table 49 are not morphologically distinguishable from class 1 nouns; their status as classifiers is semantic rather than morphosyntactic. As class 1 nouns, classifiers are obligatorily possessed; their possessors may be indexed by a lexical noun (as in (61), (65), and (67) below) or by a pronominal possessive suffix (as in (59), (60), (62)-(64), (66), and (68)-(75) below).

Noun classifier phrases (that is, combinations of a classifier and its obligatorily indexed possessor) are primarily used in Belep as an alternative to independent possession for class 4 nouns. That is, to indicate possession of some class 4 nounsprimarily those related to agriculture-speakers prefer to use a noun classifier phrase rather than the independent possessive construction. For example, rather than use independent possession (58) for the culturally important class 4 noun \(u v i\) 'yam' (§1.2), speakers prefer to indicate what the yam is to be used for with a noun classifier as in (59) and (60).

\footnotetext{
\({ }^{162}\) A similar set occurs in Balade Nyelâyu (Ozanne-Rivierre 1998:39).
}

\section*{?uvi linao}
uvi=li-nao
yam=GEN-1SG.ABS
'?my yam'

> weeng uvi we-nga
> food-1SG.POSS yam
> 'my yam (for eating),
(60) yaang uvi
ya-nga uvi
tuber-1SG.POSS yam
'my yam (for planting)'
Note that the examples in (59) and (60), and many constructions with noun classifiers, are complex noun phrases (§4.4), each consisting of a head noun (weeng and yaang, respectively) and a modifying noun (uvi 'yam'). They should not be considered compounds (see §3.6). In the rest of this section, I list each classifier and the types of nouns it classifies.

The classifier \(\hat{a}\) - indicates a cutting or a seedling of a plant, as used in Belema agriculture. For example, â nyang uvi [cutting mother-my yam] in (61) means 'my mother's yam seedlings' (this clause was produced as a translation of the given phrase in French).
(61) Te ten â nyang uvi yak.
te= te-na â nya-nga uvi yak 3SG.SUBJ= plant-DA.NSG cutting mother-1SG.POSS yam yesterday Transl. of 'My mother planted her yams yesterday.'

The classifier \(m a\) - indicates a plant that one intends to chew up, perhaps for the purpose of making medicine, as in (62).
```

mang yale, mang pawi
ma-nga yale ma-nga pawi
thing.to.chew-1SG.POSS kudzu thing.to.chew-1SG.POSS hibiscus
'my kudzu (to chew), my hibiscus (to chew)'

```

The classifier nae-, which is often used to mean 'child' as in (63), also refers to small
things which belong to a person, such as a domino tile (64), a fish (65), or shoes (66).
(63) pwadu naen âc, pwadu nae-na âc
two small.thing-3SG.POSS man
'two sons' (lit. 'two small things of men')
Yal-20092011-AW1_0017
(64) Na nawe naeng.
na= nawe nae-ng
1SG.SUBJ= leave small.thing-1SG.POSS
'I'm putting down my domino tile.' (lit. 'my small thing')
Yal-17092011-IM-dominoes
(65) nae no pwalaic
nae no pwalaic
small.thing fish one
'a small fish' (lit. 'one small thing of fish')
Yal-01082010-MFD_0010
\begin{tabular}{llll}
\begin{tabular}{lll} 
pwadu naeng ara kalooc ulo \\
pwadu & & \\
nae-ng & ara kaloya & ulo \\
two & small.thing-1SG.POSS & shoe
\end{tabular} & red
\end{tabular}
'my two small red shoes' (lit. 'my two small things of red shoes')
Yal-29072010-JMT.wav
The classifier nyana- refers to a big object, as in (67).
(67) Texa puиp va nyana waga pwalaic, \(\begin{array}{lll}\text { te=xa } & \text { puv=a nyana waga pwalaic }\end{array}\) 3SG.SUBJ=ADD swell=NOM big.thing boat one 'And a big boat popped up,'
Yal-19092011-PA_0033

The classifier \(\hat{u} d u\)-, which undergoes stem modification to \(\hat{u} d u u\) - if the possessor is indexed by a singular pronominal suffix (§4.1.2.3), refers to a beverage which one intends to drink, as in (68).
\(\hat{u} d u u n g\) weloo, \(\hat{\text { undung }}\) we, ûduung lait
ûdu-nga weloo ûdu-nga we

\section*{ûdu-nga}
[le]
beverage-1SG.POSS
milk.LN
'my drink of coconut water, my drink of water, my drink of milk'
The classifier \(w a\) - refers to a sweet food which one intends to suck, as in (69).
(69) wang ûjep, wang dowau
\begin{tabular}{|c|c|c|c|}
\hline -nga & ûjep & wa-nga & dowau \\
\hline g.to.suck-1SG.POSS & sugar.cane & thing.to & weet.coco \\
\hline 'my sugar cane (to suck & , & eet cocond & \\
\hline
\end{tabular}

The classifier we-, which undergoes stem modification to wee- if the possessor is indexed by a singular pronominal suffix ( \(\S 4.1 .2 .3\) ), is a general purpose classifier for any food which one intends to eat, as in (70) and (71).
(70) ô nawen wela uvi,
o nawe-na we-la uvi
REAL leave-DA.NSG food-3PL.POSS yam
'[they] left their yams intended for eating,'
Yal-28072010-BGMCG-igname_0073
(71) ka tuvea ween ola,
\begin{tabular}{llll} 
ka & tuve-a & we-na & ola \\
LK & dive.TR-DA.IN & food-3SG.POSS & shellfish
\end{tabular}
'and dove for his lobster to eat,'
Yal-28072010-BGMCG-tahitian_0018
The classifier \(y a\)-, which undergoes stem modification to \(y a a\) - if the possessor is indexed by a singular pronominal suffix, refers to a starchy tuber. Included in this category are bolao 'bananas', kumwala 'sweet potatoes', manyook 'manioc/cassava', carrots, and yams as in (72).

\section*{(72) La pae yala uvi, \\ \(\mathbf{l a}\) pa-e ya-la uvi \\ 3PL.SUBJ= take-SPC tuber-3PL.POSS yam \\ 'They took their tubers of yams,'}

Yal-28072010-BGMCG-igname_0032
The classifier yava-refers to one's harvest of food from the ocean, as in (73).

\footnotetext{
\({ }^{163}\) This is a particular variety of coconut called coco sucré 'sugar coco' in French; I have not been able to identify a common English name for it.
}

\section*{Ô jua koxo, yavale no, ô jua koxo yava-le no REAL very lots catch-3DU.POSS fish 'It was very large, their catch of fish,'}

Yal-20092011-AW1_0068
The classifier yaya-refers to unripe fruits which one intends to keep until they ripen, as in (74).
(74) yayang bolao, yayang papayi, yayang maak
yaya-nga bolao yaya-nga papayi
unripe.thing-1SG.POSS
banana unripe.thing-1SG.POSS
papaya
yaya-nga maak
unripe.thing-1SG.POSS mango
'my unripe banana, my unripe papaya, my unripe mango'
The classifier yae-refers to a weapon, as in (75).
(75) yaeng payi yae-nga payi
weapon-1SG.POSS tomahawk 'my tomahawk'

\subsection*{4.1.5 Locative expressions}

Belep, like most New Caledonian languages (Ozanne-Rivierre 1997), frequently uses an intrinsic system of reference-where objects and events are located with respect to other objects \({ }^{164}\)-in addition to its absolute system of reference for the conceptualization of space (§4.3.1). The locative expressions which compose this system of reference are possessive noun phrases (§4.1.2) where the possessed noun serves the same function as an adposition-it expresses some kind of a relational or part-whole meaning. There is no distinction in Belep between 'adpositions' and nouns; this is a common cross-linguistic pattern, and is also found in Yagua and Swahili (Payne 1997:88), Some Belep nouns used in locative expressions are shown in Table 50.

\footnotetext{
\({ }^{164}\) This system is also used in Tzeltal (Levinson 2003:146-168).
}

Table 50: Locative words
\begin{tabular}{|l|l|l|l|}
\hline Locative noun & Gloss & Translation & Class \\
\hline âbur & 'uphill side' & 'before' & 4 \\
\hline ânu-, ânuu- \({ }^{\text {l }}\) & \\
\hline ara- & 'shadow, lee' & 'beneath' & 1 \\
\hline arama- & 'base' & 'at the bottom of' & 1 \\
\hline bala- & 'face' & 'in front of' & 1 \\
\hline boda- & 'end, tip' & 'at the end of' & 1 \\
\hline bwe-, bwee- & 'backside' & 'top' & 'at the back of' \\
\hline bweroo & 'underside' & 1 \\
\hline mana- & 'on' & 1 \\
\hline mode- & 'front, tip' & 'at the front of' & 4 \\
\hline mon & 'accompaniment' & 'dowith' & 1 \\
\hline na- & 'interior' & 'after' & 1 \\
\hline pewo- & 'min' & 4 \\
\hline pu-, puu- & 'side' & 'between' & 1 \\
\hline
\end{tabular}

Locative expressions are typically case-marked in discourse with the ditropic clitic \(=l a\), \(=a\) 'LOC'; see \(\S 6.3 .5\) for more information.

The most common locative expressions are those where the possessed noun is bwe- 'top' or \(n a\) - 'interior'. For example, in (76) the locative expression is bwe alap 'the top of the beach/on the beach'.
(76) «Bwa ponaoda la bwe alap.» bwa= po-nao=da=la \{bwe alap\}
CONT \(=\) load-1SG.ABS=DIR.UH=LOC top beach
""Please take me up onto the beach.""
Yal-01082010-MFD_0033
In (77), the locative expression is bwe cae 'the top of the reef/at the reef'.
(77) Ka uya la bwe cae la Bwadalo,
ka uya=la \{bwe cae\}=la Bwadalo
LK arrive=LOC top reef=LOC Bwadalo 'And [they] arrived at the reef at Bwadalo,'

Yal-19092011-PA_0067
Example (78) uses the locative expression na mwa teâmaa 'the inside of the chieftain's house/in the chieftain's house'.

\footnotetext{
\({ }^{165}\) See \(\S 4.1 .2 .3\) on stem modification for the type of possessor.
}
(78) ci la na mwa teâmaa. \(\begin{array}{llll}\text { ci=la } & \text { \{na } & \text { mwa } & \text { teâmaa\} } \\ \text { sit=LOC } & \text { interior } & \text { house } & \text { high.chief } \\ \text { '[it] stayed in the chieftain's house.' }\end{array}\)
Yal-20092011-AW1_0273

Example (79) uses the locative expression na puluac 'the inside of your language/within your language'.
(79) yamayaap ma a comu la na puluac,
yamayava ma \(a=\quad\) comu=la \(\{\) na pulu-ac \(\}\)
concentrate LK4 2PL.SUBJ= learn=LOC interior language-2PL.POSS '[you must] concentrate on exploring your language,'

Yal-14092011-PT2-avenir_0019
Locative expressions where the possessor noun is a class 1 noun (§4.1.1.1) differ from those where the possessor noun is a class 4 noun (§4.1.1.4), since the former set requires dependent possession (§4.1.2.1) while the latter set requires independent possession (§4.1.2.4). For example, the locative expression boda Poc 'at the end of Poc' in (80) is a dependent possessive noun phrase, while the locative expression mon ni Paixa 'after Easter' in (81) is an example of independent possession. Note that the locative nouns âbur 'uphill side' and mon 'downhill side' are most commonly used in discourse to index temporal, rather than spatial, locations, where abur signifies 'before' and mon signifies 'after'.
(80) Le mo la boda Poc.
\begin{tabular}{llll} 
le \(=\) & mo=la & \{boda & Poc \(\}\) \\
3DU SUBJ \(=\) & live=LOC & backside & Poc
\end{tabular}

3DU.SUBJ= live=LOC backside Poc
'They lived at the end of Poc.'
Yal-19092011-PA_0004
(81) Lame âmu ta la Pouébo la mon ni Paixa.
\begin{tabular}{llllll} 
la=me & âmu= & ta=la & Pwewo=la & \begin{tabular}{l} 
(mon=i \\
3PL.SUBJ=IRR
\end{tabular} & PRF= \\
go.UH=LOC & Pouébo=LOC & side.DH=GEN & Easter.LN
\end{tabular} 'They would go to Pouébo after Easter.'

If the possessor NP in a locative expression is referred to anaphorically, it follows the same pattern as in other possessive noun phrases. A possessive suffix (§4.1.2.2) is used to index the possessor in dependent possession, and an absolutive suffix (§5.6) is used to index the possessor in independent possession. \({ }^{166}\) For example, in (82), the locative expression is aran 'its base/beneath it'; a possessive suffix is used since ara- is a class 1 noun (requiring dependent possession).
(82) Ave nyi tuvadu la aran,
\begin{tabular}{llll} 
ave \(=\) & nyi \(=\) & tuva=du=la & \{ara-n\} \\
1DU.EXCL.SUBJ \(=\) & \begin{tabular}{l} 
PUNCT \(=\) \\
dive=DIR.DH=LOC
\end{tabular} & under-3SG.POSS
\end{tabular}
'We repeatedly dove under it [a stone],'
Yal-28072010-BGMCG-tahitian_0057
In example (83), the locative expression is the dependently possessed nan 'its interior/in it'; the possessive suffix \(-n\) is used to index the possessor of the class 1 noun \(n a-\).

\section*{(83) Texa pan namadu la nan,} te=xa pana nama=du=la \(\quad\) \{na-n\}
3SG.SUBJ=ADD go.TV enter=DIR.DH=LOC interior-3SG.POSS
'He went and disappeared down into it [a hole],'
Yal-01082010-MFD_0059

\subsection*{4.2 Noun quantifiers}

Like most Oceanic languages (Lynch et al. 2002:37), Belep does not have a category of inflectional number marking on nouns; nouns are invariant in form whether they refer to one or multiple referents. For example, the noun buâny 'stone' refers to a singular referent in (84) and multiple referents in (85).
(84) mu la bwe buâny pwalaic.
mu=la bwe buâny pwalaic
moor=LOC top stone one
'[we] moored at a stone.'
Yal-28072010-BGMCG-tahitian_0033

\footnotetext{
\({ }^{166}\) There are no examples of this in my corpus, since class 4 locative nouns are few and fairly infrequent.
}

\section*{(85) me âlalic mo buâny.}
me âlalic mo buâny
IRR be.impossible LK3 stone
'they couldn't because of the stones.'
Yal-28072010-BGMCG-sousmarin_0111
As example (84) shows, if the number of a noun's referent must be specified, speakers can use a numeral (§4.6) or, under certain circumstances, a determiner suffix (§4.3.2). The grammatical number of a subject noun phrase may also be indicated by a subject agreement proclitic (§5.7).

However, there is a small set of inflectional \({ }^{167}\) nominal suffixes, called 'noun quantifiers' in this work, which indicate the quantity of the noun to which they attach. These should be considered to mark the number-like category of collectives, as defined in Bickel \& Nichols (2007), in that they "imply a number of individuals viewed as a set" (Bickel \& Nichols 2007:227). These suffixes are: associative plural -ma 'AC', associative dual -male 'ADU', general extender -mene 'GE', and total -roven 'all'. The two former suffixes occasionally trigger stem modification in the noun to which they attach. The two latter suffixes also occur as verb group enclitics. These suffixes are not mutually exclusive and may be combined, as in (86) and (87). In (86), both -roven 'all' and -mene 'GE' are affixed to the demonstrative pronoun yak (§4.5.2).

\section*{Ô yaxarovenamene,}
ô ya-xa-rovena-mene
REAL DEM.LOC-DET.D.PRX-all-GE
'It was everywhere and stuff.'
Yal-28072010-BGMCG-tayamu_0228
In (87), both -ma ' AC ' and -roven 'all' are affixed to the noun \(\hat{a} j u\) 'person'.

\footnotetext{
\({ }^{167}\) These suffixes are not prototypical examples of inflectional morphology; see §3.4.3.
}

\section*{Ka âjumaroven.}
ka âju-ma-roven
LK person-AC-all
'And everyone.'
Yal-20092011-AW1_0053

\subsection*{4.2.1 Associative plural -ma}

Associative number "is a distinct category of its own in a few languages" (Bickel \& Nichols 2007:229). Moravcsik (1994) defines associative plural constructions as those which have the form ' X and X 's associated person(s)', where X and X 's associates form a semantically related group where the named referent X is the most prominent member of the group. Thus, associative plurals are "more akin to conjoined nominals than to ordinary morphological plurals" (Moravcsik 1994:471).

The noun suffix -ma 'AC' marks associative plural in Belep. It indexes a reified group which is semantically related to its host noun-a characteristic which contributes to its use in ethnonyms (§1.2). Example (88) below shows that -ma is clearly not a morphological plural; Teâ Polo is the chieftain of a village and there are not more than one of him. Instead, \(-m a\) is used to indicate the group of Teâ Polo and his subjects.

\section*{(88) yamidu la pwemwa Teâ Poloma. ya-midu=la \\ pwemwa Teâ Polo-ma \\ DEM.LOC-DET.D.DH=LOC village Teâ Polo-AC 'down there in the home of Teâ Polo [and his people]'}

Yal-28072010-BGMCG-sousmarin_0097
The correspondence between conjoined nominals and associative plurals is especially clear in Belep: associative -ma is likely etymologically related to the homophonous dependent linker ma(§7.2.2).

Associative plural -ma is used most commonly for humans, as in (89) and (90), where it attaches to âju 'person' and ulac 'old man', respectively.

Laxa tume la âjuma la mar,
\begin{tabular}{llll}
\(\mathbf{l a}=\mathbf{x a}\) & tu=me=la \\
3PL.SUBJ=ADD & go.DH=CTP=NOM & \begin{tabular}{l} 
âju-ma=la \\
person-AC=LOC
\end{tabular} & mar \\
seashore
\end{tabular} 'And the people from the seashore came,'

Yal-19092011-PA_0069
(90) Ka ulayama, la âva li bu yeek.
ka ulaya-ma la= âva=li bu yeek
LK old.man-AC 3PL.SUBJ= fish=GEN fishhook wood 'And the ancestors, they fished with wooden fishhooks.'

Yal-28072010-BGMCG-hamecon_0078-0079
Associative plural -ma may also be used for animate, nonhuman referents such as polipoda 'butterflies' in (91), and even for inanimate referents which are conceptualized as a set, as are the dau 'islets' (92) situated to the south of Belep's main island Art.
(91) Lame kova la polipodama,
la=me kova=la polipoda-ma

3PL.SUBJ=IRR leave=NOM butterfly-AC
'The butterflies will come out,'
Yal-20092011-AW5_0054
(92) Dauma, la ci la Yade,
\begin{tabular}{lll} 
dau-ma & \begin{tabular}{l} 
da \(=\) \\
islet-AC
\end{tabular} & \begin{tabular}{l} 
ci=la \\
3PL.SUBJ \(=\) \\
sit \(=\) LOC
\end{tabular} \\
Yade
\end{tabular}
'The islets, they are in Yade,'
Yal-20092011-AW6_0109

A few nouns (93) have irregular associative plural forms.
\[
\begin{array}{lll}
\text { tamwa 'woman' } & > & \text { ta-ma 'woman-AC' }  \tag{93}\\
\text { pwairamwa 'girl' } & > & \text { pwaira-ma 'girl-AC' } \\
\text { Belep 'Belep' } & > & \text { Bele-ma 'Belep-AC' } \\
\text { Cianup 'Cianup' } & > & \text { Cianu-ma 'Cianup-AC' }
\end{array}
\]

\subsection*{4.2.2 Associative dual -male}

In addition to associative plurals ( \(\S 4.2 .2\) ), some languages have associatives indicating other numbers (Corbett \& Mithun 1996). Belep has an associative dual nominal suffix, -male 'ADU', which indicates that the referent of its host noun is a set of two like objects that are semantically related (i.e. a pair). As with associative plural -ma,
associative dual -male most commonly occurs with a human referent, as in (94) and (95) where the host nouns are nae-n 'his children' and ava-n 'his sibling', respectively.
(94) Texa âri u le naenamale,
\begin{tabular}{lll} 
te=xa & âri & \begin{tabular}{l}
\(\mathbf{u}=\mathbf{l e}\) \\
3SG.SUBJ=ADD
\end{tabular} \\
say & toward=DAT & \begin{tabular}{l} 
nae-na-male \\
child-3SG.POSS-ADU
\end{tabular}
\end{tabular}
'And he said to his two children,'
Yal-20092011-AW1_0026-0027
(95) Le âma avanamale.
le= âma= ava-na-male
3DU.SUBJ= DYAD= sibling-3SG.POSS-ADU
'They were brothers.' (lit. 'a pair of siblings')
Yal-20092011-AW6_0004
Associative dual -male also occurs with inanimate nouns. For example, in (96), it marks kan 'his feet' and en 'his hands' as being members of a pair. Note that the subject agreement proclitic for both nouns is 3 SG rather than dual; suffix -male is not a grammatical number marker.
(96) Te mwany nya kan, kanamale.
\begin{tabular}{lll} 
te \(=\) & mwany=a & ka-n \\
3SG.SUBJ \(=\) & \begin{tabular}{l} 
be.bad=NOM
\end{tabular} & \begin{tabular}{l} 
ka-na-male \\
foot-3SG.POSS
\end{tabular}
\end{tabular}

Te pwai ô la enamale.
\(\begin{array}{lll}\text { te }= & \begin{array}{l}\text { pwai } \\ \text { 3SG.SUBJ }= \\ \text { only }\end{array} & \begin{array}{l}\hat{\mathbf{o}}=\mathbf{l a} \\ \text { be.good=NOM }\end{array}\end{array} \begin{aligned} & \text { e-na-male } \\ & \text { hand-3SG.POSS-ADU }\end{aligned}\)
'His legs were paralyzed, both his legs. Only his [pair of] hands worked.'
Yal-28072010-BGMCG-lune_0015-0016
In (97), the inanimate noun toop 'field' is marked as part of a pair with -male. Here it indicates that the fields are paired because of what is growing in them.
\begin{tabular}{ll} 
La înae toovamale, & \\
la \(=\) & îna-e \\
3PL.SUBJ \(=\) & make-SPC \\
tova-male & field-ADU
\end{tabular}
'They made those two types of field [taro and kowe, another variety of taro],'
Yal-20092011-AW6_0085
Nouns which have irregular associative plural forms (93) also have irregular associative dual forms (98).
\[
\begin{array}{lll}
\text { tamwa 'woman' } & > & \text { ta-male 'woman-ADU' }  \tag{98}\\
\text { pwairamwa 'girl' } & > & \text { pwaira-male 'girl-ADU' }
\end{array}
\]

Another associative dual suffix - \(l e\) exists in Belep as well, although it is not clear how this suffix differs from -male, which is much more common. Some examples of -le are shown in (99) and (100). In (99), the suffix -le is attached to the NP Teâ Belep 'the chief of Belep' to indicate 'the chief of Belep and him; the two of them'.
(99) Toma Teâ Belevale, le pe maraic, le pe or. toma teâ beleva-le le= pe= maraic, le= pe= Or but Teâ Belep-ADU 3DU.SUBJ= RECP= resemble 3DU.SUBJ= RECP= phratry.Or 'But the chief of Belep and him, they are the same, they are both [of phratry] Or. \({ }^{168}\)
Yal-20092011-AW3_0026

In (100), the suffix -le is attached to the NP welen uvi 'their yams to eat' to indicate that there are two members of the set.
(100) ten welen uvile.
te-na we-lena uvi-le
plant-DA.NSG food-3PA.POSS yam-ADU
'[they] planted their two types of yams to eat.'
Yal-20092011-AW6_0141

\subsection*{4.2.3 General extender -mene}

General extenders-that is, pragmatic expressions which are connected to sentence structure and somewhat inflexible in their syntactic distribution (Overstreet 2005:1846)-have been recorded in many languages, including, in the Pacific Rim, Japanese, Korean, and Hawaiian (Overstreet 1999:8).

In Belep, the nominal suffix -mene 'GE' serves as a general extender, identifying a category or set of entities similar to the referent of its host noun, while also serving an interpersonal function between speaker and hearer. In (101), the suffix -mene attaches to

\footnotetext{
\({ }^{168}\) See \(\S 1.2\) on phratries in New Caledonia.
}
the host noun uruâny 'hurricane', indicating that it is not merely hurricanes, but a set of things related to bad weather that is being referred to.

\section*{(101) Te îna uruânyamene,}
te \(=\quad\) îna uruânya-mene
3SG.SUBJ= make.GNR hurricane-GE
'He makes hurricanes and stuff,'
Yal-28072010-BGMCG-sousmarin_0048
In (102), general extender -mene attaches to the host noun alcool 'alcohol', a French borrowing. Here it evokes a set of practices related to youth culture and drugs that are perceived in a negative light.
(102) Âria kava le alcoolmene, âria kava le 【alkola]-mene NEG.EX kava.LN LK2 alcohol.LN-GE 'There's no kava or alcohol and stuff [on the Isle of Pines],'

Yal-27092011-LPLY
The suffix -mene is also used in (103), where it references all the parts of a boat that must be constructed before it is finished.
(103) ka jibuuvamene,
ka jibuva-mene
LK jib-GE
'and the jib and stuff like that,'
Yal-29072010-JMT-boats_0020
Note that -mene also occurs as a verb group suffix (§5.4.12).

\subsection*{4.2.4 Total -roven}

The nominal suffix -roven 'all'—a grammaticalized form of the full verb toven 'to finish'-indicates that its host noun indexes the entire set of its referents. For instance, in (104), -roven is affixed to the noun doo 'earth', where it evokes the whole set of referents which doo indexes.

\section*{(104) Lami kawu doo, kawu dooroven na Pairoome.}
\begin{tabular}{llllll} 
la-mi & \begin{tabular}{l} 
kawu
\end{tabular} & \begin{tabular}{l} 
doo \\
DEM.PL-DET.A.DST
\end{tabular} & \begin{tabular}{l} 
kawu \\
guardian \\
earth
\end{tabular} & \begin{tabular}{l} 
do-roven=a \\
guardian
\end{tabular} & \begin{tabular}{l} 
Pairome \\
earth-all=LOC
\end{tabular}
\end{tabular} 'Those who are stewards of the land, stewards of all the land in Pairoome.'

Yal-20092011-AW6 0137
In (105), -roven is suffixed to yadan 'his belongings' to encompass a long list of more specific belongings (t-shirt, cigarettes, sandals) that had been previously mentioned.
(105) yadanaroven, yada-na-roven
belongings-3SG.POSS-all
'all his belongings,'
Yal-28072010-BGMCG-tahitian_0166
In (106), -roven attaches to the host noun da 'blood', where it indicates totality of reference.
(106) La pan pan ka kiyi daroven,
la= pana pan ka kiyi da-roven

3PL.SUBJ= go.TV go.TV LK see.SPC blood-all
'They went and saw all the blood,'
Yal-20092011-AW5_0086

Note that -roven also occurs as a verb group suffix (§5.4.11).

\subsection*{4.3 Determination and deixis}

Nouns in Belep may be modified with a set of inflectional (§3.4.1) suffixes, identified in this work as 'determiners', which express a wide range of semantic distinctions in terms of spatio-temporal reference, including marking distance and direction. The unusual spatial system of Belep, which manifests in the determiner suffixes, is described in detail in \(\S 4.3 .1\). The suffixes themselves are discussed in §4.3.2. These determiners also affix to bound demonstrative pronominal stems (§4.5.2) to produce demonstrative pronouns. Additional types of determination in Belep are discussed in §4.3.3.

Belep determiners can only follow their head noun. \({ }^{169}\) When a numeral (§4.6.2) or a demonstrative pronoun (§4.5.2) precedes a lexical noun, the lexical noun acts as a modifier; in a construction such as that shown in (107), the demonstrative pronoun lami is the head of the noun phrase (§4.4) and the lexical nouns kawu doo 'guardian of the earth' act as modifiers.
(107) lami kawu doo,
la-mi kawu doo

DEM.PL-DET.A.DST guardian earth
'those [who are] guardians of the earth,'
Yal-20092011-AW6_0137
This construction is not easily distinguishable from a relative clause headed by a relative pronoun (§7.3.3), as in (108).
(108) Ka lami mo la bwe alap,
ka la-mi mo=la bwe alap
LK DEM.PL-DET.A.DST live=LOC top beach
'And those who live on the beach,'
Yal-20092011-AW1_0052

\subsection*{4.3.1 Conceptualization of space}

All languages of New Caledonia share a typologically unusual spatial reference system (Ozanne-Rivierre 1997) similar to that of Tzeltal (Levinson 2003:146-168)—an absolute system of reference where only one set of directional terms ('up' and 'down') is used to describe a variety of axes: inland/seaward, upstream/downstream, toward the coast/toward the seas, and inside/outside. The transverse axis ('across') does not have opposing sides. Cardinal- and speaker-reference spatial orientation is not used; the intrinsic frame of reference was discussed in §4.1.5.

\footnotetext{
\({ }^{169}\) This contrasts with both Nêlêmwa (Bril 2002) and Balade Nyelâyu (Ozanne-Rivierre 1998), where there are two sets of determiners: one set precedes the noun and is based on the demonstrative pronouns; the other set consists of nominal suffixes.
}

In Belep, the absolute spatial system is realized in verbs of motion (Table 51) and their corresponding verb phrase directional (§5.11) and locational (§5.12) enclitics; and in nominal determiner suffixes (discussed below in §4.3.2).

Table 51: Spatial system of Belep
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Verb & Gloss & Directional & Gloss & Locational & Gloss & \\
\hline ta & 'to go.UH' & = da & 'DIR.UH' & =(1)exeda & 'LOC.UH' & uphill \\
\hline & & & & =(1)iyeda & 'LOC.DST.UH' & \\
\hline tu & 'to go.DH' & \(=\mathrm{du}\) & 'DIR.DH' & =(1)exedu & 'LOC.DH' & downhill \\
\hline & & & & =(1)imidu & 'LOC.DST.DH' & \\
\hline pan & 'to go.TV' & = van & 'DIR.TV' & & & transverse \\
\hline
\end{tabular}

The prototypical deictic center is located in the village of Waala for a speaker who is facing uphill toward the center of Art island. In this arrangement, he or she may \(t a\) 'go.UH' toward the church, \(t u\) 'go.DH' toward the ocean, or pan 'go.TV' to the left or right along the coast.

Figure 47 shows a photograph taken from the church door in Waala looking down toward the harbor. A speaker located at point A could move uphill and inland toward where the photo was taken, ta 'go.UH'. He or she could move downhill towards the water of the harbor, \(t u\) ' \(\mathrm{go.DH}\) '. Or he or she could move to the left or right, pan 'go.TV'.

Figure 47: View from the church in Waala, looking down towards the harbor


If the speaker is conceptualizing space in a larger, more abstract way (perhaps for a trip that will take longer than 20 minutes to walk), he or she may ta 'go.UH' to the southeast, into the prevailing winds, tu 'go.DH' to the northwest, away from the prevailing winds, or pan 'go.TV' across the islands, perpendicular to the winds (Figure 48).

Figure 48: Map of Belep showing spatial directions


Figure 48 shows a map of Belep, where, starting in Waala, one would ta to travel to Âjeeni in the southeast, \(t u\) to visit Poc in the northwest, and pan to traverse the mountain range and visit Bweo on the northeast coast. In the same vein, if a person is going to
leave New Caledonia altogether, he or she will \(t u\) 'go.DH' and then \(t a\) 'go.UH' to return again.

\subsection*{4.3.2 Determiner suffixes}

Belep nouns may be modified with a deictic, anaphoric, or interrogative determiner suffix, which marks the proximity and direction of its host noun. These suffixes are shown in Table 52.

Table 52: Determiner suffixes
\begin{tabular}{|c|c|c|c|}
\hline Deictic & Gloss & Anaphoric & Gloss \\
\hline -k & 'DET.D.PRX' & -li & 'DET.A.PRX' \\
\hline -na & 'DET.D.MPX' & -mi & 'DET.A.DST' \\
\hline -yek & 'DET.D.MDS' & & \\
\hline -xe & 'DET.D.DST' & & \\
\hline -xeda & 'DET.UH' & Interrogative & Gloss \\
\hline -xedu & 'DET.DH' & -va & 'DET.Q1' \\
\hline -yeda & 'DET.DST.UH' & -da & 'DET.Q2' \\
\hline -midu & 'DET.DST.DH' & -ra & 'DET.Q3' \\
\hline
\end{tabular}

As in Nêlêmwa (Bril 2002), Belep determiners are divided into deictic and anaphoric sets. The deictic set (§4.3.2.1), used for spatial deixis, distinguishes the referent's direction and distance from the speaker at the moment of speaking, while the anaphoric set (§4.3.2.2) distinguishes the recentness of identification of the referent in discourse and is used for temporal and discourse deixis. Belep interrogative determiners (§4.3.2.3) are used to question these attributes. Determiner suffixes are obligatorily attached to demonstrative pronominal stems (§4.5.2).

As affixes (§3.1.2.5), the determiner suffixes trigger stem modifications in their host noun, such as vowel gemination \({ }^{170}\) (109) or epenthetic vowel insertion (110).

\footnotetext{
\({ }^{170}\) The vowel gemination in the stem provoked by the proximal suffix \(-k\) is irregular and unpredictable.
}
(109)
tamwa tamwa 'woman' 'this woman'
\begin{tabular}{ll} 
ulac & \begin{tabular}{l} 
ulayixeda \\
ulac \\
old.man
\end{tabular} \\
ulayi-xeda \\
old.man-DET.UH \\
'old man' & 'that old man up there'
\end{tabular} ulayixeda ulayi-xeda
old.man-DET.UH
'that old man up there'
The determiner suffixes are not clitics (§3.1.2.6); they attach directly to their host noun rather than to the noun phrase as a whole (§4.5). For example, in the noun phrase ayili avan 'that brother of his' (lit. 'that man his brother') in (111), the determiner suffix -li is attached to the head noun \(\hat{a c}\) ' man' rather than to the end of the noun phrase.

\section*{(111) Teme cao ma}
\begin{tabular}{lll} 
te=me & cao & ma \\
3SG.SUBJ=IRR & work & LK4
\end{tabular}
teme gier ri âyili avan.
\begin{tabular}{llll}
\(\mathbf{t e}=\mathbf{m e}\) & gi-er=i & \begin{tabular}{l} 
\{âyi-li
\end{tabular} & \begin{tabular}{l} 
ava-n \(\}\) \\
3SG.SUBJ=IRR
\end{tabular} \\
attack-3SG.OBJ=GEN \\
man-DET.A.PRX & sibling-3SG.POSS
\end{tabular}
'That brother of his would try to kill him.'
Yal-20092011-AW6_0035

\subsection*{4.3.2.1 Deictic determiners}

The deictic determiners, which are used in spatial deixis, are listed in Table 53.

Table 53: Deictic determiners
\begin{tabular}{|c|c|c|c|}
\hline & Suffix & Gloss & \\
\hline \multirow[t]{4}{*}{} & -k & 'DET.D.PRX' & proximal \\
\hline & -na & 'DET.D.MPX' & medial-proximal \\
\hline & -yek & 'DET.D.MDS' & medial-distal \\
\hline & -xe & 'DET.D.DST' & distal \\
\hline \multirow[t]{4}{*}{} & -xeda & 'DET.UH' & uphill \\
\hline & -xedu & 'DET.DH' & downhill \\
\hline & -yeda & 'DET.DST.UH' & distal uphill \\
\hline & -midu & 'DET.DST.DH' & distal downhill \\
\hline
\end{tabular}

They are divided into positional and dimensional systems of reference, where both indicate the position but only the latter indicates the orientation of the interlocutors.

The first four determiners can be classified as belonging to the positional system of reference, which "localizes areas in space in relation to, and dependent on, the speaker's or the hearer's position" (Senft 1997:2). There is a four-way distinction between proximal \(-k\), medial-proximal \(-n a\), medial-distal -yek, and distal -xe. A very similar system of positional reference is found in the Mon-Khmer language Jahai (Burenhult 2004). In Belep, proximal suffix \(-k\) indicates proximity to the speaker, as in (112) where \(-k\) is suffixed to mar 'seashore'.
(112) "Yome ta ka ulinao la mariik,"
\begin{tabular}{llll} 
yo=me & ta=xa & uli-nao=la & marii-k \\
2SG.SUBJ=IRR & go.UH=LK & pour-1SG.ABS=LOC & seashore-DET.D.PRX
\end{tabular} "'You will go up and let me out on this seashore,""

Yal-28072010-BGMCG-tahitian_0136
Medial-proximal suffix -na indicates proximity to the addressee, or to "any location away from the speaker that is not saliently within the system of orientation" (Burenhult 2004:89). An example is shown in (113), where -na is suffixed to tamwa 'woman' to indicate that its referent is closer to the addressee than to the speaker.
(113) "Yome ta ka âri u le tamwana
\begin{tabular}{lllll} 
yo=me & ta=xa & âri & \(\mathbf{u}=\mathbf{l e}\) & tamwa-na \\
\(2 S G . S U B J=I R R\) & go.UH=LK & say & toward=DAT & woman-DET.D.MPX
\end{tabular}
me âyuang ngi yawang ngie."
me âyua-ng=i yawa-ng=i-e
IRR desire-1SG.POSS=GEN wife-1SG.POSS=GEN-3SG.ABS
""You will go and say to that woman that I want to make her my wife."
Yal-20092011-AW1_0176
Medial-distal suffix -yek indicates a location a short distance away from both speaker and addressee, as in (114), where -yek is attached to the generically possessed noun maya-r 'side, part'.

\section*{(114) Texa, te nam ma mayariyek,}
\begin{tabular}{llll} 
te=xa & te \(=\) & nam=a & maya-ri-yek \\
3SG.SUBJ=ADD & 3SG.SUBJ \(=\) & \begin{tabular}{ll} 
appear=LOC & part-3GNR.POSS-DET.D.MDS
\end{tabular}
\end{tabular}
'And he, he appeared on that side [of the rock],'
Yal-28072010-BGMCG-tahitian_0087
Distal suffix -xe indicates a location further away from the speaker and addressee. For example, in (115), the addressee is the daughter of the character animated by the speaker, while the tawma 'woman' in question has been spotted in the distance.
(115) "Jime to ji tamwaxe." ji=me to \(\mathbf{j i}\) tamwa-xe
1DU.INCL.SUBJ=IRR call give woman-DET.D.DST
'Let's call to that woman.'
Yal-20092011-AW1_0143
The last four determiners are part of the dimensional system of reference, which "defines relations in space dependent on the speaker's or hearer's position and orientation" (Senft 1997:2). The suffixes -xeda and -xedu both indicate direction (either 'uphill' or 'downhill') and a position within the "perceived space of speaker and hearer" (Senft 1997:2), while -yeda and -midu indicate direction and a position outside of the speaker's perceived space. Similar systems are found in some Papuan languages (KrykKastovsky 1996:336) including Eipo (Heeschen 1982:84). Some Belep examples are shown in (116) - (119). In (116), the suffix -xeda is attached to the host noun janeng 'my ear', here distinguishing the ear which is on top when the speaker lies on his side from the ear on the bottom.
(116) "Me ala janengixeda," me ala jane-ngi-xeda
IRR husk ear-1SG.POSS-DET.UH
'[It would be] my top earlobe,'
Yal-05092011-AP1_0078

In (117), the suffix -xedu is attached to ulac 'old man', indicating that the old man in question is located within the speaker's perceived space; he lived nearby.

Avexa pae waga ulayixedu, digi. ave=xa pa-e waga ulayi-xedu digi 1DU.EXCL.SUBJ=ADD take-SPC boat old.man-DET.DH canoe 'We would take this old man down there's boat, a canoe.'

Yal-28072010-BGMCG-tahitian_0013
In (118), suffix -yeda indicates that its host noun âju 'person' is located outside the speaker's perceived space.
(118) "Yo kiyi âjuyeda, teme perdu."
\(\mathbf{y o}=\) kiyi âju-yeda te=me [рекdy]

2SG.SUBJ= see.SPC person-DET.DST.UH 3SG.SUBJ=IRR lost.LN
"'You see that person up there, he's going to get lost.""
Yal-28072010-BGMCG-tahitian_0074
In (119), -midu is suffixed to the generically possessed noun ola-r 'piece'.
(119) BG: Texa wali. Ô maac ya,
te=xa wa-li ô may=a

3SG.SUBJ=ADD DEM.MAN-DET.A.PRX REAL die=NOM
'And it was like that. [They] died,'
CG: maac ya olarimidu,
may \(=\mathbf{a}\) ola-ri-midu
die=NOM piece-3GNR.POSS-DET.DST.DH
'that part [of the population] down there died,'
Yal-28072010-BGMCG-sousmarin_0103-0104

\subsection*{4.3.2.2 Anaphoric determiners}

There are two anaphoric determiner suffixes in Belep which are used for temporal and discourse deixis: proximal - \(l i\) and distal -mi. Suffix \(-l i\) indicates that the referent of its host noun has recently been mentioned in discourse, or has just appeared or occurred within the speaker's frame of reference. For example, in (120), the noun no 'fish' is first introduced in line 1 in the noun phrase nae no pwalaic 'a small fish'. In line 3 , -li occurs as a suffix on no 'fish' to indicate that this is the same fish that has just been mentioned. This is an example of discourse deixis.
(120) La âvae nae no pwalaic.
\begin{tabular}{lllll}
\(\mathbf{l a}=\) & âva-e & nae & no & pwalaic \\
3PL.SUBJ \(=\) & fish-SPC & \begin{tabular}{l} 
small.thing
\end{tabular} & \begin{tabular}{l} 
fish \\
one
\end{tabular}
\end{tabular}

2 Ka mon, ka mon texa maac yi cawi,
\begin{tabular}{lllllll} 
ka & mon & ka & mon & te=xa & may=i & cawi \\
LK & side.DH & LK & side.DH & 3SG.SUBJ=ADD & die=GEN & hunger
\end{tabular}

\section*{3 ka bae noli, ka bae wagale,}
ka bae no-li ka bae waga-le
LK bite fish-DET.A.PRX LK bite boat-3DU.POSS
'A small fish was caught. And then, and then he [the rat] was hungry, and he ate that fish and ate their boat,'
Yal-01082010-MFD_0010-0013

Another example of \(-l i\), here indicating temporal deixis, is shown in (121). A moment in time is identified in lines 1-2, and then indexed twice in line 3 with the demonstrative pronoun nyali (§4.5.2).
(121) Ka Nêlêmwa, te to ji Teâ Belep,
\begin{tabular}{llllll} 
ka & Nêlêmwa & te \(=\) & to & ji & Teâ Belep \\
LK & Nêlêmwa & 3SG.SUBJ= \(=\) & call & give & Teâ Belep
\end{tabular}

2 ma te tame yagelie ma le wayap.
\begin{tabular}{lllll} 
ma=re & \begin{tabular}{l} 
ta=me \\
LK4 \(=3\) SG.SUBJ
\end{tabular} & \begin{tabular}{l} 
yage-li-e \\
go.UH=CTP
\end{tabular} & \begin{tabular}{l} 
ma \\
help-TR-3SG.ABS
\end{tabular} & le= \\
LK4 & 3DU.SUBJ= & wayap \\
war
\end{tabular}

\section*{Teâ Belep \\ Teâ Belep}

3 Toma nyali, nyali te ta la Teâ Belep,
\begin{tabular}{lllll} 
toma & nya-li & nya-li & te= & ta=la \\
but & DEM.IDF-DET.A.PRX & DEM.IDF-DET.A.PRX & 3SG.SUBJ \(=\) & go.UH \(=\) NOM
\end{tabular}
'And Nêlêmwa, he called Teâ Belep, so that he would come and help him with the war. But then, when Teâ Belep went up,'
Yal-20092011-AW3_0038-0039

The anaphoric suffix -mi is used for referents that are New or identifiable-that is, textually or situationally evoked, or inferable by logical reasoning (Prince 1981:236). For example, (122) shows a discourse deictic use of -mi with the host noun âc 'man'. The clause immediately prior to (122) in the narrative stated that the chieftain had five children; the introduction of the oldest son in (122) is thus textually evoked.
\begin{tabular}{llll} 
Âyimi ulac, ka naran ni Teâ. & \\
\begin{tabular}{llll} 
âyi-mi & ulac & ka & nara-n=i \\
man-DET.A.DST & be.old & LK & name-3SG.POSS=GEN
\end{tabular} & Teâ \\
'The oldest son, his name was Teâ.' & &
\end{tabular}

Yal-20092011-AW1_0014-0015
In (123), suffix -mi is used to indicate that the referent of its host noun, \(\hat{a c}\) 'man', is not the one most recently mentioned but the one mentioned 'formerly'. Prior to the utterance in (123), the speaker has introduced the two characters, Belep and Coigo.
(123) Le âma avan. Ka Coigo ka teâ.
\begin{tabular}{llllll} 
le \(=\) & âma= & ava-n & ka & Coigo & ka \\
teâ \\
3DU.SUBJ \(=\) \\
DYAD \(=\) & sibling-3SG.POSS & LK & Coigo & LK & eldest.son
\end{tabular}

Te ulac, teâ. Toma âyimi, Belep, te mweyau.
\begin{tabular}{llllll} 
te \(=\) & ulac & teâ & toma & âyi-mi & Belep \\
3SG.SUBJ \(=\) & be.old & eldest.son & but & \begin{tabular}{l} 
man-DET.A.DST
\end{tabular} & \begin{tabular}{l} 
Belep
\end{tabular}
\end{tabular}
te= mweyau
3SG.SUBJ= second.son
'They were brothers. And Coigo, he was the eldest. He was older, the eldest. But that man, Belep, he was the second son.'
Yal-20092011-AW6_0012

An example of the contrast between \(-l i\) and \(-m i\) is found in (124). Both are attached to the host noun gawaar 'day'; -li is used as discourse deixis to refer to a day that the speaker has just referenced; then -mi is used as temporal deixis to refer to a different day.

\section*{(124) Avenaô mo li gawaarili, ka gawaarimi la mon, avena= \(\hat{\mathbf{o}} \quad \mathbf{m o}=\mathbf{l i}\) gawari-li ka gawari-mi=la mon 1TR.EXCL.SUBJ=REAL live=GEN day-DET.A.PRX LK day-DET.A.DST=LOC side.DH 'We stayed that day, and the day after,'}

Yal-17072009-TB-weekend_0037
In (124), the speaker uses -li to refer to a day that she had just been referencing. Then she uses -mi to refer to a different day, one that is logically inferable from discourse but has not yet been mentioned. It is thus further away in the speaker's and hearer's consciousness, though it is temporally closer to the moment of speech.

\subsection*{4.3.2.3 Interrogative determiners}

There are three interrogative determiners in Belep. Suffix -va, glossed 'DET.Q1' with the meaning of 'which', is used to question a distinction between referents in a given set. For example, in (125), suffix \(-v a\) is used in the demonstrative pronoun nyava (§4.5.2).
(125) MT: Bubuc, bwaan.
bubuc bwaa-n
unripe head-3SG.POSS
'Green, its head.'
TM: Nyava?
nya-va
DEM.IDF.DET.Q1
'Which one?'
MT: Nyak.
nya-k
DEM.IDF-DET.D.PRX
'This one.'
Yal-05102010-MTAD_25:42-25.50
The exchange in (125) occurs in the context of a card game. TM uses nyava to ask which of MT's cards she is referring to.

Suffix -da 'DET.Q2' is used to question the attributes of a referent that has not yet been introduced. For example, in (126), \(-d a\) is used to ask what the addressee will use for a tala- 'bed', which is a New referent in this context.
(126) "Me talamwada?» me tala-mwa-da?
IRR bed-2SG.POSS-DET.Q2
"What bed will you have?""
Yal-05092011-AP1_0076

Suffix -ra 'DET.Q3' is used to ask 'what type' and is used primarily to question plant and animal species, e.g. (127).

\section*{(127) Nora?}
no-ra
fish-DET.Q3
'What type of fish?'

\subsection*{4.3.3 Other determiners}

Determination in Belep is not limited to nominal suffixes. Demonstrative pronouns (§4.5.2) and some nouns can also serve the function of determiners.

In many cases, demonstrative pronouns are used as determiners (in this function, they are identified as 'demonstrative determiners' in this work). They follow the noun they modify as in (128), where the demonstrative determiner lali modifies the head noun âjuma 'people', and (129) where the demonstrative determiner leli modifies the head noun \(\hat{\text { a }}\) wurama 'waves'.

Ti li âjuma lali?
\(\mathbf{t i = l i} \quad\) âju-ma la-li
who=GEN person-AC DEM.PL-DET.A.PRX
'Who are those people?'
Yal-20092011-AW6_0079
(129) âbur ri âwurama leli
âbur=i âwura-ma le-li
side.UH=GEN wave-AC DEM.DU-DET.A.PRX
'before those waves'
Yal-09082010-JMTresponse_0017
Demonstrative determiners are used primarily, and possibly exclusively, with nouns marked as associative plural (§4.2.1). In my corpus, there are only marginal counterexamples, such as in (130) where, in line 2, the demonstrative pronoun nyami follows the noun pawi 'hibiscus', which is unmarked for quantity. However, an intonation break occurs between the two words.
\begin{tabular}{llll} 
"Name tawae nyana wîna pawi," & \\
na=me & \begin{tabular}{llll} 
tawa-e & nyana & wî-na & pawi \\
1SG.SUBJ=IRR & cut-SPC & big.thing & DEM.IA-DET.D.MPX
\end{tabular} hibiscus
\end{tabular}

2 pawi, nyami cuur ra alap. pawi nya-mi cur=a alap hibiscus DEM.IDF-DET.A.DST stand=LOC beach
"'I'm going to cut down that big hibiscus," hibiscus, the one that stands on the beach.'

Yal-20092011-AW6_0070-0071
One exceptional use of demonstrative determiners occurs with the inanimate demonstrative pronominal stem \(m w i-\), wht-, which has other irregularities as well (see \(\S 4.5 .2\) ). A demonstrative determiner may modify a demonstrative pronoun head if that head contains the stem \(m w i-, w \hat{\imath}-\) as in (131). However, the form *mwi-ma, *wî-ma cannot occur without a following demonstrative determiner.

Yal-20092011-AW1_0087

In Nêlêmwa (Bril 2002) and Balade Nyelâyu (Ozanne-Rivierre et al. 1998), constructions analogous to the Belep demonstrative determiners are analyzed as determiner suffixes beginning with - \(m a\), rather than as demonstrative determiners following an associative plural noun (§4.2.1). If this analysis were posited for Belep, it would necessitate adding the determiner suffixes shown in (132) to the list in \(\S 4.3 .2\). Forms unattested in my corpus are marked with '?').
```

(132)

| DUAL | PAUCAL | PLURAL |
| :--- | :--- | :--- |
| ?-maleek | -malenyiik | -malaak |
| ?-malena | ?-malenyina | -malana |
| ?-maleyek | ?-malenyiyek | -malayek |
| ?-malexe | ?-malenyixe | ?-malaxe |
| ?-malexeda | ?-malenyixeda | -malaxeda |
| ?-malexedu | ?-malenyixedu | ?-malaxedu |
| ?-maleyeda | ?-malenyiyeda | -malayeda |
| ?-malemidu | ?-malenyimidu | ?-malamidu |
| -maleli | ?-malenyili | -malali |
| ?-malemi | ?-malenyimi | -malami |

```

There is some evidence in Belep for this analysis: I have found no clear examples of demonstrative determiners modifying nouns unmarked for quantity (see (130) below), and speaker intuition is that constructions such as âjuma lali 'those people' should be written without an orthographic space. Furthermore, many speakers (particularly younger speakers) are likely to phonetically alter constructions such as âjuma lali to [ \(\tilde{a}^{n}\) fu \({ }^{\mathrm{m}}\) blali]. Finally, the demonstrative pronominal stem \(m w i-\), wî- for inanimates cannot stand alone as associative plural \({ }^{*} m w i-m a\), but mwima lami is attested and commonly occurs (131).

Despite this evidence, I have chosen to analyze these constructions in Belep as demonstrative pronouns functioning as determiners, which can only follow an associative plural noun. I base this analysis on the fact that most of the hypothetical determiner suffixes in (132) are unattested in my corpus; the infrequency of this collocation (especially compared to the frequency of the determiner suffixes discussed in §4.3.2) suggests a syntactic rather than a morphological analysis. Furthermore, the demonstrative determiners are able to stand alone as the head of a noun phrase in many other contexts (§4.5.2), while forms beginning with -ma cannot serve this function.

In addition to demonstrative determiners, some nouns can serve the function of determiners. The cardinal numeral pwalaic 'one' (which falls into the word class of
nouns) has grammaticalized into an indefinite article (see §4.6.2). The noun avar 'other' (133) can function as a determiner for another noun, as in (134) where its head noun is ulayili 'that old man'.
(133) Avar, la baela li nic.
\begin{tabular}{llll} 
avar & la & bae-la=li & nic \\
other & 3PL.SUBJ \(=\) & bite.SPC-3PL.ABS=GEN & shark
\end{tabular} 'Others, sharks ate them.'

Yal-20092011-AW2_0049
(134) Te wali la ulayili avar.
\begin{tabular}{llll} 
te \(=\) & \(\mathbf{w a - l i}=\mathbf{l a}\) & ulayi-li & avar \\
3SG.SUBJ \(=\) & DEM.MAN-DET.A.PRX=NOM & old.man-DET.A.PRX & other
\end{tabular} 'That other old man said thusly.'

Yal-20092011-AW1_0262

\subsection*{4.4 The noun phrase}

A noun phrase in Belep consists minimally of a head noun (or pronoun; see \(\S 4.5\) ). The head noun may be a lexical noun, a noun classifier (§4.1.4), a locative noun (§4.1.5), a numeral (§4.6), a demonstrative pronoun (§4.5.2), etc. It may be marked inflectionally to indicate its possessor (§4.1.2), quantity (§4.2), and/or determination (§4.3.2). It may be followed by any number of other nouns, including numerals (§4.6) and determiners (§4.3.3), or subordinate clauses (see \(\S 7.2\) ), which act as modifiers for the head noun. This order of elements is shown in
(135). See \(\S 6.1\) for more on basic word order in Belep.

HEAD NOUN (-POSSESSOR)(-QUANTITY/-DETERMINER) (+ POSSESSOR NP) (+ MODIFYING NP(S))

Noun phrase constituency is discussed in §4.4.1. Multiple noun phrases may be conjoined using a reduced set of linkers (§3.2.4), which vary somewhat in their meaning depending on whether they conjoin noun phrases or clauses (see chapter 7). The binomial linker \(l e\) (§4.4.2) can only be used to conjoin noun phrases. Other linkers, such as \(k a\)
(§4.4.3), ai (§4.4.4), and \(m a(\S 4.4 .5, \S 4.4 .6)\), may be used to conjoin both noun phrases and clauses.

\subsection*{4.4.1 Noun phrase constituency}

Some examples of noun phrases are shown in (136) - (139). Noun phrases may be nested inside each other, as the brackets \(\}\) in these examples show, but there is no strict 'left-branching' or 'right-branching' rule for this nesting. Modifying nouns or noun phrases may occur in a variety of orders following the head noun, which is always initial. In (136), the head noun is pwemwa 'village, home'.
pwemwa ulayili Cebaba. \{pwemwa \{ulayi-li Cebaba\}\}
village old.man-DET.A.PRX Cebaba 'the home of that old man Cebaba.'

Yal-20092011-AW1_0231
In (137), the head noun is ola- 'piece'.
(137) ola we teâmaa wan,
\{ola \{\{we teâma\} wan\}\}
piece food high.chief sea.turtle 'the chief's portion of sea turtle to eat,'
Yal-20092011-AW5_0063

In (138), the head noun is pwemwa 'village, home'.
(138) pwemwa la na we la yaxe la bweerada li Poc. \{\{pwemwa=la \{na we\}\}=la village=LOC interior water=LOC
\begin{tabular}{lll}
\(\{\mathbf{y a - x e}=\mathbf{l a}\) & \begin{tabular}{l} 
\{bwe-ra=da=li
\end{tabular} & \(\left.\begin{array}{l}\text { Poc }\} \\
\text { DEM.LOC-DET.D.DST=LOC }\end{array}\right\}\) \\
top-3GNR.POSS=DIR.UH=GEN & Poc
\end{tabular}

DEM.LOC-DET.D.DST=LOC top-3GNR.POSS=DIR.UH=GEN Poc 'a village in the water over there on the upper side of Poc.'

Yal-28072010-BGMCG-hamecon_0067
In (139), the head noun is gawaar 'day'.
gawaar ri ci va oreâ naerama li comu, \{gawar=i \{ci=va \{oreâ nae-ra-ma\}=li comu\}\} day \(=\) GEN sit=INSTR breath child-3GNR.POSS-AC=GEN learn 'the children's school vacation days,' (lit. 'the days of sitting with the children's breath from learning' \({ }^{171}\)

Yal-17072009-TB-weekend_0037-0038
Noun phrase constituents typically do not cross intonation unit boundaries, and they can serve alone as an intonation unit. Noun phrases may act as the topic of a clause, as buâny 'stone' does in (140).
(140) "Mo buâny, ka banemw," mo \{buâny\} ka bane-mw LK3 stone LK friend-2SG.POS ""Well, a stone, it's your friend,""
Yal-20092011-AW1_0261

They may serve as predicate nominals (as does the independent pronoun nao in (141)) or as the answer to a question-word question (as does the demonstrative pronoun yaxedu in (142)).
(141) "Êê, tere nao,"
êê te=re nao
yes 3SG.SUBJ=ACT 1SG.INDEP
"'Yes, it's actually me,"
Yal-20092011-AW1_0283
(142) MT: Teme ci liva?
te=me ci=liva
3SG.SUBJ=IRR sit=LOC.Q
'Where does it go?'
TM: Yaxedu.
ya-xedu
DEM.LOC-DET.DH
'Down there.'
Yal-05102010-MTAD_31:49-31:52
Noun phrases may also serve as the argument of a clause, where they are marked for case with a ditropic clitic case marker (see \(\S 6.3\) ). Only one case marker is used for the entire

\footnotetext{
\({ }^{171}\) The phrase \(c i=v a\) oreâ- [sit=INSTR breath] 'to sit with one's breath' is used idiomatically to mean 'to rest'. The verb comu 'to learn' is sometimes used as a noun to mean 'schooling'.
}

NP, as shown in example (143), where the nominative case marker \(=l a\) (§6.3.2) introduces the noun phrase tamwali Kawo 'that woman Kawo'.
(143) Texa ta la tamwali Kawo,
\begin{tabular}{llll} 
te=xa & ta=la & tamwa-li & Kawo \\
3SG.SUBJ=ADD & go.UH=NOM & woman-DET.A.PRX & Kawo
\end{tabular}
'And that woman Kawo went up,'
Yal-20092011-AW1_0166-0167
Multiple noun phrases may be conjoined with linkers le 'LK3', \(k a\) 'LK', ai 'or', and ma 'LK4' (see chapter 7 for more information). The following sections discuss these linkers.

\subsection*{4.4.2 Binomial linker le}

Belep binomial linker \(l e\), glossed as LK2, is used to conjoin two (and only two) noun phrases which are conceptualized as similar or related, forming a pair. This type of conjunction is identified as "natural conjunction" by Haspelmath (2007:23), and crosslinguistically it is often limited to occurrence with only two coordinands. In Belep, naturally conjoined coordinands are more tightly phonologically linked than in other types of conjunction (though not closely enough to qualify as a coordinative compound (Wälchli 2003)); the first coordinand in natural conjunction always appears in incomplete phase (see §2.4.2), while in other forms of conjunction this phase shift is optional. Some examples are given in (144) - (146).
(144) nyale le camale
nya-le le cama-le
mother-3DU.POSS LK2 father-3DU.POSS
'their mothers and fathers'
Yal-17072009-TB-weekend_0034
(145) têno le yâgak
têno le yâgak
type.of.shell LK2 spider.conch
'shells and spider conchs'
Yal-19092011-PA_0010
(146) teâ le mweau
teâ le mweau
first.son LK2 second.son
'[the chief's] first son and second son'
Yal-20092011-AW6_0007
If speakers conjoin additional noun phrases after the two NPs conjoined with \(l e\), the
additive linker \(k a\) must be used, as in (147).
(147) Kawo le Ixe ka Jegoloc

Kawo le Ixe ka Jegoloc
Kawo LK2 Ixe LK Jegoloc
'Kawo and Ixe, and Jegoloc' \({ }^{172}\)
Yal-20092011-AW1_0041
Any other linker is ungrammatical, as in (148).
(148) Le ta la camang le nyang (ka/*ma) avang.
le= ta=la cama-nga le nya-ng
3DU.SUBJ \(=\) go.UH=NOM father-1SG.POSS LK2 mother-1SG.POSS
ka (*ma) ava-ng
LK (*LK4) sibling-1SG.POSS
'My father and my mother, and my sibling, went.'

Yal-03112011-IM1.wav - Yal-03112011-IM2.wav

\subsection*{4.4.3 NP coordinator \(k a\) 'and'}

Additive linker \(k a\) 'LK' (§7.1.1), which is often used to conjoin clauses, is also used to conjoin noun phrases-any number of them-in a list. For example, in (149) two noun phrases (marked with brackets \(\}\) ) are conjoined with \(k a\), while in (150), four noun phrases are conjoined with \(k a\).
pwairamwa pwalaic ka nae-pabong âc pwalaic, \(\begin{array}{lllllll}\text { \{pwairamwa } & \begin{array}{l}\text { pwalaic\} } \\ \text { girl }\end{array} & \begin{array}{l}\text { ka } \\ \text { one }\end{array} & \begin{array}{l}\text { \{nae } \\ \text { small.thing }\end{array} & \begin{array}{l}\text { pabo-nga } \\ \text { grandchild-1SG.POSS }\end{array} & \begin{array}{l}\text { âya } \\ \text { male }\end{array} & \text { one }\end{array}\) 'one daughter and my little grandson,'

Yal-17072009-TB-weekend_0030

\footnotetext{
\({ }^{172}\) The proper name Kawo is traditionally given to the chieftain's eldest daughter. Ixe is the name of the chieftain's second daughter. Jegoloc is the name given to the youngest child.
}
(150) Na pa claquettes, ka pae terixo ka cixare, ka allumettes, ka yadan. na= pa claquettes ka pa-e \{terixo\} ka \{cixare\} 1SG.SUBJ= take flipflops.LN LK take-SPC tshirt.LN LK cigarettes.LN ka \{allumettes\} ka \{yada-n\}
LK matches.LN LK belongings-3SG.POSS
'I took flip-flops, and took the t-shirt, cigarettes, matches, and his belongings.'
Yal-28072010-BGMCG-tahitian_0142-0145
The use of linker \(k a\) is not necessary to conjoin noun phrases in a list; NPs can be conjoined without any overt marker. In (151), only intonation breaks are used between the coordinands. However, conjunction with \(k a\) is more common (152).
(151) Te bae taro, bolao, uvi.
\begin{tabular}{lllll} 
te \(=\) & bae & \(\{\operatorname{taro}\}\) & \begin{tabular}{l} 
\{bolao \(\}\)
\end{tabular} & \(\{\mathbf{u v i}\}\) \\
3SG.SUBJ \(=\) & eat & taro & \begin{tabular}{l} 
banana
\end{tabular} & yam
\end{tabular}
'S/he eats taro, bananas, yams.'
(152) Te bae taro ka bolao ka uvi.
te= bae taro ka bolao ka uvi
3SG.SUBJ= eat taro LK banana LK yam
'S/he eats taro and bananas and yams.'
Yal-03112011-IM1.wav - Yal-03112011-IM2.wav

The functional difference between conjunction with and without the overt linker \(k a\) requires further study. Linker \(k a\) is the only linker which may be optionally omitted.

\subsection*{4.4.4 Disjunctive linker ai 'or'}

The disjunctive linker ai (§7.1.2) is used to coordinate both noun phrases and clauses. In noun phrase coordination, ai 'or' indicates that the noun phrases it disjoins are possible alternatives for one another. The only example of noun phrase disjunction in my corpus is shown in example (153), where ai disjoins the noun phrases yo '2SG.INDEP' and \(t i\) 'who?'.
(153) «Jua yo ai ti? Kawo?»
\begin{tabular}{llll} 
jua & \(\{\mathbf{y o}\}\) & ai & \(\{\mathbf{t i \}}\) \\
truly & KSG.INDEP & or & Khowo \\
""I & Kawo
\end{tabular}
"'Is it really you or who? Kawo?",

\subsection*{4.4.5 Inclusory ma 'with'}

Linker ma 'LK4' is used to conjoin both noun phrases and clauses (§7.2.2). \({ }^{173}\) In most cases where ma conjoins noun phrases, it is used as an inclusory linker. Inclusory noun phrase conjunction is defined as conjunction where "the result of the conjunction is not the union, but the unification of the sets. That is, if some members of the second conjunct set are already included in the first conjunct set, they are not added to the resulting set" (Haspelmath 2007:33). When Belep linker \(m a\) is used to link noun phrases, the second element (called the 'included conjunct') is subordinated to, and included in, the first element, called the 'inclusory conjunct' (which is typically a nonsingular independent pronoun \({ }^{174}\) ). This also occurs in Nêlêmwa; Bril (2004a) refers to it as an "asymmetric inclusory construction" such that the second of the conjoined elements is included in the referent of the first. For example, in (154), the \(m a\)-element-the included conjunct-is included in the pronominal reference of the first element.

\section*{(154) ave ma âroong.}
\{ave\} ma \{âroo-ng\}

1DU.EXCL.INDEP LK4 husband-1SG.POSS
'me and my husband.' (lit. 'we with my husband') Yal-17072009-TB-weekend_0012

In (154), ave ma âroong 'me and my husband' literally translates as 'we with my husband' or 'the two of us including my husband'. This is an example of a phrasal inclusory construction, where "the inclusory pronominal and the included NP together form a phrase" (Lichtenberk 2000:3). Split inclusory constructions, where the two conjuncts do not form a phrase but rather the inclusory conjunct is marked as a

\footnotetext{
\({ }^{173}\) The analogous Nêlêmwa linker \(m a\) is used only to conjoin noun phrases, both symmetrically and asymmetrically. A different linker, me, is used to introduce dependent clauses (Bril 2004).
\({ }^{174}\) In fact, there are no instances in my corpus of inclusory conjuncts which are lexical nouns. When two lexical nouns are conjoined with \(m a\), this should be considered an instance of comitative conjunction (see §4.4.6 below) rather than inclusory conjunction.
}
pronominal verbal proclitic (Lichtenberk 2000:3), also occur in Belep. Example (155) shows a split inclusory construction; the inclusory pronominal subject proclitic ave \(=\) and the included coordinand tayamook 'this old woman' (marked with linker ma) do not form a phrase.
(155) Avexa paer yena ma tayamook, \(\begin{array}{lllll}\text { \{ave=\}xa } & \text { pa-era } & \text { yena } & \text { ma } & \text { \{tayamoo-k }\} \\ \text { 1DU.EXCL.SUBJ=ADD } & \text { take-3SG.ABS } & \text { now } & \text { LK4 } & \text { old.woman-DET.D.PRX }\end{array}\) 'and my wife and I have taken it now,' (lit. 'we have taken it now with this old woman')

Yal-28072010-BGMCG-lune_0076
Nonetheless, in (155), the ma-element tayamook 'this old woman' is included in the reference of the proclitic \(a v e=.{ }^{175}\) Shown in (156) is another example of a split inclusory construction, where the included conjunct âjuma la Yade 'the people of Yade' (marked with linker \(m a\) ) is included in the reference of the plural subject proclitic \(l a=\), which refers to the entirety of fighters on both sides.

La peyere ma âjuma la Yade, \(\{\mathbf{l a =}=\) pereye ma \{âju-ma=la Yade\} 3PL.SUBJ= brawl LK4 person-AC=LOC Yade 'They fought with the people of Yade,'

> Yal-20092011-AW6_0095

In (157) below, the included conjunct (the \(m a\)-element naen 'his child') is
included in the dual referent of its controlling element \(l e\) '3DU.INDEP'. However, the subject agreement proclitic \(t e=\) which precedes it is singular.
(157) Te mo li, le ma naen.
\(\mathbf{t e}=\quad \mathbf{m o}=\mathbf{l i} \quad\{\mathbf{l e}\} \quad\) ma \(\quad\) \{nae-n \(\}\)

3SG.SUBJ= live=LOC.A 3DU.INDEP LK4 child-3SG.POSS
'He lived there, he and his child.' (lit. 'they two including his child')
Yal-20092011-AW5_0010

As (157) shows, the ma-element may not always trigger subject agreement on the verb.

\footnotetext{
\({ }^{175}\) The nouns ulac 'old man' and tayamo 'old woman' are often used as terms of respect for one's family members.
}

Linker ma cannot be used to conjoin more than two noun phrases (see (148) above). However, example (158) shows that a \(m a\)-element can itself contain conjoined elements, in this case conjoined with \(k a\) (see §4.4.3).
(158) Ava ma naengama pwairama \{ava\} ma \{nae-nga-ma pwaira-ma
1PL.EXCL.INDEP LK4 small.thing-1SG.POSS-AC girl-AC 'We with the girls - '
pwairamwa pwalaic, ka nae pabong âc pwalaic, pwairamwa pwalaic\} ka \{nae pabo-nga âya pwalaic\} girl one LK small.thing grandchild-1SG.POSS male one 'my daughter, and my little grandson,'
avena mae la pwemwa.
avena= mae=la pwemwa 1PA.EXCL.SUBJ= sleep=LOC home 'we slept at home.'

Yal-17072009-TB-weekend_0029-0031
In (158), we see that the noun phrases conjoined with \(k a-p w a i r a m w a ~ p w a l a i c ~ ' o n e ~ g i r l ' ~\) and nae pabong âc pwalaic 'my little grandson'-are included in the reference of the inclusory conjunct, the independent plural pronoun \(a v a\).

\subsection*{4.4.6 Comitative conjunction}

In addition to its use in inclusory conjunction (§4.4.5), where the coordinands are inherently asymmetrical, Belep linker ma (§7.2.2) may occasionally be used to conjoin two lexical noun phrases where the coordinands are symmetrical. I will refer to this usage of \(m a\) as comitative conjunction, defined as conjunction where "the conjunctive coordinator for NPs is identical in shape with the marker for accompaniment" (Haspelmath 2007:29). A similar usage occurs in Nêlêmwa, where inclusory conjunction \(m a\) is also used for symmetric coordination of "contiguous NPs which must belong to the same category, have the same semantic role and the same syntactic function" (Bril 2004a:5). Two Belep examples of comitative conjunction using \(m a\) occur in my corpus.

In both (159) and (160), the coordinands belong to the same category and are semantically parallel in some way.
(159) Or ma Waap, \{or\} ma \{waap\}
spill LK4 topple
'Hoot ma Waap, \({ }^{\prime}{ }^{\prime}\)

> Yal-20092011-AW3_0011
(160) O Keyau ma Kenadu!
o= \(\quad\) \{Keyau\} ma \(\{\) Kenadu\}
2DU.SUBJ= Keyau LK4 Kenadu
'You, Keyau and Kenadu! \({ }^{177}\)
Yal-28072010-BGMCG-tayamu_0151
The use of \(m a\) to conjoin like members of a set is not very productive in Belep; for example, (161) is ungrammatical.
(161) *Te bae taro ma bolao.
te \(=\quad\) bae \(\{\operatorname{taro}\}\) ma \(\{\) bolao \(\}\)
3SG.SUBJ= eat taro LK4 banana
*'S/he eats taro with banana.'
Yal-03112011-IM1.wav - Yal-03112011-IM2.wav

\subsection*{4.5 Pronouns}

Belep pronouns are defined as full phonological words (§3.1.1) which are capable of substituting for a noun phrase in a clause. This definition includes personal pronouns (called 'independent pronouns' in this work; see \(\S 4.5 .1\) ), demonstrative pronouns (§4.5.2), and interrogative pronouns (§4.5.3). It excludes a variety of other pronominal and anaphoric elements, such as possessive suffixes (§4.1.2.2), subject agreement proclitics (§5.7), absolutive suffixes (§5.6), and verb phrase locational enclitics (§5.12).

\footnotetext{
\({ }^{176}\) The two phratries in Northern New Caledonia take their names from two legendary brothers, whose names in Belep are Or 'to spill' and Waap 'to topple'. The official designation of the tribal region into which Belep falls (according to the indigenous Senate) is \(<\) Hoot ma Waap \(>\), named in another Northern language.
\({ }^{177}\) Keyau and Kenadu are proper names of two sisters who are characters in the narrative from which this example is drawn. Throughout this narrative they are portrayed as two of a kind.
}

\subsection*{4.5.1 Independent pronouns}

The personal pronouns are presented in Table 54. Throughout this work they are referred to as 'independent pronouns', in keeping with the existing literature on New Caledonian languages. \({ }^{178}\)

Table 54: Independent pronouns
\begin{tabular}{|l|l|l|l|l|}
\hline & Singular & Dual & Paucal & Plural \\
\hline \multicolumn{5}{|c|}{ 1 exclusive } \\
nao & ave & aven & ava \\
\cline { 3 - 5 } inclusive & & ji & jen & ja \\
\hline \(\mathbf{2}\) & yo & or & ôn & ac \\
\hline \(\mathbf{3}\) & yer & le & len & la \\
\hline
\end{tabular}

As Table 54 shows, Belep has a Chechen-type clusivity division (Bickel \& Nichols 2005), where an inclusive-exclusive distinction exists in the nonsingular numbers. Belep distinguishes between four numbers in its pronominal system: singular, dual, paucal, and plural. Paucal number is typically used to refer to a small group, or to distinguish a subset from a superset. For example, in (162), the paucal pronoun aven '1PA.EXCL.INDEP' refers to a group of at least five people in a self-contained unit-the speaker's family.
(162) Aven ma âroong.
aven ma âroo-ng
1PA.EXCL.INDEP LK4 husband-1SG.POSS
'We with my husband.'
Yal-17072009-TB-weekend_0031
In (163), the paucal pronoun len '3PA.INDEP' refers to Teâ Belep, the legendary founder of the Belep dynasty (§1.2.3), and his two courtiers. It is used first as a topic (§6.8.1) and then as a predicate locative (§6.4) to distinguish this small group from the larger group with whom they are fighting (for whom plural number is used; not shown here).

\footnotetext{
\({ }^{178}\) This terminology is used by scholars such as Ozanne-Rivierre (1998) and Bril (2002) to differentiate personal pronouns from other pronominal formatives, such as possessive suffixes on nouns and verb agreement morphology. In this work, such formatives are not classified as words, and so do not need to be distinguished from free pronouns which have word-status.
}

Puur ri âmi len, len mode yadalen.
\begin{tabular}{lll} 
pu-r=i & â-mi & len \\
origin-3GNR.POSS=GEN & DEM.NEW-DET.A.DST & \begin{tabular}{ll} 
3PA.INDEP
\end{tabular}
\end{tabular}
lena mode yada-len
3PA.INDEP together belongings-3PA.POSS
'Because, as for them, they had their magic.' (lit. 'they were with their belongings')
Yal-20092011-AW6_0160

Independent pronouns are used most commonly in noun phrase coordination, topicalization, for emphasis, and as a response to a question-word question. For example, in (67), the third plural pronoun la participates in noun phrase coordination (§4.4).
(164) la ma teâmaa
la ma teâmaa

3PL.INDEP LK4 high.chief
'they with the chieftain'
Yal-20092011-AW3_0054

In (165), the first singular pronoun nao acts as the topic (§6.8.1); it is followed by a comment.
(165) "Toma nao, ka name yaûda la bwe mweogo."
\begin{tabular}{llllll} 
toma & \(\frac{\text { nao }}{1 S G}\) & ka & na=me & yaûda=la & bwe
\end{tabular}\(\quad\) mweogo "While as for me, I'm going to climb onto the mountaintop.""

Yal-28072010-BGMCG-tahitian_0152
In (166), the third dual pronoun le emphatically substitutes for a subject noun phrase
(§6.2.1), appearing with a nominative case marker (see §6.3.2).
(166) Pan na le,
pan=a le
go.TV=NOM 3DU.INDEP
'Went, they did,'
Yal-20092011-AW6_0114
In (167), the second singular independent pronoun \(y o\) acts as the response to a questionword question (§6.4.2).
(167) BG: \(\quad\) Te ta la \(\boldsymbol{i}\) ?
te= \(\quad \mathbf{t a}=\mathbf{l a}=\mathbf{r i}\)
3SG.SUBJ= go.UH=NOM=who
'Who went up?'
CG: Yo.
\(\xrightarrow{\text { yo }}\)
2SG.INDEP
'You.'
Yal-28072010-BGMCG-tahitian_0249-0250

\subsection*{4.5.2 Demonstrative pronouns}

Demonstrative pronouns in Belep are formed using a bound pronominal stem (Table 55) to which a determiner suffix (§4.4.2) is attached. The functions of each of these stems are further discussed below. See Appendix D for a full chart of the demonstrative pronouns.

Table 55: Demonstrative pronominal stems
\begin{tabular}{|l|l|l|}
\hline Stem & Gloss & Definition \\
\hline â- & DEM.NEW & new \\
\hline nya- & DEM.IDF & singular identifiable \\
\hline \begin{tabular}{l} 
mwi-, mwii- \(^{\text {(179 }}\) \\
wî-, wî1-
\end{tabular} & DEM.IA & singular inanimate \\
\hline le-, lee- & DEM.DU & dual \\
\hline lenyi-, lenyii- & DEM.PA & paucal \\
\hline la-, laa- & DEM.PL & plural \\
\hline ya- & DEM.LOC & locative \\
\hline wa-, waa- & DEM.MAN & manner \\
\hline ere-, era- & DEM.PRES & presentative \\
\hline
\end{tabular}

Demonstrative pronouns are used to replace a full noun phrase as an argument of a clause; to respond to a question word question; as a modifier for the head noun in a noun phrase; and as the head of some relative clauses. For example, in (168), the demonstrative pronoun leli acts as the subject (§6.2.1) of a clause; it is marked with the nominative case marker (§6.3.2).

\footnotetext{
\({ }^{179}\) Several demonstrative pronominal stems undergo stem modification (§4.1.2.3) depending on the determiner suffix (§4.4.2). That is, these stems use a like-vowel hiatus when the proximal suffix \(-k\) is attached; in all other cases, they use a singleton vowel.
}
```

Mo la leli,
mo=la le-li
live=NOM DEM.DU-DET.A.PRX
'Lived, they did,'

```

Yal-20092011-AW1_0247
In (169), the demonstrative pronoun wîmi acts as the absolutive argument of the clause; it is unmarked (§6.3.2).
(169) Texa pae wîmi la ulayili Cebaba, te=xa pa-e wî-mi=la ulayi-li Cebaba 3SG.SUBJ=ADD take-SPC DEM.IA-DET.A.DST=NOM old.man-DET.A.PRX Cebaba 'And that old man Cebaba, took that thing,'
Yal-20092011-AW1_0265

In (170), the demonstrative pronoun yaxedu serves as the answer to a question-word question (§6.5.2).
(170) MT: Teme ci liva?
te=me ci=liva
3SG.SUBJ=IRR sit=LOC.Q
'Where does it go?'
TM: Yaxedu.
ya-xedu
DEM.LOC-DET.DH
'Down there.'
Yal-05102010-MTAD_31:49-31.52
In (171), the demonstrative pronoun lali acts as a determiner modifying the head noun âjuma 'people' (see §4.4.2.5).
(171) Ti li âjuma lali ?
\(\mathbf{t}=\mathbf{l i} \quad\) âju-ma la-li
who=GEN person-AC DEM.PL-DET.A.PRX
'Who are those people?'
Yal-20092011-AW6_0079
In (172), the dative-marked demonstrative pronoun lami acts as a relative pronoun serving as the head of a relative clause (§7.3.3).
(172) ka u le lami me tame mwa la mon.
\begin{tabular}{lllllll} 
ka & \(\mathbf{u}=\mathbf{l e}\) & la-mi & me & ta=me & mwa=la & mon \\
LK & toward=DAT & DEM.PL-DET.A.DST & IRR & go.UH=CTP & again=LOC & side.DH
\end{tabular} 'for all of those who will come after you.'

Yal-14092011-PT2-avenir_0022
The demonstrative pronouns are differentiated based on a number of deictic and discourse characteristics, including information status, animacy, and number. The demonstrative pronominal stem \(\hat{a}\) - 'DEM.NEW' is used to refer to New information; that is, information which is created by the speaker or which is newly introduced into the conversation (Prince 1981:235). For instance, in (173), the pronoun \(\hat{a m i}\) 'the one' is a questioned constituent in a negative question.
(173) "Âri yo li âmi ca bae du liva?"
 ""Aren't you the one who always eats our bones?""
Yal-01082010-MFD_0034-0035

In (174), the demonstrative pronoun âxeda 'one up there' substitutes for a New NP, mweogo 'mountain', that the speaker has not uttered yet.
(174) uya la bwe âxeda, bwe mweogo na lexeda.
 Yal-28072010-BGMCG-tahitian_0160-0161

The pronominal stem nya- 'DEM.IDF' indexes a singular, identifiable referenteither one which has previously been textually or situationally evoked, or one which the "speaker assumes the hearer can infer [via logical or plausible] reasoning" (Prince 1981:236). For example, in (175), the noun phrase buâny 'stone' is introduced in line 1, so the speaker assumes it is still familiar to the hearer when he refers to it using the demonstrative pronoun nyaxeda in line 3 . Here the referent has been textually evoked.

Avexa nyi tuvadu la na buâny waak.
\begin{tabular}{llllll} 
ave=\(=\mathbf{x a}\) & nyi= & tuva=du=la & na & buâny & waa-k \\
1DU.EXCL.SUBJ=ADD & PUNCT= & \begin{tabular}{l} 
dive=DIR.DH=LOC
\end{tabular} & interior & stone & DEM.MAN-DET.D.PRX
\end{tabular}

2 Ave pe namavan ka namame,
\begin{tabular}{lllll}
\(\mathbf{a v e}=\) & \(\mathbf{p e}=\) & nama=van & ka & nama=me \\
1DU.EXCL.SUBJ \(=\) & RECP \(=\) & enter=go.TV & LK & enter=CTP
\end{tabular}

3 ka te cuur ka tame, toma bwe nyaxeda,
ka te= cura=xa ta=me toma bwe nya-xeda LK 3SG.SUBJ= stand=LK go.UH=CTP but top DEM.IDF-DET.UH 'And we kept diving by the rock like this. Together we came and went, and he stood and came up, but on top of that [the rock],'

Yal-28072010-BGMCG-tahitian_0053-0057
The stem nya- is also frequently used as the head of a relative clause (§7.3.3) to refer to a moment in time, as in (176). In these instances, the referent is inferable rather than specifically evoked.
(176) Te nodu, noduxa, koni kiyi Belema, nyami la ta, la ma teâmaa.
\begin{tabular}{llllll} 
te \(=\) & no=du & no=du=xa & koni & kiyi & Bele-ma \\
3SG.SUBJ= \(=\) & peer=DIR.DH & peer=DIR.DH=LK & never= & see.SPC & Belep-AC
\end{tabular}
\begin{tabular}{lllll} 
nya-mi & \(\mathbf{l a}=\) & ta & la & ma \\
teâmaa \\
DEM.IDF-DET.A.DST & 3PL.SUBJ \(=\) & go.UH & 3PL.INDEP & LK4
\end{tabular} high.chief.
Yal-20092011-AW4_0010-0013

In (176), the speaker uses the demonstrative pronoun nyami as a relative pronoun to index a temporal location which is identifiable to the hearer-prior to this point in the narrative, the speaker has already mentioned that the Belema were on their way.

The pronominal stem \(m w i\) - or \(w \hat{\imath}-\) 'DEM.IA \({ }^{180}\) indexes a singular \({ }^{181}\) non-human entity. For example, in (177), the demonstrative pronoun wîk \({ }^{182}\) substitutes for the noun phrase kan 'his feet' \({ }^{183}\) as the speaker performs a word search.

\footnotetext{
\({ }^{180}\) The phonological form tends to vary by age; older speakers are more likely to use the full form mwi- and younger speakers are more likely to use the reduced form wit-.
\({ }^{181}\) That is, one which is unmarked for number; one which is not explicitly marked as dual, paucal, or plural.
}
(177) Na tao toda, na pwai kiya nabwa wîlk. Kan. Toma âju, âri na kiyie.
\begin{tabular}{llllllll} 
na \(=\) & \(\mathbf{t a o}=\) & \(\mathbf{t o}=\mathbf{d a}\) & na \(=\) & pwai & kiya & nabwa & wîl-k \\
1SG.SUBJ \(=\) & \(H A B=\) & call=DIR.UH & 1SG.SUBJ \(=\) & only & see.GNR & imprint & DEM.IA-DET.D.PRX
\end{tabular}
ka-n toma âju âri= na= kiyi-e foot-3SG.POSS but person \(\mathrm{NEG}=1 \mathrm{SG} . \mathrm{SUBJ}=\) see.SPC-3SG.ABS
'I kept calling and calling but I only saw prints from whatsit. His feet. But the person I didn't see.'
Yal-28072010-BGMCG-tahitian_0093-0094

In example (178), the demonstrative pronoun \(m w i ̂ m i\) acts as the head of a relative clause (§7.3.3).
(178) Ka temere uya la mwimi te nooxee.
\begin{tabular}{llll} 
ka & te=me= \(=\mathbf{r e}\) & \begin{tabular}{l} 
uya=la
\end{tabular} & \begin{tabular}{l} 
mwi-mi=re
\end{tabular} \\
LK & 3SG.SUBJ=IRR=ACT & \begin{tabular}{l} 
arrive=NOM
\end{tabular} & \begin{tabular}{l} 
noxe-e \\
DEM.IA-DET.A.DST=3SG.SUBJ
\end{tabular} \\
solicit.TR-3SG.ABS
\end{tabular}
'If \(\mathrm{s} / \mathrm{he}\) asks in my name, what \(\mathrm{s} /\) he asked for will happen.'
Yal-25072010-PT-homily_0044-0045
Uniquely among the demonstrative pronouns, the bound stems \(m w i-\), w \(\hat{l}\) - have the corresponding free stems mwija, wîja 'thing', \({ }^{184}\) which are full phonological words (§3.1.1) and are not compatible with determiner suffixes (§4.4.2). These forms are used to introduce a New referent into discourse, as in (179) and (180). The stems mwi-, wîalso have other irregularities (§4.3.3); it is possible that they are in the process of grammaticalizing from class 1 nouns to pronouns.
(179) Enyi te padi mwija pwalaic ki mwany u leen. \(\begin{array}{llllll}\text { enyi } & \text { te }= & \text { padi }= \\ \text { if } & \text { 3SG.SUBJ }= & \text { show.SPC } & \begin{array}{l}\text { mwija } \\ \text { shing }\end{array} & \begin{array}{l}\text { pwalaiyi=xi } \\ \text { one=REL }\end{array} & \begin{array}{l}\text { mwanya } \\ \text { bad }\end{array} \\ \begin{array}{l}\text { u=lee-n } \\ \text { toward=DAT-3SG.POSS }\end{array}\end{array}\) 'If she is showing something bad to him.'
Yal-20092011-AW4_0058-0059

\footnotetext{
\({ }^{182}\) When the proximal determiner suffix \(-k(\S 4.4 .2)\) is attached to the stem \(m w i\) - or \(w \hat{l}-\), the stem is modified (§4.1.2.3) to have a like-vowel hiatus.
\({ }_{183}\) The noun \(k a\) - 'foot, feet' is not marked for number.
\({ }^{184}\) These forms are likely related to the Balade Nyelâyu determiner suffix -ija, indicating proximity to the speaker (Ozanne-Rivierre 1998: 42).
}
(180) Ô âria wîja leme îna,
\begin{tabular}{lllll}
\(\hat{\text { o }}\) & âria & wîja & le=me & îna \\
REAL & NEG.EX & thing & 3DU.SUBJ=IRR & make
\end{tabular}
'There wasn't anything they would do,'
Yal-28072010-BGMCG-tayamu_0033
The pronominal stems \(l e\) - 'DEM.DU', lenyi- 'DEM.PA', and la- 'DEM.PL' index dual, paucal, and plural referents, respectively. There is no stipulation as to whether or not their referents are human. An example of le- 'DEM.DU' is shown in (181), where the demonstrative pronoun leli is marked as the subject using the nominative case marker (§6.3.2).
```

Mo la leli, mo=la le-li
live=NOM DEM.DU-DET.A.PRX
'Lived, did those two,'

```

Yal-20092011-AW1_0247
In (182), the stem lenyii- 'DEM.PA' is used in the demonstrative pronoun lenyiik; the stem contains like-vowel hiatus because the proximal determiner suffix \(-k\) is attached.
(182) «He, âju pwajen! Lenyiik bwa mo lexeng.» âju pwajen lenyii-k bwa= mo=lexeng » person three DEM.PA-DET.D.PRX CONT= live=LOC.DC ""Hey, three people! These three are living here.""
Yal-20092011-AW6_0147

An example of la- 'DEM.PL' is shown in (183), where the demonstrative pronoun is lali.
(183) ma te pa cavac yi lali,
\begin{tabular}{lll} 
ma=re & pa= & cavay \(=\mathbf{i}\)
\end{tabular}\(\quad\)\begin{tabular}{l} 
la-li \\
LK4=3SG.SUBJ \\
' CAUS \(=\) \\
'and he made them leave'
\end{tabular}

Yal-28072010-BGMCG-tahitian_0256
The pronominal stem \(y a\) - 'DEM.LOC' is used to index a spatial location. For instance, in (184) the demonstrative pronoun yamidu, marked as in the locative case with the case marker \(=l a(\S 6.3 .5)\), substitutes for the toponyms Weaa and Gawe.
(184) La mo la Weaa, ka mo la Gawe, yamidu, pwemwala la yamidu,
\begin{tabular}{llllll}
\(\mathbf{l a}=\) & mo=la & Weaa & ka & mo=la & Gawe \\
3PL.SUBJ \(=\) & live=LOC & Weaa & LK & live=LOC & Gawe
\end{tabular}

\section*{ya-midu pwemwa-la=la ya-midu}

DEM.LOC-DET.D.DH village-3PL.POSS=LOC DEM.LOC-DET.D.DH
'They lived at Weaa, and lived at Gawe, down there, their home down there,'
Yal-20092011-AW5_0017-0018
In (185), the demonstrative pronoun yali occurs twice, first as a topicalized NP (§6.8.1)
and then as the head of a relative clause (87.3.3).
(185) Toma yali, yali te uya li,
\begin{tabular}{|c|c|c|c|c|}
\hline na & ya-li & ya-li & te= & li \\
\hline but & I.LOC-DET.A.PR & LOC-DET & 3 SG.SUBJ= & arrive=DET.A \\
\hline
\end{tabular} 'But that place, where she arrived,'
Yal-20092011-AW1_0133

The pronominal stem wa- 'DEM.MAN' indexes a manner of movement or action and is very productive in discourse and idiom. In (186) and (187), demonstrative pronouns wali and wana respectively are used adverbially.
(186) Cexeen ni te tâna ka yo pulu wali. \(\begin{array}{lllllll}\text { cexen=i } & \text { te }= & \text { tâna } & \text { ka } & \text { yo }= & \text { pulu } & \text { wa-li } \\ \text { sacred=GEN } & \text { 3SG.SUBJ }= & \text { hear } & \text { LK } & 2 S G . S U B J= & \begin{array}{l}\text { speak }\end{array} & \begin{array}{ll}\text { DEM.MAN-DET.A.PRX }\end{array}\end{array}\) 'It is forbidden that he hear you speak like that.'

Yal-20092011-AW4_0057
(187) calayi doo wana,
calayi doo wa-na
brush.TR earth DEM.MAN-DET.D.MPX
'[until it] brushed the earth like that,'
Yal-28072010-BGMCG-hamecon_0027
Demonstrative pronouns containing wa- are commonly predicated to serve as a direct quotative (§6.9.4), as in (188) where the demonstrative pronoun waak contains a stem with a like-vowel hiatus due to the presence of the proximal determiner \(-k\).
(188) Texa wakk, "Ka ivi wagaji ?"
te=xa waa-k ka ivi waga-ji

3SG.SUBJ=ADD DEM.MAN-DET.D.PRX LK be.where.SPC boat-1DU.INCL.POSS 'And he was like, "Well, where's our boat?""

> Yal-01082010-MFD_0014-0016

Another common usage for the pronominal stem \(w a\) - is in the construction used to predicate similarity (§6.11.2), as in example (189) where the demonstrative pronoun is wali.
(189) Ka tuи ciraan wali ma bu la Belep.
\begin{tabular}{lllllll} 
ka & tu & ciraan & wa-li & ma & \begin{tabular}{l} 
bu=la
\end{tabular} & \begin{tabular}{l} 
Belep \\
LK
\end{tabular} \\
EX.SPC & barb & DEM.MAN-DET.A.PRX & similarity & fishhook=LOC & Belep
\end{tabular} 'And there were barbs like the fishhooks in Belep.' Yal-28072010-BGMCG-hamecon_0007-0009

The irregular pronominal stem ere-, era- 'DEM.PRES' \({ }^{185}\) functions as a presentative-that is, a term referring "to an entity which the speaker by means of the associated predication wishes to explicitly introduce into the world of discourse" (Hannay 1985:171, cited in Dik 1997). \({ }^{186}\) In its use as a demonstrative pronoun, ere-, erais used to index an entity which is being presented by the speaker, either deicticallyaccompanied by a gesture such as pointing or handing-or anaphorically, to reiterate the relevance of an utterance. For example, in (190), two speakers are playing a game of Go Fish. When MT asks for a certain card, AD responds by showing her the card (line 3) and using the demonstrative pronoun erak. MT affirms that this is the correct card using the demonstrative pronoun erena (line 4).

\footnotetext{
\({ }^{185}\) This phonological variation depends on the determiner suffix (84.4.2). The form era- is used with \(-k\), while the form ere- is used with -na, -li, and -mi. The stem era-, ere- is not compatible with any other determiners.
\({ }^{186}\) The free stem era is also used as a locative verb (86.3.2). In some cases, it may be difficult to distinguish the demonstrative pronoun from the locative verb: the pronominal stem occurs with only four of the determiners, and the locative verb occurs with only eight of the ten locational VP enclitics (§5.11).
}
(190) MT: Mwija pwalaic te marron, bwaan, \(\begin{array}{lllll}\text { mwija } & \begin{array}{ll}\text { pwalaic }\end{array} & \begin{array}{l}\text { te }= \\ \text { thing }\end{array} & \begin{array}{ll}\text { one }\end{array} & \text { 3SG.SUBJ }=\end{array} \begin{aligned} & \text { brown.LN }\end{aligned} \begin{aligned} & \text { bwaa-n } \\ & \text { head-3SG.POSS }\end{aligned}\)

2 ka cuur ra na lunettes bleues.
ka cur=a na [lyneta blæ]

LK stand=LOC interior glasses.LN blue.LN
'A thing, it's brown, its head, and it's wearing blue glasses.'
3 AD: Erak?
era-k
DEM.PRES-DET.D.PRX
'Is this it?'
4 MT: Erena, êê. ere-na êê DEM.PRES-DET.D.MPX yes 'There it is, yeah.'

Yal-05102010-MTAD_24:21-24:29
In (191), the speaker has just finished her narrative in response to a request to describe what she did over the weekend. She uses the demonstrative pronoun ereli to point out that she has now fully answered the question.

\section*{(191) Ô ereli, avenaô mo li gawaarili,}
\(\hat{\mathbf{o}}\) ere-li \(\quad\) avena \(=\hat{\mathbf{o}} \quad \mathbf{m o}=\mathbf{l i}\) gawari-li
REAL DEM.PRES-DET.A.PRX 1TR.EXCL.SUBJ=REAL live=GEN day-DET.A.PRX
'There you have it, we stayed that day,'
Yal-17072009-TB-weekend_0036-0037

\subsection*{4.5.3 Interrogative pronouns}

There are four interrogative pronouns in Belep. They are shown in Table 56. See
\(\S 6.5\) for more information on interrogatives.

Table 56: Interrogative pronouns
\begin{tabular}{|l|l|}
\hline Pronoun & Gloss \\
\hline ti, =ri & 'who' \\
\hline da, \(=\) da & 'what' \\
\hline neen & 'when' \\
\hline pwaneen & 'how many' \\
\hline
\end{tabular}

Interrogative pronouns \(t i\) 'who' and \(d a\) 'what' (discussed in depth in §6.5.2) contrast in terms of animacy. \({ }^{187}\) Both are simple clitics (as defined by Zwicky 1977); that is, they have full phonological word forms (§3.1.1) as well as enclitic forms (§3.1.2.6). The full forms occur primarily as predicate nominals and in equative constructions (§6.4.1), and in interrogative clefting (§6.5.2). The enclitic forms occur primarily as possessors (§4.1.2) and absolutive arguments (§6.2.3). Other contexts for these interrogative pronouns may vary between the full and encliticized forms.

The interrogative pronouns neen 'when' and pwaneen 'how many' do not occur in my corpus of natural discourse. Examples of neen 'when' from my elicitation and notes are shown in (192) and (193).
(192) Yome uya neen?
yo=me uya neen
2SG.SUBJ=IRR arrive when
'When will you arrive?'
overheard
(193) Paradiso, yome pe pwemwa, me neen, me neen?
[paradiso] yo=me pe= pwemwa me neen me neen
heaven.LN 2SG.SUBJ=IRR RECP= village IRR when IRR when 'Paradise, you will be my home, when, when?'

Paradiso

Examples of pwaneen 'how many' are shown in (194) and (195).
(194) Pwaneen naen? pwanena nae-n
how.many small.thing-3SG.POSS
'How many children does s/he have?'
Yal-07112011-TB1.wav - Yal-07112011-TB3.wav
(195) Yo kiyi pwaneen mani?
yo = kiyi pwanena mani
2SG.SUBJ= see.SPC how.many bird
'How many birds do you see?'
Yal-03102011-NT.wav

\footnotetext{
\({ }^{187}\) A similar distinction in animate/inanimate interrogative pronouns exists in Nêlêmwa (Bril 2002).
}

\subsection*{4.6 Number system and numerals}

There is evidence that Proto-Austronesian had a decimal number system, and many Austronesian languages maintain this system today. However, Oceanic languages are more heterogeneous (Bender \& Beller 2006:11), with Māori having a vigesimal (base-20) system (Best 1907), and many languages of Vanuatu having quinary (base-5) systems (Lynch et al. 2002:39). The number system in Belep, as in most of the New Caledonian languages (Lavigne 2012), is a combination quinary and vigesimal system, with unique words for \(1-5,10,15\), and 20 .

Cardinal and ordinal numerals (§4.6.1) are nouns in Belep (§3.2.1)-they can be marked with a determiner suffix (§4.4.2) and can serve as a case-marked argument of a clause (§6.3) or as the head of a relative clause (§7.3). Belep numerals can serve as both a head noun and as a modifier (§4.6.2) within the noun phrase (§4.5). The numeral pwalaic 'one' has grammaticalized as an indefinite article. Belep also uses a variety of numeral classifiers (§4.6.3) to count certain types of objects.

Today, the numerals 1-5 are learned and used by all Belep speakers. For numbers larger than 5, Belema normally use French numerals; the traditional system of Belep numeration is largely unknown to all but the oldest speakers. As such, there is disagreement among speakers as to the proper forms of numerals greater than 5 . Numbers greater than 20 are only recorded in Dubois (1975c). I have attempted to reconstruct them based on this manuscript and with the help of speaker THALE Nazaire.

\subsection*{4.6.1 Cardinal and ordinal numerals}

Table 8 shows the cardinal numerals from 1-20.

Table 57: Belep cardinal numerals, 1-20
\begin{tabular}{llll} 
Belep & Gloss & Belep & Gloss \\
pwalaic & 188 & tûnik nua pwalaic & \(11=10+1\) \\
pwadu & 2 & tûnik nua pwadu & \(12=10+2\) \\
pwajen & 3 & tûnik nua pwajen & \(13=10+3\) \\
pwalavaac & 4 & tûnik nua pwalavaac & \(14=10+4\) \\
pwanem & 5 & cînik & 15 \\
(pwanem) nua pwalaic \({ }^{189}\) & \(6=5+1\) & cînik nua pwalaic & \(16=15+1\) \\
(pwanem) nua pwadu & \(7=5+2\) & cînik nua pwadu & \(17=15+2\) \\
(pwanem) nua pwajen & \(8=5+3\) & cînik nua pwajen & \(18=15+3\) \\
(pwanem) nua pwalavaac & \(9=5+4\) & cînik nua pwalavaac & \(19=15+4\) \\
tûnik & 10 & ayaic \({ }^{190}\) & \(20=20 \times 1\) \\
& & & Yal-03102011-NT.wav
\end{tabular}

Table 58 shows my hypothesized reconstruction of the cardinal numerals greater than 20 based on Dubois (1975c).

Table 58: Belep cardinal numerals, above 20

\section*{Belep}
ayaic nua pwalaic
ayaic nua pwanem nua pwalaic
ayaic bwaar tûnik \({ }^{191}\)
ayaru
ayacen
ayavaac
ayanem
ayanem bwaar ayaic
ayanem bwaar ayavaac bwaar tûnik
tûnik âjek
cînik âjek
ayaic âjek

\section*{Gloss}
\(21=20 \times 1+1\)
\(26=20 \times 1+5+1\)
\(30=20 \times 1+10\)
\(40=20 \times 2\)
\(60=20 \times 3\)
\(80=20 \times 4\)
\(100=20 \times 5\)
\(120=20 \times 5+20 \times 1\)
\(190=20 \times 5+20 \times 4+10\)
\(200=10 \times 20\)
\(300=15 \times 20\)
\(400=20 \times 20\)

These numerals are used to count most types of entities (see \(\S 4.6 .3\) for exceptions).

\footnotetext{
\({ }^{188}\) In Balade Nyelâyu, a quantifier \(p w a\) - is used for fruit and round things (Ozanne-Rivierre 1998). It is likely that the Belep forms beginning with \(p w a\) - and \(p w a l a\) - are etymologically related to this quantifier; however, Belep \(p w a\) - is not a quantifier - numerals containing \(p w a\) - can be used to count any type of object.
\({ }^{189}\) The free verb nua 'to leave' is used here to indicate addition. Speakers disagree as to whether it is necessary to include \(p\) wanem 'five' in numerals between 5 and 10 . The form âdenem (§4.3.3) can also substitute for pwanem in these numerals. Some speakers may also use linker ka (§7.1.2) before nua in the numerals where it appears.
\({ }^{190}\) The form ayaic 'twenty' is in fact a numeral classifier (§4.3.3), as are other forms beginning with aya-.
\({ }^{191}\) If a number greater than 9 is being added, bwaa-r 'head-3GNR.POSS' is used to indicate addition instead of nua 'to leave'. It is produced as [" \({ }^{\mathrm{b}}{ }^{\text {wara }}\) ], the incompletive phase of bwaar ( \(\$ 2.3 .3 .2\) ).
}

Ordinal numerals in Belep are formed with the derivational proclitic \(b a=\) 'ORD' (§3.5.1.1), as shown in Table 59. The ordinal proclitic is incompatible with pwalaic 'one' (which is also used to mean 'first'), and it is not usually used with numbers larger than 5.

Table 59: Ordinal numerals
Belep Gloss
ba pwadu second
ba pwajen third
ba pwalavaac fourth
ba pwanem fifth
ba toven last (lit. 'ORD= finish')

\subsection*{4.6.2 Numerals in discourse}

As nouns, numerals may be used as arguments of a clause, as predicate nominals, and as topicalized NPs. For example, in (196), the cardinal numeral pwalaic 'one' serves as the absolutive argument (§6.2.3) of the negative existential verb âria (§6.4.2).
(196) Âria pwalaic ki molep âria pwalaiyi=xi molep NEG.EX one=REL be.alive 'There wasn't a single one alive.'

> Yal-28072010-BGMCG-sousmarin_0106

In (197), the noun phrase headed by ordinal numeral ba pwadu 'second' is marked as in the genitive case (§6.3.3).
(197) Ô tame li ba pwadu gawaar,
\begin{tabular}{lllll}
\(\hat{\mathbf{o}}\) & ta=me=li & ba= & pwadu & gawaar \\
REAL & go.UH=CTP=GEN & ORD \(=\) & two & day
\end{tabular}
'The second day came,'
Yal-28072010-BGMCG-tayamu_0169
In (198), the cardinal numeral pwanem 'five' acts as a predicate nominal (§6.4.1).
(198) Pwanem naen. pwanema nae-n
five small.thing-3SG.POSS
'He had five children.'
Yal-20092011-AW1_0013

In (199), the ordinal number ba pwajen 'third' acts as the topic of the clause (§6.8.1).
(199) Ka ba pwajen, ka Jegoloc.
ka ba= pwajen ka Jegoloc LK ORD= three LK Jegoloc 'And the third one, [she was] Jegoloc.'
Yal-20092011-AW1_0020

Within a noun phrase (§4.5), the first noun always serves as the head. As such, numerals can serve both as the head of an NP with other nominal modifiers, or as modifiers of head nouns. These two constructions differ in meaning. If the numeral acts as the head noun, it has a descriptive function for a Given referent. For example, in (200), the numeral pwajen 'three' is the head of the noun phrase pwajen âju 'three people' (indicated with \(\}\) ), which provides a description of a Given referent.
(200) Mo pwai pwajen nilen ai ? Pwajen nilen. Pwajen âju. mo pwai pwajen=i-len ei pwajen=i-len \(\quad\{p w a j e n a ~ a ̂ j u\} ~\) LK3 only three=GEN-3TR.ABS or three=GEN-3TR.ABS three person 'But there were only three of them, you know? Three of them. Three people.' Yal-20092011-AW6_0156-0157

In (201), the numeral pwalaic 'one' is the head of the noun phrase \(p\) walaic ola 'one lobster', which provides a description of the Given referent.

\section*{(201) Avexa migi pwalaic. Pwalaic ola. ave=xa migi pwalaic \{pwalaiya ola\} \\ 1DU.EXCL.SUBJ=ADD catch one one shellfish 'And we caught one. One lobster.'}

Yal-28072010-BGMCG-tahitian_0049-0050
More commonly, when the numeral is used as a modifier following the head noun, it indicates that the referent it modifies is New information. For instance, in (202), the noun phrase containing a numeral, âju pwadu 'two people', is New information; the numeral follows the head noun as a modifier.
(202) Yena, âju lier ka âju pwadu.
yena âju=li-er ka \{âju pwadu\}
now person=GEN-3SG.ABS LK person two
'Now, his courtiers, there were two.'
Yal-20092011-AW6_0056
In (203), the numeral pwajen 'three' modifies the head noun âju 'person', whose referent is New information.
(203) "He, âju pwajen! Lenyiik bwa mo lexeng." \{âju pwajen\} lenyii-k bwa= mo=lexeng» person three DEM.PA-DET.D.PRX CONT= live=LOC.DC "'Hey, three people! These three are living here.""
Yal-20092011-AW6_0147

The numeral pwalaic 'one' has grammaticalized into an indefinite article when it is used to modify another noun, an unsurprising development since it marks New information when used in this position. For example, in (204), pwalaic 'one' is used twice as an indefinite article, first in the noun phrase gawaar pwalaic 'one day', and then again in the noun phrase ulac pwalaic 'one old man'.
(204) Gawaar pwalaic, te mo la ulac pwalaic ya Poc.
\{gawara pwalaic\} te \(=\quad\) mo=la \(\quad\) \{ulaya pwalaiy \(=\mathbf{a}\) Poc day one 3 SG.SUBJ= live=NOM old.man one=LOC Poc 'Once upon a time (lit. 'one day'), there lived an old man in Poc.' Yal-28072010-BGMCG-lune_0003-0004

The Belep numerals are also used in the names for days of the week (Table 60), and may also be used to identify months. See also §6.10.

Table 60: Days of the week
\begin{tabular}{|l|l|}
\hline Belep & English translation \\
\hline bwera pwalaic & 'Monday' (lit. 'day one') \\
\hline bwera pwadu & 'Tuesday' (lit. 'day two') \\
\hline bwera pwajen & 'Wednesday' (lit. 'day three') \\
\hline bwera pwalavaac & 'Thursday' (lit. ‘day four') \\
\hline bwera pwanem & 'Friday' (lit. 'day five') \\
\hline bwe cavaro & 'Saturday' (lit. 'Sabbath day') \\
\hline bwe cexeen & 'Sunday' (lit. 'sacred day') \\
\hline
\end{tabular}

Not all numerals used in Belep discourse are etymologically numerals. In casual and playful speech environments, speakers tend to use several numerals which have been coined since European colonization. These numerals are somewhat numerological in character and combine both Belep and French elements. They originate from the practice of playing bingo. Some examples are shown in Table 61.

Table 61: Bingo numerals
\begin{tabular}{|l|l|l|}
\hline Numeral & Gloss & Origin \\
\hline \begin{tabular}{l} 
apo vingt \\
apo trente, etc.
\end{tabular} & 20 & French vingt 'twenty', trente 'thirty', etc. \\
\hline nono & 24 & \\
\hline covan & 25 & \begin{tabular}{l} 
covan 'horse', from French cheval \\
25 was the number of a famous racehorse in Belep
\end{tabular} \\
\hline ulac & 90 & ulac 'to be old' \\
\hline
\end{tabular}

Other examples include the use of French petit 'small' before French numbers less than 10, as in example (205), and French coller for multiples of 11, as in (206).
(205) petit deux
[peti \({ }^{\text {n }} \mathrm{d}\) ]
little two
'2'
(206) coller quatre
[kole katr]
glue four
'44'

\subsection*{4.6.3 Numeral classifiers}

Not all objects may be counted using the cardinal numbers (§4.6.1). Belep, like many Oceanic languages (Lynch et al. 2002) has several numeral classifiers, which are used for counting specific types of objects. They are shown in Table 62.

Table 62: Numeral classifiers
\begin{tabular}{ll} 
Classifier & \begin{tabular}{l} 
Used to count... \\
people
\end{tabular} \\
âde- & âôra- \\
instances \\
aya- & sets of 20 objects \\
go- & sets of 10 pieces of sugar cane \\
manyina- & sets of 6 yams \\
puâna- & baskets of yam seedlings \\
*âdala- \({ }^{192}\) & branches \\
*âvâna- & armlengths \\
*dabo- & coconuts \\
*îdana- & \begin{tabular}{l} 
rows of yams in a field \\
*juna-
\end{tabular} \\
strings of fish, clams \\
*puna- & \begin{tabular}{l} 
strings of fish
\end{tabular}
\end{tabular}

It seems likely that the numeral classifiers derive etymologically from nouns (§4.1), given their phonological similarity in some cases to nouns with related meanings. \({ }^{193}\)

However, they are peripheral members at best of the noun word class. Though they are able to serve as an argument or topic of a clause, they are incompatible with all nominal morphology save for the numeric determiner clitics which obligatorily follow them (Table 63).

Table 63: Numeric determiners
Determiner Gloss
ic, \(=\) ic one
tu, \(=\mathrm{ru} \quad\) two
cen three
=vaac four
nem, \(=\) nem five
The numeric determiners shown in Table 63 are classified as simple clitics (Zwicky

\footnotetext{
\({ }^{192}\) Many numeral classifiers, marked with (*), have fallen out of use and are only recorded in the manuscripts of Dubois (1975c) and Neyret (1974d); I have attempted to reconstruct them here. Several of the other numeral classifiers are used today only in the formal register of la coutume (§1.2.1). Only âdeand \(\hat{a} o ̂ r a\)-appear in my corpus.
\({ }^{193}\) For example, the classifier âde- for people bears some similarity to the class 4 noun \(\hat{a j u}\) 'person'. The class 1 noun goa- 'cord (of wood, sugar cane, etc.)' corresponds to the numeral classifier go- for cords of sugar cane. The class 1 noun \(\hat{a d a}\) - 'branch' corresponds to the numeral classifier âdala- for branches. The class 1 noun îda- 'line, row' corresponds to the numeral classifier îdana- for rows of yams.
}
1977), given that they have both free \({ }^{194}\) and bound forms, which vary unpredictably depending on the numeral classifier they follow. Numeric determiners do not occur except following a numeral classifier.

Some examples of numeral classifiers in discourse are shown in (207) and (208). In (207), the numeral classifier for people, âde-, is followed by the numeric determiner \(=i c\) 'one'.

\section*{(207) Âdeic, naran ni Keyau. âde=ic nara-n=i \\ CL.person=one name-3SG.POSS=GEN \\ Keyau \\ Keyau 'One person, her name was Keyau.'}

Yal-28072010-BGMCG-tayamu_0057
In (208), the numeral classifier âora-, used for a number of times or instances, is
followed by the numeric determiner \(=i c\) 'one'.

\section*{(208) Laxa keja âôraic ya laxeda, \\ \begin{tabular}{llll}
\(\mathbf{l a}=\mathbf{x a}\) & keja & & \begin{tabular}{l} 
âôra=iy=a \\
3PL.SUBJ=ADD
\end{tabular} \\
run & la-xeda \\
CL.instance=one=NOM & DEM.PL-DET.UH
\end{tabular} \\ 'And the ones up there ran one time.' \\ Yal-28072010-BGMCG-igname_0068-0069}

Table 64 shows a few more examples of noun phrases composed of numeral classifiers plus numeric determiners.

Table 64: Numeral classifier NPs

\section*{Belep}
goic 'one cord'
goic ûjep 'one cord of sugar cane'
goru ûjep 'two cords of sugar cane'
go cen ûjep 'three cords of sugar cane'
govaac ûjep 'four cords of sugar cane'
gonem ûjep 'five cords of sugar cane'

\section*{Belep Gloss}
âôraic 'once, one time, first time'
âôra tu 'twice, two times, second time' âôra cen 'three times, third time' âôravaac 'four times, fourth time' âôranem 'five times, fifth time'

\footnotetext{
\({ }^{194}\) It is likely that these determiners originate from the proto-forms of the cardinal numerals. In Yuanga (a sister language of Belep within the Far North subgroup; see §1.4), the cardinal numerals are \(x e^{~ ' ~} 1\) ', cu '2', kon '3', pa '4', nim '5' (Lavigne 2012:39).
}

\subsection*{4.7 Summary}

In this chapter, I have presented the Belep word class of nouns and their associated morphology. Belep nouns are divided into four noun classes (§4.1) based on the allomorphy of the possessive inflections they are compatible with. Though there is no inflectional number marking, quantity of a noun may be indicated by suffixes (§4.2). Nouns may be marked for a variety of discourse-relevant characteristics using determiner suffixes (§4.3). Noun phrases (§4.4) consist of a head noun followed by any modifying nouns, which may include numerals (§4.6). Pronouns (§4.5) may substitute for nouns.

\section*{Chapter 5 Verbs and the verb group}

\subsection*{5.0 Introduction}

Predicates in unmarked clauses are clause-initial in Belep (§6.1). Prototypically, these predicates are verbal (see \(\S 6.4\) for exceptions). Verbs may be intransitive (§5.1.1, §5.1.2)-varying by whether their argument is required to be in the nominative (§6.3.2) or absolutive (§6.3.1) case-or transitive (§5.1.3) with either a free or a bound root. The verb word may be modified by a number of inflectional suffixes indicating valency (§5.1.5), the specificity of the absolutive argument (§5.1.4), and the animacy of the absolutive argument (§5.1.5); anaphoric inflectional verbal suffixes also index the person and number of the absolutive argument (§5.6).

The verb word is also prototypically preceded by a host of clitics (§3.1.2.6) which modify its meaning in terms of valence ( \(\S 5.3\); also see \(\S 3.3\) and \(\S 3.5\) ), aspect (§5.4), modality (§5.5), \({ }^{195}\) and subject agreement (§5.7), common categories expressed by morphological inflection in many languages (Bybee 1985). As is typical for proclitics in Belep, these verbal modifiers behave as individual phonological words separate from the verb word (§3.1.1), though together the verb word and all its modifying suffixes and

\footnotetext{
\({ }^{195}\) Belep has no morphological tense. If necessary, tense may be expressed periphrastically with temporal nouns (§6.9).
}
proclitics form one single grammatical word (§3.1.2) with a number of position classes. Other scholars of New Caledonia have not typically used the term 'proclitic' in the description of verbal morphology: Bril (2002) and Ozanne-Rivierre et al. (1998) refer to aspect markers as "morphemes" (Bril 2002: 198) or "particles" (Ozanne-Rivierre et al. 1998: 50). The subject agreement markers are referred to as "indices" (Bril 2002: 88, Ozanne-Rivierre et al. 1998: 50).

In this work, the constituent that consists of the verb word and its various modifying suffixes and proclitics will be called a verb group (§5.2), a term which is also used by Ozanne-Rivierre et al. (1998: 40) for Balade Nyelâyu. A larger syntactic constituent verb phrase (as traditionally defined; see Givón 2001) also exists in Belep (§5.10); it minimally contains a verb group but may also contain an absolutive noun phrase and a number of inflectional enclitics indicating direction (§5.11) and location (§5.12).

\subsection*{5.1 The verb word}
'Verb' is a coherent lexical category in Belep with several prototypical characteristics (as discussed in §3.2.2). Belep verbs can be classed into intransitive and transitive types. Intransitive verbs can be further subdivided into those which require a nominative argument (§5.1.1) and those which require an absolutive argument (§5.1.2). This is a split-S system; see \(\S 6.2\). Transitive verbs have two classes, free (§5.1.3.1) and bound (§5.1.3.2). Free transitive verbs and absolutive-intransitive verbs are inflected to agree with their absolutive argument in specificity (§5.1.4). Most transitives and some intransitives can also be marked inflectionally to agree with their absolutive argument in
animacy (§5.1.6). This section will also discuss inflectional valence-changing operations in Belep (§5.1.5).

\subsection*{5.1.1 Intransitive verbs with a nominative argument}

Prototypical intransitive verbs in Belep require their argument to be in the nominative case (§6.3.2), thus acting as the subject of the clause (§6.2.1). For example, in (1), the intransitive verb \(t u\) 'go.DH' has a single argument, âju 'person', marked as nominative. \({ }^{196}\)
```

(1) te tume la âju,
te= tu=me=la âju
3SG.SUBJ= go.DH=CTP=NOM person
'a person came,'

```

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In example (2), where the intransitive verb is \(t a\) 'go.UH', there is no nominal subject; instead, the subject is indexed with a subject agreement marker ave \(=(\S 5.7)\).

\section*{(2) aveô ta, \\ ave=ô ta \\ 1DU.EXCL.SUBJ=REAL go.UH \\ 'we went up,'}

Yal-28072010-BGMCG-tahitian_0139
Lexically intransitive verbs with a nominative argument include property concepts (3) and stative verbs(4) as well as many active verbs (5). In (3), the intransitive verb is kop 'to be white-haired', and the subject bwaang 'my head' is marked as nominative with \(=a\) ' NOM '. The subject agreement marker \(t e=\) ' 3 SG.SUBJ' is the first element in the verb group.

\section*{(3) Teô kop va bwaang. te=ô kov=a bwaa-ng \\ 3SG.SUBJ=REAL be.white.haired=NOM head-1SG.POSS \\ 'My hair is white.' (lit. 'my head has become white-haired')}

Yal-28072010-BGMCG-tayamu_0154

\footnotetext{
\({ }^{196}\) The nominative case marker \(=l a\) or \(=a(\) discussed in \(\S 4.6)\) is a ditropic clitic (§3.1).
}

In (4), the intransitive verb is kôe 'to be tired', and it is modified by the subject agreement marker \(t e=\) ' 3 SG.SUBJ'. The subject camala 'their father' is marked as nominative with \(=l a\) 'NOM'.

\section*{(4) Teô kô̂, kôê la camala.}
te=ô kôê kôê=la cama-la
3SG.SUBJ=REAL be.tired be.tired=NOM father-3PL.POSS
'He was tired, tired their father was.'
Yal-20092011-AW1_0024

In (5), the intransitive verb is keja 'run', modified by the subject agreement marker ave=
'1DU.EXCL.SUBJ'.
(5) ave keja ka najier ra na yali, ave= \(\quad\) keja=xa naji-er=a na ya-li 1DU.EXCL.SUBJ run=LK let-3SG.ABS=LOC interior DEM.LOC-DET.A.PRX 'we ran and left \({ }^{197}\) him in that place,'

Yal-28072010-BGMCG-tahitian_0275
Many intransitive verbs can be transitivized with stem modification (§5.1.5.1). Many
others can be transitivized with the suffix -li (§5.1.5.2).

\subsection*{5.1.1.1 Bound intransitives}

Some Belep intransitive verbs lack an uninflected free form. Unlike bound transitives (§5.1.3.2), these verbs must either appear with a spatial directional enclitic (§5.11) or with the suffix \(-r{ }^{\text {' } N D R}{ }^{\prime 198}\) indicating that the verb is unmarked for direction. This situation is reminiscent of Ajië (Fontinelle 1976), where there are a number of verbal 'prefixes' which mark position or manner.

\footnotetext{
\({ }^{197}\) Belep distinguishes between nawee 'to leave sth., to put sth. down' and najie 'to leave sb., to let sb. do sth.' Throughout this text, nawee is glossed 'leave' and najie is glossed 'let'.
\({ }^{198}\) This suffix \(-r\) 'NDR' bears a resemblance to the 3GNR.POSS nominal suffix \(-r\) used to indicate a generic possessor (§4.1.2.2). Like some nouns (§4.1.2.3), these bound intransitive verbs undergo stem modification depending on whether they take the NDR suffix or a directional enclitic.
}

Only a few of these bound intransitives in Belep have been identified. One example is the verb noo-r 'to wake up' (6).
(6) Te noor, ai, yer bwa mae.
te= noo-r ai yera bwa= mae
3SG.SUBJ= be.awake-NDR no 3SG.INDEP CONT= sleep
'She woke up, no, I mean she was still sleeping.'
Yal-28072010-BGMCG-tayamu_0104
If noo-r is modified with a directional enclitic, its meaning is bleached to 'to peer, look' as in (7) and (8).
(7) Avexa noda, kiyi digi,
ave=xa no=da kiyi digi
1DU.EXCL.SUBJ=ADD peer-DIR.UH see.SPC canoe
'And we peered up and saw the canoe,'
Yal-28072010-BGMCG-tahitian_0186
(8) nodu la wexaac ma leme kiyi mar, no=du=la wexaac ma le=me kiyi mar peer=DIR.DH=LOC ocean LK4 3DU.SUBJ=IRR see.SPC intertidal.zone '[they] looked down to the ocean so they would see when low tide came,'

Yal-28072010-BGMCG-tayamu_0023
Another example of a bound intransitive verb is cuu-r 'to stand' (9).
(9) Teô cuur ra ulayili.
\(\begin{array}{lll}\boldsymbol{t} \boldsymbol{e}=\hat{\boldsymbol{o}} & \boldsymbol{c} \boldsymbol{u} \boldsymbol{u}-\boldsymbol{r}=\boldsymbol{a} & \boldsymbol{u l a y i - l i} \\ \text { 3SG.SUBJ=REAL } & \begin{array}{l}\text { stand-NDR=NOM } \\ \text { old-DETA.PRX }\end{array}\end{array}\)
'The old man stood up.'
Yal-28072010-BGMCG-tahitian_0208

This verb also occurs in cuda âvan 'swamp harrier (Circus approximans)', the name of a bird whose wings are raised while hunting (10).
(10) cuda âvan
cu=da âva-n
stand=DIR.UH wing-3SG.POSS
lit. 'his wings are standing up'
More research is necessary to make a comprehensive list of the bound intransitive verbs in Belep.

\subsection*{5.1.2 Intransitive verbs with an absolutive argument}

A few intransitive verbs in Belep require their argument to be in the absolutive case (which is unmarked; see §6.3.1), creating a split-S system (§6.2.2) as defined in Dixon (1994). Some examples of these verbs are shown in Table 65. Note that other such verbs may exist, though they are uncommon.

Table 65: Predicates requiring an absolutive \(S\) argument
\begin{tabular}{|l|l|}
\hline Predicate & Gloss \\
\hline âria & 'NEG.EX' \\
\hline bwara & 'to be missed, hoped for' \({ }^{199}\) \\
\hline ciae, cia \({ }^{200}\) & 'NEG.LOC' \\
\hline era & 'PRED.LOC' \\
\hline ivi, iva & 'to be where?'' \\
\hline mwanya & \begin{tabular}{l} 
'to be many, to be \\
overpowering \({ }^{201}\)
\end{tabular} \\
\hline mwanyi & 'to be ignorant' \({ }^{202}\) \\
\hline tu \(^{203}\), tuya & 'EX' \\
\hline
\end{tabular}

Examples (11) - (15) show instances of the use of these absolutive-intransitive verbs. In (11), the nominal S argument wagaji 'our boat' is unmarked in the absolutive case.
(11) "Ka ivi waga-ji?"
ka ivi waga-ji

LK be.where.SPC boat-1DU.INCL.POSS
""And where is our boat?"
Yal-01082010-MFD_0016

In (12), the nominal \(S\) argument \(\hat{u j e n}\) 'his power' is unmarked in the absolutive case.

\section*{(12) Teâ Pûnivaac, mwanya ûjen.}

Teâ Pûnivaac mwanya ûje-n
chief Pûnivaac many kidney-3SG.POSS
'Teâ Pûnivaac, his power was strong. \({ }^{204}\)
Yal-20092011-AW5_0005

\footnotetext{
\({ }^{199}\) As in bwara nabwa mae [hope place sleep] 'I miss my old bed.'; bwara wee-ng [hope food-1SG.POSS] 'I wish I could eat it.'
\({ }^{200}\) Some of these intransitive verbs are obligatorily inflected for the specificity of their argument; see §5.1.4 below for more information.
\({ }^{201}\) As in mwanya câbuk [lots cold] 'It's really cold.'; mwanya âju [lots people] 'There are lots of people.'
\({ }^{202}\) As in mwanyi-nao [ignorant-1SG.ABS] 'I don't know.'
\({ }^{203} t u\) 'EX' is a bound root, used before an absolutive noun phrase. It can occur in a free form as \(t u-u\).
\({ }^{204}\) The word \(\hat{u} j e\) - 'kidney' also means 'power, strength' by metaphorical extension.
}

In (13), the absolutive noun phrases \(O r\) 'Or phratry' and Waap 'Waap phratry' (see §1.2) are the \(S\) arguments of the verb tuya 'EX.GNR' (see §5.1.4 on specificity).

\section*{(13) Ka tuya Or, ka tuya Waap.}
ka tuya or ka tuya waap
LK EX.GNR spill LK EX.GNR topple
'And there is Or [phratry], and there is Waap [phratry].'
Yal-20092011-AW3_0012
When the S argument is indexed by an anaphoric pronominal element, an absolutive
suffix (§5.6) is used. In example (14), the suffix \(-e\) ' 3 SG.ABS' is used on the intransitive verbs iva 'to be where?' (inflected for specificity; see §5.1.4) and cia 'NEG.LOC'.
(14) «Ivie ? » Ô ciae. ivi-e \(\hat{\mathbf{o}} \quad\) cia-e be.where.SPC-3SG.ABS REAL NEG.LOC-3SG.ABS "'Where is he?" He wasn't there.'

Yal-28072010-BGMCG-tahitian_0178
In (15), the suffix -len ' 3 TR.ABS' is used on the intransitive verb cia 'NEG.LOC'.

\section*{(15) Toma len, cialen,}
toma len cia-len
but 3PA.INDEP NEG.LOC-3PA.ABS
'But they, they weren't there,'
Yal-20092011-AW6_0161

Intransitive verbs requiring an absolutive argument share most prototypical characteristics of verbs (§3.2.2). However, they are incompatible with most deverbal derivational morphology. Derivational proclitics such as \(\hat{a}=\) and \(w a=\) (§3.5.2) are ungrammatical when used with an absolutive-intransitive verb, as in (16) and (17), and these verbs are also incompatible with the valence proclitics (18) (see §5.3).

> *â ciae
> \(\hat{\mathbf{a}=}\) cia-e
> AGT= NEG.LOC-SPC
> '*one who isn't there'
```

(17) *wa tuya
wa= tuya
RESULT= EX.GNR
'*way of existing'

```

Yal-22092011-TB.wav
(18) *pa âria
pa= âria
CAUS= NEG.EX
'*to cause not to exist'
Yal-22092011-TB.wav
Absolutive-intransitive verbs are also incompatible with subject agreement proclitics
(§5.7). For example, in (19), the negative existential verb âria 'NEG.EX' occurs without any subject agreement marker; to use one would be ungrammatical (20).
(19) Âria ola.
âria ola
NEG.EX lobster
'There weren't any lobsters.'
Yal-28072010-BGMCG-tahitian_0032
(20) \({ }^{*} T e\) âria ola.
*te= âria ola
3SG.SUBJ= NEG.EX lobster
*‘There weren't any lobsters'
The absolutive-intransitive verbs can be marked for specificity (§5.1.4) and characteristics of the absolutive argument (§5.1.6), as well as with absolutive suffixes (§5.6), and aspect (§5.4) and mood (§5.7) inflections. Verb phrases using an absolutiveintransitive verb can contain verb phrase enclitic locationals (§5.12).

\subsection*{5.1.3 Transitive verbs}

Prototypical transitive verbs in Belep require their subject to be in the nominative (§6.3.2) or genitive (§6.3.3) case (see §6.2.2) and their semantic patient to be in the absolutive case (§6.3.1); that is, unmarked. Transitive verbs are obligatorily marked to agree with their subject in person and number (with a few exceptions, discussed in §5.7). They can be divided into two classes: 1) free verb roots; and 2) bound verb roots. Free
verb roots are obligatorily inflected for the specificity of their absolutive argument (§5.1.4). Both free and bound verb roots can be detransitivized with \(-u\) (§5.1.5.3).

Transitive verbs may be differentially marked to index some of the characteristics of their absolutive argument (§5.1.6). \({ }^{205}\)

\subsection*{5.1.3.1 Free transitives}

Many transitive verbs in Belep have free roots. Belep speakers may give these forms as citation forms, and they also appear in clauses. A partial list of such verbs is shown in Table 68. Note that most free verbs end in \(/ \mathrm{a} /\).

Table 66: Free transitive verbs
\begin{tabular}{llll} 
Free verb & Gloss & Free verb & Gloss \\
âbwa & 'to lift' & \begin{tabular}{l} 
pajela \\
'to question'
\end{tabular} \\
âva & 'to fish' & pera & 'to collect' \\
âya & 'to feel, touch' & pora & 'to massage' \\
buya & 'to obey' & pua & 'to open' \\
cevera & 'to push' & puya & 'to uncover' \\
cibia & 'to turn over' & pûnu & 'to strike (the sails)' \\
cibwa & 'to throw' & pwaxa & 'to wash' \\
coba & 'to hide (from)' & tabwa & 'to attach' \\
cola & 'to relax', & tada & 'to slap', \\
êna & 'to know' & tâna & 'to hear' \\
îna & 'to make' & tawa, tiawa, teawa & 'to cut' \\
karo & 'to shave' & taxa & 'to unearth' \\
kera & 'to brush' & tera & 'to stop' \\
kiya & 'to see' & teva & 'to peel' \\
mija & 'to pinch' & tia & 'to pierce' \\
niva & 'to lose track of' & tua & 'to detach' \\
nua & 'to leave' & waba & 'to jiggle' \\
pa & 'to take' & yala & 'to shake'
\end{tabular}

\footnotetext{
\({ }^{205}\) Transitive verbs in Nêlêmwa (Bril 2002) are categorized in terms of whether they are 1) 'exclusively transitive', with inflectional suffixes that vary based on inanimate/indeterminate vs. animate/determinate; 2) 'transitivized', with inflectional suffixes that vary based on intransitive vs. transitive; or 3) 'transitivized', with inflectional suffixes that vary based on intransitive vs. indeterminate vs. human/determinate. These alternations generally involve vowel alternation or suffixation of \(-e,-i\), or \(-u\) to the verb stem.
}

Free transitive verbs are obligatorily inflected for the specificity of their absolutive argument (§5.1.4). The forms in Table 68 are the generic forms of the free verbs, but their specific forms may also be given as citation forms.

Some examples of free transitive verbs are shown in (21) - (23). In (21), the generic form of the verb êna 'to know' is used without an overt absolutive argument. It is marked to agree with its 3 DU subject.
(21) Lê̂, leô êna.
\begin{tabular}{ll}
\(\mathbf{l e}=\hat{\mathbf{o}}\) & \(\mathbf{l e}=\hat{\mathbf{0}}\) \\
3DU.SUBJ=REAL & 3DU.SUBJ=REAL know.GNR
\end{tabular}
'They, they knew.'
Yal-28072010-BGMCG-tayamu_0141
In (22), the generic form of the verb pa 'to take' is used with the absolutive nominal ween nole 'her meal of fish'. The subject agreement proclitic is omitted (§5.7).
(22) Ô pa ween nole, \(\hat{0}\) pa wee-na no-le
REAL take.GNR food-3SG.POSS fish-ADU
'[She] took her meal of fish,'
Yal-20092011-AW1_0111

In (23), the verb tabwa 'to attach' occurs in its specific form in line 1 with the suffix \(-e\) 'SPC' (§5.1.4) and the absolutive nominal kô bolao 'banana petiole'. In line 2, it appears with the pronominal absolutive suffix \(-\operatorname{er}(\S 5.6 .2)\).

La tabwae kô bolao la bwe buâny,
\(\mathbf{l a}=\) tabwa-e kô bolao=la bwe buâny
3PL.SUBJ= attach-SPC petiole banana.tree=LOC top stone
ka tabwaer ra bwe nao,
ka tabwa-er=a bwe nao
LK attach-3SG.ABS=LOC top line
'They attached a banana leaf stalk to a stone, and attached it to the fishing line,'
Yal-28072010-BGMCG-hamecon_0023-0024

See §5.1.4 for the difference between generic and specific free transitives. The differential absolutive suffixes \(-n\) and \(-a\) (§5.1.6) attach only to the specific form of free transitives. The detransitivizer \(-u\) (§5.1.4.3) attaches only to the generic form of free transitives.

\subsection*{5.1.3.2 Bound transitives}

A vast number of Belep transitive verbs lack an uninflected free form. Unlike in bound intransitives (§5.1.1.1), the verb root must be followed by a pronominal absolutive suffix (§5.6), a differential absolutive suffix (§5.1.6), or an absolutive noun phrase. In citation form, Belep speakers attach the absolutive suffix -e '3SG.ABS’ (§5.6.2) to the bound root; this is how these verbs will be cited in this text. A partial list of these bound roots is shown in Table 67.

Table 67: Inherently bound transitive verb roots
\begin{tabular}{|c|c|c|c|}
\hline Bound root & Gloss & Bound root & Gloss \\
\hline bage & 'to rub' & padi & 'to show' \\
\hline be & 'to beat' & paye & 'to set down' \\
\hline ca & 'to drag' & pi & 'to cook (in a pot)' \\
\hline cagani & 'to mix' & pinye & 'to make (a fire)' \\
\hline cebe & 'to suspect' & piyi & 'to delouse' \\
\hline cêbone & 'to moon, expose the buttocks' & po & 'to load' \\
\hline cêmwe & 'to gut' & pwagi & 'to tense' \\
\hline cili & 'to throw straw onto a roof' & pwede & 'to turn' \\
\hline ciwi & 'to bury' & tabo & 'to hit a target' \\
\hline co & 'to count' & tabua & 'to break' \\
\hline gi & 'to attack' & tale & 'to cover with a cloth' \\
\hline îbi, ôbi & 'to gather' & taxe & 'to distribute' \\
\hline iwi & 'to scrub' & te & 'to close, plant' \\
\hline iye & 'to peel' & texe & 'to cradle' \\
\hline ji, di & 'to give' & tiwi & 'to push (a car), put on (clothes)' \\
\hline kâye & 'to keep, guard' & tixi & 'to sew' \\
\hline kele & 'to scoop' & tu & 'to find' \\
\hline kewe & 'to chase' & turowi & 'to insult' \\
\hline maji & 'to send' & turu & 'to hide' \\
\hline migi & 'to touch, hold' & uli & 'to pour' \\
\hline mini & 'to braid' & wâdi & 'to whip, beat up' \\
\hline naji & 'to leave' & wi & 'to sharpen' \\
\hline nawe & 'to leave' & yaxe & 'to expire, wait too long' \\
\hline ngini & 'to not see, miss' & yaye & 'to ripen' \\
\hline
\end{tabular}

A few examples of bound verbs are given in (34), where the absolutive argument of the verb migie 'to touch, hold' is a full noun phrase; and in (25), where the absolutive argument of the verb kewee 'to chase, hunt' is indexed by a pronominal suffix.
(24) te migi buâny,
te= migi buâny
3SG.SUBJ= hold stone
'he was holding a stone,'
Yal-20092011-AW1_0254
(25) Naxa kewee.
na=xa kewe-e
1SG.SUBJ=ADD chase-3SG.ABS
'And I chased him.'
Yal-28072010-BGMCG-tahitian_0075

\subsection*{5.1.3.3 Irregular transitives}

Some transitive verbs in Belep do not fit clearly into either the free (§5.1.3.1) or bound (§5.1.3.2) categories. One example is \(u e\) 'to suck', whose form is \(u\) before a noun phrase (this behavior resembles a bound verb) and \(u a\) before an absolutive suffix (this resembles a free verb). Another example is that of wayule 'to plow' and \(p u\) 'to pick [a plant]', which do not inflect for specificity, being invariant before noun phrases and pronominal suffixes (like bound verbs), but which also have free forms. More research remains to be done on identifying and classifying such irregular verbs.

\subsection*{5.1.4 Inflection for specificity}

Some Belep verbs are obligatorily marked to indicate the specificity of their absolutive argument; that is, these verbs have both a generic and a specific form. Verbs which undergo this inflectional process include most free transitive verbs (§5.1.3.1) and some intransitive verbs whose argument is absolutive (§5.1.2). In most cases, the addition of the suffix \(-e\) 'SPC' to the generic form indicates specificity. \({ }^{206}\) Other generic/specific verb pairs are irregular. A partial list of generic and specific forms for verbs is shown in Table 68.

\footnotetext{
\({ }^{206}\) I hypothesize that the specific marker \(-e\) originated as the 3 SG.ABS pronoun \(-e(\S 5.6)\), since it does not ever occur in sequence with this pronoun. It does, however, co-occur with all other pronouns and before absolutive noun phrases, so in these cases it can no longer be said to serve a pronominal function.
}

Table 68: Inflection for specificity
\begin{tabular}{|l|l|l|c|c|}
\hline Generic & Specific & Gloss & \begin{tabular}{c} 
Transitive/ \\
Intransitive
\end{tabular} & Irregular? \\
\hline âbwa & âbwae & 'to lift' & TR & \\
\hline âya & âyae & 'to feel, touch' & TR & \\
\hline ba, bae & bae & 'to eat' & TR & irreg. \\
\hline buya & buyae & 'to obey' & TR & \\
\hline cia & cia, ciae & 'NEG.EX' & NTR & irreg. \\
\hline coba & cobae & 'to hide (from)' & TR & \\
\hline êna & ênae & 'to know' & TR & \\
\hline îna & înae & 'to make' & TR & \\
\hline iva & ivi & 'to be where?' & NTR & irreg. \\
\hline kiya & kiyi & 'to see' & TR & irreg. \\
\hline nua & nuae & 'to leave' & TR & \\
\hline pa & pae & 'to take' & TR & \\
\hline para & pari & 'to tell' & TR & irreg. \\
\hline pûnu & pûnue & 'to strike (the sails)' & TR & \\
\hline pwaxa & pwaxae & 'to wash' & TR & \\
\hline tâna & tânae & 'to hear' & TR & \\
\hline tuya & tu \({ }^{207}\) & 'EX' & NTR & irreg. \\
\hline yala & yalae & 'to shake' & TR & \\
\hline
\end{tabular}

Generic and specific forms of these verbs share most speech environments (Table 69):
both can be given as the citation form of a verb and may appear at the end of an
intonation unit \({ }^{208}\); both can be used before an absolutive NP. However, only the specific form of these verbs can occur before an absolutive pronominal suffix (§5.6).

Table 69: Environments where generic and specific forms may appear
\begin{tabular}{|l|c|c|c|}
\hline & Free & Before absolutive NP & Before absolutive suffix \\
\hline Generic & \(\checkmark\) & \(\checkmark\) & \\
\hline Specific & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) \\
\hline
\end{tabular}

The following examples show the distinction between generic- and specificmarked verbs in discourse. In (101) and (27), the verb inna 'to make' is used with an

\footnotetext{
\({ }^{207}\) The irregular specific forms kiyi 'see.SPC', ivi 'to be where.SPC', and \(t u\) 'EX' are not free; they are bound. The existential verb can occur in a free form as \(t u-u\).
\({ }^{208}\) These occurrences typically serve different functions: the generic form of a verb at the end of an intonation unit is usually being used unergatively, without an overt absolutive argument; while the specific form of a verb at the end of an intonation unit should be interpreted as an anaphoric pronominal reference to a preceding 3 SG argument.
}
absolutive noun phrase. In (101), the absolutive uruâny 'hurricane' is marked with the suffix -mene, which indicates that it is one in a class of similar objects (see \(\S 4.2 .3\) ). Since this noun phrase is generic, the verb form that appears is the generic form, ina.
(26) Te îna uruânyamene, te \(=\) îna uruânya-mene
3SG.SUBJ= make.GNR hurricane-accoutrement 'He makes hurricanes and stuff like that,'

Yal-28072010-BGMCG-sousmarin_0048
In (27), the absolutive noun phrase is mwan 'his house'. The pronominal possessive suffix (§4.1.2.2), and the specific form of the verb, inae [make-SPC], together indicate that this absolutive NP is specific.

\section*{(27) Yali la pwemwan, te înae mwan,} ya-li=la pwemwa-n te \(=\) îna-e mwa-n DEM.LOC-DET.A.PRX=LOC home-3SG.POSS 3SG.SUBJ= make-SPC house-3SG.POSS 'There in his home, he made his house,'
Yal-20092011-AW1_0006-0007

In (28), the generic form of \(\hat{a v a}\) 'to fish' is used without an overt absolutive argument, while the specific form âvae is used with the absolutive NP nae no pwalaic 'a small fish', which is marked as new and indefinite (§2.3.6).
(28) Ka mon, caivak te âva, la âvae nae no pwalaic,
ka mona caivak te \(=\) âva la= âva-e nae no pwalaic LK side.DH rat 3SG.SUBJ= fish 3PL.SUBJ= fish-SPC small.thing fish one 'And then, the rat, he went fishing, a small fish was caught,'
Yal-01082010-MFD_0010

If the absolutive argument is anaphorically indexed by a pronominal suffix (§5.6), the specific form of the verb must be used. For example, in (29) the verb pa 'to take' is marked with the specific marker \(-e\), followed by the pronominal suffix -le '3DU.ABS'. The generic form of the verb is ungrammatical before a pronominal suffix.

Texaô paele,
te=xa=ô pa-e-le
3SG.SUBJ=ADD=REAL take-SPC-3DU.ABS
'And he took them,'
Yal-28072010-BGMCG-lune_0040
Example (30) shows the use of the specific verb form pae 'to take'; used here, the specific marker is reinterpreted as a \(3 \mathrm{SG} . \mathrm{ABS}\) anaphoric reference (§5.6).
(30) Texaô paeme la Waala.
te=xa=ô pa-e=me=la Wala

3SG.SUBJ=ADD=REAL take-3SG.ABS=CTP=LOC Waala
'And he brought him here to Waala.'
Yal-28072010-BGMCG-tahitian_0221
The difference between the generic and specific forms is clearest in the irregular transitive verb kiya 'to see', which has two forms: kiyi 'see.SPC' and kiya 'see.GNR'. In example (51), kiyi is used when its patient is \(\hat{a j u}\) 'person' (a specific person who had been previously mentioned), while kiya is used for the generic nabwa kan 'his footprints'.
(31) Te tao ta, toma âri na kiyi âju.
\begin{tabular}{lllllll} 
te \(=\) & tao \(=\) & ta & toma & âri= & na= & kiyi \\
âju
\end{tabular}

Na pwai kiya nabwa kan.
na= pwai kiya nabwa ka-n
1SG.SUBJ= only see.GNR imprint foot-3SG.POSS
"He kept going up, but I didn't see the person. I only saw his footprints.'
Yal-28072010-BGMCG-tahitian_0096
In example (32), kiya and kiyi both have the same absolutive argument, buâny 'stone'.
Both instances of buâny 'stone’ (32) are definite (marked with determiners (§4.3.2)); however, the use of kiyi 'see.SPC' in line 2 references specific stones that the speaker has previously described. In line 3, kiya refers to a generic class of such stones, explicitly marked as a class with -ma 'AC' (see §4.2.1).
(32) Ka enyi yome bwa tu yena,
ka enyi yo=me bwa= tu yena,
LK if 2 SG.SUBJ=FUT CONT= go.DH now
2 yome bwa kiyi buânyili.
\(\mathbf{y o}=\) me bwa= kiyi buânyi-li
2SG.SUBJ=FUT CONT= see.SPC stone-DET.A.PRX
3 Yome bwa kiya buânyama lali, bwa yena.
yo=me bwa= kiya buânya-ma la-li bwa= yena 2SG.SUBJ=FUT CONT= see.GNR stone-AC 3PL.SUBJ-DET.A.PRX CONT= now 'And if you would go down there now, you would see these stones. You would see all these stones if you went now.'

Yal-28072010-BGMCG-sousmarin_0119-0120

\subsection*{5.1.5 Valence-changing operations}

There are two processes for the transitivization of an intransitive verb in Belep: 1)
the intransitive stem undergoes unpredictable modification, generally through the addition of a syllable (§5.1.5.1); and 2) the regular suffix -li is added to the intransitive verb (§5.1.5.2). In both cases, the transitivized verb falls into the class of bound transitives (§5.1.3.2); it must be followed by a pronominal absolutive suffix (§5.6), a differential absolutive suffix (§5.1.6), or an absolutive noun phrase.

Transitive verbs can also be detransitivized with the suffix \(-u\) 'DETRANS' (§5.1.5.3), which attaches to the root of bound transitives and to the generic form of free transitives. The use of this suffix precludes the presence of any nominal or pronominal reference to the absolutive. The detransitive suffix can be used on verbs which have undergone transitivization.

\subsection*{5.1.5.1 Transitivization with stem modification}

A vast number of Belep verbs have both an intransitive and a transitive form
(Table 70). Though in many cases the existence of a semantic patient is implied in the
intransitive form (e.g. caang 'to steal'), the transitive form is used only if the patient is overtly referenced. \({ }^{209}\)

Table 70: Intransitive and transitivized verb stems

\section*{Intransitive Transitive Gloss}
\begin{tabular}{|c|c|c|c|}
\hline âny & âje & 'to steer' & (B), (C) \\
\hline âpw & âwi & 'to laugh, to laugh at \({ }^{210}\) & (A) \\
\hline ar & are & 'to paddle' & (B) \\
\hline âya & âyawe & 'to fear' & (B), (E) \\
\hline bwawa & bwawi & 'to remove' & (A), (E) \\
\hline caang & cage & 'to steal' & (B), (C), (D) \\
\hline cak & caxe & 'to fish with a net' & (B) \\
\hline câny & câje & 'to seize, to press' & (B), (C) \\
\hline calac & calayi & 'to brush, barely touch' & (A) \\
\hline cââmw & câmwi & 'to do what?, to do what with?' & (A), (D) \\
\hline côk & côxe & 'to splash, to squirt' & (B) \\
\hline coon & coni & 'to carry on the shoulder' & (A), (D) \\
\hline cuu-r \({ }^{211}\) & curi & 'to stand, to stand before' & (A), (D) \\
\hline iru & irue & 'to grate' & (B) \\
\hline iyu & iyue & 'to buy' & (B) \\
\hline jang & jage & 'to measure' & (B), (C) \\
\hline koon & koni & 'to be unable, to be ignorant of' & (A), (D) \\
\hline nac & nayi & 'to be surprised, to be surprised by' & (A) \\
\hline nanam & nanami & 'to think, to think about' & (A) \\
\hline nobwapw & nobwawi & 'to insult' & (A) \\
\hline nook & noxe & 'to solicit' & (B), (D) \\
\hline ôbwac & ôbwayi & 'to watch' & (A) \\
\hline para & pari & 'to tell' & (A), (E) \\
\hline param & parame & 'to forgive, forget' & (B) \\
\hline pavang & pavage & 'to prepare' & (B), (C) \\
\hline payeen & payeni & 'to listen' & (A), (D) \\
\hline pûmw & pûbwi & 'to smoke (fish)' & (A), (C) \\
\hline pûnu & pûnue & 'to lower' & (B) \\
\hline tââng & tâge & 'to scrape' & (B), (C), (D) \\
\hline taar & tare & 'to flee, to escape from' & (B), (D) \\
\hline taxaûm & taxaûbe & 'to cover' & (B), (C) \\
\hline teec & teya & 'to burn' & (D), (E) \\
\hline toopw & toe & 'to fill' & (B), (D), (E) \\
\hline tûûn & tune & 'to rub' & (B), (D) \\
\hline tup & tuve & 'to dive, to dive for' & (B) \\
\hline
\end{tabular}

\footnotetext{
\({ }^{209}\) The forms listed as transitive are bound forms; they cannot be used without a pronominal absolutive suffix, differential absolutive marker, absolutive noun phrase, or other word (see §5.9.1) following them. \({ }^{210}\) 'to V 1 , to V 2 ' here means that V 1 is the gloss of the intransitive and V 2 is the gloss of the transitive.
\({ }^{211}\) See §5.1.1.1.
}
\begin{tabular}{llll} 
up & uve & 'to breathe, smoke (tobacco)' & (B) \\
waap & wave & 'to topple'' & (B), (D) \\
wêeng & wêge & 'to organize, teach' & (B), (C), (D) \\
yaang & yagi & 'to search'212 & (A), (C), (D) \\
yaap & yavi & 'to search' & (A), (D) \\
yaar & yare & 'to disembark, to disembark from' & (B), (D)
\end{tabular}

The stem modifications shown in Table 70 indicate transitivization. Though there is no regular rule deriving transitivized forms from intransitives, they follow several general patterns:
(A) Transitivized forms may contain a suffixed \(-i\); or
(B) Transitivized forms may contain a suffixed -e
(C) Final nasals in the intransitive form sometimes correspond to prenasalized stops in the transitivized form
(D) Like-vowel hiatuses in the intransitive form correspond to single vowels in the transitivized form
(E) Unpredictable segments are added or subtracted

The fourth column of Table 70 indicates which of these patterns is used in the relevant intransitive-transitive pair.

Examples of the usage of these intransitive-transitive pairs are shown below. In (33), intransitive nook 'to solicit' is used in line 1, while transitive noxe with a pronominal absolutive suffix is used in line 2.
(33) Enyi te nook na narang, enyi=re nook na nara-ng if \(=3\) SG.SUBJ solicit.NTR interior name-1SG.POSS
\(2 \quad\) Ka temere uya la mwimi te nooxee. \(\begin{array}{llll}\text { ka } & \mathbf{t e}=\mathbf{m e}=\mathbf{r e} & \begin{array}{l}\text { uya=la }\end{array} & \begin{array}{l}\text { mwi-mi=re } \\ \text { LK }\end{array} \\ \text { 3SG.SUBJ=IRR=ACT } & \begin{array}{l}\text { arrive=NOM }\end{array} & \begin{array}{l}\text { DEM.INAN-DET.A.DST=3SG.SUBJ }\end{array} & \begin{array}{l}\text { noxe-e } \\ \text { solicit.TR-3SG.ABS }\end{array}\end{array}\) 'If \(\mathrm{s} / \mathrm{he}\) asks in my name, what \(\mathrm{s} / \mathrm{he}\) asked for will happen.'
Yal-25072010-PT-homily_0044-0045

In (34), intransitive âya 'to fear' is used with a following subordinate clause (see §7.2.7), while transitive âyawe is used with the absolutive argument januun 'his spirit'.

\footnotetext{
\({ }^{212}\) It is not clear whether there is any semantic difference between the verbs yaap 'to search' and yaang 'to search'. They may be alternate phonemic forms for the same meaning, or they may be subtly different.
}
(34) "Na âya li na pan na pu caya purr ri, na âyawe januun."
\begin{tabular}{lllll} 
na= \\
1SG.SUBJ \(=\) & \begin{tabular}{l} 
âya=li \\
fear.NTR=GEN
\end{tabular} & na= & 1SG.SUBJ= \(=\) & \begin{tabular}{l} 
pan=a \\
go.TV=LOC
\end{tabular}
\end{tabular} \begin{tabular}{l} 
pu \\
side
\end{tabular} \begin{tabular}{l} 
caya \\
dad
\end{tabular}
\begin{tabular}{lll}
\begin{tabular}{ll} 
pu-r=i \\
origin.3GNR.POSS=GEN
\end{tabular} & \begin{tabular}{l} 
na= \\
1SG.SUBJ \(=\)
\end{tabular} & \begin{tabular}{l} 
âyawe \\
fear.TR
\end{tabular} \\
januu-n \\
spirit-3SG.POSS
\end{tabular}, 'I am afraid to go near Dad because, I'm afraid of his ghost.'

Yal-20092011-AW1_0039
In (35), intransitive param 'to forget, forgive' is followed by a subordinate clause (see
§7.2.1), while in (36) transitive parame is followed by the absolutive noun phrase narale 'their names'.
(35) te param ka te turowinao, te \(=\) param ka te \(=\) turowi-nao
3SG.SUBJ= forget.NTR LK 3SG.SUBJ= insult-1SG.ABS
'He forgot he had insulted me,'
Yal-28072010-BGMCG-tahitian_0329
(36) na parame narale.
na= parame nara-le
1SG.SUBJ= forget.TR name-3DU.POSS
'I forget their names.'
Yal-20092011-AW6_0057
Verb forms transitivized through stem modification, like all bound transitives
(§5.1.3.2), are eligible to receive the differential absolutive marking suffixes \(-n\) and \(-a\)
(§5.1.6) and the detransitivizing \(-u\) suffix (§5.1.4.3). For example, (37) shows the suffixation of \(-n\) to yagi, the transitivized form of yaang 'to search'.
(37) La yuu, yuu, yagin,
\(\mathbf{l a}=\quad\) yu-u \(\quad\) yu-u \(\quad\) yagi-n

3PL.SUBJ= dig-DETR dig-DETR search.TR-DA.NSG
yuu, yagin, ka koni tun.
yu-u yagi-n ka koni tu-n
dig-DETR search.TR-DA.NSG LK unable.TR find-DA.NSG
'They dug, dug, searched, dug, searched and never could find anything.' Yal-28072010-BGMCG-sousmarin_0116

In (38), \(-a\) is suffixed to the transitivized form yavi, from yaap 'to search'.

Ja jua yavia wa înau,
ja= jua yavi-a wa= îna-u
1PL.INCL.SUBJ= very search.TR-DA.IN
RESULT= make.GNR-DETR
'We truly search for a way,'
Yal-25072010-PT-homily_0055
Example (39) shows the suffixation of detransitive \(-u\) to nanami, the transitivized form of nanam 'to think'.
(39) La nanamiu wali.
la= nanami-u wa-li
3PL.SUBJ= think.TR-DETR DEM.MAN-DET.A.PRX
'They thought thusly.'
Yal-28072010-BGMCG-igname_0062
There is often some degree of semantic bleaching when verbs are transitivized through stem modification. For example, intransitive câny 'to seize' generally refers to an epileptic seizure, constipation, or some other involuntary bodily blockage, while its transitive form câjee means 'to press on something', usually with the arms or hands.

\subsection*{5.1.5.2 Transitivizer -li}

Intransitive verbs in Belep which do not have corresponding transitive stems (§5.1.5.1) may be transitivized through the regular addition of the suffix \(-l i\) ' TR '. \({ }^{213}\) It is probable that this suffix grammaticalized from the genitive case marker, the ditropic clitic \(=l i,=i\) ' GEN', which is used to mark oblique noun phrases (§6.3.3). Some examples of verbs transitivized with -li ‘TR’ are shown in Table 71.

\footnotetext{
\({ }^{213}\) It is likely that this morpheme in Belep is etymologically related to one or more of the following morphemes in Nêlêmwa: (i) The verb inflection - \(i\) used to indicate that the object is human or a given animate (Bril 2002: 42). (ii) The verb suffixes -le and -(i)l̂, which indicate an augmentation of valence for an intransitive verb (Bril 2002: 49). (iii) The relators \(i\) (human) and \(o\) (non-human) which precede the object of a so-called medio-active verb ('say', 'think', 'know', 'fear', etc.) (Bril 2002: 145-146). They may be reflexes of Proto-Oceanic *i / *aki(ni), which occurs both as a verb suffix and a preposition introducing oblique case nominals (Pawley 1976: 59).
}

Table 71: Verbs transitivized with \(-l i\)
\begin{tabular}{|l|l|l|}
\hline Intransitive & Transitive & Gloss \\
\hline boyu & boyuli & 'to greet' \\
\hline cao & caoli & 'to work, mix' \\
\hline caxe & caxeli & 'to be ashamed, to be ashamed of' \\
\hline comu & comuli & 'to study' \\
\hline due & dueli & 'to admire' \\
\hline ka & kali & 'to break, shatter' \\
\hline kaxi & kaxili & 'to watch' \\
\hline mwanao & mwanaoli & 'to approach' \\
\hline ole & oleli & 'to thank' \\
\hline to & toli & 'to call aloud, to call sb. sth.' \\
\hline ûdu & ûduli & 'to drink' \\
\hline yage & yageli & 'to help' \\
\hline
\end{tabular}

The transitivized forms of the verbs shown in Table 71 belong to the class of bound transitives (§5.1.3.2); they must be followed by an absolutive suffix (§5.6), a differential absolutive suffix (§5.1.6), or an absolutive noun phrase. For example, in (40) the transitivized verb dueli 'admire' is followed by the absolutive suffix -la.
(40) Texa duelila, yo kiyie?
\begin{tabular}{ll} 
te \(=\mathbf{x a} \quad\) due-li-la \\
3SG.SUBJ=ADD & yoxe
\end{tabular}

TAG
'And she admired them, you know?'
Yal-20092011-AW1_0169

In (41), the transitivized verb kaxili 'look' is followed by a differential absolutive marker.
(41) "Mo bwa pame ka kaxilin.»
mo bwa= pa=me ka kaxi-li-n
LK3 CONT= go.TV=CTP LK look-TR-DA.NSG
""Well, come and look at them [footprints]."
Yal-28072010-BGMCG-tayamu_0176
The transitivized verb \(\hat{u} d u l i\) 'drink' in (42) is followed by the absolutive noun phrase we 'water'.
(42) Texa ûduli we,
te=xa ûdu-li we
3SG.SUBJ=ADD drink-TR water
'And he drank the water,'
Yal-28072010-BGMCG-tahitian_0313

Some semantic bleaching can occur with -li transitivization. For example, the intransitive verb to means 'to vocalize, call' and may be used for birds as well as humans (43); however, the absolutive argument of the transitivized form toli 'to call sb. sth.' is the recipient of a particular appellation (44).

\section*{(43) Naxa to, to, to, tovan ka âria.}
\begin{tabular}{lllllll} 
na=xa & to & to & to & to=van & ka & âria \\
1SG.SUBJ=ADD & call & call & call & call=DIR.TV & LK & NEG.EX
\end{tabular}
'And I called, and called, and called, and kept calling but there was nothing.' Yal-28072010-BGMCG-tahitian_0103-0104
(44) Te tao toli tayamook xi nyan.
\(\begin{array}{lll}\mathbf{t e}= & \mathbf{t a o}=\text { to-li } \quad \text { tayamoo- } \mathbf{x}=\mathbf{i} & \text { nya-n } \\ \text { 3SG.SUBJ }=\text { HAB }=\text { call-TR old.woman-DET.D.PRX=GEN } & \text { mother-3SG.POSS }\end{array}\)
'He always called this old woman his mother.'
Yal-28072010-BGMCG-tahitian_0318
Transitivization of verbs with - \(l i\) has become grammaticalized in Belep codemixing (§1.6.2) as the method for incorporating verbs from French into Belep morphosyntax. Any French verb which is used in a Belep clause \({ }^{214}\) is marked with the suffix -li 'TR', even if the verb is already transitive in French. For example, the transitive verb soigner [swane] 'to heal' is inserted into Belep morphosyntax in (45) using -li.
(45) Te soigner-lie ma te \(\hat{0}\).
te \(=\quad\) [swaje]-li-e ma=re \(\hat{\boldsymbol{o}}\)
3SG.SUBJ= heal.LN-TR-3SG.ABS LK4=3SG.SUBJ be.good
'She healed him so he was well.'
Yal-28072010-BGMCG-tahitian_0308

\subsection*{5.1.5.3 Detransitivizer -u}

All transitive verbs may be marked with the inflectional suffix -u 'DETRANS' \({ }^{215}\)
when they are used without any reference to an absolutive argument-that is, detransitive \(-u\) is incompatible with inflection for specificity (§5.1.4), with the differential absolutive

\footnotetext{
\({ }^{214}\) Note that only the infinitive forms of French verbs are used in Belep code-mixing.
\({ }^{215}\) An etymologically related suffix - \(u\) 'INTRANS' is identified by Bril (2002: 43) for Nêlêmwa; it marks the intransitive form of some verbs and is one of the few suffixes identified by Bril as inflectional.
}
markers (§5.1.6), with the absolutive suffixes (§5.6), and with a following absolutive noun phrase. The detransitivizer attaches to the generic form of free transitives (§5.1.3.1), and to the root of bound transitives (§5.1.3.2) and transitivized verbs (§5.1.5.1 and §5.1.5.2). A few examples of detransitivized verbs are shown in Table 72.

Table 72: Examples of the usage of \(\boldsymbol{-} \boldsymbol{u}\) 'DETRANS'
\begin{tabular}{|l|l|l|l|}
\hline Intransitive & Transitive & Detransitive & Gloss \\
\hline- & êna & ênau & 'to know' \\
\hline- & inna & înau & 'to make' \\
\hline- & pa & pau & 'to take' \\
\hline- & taxa & taxau & 'to unearth' \\
\hline- & gi & giu & 'to attack' \\
\hline- & ji & jiu & 'to give' \\
\hline & kele & keleu & 'to scoop' \\
\hline- & taxe & taxu \(1{ }^{2} 6\) & 'to distribute' \\
\hline bwawa & bwawi & bwawiu & 'to remove' \\
\hline iyu & iyue & iyueu & 'to buy' \\
\hline nanam & nanami & nanamiu & 'to think' \\
\hline wêêng & wêge & wêgeu & 'to organize, teach' \\
\hline
\end{tabular}

Detransitive \(-u\) is used when the verb's patient is either obvious or irrelevant. The derivational proclitics to convert verbs to nouns (§3.5.2) often incorporate detransitivized forms of verbs. Speakers might use a detransitivized verb as a response to the question 'What are you doing?', as in where the patient of the detransitivized verb pwaxa 'to wash' can only be understood as the speaker's clothing.
(46) Na pwaxau.
na= pwaxa-u
1SG.SUBJ= wash-DETR
'I'm doing the washing [of the laundry].'
Yal-06102010-DY.wav

Speakers might also use a detransitivized verb when its patient is not a simple noun phrase but rather an involved explanation or a set of unrelated things; in these instances,

\footnotetext{
\({ }^{216}\) taxe \(>\) taxu 'to distribute' is irregular. More research is needed to determine how many other verbs are irregular in this way.
}
detransitive \(-u\) serves a sort of 'summing up' function. For example, in (47), detransitivized pau 'take' in line 4 refers to all the diverse items the speaker has just enumerated.
(47) «Jime tu ma, tu la bwe mar.
\begin{tabular}{lll}
\(\mathbf{j i = m e}\) & tu & ma \(\mathbf{t u}=\mathbf{l a}\) \\
1DU.INCL.SUBJ=IRR & go.DH LK4 & \begin{tabular}{l} 
go.DH=LOC
\end{tabular}
\end{tabular} \begin{tabular}{l} 
bwe mar \\
top
\end{tabular} seashore

2 Tu ma âvae no,
\begin{tabular}{llll} 
tu & ma & âva-e & no \\
go.DH & LK4 & fish-SPEC & fish
\end{tabular}

3 ai tu ma pae weji ânemar, âna mar.
\begin{tabular}{llllllll} 
ai & tu & ma & pa-e & we-ji & ânemar & âna & mar \\
or & go.DH & LK4 & take-SPEC & food-1DU.INCL.POSS & top.snail & contents & seashore
\end{tabular}

4 Jime paudame la pwemwa.»
ji=me pa-u=da=me=la pwemwa
1DU.INCL.SUBJ=IRR take-DETR=DIR.UH=CTP=LOC village
""We're going to go down to the seashore. Go down to catch fish, or go down to get some troca to eat, [and] seafood. We're going to take all that stuff home.""

Yal-20092011-AW1_0065

\subsection*{5.1.6 Differential absolutive suffixes}

Many verbs in Belep may be marked with a suffix-either -n 'DA.NSG' or -a 'DA.IA'—which identifies some characteristics of the absolutive argument. This is a form of differential object marking (DOM), as defined by Bossong (1985) and described in Comrie (1979, 1980), Bossong (1991), Aissen (2003), etc. Though cross-linguistically DOM is most commonly a form of dependent-marking (as defined by Nichols 1986), in Belep DOM is realized as head-marking. \({ }^{217}\) That is, characteristics of the absolutive argument are indicated by verb suffixes. The term 'differential object marking' is not a completely accurate descriptor of the Belep phenomenon, which can occur on all transitive verbs (§5.1.3) and some intransitive verbs whose argument is in the absolutive

\footnotetext{
\({ }^{217}\) This also occurs cross-linguistically; Hungarian and Blackfoot are two examples of languages with head-marked DOM (N. Weber, p.c.).
}
case (§5.1.2). For this reason I have substituted the term 'differential absolutive (DA) marking'.

The inflection for specificity discussed in \(\S 5.1 .4\) is one type of differential absolutive marking in Belep. It is distinct, however, from the two suffixes that will be discussed in this section because it occupies a different position class. These differential absolutive suffixes attach to the root of bound transitives (§5.1.3.2) and transitivized verbs (§5.1.5.1), and to the specific form of free transitives (§5.1.3.1)—free transitives marked with a DA suffix must be obligatorily marked as specific. A few examples are shown in Table 73. \({ }^{218}\)

Table 73: Differential absolutive suffixes
\begin{tabular}{llllll} 
Intransitive & Transitive & Specific & -n & -a & Gloss \\
iva & - & ivi & ivin & ?ivia & 'to be where?' \\
- & ina & înae & înaen & innaea & 'to make' \\
- & pa & pae & paen & ?paea & 'to take' \\
- & pwaxa & pwaxae & pwaxaen & pwaxaea & 'to wash' \\
- & ji & - & jin & jia & 'to give' \\
- & obbi & - & ôbin & ôbia & 'to gather' \\
- & texe & - & ?texen & texea & 'to cradle' \\
kaxi & kaxili & - & kaxilin & ?kaxilia & 'to look at' \\
nook & noxe & - & noxen & noxea & 'to solicit' \\
tup & tuve & - & ?tuven & tuvea & 'to dive, to dive for' \\
yaap & yavi & - & yavin & yavia & 'to search for'
\end{tabular}

Differential absolutive suffixes are incompatible with pronominal absolutive suffixes (§5.6) and the detransitivizer \(-u\) (§5.1.5.3). Unlike the absolutive suffixes, DA suffixes can co-occur with absolutive noun phrases.

\footnotetext{
\({ }^{218}\) Since the differential absolutive suffixes are fairly rare, they lack paradigmatic instantiation in my corpus. It is hypothesized that the forms marked with a question mark are valid, but it has not been confirmed by speakers.
}

\subsection*{5.1.6.1 The suffix -n}

The DA suffix -n 'DA.NSG'-also occurring as [-nã] in its incomplete phase (§2.3.3.2)—is used to index inanimate absolutive arguments referring to more than one item. For example, in (48), -n 'DA.NSG' occurs with the absolutive noun phrase tolabava 'our baskets', a nonsingular \({ }^{219}\), inanimate noun phrase.

\section*{Ava nawen tolambava. ava= nawe-na tolamba-va \\ 1PL.EXCL.SUBJ= deposit-DA.NSG bag-1PL.EXCL.POSS \\ 'We put down our baskets.'}

Yal-17072009-TB-weekend_0004
In (49), \(-n\) 'DA.IA' is suffixed to transitivized kali 'to break, shatter' and indexes nuyan 'her shroud'.

Pan na Kawo, kalin nuyan, pan=a Kawo ka-li-na nuya-n
go.TV=NOM Kawo shatter-TR-DA.NSG shroud-3SG.POSS
nyami la nuer,
nya-mi la= nu-er
DEM.IDF-DET.A.DST 3PL.SUBJ= wrap.with.leaves-3SG.ABS
'Kawo went and ripped her shroud, the one they had wrapped her with,'
Yal-20092011-AW1_0301
In (50), -n 'DA.NSG' on the bound transitive verb jie 'to give' occurs without an
absolutive noun phrase; instead it refers anaphorically to the nonsingular, inanimate noun phrase yadan 'his clothes'.
(50) Naxa ta ka pae yadan,
na=xa ta=xa pa-e yada-n
1SG.SUBJ=ADD go.UH=LK take-SPC belongings-3SG.POSS

\footnotetext{
\({ }^{219}\) I use 'nonsingular' here to mean simply that a noun phrase references more than one item; number is not a grammatical category which is marked on nouns in Belep (see §4.2).
}

The DA suffix \(-n\) is suffixed to the bound transitive verb pie 'to cook' in (131); in line 1 it is clause-final, while in line 2 it is followed by the noun phrase wele nole 'their fish to eat'.
(51) Wîma lami le pa, le pin.
wî-ma la-mi le= pa le= pi-n

DEM.INAN-AC DEM.PL-DET.A.DST 3DU.SUBJ= take.GNR 3DU.SUBJ= cook-DA.NSG

\section*{2 Pin wele nole,}
pi-na we-le no-le
cook-DA.NSG food-3DU.POSS fish-ADU
'The ones they took, they cooked. Cooked their fish,'
Yal-20092011-AW1_0087-0088
Examples (50) and (131) reflect that bound transitive verb stems may become free with the addition of the differential absolutive suffix \(-n\), and verbs with this suffix may occur at the end of an intonation unit. \({ }^{220}\)

\subsection*{5.1.6.2 The suffix -a}

The DA suffix - \(a\) 'DA.IA' indicates that the verb's absolutive argument is inanimate, although more research remains to be done in order to understand its precise meaning and how \(-a\) differs from \(-n\) 'DA.NSG'. In (52), \(-a\) precedes the inanimate noun phrase wîja 'something'.
(52) Mwaudu li lere înaea wîja ma, ai?
mwaudu=li le=re îna-e-a wîja ma ei
unknown=GEN 3DU.SUBJ=ACT make-SPC-DA.IN DEM.INAN LK4 or '[She] didn't know that they were actually doing something that, you know?'

Yal-28072010-BGMCG-tayamu_0250

\footnotetext{
\({ }^{220}\) Note that verb forms ending in the DA suffix \(-a\) are not free; they must be followed by an absolutive noun phrase.
}

In (53), \(-a\) references the inanimate noun phrase ween ola 'lobster to eat'.
ka tuvea ween ola,
ka tuve-a wee-n ola

LK dive.TR-DA.IN food-3SG.POSS shellfish 'dive for lobster to eat,'

Yal-28072010-BGMCG-tahitian_0018
In (54), both \(-n\) 'DA.NSG' and \(-a\) 'DA.IA' are suffixed to the transitivized verb noxe 'solicit'. In line 1, \(-n\) occurs without an absolutive noun phrase and refers to the previously mentioned banana tree and sugar cane plant. In line \(2,-a\) precedes the noun phrase wîkk 'this thing'.
(54) Laxa pan cuur reen, laxaô nooxen.
\begin{tabular}{lll}
\(\mathbf{l a}=\mathbf{x a}\) & pana \(\mathbf{c u - r =}=\mathbf{e e - n}\) & \(\mathbf{l a}=\mathbf{x a =}\) \\
3PL.SUBJ=ADD go.TV stand-NDR=DAT-3SG.POSS & 3PL.SUBJ=ADD=REAL & noxe- \(\boldsymbol{n}\) \\
solicit.TR-DA.NSG
\end{tabular}

\section*{Lâ̂ nooxea wîk,}
la=ô noxe-a wî-k
3SG.SUBJ=REAL solicit.TR-DA.IN DEM.INAN-DET.D.PRX
'And they went and stood before him, and then asked him. They asked for this thing,'

> Yal-28072010-BGMCG-lune_0054-0055

Unlike \(-n\), the suffixation of \(-a\) does not allow a bound verb stem to become free. For example, when \(-a\) is attached to bound transitive wêge (transitivized from wêêng 'to learn, organize'), a following absolutive noun phrase is grammatical (55), while an omitted one is not (56).
(55) Te wêêgea pulu.
\(\begin{array}{lll}\text { te }= & \text { wêge-a } & \text { pulu } \\ \text { 3SG.SUBJ }= & \text { learn.TR-DA.IN } & \text { language }\end{array}\)
'S/he learns a language.'
(56) *Te wêêgea.
te= wêge-a
3SG.SUBJ= learn.TR-DA.IN
'*S/he learns.'

\subsection*{5.2 The verb group}

Verbs in Belep consist generally of the verb word and a number of peripheral inflectional and derivational elements. This combination of suffixes and clitics surrounding the verb word will be termed the verb group, a term borrowed from the grammatical sketch of Balade Nyelâyu (Ozanne-Rivierre et al. 1998), which uses a similar morphological unit. This should be differentiated from the Belep verb phrase (see §5.10).

The Belep verb group is classified as a clitic group (as defined by Nespor \& Vogel 1986, Aikhenvald 2002); the elements around the verb word fall into position classes (Table 74), are normally unstressed, cannot occur in other clausal positions independently of each other, and have varying levels of phonological integration with the verb and each other.

In most cases, a subject agreement proclitic is the obligatory first element of the verb group (although there are a few exceptions; see for instance §5.5, §5.1.2, §6.7.1 and §7.1.1.1). In many cases throughout this work, subject agreement proclitics will be marked as procliticized to the rest of the verb group, as in (57).
(57) Te mae.
te= mae

3SG.SUBJ= sleep
'S/he sleeps.'
However, in cases where a subject agreement marker is followed by the additive marker \(=x a\) ' \(\operatorname{ADD}\) ' (§7.1.1.3), the mood markers \(=m e\) 'IRR' and \(=\hat{o}\) 'REAL' (§5.5), or the focus marker \(=r e\) 'АСТ' (§6.8.2.1), these elements will be considered to be encliticized onto the
subject agreement marker, forming a phonological word which consists of clitics only. \({ }^{221}\) In such cases, the subject agreement proclitic with its attached enclitics will be written as a separate phonological word from the rest of the verb group. The term preface will be used for this phonological word, based on the term "prefatory material" used for a similar constituent in Fijian (Dixon 1988). An example is shown in (58).

\section*{(58) Texa mae.}
te=xa mae
3SG.SUBJ=ADD sleep
'And s/he sleeps.'
Intonation breaks, pauses, and repairs during the production of the verb group are most likely to occur immediately after the preface; however, these should be considered indicators of a phonological, rather than a grammatical, word boundary (Dixon and Aikhenvald 2002:24). Morphologically, the preface acts as part of the verb group-it cannot occur in any other clausal position or independently of the rest of the verb group, and the individual elements it contains do not have the status of phonological words and cannot be assigned to a word class. \({ }^{222}\)

The formatives which compose the verb group (Table 74) fall into the following position classes, from left to right: clausal negation proclitics (§6.7); the preface, including subject agreement proclitics (§5.7), the additive enclitic (§7.1.1.3), the mood enclitics (§5.5), and the focus enclitic (§6.8.2.1); prohibitive proclitics (§6.6.2); aspectual proclitics (§5.4); derivational valence proclitics (§5.3); valence-changing suffixes (§5.1.5) and the specific suffix (§5.1.4) (these two categories are incompatible with one another); differential absolutive suffixes (§5.1.6) and anaphoric absolutive suffixes (§5.6)

\footnotetext{
\({ }^{221}\) Aikhenvald (2002) identifies phonological words consisting only of clitics as clitic groups.
\({ }^{222}\) For instance, the preface is not an auxiliary, since it never occurs in the position of a verb (Payne 1997), nor is it a satellite, since it does not overlap any word class (Talmy 2007).
}
(these two categories are incompatible with one another); and miscellaneous verb suffixes (§5.4.11 and §5.4.12). Despite the inflectional status of many verbal elements, most are not obligatory (optional element positions are shown in parentheses in Table 74), and some position classes-marked by \(\left(^{*}\right)\) in Table 74-allow for the use of multiple formatives from the same category. Note that the order of the mood and focus morphemes is only a tendency, not a rule.

The elements which follow the verb word are exclusively inflectional (§3.4) suffixes (§3.1.2.5), while those that precede it are inflectional and derivational (§3.5) clitics. The ordering of elements with relation to the verb is consistent with Bybee's (1985) generalizations about the categories of inflection. Valence, the inflectional category most closely tied to the verb, is also the closest morphological marking (§5.1). Derivational valence (see §5.3) is closer to the verb than other inflectional categories. Inflectional aspect is marked next-furthest in the position classes (§5.4), followed by \(\operatorname{mood}(\S 5.5)\) and subject agreement (§5.7).

Table 74：Verb clitic group position classes
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline & \[
\stackrel{\approx}{f}
\] & \[
\begin{aligned}
& \text { ن } \\
& \sum \\
& \Sigma
\end{aligned}
\] &  & E & & & & & & & & & & & & & \\
\hline & \multirow[t]{2}{*}{®} & 令 & \begin{tabular}{l} 
U \\
\(=0\) \\
0 \\
\hline 0
\end{tabular} & \[
\begin{aligned}
& \text { O} \\
& \text { N } \\
& \text { i }
\end{aligned}
\] &  &  &  & \[
\] & \[
\begin{aligned}
& \overline{1} \\
& \text { en } \\
& \cdots
\end{aligned}
\] &  &  &  &  &  &  &  &  \\
\hline & & ¢ & \％ & \[
\begin{array}{r}
\dot{z} \\
\\
\end{array}
\] & & & & & & & & & & & & & \\
\hline & & 家 & O & & & & & & & & & & & & & & \\
\hline & \(\pm\) & \[
\underset{\underset{y}{\mid}}{\stackrel{j}{2}}
\] & \[
\begin{array}{r}
\stackrel{\ddot{y}}{\underline{4}} \\
\end{array}
\] & 킄 & & & & ． & ． & ． & ． & ． & ． & ． & ． & ． & ． \\
\hline & \(\bigcirc\) & \(\stackrel{\stackrel{\sim}{4}}{\stackrel{1}{5}}\) & ． & ． & ． & ． & ． & ． & ． & ． & ． & ． & ． & ． & ． & ． & ． \\
\hline & \[
\stackrel{\widetilde{*}}{ \pm}
\] & \[
\underset{>}{\underset{\sim}{\lambda}}
\] &  & 苞 &  & & ． & ． & ． & ． & ． & ． & ． & ． & ． & ． & ． \\
\hline & \[
\stackrel{\text { I }}{\text { I. }}
\] & 令 &  & 毕袚 & \[
\overbrace{\tilde{\sim}}^{\sim}
\] & 产 & 䍖 &  & \[
{ }_{a}^{0}
\] &  & 䧲密 & \[
{ }_{\|}^{\stackrel{1}{0}}
\] & & ． & ． & & \\
\hline & © &  &  &  & & & & & & & & & & & & & \\
\hline \multirow{4}{*}{} & ¢ & نٌ &  & ． & ． & ． & ． & ． & ． & ． & ． & ． & ． & ． & ． & ． & ． \\
\hline & ® & \[
\begin{aligned}
& 0 \\
& \frac{0}{8} \\
& \sum
\end{aligned}
\] & \[
\stackrel{0}{\|}
\] & o & ． & ． & ． & ． & ． & ． & ． & ． & ． & ． & ． & ． & ． \\
\hline & O & \[
\stackrel{\hat{Q}}{8}
\] & \[
\underset{\pi}{\approx}
\] & ． & ． & ． & ． & ． & ． & ． & ． & ． & ． & ． & ． & ． & ． \\
\hline & \(\bigcirc\) & 令 & \(\xrightarrow{0}\) & O
\(\sim\)
\(N\)
0
\(\vdots\) & \[
\begin{aligned}
& \text { U} \\
& \text { N} \\
& \text { U. }
\end{aligned}
\] &  &  & \[
\begin{aligned}
& \stackrel{\rightharpoonup}{\mathrm{N}} \\
& \stackrel{10}{2}
\end{aligned}
\] & \[
\begin{aligned}
& \vec{\partial} \\
& \text { è } \\
& \ddot{0}
\end{aligned}
\] &  &  & \[
\begin{aligned}
& \text { む̀ } \\
& \text { הٍ } \\
& 0 \\
& 0
\end{aligned}
\] &  &  & （1） & －
ה
IIt & \(\xrightarrow{\text { e }}\) \\
\hline & \(\stackrel{\otimes}{\underline{p}}\) & \[
\begin{aligned}
& \text { Hi } \\
& \text { H }
\end{aligned}
\] & シ ì & 艺第 & & & & & & & & & & & & & \\
\hline
\end{tabular}

\subsection*{5.3 Valence}

In Belep, the verbal valence proclitics (§3.1.2.6) \(p a=\) 'CAUS', \(p e=\) ' RECP ', and \(p u=\) 'RA' are derivational morphemes (see §3.5) used to derive new lexical verbs from other verbs. The causative and reciprocal are reflexes of Proto-Oceanic prefixes which had the same function (Lynch et al. 2002:83).

\subsection*{5.3.1 Causative \(\boldsymbol{p a}=\)}

The causative proclitic \({ }^{223} p a=\) 'CAUS' is a derivational morpheme that derives verbs from other verbs. Some examples of attested causatives with \(p a=\) are shown in Table 75. Those marked with \(\left(^{*}\right)\) are drawn from Dubois (1975e); all others occur in my corpus and field notes.

Table 75: Causativized verbs
\begin{tabular}{|l|l|l|}
\hline Causative & Gloss & Translation \\
\hline pa abwar & CAUS \(=\) rise & 'to raise' \\
\hline pa âya & CAUS \(=\) fear & 'to scare' \\
\hline pa bo & CAUS \(=\) stink & 'to extinguish' \\
\hline *pa cola & CAUS \(=\) be.strong & 'to strengthen' \\
\hline *pa kaxaleva & CAUS \(=\) be.flat & 'to smooth' \\
\hline pa kôê & CAUS \(=\) be.tired & 'to annoy' \\
\hline pa mae & CAUS \(=\) sleep & 'to lull'' \\
\hline pa noor & CAUS \(=\) be.awake & 'to awaken' \\
\hline pa pulu > pawulu & CAUS \(=\) speak & 'to converse' \\
\hline 'pa pwalic & CAUS \(=\) be.long & 'to lengthen' \\
\hline pa pweyau & CAUS \(=\) give.birth & 'to midwife' \\
\hline
\end{tabular}

Note that in some cases, the morphological causative has become lexicalized to some degree, e.g. pawulu 'to converse' from \(p a=\) pulu. Another example is pariae 'to nurse', from \(p a=t i\) [CAUS \(=\) suckle], whose etymology is even more opaque to speakers.

When transitive verbs (§5.1.3) are causativized with \(p a=\), as in (59) and (60), the causee is (un)marked in the absolutive case (§6.3.1). For instance, in (59) the causee of

\footnotetext{
\({ }^{223}\) The etymologically related form in Nêlêmwa, pa- 'CAUS', is analyzed as a prefix by Bril (2002).
}
the causativized transitive verb bwagee 'to return [oneself]' is the demonstrative pronoun (§4.5.2) wîli, which is unmarked in the absolutive case.
(59) Te pa bwage wîli,
te= pa= bwage wî-li
3SG.SUBJ= CAUS= return.SPC DEM.INAN-DET.A.PRX
'He made that thing return [itself],'
Yal-20092011-AW6_0040
In (60), \(p a=\) causativizes the transitive verb tuâgee 'to tell lies'. Its causee is indexed by the absolutive pronominal suffix -e (§5.6).
(60) ka pa tuâgee, ka pa= tuâge-e
LK CAUS= lie-3SG.ABS
'and made him tell lies,'
Yal-28072010-BGMCG-tahitian_0285
When intransitive verbs (§5.1.1) are causativized with \(p a=\), the causee is marked in the genitive (§6.3.3) or instrumental (§6.3.6) case. It is unclear what conditions the choice between the two marking strategies, although it may be related to the animacy of the causee. For example, in (61) and (62), the animate causee is marked with the genitive ditropic clitic \(=l i\) or \(=i\).
(61) Te pa mwany nyi avan.
\begin{tabular}{lll} 
te= \(=\quad\) pa= & mwany=i & ava-n \\
3SG.SUBJ \(=\) & CAUS \(=\) & be.bad=GEN \\
sibling-3SG.POSS
\end{tabular}
Yal-20092011-AW6_0023

In (61), the causee avan 'his brother' is marked with genitive \(=i\), while in (62) the causee \(\hat{a} j u\) 'person' is marked with genitive \(=l i\).
\begin{tabular}{|c|c|c|}
\hline \multicolumn{3}{|l|}{pa jajani li âju} \\
\hline pa= & jajani=li & âju \\
\hline CAUS \(=\) & be.crazy=GEN & person \\
\hline 'make p & ople irritated' & \\
\hline
\end{tabular}

In examples (63) and (64), the inanimate causee is marked with the instrumental ditropic clitic \(=v a\) or \(=v a e\).
(63) Ka ô pa uya va yadava la na mwa,
ka \(\hat{0}\) pa= uya=va yada-va=la na mwa
LK REAL CAUS= arrive=INSTR belongings-1PL.EXCL.POSS=LOC interior house 'And we caused our clothes to come into the house,'

Yal-17072009-TB-weekend_0005
In (63), the causee yadava 'our clothes' is marked with instrumental \(=v a\). In (64), the causee naap 'fire' is marked with instrumental = vae.
(64) pa ulo vae naap
pa= ulo=va-e naap
CAUS \(=\) be.red=INSTR-SPC fire
'light the fire' (lit. 'cause the fire to be red')
Causative \(p a=\) is used productively to create morphological causative constructions such as in (65), where the causativized verb is the intransitive cavac 'to leave, go far away' in line 2 and the causee is the genitive-marked demonstrative pronoun lali.
(65) BG: Ma leme soigner lierexeng.
ma le=me soigner-li-er=exeng
LK4 3SG.SUBJ=IRR heal.LN-TR-3SG.ABS=DET.DC
'That they would heal him here.'
2 MCG: Ma te pa cavac yi lali.
ma=re pa= cavay=i la-li
LK4=3SG.SUBJ CAUS \(=\) leave=GEN DEM.PL-DET.A.PRX
'So it would make them [the spirits] leave.'
3 BG: Ma te pa ca-ji bwage lali,
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline ma & te= & pa= & cavac & ji & bwage & la-li \\
\hline LK4 & 3SG.SUBJ= & CAUS \(=\) & leave & give & return & DEM.P \\
\hline
\end{tabular} 'So it would make them 1- cause them to return,'

4 ma la pan na Poc.
ma \(\mathbf{l a =} \quad\) pan=a
LK4
3PL.SUBJ= \(=\) go.TV=LOC
'so that they would go to Poc.'

Yal-28072010-BGMCG-tahitian_0255

Example (65) also demonstrates speakers' sense that morphological causativization with \(p a=\) implies a semantically more direct causation than the similar periphrastic expression with \(j i\) 'give’ (discussed in §6.9.1). In (65), line 2, speaker MCG expands BG’s statement from line 1 . BG begins to repeat MCG's morphological causative in line 3 , then changes his mind and produces a periphrastic causative. The semantic distinction between morphological and periphrastic causation is also reflected in differing glosses speakers give for them. For example, the glosses in (66) (a morphological causative with \(p a=\) ) and (67) (a periphrastic causative) indicate that speakers perceive the morphological causative as more direct.
(66) pa up vi naemw \(\mathbf{p a}=\quad \mathbf{u v}=\mathbf{i} \quad\) nae-mw
CAUS \(=\) smoke=GEN child-2SG.POSS
'teach your child to smoke'
jier ma te up
\(\begin{array}{lll}\text { ji-er } & \text { ma=re } & \text { up } \\ \text { give-3SG.ABS } & \text { LK4=3SG.SUBJ } & \text { smok }\end{array}\)
give him to mok
'cause him to smoke [he already knows how]'

\subsection*{5.3.2 Reciprocal \(p e=\)}

The valence proclitic \(p e={ }^{\prime} \mathrm{RECP}{ }^{224}\) is a derivational morpheme that derives new verbs from verbs. Its most basic usage is as a reciprocal marker, as in (68) where it indicates that the participants carried out the action on each other.
(68) Lexa da pe cebe pwairamale, le=xa da= pe= cebe pwaira-male
3DU.SUBJ=ADD GNO= RECP= suspect girl-ADU
'And the two girls just suspected each other,'
Yal-19092011-PA_0061
More commonly, \(p e=\) indicates that the action of the verb is distributed or shared among all participants. In (69), \(p e=\) is used with the transitive verb tae 'to encircle'; in (70) \(p e=\)

\footnotetext{
\({ }^{224}\) The etymologically related form in Nêlêmwa, pe- 'RECP', is analyzed as a prefix by Bril (2002).
}
is used with intransitive \(k a\) 'to break'. In both examples, \(p e=\) indicates joint action on the part of the participants.
(69) La pe taela li Belema.
\(\mathbf{l a}=\quad\) pe \(=\quad\) tae-la=li Bele-ma
3PL.SUBJ= RECP= encircle-3PL.ABS=GEN Belep-AC
'Together, the Belema encircled them.'
Yal-20092011-AW3_0058
(70) Avaxaô pe ka.
\(a v a=x a=\hat{o} \quad p e=k a\)
1PL.EXCL.SUBJ=LK=REAL RECP= break
'We separated.'
Yal-17072009-TB-weekend_0028
Accomplishing actions together is an important part of Belep culture (L. Giordana, p.c.).
The combination of reciprocal \(p e=\) with the verb tue 'to find' is commonly used to mean
'to assemble, to meet, to be together', as in (71), and the combination of \(p e=\) with tâna
'to hear' means 'to understand; to get along', as in (72).
(71) ma ja pe pana pe tuja.
ma \(\mathbf{j a}=\quad\) pe \(=\) pana \(p e=\) tu-ja

LK4 1PL.INCL.SUBJ= RECP= go.TV RECP= find-1PL.INCL.ABS
'that we may come together,'
Yal-25072010-PT-homily_0058
(72) Âbur, la koni pe tâna lile.
âbur \(\quad \mathbf{l a}=\quad\) koni \(\quad \mathbf{p e}=\) tâna=li-le
side.UH 3PL.SUBJ= never RECP= hear.GNR=GEN-3DU.ABS 'Before, they [the Or and Waap phratries] never could get along.'

Yal-20092011-AW3_0017
The various uses of the reflexes of this morpheme in other New Caledonian and Austronesian languages are discussed in Bril (2005).

\subsection*{5.3.3 Reduced agentive pu=}

There are very few examples of \(p u=(\) glossed here 'RA'), in my corpus, and it was not possible to gather enough data to fully explain its usage. However, in the examples shown here, \(p u=\) indicates reduced action of the verb, such that the agent is attributed less
agency than normal. For instance, the verb kewee 'to chase, to hunt' is shown in its typical usage in (73), where the agent is a frightening demon.
(73) Teme kewela li Dubageni.
te=me kewe-la=li Dubageni
3SG.SUBJ=IRR chase-3PL.ABS=GEN type.of.demon
'The Dubageni will chase them.'
Yal-05092011-AP1_0094

In (74), the modification of kewee 'to chase' with the reduced transitive proclitic \(p u=\) changes the meaning to 'to follow'. The example in (74) occurred several times in conversation with Belema, where the agent was a faithful dog.
(74) Te pu kewenao.
te= pu= kewe-nao
3SG.SUBJ= RA= chase-1SG.ABS
'He's following me.'
Examples (75) and (76) also show the usage of reduced agentive \(p u=\). In (75), the normal active meaning of nginie 'to miss, to not be able to see' is reduced by \(p u=\) to mean 'to accidentally not see'.
(75) La pu ngini cae to bwan.
\(\mathbf{l a}=\quad \mathbf{p u}=\) ngini cae=ro bwan
3PL.SUBJ= RA= not.see reef=when night
'They didn't see the reef in the night.'
Yal-20092011-AW2_0036
In (76), the action of \(p a\) 'to take' is reduced by \(p u=\) to indicate that the action was accomplished through magic, rather than through the physical action of the agent.
(76) Te âri ma, la pu pa dooma lali,
\begin{tabular}{lllllll} 
te \(=\) & âri & ma & \(\mathbf{l a}=\) & pu= & pa & do-ma \\
3SG.SUBJ \(=\) & say & LK4 & lic \\
3PL.SUBJ \(=\) & RA \(=\) & take.GNR & earth-AC & DEM.PL-DET.A.PRX
\end{tabular}

\section*{ka pu pada la mweogo.}
ka pu= pa=da=la mweogo
LK RA= take.GNR=DIR.UH=LOC mountain
'He commanded that all this earth would be taken, and taken up onto the mountain [using magic].'

In (77), the action of wayap 'to make war' is reduced by \(p u=\), signifying that the warriors may have wanted to stop fighting, but could not (in the next clause, the speaker asserts the warriors' inability to stop).
(77) Ka ô pu wayap, pu wayavavan.
ka \(\hat{\mathbf{o}} \quad \mathrm{pu}=\) wayap \(\mathrm{pu}=\) wayava=van
LK REAL RA= make.war RA= make.war=DIR.TV
'And they kept fighting and fighting.'
Yal-20092011-AW4_0040

Example (78) is from a discussion with a speaker in an attempt to understand the meaning of \(p u=\), which is typically glossed by speakers as 'to the side'. In (78), \(p u=\) decreases the agentivity of the agent of a general motion verb like pan 'to go.TV'; however, it is ungrammatical to use with the more active verb wânem 'to walk', which implies a greater amount of agentivity for its agent.
(78) Na pan.
na= pan
1SG.SUBJ= go.TV
'I go.'
Na pu pan.
na= pu=pan
1SG.SUBJ= RA= go.TV
'I go a little; I stop; I do not continue.'
*na= pu=wânem
1SG.SUBJ= RA= walk
*'I walk a little.'

\subsection*{5.4 Morphological aspect}

Aspect is richly expressed in Belep. It is indicated by a closed set of verbal proclitics (§3.1.2.6), listed in Table 76, which precede the verb in a fixed position. As discussed in §3.4.3, these proclitics are analyzed here as inflectional, though they have some derivational properties-chiefly, that verbs may be unmarked for aspect; aspect marking is not obligatory.

Table 76: Aspect clitics
\begin{tabular}{|l|l|l|}
\hline Belep & Gloss & English meaning \\
\hline\(\hat{a g g a=}\) & PROG \(=\) & progressive (§5.4.1) \\
\hline\(\hat{a m u}=\) & PRF \(=\) & perfect \((\S 5.4 .2)\) \\
\hline\(b a=\) & SBJ \(=\) & subjunctive (§5.4.3) \\
\hline\(b w a=\) & CONT \(=\) & continuative; 'to still be'; 'to have just' (§5.4.4) \\
\hline\(c a=\) & ITER \(=\) & iterative \((\S 5.4 .5)\) \\
\hline\(d a=\) & GNO \(=\) & gnomic; with its own agency \((\S 5.4 .6)\) \\
\hline\(m a=\) & DIM \(=\) & diminished (§5.4.7) \\
\hline\(n y i=\) & PUNCT \(=\) & punctual; increased (§5.4.8) \\
\hline\(t a o=\) & HAB \(=\) & habitual (§5.4.9) \\
\hline\(u=\) & DUB \(=\) & dubitative; 'to pretend to'; 'to kind of' (§5.4.10) \\
\hline
\end{tabular}

Table 77 shows the aspectual morphemes divided into perfective and imperfective groups; there is some language-internal evidence for this division in that some morphemes from one group are incompatible with some morphemes from the other, though this is not always the case and much work remains to be done on this topic. Some aspect particles can co-occur and some cannot; this will be discussed in-depth here.

Table 77: Classes of aspect formatives in Belep
\begin{tabular}{|c|c|c|}
\hline \begin{tabular}{l}
Perfective \\
\(\mathrm{ca}=\) 'ITER'
\end{tabular} & Imperfective tao \(=\) ' HAB ' & Other
âmu= 'PRF' \\
\hline \(\mathrm{da}={ }^{\text {'GNO}}\) ' & âga \(=\) 'PROG' & \(\mathrm{ba}={ }^{\text {'SBJ }}\) ' \\
\hline nyi= 'PUNCT' & bwa= 'CONT' & ma= 'DIM' \\
\hline & & 'DUB \\
\hline
\end{tabular}

Any number of aspectual particles may be used on a given verb, and their order may vary. For example, in the constructed examples in (79), the aspectual proclitics nyi= 'PUNCT' and tao = 'HAB' may occur in either order.

Te nyi tao tawae yeek.
te \(=\quad\) nyi= tao= tawa-e yeek
3SG.SUBJ= PUNCT= HAB= cut-SPC plant
'S/he always chops down the trees.'
Te tao nyi tawae yeek.
te \(=\quad\) tao \(=\) nyi= tawa-e yeek
3SG.SUBJ= HAB= PUNCT= cut-SPC plant
'S/he always chops down the trees.'
Yal-15092011-TB1.wav - Yal-15092011-TB3.wav
Many aspect clitics are polyfunctional and may occur in other constructions in the language. For example, \(\hat{a} m u=\) 'PRF' may also modify nouns (see §5.4.2)); \(b w a=\) is used in imperatives (§6.6.1) and to form participles (§5.9.2); and \(m a=\) and \(n y i=\) are used in comparatives (§6.11).

Two additional morphemes which are not aspect proclitics are discussed in this section. The verb suffixes -roven 'COMPL' (§5.4.11) and -mene 'GE' (§5.4.12) also serve an aspectual function in Belep. Similar in meaning to the homophonous noun suffixes (§4.2.3, §4.2.4), they occur in the final position class of the verb group, following any absolutive suffixes (§5.2). The verb group directional enclitic \(=\) van (§5.11) also has an aspectual meaning.

\subsection*{5.4.1 Progressive âga=}

The progressive aspect clitic \(\hat{a} g a=\) is used to indicate that the action is an "ongoing, dynamic process" (Payne 1997:240). It is incompatible with \(\hat{a} m u=\) 'PRF', \(c a=\) 'ITER', and \(m a=\) 'DIM', and with the adverb \(m w a\) 'again'. For example, in (80), the use of \(\hat{a} g a=\) implies that it must be possible to describe the action while it is occurring-the action of tabo 'fall' must be taking a long time.
\[
\begin{array}{ll}
\text { (80) } & \text { Te âga tabo. } \\
\text { te }=\text { âga }=\text { tabo } \\
\text { 3SG.SUBJ }=\mathrm{PROG}=\text { fall } \\
& \text { 'He is falling (e.g. a parachutist })
\end{array}
\]

Yal-30092010-PT.wav

In (81), \(\hat{a} g a=\) is used to represent the continuing action of one participant while other participants perform other actions. In this narrative, an old woman te âga pilu 'is still dancing' while two other women stalk her with murderous intent.
(81) Toma te âga pilu,
toma te \(=\quad\) âga \(=\) pilu but 3SG.SUBJ= PROG= dance
ka âri te ênae, puur rima,
ka âri= re= êna-e pu-r=i ma

LK NEG \(=3\) SG.SUBJ \(=\) know-3SG.ABS origin-3GNR.POSS=GEN LK4
arite -ai ? Ârite kiyile?
âri= te \(=\) ei âri= te= kiyi-le
NEG \(=\quad 3\) SG.SUBJ \(=\) or \(\mathrm{NEG}=3\) SG.SUBJ= see.SPC-3DU.ABS
'But she was still dancing, and she didn't know because, she didn't - you see?
She didn't see them?'
Yal-28072010-BGMCG-tayamu_0247-0249

\subsection*{5.4.2 Perfect \(\hat{a} m u=\)}

Cross-linguistically, clauses marked as perfect are depicted "against a background state of affairs in which the event referred to in the sentence has not yet taken place" (Dahl 1985:134). The perfect aspect clitic \(\hat{a} m u=\) in Belep is used to indicate that the action is currently relevant because it has happened, or because it should happen, against a background where it has not happened. This is often translated by Belep speakers as immediate past (82) or present (83), as seen in these constructed examples.
(82) Te âmи pae.
\(t e=\quad \hat{a} m u=p a-e\)
3SG.SUBJ= PRF= take-3SG.ABS
'He has taken it.' (translated by Belep speaker as 'He just took it')

\section*{Teme âmu pae.}
te=me âmu=pa-e
3SG.SUBJ=FUT PRF= take-3SG.ABS
'He will have taken it.' (translated by Belep speaker as 'He will take it soon')
Yal-13102010-AP.wav

In (93), the use of \(\hat{a} m u=\) shows that the action of the verb, kiya-u 'see.GNR-DETR' is
relevant to the moment of speaking.
(84) Toma yena, ja âmu kiyau ka,


\section*{tuya avar ki înau.}
tuya avari=xi îna-u
EX.GNR other=REL make-DETR
Na kiyau la na télé.
\(n a=\quad\) kiya-u=la na télé
1SG.SUBJ= see.GNR-DETR=LOC interior television.LN
'But now, we have seen that there are others who do it. I saw it on TV.'
Yal-28072010-BGMCG-hamecon_0051-0052
In (85), \(\hat{a} m u=\) is used to indicate that the action it marks, cavac 'to leave', is relevant to the hypothetical moment of realization of the clause that precedes it.
(85) Te ô ki ja pan înae Paixa, ka âmu cavac.
te \(=\quad \hat{\mathbf{0}}=\mathbf{x i} \quad \mathbf{j a}=\quad\) pana îna-e Paixa ka âmu= cavac
3SG.SUBJ= good=REL 1PL.INCL.SUBJ= go.TV make-SPC Easter.LN LK PRF= leave
'We must celebrate Easter, and then leave.' [as opposed to leaving before Easter]
Yal-20092011-AW2_0075
The perfect clitic \(\hat{a} m u=\) is incompatible with \(\hat{a g} a=\) 'PROG' and \(c a=\) 'ITER'. It may also occur before nouns, as in the example greetings shown in Table 78.

Table 78: Belep greetings
\begin{tabular}{|l|l|l|}
\hline Belep greeting & English gloss & English translation \\
\hline âmu= yena & PRF= now & 'see you soon [later today]' \\
\hline âmu= iyam & PRF= tomorrow & 'see you tomorrow' (used to mean 'good night') \\
\hline âmu= mon & PRF= side.DH & 'see you later [our next meeting]' \\
\hline âmu= jaok iyam & \begin{tabular}{l} 
PRF= year-DET.D.PRX \\
tomorrow
\end{tabular} & 'see you next year' \\
\hline
\end{tabular}

\subsection*{5.4.3 Subjunctive \(\boldsymbol{b a}=\)}

The subjunctive proclitic \(b a=\) is used to indicate that the action of the clause in which it occurs is hypothetical, depending on the realization of the matrix clause. The constructed examples in (86) and (87) show this usage. Note that this proclitic is rare and does not occur in my corpus; more research is necessary to determine a full list of its functions.
(86) Te wêêng ma te ba comu.
te= wêêng ma=re ba= comu
3SG.SUBJ= organize LK4=3SG.SUBJ SBJ= learn
'S/he studies so that s/he might learn.'
(87) Te pae savon ma te ba boyâm.
te= pa-e cawô ma=re ba= boyâm
3SG.SUBJ= take-SPC soap.LN LK4=3SG.SUBJ SBJ= bathe
'S/he takes the soap so that \(\mathrm{s} / \mathrm{he}\) might bathe.'
Yal-03112011-IM1.wav - Yal-03112011-IM2.wav

\subsection*{5.4.4 Continuative \(\boldsymbol{b} w a=\)}

Though \(b w a=\) is used as a polite imperative (§6.6.1) and in a complementation strategy (§7.2.9), it also has an aspectual meaning. In this meaning, it is often translated 'just' or 'still'. For example, in the constructed example in (88), it can have either meaning.

\section*{(88) Na bwa wiu.}
na= bwa= wiu
1SG.SUBJ= CONT= dine
'I just ate' or 'I'm still eating'
Discourse examples indicate that \(b w a=\) should be glossed as a continuative, a type of imperfective aspect. In (89), \(b w a=\) is used to indicate that the action is continuing.
(89) te bwa tao ci koon na bwe mar,
\(\begin{array}{lllllll}\text { te }= & \text { bwa }= & \text { tao }= & \text { ci } & \text { kon=a } & \text { bwe } & \text { mar } \\ \text { 3SG.SUBJ }= & \text { CONT }= & \text { HAB }= & \text { sit } & \text { unable=LOC } & \text { top } & \text { seashore }\end{array}\)
'he is still nonetheless incapable [of moving the boat] on the seashore,'
Yal-19092011-PA_0071

In (90), the use of \(b w a=\) indicates that the verbal state \(m o\) 'to live' was still continuing.
(90) âbur, Pairoome, âjuma lami la bwa mo li.
âbur Pairome âju-ma la-mi
side.UH Pairome person-AC DEM.PL-DET.A.DST
\(\mathbf{l a}=\quad \mathbf{b w a}=\quad \mathbf{m o}=\mathbf{l} \mathbf{l}\)
3PL.SUBJ= CONT= live=DET.LOC
'before, at Pairoome, those people were still living there.'
Yal-20092011-AW6_0132
In (91), the continuing action marked by \(b w a=\) is kela 'to slide, crawl'.
(91) Te wali, te bwa kela.
te= wa-li te= bwa= kela
3SG.SUBJ= DEM.MAN-DET.A.PRX 3SG.SUBJ= CONT= slide
'He was like, he was still crawling [he hadn't learned to walk yet].'
Yal-28072010-BGMCG-sousmarin_0012
Usages of \(b w a=\) are incompatible with the gnomic aspect marker \(d a=\) 'GNO' and with \(m a=\) ' DIM '.

Continuative \(b w a=\) can also mean 'yet' if it occurs in a negated clause (§6.7); in these instances, it occurs outside of its normal position class. For example, in (92), bwa= is used first to indicate that a state is continuing, namely \(\hat{a} n \hat{o}\) 'be young'; then it is used before the negative proclitic \(\hat{a} r i=\) to mean 'not yet'.
(92) Te bwa ânô, bwa âri te - jua âri te ulac.
te \(=\) bwa= ânô bwa= âri= te \(=\) jua âri= te \(=\) ulac
3 SG.SUBJ \(=\) CONT \(=\) be.young CONT \(=\) NEG \(=3\) SG.SUBJ \(=\) very NEG \(=3\) SG.SUBJ= be.old 'He was still young, he wasn't yet - he wasn't old at all.'

Yal-20092011-AW3_0006

\subsection*{5.4.5 Iterative \(\boldsymbol{c a}=\)}

The iterative aspect clitic \(c a=\) is used to conceptualize the processual action of the verb as a unit which is repeated multiple times. This iterative aspect is a type of perfective. My corpus includes examples of its use with the verbs ta 'go.UH', mo 'live, stay', kiya 'see', pae 'take', uya 'arrive'. For example, in (93), ca= is used in lines 1 and 2 to indicate that the reified actions of ta la na toop 'go up into the fields' and tu la bwe
mar 'go down to the seashore' were repeated many times throughout the participants' lives.
```

Le ca ta la na toop,
le= ca= ta=la na toop
3DU.SUBJ= ITER= go.UH=LOC interior field

```

\section*{ka le ca tu la bwe mar.}
ka le= ca= tu=la bwe mar
LK 3DU.SUBJ= ITER= go.DH=LOC top seashore
'They would always go up into the fields, and they would always go down to the seashore.'

Yal-19092011-PA_0005
In example (94), \(c a=\) marks the frequent occurrence of a natural phenomenon.
(94) Baraap, la ca puc ya kawinama. baraap la= \(\quad \mathbf{c a}=\) puy=a kawina-ma
evening 3 PL.SUBJ \(=I T E R=\) fly \(=\) NOM firefly-AC
'In the evening, the fireflies often come out.'
Yal-20092011-AW5_0114
Iterative \(c a=\) is fairly similar in meaning to habitual \(t a o=\); Belep speakers translate both of them as 'always'. However, \(c a=\) is incompatible with \(\hat{a} g a=\) 'PROG' and \(\hat{a} m u=\) ' PRF ', whereas \(t a o=\) is compatible with both.

\subsection*{5.4.6 Gnomic \(d a=\)}

The aspectual clitic \(d a=\) is normally translated 'all by itself' by Belep speakers.
The similar particle daa in Nêlêmwa is glossed as 'of its own volition (naturally, or through magic)' (Bril 2000). The Belep morpheme \(d a=\) also seems to have this meaning, as shown in (95), where it indicates that the participants are performing a normal, characteristic activity with no particular impetus.
(95) Lexa da ôbi têno le yâgak,
le=xa da= ôbi têno le yâgak
3DU.SUBJ=ADD STAT= gather type.of.shell LK2 spider.conch
'They were just gathering têno and spider conchs,'
Yal-19092011-PA_0009

A broader definition for Belep \(d a=\) seems to include the idea that the action expressed by the verb is expected based on the nature of the participants or is a general truth. For example, in (96), \(d a=\) expresses that the ancient whitened remains of people killed in a battle are visible to any observer.
(96) Yo da kiyie, ma la poro, yena, la poro.
\(\mathbf{y o}=\) da= kiyi-e ma la \(=\) poro yena la \(=\) poro 2SG.SUBJ= STAT= see.SPC-3SG.ABS LK4 3PL.SUBJ= be.white now 3PL.SUBJ= be.white 'You see that they are white, now-they are white.'
Yal-20092011-AW3_0071-0072

The gnomic aspectual clitic \(d a=\) is incompatible with \(b w a=\) 'CONT' and \(m a=\) 'DIM'.

\subsection*{5.4.7 Diminished \(\boldsymbol{m a}=\)}

The aspectual clitic \(m a=\) is used to indicate a decreased amount of the action of the verb, or that the action of the verb was defective in some way. For example, in (97), \(m a=\) is used with the verb ulac 'be old' to mean that the participant was deficient in performing the action of the verb.
(97) ô ma ulac ya naele.
ô ma= ulay=a nae-le
REAL DIM= be.old=NOM child-3DU.POSS
'their child wasn't very old'
Yal-28072010-BGMCG-sousmarin_0011
It is also used in comparative constructions (§6.11.1) to indicate 'less’, and is incompatible with \(\hat{a g} a=\) ' PROG ', \(b w a=\) ' CONT ', \(d a=\) ' GNO ', and \(t a o=\) ' HAB '. The analogous form in Nêlêmwa is hma, meaning 'too much, too many' (Bril 2002).

\subsection*{5.4.8 Punctual nyi=}

The aspectual clitic nyi= is used to indicate that an action is punctual; it occurs at a specific instant in time and has "no internal temporal structure" (Payne 1997: 241). For example, in (98), the action of the verb tup 'to dive' is represented as being forceful and occurring at a single moment in time.

\section*{Avexa nyi tuvadu la na buâny waak. ave=xa nyi= tuva=du=la na buâny waa-k}

1DU.EXCL.SUBJ=ADD PUNCT= dive=DIR.DH=LOC interior stone DEM.MAN-DET.D.PRX 'And we dove down at the stone like this.'

Yal-28072010-BGMCG-tahitian_0053
In example (99), the use of nyi= indicates the manner of cao 'to work' and cibia 'to turn over'; the participants were planting yam fields, work that requires repeated punctual action of digging a hole, planting a yam, and marking it with a stick.

\section*{(99) La nyi cao, la nyi cibiae doo,}
\(\mathbf{l a}=\quad\) nyi= cao \(\quad \mathbf{l a}=\quad\) nyi= cibia-e doo

3PL.SUBJ= PUNCT= work 3PL.SUBJ= PUNCT= turn-SPC earth 'They worked, they turned the earth'

Yal-28072010-BGMCG-sousmarin_0016
For Belep speakers, nyi= usually implies that the punctual event occurs with a large amount of force or effort exerted by the participants; this is most likely why nyi= is also used for comparatives to indicate 'more' (§6.11.1).

\subsection*{5.4.9 Habitual tao=}

The habitual aspect clitic \(t a o=\) is used to express that "a certain type of event...regularly takes place (i.e. is instantiated by actual events) from time to time" (Payne 1997: 241). It is a type of imperfective aspect in Belep. For example, in (100), the action of the verb is conceptualized as something that is constantly occurring, with no distinct endpoints for iterations.

\section*{(100) Te tao to li tayamook xi nyan.}
te \(=\quad\) tao \(=\) to \(=l i\) tayamoo \(-x=i \quad\) nya-n
3SG.SUBJ= HAB= call-TR old.woman-DET.D.PRX=GEN mother-3SG.POSS
'He always called this old woman his mother.'
Yal-28072010-BGMCG-tahitian_0318
In example (101), the action of the verb is conceptualized as happening several times, with no distinct endpoints.

Habitual \(t a o=\) is fairly similar in meaning to iterative \(c a=\); Belep speakers translate both of them as 'always' and feel that one can often substitute for the other. Proclitic \(t a o=\) is incompatible with \(m a=\) 'DIM'.

\subsection*{5.4.10 Dubitative \(\boldsymbol{u}=\)}

The aspectual clitic \(u=\) seems to indicate that the action of the verb was
performed halfheartedly, and it could be glossed 'kind of'. For example, in (102), \(u=\) indicates the participant's incomplete performance of the verb para 'to tell'.
(102) Te u parie, toma bwa âri ave âvalie.
\begin{tabular}{lll} 
te \(=\) & \(\mathbf{u}=\) & pari-e \\
3SG.SUBJ \(=\) & DUB \(=\) & tell.TR-3SG.ABS
\end{tabular}
toma bwa \(=\) âri \(=\) ave \(=\quad\) âva \(=\) li-e
but CONT= NEG= 1DU.EXCL.SUBJ= fish.GNR=GEN-3SG.ABS
'He kind of talked about it, but we never did fish that way.'
Yal-28072010-BGMCG-hamecon_0089
The morpheme \(u=\) is normally incompatible with all other aspectual proclitics. The homophonous particle \(u\) in Nêlêmwa is used to indicate a change of state or a future possibility (Bril 2000).

\subsection*{5.4.11 Completive -roven}

The completive aspect is accomplished in Belep with the verb suffix -roven 'COMPL \({ }^{225}\) rather than with a verb group aspectual proclitic. Cross-linguistically, the

\footnotetext{
\({ }^{225}\) Completive verb suffix -roven is clearly a grammaticalized version of the full verb toven 'to finish'. It is homophonous with the noun suffix -roven 'all' (§4.2.4).
}
completive aspect is associated with several related meanings, including "to do something thoroughly and completely [such that t]he object of the action is totally affected, consumed, or destroyed by the action[, which] may well involve multiple entities" Bybee et al. 1994: 57).

The Belep suffix =roven is compatible with all of these cross-linguistic characteristics of completive aspect. It is used to indicate a thoroughly completed action, as in (103) where the action is described by ciwie 'to bury'. Note that a phonologically reduced form of -roven is used because the verb group is followed by an absolutive noun phrase, the toponym Ono.
(103) Texa ciwiroven Ono.
te=xa \(\quad\) ciwi-rove Ono

3SG.SUBJ=ADD bury-COMPL Ono
'And it [a tsunami] completely buried [the village of] Ono.'
Yal-28072010-BGMCG-sousmarin_0077
Belep -roven also indicates the total affectedness of the patient. For example, in (104), the completive suffix on the transitive verb bae 'to eat, bite' is interpreted as meaning that the patient is completely affected-completely eaten.
(104) «Na maac yi cawi, na baeroven."
\begin{tabular}{llll} 
na= & may=i & cawi & na=
\end{tabular}\(\quad\)\begin{tabular}{l} 
bae=roven \\
1SG.SUBJ= \(=\) \\
die=GEN \\
hunger \\
"
\end{tabular}

Yal-01082010-MFD_0017
Finally, part of the meaning of the suffix -roven is that multiple entities are affected by the action of the verb. For example, in (105), the use of completive -roven is intended to mean that all of the agents are affected by the action of the intransitive verb cavac 'to leave'.
(105) «Me âria âju la pwemwajen, enyi ji cavayaroven." me âria âju=la pwemwa-jen IRR NEG.EX person=LOC village-1PA.INCL.POSS
\(\begin{array}{ll}\text { enyi } & \mathbf{j i}= \\ \text { if } & \begin{array}{l}\text { cavaya-roven }\end{array} \\ \text { leave=COMPL }\end{array}\)
"'There won't be anyone in our home, if we both leave.""
Yal-20092011-AW1_0083
The difference between the completive aspect verb suffix -roven and the total noun quantifier -roven is demonstrated in (106) and (106).
(106) Duaro na mo lexeng, na tânaroven pavadaar pulu. duaro na= mo=lexeng while 1SG.SUBJ= live=LOC.DC
\begin{tabular}{lll} 
na= & tâna-rovena & pavada-ra \\
1SG.SUBJ \(=\) & hear.GNR-COMPL & muttering-3GNR.POSS
\end{tabular} pulu \begin{tabular}{l} 
speech \\
'Living here, I hear everything people grumble about.'
\end{tabular}

Yal-25072010-PT-homily_0097-0098
(107) La pan pan ka kiyi daroven, la= pana pan ka kiyi da-roven 3PL.SUBJ= go.TV go.TV LK see.SPC blood-all 'They went along and saw all that blood,'
Yal-20092011-AW5_0086

In (106), the completive verb suffix -roven modifies the verb tâna 'to hear', indicating that its action is completed thoroughly. In (106), the noun suffix -roven modifies the noun \(d a\) 'blood', indicating totality of reference.

\subsection*{5.4.12 General extender -mene}

General extenders are pragmatic expressions which are connected to sentence structure and somewhat inflexible in their syntactic distribution (Overstreet 2005:1846). The Belep verb suffix -mene ' GE ' is used as a general extender, identifying a category or set of actions similar to that of its host verb, as in (108).

\section*{(108) Enyi âmi la oyaavamene, la yava jabaang ngie. \\ enyi â-mi la= oyava-mene \\ if DEM.NEW-DET.A.DST 3PL.SUBJ= reel-GE}
la= yava jabang=i-e
3PL.SUBJ= catch.GNR Spanish.mackerel=GEN-3SG.ABS
'Whenever they reeled and stuff, they caught Spanish mackerel with it.'
Yal-28072010-BGMCG-hamecon_0091
Note that -mene also occurs as a noun suffix general extender (§4.2.3).

\subsection*{5.5 Morphological mood}

In Belep, the mood morphemes \(=\hat{o}\) 'REAL' and \(=m e\) 'IRR' form a basic distinction between realis and irrealis modes \({ }^{226}\) as defined in Palmer (2001). "The realis portrays situations as actualized, as having occurred or actually occurring, knowable through direct perception. The irrealis portrays situations as purely within the realm of thought, knowable only through imagination" (Mithun 2001: 173).

The morphological mood clitics behave in a manner distinct from the set of aspectual clitics (§5.4). One piece of evidence for the separation of these two categories is that mood markers cluster with the preface (§5.2) rather than with the aspectual proclitics and the rest of the verb group. Some subject agreement proclitics undergo phonetic reduction when they occur with \(=\hat{o}\) 'REAL' (see §5.5.1 below), and it is ungrammatical for an aspect proclitic to precede the morpheme \(=m e\) 'IRR'. \({ }^{227}\) These behaviors (i.e. triggering phonemic reduction, strict ordering) are not characteristic of the aspect proclitics.

Another piece of evidence for the existence of a mood category distinct from aspect is that the two categories have different frequencies of occurrence in discourse.

\footnotetext{
\({ }^{226}\) The terms mood, mode, and modality are used interchangeably throughout this work.
\({ }^{227}\) One speaker stated that it is possible for realis \(=\hat{o}\) to occur after an aspectual proclitic, though this has never been instantiated in my hearing. She was sure, however, that irrealis =me could never occur after an aspectual proclitic.
}

The mood markers \(=\hat{o}\) 'REAL' and \(=m e\) 'IRR' occur very frequently in natural discourse, while the aspectual proclitics are fairly uncommon. Approximate frequencies from my corpus are represented in Table 79.

Table 79: Frequencies of TAM morphemes
\begin{tabular}{|c|c|}
\hline Morpheme & \# of tokens \\
\hline =ô 'REAL' & 429 \\
\hline \(=\) me 'IRR' & 260 \\
\hline tao \(=\) ' HAB ' & 57 \\
\hline bwa \(=\) 'CONT' & 49 \\
\hline nyi= 'PUNCT' & 38 \\
\hline ca= 'ITER' & 17 \\
\hline da \({ }^{\text {'GNO' }}\) & 11 \\
\hline âmu= 'PRF' & 9 \\
\hline âga \(=\) 'PROG' & 2 \\
\hline
\end{tabular}

The fact that the frequency of mood markers differs from that of aspectual proclitics indicates that they form separate categories.

Finally, cross-linguistic evidence indicates that a mood category distinct from aspect might exist in Belep. In Nêlêmwa (Bril 2002), there is a 'frame of reference' distinction between 'virtual' clauses (marked with either hypothetical o or prospective future io preposed to the entire clause) and 'non-virtual' clauses, which are zero-marked. In Boumaa Fijian, 'tense-aspect' markers (indicating 'past', 'future/would/might', and 'contrast with the present') are included in the 'prefatory material' before the verb; they are distinguished from 'stance-aspect' modifiers, which "describe the temporal duration, etc, of the activity or state referred to by the predicate" (Dixon 1988: 76). In South Efate, bound subject pronouns procliticized to the verb complex "distinguish realis and irrealis forms" (Thieberger 2006: 109).

In Belep, mood is not obligatorily marked in all clauses. Clauses for which the speaker claims actual instantiation of the event described by the verb are marked with the
realis marker \(=\hat{o}\). Clauses where the instantiation of the verb is hypothetical, conditional, or predicted for the future are marked with the irrealis marker \(=m e\). All other clauses are zero-marked. This is reminiscent of the situation in Xârâcùù, where "utterances called 'atemporal', affirmations of a general order...simple statements of a fact or a state, do not necessitate the presence of an aspecto-temporal modal" (Moyse-Faurie 1995: 115). A similar system exists in Nêlêmwa (Bril 2002), where the perfective morpheme can cooccur with both of the 'virtual' morphemes. Bril states that the zero-realization of the perfective morpheme may occur if the action of the verb is "generic, imperfective, or unmarked perfective" \({ }^{228}\) when "the situation of the utterance or the discourse context suffices to define the temporal or aspectual reference",229 (Bril 2002: 198). Speakers assert that the Belep mood morphemes may co-occur, although it is unclear what circumstances might prompt this and how its meaning would be interpreted.

Both mood markers \(=\hat{o}\) and \(=m e\) normally occur as enclitics in the preface part of the verb group (§5.2), as in (109) and (110).
(109) Teô wânem,
te \(=\hat{\mathbf{o}} \quad\) wânem
3SG.SUBJ=REAL walk
'She walked.'
(110) Teme cegele,
te=me cege-le
3SG.SUBJ=IRR watch-3DU.ABS
'She watched them,'
Yal-28072010-BGMCG-tayamu_0147

\footnotetext{
228 "soit à du générique, soit à de l'inaccompli, soit à de l'accompli non-marqué"
229 "La situation d'énonciation ou le contexte discursif suffisent à définir la référence temporelle ou aspectuelle (accompli)."
}

However, they should be considered simple clitics according to Zwicky's (1977) definition; they may also appear in a full, uncliticized form when there is no subject agreement proclitic (§5.7) for them to attach to, as in (111) and (112).
(111) Ô toven.

人 \(\boldsymbol{0}\) toven
REAL finish
'That's it, that's all.'
Yal-20092011-AW1_0306
(112) «mo me weeng.»
mo me wee-ng
LK3 IRR food-1SG.POSS
""as my food.""
Yal-20092011-AW1_0073

\subsection*{5.5.1 Realis \(=\hat{\boldsymbol{o}}\)}

The Belep realis marker \(=\hat{o}^{230}\) indicates that the action expressed by the verb is instantiated in an actual event, either within the speaker's memory or his or her knowledge of history and of the world. For example, the beginning of a fable is given in (113). The speaker begins with background, general truths not instantiated by any particular event, which are unmarked for mood (lines 1-2). Then she begins the sequence of events of the story (line 3 ), which repeatedly uses the \(=\hat{o}\) realis marker.

\footnotetext{
\({ }^{230}\) While the realis marker \(=\hat{o}\) is typically encliticized to the subject agreement marker, occasionally it appears at the beginning of an intonation unit. For this reason, \(\hat{o}\) should be considered a simple clitic as defined by Zwicky (1977): it has a free form \(\hat{o}\) but typically occurs in its encliticized form \(=\hat{o}\). If there is no subject agreement marker, \(=\hat{o}\) may also attach to a clause-initial linker \(k a\).
}
(113) Buny, te tu cage ûjep va pwemwa caivak,
\begin{tabular}{lllllll} 
buny & te= & tu & cage & ûjev=a & pwemwa & caivak \\
great.crested.tern & 3 3SG.SUBJ \(=\) & go.DH & steal.TR sugar.cane=LOC & village & rat
\end{tabular} 'The tern, he steals sugar cane from the rat's home,'

2 caivak, texa, te kaac u le buny, ka mon,
caivak te=xa te= kaya u=le buny ka mon
rat 3SG.SUBJ=LK 3SG.SUBJ= bitter toward=DAT great.crested.tern LK side.DH 'The rat, he's, he's angry at the tern, and then,'

3 ka mon, ô bwaêdan, leô-leô-leô pae,
ka mon \(\underline{\hat{0}}\) bwaêdan \(l \mathbf{e}=\underline{\hat{\mathbf{0}}}\) pa-e
LK side.DH REAL morning 3DU.SUBJ=REAL take-SPC 'and then, [one] morning, they- they- they took,'

4 leô pae, leô pae wagale ûjep,
le= \(\boldsymbol{\hat { \mathbf { o } }}\) pa-e le=ô pa-e waga-le ûjep
3DU.SUBJ=REAL take-SPC 3DU.SUBJ=REAL take-SPC boat-3DU.POSS sugar.cane 'they took, they took their sugar cane boat,'

5 ma leô tu ka âva.
ma le=ô tu=xa âva
LK4 3DU.SUBJ=REAL go.DH=LK fish.GNR
'so that they could go down and fish.'
Yal-01082010-MFD_0003-0006
In example (114), realis \(=\hat{o}\) is used to represent a present state, one of the typical
expressions of realis (Chafe 1995). The character animated by the speaker is speaking
about a state that is actualized at the moment of speaking.
(114) Teô kop va bwang.
te= \(\boldsymbol{\hat { 0 }} \quad\) kov=a bwaa-ng
3SG.SUBJ=REAL be.white.haired=NOM head-1SG.POSS
"'my hair is [grown] white."
Yal-28072010-BGMCG-tayamu_0154
Realis \(=\hat{o}\) is also used to represent past states, such as in (115).
(115) Texaôô, ka ô toven.
te \(=x a=\hat{\underline{0}} \quad \hat{\mathbf{o}} \quad\) ka \(\underline{\hat{\mathbf{o}}} \quad\) toven
3SG.SUBJ=LK=REAL good LK REAL finish
'and he was fine, it was over.'
Yal-28072010-BGMCG-tahitian_0322

The morpheme \(=\hat{o}\) can also mark future states. In (116), the speaker addresses the hypothetical future readers of this book, referring to the fact that those of his generation will no longer be here.
(116) lami ô cavac ka najiac.
la-mi \(\quad \underline{\hat{0}} \quad\) cavay=a naji-ac
DEM.PL-DET.A.DST REAL leave=LK let-2PL.ABS
'those who have gone away and left you.'
Yal-14092011-PT2-avenir_0011
Note that all the instances of \(l e=\hat{o}\) [3DU.SUBJ=REAL] in example (113) are produced [lo], and that \(t e=\hat{o}\) [3SG.SUBJ=REAL] in example (114) is pronounced [to]. The reduction of subject agreement markers with enclitic \(=\hat{o}\) occurs most frequently when the subject agreement marker ends with /e/, as shown in Table 80.

Table 80: Reduction of realis \(=\hat{\boldsymbol{o}}\)
\begin{tabular}{|l|l|l|}
\hline Phonological & Phonetic & Gloss \\
\hline te \(=\hat{\mathrm{o}}\) & {\([\) tõ \(]\) or \([\) to \(]\)} & 3sG.SUBJ=REAL \\
\hline le \(=\hat{o}\) & {\([1 \tilde{o}]\) or \([\mathrm{lo}]\)} & 3DU.SUBJ=REAL \\
\hline ave \(=\hat{o}\) & {\([\) avõ \(]\) or \([\mathrm{avo}]\)} & 1DU.EXCL.SUBJ=REAL \\
\hline
\end{tabular}

Realis \(=\hat{o}\) may also precede a temporal noun which acts as a predicate. This construction is used as a sort of 'stage-setting' narrative device. Example (117) shows the use of realis \(=\hat{o}\) with the predication of mon gawaar 'afternoon'.
(117) ka ô mon gawaar.
ka \(\mathbf{o}\) mon gawaar
LK REAL be.side.DH day
'then it was afternoon.'
Yal-28072010-BGMCG-tahitian_0038
Realis \(=\hat{o}\) may co-occur with all aspectual clitics, although this is relatively rare: the only such examples in my corpus are of \(=\hat{o}\) co-occurring with punctual nyi=(118).
(118) Ka teô nyi âri ka, ava keja ka najie.
ka te= \(\mathbf{0} \quad\) nyi âri=xa

LK 3SG.SUBJ=REAL PUNCT= say=LK

\section*{ava= \(\quad k e j a=x a\) najie}

1PL.EXCL.SUBJ= run=LK leave-3SG.ABS
'and he kept saying that we had run away and left him.'
Yal-28072010-BGMCG-tahitian_0303

\subsection*{5.5.2 Irrealis \(=m e\)}

The irrealis marker =me indicates that the action expressed by the verb is hypothetical, prospective, or conditional. For example, in (119), \(=m e\) is used as a marker of immediate future events following the moment of speaking. The speaker begins his story by saying that he is going to tell it.
(119) Name, na pari para camang,
na=me na= pari para cama-ng

1SG.SUBJ=IRR 1SG.SUBJ= tell.TR story father-1SG.POSS
'I'm going to- I'm telling a story of my father's.'
Yal-28072010-BGMCG-hamecon_0001
In (120), \(=m e\) clearly has a conditional function. The clause is marked with an initial enyi
'if', and both the clause containing the conditional circumstance and the two clauses
containing conditional results contain irrealis \(=m e\).
(120) Ka enyi yome bwa tu yena,
ka enyi yo=me bwa= tu yena
LK if 2 SG.SUBJ=IRR CONT= go.DH now
yome bwa kiyi buânyili.
yo=me bwa= kiyi buânyi-li
\(2 \mathrm{SG} . \mathrm{SUBJ}=\mathrm{IRR} \quad \mathrm{CONT}=\) see.SPC stone-DET.A.PRX
Yome bwa kiya buânyama lali, bwa yena.
yo=me bwa= kiya buânya-ma lali bwa= yena
2SG.SUBJ=IRR CONT= see.GNR stone-AC 3PL.SUBJ-DET.A.PRX CONT= now 'and if you would go down there now, you would see these stones. You would see all these stones, they're there now.'

Yal-28072010-BGMCG-sousmarin_0119-0120

The irrealis clitic \(=m e\) is also commonly used with \(m a\)-subordinate clauses (§7.2.2) to indicate that the action is contingent, intended, or desired, but not necessarily accomplished. In the \(m a\)-subordinate clause in (121), \(=m e\) indicates a purposive, or an intention of completing the action of the verb bwawar 'plant yams' at some point in the future, although the narrated events took place in the past.
(121) ka bwagevavan na toop, ma avame bwawar.
ka bwage-va=van na toop ma ava=me bwawar
LK return-2PL.EXCL.ABS=DIR.TV interior field LK4 1PL.EXCL.SUBJ=IRR plant.yams 'and [we] returned to the fields, so that we could plant yams.'

Yal-17072009-TB-weekend_0019-0020
The irrealis \(=m e\) is compatible with all aspectual clitics (§5.4). There are examples in my corpus where \(=m e\) occurs with habitual \(t a o=\), gnomic \(d a=\), progressive \(\hat{a} g a=\), iterative \(c a=\), continuative \(b w a=\), and punctual nyi=.

\subsection*{5.6 Absolutive suffixes}

An absolutive noun phrase (§6.2.3, §6.3.1) may be anaphorically referenced by an absolutive suffix, shown in Table 81. For more on the pronominal system in Belep, see

Table 81: Anaphoric absolutive suffixes
\begin{tabular}{|l|l|l|l|l|}
\hline & Singular & Dual & Paucal & Plural \\
\hline \(\mathbf{1}\) excl & -nao & -ve & -ven & -va \\
\cline { 3 - 5 } incl & & -ji & -jen & -ja \\
\hline \(\mathbf{2}\) & -o & -or & -ôn & -ac \\
\hline \(\mathbf{3}\) & \(-\mathrm{e},-\mathrm{er}^{231}\) & -le & -len & -la \\
\hline
\end{tabular}

These suffixes are anaphoric; their referent is Given information. They serve this function in both verbal and nominal morphology. As formatives within the verb group (§5.2), the absolutive suffixes reference the NP serving as the absolutive argument (§6.3.1). Within the noun phrase, absolutive suffixes refer to the possessor in an independent possessive

\footnotetext{
\({ }^{231}\) The difference between these 3 SG.ABS forms is explained below in \(\S 5.6 .2\).
}
construction (§4.1.2.4), as well as to an argument marked as genitive with the case marker \(=l i(\S 6.3 .3)\).

\subsection*{5.6.1 As verb inflections}

The absolutive suffixes are verb inflections that serve as part of the verb group
(§5.2). They can refer either to the patient of a transitive verb, as in (122) where -le '3DU.ABS' refers to the patient of transitive migie 'to touch, catch'; or to the singular argument of an intransitive verb (§5.1.2; see \(\S 6.2 .3\) ) such as cia 'NEG.LOC', as in (123).
(122) Jame migile, ja=me migi-le
1PL.INCL.SUBJ=IRR hold-3 \(\overline{\mathrm{D} U} . \mathrm{ABS}\)
"We will catch them,""
Yal-20092011-AW6_0083
(123) Toma len, cialen, toma len cia-len
but 3PA.INDEP NEG.LOC-3PA.ABS
'But they, they weren't there,'
Yal-20092011-AW6_0161
The absolutive suffixes are in complementary distribution with noun phrases, as shown in (133), where the 3pL.ABS pronoun -la occurs without a corresponding noun phrase; it refers anaphorically to the topicalized (§6.8.1) noun phrase avar 'others'.
(124) Avar, la baela li nic.
avar la bae-la=li nic
other 3PL.SUBJ= bite.SPC-3PL.ABS=GEN shark
'Others, sharks ate them.'
Yal-20092011-AW2_0049
Clauses which contain both an absolutive suffix and an absolutive noun phrase are ungrammatical (125).

\section*{(125) *Te yavie wîmi.}
te \(=\) yavi-e wî-mi
3SG.SUBJ= search.TR-3SG.ABS DEM.INAN-DET.A.DST
*'S/he searches for it that thing.'

This is in contrast with the DA suffixes \(-n\) and \(-a(\S 5.1 .3 .3, \S 5.1 .3 .4)\), which are often used concurrently with an absolutive noun phrase. For this reason, DA suffixes are not considered to belong to the set of absolutive suffixes, even though the lack of cooccurrence between these two sets makes it impossible to tell whether they belong to the same position class.

The absolutive suffixes are bound to the verb word. They occur immediately after any valence (§5.1.4) or specific \({ }^{232}\) (§5.1.3.1) suffixes, and before verb phrase enclitics (§5.11, §5.12), as in (126).

\section*{mo âyuang ngi yo paenaoda, mo âyua-ng=i yo pa-e-nao=da}

LK3 desire-1SG.POSS=GEN 2 SG.SUBJ= take-SPC-1SG.ABS=DIR.UH
'but I want you to accompany me up,'
Yal-20092011-AW1_0096

In example (126), the absolutive suffix -nao '1SG.ABS' follows the specific suffix \(-e\) and precedes the verb phrase enclitic \(=d a\) 'DIR.UH'. In (127), the speaker accidentally utters the absolutive suffix after the directional verb phrase enclitic, stops, and makes a repair.
(127) Avaxaô bwagedava-
ava=xa=ô
1PL.EXCL.SUBJ=LK=REAL
'Also we retur-'

\section*{bwage=da-va}
return-DIR.UH-2PL.EXCL.ABS
bwagevadame la bwe Waala. bwage-va=da=me=la bwe Wala
return-2PL.EXCL.ABS=DIR.UH=CTP=LOC top Waala 'returned back up here to Waala.'

Yal-17072009-TB-weekend_0042

\subsection*{5.6.2 Suffixes -e and -er}

The variation between the two \(3 \mathrm{SG} . \mathrm{ABS}\) suffixes \(-e\) and -er appears to be conditioned by as-yet-unidentified discourse features. \({ }^{233}\) More work remains to be done

\footnotetext{
\({ }^{232}\) Note that the specific suffix \(-e\) does not co-occur with either 3 SG absolutive suffix; the former is most likely a grammaticalized version of the latter.
}
to fully understand the influencing factors for this variation. \({ }^{234}\) The difference in distribution of the two suffixes is the chief evidence for the distinction in meaning. If the clause contains a full, case-marked NP argument-such as a genitive-marked subject (§6.2.2), a locative goal (§6.3.5 and §5.12), a genitive-marked oblique (§6.3.3), etc.-the form -er is obligatory and \(-e\) is ungrammatical. For example, in (128), the suffix -er is used because there is a genitive-marked subject, Belep 'Chieftain Belep'. The use of ina\(e=l i\) would be ungrammatical.
(128) Texa înaer ri Belep ka ô. te=xa îna-er=i Belev=a ô 3SG.SUBJ=ADD make-3SG.ABS=GEN Belep=LK good 'And Belep made him better.'

Yal-20092011-AW6_0055
In (129), the suffix -er is used because there is a locative-marked goal NP, bwe daan 'on
the path'. The use of nawe-e=la would be ungrammatical.

\section*{ka naweer ra bwe daan.}
ka nawe-er=a
bwe daan
LK deposit-3SG.ABS=LOC top path
'and left her on the path.'
Yal-20092011-AW1_0109
In (130), the suffix -er is used because there is a genitive-marked theme NP, bolao pwâgo 'poingo banana'.
(130) Te taxeer ri bolao pwâgo, te \(=\) taxe-er \(=\mathbf{i} \quad\) bolao pwâgo
3 SG.SUBJ \(=\) distribute-3SG.ABS=GEN banana poingo
'He gave him poingo bananas,'
Yal-28072010-BGMCG-lune_0037

\footnotetext{
\({ }^{233}\) In Nêlêmwa, two 3SG object forms are distinguished by the animacy of their anaphoric referent (Bril 2002: 86).
\({ }^{234}\) Speakers have difficulty describing the difference between the two morphemes. In a few cases, speakers said that \(-e r\) was 'more specific' than \(-e\); one speaker glossed \(t e=g i-e\) as 'he hits him' and \(t e=g i-e r\) as 'he hits him (specifically)'. It is unclear how this corresponds to the rest of the evidence.
}

In all of these cases, the full NP argument within the clause precludes the use of the suffix \(-e\).

By contrast, if the verb group with the absolutive suffix is followed by a verb phrase directional or deictic enclitic (§5.11), the form -e is obligatory and \(-e r\) is ungrammatical. For example, in (131) the form -e is used; it is followed by verb phrase directional \(=d u\) 'DIR.DH' and deictic \(=m e\) 'CTP'. The form -er would be ungrammatical. \({ }^{235}\)
(131) ma le paedume leeng.
ma le= pa-e=du=me=lee-ng
LK4 3DU.SUBJ= take-3SG.ABS=DIR.DH=CTP=DAT-1SG.POSS
'so they could bring him down to me.'
Yal-28072010-BGMCG-tahitian_0254
The environments in which \(-e\) and \(-e r\) occur are not in complementary
distribution: both may be used at the end of an intonation unit. For instance, both \(-e\) in (132) and -er in (133) refer to the patient of the specific form of the verb kiya 'to see'.

Both occur at the end of an intonation unit and refer to a singular human referent.
(132) Toma âju, âri na kiyie.
toma âju âri= na= kiyi-e.
but person NEG= 1SG.SUBJ= see.SPC-3SG.ABS
'but the person I didn't see.'
Yal-28072010-BGMCG-tahitian_0094
(133) Le îna ma leô kôk to leô kiyier,
le= îna ma le=ô kôxa=ro le=ô kiyi-er
3DU.SUBJ= make.GNR LK4 3DU.SUBJ=REAL overflow=when 3DU.SUBJ=REAL see.SPC-3SG.ABS
'They wanted to throw up when they saw her,'
Yal-28072010-BGMCG-tayamu_0233
A similar example occurs in (134) and (135) with the verb najie 'to leave, let'; -e in (134) and \(-e r\) in (135) both refer to human referents and occur at the end of an intonation unit.

\footnotetext{
\({ }^{235}\) The distinction between -e and -er may also have a phonological component; -er would be phonologically impossible in this environment.
}
(134) Lexa pe najie.
le=xa \(\quad\) pe= naji-e
3DU.SUBJ=ADD RECP= let-3SG.ABS
'and they left [each other].'
Yal-28072010-BGMCG-tahitian_0202
(135) Ka ave keja ka najier.
ka ave= \(\quad k e j a=x a ~ n a j i-e r ~\)
LK 1DU.EXCL.SUBJ= run=LK let-3SG.ABS
'and we ran and left him.'
Yal-28072010-BGMCG-tahitian_0274
The distinction between -e and -er also holds when these absolutive suffixes occur within an independently possessed noun phrase (§4.1.2.4). For example, in (136) and (137), the independently possessed noun \(\hat{a j u}\) 'person' is modified by an absolutive suffix which refers to the referent Teâ Belep. However, the form -e is used in (136) while -er is used in (137). It is not clear what discourse features might condition this variation.

La tu la âju lie ma la cao.
\begin{tabular}{|c|c|c|c|c|c|}
\hline \(\mathbf{l a}=\) & tu=la & âju=li-e & ma & \(\mathbf{l a}=\) & cao \\
\hline 3PL.SUBJ= & go.DH=NOM & person=GEN-3SG.ABS & LK4 & 3PL.SUBJ= & work \\
\hline \multicolumn{6}{|l|}{'His people went down to work.'} \\
\hline
\end{tabular}
(137) Âju lier ka âju pwadu.
âju=li-er \(\quad\) ka âju pwadu person= \(\overline{\mathrm{GE}} \mathrm{N}-3 \mathrm{SG} . \mathrm{ABS}\) LK person two
'He had two courtiers.'
Yal-20092011-AW6_0057

\subsection*{5.7 Subject agreement clitics}

The subject agreement proclitics are presented in Table 82.

Table 82: Subject agreement clitics
\begin{tabular}{|l|l|l|l|l|}
\hline & Singular & Dual & Paucal & Plural \\
\hline \multicolumn{5}{|c|}{ exclusive } \\
\multirow{2}{*}{ na \(=\)} & ave \(=\) & avena \(=\) & \(\mathrm{ava}=\) \\
\cline { 3 - 5 } inclusive & & \(\mathrm{ji}=\) & \(\mathrm{jena}=\) & \(\mathrm{ja}=\) \\
\hline 2 & \(\mathrm{yo}=\) & \(\mathrm{o}=\) & ôna \(=\) & \(\mathrm{a}=\) \\
\hline 3 & \(\mathrm{te}=\) & \(\mathrm{le}=\) & lena \(=\) & \(\mathrm{la}=\) \\
\hline
\end{tabular}

The subject agreement clitics are verb inflections which typically serve as the first element of the verb group (§5.2). They agree in person and number with the subject of a transitive clause-whether it is marked as nominative (§6.3.2), as in (138), or genitive (§6.3.3; see §6.2.2), as in (139)—and with the subject of most intransitive clauses (§5.1.1), as in (140). Subject agreement proclitics are not present in clauses where the intransitive verb takes an absolutive argument (§5.1.2).

In (138), the subject agreement proclitic \(t e=\) ' 3 SG.SUBJ' agrees with the nominative subject teâmaa 'high chief'.
(138) Texa terae wayap va teâmaa, te=xa tera-e wayav=a teâmaa 3SG.SUBJ=ADD stop-SPC war=NOM high.chief 'And the chieftain stopped the war,'
Yal-20092011-AW4_0060

In (139), the subject agreement proclitic \(l a=\) ' 3 PL.SUBJ' agrees with the genitive subject Âovaayama 'the Âôvaac people'.
(139) La ginao li Âôvaayama.

'The Åôvaac people are attacking me.'
Yal-20092011-AW3_0029
In (140), the subject agreement proclitic \(l a=\) ' 3 PL.SUBJ' agrees with the intransitive subject âjuma 'people'.
(140) Laxa tame la âjuma,
\(\underline{l a}=x a \quad t a=m e=l a \quad\) âju-ma,

3PL.SUBJ=ADD go.UH=CTP=NOM person-AC 'and the people came,'

Yal-28072010-BGMCG-igname_0049
Subject agreement proclitics are not considered to be pronouns; they are not in complementary distribution with noun phrases and are obligatory in most clauses.

Examples (138) - (140) show the co-occurrence of a subject agreement proclitic with a full NP subject.

As proclitics, the subject agreement markers do not carry stress. They are often procliticized to the verb group; however, as discussed in §5.2, in the presence of certain morphemes they form a 'clitic-only' phonological word (Aikhenvald 2002: 51) called the 'preface' that can serve as an intonation unit. The morphemes which can trigger the formation of this clitic-only word are the additive enclitic \(=x a\) 'ADD' (§7.1.1.3); the mood
 example, in (141), the speaker uses texa ' \(3 \mathrm{SG} . \mathrm{SUBJ}=\mathrm{ADD}\) ' as a temporizer, waits 1.21 seconds, and then produces a full clause beginning with avexa '1DU.EXCL.SUBJ=ADD'.
(141) Texa, ...avexa migi pwalaic.
\begin{tabular}{llll} 
te=xa & ave=xa & migi & pwalaic \\
3SG.SUBJ=ADD & 1DU.EXCL.SUBJ=ADD & catch & one
\end{tabular}
'Also it, ...(1.21) also we caught one.'
Yal-28072010-BGMCG-tahitian_0048-0049
In (142), the speaker uses lame ' 3 PL.SUBJ=IRR', pauses for 0.8 seconds, and continues with the rest of the clause.
```

ma lame,
ma la=me
LK4 3PL.SUBJ=IRR

```
tu ka âja ka me tame ka,
tu=xa âja=xa me ta=me=xa
go.DH=LK dive.for.top.snail=LK IRR go.UH=CTP=LK
'so that they would, ...(0.8) go down, fish for top snail, and then come back and,'
Yal-28072010-BGMCG-igname_0052-0053
In (143), the speaker produces teôre '3SG.SUBJ=REAL=ACT', pauses for 1.6 seconds, then produces a full clause, repeating the subject proclitic \(t e=\).
(143) Teôre:::, te ta,

'He actually, ...(1.6) he went up,'
Yal-28072010-BGMCG-tahitian_0194-0195
The preface-a clitic-only phonological word-is part of the grammatical word formed by the verb group (see §3.1.2).

There are some clauses where use of a subject agreement proclitic is not obligatory. In imperatives where the addressee is singular, subject agreement proclitics are optional (§6.6.1). If the verb is repeated for dramatic effect, the subject agreement marker is not included in the repetition, as in (144), where the verbs yue 'to dig' and yagie 'to search' are repeated dramatically without the subject agreement marker la= '3PL.SUBJ'.
(144) La yuu, yuи, yagin, \(\mathbf{l a}=\quad\) yu-u \(\quad\) yu-u yagi-n
3PL.SUBJ= dig-DETR dig-DETR search-VAL
yuu, yagin, ka koni tun.
yu-u yagi-n ka koni tu-n
dig-DETR search-VAL LK unable find-VAL
'They dug, dug, searched, dug, searched and never could find anything.' Yal-28072010-BGMCG-sousmarin_0116

The subject agreement clitic is obligatorily omitted in a clause conjoined with ka ' LK ' (see §7.1.1.1).

The subject agreement clitics seem to serve the same purpose as subject pronouns in English (Nariyama 2006); they are ubiquitous (there are more than 1000 tokens in my corpus), the majority of clauses begin with one, and they may be ellipted in certain discourse conditions. This may contribute to the maintenance of the basic word order of Belep, which is VOS (see \(\S 6.1\) ); since the subject is referred to inflectionally at the
beginning of the clause, the fact that the nominal subject is clause-final is not such a detriment to the communicative needs of the speakers (cf. Du Bois 1987).

\subsection*{5.8 Verb compounding}

A number of verbal elements which may combine with other verbs have already been examined (Table 83).

Table 83: Grammaticalized verb roots
\begin{tabular}{|l|l|}
\hline Full verb & Formative \\
\hline toven 'finish' & -roven 'COMPL' \\
\hline ta 'go.UH' & \(=\) da 'DIR.UH' \\
\hline tu 'go.DH' & \(=\) du 'DIR.DH' \\
\hline pan 'go.TV' & \(=\) van 'DIR.TV' \\
\hline pa 'take' & \(=\) va, =vae 'INSTR' \\
\hline
\end{tabular}

However, these should be considered fully grammaticalized formatives rather than independent verbs used in compounding, since these meanings are substantially distinct from the corresponding independent verbs and the formatives have a strongly bleached semantic content (Payne 1997: 233). As such, these morphemes will not be further discussed in this section; refer to the various sections in which each is discussed individually (§5.4.11 for \(=\) roven, \(\S 5.11\) for \(=d a,=d u\), and \(=v a n\), and \(\S 6.3 .6\) for \(=v a e\) ). A similar caveat holds for verbs used as the first element in a serial verb construction (§5.9); these should not be considered compounds.

This section will discuss instances of true verb compounding in Belep as defined by Payne (1997): "both roots are recognizable verbs in their own right, but nothing can come in between them, and the meaning of the whole structure is 'bleached,' i.e., slightly different from the combination of the lexical meanings of the two roots" (Payne 1997: 233).

There are a few clear examples of this compounding in my data, represented in (145).
\begin{tabular}{ll} 
bala koon & 'to be clumsy' (from balap 'to move' and koon 'to be unable') \\
boyuma & 'to kiss' (from boyu 'to greet') \\
câgewadi & 'to encircle' (from câge-r 'to turn') \\
ceneju & 'to be greedy' (from ceenee 'to swallow') \\
cera kannu & 'to look at oneself' (from kânu 'appearance, soul') \\
guluvinya, gulu pinya 'to be crunchy' (from pinyau 'watermelon') \\
kawari & 'to snack' (probably from arii 'rice') \\
nodeec & 'to daydream' (probably from noo-r 'to awaken, to peer') \\
payemuau & 'to compare' (probably from paye 'to place') \\
tara koon & 'to correspond' (from tara 'to scoop' and koon 'to be unable') \\
taxâ̂m & 'to cover' (probably from taxa 'to unearth') \\
texenau & 'to take care of' (probably from texee 'to cradle') \\
tilibugi & 'to have cramps' (probably from tilie 'to knot') \\
tiurien & 'to pray' (from purieen 'prayer.LN') \\
to ji & 'to call to sb.' (lit. 'call give') \\
yamawuc & 'to blink' (probably from mawuc 'to close one's eyes') \\
yamayaap & 'to concentrate' (probably from yaap 'to search')
\end{tabular}

In most instances, not all compounding elements are identifiable. Where the second element is definitely identifiable, I have written it as a separate phonological word; it is unknown which of the other compounds in (145) should be considered multiple
phonological words (see §3.1). Nonetheless, in verb compounding the two verbs behave as one grammatical word-there is only one subject agreement proclitic (§5.7) and absolutive suffix (§5.6) if the verb is transitive, and nothing can intercede between the two verbs. The first element serves as the head of the compound (Nichols 1986). These characteristics are demonstrated in example (146), where the verb is to \(j i\) 'to call to sb.'

Na nyi kewee ka to jie, "Ai!"
na= nyi= kewe-e=xa to ii-e ai
1 SG.SUBJ= PUNCT= run-3SG.ABS=LK call give-3SG.ABS no
Ka me to ji-e, "Ai!"
ka me= to ii-e ai
LK IRR= call give-3SG.ABS no
'I immediately chased after him and called to him, "No!" and then called to him, "No!""

Yal-28072010-BGMCG-tahitian_0078
More research would be required to determine the productivity of verb compounding in Belep.

\subsection*{5.9 Verb serialization}

Many Northern New Caledonian languages have productive serial verb constructions (SVCs). Nêlêmwa and other Northern languages have both same-subject and different-subject SVCs (Bril 2004b). In Belep, same-subject serialization with a limited set of verbs may be used to modify the aspect or modality of the clause. In such cases, the first verb provides modal information and the second verb provides lexical information. Switch-subject SVCs, by contrast, are used as a complementation strategy; in these instances, the first verb is the main verb (see §7.2.9). Belep SVCs are distinguished from compound verbs in that each verb in a SVC can serve independently as the main verb of a clause.

This section describes a number of full verbs which function as modals, occurring in the same position in the verb group as the aspectual (§5.4) proclitics. These modals differ from morphological modals in that they have the capacity to appear in other clauses as the main and only verb. Each full verb presented here-jaar 'to be happy' (§5.9.1), cavie 'to try' (§5.9.2), mo 'to live' (§5.9.3), pan 'to go.TV’ (§5.9.4), ci 'to sit' (§5.9.5), koon 'to be unable’ (§5.9.6), toven 'to finish’ (§5.9.7), and others (§5.9.8) -has a
semantically shifted meaning when it is used as a modal modifier in a SVC. Intransitive verbs (§5.1.1) used modally in this way occur in their incomplete phase (§2.3.3.2), while transitive (§5.1.3) or transitivized (§5.1.5) verbs occur in their generic (§5.1.4) or bound (§5.1.3.2) forms.

\subsection*{5.9.1 Desiderative jaar 'to want to'}

When the intransitive verb jaar acts as the main verb, its meaning is 'to be
happy', as in (147).
(147) Ma le jua jaar, jua jaar, jaar.
\begin{tabular}{lllll} 
ma & le \(=\) & jua & jaar & jua \\
LK4 & jaar & jaar \\
3DU.SUBJ \(=\) & very & happy & very \\
happy & happy
\end{tabular}
'So that they were really happy, so happy, happy.'
Yal-28072010-BGMCG-tayamu_0073
When jaar is the first element in a SVC, it appears in its incomplete phase (§2.3.3.2) as [ \({ }^{n} \mathfrak{a r a ]}\), and its meaning is modal; it indicates a desiderative mood for the main verb. In (148) and (149), jaar participates in such a SVC and is glossed 'to want.'
(148) Âri le jaar pulu ma le tao go. \(\begin{array}{lllll}\text { âri }= & \text { le }= & \text { jara } \\ \text { NEG }= & \text { pulu } & \text { ma } & \text { le }= & \mathbf{t a o}= \\ \text { go }\end{array}\) 'They didn't want to speak because they kept crying.'

Yal-19092011-PA_0021
(149) Ava jaar bae pê
ava= jara bae pê
1PL.EXCL.SUBJ= want bite bread
'We want to eat the bread'
Yal-25072010-PT-homily_0030

\subsection*{5.9.2 Conative cavi 'to try to'}

The bound transitive (§5.1.3.2) verb cavie 'to try, to taste' does not occur in my corpus; a constructed example is shown in (150).
(150) Bwa cavi weemw nook. bwa= cavi we-mwa noo-k CONT= try food-2SG.POSS fish-DET.D.PRX 'Taste this fish.'

The verb cavie takes on a conative modal meaning when it is used as the first element in a SVC. Forsyth (1970) uses the term 'conative' to mean "a conscious attempt to perform the action" (Forsyth 1970:71) and "the expression of an action which has not yet taken place, but which is considered as part of a plan or programme arranged to take place" (Forsyth 1970:73). \({ }^{236}\) The Belep modal form cavi is used with this function as in (151).

Note that form cavi is the bound form of the verb cavie.
(151) Name cavi pulu.
\begin{tabular}{lll} 
na=me & cavi & pulu \\
1SG.SUBJ=IRR try & speak \\
'I'm going to try to speak.'
\end{tabular}
Yal-03112011-IM1.wav - Yal-03112011-IM2.wav

\subsection*{5.9.3 Prospective mo 'to be about to'}

The intransitive verb mo 'to live, to stay' is very common in discourse; example
(152) is representative.
(152) La mo la âjuma la yali.
\begin{tabular}{llll}
\(\mathbf{l a}=\) & \(\mathbf{m o}=\mathbf{l a}\) & âju-ma=la & ya-li \\
3PL.SUBJ \(=\) & live=NOM & person-AC=LOC & DEM.LOC-DET.A.PRX
\end{tabular}
'The people lived there.'
Yal-28072010-BGMCG-igname_0007
When \(m o\) is used as the first verb in a SVC, by contrast, it takes on the prospective meaning of 'to be about to'. Examples are given in (153) and (154), and in both lines of (155).
```

te mo maac ya camala.
te= mo may=a cama-la
3SG.SUBJ= live die=NOM father-3PL.POSS
'their father was about to die.'

```

Yal-20092011-AW1_0030

\footnotetext{
\({ }^{236}\) This is a different sense of the word 'conative' than that used by Jakobson (1960).
}
(154) Laxa mo tu la bwe mar,
\begin{tabular}{lllll} 
la=xa & mo & tu=la & bwe & mar \\
3PL.SUBJ=ADD & live & go.DH=LOC & top & seashore
\end{tabular} 'and they were about to go down to the seashore,'

Yal-28072010-BGMCG-igname_0066
(155) «Mo mon, yo mo nginie,
\begin{tabular}{lllll} 
mo & mon & mo \(=\) & mo & \begin{tabular}{l} 
ngini-e \\
LK3
\end{tabular} \\
side.DH & \begin{tabular}{l} 
2SG.SUBJ \(=\) \\
live
\end{tabular} & \begin{tabular}{l} 
miss-3SG.ABS
\end{tabular}
\end{tabular}
avena mo gio."
avena= mo gi-o
1TR.EXCL.SUBJ= live attack-2SG.ABS
""For afterwards, you will not see it again; we are about to kill you.""
Yal-20092011-AW6_0100
These examples show that, as the first element of a SVC, mo indicates a modal meaning of incipient intention to commit an action.

\subsection*{5.9.4 Inceptive pan'to be going to'}

The intransitive verb pan 'to go.TV', which indicates general motion in a transverse direction (see §4.4.1), frequently acts as the main verb of a clause (156).
(156) avena pan na Poc.
avena= pan=a Poc

1TR.EXCL.SUBJ= go.TV=LOC Poc
'we [would] go to Poc.'
Yal-28072010-BGMCG-tahitian_0012
However, when pan is the first element in a SVC (its incomplete phase is [panã]), its meaning shifts to indicate a modal sense of futurity and the initiation of the action of the main verb. "Futurity is never a purely temporal concept; it necessarily includes an element of prediction" (Lyons 1994:677), a characteristic of modality. Some of the "modal characteristics of future time reference" were discussed in Palmer (2001:106).

Examples (157) - (159) show that the meaning of pan is modal rather than tensebased. These three examples show the use of modal pan with a past (157), present (158),
and future (159) event; what these events have in common is the speaker's conceptualization of the event as inceptive or intended. In (157), where the first element is pan and the main verb is nam 'to disappear', the narrated events take place in the past.
(157) Texa pan namadu la nan, te=xa pana 3SG.SUBJ=ADD go.TV disappear=DIR.DH=LOC interior-3SG.POSS 'And he went and disappeared down into it,'

Yal-01082010-MFD_0059
Example (158) shows a SVC where the first element is pan and the main verb is balap 'to move around'.
(158) Texa waak, «Na pan balap.»
\begin{tabular}{llll} 
te=xa & waa-k & na= & pana
\end{tabular} balap

Yal-19092011-PA_0028-0029
Example (159) shows a SVC where the first element is pan and the main verb is ciwie 'to bury’.
(159) «Jename pan ciwi caya.» jena=me pana ciwi caya 1TR.INCL.SUBJ=IRR go.TV bury dad ""We're gonna go and bury Dad.""
Yal-20092011-AW1_0042

It is worth noting that modal pan can also occur in a SVC with the full verb pan
'to go.TV', as seen in example (160).
(160) La pan pan, ka kiyi daroven, \(\begin{array}{llllll}\text { la= } & \text { pana } & \text { pan } & \text { ka } & \text { kiyi } & \text { da=roven } \\ \text { 3PL.SUBJ= } & \text { go.TV } & \text { go.TV } & \text { LK } & \text { see.SPC } & \text { blood=all }\end{array}\) 'They went and went, and saw all the blood,'
Yal-20092011-AW5_0086

\subsection*{5.9.5 Concessive ci 'nonetheless'}

The full verb \(c i\) 'to sit, to stay' may act as the main verb of a clause, as in (161).

\section*{(161) Te ci la yaxeda.}
te= ci=la ya-xeda
3SG.SUBJ= sit=LOC DEM.LOC-DET.UH
'It [a boulder] sits up there.'
Yal-20092011-AW3_0033
However, when it is used as the first element in a SVC, \(c i\) indicates the accomplishment of the main verb despite resistance. For example, (162) occurs during a story about a shipwreck where, despite the children's best efforts to swim, la ci maac 'they died'.
(162) Naerama, la ci maac.
nae-ra-ma la= ci maac
child-3GNR.POSS-AC 3PL.SUBJ= sit die
'The children, they died nonetheless.'
Yal-20092011-AW2_0041
Example (163) occurs during a description of a particular method for fishing. Though this method is also used in Tahiti, te ci tewuur ra Poc 'it nonetheless began at Poc', the speaker's ancestral home.
(163) Te ci tewuur ra Poc.
te \(=\quad\) ci tewuu-r=a Poc

3SG.SUBJ= sit beginning-3GNR.POSS=LOC Poc
'It nonetheless began at Poc.'
Yal-28072010-BGMCG-hamecon_0055
In (164), it is the speaker's reluctance to discourage her interlocutor that provides the resistance inherent in ci.

Na ci âri u lela ka te pwalic ya daan.
\begin{tabular}{llll} 
na= & ci & âri & u=le-la \\
1SG.SUBJ \(=\) & sit & say & toward=DAT-1PL.POSS
\end{tabular}
ka te= pwaliy=a daan
LK 3SG.SUBJ= long=NOM path
'I warn them that the road is long.' (lit. 'I reluctantly say to them that the road is long.')
Yal-03112011-IM1.wav - Yal-03112011-IM2.wav

In example (165), the speaker relates a narrative about two sisters fighting over the right to nurse a baby. When one sister succeeds at wresting control of the baby, she (animated
by the speaker) says name ci pariae 'I will nonetheless nurse it'. An SVC with \(c i\) is used again in line 2 , where she asserts that, despite her resistance, her sister should prepare the food.
(165) "Name ci pariae,
\begin{tabular}{lll} 
na=me & ci & pariae \(\mathbf{2 0}^{237}\) \\
SG.SUBJ=IRR & sit & \begin{tabular}{l} 
nurse.SPC
\end{tabular}
\end{tabular}
toma yo, yome ci tînin weji."
\(\begin{array}{llllll}\text { toma } & \text { yo } & \begin{array}{l}\text { yo=me }\end{array} & \text { ci } & \text { tîni-na } & \text { we-ji } \\ \text { but } & \text { 2SG.INDEP } & \text { 2SG.SUBJ=IRR } & \text { sit } & \text { burn-DA.NSG } & \text { food-1DU.INCL.POSS }\end{array}\)
"'I will nonetheless nurse it, but you, you should nonetheless cook our food."" Yal-28072010-BGMCG-tayamu_0065-0067

\subsection*{5.9.6 koni'to never'}

The intransitive verb koon 'to be unaware, unable', indicates a sort of powerlessness or a lack of ability on the part of the subject. The phrase te koon is sometimes translated as ' \(\mathrm{s} / \mathrm{he}\) 's an idiot', and example (89) is from a story where the character tries everything possible to move his boat, but fails and turns into a stone in that spot.
(166) Te bwa tao ci koon na bwe mar,
te= bwa= tao= ci kon=a bwe mar
3SG.SUBJ= CONT \(=\mathrm{HAB}=\) sit be.unable=LOC top seashore 'He is still nonetheless incapable [of moving the boat] on the seashore,'
Yal-19092011-PA_0071

When it is transitivized through stem modification (§5.1.5.1), its bound transitive form koni indicates 'to not know, be ignorant of'; na koni naran [1SG.SUBJ= unaware.TR name3SG.POSS] means 'I don't know his/her name'.

However, koni can also be the first element in a serial verb construction, where it may indicate a negative ability or a negative continuative aspect. There is not a clear demarcation between these meanings in Belep; for the sake of simplicity, all modal

\footnotetext{
\({ }^{237}\) The verb pariae 'to nurse a child' comes from the causative morpheme \(p a=\) and the verb \(t i\) 'to suck, to nurse'.
}
instances of koni will be glossed 'never', although there may be multiple possible translations. For example, in (167), koni is used with the verb ta 'to go.UH' to indicate primarily a negative continuative, but may be interpreted as a negative ability.
(167) Nanami lami kooni tame li bwe cexeen. \(\left.\begin{array}{llllll}\text { nanami } & \text { la-mi } & \frac{\text { koni }}{\text { never }} & \begin{array}{l}\text { ta }=\mathbf{m e}=\mathbf{l i} \\ \text { think.TR }\end{array} & \text { DEM.PL-DET.A.DST } & \text { bwe }\end{array} \begin{array}{l}\text { cexeen } \\ \text { go.UH }=\text { CTP }=\text { GEN }\end{array}\right)\) 'Think about those who never come on Sunday.' or 'who can't come'

Yal-25072010-PT-homily_0078
In (168), koni largely indicates a negative habitual, though the negative ability is also implied.
\begin{tabular}{|c|c|c|c|c|}
\hline \multicolumn{5}{|l|}{Âbur, la kooni pe tâna lile. La ca wayap.} \\
\hline âbur & \(\mathbf{l a}=\) & koni & pe= & tâna=li-le \\
\hline side.UH & 3PL.SUBJ= & never & RECP \(=\) & hear.GNR=GEN-3DU.OBJ \\
\hline \multicolumn{5}{|l|}{\(\mathbf{l a}=\quad \mathbf{c a}=\quad\) wayap} \\
\hline \multicolumn{5}{|l|}{3PL.SUBJ= ITER= war} \\
\hline \multicolumn{5}{|l|}{'Before, they [the Or and Waap phratries] never could get along. They we always at war.'} \\
\hline & & & & Yal-20092011-A \\
\hline
\end{tabular}

In (169), koni is used with the verb tue 'to find' to indicate both an inability and a negative continuative.
(169) La yиu, yuи, yagin, yuu, yagin, ka kooni tun.
\begin{tabular}{llll}
\(\mathbf{l a}=\) & \begin{tabular}{l} 
yu-u \\
3PL.SUBJ \(=\)
\end{tabular} & \begin{tabular}{l} 
yu-u \\
dig-DETR
\end{tabular} & \begin{tabular}{l} 
dig-DETR
\end{tabular} \\
search.TR-DA.NSG
\end{tabular}
\begin{tabular}{llllll} 
yu-u & \begin{tabular}{l} 
yagi-n \\
dig-DETR
\end{tabular} & search.TR-DA.NSG & ka & koni & tu-n \\
never & find-DA.NSG
\end{tabular}
'They dug, dug, searched, dug, searched and never could find anything.'

> Yal-28072010-BGMCG-sousmarin_0116

In (170), the speaker is narrating a story about chasing after his brother-in-law, who had been turned invisible. Here, koni primarily indicates an inability, though the negative continuative is implied for the period of invisibility.
(170) Na kooni kiyie,
\begin{tabular}{lll} 
na \(=\) & \begin{tabular}{l} 
koni \\
1SG.SUBJ \(=\) \\
never
\end{tabular} & \begin{tabular}{l} 
kiyi-e \\
see.SPC-3SG.ABS
\end{tabular}
\end{tabular}
'I couldn't see him' or 'I never saw him'
Yal-28072010-BGMCG-tahitian_0099

Example (171) clearly shows a contrast between the full verb form of koon and the modal meaning of koni. The speaker's inability (koon) to make a certain type of fishhooks is stated as a cause (using mo 'LK3'; see §7.1.3) for his never (koni) making it.
(171) Ka ava êna ka kooni înau mo ava koon.
\begin{tabular}{llll} 
ka & ava \(=\) & êna=xa & koni
\end{tabular}\(\quad\) îna-u
mo ava= koon
LK3 1PL.EXCL.SUBJ= be.unable
'And we know that [we] never make them, for we cannot.'
Yal-28072010-BGMCG-hamecon_0083

\subsection*{5.9.7 Cessative toveni 'to finish'}

The intransitive verb toven 'to finish' (171) can be transitivized to the bound form toveni (not found in my corpus) using stem modification (§5.1.5.1).
(172) Ka ô toven na para la bween.
\(\begin{array}{lllll}\text { ka } & \text { o } & \text { toven=a } & \text { para=la } & \text { bwee-n } \\ \text { LK } & \text { REAL } & \text { finish=NOM } & \text { story=LOC } & \text { top-3SG.POSS }\end{array}\)
'And the story about that is finished.'
Yal-28072010-BGMCG-lune_0064
This verb has two grammaticalized functions that have already been discussed-use as a verb suffix indicating completive aspect and the total affectedness of the patient (§5.4.11); and as a nominal suffix meaning 'all’ (§4.2.4). A further grammaticalized function of toven is as the first element of a SVC. Here it appears in its bound form toveni and carries the meaning of terminating an ongoing state or action (which is indicated by the second verb). For example, in (173) the second verb is go 'to cry'.
\begin{tabular}{|c|}
\hline "Toveni go, Ixe, " \\
\hline veni go Ix \\
\hline nish.TR cry \\
\hline Stop \\
\hline
\end{tabular}

Yal-19092011-PA_0016
In (174) and (175), the verbs whose cessation is being predicated are wayap 'to make war' and cao 'to work', respectively.
(174) Teme toveni wayap.
te=me toveni wayap
3SG.SUBJ=IRR finish.TR war
'He will end the war.'
Yal-20092011-AW4_0050
(175) Leô toveni cao,
le=人 toveni cao
3DU.SUBJ=REAL finish.TR work
'They finished working,'
Yal-28072010-BGMCG-sousmarin_0042

\subsection*{5.9.8 Other modal elements}

A number of other verbs can serve as the first element in a SVC, where they take on more grammaticalized modal or aspectual meanings. A few of these verbs will be discussed here; however, this is not a complete list.

The verb ta 'to go.UH', when serving as the first element in a SVC, seems to indicate that some form of upward motion is necessary in order to complete the action or state predicated by the second verb (this contrasts with the directionals, which indicate the trajectory of the action predicated by the verb). In example (176), the warriors must ta 'go.UH' before they ce 'settle' on top of the mountain; in (177), soil must first be raised before it can be thrown.

La ta ce la bwe mweogo,
la= ta ce=la bwe mweogo

3PL.SUBJ= go.UH settle=LOC top mountaintop
'They camped on the mountaintop,'
(177) Te ta înae doo la nyan, tayamook. te= ta îna-e do=la nya-n tayamoo-k 3SG.SUBJ= go.UH make-SPC earth=NOM mother-3SG.POSS old.woman-DET.D.PRX 'His mother, this old woman, flung the soil [into her child's eyes].'

Yal-28072010-BGMCG-sousmarin_0025-0026
A similar situation holds when the verb \(t u\) 'to go.DH' is the first element in a SVC.
In (178), the tern must tu 'go.DH' before he can cage 'steal' the sugar cane.
(178) Buny, te tu cage ûjep va pwemwa caivak,
\begin{tabular}{lllllll}
\begin{tabular}{lll} 
buny \\
great.crested.tern
\end{tabular} & te \(=\) & tu & cage & âjev=a & pwemwa & caivak
\end{tabular} 'The tern, he swooped down and stole sugar cane from the rat's home.'

Yal-01082010-MFD_0003
When the full verb jie 'to give' is the first element of a SVC, the meaning of the whole expression is similar to the causative meaning expressed by the periphrastic causative with \(j i e\) (discussed in §6.8.1).
(179) "Ma a ji bwagee,"
ma \(\mathbf{a}=\quad\) ji bwage-e

LK4 2PL.SUBJ= give return-3SG.OBJ
""That you give him back,""
Yal-28072010-BGMCG-tahitian_0168
The verb inna 'to make' is used with a similar causative meaning when it occurs as the first verb in a SVC (180).
\begin{tabular}{ll} 
te îna bwagee, & \\
te= & \\
3SG.SUBJ \(=\) make.GNR & bwage-e \\
return-3SG.OBJ
\end{tabular}
Yal-20092011-AW6_0036

The verb tejoon 'to plead, to complain' takes on an aspectual meaning of insistence when it is the first element of a SVC, as in (181) where it occurs in its incomplete phase tejoni.
(181) Te tejoni âva na ora.
te= tejoni âva na ora

3SG.SUBJ= plead.TR fish interior rain
'He insists on fishing in the rain.'
Yal-03112011-IM1.wav - Yal-03112011-IM2.wav

\subsection*{5.10 The verb phrase}

In §5.2 I discussed the verb group, the clitic group surrounding the verb word and its accompanying suffixes. There is also a constituent verb phrase in Belep, which bears a resemblance to the prototypical verb phrase found in many languages (e.g. Givón 2001). The Belep verb phrase consists minimally of a verb group, but may also contain an absolutive noun phrase and a number of enclitics (Table 84).

Table 84: Verb phrase enclitics
\begin{tabular}{|c|c|c|c|c|}
\hline 0 & (+1) & (+2) & (+3) & (+4) \\
\hline VERB GROUP & ABS. NP & DIRECTIONAL & DEICTIC & LOCATIONAL \\
\hline & & =da 'DIR.UH' & \(=\) me 'СТР' & =(1)exeng 'LOC.DC' \\
\hline & & =du 'DIR.DH' & =ic 'CTF' & =(1)ena 'LOC.MPX' \\
\hline & & =van 'DIR.TV' & & =(1)iyek 'LOC.MDS' \\
\hline & & & & =(l)exe 'LOC.DST' \\
\hline & & & & =(1)exeda 'LOC.UH' \\
\hline & & & & =(1)exedu 'LOC.DH’ \\
\hline & & & & =(1)iyeda 'LOC.DST.UH' \\
\hline & & & & =(l)imidu 'LOC.DST.DH' \\
\hline & & & & =(l)iva 'LOC.Q' \\
\hline & & & & =(1)i 'LOC.A' \\
\hline
\end{tabular}

Verb phrases can occur in both transitive and intransitive clauses. For example, (182)
shows a verb phrase with the transitive verb nawee 'to deposit', the absolutive NP pulu 'speech, language', and the verb phrase enclitic =me 'СТР'.
(182) La nawe pulume.
\(\{\mathbf{l a}=\quad\) nawe pulu=me\}
3PL.SUBJ= deposit language=CTP
'They brought the message here.'

An example of a verb phrase with an absolutive NP in an intransitive clause is shown in （183）．The absolutive noun phrase is wagaji＇our boat＇．
（183）«Ka ivi wagaji ？＂
ka \｛ivi waga－ji\}
LK where．SPC boat－1DU．INCL．POSS
＂＂And where is our boat？＂＂
Yal-01082010-MFD_0016

\section*{5．11 Directionals}

Directionals are verb phrase enclitics（§3．1．2．6）in Belep．They are divided into two sets，the spatial directionals－which describe movement with respect to spatial axes （see §4．3．1）—and the deictic directionals，which describe movement with respect to the speaker．A list of the Belep directionals is given in Table 85.

Table 85：Belep directionals
\begin{tabular}{|c|c|c|c|}
\hline & Belep directional & Gloss & Translation \\
\hline \multirow[b]{3}{*}{ज⿹丁口㇒
\％
\％} & ＝da & ＇DIR．UH＇ & uphill；up \\
\hline & ＝du & ＇DIR．DH＇ & downhill；down \\
\hline & ＝van & ＇DIR．TV＇ & transverse；persistive＇PER＇ \\
\hline \multirow[b]{2}{*}{．00000} & \(=\mathrm{me}\) & ＇CTP＇ & centripetal \({ }^{238}\) ；toward the speaker \\
\hline & \(=\mathrm{ic}\) & ＇CTF＇ & centrifugal；away from the speaker \\
\hline
\end{tabular}

The spatial directionals are grammaticalized versions of the corresponding full verbs，as shown in Table 86.

Table 86：Spatial directionals and corresponding full verbs
\begin{tabular}{|l|l|l|l|}
\hline Full verb & Gloss & Directional & Gloss \\
\hline ta & ＇to go．UH＇ & \(=\) da & ＇DIR．UH＇ \\
\hline tu & ＇to go．DH＇ & \(=\) du & ＇DIR．DH＇ \\
\hline pan & ＇to go．TV＇ & \(=\) van & ＇DIR．TV＇ \\
\hline
\end{tabular}

\footnotetext{
\({ }^{238}\) The terms centripetal and centrifugal come from Bril（2002）；they are used here rather than the more common terms venitive and andative．
}

The deictic directionals are incompatible with spatial directional =van 'TV'; however, they may occur concurrently with \(=d a\) ' UH ' and \(=d u\) ' DH '. In these cases, the spatial directional always precedes the deictic directional, as in (184).
(184) Texa tao migi janenadume, te=xa tao= migi jane-na=du=me
3SG.SUBJ=ADD HAB= hold ear-3SG.POSS=DIR.DH=CTP
'And he kept clutching his ear,'
Yal-05092011-AP1_0092
The spatial directional = van 'DIR.TV' sometimes serves to indicate transverse movement, as in (185).

Caivak, te kejavan na na pwa, caivak te= keja=van=a na pwa rat 3 SG.SUBJ= run=DIR.TV=LOC interior hole 'The rat, he ran into a hole,'
Yal-01082010-MFD_0058

However, its most common meaning is aspectual (see \(\S 5.4\) for more information on aspect in Belep). Its use implies that the action of the verb is persistive; it could be translated 'to keep doing' the verb. This aspectual meaning is most clearly demonstrated in instances like (186), where the verb mo 'to live, stay' is static rather than active, and (81), where the verb go 'to cry' does not indicate movement at all.
(186) Lexa movan, movan,
le=xa mo=van mo=van

3DU.SUBJ=ADD live=DIR.TV live=DIR.TV
'And they kept living and living,'
Yal-28072010-BGMCG-sousmarin_0010
(187) Texa govan na ulac âyili,
te=xa \(\quad\) go=van=a ulaya âyi-li
3SG.SUBJ=ADD cry=DIR.TV=NOM old man-DET.A.PRX
'And that old man kept crying,'
Yal-28072010-BGMCG-tahitian_0244
As enclitics (§3.1.2.6), the directionals trigger phonological changes in their hosts; these include the introduction of epenthetic vowels, as in (188), and the
unpredictable loss of final consonants in the host, as in (189). In (188), an epenthetic vowel [a] is inserted between the verb tup 'to dive' and the directional = \(d u\) 'DIR.DH'.
(188) Avexa nyi tuvadu la na buâny waak, ave=xa nyi= tuva=du=la na buâny waa-k 1DU.EXCL.SUBJ=ADD PUNCT= dive=DIR.DH=LOC interior stone DEM.MAN-DET.D.PRX 'And we repeatedly dove down by the stone like this,'

Yal-28072010-BGMCG-tahitian_0053
In example (189), the verb wânem 'walk' is reduced to /wâne/ when = da 'DIR.UH' is encliticized to it.
(189) Texa wâneda la bween,
te=xa wâne=da=la bwee-n
3SG.SUBJ=ADD walk=DIR.UH=LOC top-3SG.POSS
'And he walked up on it,'
Yal-28072010-BGMCG-tahitian_0058

\subsection*{5.12 Locationals}

The locationals are verb phrase enclitics which identify the endpoint of motion or the location of the action with respect to the deictic center-this is in contrast with the directionals discussed in §5.11, which primarily describe the direction of motion. The locationals are shown in Table 87. They follow all other verb phrase enclitics.

Table 87: Belep locationals
\begin{tabular}{|l|l|}
\hline Locational & Gloss \\
\hline\(=(1)\) exeng \(^{239}\) & 'LOC.DC' \\
\hline =(l)ena & 'LOC.MPX' \\
\hline\(=(1) i y e k ~\) & 'LOC.MDS' \\
\hline\(=(1)\) exe & 'LOC.DST' \\
\hline =(l)exeda & 'LOC.UH' \\
\hline\(=(1)\) exedu & 'LOC.DH' \\
\hline =(l)iyeda & 'LOC.DST.UH' \\
\hline =(l)imidu & 'LOC.DST.DH' \\
\hline =(l)iva & 'LOC.Q' \\
\hline =(l)i & 'LOC.A' \\
\hline
\end{tabular}

\footnotetext{
\({ }^{239}\) Another locational = (l)exen also occurs; it is unknown at this time whether this is a phonological variant of \(=(l)\) exeng or has a separate meaning.
}

The allomorphs containing /l/ are used following a vowel, while those without /l/ are used following a consonant (the same pattern is followed by the ditropic clitics which indicate case; see §6.3). These deictic locative enclitics distinguish among many of the same features as the nominal determiner suffixes (§4.3.2): locational enclitics indicate distance from the speaker and the hearer, as well as direction in relation to the deictic center (uphill or downhill; see §4.3.1). The locationals are pronominal in that they deictically or anaphorically index a locational noun phrase, often one marked as in the locative case (§6.3.5); however, they are not pronouns (§4.5).

Locationals \(=(l)\) exeng 'LOC.DC', =(l)ena 'LOC.MPX', =(l)iyek 'LOC.MDS' and \(=(l)\) exe 'LOC.DST' contrast in terms of distance from the speaker and the hearer. In (190), the use of =lexeng 'LOC.DC' indicates that the event described by the verb occurred at or very near the deictic center.


Yal-28072010-BGMCG-tahitian_0234
In (191), =lena 'LOC.MPX' refers to an area near the hearer where the endpoint of the verb's action occurred. At the time of narration, we were fairly near to the beach and I (the hearer) was sitting downhill of the speaker.
(191) Toma pwala pwemwa, te tame la pwâna we, toma pwala pwemwa te \(=\quad \mathbf{t a}=\mathbf{m e}=\mathbf{l a} \quad\) pwâna we but front village 3 SG.SUBJ= go.UH=CTP=LOC hole water
pwâna wedame ka uya lena ka pwabo, pwâna we=da=me ka uya=lena ka pwabo
hole water=DIR.UH=CTP LK arrive=LOC.MPX LK reef.well 'But the tip of the island, the bay moved, moved up here and turned into a reef well right there,'

In (192), =(l)iyek 'LOC.MDS' indexes to an area which is a short distance away from both the speaker and the hearer where the action of the verb \(\hat{a v a}\) 'to go fishing' takes place.

\section*{(192) Teme âri, teme pan âva liyek, te=me âri=re=me pana âva=liyek 3SG.SUBJ=IRR say=3SG.SUBJ=IRR go.TV fish=LOC.MDS 'He would say, he would go fish over there,'}

Yal-01082010-MFD_0008
In (193), =(l)exe 'LOC.DST' is used to locate the predicated referent (§5.1.6) far from both the speaker and the hearer, in the deep ocean.
(193) Era lexe, era la dânac, era=lexe era=la dânac
3SG.NEW.V=LOC.DST 3SG.V=LOC ocean
'It was there, it was in the deep ocean,'
Yal-28072010-BGMCG-igname_0012-0013
Locationals \(=(l)\) exeda 'LOC.UH', \(=(l)\) exedu 'LOC.DH', \(=(l)\) iyeda 'LOC.DST.UH', and =(l)imidu 'LOC.DST.DH' all indicate the location of the predication with respect to both the distance and direction from the deictic center: \(=(l)\) exed \(a\) and \(=(l)\) exed \(u\) are used for areas conceptualized as within the boundaries of the speaker's location-areas to which someone could walk in just a few minutes-while \(=(l)\) iyeda and \(=(l)\) imid \(u\) refer to areas conceptualized as outside this boundary, to which someone might travel in hours or multiple days. The enclitics \(=(l)\) exed \(a\) and \(=(l) i\) iyeda both refer to the uphill direction, while \(=(l)\) exed \(u\) and \(=(l) i m i d u\) both refer to the downhill direction (see \(\S 4.3)\). For example, in (194), =lexeda 'LOC.UH' indexes a location which is far from the deictic center, but not conceptualized as being outside of a boundary.
(194) Texa nyi ce lexeda.
te=xa nyi= ce=lexeda
3SG.SUBJ=ADD PUNCT= settle=LOC.UH
'And he sat up there [in a tree].'

By contrast, =liyeda 'LOC.DST.UH' in (195) indexes a location which is far to the southeast of Belep, located on the northwest tip of the Mainland, which might take a day of traveling to reach.
paeda, uya liyeda.
pa-e=da uya=liyeda
take-3SG.ABS=DIR.UH arrive=LOC.DST.UH
'brought her up [from Belep], arrived up there [at Pwayili].'
Yal-20092011-AW1_0230
In (196), = lexedu 'LOC.DH' indexes to a location which is northwest of the speaker, but not conceptualized as being outside of a boundary; on a boat, he might travel there in fifteen minutes.
(196) Avexa pame, pame, pame, ka mu lexedu.
ave=xa pa=me pa=me pa=me ka mu=lexedu
1DU.EXCL.SUBJ=ADD go.TV=CTP go.TV=CTP go.TV=CTP LK moor=LOC.DH
'And we came, came, came and moored down there,' Yal-28072010-BGMCG-tahitian_0224

By contrast, =limidu 'LOC.DST.DH' in (197) refers to a place in Belep which is conceptualized as being outside of a boundary; travel there might take several hours.

\section*{(197) Avaxa uya limidu to bwaêdan, ava=xa uya=limidu=ro bwaêdan \\ 1PL.EXCL.SUBJ=ADD arrive=LOC.DIST.DH=when morning \\ 'And we arrived down there [at Awe] in the morning,'}

Yal-17072009-TB-weekend_0003

\subsection*{5.13 Summary}

In this chapter, I have presented the Belep word class of verbs and their associated morphology. Intransitive verbs require either a nominative argument (§5.1.1) or an absolutive argument (§5.1.2). Transitive verbs (§5.1.3) are either free or bound. A variety of verb inflections for specificity (§5.1.4), valence (§5.1.5), and differential absolutive marking (§5.1.6) are available for many verbs. The verb group (§5.2) is a constituent including the verb word and its surrounding suffixes and clitics. Included in the verb
group are valence proclitics (§5.3), aspectual proclitics (§5.4), modal clitics (§5.5), absolutive suffixes (§5.6), and subject agreement proclitics (§5.7). Some verb compounding exists (§5.8); however, verb serialization (§5.9) is more common. The verb phrase (§5.10) is a constituent which includes a verb group, a nominal absolutive argument, and any accompanying directional (§5.11) or locational (§5.12) enclitics.

\section*{Chapter 6 Basic clause structure}

\subsection*{6.0 Introduction}

Belep has a fixed word order of VERB + PATIENT + AGENT (§6.1). Its argument structure is split-intransitive; some intransitive arguments (hereafter S arguments) behave like transitive Agents and some S arguments behave like transitive Patients (§6.2). Predicate nominals (§6.4) are used for many pragmatic functions, including some types of questions (§6.5). Imperatives (§6.6) and negation (§6.7) are formed primarily through modifications of verbal morphology. This chapter concludes with a discussion of pragmatically marked clauses (§6.8), periphrastic expressions of voice (§6.9) and temporality (§6.10), and the comparative construction (§6.11).

\subsection*{6.1 Basic word order and typology}

The basic word order for transitive clauses with two full NPs in Belep is VOS (according to Greenberg's 1963 classification), or VERB GROUP + PATIENT NP + AGENT NP, a fairly rare word-order type found in only about 3\% of the world's languages (Dryer 1989). Belep shares this basic constituent order with neighboring Nêlêmwa (Bril 2002); however, Balade Nyelâyu, to which Belep is more closely related, has a different basic word order: VERB + AGENT NP + PATIENT NP (Ozanne-Rivierre 2004).

Examples (1) - (138) demonstrate Belep's basic constituent order, which is invariant in pragmatically unmarked clauses. In (1), the verb group (see §5.2) is clauseinitial; it is followed by the patient NP doo 'earth' and then the agent NP, nyan tayamook 'his mother, this old woman'.

\section*{(1) Te ta înae doo la nyan, tayamook.}
\begin{tabular}{|c|c|c|c|c|c|}
\hline & VG & & P & A & \\
\hline [te= & ta & îna-e] & [do]=la & [nya-n & tayamoo-k] \\
\hline 3SG.SUBJ & go.UH & make-SPC & earth=NOM & mother-3SG.POSS & old.woman-DET.D.PRX \\
\hline
\end{tabular} 'his mother, this old woman, flung dirt.'

Yal-28072010-BGMCG-sousmarin_0025-0026
In example (2), the verb group precedes the patient NP oyeen 'his spell' and the agent NP teâmaa 'chieftain'.
(2) ma teme, me âri oyeen na teâmaa.


LK4 3SG.SUBJ=IRR IRR say.TR spell-3SG.POSS=NOM high.chief 'so that the chieftain would, would cast his spell.'

Yal-20092011-AW6_0038
In (3), the patient NP wîmi 'that thing' is followed by the agent NP ulayili Cebaba 'that old man Cebaba'.
(3) Texa pae wîmi la ulayili Cebaba,
\begin{tabular}{|c|c|c|c|c|}
\hline VG & & P & \multicolumn{2}{|c|}{A} \\
\hline [te=xa & pa-e] & [wî-mi] \(=\) la & [ulayi-li & Cebaba] \\
\hline 3SG.SUBJ=ADD & take-SPC & DEM.INAN-D & old.man-D & Cebaba \\
\hline 'And that old m & an Ceb & a took that th & & \\
\hline
\end{tabular}

Yal-20092011-AW1_0265
In example (138), the clause begins with a verb group, followed by the patient NP wayap 'war' and the agent NP teâmaa 'chieftain'.
(4) Texa terae wayap va teâmaa,
\(V G \quad P \quad A\)
[te=xa tera-e] [wayav]=a [teâmaa]
3SG.SUBJ=ADD stop-SPC war=NOM high.chief
'And the chieftain stopped the war,'

Transitive clauses like (1) - (138), with a full NP for both agent and patient, are rare in discourse (Du Bois 1987, Thompson \& Hopper 2001). Most clauses produced by speakers in natural discourse contain only one full noun phrase argument: either an intransitive S argument, a transitive P argument, or a transitive A argument. In intransitive clauses the order of elements is VERB GROUP + INTRANSITIVE NP, as shown in examples (46) - (7). In (46), the argument of an intransitive verb-hereafter called the \(S\) argument-is mwaak 'rabbitfish', and it follows the verb group.

\section*{(5) Te tame la mwaak,}

VG \(S\)
[te= ta=me]=la [mwaak]
3SG.SUBJ= go.UH=CTP=NOM rabbitfish
'The rabbitfish came,'
Yal-01082010-MFD_0033
In (9), the S argument ulayili 'that old man' follows the verb group.
(6) Teô cuur ra ulayili,


3SG.SUBJ=REAL stand=NOM old-DET.A.PRX
'The old man stood up,'
Yal-28072010-BGMCG-tahitian_0208
In (7), the \(S\) argument ola 'shellfish' follows the verb group.
(7) Âria ola.

VG \(S\)
[âria] [ola]
NEG.EX shellfish
'There weren't any lobsters.'
Yal-28072010-BGMCG-tahitian_0032
Examples (8) - (73) show transitive clauses with only one full noun phrase argument. In such clauses, the additional argument is indicated by inflectional morphology within the verb group. In the transitive clauses in (8) and (9), only a noun phrase Patient argument is present. The Agent in both clauses is cross-referenced by a subject agreement proclitic
(§5.7) in the verb group. In (8), the subject proclitic \(l a=\) ' 3 PL.SUBJ' refers anaphorically to the Agent, as does the subject proclitic \(t e=\) ' 3 SG.SUBJ' in (9).

\section*{(8) La âvae nae no pwalaic.}


Yal-01082010-MFD_0010
(9) te migi buâny,
 'he was holding the stone,'

Yal-20092011-AW1_0254
In the transitive clauses in (10) and (73), only a noun phrase Agent argument is present; the Patient in both clauses is indexed anaphorically by an absolutive pronominal suffix (§5.6) in the verb group. In (10) the Patient is indexed by the 3 SG absolutive suffix -er, while the 3pl suffix -la indexes the Patient in (73).
(10) Texa înaer ri Belep,

VG
[te=xa îna-er]=i
'Belep did it,'
Yal-20092011-AW6_0055
(11) Teme kewela li Dubageni.

VG
[te=me kewe-la]=li
A
[Dubageni]
3SG.SUBJ=IRR chase-3 \(\overline{\mathrm{PL}} . \mathrm{ABS}=\mathrm{GEN}\) type.of.demon 'The Dubageni will chase them.'

Yal-05092011-AP1_0094
These examples have shown that the VERB + PATIENT + AGENT word order in basic Belep clauses does not vary based on the status of the arguments; Belep has a rigid word-order in pragmatically unmarked clauses.

The only variation in word-order is found in a subset of pragmatically-marked clauses; that is, in clauses of the form TOPIC + COMMENT (§6.8.1). In topicalized clauses, the topic NP occurs before the verb, usually with an intonation break between them as in (12).
(12) ka naerama, la îbi jawu.

TOP VG P
ka [nae-ra-ma] [la= îbi] [jawu]
LK child-3GNR.POSS-AC 3PL.SUBJ= collect dead.leaves 'and the children, they collected trash.'

Yal-17072009-TB-weekend_0009
According to the typological word-order correlations put forward in Dryer (1992), which adjust linguistic sampling for genetic and areal bias, Belep is a fairly consistent VO language. \({ }^{240}\) The rest of this section will elaborate on a few of these correlations.

ADPOSITION + NOUN
Belep does not have a class of adpositions (see §3.2). However, the set of locative nouns which serve the function of adpositions (§6.3.5.1) always precede their possessor noun, as in (13) and (14).
(13) bwe alap
top beach
'on the beach'
Yal-01082010-MFD_0033
(14) na buâny
interior stone
'at the stone'
Yal-28072010-BGMCG-tahitian_0053
This is consistent with the word-order correlate noted by Dryer (1992: 83), that languages with VO order tend overwhelmingly to have prepositions.

NOUN + RELATIVE CLAUSE

\footnotetext{
\({ }^{240}\) I use Dryer's term 'VO' here to indicate that the order of verb and patient NP in Belep is always VERB + PATIENT. I do not use the term 'object' in this work (see \(\S 6.2\) ).
}

Belep also follows the tendency for VO languages to have the relative clause follow the noun, rather than the reverse (Dryer 1992: 86). In all types of relative clauses (§7.3), the relative clause follows the head, as shown in examples (15) and (16).
(15) Vayimi cuur ra na keloop dadabwa. HEAD RELATIVE CLAUSE vayi\{-mi cur=a na kelova dadabwa\} cow.LN-DET.A.DST stand=LOC interior hat black 'The cow wearing a black hat.'
Yal-05102010-MTAD_45:07-45:11

\section*{(16) Nyana yo migier ri nyoda emwiyek.}
HEAD RELATIVE CLAUSE
nya\{-na \(\quad\) yo \(=\) migi-er=i nyoda e-mwi-yek\} DEM.IDF-DET.D.MPX 2SG.SUBJ= hold-3SG.ABS=GEN tentacle hand-2SG.POSS-DET.D.MDS 'The one you're holding in your other hand.'

Yal-05102010-MTAD_33:24-33:27
NOUN + GENITIVE
Belep is also consistent with the tendency for VO languages to have the possessor
follow the possessed noun, rather than the reverse (Dryer 1992: 91). Section §4.1.2
discussed the possessive constructions in detail; in both the dependent and the
independent possessive constructions, the possessed noun always precedes its possessor,
as shown in examples (17) and (18).
(17) oreâ naerama
oreâ nae-ra-ma
breath child-3GNR.POSS-AC
'the children's breath'
Yal-17072009-TB-weekend_0038
(18) pulu li gawaariik
pulu=li gawarii-k
speech=GEN day-DET.DEICT-PROX
'the words of this day'
Yal-25072010-PT-homily_0004

ADJECTIVE + STANDARD
Dryer asserts a "clear preference" for adjectives to precede the standard of comparison in VO languages (Dryer 1992: 92). Though Belep does not have a class of
adjectives (see \(\S 3.2\) ), comparative constructions (§6.11) predicate a property concept (§6.4.3), which is modified by an aspectual proclitic (§5.4) indicating degree. The standard is a dative-marked NP (§6.3.4). However, Belep is still consistent with Dryer’s universal tendency in that the property concept precedes the standard, as in example (19).
(19) Te nyi ulac na le nyak.
 'He is older than that one.'
Yal-05102010-PT1.wav - Yal-05102010-PT3.wav

VERB + ADPOSITIONAL PHRASE
There are no adpositions in Belep; their function is served by locative NPs headed by a body part noun (§6.3.5.1). Phrases consisting of a body part noun and its nominal possessor-Belep's functional equivalent of adpositional phrases-follow the verb, as in most VO languages (Dryer 1992: 92). An example is given in (20).

\section*{(20) "Ôda la bwe bwaang." \\ VG LOC [ôda]=la [bwe bwaa-ng] \\ climb=LOC top head-1SG.POSS \\ ""Climb onto my head.""}

Yal-01082010-MFD_0044
VERB + MANNER ADVERB
In Belep, as in most VO languages (Dryer 1992: 93), the manner adverb follows the verb, as in (21) where the manner adverb is the bound demonstrative pronoun wa-
'DEM.MAN’ (§4.5.2) with the deictic suffix -na 'DET.D.MPX’ (§4.3.2.1).
(21) calayi doo wana.
calayi doo wa-na
brush.TR earth DEM.MAN-DET.D.MPX
'[until it] brushed the earth like that.'
Yal-28072010-BGMCG-hamecon_0027

WANT + SUBORDINATE VERB
In Belep, as in most VO languages (Dryer 1992: 94), the verb for 'want' precedes the subordinate verb, as in (22). This is further discussed in §5.9.1.
(22) ava jaar bae pê
ava= jara bae pê
1PL.EXCL.SUBJ= want bite bread
'we want to eat the bread'
Yal-25072010-PT-homily_0030
For a discussion of the word order within NPs, see \(\S 4.4\). For the word order within the verb group, see §5.2.

\subsection*{6.2 Argument structure}

This work will adopt the viewpoint of Andrews (2007a) and Payne (1997) in terms of argument structure; that is, that the system of grammatical relations in a language is generally determined by the manner of marking the singular argument (S) of an intransitive verb like either the patient (P) or the agent (A) of a transitive verb. As such, only those S arguments which are marked like A (displaying a nominativeaccusative argument structure) may be said to be subjects.

Grammatical relations in Belep are not easily classifiable into any one alignment system. In transitive clauses, P arguments are always unmarked (§6.3.1), and A arguments can either be marked with \(=l a\) 'NOM’ (§6.3.2) or \(=l i\) ' \(\mathrm{GEN}^{\prime}\) (§6.3.3) depending on the definiteness of the P argument (see \(\S 6.2 .2\) below). In intransitive clauses, S arguments are either marked with \(=l a\) 'NOM' like some A arguments or are unmarked like P arguments, a distinction governed by the choice of verb (§5.1.1, §5.1.2). This system is depicted in Figure 49.

Figure 49: Argument structure in Belep


As such, Belep demonstrates both nominative-accusative and ergative-absolutive patterning (that is, a pattern of split-intransitivity or split-S (Andrews 2007a, Dryer 2007) rather than fluid-S (Dixon 1994)), as well as a distinction between nominative- and genitive-marked subjects (a phenomenon which is not unusual cross-linguistically; see Bhaskararao \& Subbarao 2004). This differs from the majority of New Caledonian languages, which have split-ergative argument structure (Moyse-Faurie 2003b), though they vary as to the conditions of the split. Nêlêmwa and Nemi are split according to Silverstein's (1976) empathy/agent-worthiness hierarchy, with a pronoun/noun split and an animate/inanimate split respectively. Drehu's split ergativity is based on different tense/aspects. Ozanne-Rivierre (2004) states that Balade Nyelâyu is split, like Nêlêmwa, based on pronoun/noun.

There is no evidence of split-ergativity in Belep, and I have chosen not to identify any arguments as 'ergative'. \({ }^{241}\) In this work, the term 'absolutive' will be used for all P arguments and unmarked S arguments. The term 'subject' will be used to refer to all A arguments (whether they are marked as nominative or genitive) and S arguments which

\footnotetext{
\({ }^{241}\) Use of this term would not be entirely unfounded; there is a marker which occurs only on A arguments and never on P or S arguments (genitive \(=l i\) ), which might be identified as ergative if it were not already identified as genitive. Many Australian and Papuan languages have multifunctional 'ergative' markers which are also used to mark possessors (Dixon 1980, Foley 1986, Onishi 2004).
}
are marked as nominative. Justifications for these groupings will be given in the sections that follow.

\subsection*{6.2.1 Nominative-accusative alignment}

Belep's split-intransitive argument structure shows a nominative-accusative alignment if only those intransitive verbs which require a nominative argument (§5.1.1) are considered. These verbs form the majority of intransitives.

Evidence for nominative-accusative alignment is found in nominal case-marking, verb inflection, relativization, and clausal coordination.

Nominal case-marking shows a nominative-accusative alignment. The nominative case marker \(=l a\) or \(=a\) ' NOM ’ (§6.3.2) marks A arguments in a transitive clause (where the \(P\) argument is indefinite; see \(\S 6.2 .1\) ) and \(S\) arguments for a majority of intransitive verbs. For example, in (169), the nominative case marker =la 'NOM' marks the transitive A argument ulayili Cebaba 'that old man Cebaba'. In (24), the nominative case marker \(=a\) 'NOM' marks the A argument teâmaa 'the chieftain'. \({ }^{242}\) In both of these examples, the P argument is unmarked (§6.3.1).
(23) Texa pae wîmi la ulayili Cebaba,


3SG.SUBJ=ADD take-SPC DEM.INAN-DET.A.DST=NOM old.man-DET.A.PRX Cebaba 'And that old man Cebaba, took that thing,'
Yal-20092011-AW1_0265
(24) Texa terae wayap va teâmaa,

[te=xa tera-e] [wayav]=a [teâmaa] 3SG.SUBJ=ADD stop-SPC war=NOM high.chief
'And the chieftain stopped the war,'
Yal-20092011-AW4_0060

\footnotetext{
\({ }^{242}\) The variation in the form of the nominative case marker is phonological. See \(\S 3.1 .2 .5\) on enclitics.
\({ }^{243}\) In the examples in this section, 'VG' means 'verb group'; see \(\S 5.2\).
}

Examples (25) - (28) show the use of the same nominative case marking for the S argument in intransitive clauses. Omission of the case marker-which would make the S argument unmarked (§6.3.1) like a P argument-is ungrammatical. In (25), the S argument Awuli Cabak (a personal name) is marked with nominative \(=l a\).
(25) Texa ta la Awuli Cabak,
\begin{tabular}{|c|c|c|}
\hline & VG & S \\
\hline [te=xa & ta] \(=\) la & [Awuli Caba \\
\hline
\end{tabular}

3SG.SUBJ=ADD go.UH=NOM Awuli Cabak
'And Awuli Cabak went up,'
Yal-19092011-PA_0027
In (26), the intransitive S argument âju la bween 'the person on him' is marked with nominative \(=l a\).
(26) Texa bwawa la âju la bween.

VG S
[te=xa bwawa]=la \(\quad\) [âju=la bwee-n]
3SG.SUBJ=ADD remove.NTR=NOM person=LOC top-3SG.POSS
'And the person on him was removed.'
Yal-28072010-BGMCG-tahitian_0266
In (27), the S argument Ixe (a personal name) is marked with nominative \(=a\).
(27) Texa tejoon na Ixe.
\(\begin{array}{lcc} & \text { VG } & \\ \text { tejon] }=\mathbf{a} & \begin{array}{c}\mathrm{a} \\ {[\mathrm{Ixe}]}\end{array}\end{array}\)
3SG.SUBJ=ADD plead=NOM Ixe
'And Ixe begged.'
Yal-20092011-AW1_0100

In (28), the S argument âju pwalaic 'a person' is marked with nominative \(=a\).
(28) Texa ovan na âju pwalaic,

VG S
[te=xa \(\quad\) o=van]=a \(\quad\) âju pwalaic]
3SG.SUBJ=ADD advance=DIR.TV=NOM person one
'And a person advanced,'
Yal-20092011-AW5_0076

The argument structure shown here, whereby the A argument of a transitive and the S argument of an intransitive are marked with \(=l a\) or \(=a\) ' NOM ', while the P argument of a
transitive is unmarked, can be characterized as a nominative-accusative alignment pattern for case marking.

Cross-referencing of nominal arguments on the verb also demonstrates a nominative-accusative pattern. In transitive clauses, the A argument is obligatorily crossreferenced by a subject agreement proclitic on the verb (§5.7). The P argument may be anaphorically indexed by an absolutive pronominal verb suffix (§5.6). For example, in (29), the verbal proclitic \(n a=\) ' 1 SG.SUBJ' agrees with the anaphoric A argument. In (30), the verbal suffix -nao '1SG.ABS' agrees with the anaphoric P argument.
(29) Naô pae tânema cawone,


Yal-28072010-BGMCG-tahitian_0076
(30) «La ginao limidu,»

VG
[la= gi-nao \(=\) limidu]
3PL.SUBJ= attack-1SG.ABS=LOC.DST.DH
""They killed me down there,""
Yal-20092011-AW1_0283
In the intransitive clauses in (31) - (34), verbal proclitics (§5.7) are used to agree with the S argument; use of verbal suffixes (§5.6) is ungrammatical. In (31), the verbal proclitic \(n a=\) ' 1 SG.SUBJ' indexes the S argument of the intransitive verb puer 'to cook, prepare food'.
(31) Ka nao, na puer,

VG
ka nao [na= puer]
LK 1SG.INDEP 1 SG.SUBJ= cook
'And as for me, I cooked,'
Yal-17072009-TB-weekend_0014

In (32), \(n a=\) ' 1 SG.SUBJ' occurs on both the intransitive main verb aya 'to be afraid' and the intransitive subordinate verb pan 'to go.TV'.

\section*{(32) Na âya li na pan na pu caya,}


In (33), the verbal proclitic \(t e=\) ' 3 SG.SUBJ' indexes the \(S\) argument of the intransitive verb kaac 'to be angry, bitter'. Note that the 3SG.ABS verb suffixes are \(-e\) and \(-e r(\S 5.6 .2)\).
(33) Caivak, texa, te kaac u le buny,
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{VG} \\
\hline caivak & \(\underline{\text { te}}=\mathbf{x a}\) & [te= & kaya] & \(\mathbf{u}=\mathbf{l e}\) & buny \\
\hline rat & 3SG.SUBJ=ADD & 3SG.SUBJ= & bitter & toward=DAT & reat.crested.ter \\
\hline
\end{tabular}
'The rat, he, he was angry at the tern,'
Yal-01082010-MFD_0004

In (34), the verbal proclitic \(y o=\) ' 2 SG.SUBJ' indexes the S argument of the intransitive verb \(c i\) 'to sit, stay'. The corresponding 2 SG.ABS verb suffix is -o (§5.6).
(34) "Yome ci la pwemwaji." VG
[y \(\mathbf{y}=\mathbf{m e} \quad\) ci]=la pwemwa-ji
2 SG.SUBJ=IRR sit=LOC village-1DU.INCL.POSS
"'You will stay in our home.""
Yal-20092011-AW1_0105
Since a different set of verb agreement markers are used for P arguments in a transitive clause than for intransitive S and transitive A arguments, the system of verb inflections can be said to have a nominative-accusative alignment pattern.

Relativization (§7.3) also shows evidence of a nominative-accusative system. When a third-person singular A argument of a transitive clause is relativized, it is ungrammatical to use a verbal proclitic to index the relativized NP. For example, the A argument âju 'person' of the transitive clause with cage 'steal.TR' is gapped in (35). It is
ungrammatical to use the 3 SG.SUBJ proclitic \(t e=\) in the location indicated by [0] within the relative clause (indicated by \(\}\) ).

\section*{(35) Na ênae âjumi cagele.}
\begin{tabular}{lllll} 
na= & \begin{tabular}{l} 
êna-e \\
1SG.SUBJ \(=\)
\end{tabular} & \begin{tabular}{l} 
âju\{-mi \\
know-SPC
\end{tabular} & {\([0]\)} & \begin{tabular}{l} 
cage-le \(\}\) \\
person-DET.D.DST
\end{tabular} \\
steal.TR-3DU.ABS
\end{tabular} 'I know the person who stole them.'

Yal-02112011-DY.wav
In contrast, when the P argument of a transitive clause is relativized, it is obligatorily indexed by a verbal suffix. For example, in (35) the relativized P argument gawaariik 'this day' is indexed by the 3 SG.ABS verb suffix \(-e r\).
(36) Gawaariik te jier ri kawuja, gawari\{-xa=re \(\quad \mathbf{j i - e r = i} \quad\) kawu-ja\} day-DET.D.PRX=3SG.SUBJ give-3SG.ABS=GEN guardian-1PL.INCL.POSS 'This day that our Lord has given,' (lit. 'This day that our Lord has given it,') Yal-25072010-PT-homily_0005

When the third-person singular S argument of an intransitive clause is relativized, itlike the A argument of a transitive clause-is obligatorily gapped. For instance, in (37), the S argument \(\hat{a j u}\) 'person' of the intransitive verb ta 'to go.UH' is relativized. Use of 3SG.SUBJ proclitic \(t e=\) instead of the indicated gap would be ungrammatical.

\section*{(37) Âjumi ci ta la na mwanok,}
\begin{tabular}{llllll} 
âju\{-mi & {\([0]\)} & \begin{tabular}{l} 
ci \\
person-DET.A.DST
\end{tabular} & \begin{tabular}{l} 
ta=la \\
sit
\end{tabular} & \begin{tabular}{l} 
go.UH=LOC
\end{tabular} & na \\
interior
\end{tabular}\(\quad\)\begin{tabular}{l} 
mwanok \(\}\) \\
moon
\end{tabular}
'The person who went to the moon,'
Yal-28072010-BGMCG-lune_0066-0067
Since \(S\) arguments in relativization behave like transitive \(A\) arguments rather than transitive P arguments, they are further evidence of a nominative-accusative system.

Finally, nominative-accusative alignment is found in the rules for clausal coordination (§7.1). When transitive clauses with identical A arguments are conjoined with linker \(k a\) (§7.1.1), the subject agreement proclitic in the non-initial clauses is obligatorily omitted. By contrast, if the P arguments are identical, the non-initial clauses
must all be marked with indexical absolutive pronominal suffixes. For example, in (38), the subject proclitic \(t e=\) ' 3 SG.SUBJ' is used to index the A argument in the first transitive clause (where the verb is \(p a\) 'to take'), but is omitted in the second transitive clause (where the verb is nawee 'to deposit'). The A arguments of the two clauses index the same referent. However, though the P arguments of the clause-buâny 'stone' and -er '3SG.ABS'-also index the same referent, both must be present.
(38) Te pae buâny, ka naweer rexeng,
te \(=\) pa-e buâny ka [0] nawe-er=exeng
3SG.SUBJ= take-SPC stone LK deposit-3SG.ABS=LOC.DC
'He took the stone \({ }_{i}\), and dropped \(\mathrm{it}_{\mathrm{i}}\) here,'
Yal-20092011-AW1_0266

When intransitive clauses with identical S arguments are conjoined using linker \(k a\), the subject agreement proclitic in the non-initial clauses is also obligatorily omitted. For example, in (39), intransitive clauses with the verbs kaac 'to be angry, bitter' and go 'to cry' are conjoined with linker \(k a\). In the first clause, subject proclitic \(t e=\) ' 3 SG.SUBJ' is used, but it is obligatorily omitted in the second clause.

\section*{(39) Teô jua kaac, ka tao go, go.}
\begin{tabular}{ll} 
te= \(=\mathbf{0}\) & jua kaac ka \\
3SG.SUBJ \(=\) REAL & tao \(=\) go go \\
very bitter
\end{tabular}
S. HAB= cry cry
'He was very angry, and kept crying and crying.'
Yal-20092011-AW1_0275

Thus, the \(S\) argument of an intransitive behaves like the \(A\) argument of a transitive, and unlike the P argument of a transitive, in terms of clausal conjunction; this is further evidence of nominative-accusative alignment.

\subsection*{6.2.2 Non-nominative subjects}

In transitive clauses in Belep, the P argument-that is, the absolutive argumentis always unmarked for case (§6.3.1). The subject (the A argument), however, may be marked in one of two ways. If the \(P\) is indefinite, the subject is marked with nominative
case marker \(=l a\) or \(=a\) ' NOM ' (§6.3.2). If the P is definite, the subject is marked with genitive case marker \(=l i\) or \(=i\) 'GEN’ (§6.3.3). Non-nominative subjects are a well-attested cross-linguistic phenomenon, being found in many languages of southeast Asia including Japanese, Balinese, Telugu, and the Papuan language Motuna (Bhaskararao \& Subbarao 2004). They are also found in some Austronesian languages including Kambera (Klamer 2000), Ivatan (Kaufman 2011), and others.

Example (40), a constructed pair of clauses glossed by a Belep speaker, shows the contrast between nominative- and genitive-marked A arguments in Belep.
a. Te kiyi Darine na teâmaa.
te \(=\quad\) kiyi Darin=a teâmaa
3SG.SUBJ= see.SPC Darine=NOM high.chief
'The chieftain saw a Darine [I don't think you can identify who I mean].'
b. Te kiyi Darine ni teâmaa.
te= kiyi Darin=i teâmaa
3SG.SUBJ= see.SPC Darine=GEN high.chief
'The chieftain saw Darine [and I think you can identify who I mean].'
In (40a), the A argument is marked as nominative; the speaker doesn't think the hearer can identify the indefinite P referent, and he or she might respond by asking 'Which Darine?'. In (40b), the A argument is marked as genitive; the speaker believes the hearer can identify the referent of the P argument. Note that in both clauses, the verb is marked as specific (§5.1.4). In my corpus of naturally-occurring speech, no examples like (40b) occur-all instances of genitive subjects in my corpus occur in clauses with pronominal absolutive suffixes (§5.6). From this I infer that transitive clauses with two full NPs where the P argument is definite are very unusual in Belep, a finding consistent with Du Bois (1987).

If the \(P\) argument is represented by an anaphoric suffix (§5.6), the subject is obligatorily marked with the genitive case marker. For example, in (41), the subject maac
'death, illness' is marked as genitive with \(=l i\) because the P argument is indexed by the pronominal suffix -nao '1SG.ABS'.
(41) "Te tunao li maac,»
te \(=\quad\) tu-nao \(=l i \quad\) maac
3SG.SUBJ= find-1SG.ABS=GEN death
"'I'm sick,"" (lit. "'death has found me,'")
Yal-20092011-AW6_0050

In (42), the subject ulayama 'elders, ancestors' is marked as genitive with \(=i\) since the P argument is referenced by the pronominal suffix -er '3SG.ABS' (see §5.6.2).
(42) Lâ̂ paer ri ulayama.
\(\mathbf{l a}=\hat{\mathbf{o}} \quad\) pa-er=i ulaya-ma
3PL.SUBJ=REAL take-3SG.ABS=GEN old.man-AC
'The ancestors took him.'
Yal-28072010-BGMCG-tahitian_0113
In (133), the subject nic 'sharks' is marked as genitive with \(=l i\) since the absolutive argument is the pronominal suffix -la '3PL.ABS'.

> Avar, la baela li nic. \(\begin{aligned} & \text { avar la= bae-la=li } \\ & \text { other 3PL.SUBJ= bite.SPC-3PL.ABS=GEN shark } \\ & \text { 'Others, sharks ate them.' }\end{aligned}\) nic

Yal-20092011-AW2_0049
Note that clauses of this shape are not morphosyntactically distinguishable from transitive clauses with a genitive oblique representing the semantic theme, instrument, etc., although this does not usually result in ambiguity. For instance, example (130) contains a genitive-marked theme NP, bolao pwâgo 'poingo banana' which is morphologically identical to a genitive-marked subject.

\section*{(44) Te taxeer ri bolao pwâgo,}
te \(=\) taxe-er=i bolao pwâgo
3 SG.SUBJ= distribute-3SG.ABS=GEN banana poingo
'He gave him poingo bananas,'

The interpretation of bolao pwâgo 'poingo banana' as the theme rather than the subject in (130) is based purely on semantic grounds; the clause could also be translated (somewhat nonsensically) as 'A poingo banana gave [it to] him'.

There is considerable evidence for considering genitive A arguments to be subjects (as discussed above in §6.2.1) in Belep, including evidence from verb inflection, relativization, and clausal coordination.

First, genitive subjects are obligatorily cross-referenced on the verb using the same agreement markers as nominative subjects (§5.7). For example, in (45), the genitive subject lami bwa molep 'those still living', marked as genitive with \(=i\), is indexed by the 3PL subject agreement marker \(l a=\) in the verb group.
(45) La kiyier ri lami bwa molep,
\begin{tabular}{lll}
\(\mathbf{l} \mathbf{a}=\) & kiyi-er \(=\mathbf{i}\) & \(\mathbf{l a - m i}\) \\
3PL.SUBJ \(=\) see.SPC-3SG.ABS=GEN & DEM.PL-DET.A.DST & bwa molep \\
CONT= alive
\end{tabular} 'Those still alive saw it,'

Yal-20092011-AW2_0073
Genitive subjects also behave like nominative subjects in relativization (\$7.3). For both relativized 3SG nominative and genitive subjects, it is ungrammatical to use a verbal proclitic to index the relativized NP. An example of this 'gapped' 3SG subject agreement marker is shown in (46); note that this subject would be marked genitive if it were not relativized since the P argument is definite.

\section*{Mo âjumi be pwâna mwa, mo âju-mi [0] be pwâna mwa LK3 person-DET.A.DST hit hole house 'But the person who knocks at the door,'}

Yal-25072010-PT-homily_0046
Another example of a 'gapped' 3SG subject agreement marker is shown in (47); it would be marked as genitive if it were not relativized, as evidenced by the absolutive pronominal suffix -er in the second clause.
lami pae we teâmaa ka jier ra pwemwan.
la-mi [0] pa-e we teâmaa ka [0] ji-er=a pwemwa-n
DEM.PL-DET.A.DST take-SPC food high.chief LK give-3SG.ABS=LOC village-3SG.POSS 'those who took the chieftain's food and brought it to the village.'
Yal-20092011-AW5_0031

\subsection*{6.2.3 Absolutive-ergative alignment}

Belep's split-intransitive argument structure shows an absolutive-ergative alignment if only those intransitive verbs which require an (unmarked) absolutive argument (§6.3.1) are considered. These verbs (discussed in §5.1.2) form a closed class and are listed in Table 65. \({ }^{244}\)

Table 88: Verbs requiring an absolutive \(S\) argument
```

Predicate Translation
aria 'NEG.EX'
bwara 'to be missed, hoped for'
ciae, cia 'NEG.LOC'
ivi, iva 'to be where?'
mwanya 'to be many, to be overpowering'
mwanyi 'to be ignorant, to dislike'
tu, tuya 'EX'

```

Evidence for absolutive-ergative alignment for these verbs is found in nominal case-marking, verb inflection, and clausal subordination.

The case-marking of noun phrases in clauses with the Table 65 verbs shows absolutive-ergative alignment. In transitive clauses, the case marker \(=l a\) or \(=a\) ' NOM ' (§6.3.2) marks some A arguments in a transitive clause, while P arguments are unmarked (§6.2.1). For example, in (48), the A argument teâmaa 'chieftain' is marked with case marker \(=a\), while the P argument wayap 'war' is unmarked.

\footnotetext{
\({ }^{244}\) There are most likely several other verbs that fall into this set; however, the total number is still very small.
}
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{4}{|l|}{Texa terae wayap va teâmaa,} \\
\hline VG & & P & A \\
\hline [te=xa & tera-e] & [wayav]=a & [teâmaa] \\
\hline 3SG.SUBJ=ADD & stop-SPC & war=NOM & high.chief \\
\hline \multicolumn{4}{|l|}{'And the chieftain stopped the war,'} \\
\hline
\end{tabular}

Yal-20092011-AW4_0060
In intransitive clauses using the verbs shown in Table 65, the \(S\) argument is unmarked. In (19), the S argument ola 'lobster, shrimp' of the negative existential verb âria 'NEG.EX' is unmarked.
```

Arria ola.
VG S
[âria] [ola]
NEG.EX shellfish
'There weren't any lobsters.'

```

Yal-28072010-BGMCG-tahitian_0032
In (50), the S argument naran 'its name' of the verb iva 'to be where?' is unmarked.
(50) Iva naran?

VG S
[iva] [nara-n]
where.GNR name-3SG.POSS
'What's it called?' (lit. 'Where is its name?')
Yal-20092011-AW1_0273
In (51), the \(S\) argument madaan 'his sadness' of the verb mwanya 'to be many' is unmarked.
(51) Texa mo la Teâ Nenema ka, mwanya madaan, yo kiyie?

VG
S
te=xa mo=la Teâ Nenema ka [mwanya] [madaa-n] yoxe 3SG.SUBJ=ADD live=NOM Teâ Nêlêmwa LK many sadness-3SG.POSS TAG 'And Teâ Nêlêmwa went along and his sadness was great, you see?' Yal-20092011-AW3_0024

The S arguments of the Table 65 verbs behave like transitive P arguments in terms of case-marking rather than like transitive A arguments. This is evidence of absolutiveergative alignment in Belep.

Verb inflection of the Table 65 verbs also shows evidence of an absolutiveergative system. In transitive clauses, the A argument is obligatorily cross-referenced by a subject agreement proclitic on the verb (§5.7). The P argument may be anaphorically indexed by an absolutive pronominal verb suffix (§5.6). If the \(S\) argument of a Table 65 verb is referred to anaphorically, a verb suffix is used. Use of a subject agreement proclitic is ungrammatical. For example, the pronominal verb suffix \(-e\) ' \(3 \mathrm{SG} . \mathrm{ABS}\) ' in (14) indexes the S argument of \(i v a\) 'to be where?' and cia 'NEG.LOC'.
(52) «Ivie ? » \(\hat{O}\) ciae.
VG VG
[ivi-e] [ô cia-e]
where.SPC-3SG.ABS REAL NEG.LOC-3SG.ABS
""Where is he?" He wasn't there.'
Yal-28072010-BGMCG-tahitian_0178
In the constructed example in (53), the suffix -er '3SG.ABS' indexes the \(S\) argument of mwanyi 'to be ignorant of, dislike'.
(53) Mwanyier ri comu.

VG
[mwanyi-er]=i comu
dislike-3SG.abs=GEN learning
'He doesn't like school.'
Yal-22092011-TB.wav

In this respect, S arguments of Table 65 verbs behave like P arguments of transitive verbs, rather than like A arguments of transitive verbs.

Many Belep transitive verbs (§5.1.3.1) obligatorily inflect to agree with their P argument in specificity (§5.1.4). Some of the Table 65 verbs also inflect to agree with their \(S\) argument in specificity, as in (50) and (14) above. In these examples, the verb 'to be where?' has two forms, ivi when used with a specific S argument and \(i v a\) for a generic S argument. Transitive verbs never agree with their A argument in specificity. This is further evidence of absolutive-ergative alignment in Belep.

Finally, evidence for an absolutive-ergative system is found in the rules for clausal subordination (§7.2). When adverbial linker to (§7.2.2.2) is used to link a subordinate intransitive clause to a transitive clause, the S argument of the subordinate clause is interpreted as being co-referential with the P argument of the preceding clause. For example, in (54), the S argument of the subordinate to-clause te uya 'it was appearing' is co-referential with the P argument of the preceding clause.
(54) Le nodame ka kiyi mwija pwalaic to te uya,
le= no=da=me ka kiyi mwija pwalaic to=re uya

3DU.SUBJ= peer=DIR.UH=CTP LK see.SPC thing one when=3SG.SUBJ arrive
'They looked up and saw something \({ }_{i}\) as \(i_{i}\) was appearing,'
Yal-28072010-BGMCG-tayamu_0220
When relativizer \(k i\) ( \(\S 7.2 .6\) ) is used to link a subordinate intransitive clause to transitive clause, the S argument of the subordinate clause is co-referential with the P argument of the preceding clause. For example, in (55), the S argument of the subordinate clause, indexed by subject proclitic \(a v e=\) '1DU.EXCL.SUBJ', is co-referential with the P argument of the preceding clause, indexed by the absolutive pronoun \(-v e\).
(55) Te kuar rive ki ave cuur reen.
\begin{tabular}{lllll} 
te \(=\) & kuar=i-ve & ki & ave \(=\) & cur=e-en \\
3SG.SUBJ \(=\) & refuse=GEN-1DU.EXCL.ABS & REL & 1DU.EXCL.SUBJ \(=\) & stand=DAT-3SG.POSS
\end{tabular}
'He didn't want us to visit him.' ('He didn't want usi that we \(\mathrm{e}_{\mathrm{i}}\) stand before him.')
Yal-28072010-BGMCG-tahitian_0271
When a serial verb construction is used to link a subordinate intransitive clause (§7.5.2) to a transitive clause, the S argument of the subordinate clause is co-referential with the P argument of the preceding clause. An example is shown in (56), where the \(S\) argument of the subordinate clause bwa maac '[she] was dead' is co-referential with the P argument of the preceding clause.

Pame la teâmaa ka kiyie bwa maac.
\begin{tabular}{llllll} 
pa=me=la & teâmaa & ka & kiyi-e & bwa= & maac \\
go.TV=CTP=NOM & high.chief & LK & see.SPC-3SG.abs & CONT= & die \\
'The chief came and saw her \({ }_{i}\) [as she \({ }_{i}\) was] dead.' & &
\end{tabular}

Yal-20092011-AW1_0274
In these three participial constructions, S arguments are co-referential with P arguments, while it would be ungrammatical for them to be co-referential with A arguments. This is evidence of syntactic ergativity (Payne 1997) in Belep.

\subsection*{6.2.4 Subjecthood in Belep}

I have shown in the preceding sections that there is evidence for grouping together each of the following in Belep: 1) all A arguments of a transitive clause, whether they are marked as nominative or genitive; 2) nominative A arguments of a transitive clause with nominative S arguments of an intransitive clause; and 3) absolutive P arguments of a transitive clause with absolutive \(S\) arguments of an intransitive clause. Though I have chosen to use the term 'subject' only for the first two categories, all three of these groupings display some cross-linguistic subject-like characteristics, as proposed in Keenan (1976).

The set of arguments containing genitive A arguments and all nominative arguments displays the largest number of subject-like properties in Belep; it is identified in this work as the category of 'subject'. This set of arguments controls verb agreementa subject-like property (Keenan 1976: 316)—and, though nominal subjects obligatorily occur at the end of a clause, verbal proclitics which agree with the subject are normally the first element of a clause. This is also consistent with the cross-linguistic tendency of subject-like arguments to be "leftmost" in the clause (Keenan 1976: 319). Belep nominative arguments can be indexed by an independent pronoun (§4.5.1) -a subject-
like property (Keenan 1976: 320)—while absolutive arguments cannot. \({ }^{245}\) Nominative arguments in Belep are obligatorily deleted across the coordinating linker ka (§7.1.1), which is a common subject-like property (Keenan 1976: 317). \({ }^{246}\) Subject relativization is the only type of relativization in Belep which uses gapping as a strategy (see §7.3.4); this strategy is usually used cross-linguistically for subject-like arguments (Keenan 1976: 320). A wide variety of semantic roles, including Agent, are available to Belep subject arguments; however, absolutive arguments cannot be Agents and are typically Experiencers. This is consistent with Keenan's (1976) contention that subjects "express the agent of the action, if there is one" (Keenan 1976: 321). In Belep causatives (§5.3.1), the causer acts as the subject (consistent with the subject-like properties described by Keenan (1976: 321)); absolutive verbs cannot undergo causativization. Finally, the addressee of an imperative (§6.6.1) must be the subject in Belep; absolutive verbs cannot be imperatives. This is common for subject-like arguments cross-linguistically (Keenan 1976: 321).

Absolutive arguments in Belep also display a few cross-linguistic subject-like properties which are not shared by Belep nominative or genitive subjects. Belep absolutive arguments are always unmarked, while all other nominal cases require marking-cross-linguistically, subject-like arguments are "usually not case marked" if there is any unmarked case (Keenan 1976: 320). Belep absolutive arguments can also be co-referentially deleted in one type of verb serialization (see §6.2.3), a subject-like property according to Keenan (1976: 317).

\footnotetext{
\({ }^{245}\) This property is not shared by genitive subjects.
\({ }^{246}\) This property is not shared by genitive subjects.
}

Finally, there are subject-like properties that are shared both by absolutive arguments and by nominative and genitive subjects in Belep. All of these subject-like arguments can be topicalized (§6.8.1); cross-linguistically, subjects are "normally the topic" of the clause (Keenan 1976: 318). Interestingly, both absolutive and nominative arguments in Belep also participate in the subject-like property of controlling "coreferential deletions and pronominalizations" (Keenan 1976: 315); that is, Belep exhibits both syntactic accusativity and syntactic ergativity.

Belep nominative arguments control coreference in some coordinate clauses. The A argument of a transitive clause can be co-referential with the S argument of a \(k a\) conjoined intransitive clause, a common characteristic of subjects (Andrews 2007a). For instance, in (85), the A argument of the transitive clause (where the verb is inn 'to make') is indexed by the subject agreement proclitic \(j a=\) ' 1 PL.INCL.SUBJ'; though the subject agreement proclitic is omitted in the conjoined transitive clause (where the verb is cavac 'to leave), the referent of the S argument is identical.
(57) Te ô ki ja pan înae Paixa, ka âmu cavac.
te \(\hat{\mathbf{o}}=\mathbf{x i} \quad \mathbf{j a}=\quad\) pana îna-e Paixa ka [0] âmu= cavac
3SG.SUBJ= good=REL 1PL.INCL.SUBJ= go.TV make-SPC Easter.LN LK PRF= leave ' \(\mathrm{We}_{\mathrm{i}}\) must celebrate Easter, and then \(\left[\mathrm{we}_{\mathrm{i}}\right.\) ] leave.'

Yal-20092011-AW2_0075
Belep absolutive arguments control coreference in some subordinate clauses. The \(P\) argument of a transitive clause can be co-referential with the \(S\) argument of a following subordinate clause (§7.2). For example, in (128), linker \(k a\) acts as a subordinator (§7.2.1). The P argument of the transitive clause (where the verb is ina 'to make') is indexed by the absolutive 3 SG pronominal suffix -er. Though the subject agreement proclitic is
omitted in the linked subordinate clause (where the verb is \(\hat{o}\) 'to be good'), the referent of the S argument is identical.

Texa înaer ri Belep ka ô.
te=xa îna-er=i Belep ka ô

3SG.SUBJ=ADD make-3SG.ABS=GEN Belep LK be.good 'Belep healed him.' (lit. 'Belep made \(\mathrm{him}_{\mathrm{i}}\) that [he \(\mathrm{i}_{\mathrm{i}}\) ] was good.')
Yal-20092011-AW6_0055

Other examples of an absolutive argument acting as a controller of coreference across clausal boundaries were given in §6.2.3.

Though subjecthood in Belep is most clearly aligned with nominative-marked (and to a lesser degree, genitive-marked) arguments, absolutive arguments also have a number of subject-like characteristics. This is perhaps not surprising, given that Belep's closest linguistic neighbors (such as Balade Nyelâyu and Nêlêmwa) have split-ergative argument structures (Ozanne-Rivierre et al. 1998, Bril 2002). The ergative properties in Belep are likely either a holdover from a common ancestor or a new innovation based on language contact. Either way, the evidence indicates that Belep may be in the process of a shift in argument structure.

\subsection*{6.3 Case and grammatical relations}

Noun phrases in Belep are marked to indicate their role in grammatical relations using a set of case-marking formatives which fall under the definition of ditropic clitics (see §3.1.2.6), terminology coined by Embick and Noyer (1999:291). Cysouw (2005), who discusses examples of ditropic clitics in a variety of languages, describes them thusly: "Functionally, the clitic belongs together with Y [its attractor], yet it is attached morphologically to X [its host, which defies]...all attempts at any unitary structural characterization... The only possible way to describe the surface position of the clitic is
by stating that it is attached to whatever element happens to come before its attractor" (Cysouw 2005:2,3-4). Ditropic clitics with noun phrase attractors are attested in some Wakashan languages and in Yagua (Cysouw 2005). \({ }^{247}\) In Belep, the formative which marks the grammatical role of a noun phrase is realized as an enclitic (§3.1.2.6) on whatever element immediately precedes that noun phrase.

The Belep case-marking ditropic clitics are shown in Table 89. Absolutive arguments are unmarked for case. Nominative, genitive, dative, and locative case markers vary phonologically depending on whether they are preceded by a vowel or consonant. The instrumental case marker varies based on whether its noun phrase attractor is specific or generic (§5.1.4).

Table 89: Ditropic clitic case markers
\begin{tabular}{|l|l|}
\hline Clitic & Case \\
\hline\(=(1) \mathrm{a}\) & nominative \\
\hline\(=(\mathrm{l}) \mathrm{i}\) & genitive \\
\hline\(=(\mathrm{l}) \mathrm{e}\) & dative \\
\hline\(=(\mathrm{l}) \mathrm{a}\) & locative \\
\hline\(=\mathrm{va}(-\mathrm{e})\) & instrumental \\
\hline
\end{tabular}

These case markers pose a bracketing paradox for Belep (cf. Sproat 1988).
Morphologically, they belong with their host, the element that precedes them, while syntactically and semantically they belong with their attractor, a noun phrase whose case they mark. For example, in (59), the noun phrase attractor teâmaa 'chieftain' is the subject of the clause; this is indicated by the nominative ditropic enclitic \(=a\) which is attached to the host verb kaac 'to be bitter'.

\footnotetext{
\({ }^{247}\) Data in the grammars of Nêlêmwa (Bril 2002) and Balade Nyelâyu (Ozanne-Rivierre 1998) suggests that ditropic encliticization may be present in these languages as well, although the authors make no mention.
}
(59) Ka kaac, kaac ya teâmaa.
\begin{tabular}{llll} 
ka & kaac & \begin{tabular}{l} 
kay=a \\
LK
\end{tabular} & be.bitter \\
be.bitter=NOM & teâmaa \\
high.chief
\end{tabular}
'And [he was] angry, the chieftain was angry.'
Yal-20092011-AW1_0233

In this work, case markers are not considered to be part of the noun phrase constituent (§4.4) since they do not act as part of that unit. Case markers are used only when a noun phrase appears in situ as an argument of a clause; in all other noun phrases, such as topicalized NPs, answers to question-word questions, appositive NPs, etc., use of a case marker is ungrammatical. For example, in noun phrase topicalization (§6.8.1), the topicalized NP is not marked for case (60).
(60) Naerama, la ci maac. Maac ya naerama,
\(\underline{0}\) nae-ra-ma la= ci maac may=a nae-ra-ma child-3GNR.POSS-AC 3PL.SUBJ= sit die die=NOM child-3GNR.POSS-AC 'The children, they died nonetheless. The children died,'

Yal-20092011-AW2_0041-0042
Example (60) shows a clause with the topicalized NP naerama 'the children', which is used without a case marker (indicated here with [0]). This contrasts with the subsequent clause, where naerama acts as the subject and is marked with the nominative case marker \(=a\). Also, in noun phrase responses to question-word questions (§6.5.2), use of casemarkers is ungrammatical (61).
(61a) Ayuamw mwiti? âyua-mw=i=ri
desire-2SG.POSS=GEN=who
'Who do you love?' (lit. 'Who is your desire?')
(61b) Âyuang ngi Kacaca. âyua-ng=i Kacaca
desire-1SG.POSS=GEN Kacaca
'I love Kacaca.' (lit. 'Kacaca is my desire.')
(61c) Kacaca.
Kacaca
Kacaca
'Kacaca.'
(61d) *Li Kacaca.
=li Kacaca
=GEN Kacaca
‘*Of Kacaca.'
Yal-05102010-PT1.wav - Yal-05102010-PT3.wav

The answer to the questioned genitive argument in (61a) can be either a full clause as in (61b) or an unmarked NP as in (61c), but it cannot be an NP marked for case as in (61d). In addition, appositive noun phrases, set apart by intonation breaks, are not marked for case (62).
(62) Ta la Nic, Nic, yami na âri li, yaxe. \(\mathbf{t a}=\underline{\mathbf{a}} \quad\) Nic Nic ya-mi go.UH=LOC Nic Nic DEM.LOC-DET.A.DST \(\begin{array}{lll}\text { na= } & \text { âri=li } & \text { ya-xe } \\ \text { 1SG.SUBJ }= & \text { say=LOC.A.DST } & \text { DEM.LOC-DET.D.DST }\end{array}\) '[They] went up to Nic, Nic, that place I mentioned, over there.'

Yal-20092011-AW1_0193
In (62), only the first mention of Nic, a toponym, is marked for case with the locative case marker \(=l a\). The appositive noun phrases that follow it-a repetition of the toponym Nic, the relative pronoun-headed (§7.3.3) relative clause yami na âri li'the place I mentioned', and the demonstrative pronoun yaxe (§4.5.2)-are not marked for case.

Furthermore, in my corpus, pauses and word-searches do not occur in discourse before a case marker (that is, between a ditropic clitic and its host); however, they frequently occur between a case marker and its NP attractor, as shown in (63), where [:::] indicates a lengthened vowel.
(63) Texa tame la, texa pame la, buny,
\begin{tabular}{lllll} 
te \(=\mathbf{x a}\) & ta-me=la::: & te=xa & pa-me=la::: & buny \\
3SG.SUBJ=ADD & go.UH=CTP=NOM & 3SG.SUBJ=ADD & go.TV=CTP=NOM & great.crested.tern \\
'Came the \(=, \ldots(.9)\) came the \(=, \ldots(.8)\) tern,' & &
\end{tabular}
Yal-01082010-MFD_0015

In (63), the speaker performs a word search for the word buny 'great crested tern'. She first produces the nominative case marker \(=l a\) at the end of an intonation unit, followed by a long pause. She then produces a similar intonation unit, correcting the verb she had used and again lengthening the final case marker. After another long pause, she produces the NP. These examples show evidence that case markers do not pattern with their NP attractor, and should best be considered part of the syntax of Belep rather than part of the NP constituent.

\subsection*{6.3.1 Absolutive case}

Noun phrases in the absolutive case-all P arguments of a transitive clause, and some S arguments of an intransitive clause (see §6.2.3, §5.1.2)—are unmarked in Belep. For example, in (64), the absolutive NPs uvi 'yam', bolao 'banana tree', and ûjep 'sugar cane’, which are all P arguments of the transitive (§5.1.3.2) verb tee 'to plant', are unmarked.
(64) Le te uvi, te bolao, ka te ûjep, le \(=\) te \(\{\) uvi\} te \(\{b o l a o\}\) ka te \(\{\) ûjep \(\}\) 3DU.SUBJ= plant yam plant banana.tree LK plant sugar.cane 'They planted yams, planted bananas, and planted sugar cane,' Yal-28072010-BGMCG-tayamu_0015-0018

In (65), the unmarked absolutive NP is waga ulayixedu digi 'that old man's boat, a canoe’. It serves as the P argument of the transitive (§5.1.3.1) verb pa'to take’.
(65) Avexa pae waga ulayixedu digi, ave=xa pa-e \(\quad\) \{waga ulayi-xedu digi\} 1DU.EXCL.SUBJ=ADD take-SPC boat old.man-DET.DH canoe 'And we took that old man's boat, a canoe,'

Yal-28072010-BGMCG-tahitian_0013
In (66), the absolutive \(S\) argument \(\hat{a j u}\) 'person' of the negative existential verb (§5.1.2,
§6.2.3) âria is unmarked for case.
(66) Ô âria âju.
ô âria \(\{a ̂ j u\}\)
REAL NEG.EX person
'There were no people.'
Yal-20092011-AW5_0070

In (137), the noun phrase mwadeng 'my nose' is not modified by a case marker; it acts as the S argument of the negative locative verb cia.

\section*{(67) "Cia mwadeng.»}
cia \{mwade-ng\}
NEG.LOC nose-1SG.POSS
"'I don't have a nose." (in context 'without a nose')
Yal-20092011-AW5_0107

An absolutive suffix (§5.6) may substitute for an unmarked absolutive argument, as in (68) where the first singular absolutive suffix -nao anaphorically indexes an absolutive argument.
(68) "Ka nawenao la bwe daan».
ka nawe-nao=la bwe daan
LK deposit-1SG.OBJ=LOC top path
'And leave me on the path.'
Yal-20092011-AW1_0097

\subsection*{6.3.2 Nominative case}

Noun phrases in the nominative case-that is, most \(S\) arguments of an intransitive clause (§6.2.1) and some A arguments of a transitive clause (§6.2.2)-are case-marked
with the ditropic enclitic \(=l a\) or \(=a\) 'NOM' on the preceding element. The \(=l a\) form occurs when its host ends in a vowel (35); the \(=a\) form occurs when its host ends in a consonant (70).
(69) Laxâ̂ kejadu la naerama, \(\mathbf{l a}=\mathbf{x a}=\hat{\mathbf{o}} \quad\) keja=du=la \(\quad\) \{nae-ra-ma\}
3PL.SUBJ=ADD=REAL run=DIR.DH=NOM child-3GNR.POSS-AC
'And the children ran down,'
Yal-17072009-TB-weekend_0024
(70) Te nam ma denaar.
te= nam=a \(\quad\) \{denaar\}
3SG.SUBJ= disappear=NOM sun
'The sun was setting.'
Yal-17072009-TB-weekend_0005
In (35) and (70), the \(S\) argument of an intransitive clause—indicated with \(\}\)-is marked as in the nominative case. The nominative ditropic clitic case marker is also used to mark the A argument of a transitive clause when the P argument is indefinite, as in (71) and (72).
(71) Texa pae wîmi la ulayili Cebaba,
\begin{tabular}{lllll} 
te=xa & pa-e & wî̀-mi=la & \{ulayi-li & Cebaba \\
3SG.SUBJ=ADD & \begin{tabular}{l} 
take-SPC
\end{tabular} & \begin{tabular}{l} 
DEM.INAN-DET.A.DST=NOM
\end{tabular} & \begin{tabular}{l} 
old.man-DET.A.PRX
\end{tabular} & Cebaba
\end{tabular}

DEM.INAN-DET.A.DST=NOM old.man-DET.A.PRX Cebaba
'And that old man Cebaba took that thing,'
Yal-20092011-AW1_0265
In (71), nominative-marked ulayili Cebaba 'that old man Cebaba' is the A argument of a transitive clause. In (72), the A argument teâmaa 'chieftain' of a transitive clause is marked as nominative.
(72) ma teme, me âri oyeen na teâmaa.
\(\mathbf{m a}=\mathbf{r e}=\mathbf{m e} \quad\) me âri oye-n=a \(\quad\) \{teâmaa\}

LK4=3SG.SUBJ=IRR IRR say.TR spell-3SG.POSS=NOM high.chief 'so that the chieftain would, would cast his spell.'
Yal-20092011-AW6_0038

Note that the variation in the phonological form of the nominative marker in (3) and (2) is triggered by the final phoneme of its host.

A pronoun may substitute for a nominative-marked noun phrase, as in (73) where the independent pronoun le (§4.5.1) is marked as nominative, or in (74) where the demonstrative pronoun leli \((\S 4.5 .2)\) is marked as nominative. Such a substitution is pragmatically marked.
(73) Ka ô tuic ya le,
\(\begin{array}{llll}\text { ka } & \hat{\mathbf{o}} & \mathbf{t u}=\mathbf{i y = a} & \{\mathbf{l} \mathbf{e} \boldsymbol{a} \\ \text { LK } & \text { REAL } & \text { go.DH=CTF=NOM } & \text { 3DU.INDEP }\end{array}\)
'And went down they did,'
Yal-28072010-BGMCG-tayamu_0164
(74) Mo la leli,
\(\mathbf{m o}=\underline{\mathbf{l a}} \quad\{\mathrm{le}-\mathrm{li}\}\)
live=NOM DEM.DU-DET.A.PRX
'Lived those two did,'
Yal-20092011-AW1_0247
The Belep nominative marker may be etymologically related to (e)a 'ERG', the ergative case marker for human agents in Nêlêmwa (Bril 2002), though Bril does not use the term 'case' and analyzes the marker as a particle. There is a similar ergative marker an in Balade Nyelâyu (Ozanne-Rivierre et al. 1998) which is used for demonstrative personal pronouns. Bril (2002: 138) hypothesizes that the Nêlêmwa morpheme may be the reflex of a possessive classifier marking general active possession, Proto-Oceanic *a(+ possessive suffix).

\subsection*{6.3.3 Genitive case}

Noun phrases in the genitive case-that is, some A arguments of a transitive clause (§6.2.2), all independent possessors (§4.1.2.4), some obliques, and various other arguments-are case-marked with the ditropic enclitic \(=l i\) or \(=i\) ' GEN ' on the preceding element. The form \(=l i\) occurs if the host ends in a vowel (139), while the form \(=i\) occurs if the host ends in a consonant (76).
«La ginao li Âôvaayama." \(\mathbf{l a}=\quad\) gi-nao=lin \(\quad\{\hat{\mathbf{A}}\) ôvaya-ma\}
3PL.SUBJ= attack-1SG.ABS=GEN Â̂ovaac-AC
""The Âôvaac people are attacking me."
Yal-20092011-AW3_0029
In (139), the genitive case-marking ditropic clitic \(=l i\) marks the A argument of a transitive clause, Âôvaayama 'the Âôvaac people'. In (76), the form \(=i\) marks the A argument Anthony of a transitive clause.
(76) To jier ri Anthony.
to \(\mathbf{j i}-\mathrm{er}=\underline{\mathbf{i}} \quad\{\) ãtoni]\}
call give-3SG.ABS=GEN Anthony.LN
'Anthony called him.'
Yal-05092011-AP1_0040
In both (139) and (76), the A argument of a transitive clause is marked as genitive because the P argument is definite (§6.2.2).

The term 'genitive' is used for the case marker \(=l i,=i\) because its prototypical use is to mark the possessor noun phrase in the independent possessive construction (§4.1.2.4). For example, in (77), the genitive ditropic clitic marks teâmaa 'chieftain' as the possessor of âju 'person', and in (78) it marks Awucili, a clan name, as the possessor of âma naen 'clan, family'. The phonological variation is due to the final phoneme of its host.

\section*{âju li teâmaa,}
âju=lin \(\quad\{t e a ̂ m a a\}\)
person=GEN high.chief
'the chieftain's vassal' (lit. 'the chieftain's person')
Yal-20092011-AW5_0076
(78) Pwai âma naen ni Awucili, pwai âma= nae-n=i
\{Awucili\}
only DYAD= child-3SG.POSS=GEN Awucili
'Only the clan of Awucili,'
Yal-20092011-AW6_0134

Another use of the genitive case marker is as a marker for oblique arguments. In (79) and (80), genitive \(=l i,=i\) is used to mark the semantic theme.
(79) Te tao toli tayamook xi nyan.
\(\mathbf{t e}=\quad \boldsymbol{t a o}=\quad\) to-li \(\quad\) tayamoo- \(\mathbf{x}=\mathbf{i} \quad \begin{cases}\text { nya-n }\}\end{cases}\)
3SG.SUBJ= HAB \(=\) call-TR old.woman-DET.D.PRX=GEN mother-3SG.POSS 'He always called this old woman his mother.'

Yal-28072010-BGMCG-tahitian_0318
In (79), genitive \(=i\) marks the oblique NP nyan 'his mother' as the theme. In (80), the noun phrase pê koba gawaar 'daily bread' is marked as genitive with \(=l i\).
(80) Yo taxeva li pê kôba gawaar.
\begin{tabular}{lllll}
\(\mathbf{y o}=\) & taxe-va==li & \{pê & kôba & gawaar \(\}\) \\
2SG.SUBJ \(=\) & distribute-2PL.EXCL.ABS=GEN & bread.LN & entirety & day
\end{tabular}
'You give us our daily bread.'
Yal-25072010-PT-homily_0028
Present/future temporal deixis is also accomplished with the genitive marker (this contrasts with past temporal deixis, for which the adverbial linker to 'when' is used; see §7.2.3.2). For example, in (81) the noun phrase bwe cexeeniik 'this Sunday' is marked as genitive with \(=l i\).
(81) yena li bwe cexeeniik, yena=li \(\quad\{b w e \quad\) cexenii-k \(\}\)
now=GEN moment sacred-DET.D.PRX 'today this Sunday,'

Yal-25072010-PT-homily_0054
In (82), the noun phrase bwaêdan 'morning' is marked as genitive with \(=i\).
(82) noor iyam mi bwaêdan,
no-ra iyam=i \(\quad\) \{bwaêdan\}
awake-NDR tomorrow=GEN morning '[he] woke up the next morning,'
Yal-05092011-AP1_0024

Both genitive-marked noun phrases in (81) and (82) refer to present or future temporal locations.

The \(S\) argument of an equative construction (§6.4.1) is also typically marked as in the genitive case, as in (83) and (84). In (83), genitive \(=l i\) marks the noun phrase âjuma lali 'those people' as the S argument of a predicate nominal (see §6.5.2).
(83) «Ti li âjuma lali ?»
\(\begin{array}{lll}\mathbf{t i}=\underline{\mathbf{i}} & \begin{array}{l}\{\hat{a} j u-m a \\ \text { who }=\text { GEN }\end{array} & \text { la-li }\} \\ \text { person-AC } & \text { DEM.PL-DET.A.PRX }\end{array}\)
""Who are those people?"' (lit. ""Those people are who?"")
Yal-20092011-AW6_0079
In (84), genitive \(=i\) marks the proper noun Tayema as the \(S\) argument of a predicate nominal.
(84) Naran ni Tayema, tahitien. nara-n=i \(\quad\{\) Tayema\} [taisjẽ] name-3SG.POSS=GEN Tayema Tahitian.LN 'Tayema was his name, a Tahitian.'

Yal-28072010-BGMCG-tahitian_0003
An absolutive suffix (§5.6) may substitute for a genitive-marked noun phrase, as in (85) where the third plural absolutive suffix -la, marked with the genitive marker \(=l i\), anaphorically indexes a noun phrase.
(85) Toma bu lila yeek, toma bu=li\{-la\} yeek but fishhook=GEN-3PL.ABS wood 'While their wooden hooks,'

Yal-28072010-BGMCG-hamecon_0034
In (86), the third paucal absolutive suffix -len substitutes for a genitive-marked noun phrase.

\section*{Pwajen nilen.}
pwajen=i\{-len\}
three=GEN-3PA.ABS
'There were three of them.'
Yal-20092011-AW6_0156-0157
The Belep genitive marker may be etymologically related to the Nêlêmwa relator \(i\), which is used for human obliques. Bril (2002:146) remarks that this relator is most
likely the reflex of Proto-Oceanic preposition *i/*aki(ni), which "introduc[es] oblique case nominals" (Pawley \& Reid 1976:59).

\subsection*{6.3.4 Dative case}

Noun phrases in the dative case-that is, primarily semantic recipients-are casemarked with the ditropic clitic \(=l e\) or \(=e\) 'DAT' on the preceding element. The form \(=l e\) occurs if the host ends with a vowel (87), while the form \(=e\) occurs if the host ends in a consonant (88).
(87) Ka cavac ya Ciaup, ka pan mo le âju liema, ka cavay=a Ciaup ka pana mo=le \{âju=li-e-ma\}
LK leave=NOM Ciaup LK go.TV live= \(\overline{\text { DAT }}\) person=GEN-3SG.ABS-AC
'And Ciaup left, and went to be with his people,'
Yal-20092011-AW1_0222-0223
In (87), the dative marker =le marks the noun phrase âju liema 'his people' as a semantic recipient. In (88), the dative-marked argument teâmaa 'chieftain' is indicated by the ditropic clitic \(=e\).
(88) «Jame pan ne teâmaa.»
ja=me pan=e \(\quad\{\) teâmaa\}
1PL.INCL.SUBJ=IRR go.TV=DAT high.chief
"We will go to the chieftain.""
Yal-20092011-AW5_0037
The dative case marker occurs most commonly following the class 1 nouns na'interior' and \(u\) - 'toward \({ }^{248}\). A dative-marked noun phrase following na- 'interior' typically indexes the experiencer of a predicated emotional affect, such as difficulty (89), pain, preference, etc. In (89), the noun phrase naerama lami 'those children' is marked as the experiencer using the dative case marker \(=l\).

\footnotetext{
\({ }^{248}\) The morpheme \(u\) - 'toward' is not attested in my corpus in any position except followed by the dative case marker; I have classed it as a noun due to its parallelism with \(n a\) - 'interior', which displays a number of nounlike characteristics.
}

\section*{Me cao pwalu na le naerama lami,}
\begin{tabular}{llllll} 
me & cao & pwalu & na=le & \begin{tabular}{l} 
\{nae-ra-ma \\
child-3GNR.POSS-AC
\end{tabular} & la-mi\} \\
IRR & work.PL-DET.A.DST & heavy & interior=DAT
\end{tabular} 'It is difficult for those children,'

Yal-25072010-PT-homily_0089
A dative-marked noun phrase following \(u\) - 'toward' indexes the recipient of the action of the predicate. For example, in (90), the dative-marked noun phrase âju lieramale 'his two courtiers' is the recipient of the action of the transitive verb ârie 'to say'.
(90) Te âri u le âju lieramale, te= âri u=le
3SG.SUBJ= say toward=DAT
\{âju=li-era-male\}
'He said to his two courtiers,'
Yal-20092011-AW6_0111
In (91), the noun phrase buny 'tern' is marked as the recipient of the action of the intransitive verb kaac 'to be bitter, angry' using the dative marker \(=l e\).
(91) Te kaac u le buny,
te= kaya u=le \(\quad\{b u n y\}\)
3SG.SUBJ= be.bitter toward=DAT great.crested.tern
'He was angry at the tern,'
Yal-01082010-MFD_0004
A possessive suffix (§4.1.2.2) may substitute for a dative-marked noun phrase.
The dative case marker-unlike the other case markers-undergoes vowel gemination if a singular possessive suffix follows it (see §4.1.2.3). For example, in (92), the plural possessive suffix \(-a c\), marked with the genitive case marker \(=l e\), indexes a noun phrase.
(92) Ma yena to name tiu uleac,
\begin{tabular}{lllll} 
ma & \begin{tabular}{l} 
yena=ro \\
LK4
\end{tabular} & \begin{tabular}{l} 
na=me \\
now=when
\end{tabular} & \begin{tabular}{l} 
ti-u \\
1SG.SUBJ=IRR
\end{tabular} & \begin{tabular}{l} 
u=le \(\{-a c\}\) \\
prick-DETR
\end{tabular} \\
toward=DAT-2PL.POSS
\end{tabular}
'But now, as I am writing to you,'
Yal-14092011-PT2-avenir_0016
In (93), the third singular possessive suffix - \(n\) anaphorically indexes a noun phrase; since it is singular, the dative case marker that precedes it contains a like-vowel hiatus.
```

Avexa boyu leen.
ave=xa boyu=lee{-n}
1DU.EXCL.SUBJ=ADD greet=DAT-3SG.POSS
'We greeted him.'

```

Yal-28072010-BGMCG-tahitian_0236
Examples (94) and 95) also show instances of vowel gemination in the dative case marker when the noun phrase indexed by its pronominal suffix is singular. In (94), the case marker follows the noun na- 'interior', indexing the experiencer of an emotion or affect.
```

"Te mwany na leeng,"
te= mwany na=lee{-ng}
3SG.SUBJ= bad interior=DAT-1SG.POSS
"'I'm sick,""

```

Yal-20092011-AW6_0050
In 95), the dative case marker marks the noun phrase it modifies as the recipient of the action of the intransitive verb cuur 'to stand'.

\section*{95) Te kuarive ki ave cuur reen.}
te \(=\) kuar-i-ve \(\quad\) ki ave \(=\quad\) cur=ee \(\{-n\}\)

3SG.SUBJ= refuse-TR-1DU.EXCL.ABS REL 1DU.EXCL.SUBJ= stand=DAT-3SG.POSS 'He didn't want us to stand before him.'

Yal-28072010-BGMCG-tahitian_0271

\subsection*{6.3.5 Locative case}

Noun phrases in the locative case-that is, which index a semantic location, source, or goal-are case-marked with the ditropic clitic \(=l a\) or \(=a\) 'LOC' on the preceding element. \({ }^{249}\) The form \(=l a\) occurs if the host ends in a vowel (96), while the form \(=a\) is used if the host ends in a consonant (97). In (96), the semantic goal noun phrases Cager and Amwany, both toponyms, are marked with the case-marker \(=l a\).

\footnotetext{
\({ }^{249}\) The locative case marker is homophonous with the nominative case marker (§6.3.2); however, in practice, this homophony does not pose any problems for comprehension-very few semantic locations could serve as the subject of a clause.
}
(96) uya la Cager ka uya la Âmwany. \(\begin{array}{lllll}\text { uya }=\mathbf{l a} & \text { \{Cager } & \text { ka } & \text { uya }=\mathbf{l a} & \{\text { Âmwany }\} \\ \text { arrive }=\text { LOC } & \text { Cager } & \text { LK } & \text { arrive= }=\text { LOC } & \text { Âmwany }\end{array}\) '[we] arrived at Cager and arrived at Âmwany.'

Yal-28072010-BGMCG-tahitian_0028-0030
In (97), the toponym Poc, a semantic goal, is marked with the case-marker \(=a\).
\begin{tabular}{ll} 
Avena pan na Poc. & \\
avena= & pan=a \\
1TR.EXCL.SUBJ= go.TV=LOC & PPoc \(\}\) \\
'We would go to Poc.' &
\end{tabular}

Yal-28072010-BGMCG-tahitian_0012
Example (98) shows the ditropic clitic =la being used to mark a semantic source noun phrase, the toponym Ono.
(98) Te cavac ci la Ono.
\begin{tabular}{|c|c|c|c|}
\hline te= & cavaya & ci=la & \{Ono\} \\
\hline 3SG.SUBJ= & leave & sit=LOC & Ono \\
\hline
\end{tabular}
'He came from Ono.'
Yal-05092011-AP1_0006
The locative case marker can also indicate that the noun phrase it marks is the location of the action of the predicate, as in (99) and (100). In (99), the locative case-marked location is pwemwa 'home, village'.
(99) Bwa tuи per ra pwemwa. bwa= tu per=a \{pwemwa\}
CONT \(=\) EX.SPC party.LN=LOC village
'There was still a party in the village.'
Yal-28072010-BGMCG-tahitian_0293
In (100), the attractor of locative case-marker =la is the demonstrative pronoun yaxeda
(100) Te ci la yaxeda.
\(\begin{array}{lll}\mathbf{t e}= & \mathbf{c i}=\mathbf{l a} & \text { \{ya-xeda }\} \\ \text { 3SG.SUBJ }= & \text { sit=LOC } & \text { DEM.LOC-DET.UH }\end{array}\)
'It sits up there.'
Yal-20092011-AW3_0033

Demonstrative pronouns are the only pronouns in Belep which can substitute for a locative-marked noun phrase. The verb phrase locational enclitics (§5.11) can also be used to indicate the location of the action of a predicate.

The locative case marker is also used to mark possessive noun phrases which function as locative expressions (§4.1.5). For example, in (101), the locative ditropic clitic marks the noun phrase na kiyooc 'in the hut' (lit. 'the interior of the hut').
(101) Le tu ka ta la na kiyooc,
\begin{tabular}{llllll} 
le \(=\) & tu & ka & ta \(=\mathbf{l a}\) & \{na & kiyooc \(\}\) \\
3DU.SUBJ= & go.DH & LK & go. \(\mathrm{UH}=\mathrm{LOC}\) & interior & hut
\end{tabular}

Yal-20092011-AW1_0263
In (102), the locative case marker's attractor is the noun phrase bwe janen 'on his ear' (lit. 'the top of his ear').
(102) Ka ce la bwe janen.
ka ce=la \(\quad\{b w e\) jane-n\}

LK settle=LOC top ear-3SG.POSS
'And landed on his ear.'
Yal-05092011-AP1_0083
For locative expressions of this type, a possessive suffix (§4.1.2.2) may be used on the possessed noun to anaphorically index the frame of reference for the location (103).
(103) La ta la bween.
\begin{tabular}{|c|c|c|}
\hline \(\mathbf{l a}=\) & ta \(=\underline{\mathbf{a}}\) & \{bwee-n\} \\
\hline \(3 \mathrm{PL} . \mathrm{SUBJ}=\) & go.UH=LOC & top-3SG.POSS \\
\hline & onto it [a reed & \\
\hline
\end{tabular}

Yal-20092011-AW2_0037

\subsection*{6.3.6 Instrumental case}

Noun phrases in the instrumental case-those which index a semantic instrument-are case-marked with the ditropic clitic \(=v a\) 'INSTR.GNR' or \(=v a-e\) 'INSTRSPC' on the preceding element. The generic and specific forms of the instrumental case marker contrast based on the specificity of the case-marked noun phrase (§5.1.4). For
example, in (104), the instrumental NP oreâva 'our breath' is marked as generic with the case-marker \(=v a\).
(104) Ka ci va oreâva, ka ci=va \{oreâ-va\}
LK sit=INSTR.GNR breath-1PL.EXCL.POSS
'and [we] rested,' (lit. 'and [we] sat with our breath') \({ }^{250}\)
Yal-17072009-TB-weekend_0017-0020
In (105), the noun phrase yadan 'his belongings' is marked as generic with the instrumental case-marker \(=v a\).
(105) yaûda va yadan, yaûda=va \(\quad\) \{yada-n\}
climb=INSTR.GNR belongings-3SG.POSS
'climbed with his belongings,'
Yal-28072010-BGMCG-tahitian_0158
Example (106) shows the instrumental NP digi 'canoe' marked as specific with \(=v a e\).
(106) Ka teô tame la Maxeek vae digi.
ka=re=0 \(\quad\) ta=me=la Maxexa=va-e \(\quad\{d i g i\}\)

LK=3SG.SUBJ=REAL go.UH=CTP=NOM
Maxeek=INSTR-SPC
canoe
'And Maxeek came with the dinghy.'
Yal-28072010-BGMCG-tahitian_0105
In (107), the specific instrumental case-marker is used to mark the noun phrase karavaali 'that pirogue'.

\section*{Pan na teâmaa vae karavaali, pan=a teâma=va-e \\ go.TV=NOM high.chief=INSTR-SPC pirogue-DET.A.PRX \\ 'The chieftain went with that pirogue,'}
Yal-20092011-AW5_0042

An absolutive suffix (§5.6) may substitute for an instrumental-marked noun phrase, as in (108), where the absolutive suffix \(-e r\) is case-marked with instrumental \(=v a\).

\footnotetext{
250 'To sit with one's breath' is an idiomatic expression meaning 'to rest'.
}

\section*{(108)}

\section*{Laô wânem vaer ri janu, \(\mathbf{l a}=\hat{\mathbf{o}} \quad\) wâne=va \(\{-\mathrm{er}\}=\mathbf{i} \quad\) janu 3PL.SUBJ=REAL walk=INSTR-3SG.ABS=GEN spirit} 'The spirits were walking with him,'

Yal-28072010-BGMCG-tahitian_0299-0300
The instrumental case-marker is a grammaticalized form of the transitive
(§5.1.3.1) verb \(p a\) 'to take', whose specific form is pa-e. This etymology for the Belep ditropic clitic is analogous to that of the Nêlêmwa preposition ve (+inanimate) or \(v i\) (+animate), described as a non-coagentive 'with', which "grammaticalized through serialisation from the verb fhe 'carry, take' into an applicative or preposition-like affix" (Bril 2004a:9).

\subsection*{6.4 Non-prototypical clause types}

Cross-linguistically, clauses which express equation, location, attribution, existence, and possession tend to "lack a semantically rich lexical verb" (Payne 1997: 112) and to share other morphosyntactic characteristics (Lyons 1967, Clark 1978). In Belep, these functions are divided into roughly three types of clauses: predicate nominals (§6.4.1); clauses typified by existentials (§6.4.2); and attributive clauses (§6.4.3). Only predicate nominals and some predicate possessives lack a verb altogether; in these clauses, the predicate is a demonstrative pronoun (§4.5.2), locative pronoun, or a noun phrase (§4.4) which may be marked to indicate aspect (§5.4), mood (§5.5), or negation (§6.7). Belep predicates existence, location, and sometimes possession using nonprototypical absolutive verbs (§5.1.2). Property concepts are either expressed as prototypical nominative verbs (§5.1.1), or they fall into one of the other categories. There is no copula in Belep.

\subsection*{6.4.1 Predicate nominals and the equative construction}

Belep predicate nominals are nouns (see §3.4.1) or nominal elements which serve as the predicate of a clause. As predicates, predicate nominals appear clause-initially (§6.1) and can be marked to indicate aspect (§5.4), mood (§5.5), or negation (§6.7).

Predicate nominals often occur without a nominal argument. Temporal nouns (§6.10) are one class of such predicate nominals; they are typically used to predicate the time of day, as in (109).
(109) ka mon, ô bwaêdan,

\section*{PRED}
ka mon [ô bwaêdan]
LK side.DH REAL morning
'and then, it was morning,'
Yal-01082010-MFD_0005

Another class of predicate nominals which are used without a nominal argument is the set of pronouns which are used to predicate location (Table 90).

Table 90: Pronominal predicate locatives
\begin{tabular}{|c|l|l|l|l|}
\hline & Singular & Dual & Trial & Plural \\
\hline \multicolumn{1}{|l|}{ 1 exclusive } & nao & ave & aven & ava \\
\cline { 3 - 5 } inclusive & & ji & jen & ja \\
\hline \(\mathbf{2}\) & yo & or & ôn & ac \\
\hline \(\mathbf{3}\) & yer, era & le & len & la \\
\hline
\end{tabular}

The only difference between these pronouns and the independent pronouns (§4.5.1) is that era '3SG.PRED' is present in this set. The difference between yer '3SG.PRED' and era '3SG.PRED' has not yet been determined. Examples of the use of predicate locative pronouns are shown in (110) and (111). In these examples, deictic verb phrase enclitics (§5.11) index the locative S argument.
(110) Ô era lexeng

PRED
[ \(\hat{0}=\quad\) era=lexeng]
REAL= 3 SG.PRED=LOC.DC
' S /he was here.'
Yal-22092011-TB.wav
(111) Bwa la lexeng. PRED
[bwa= la=lexeng]
CONT= 3PL.PRED=LOC.DC
'They're still here.'
Yal-28072010-BGMCG-sousmarin_0121
These predicate locative pronouns can also occur with a nominal argument, which is
marked as in the locative case (§6.3.5). In (112), the predicate locative pronoun era
'3SG.PRED' is used with the locative-marked argument Poc '[the islet of] Poc'.
(112) Toma olan, ka era-bwa era la Poc.

\section*{PRED}
toma ola-n ka era \(\quad[b w a=\) era \(]=l a \quad\) Poc
but piece-3SG.POSS LK 3SG.PRED CONT= 3SG.PRED=LOC Poc 'But his portion, it's- it's still at Poc.'

Yal-20092011-AW5_0026
The predication of locative noun phrases is discussed below in §6.4.2.
Predicate nominals can also act as the first clause in a complex construction whereby their subordinate clause is marked by genitive \(=l i\) or \(=i\) acting as a subordinator (§7.2.7), as in (113) and (114).
(113) «âyua teâma li teme paeo ma yawan."

PRED
[âyua teâma] \(=\mathbf{l i} \quad\) te=me pa-e-o ma yawa-n desire high.chief=GEN 3SG.SUBJ=IRR take-SPC-2SG.ABS LK4 wife-3SG.POSS ""The chieftain wants to take you as his wife." (lit. ""The chieftain's desire is that he takes you as his wife."')

Yal-20092011-AW1_0178
```

ka jagar ri te jie ma ja nginie.
PRED
ka [jaga-r]=i te= ji-e ma ja= ngini-e
LK capacity-3GNR.POSS=GEN 3SG.SUBJ= give-3SG.ABS LK4 1PL.INCL.SUBJ= miss-3SG.ABS
'He could make himself invisible.' (lit. 'It was possible that he would make
himself such that we did not see him.')

```
Yal-20092011-AW6_0091

Most commonly, predicate nominals occur in an equative construction, where they are used to predicate either the equation \({ }^{251}\) of two noun phrases or, in some cases, the possession of an inherently possessed noun phrase. In typical intransitive clauses, the S argument is marked either as nominative (§6.3.2, §5.1.1) or as absolutive (§6.3.1, §5.1.2). However, in the predicate nominal construction, the S argument is marked as genitive with \(=i\) or \(=l i\) 'GEN' (§6.3.3). Pronominal S arguments in an equative construction are indexed by the absolutive pronominal suffixes (§5.6).

The primary use of the equative construction is to predicate the equation of two nominals. Examples (115) - (173) show this function of the predicate nominal construction. In (115), the predicate nominal is talang 'my bed' and the intransitive argument is ala janengexedu 'my lower earlobe', which is marked as genitive with \(=i\).
(115) Talang ngi ala janengexedu, PRED
[tala-ng] \(=\mathbf{i} \quad\) ala jane-ng-exedu]
bed-1SG.POSS=GEN husk ear-1SG.POSS-DET.DH
"'My lower earlobe is my bed,")252
Yal-05092011-AP1_0077
In (116), the predicate nominal is naran 'his name' and the intransitive argument is Teâ, a personal name which also means 'chief', which is marked as genitive with \(=i\).

\footnotetext{
\({ }^{251}\) In discourse, a Topic-Comment structure using the linker \(k a\) (§7.1.2.3) is also used frequently to indicate equation. In some speech situations this usage is not easily distinguishable from a copular usage.
\({ }^{252}\) This utterance is drawn from a narrative about the Dubageni, a demon who has very large ears. It is uttered in response to the question 'What is your bed?'
}
(116)
ka naran ni Teâ.
PRED S
ka [nara-n]=i [Teâ]
LK name-3SG.POSS=GEN Teâ
'and Teâ is his name.'
Yal-20092011-AW1_0015
In (117), the predicate nominal is the interrogative pronoun \(t i\) 'who?' (§4.5.3) and the S argument is indexed by the absolutive pronominal suffix -o '2SG.ABS' (§5.6) marked as genitive with \(=l i\).
(117) «Ti lio?»

PRED
[ \(\mathbf{t i}]=\mathbf{l i}-\mathbf{o}\)
who?=GEN-2SG.ABS
"'Who are you?"' (lit. 'You are who?')
Yal-20092011-AW1_0299
In (118) - (120), the \(S\) argument is also indexed by an absolutive pronominal suffix. In (118), the predicate nominal is koxo 'a lot'. In (119) the predicate nominal is mwauju 'no idea’. Example (120) shows the use of a numeral (§4.6) as a predicate nominal.

Jua koxo lila.
jua koxo=li-la
very a.lot=GEN-3PL.ABS
'There were a lot of them.' (lit. ‘They were many.')
Yal-20092011-AW2_0042
(119) Mwauju lile,
mwauju=li-le
no.idea=GEN-3DU.ABS
'They had no idea.'
(120) Pwajen nilen.
pwajen=i-len
three=GEN-3TR.ABS
'There were three of them.' (lit. 'They were three.')
Yal-20092011-AW6_0156

In (173), the predicate nominal is the independent pronoun yo '2SG.INDEP' (§4.5.1), and the S argument is the genitive-marked relative clause (§7.3.3) âmi ca bae du liva 'the one who always eats our bones'.
```

"Âri yo li âmi ca bae du liva?"
PRED S
[âri= llo]=li
""Aren't you the one who always eats our bones?""

```
    Yal-01082010-MFD_0034-0035

The equative construction is also used to predicate the possession of a Given element, which is typically dependently possessed (§4.1.2.1). In this usage, the predicate nominal is normally ina- 'possession'. Examples (122) - (125) show instances of this usage.
(122) înaang ngi tolamiik îna-ng=i tolamii-k
possession-1SG.POSS=GEN basket-DET.D.PRX
'This basket is mine [I made it].'
Yal-07112011-TB1.wav - Yal07112011-TB3.wav
(123) âri înaang ngi tolamiik
âri= îna-ng=i tolamii-k
NEG \(=\) possession-1SG.POSS=GEN basket-DET.D.PRX
'This basket is not mine [I didn't make it].'
Yal-07112011-TB1.wav - Yal07112011-TB3.wav
(124) âri tolabang ngi âk
âri= tolaba-ng=i â-k
NEG \(=\) basket-1SG.POSS=GEN DEM.NEW-DET.D.PRX
'This thing is not my basket [it's something else].'
Yal-07112011-TB1.wav - Yal07112011-TB3.wav
(125) inaamw mwi jia ti?
îna-mw=i jia ti
possession-2SG.POSS=GEN gift who?
'Who gave you that?' (lit. 'Your possession is a gift from whom?')
overheard
It is possible that some \(S\) arguments in a predicate nominal equative construction may be marked as nominative (§6.3.2) with \(=l a\) or \(=a\) 'NOM'; however, the conditions under which this may occur are unclear. For instance, compare the usual genitive-marked \(S\) argument in (126) with the nominative-marked \(S\) argument in (127).
(126)

Nyang ngi tamwa la Poum ai tamwa la Koumac? nya-ng=i tamwa=la pûmw ai tamwa=la kumwaak mother-1SG.POSS=GEN woman=LOC Poum or woman=LOC Koumac 'Is the woman from Poum or the woman from Koumac my mother?'
Yal-07112011-TB1.wav - Yal07112011-TB3.wav
(127) Nyang nga tamwa la Poum.
nya-ng=a tamwa=la pûmw
mother-1SG.POSS=NOM woman=LOC Poum
'My mother is from Poum.' (transl. by speaker)
Yal-07112011-TB1.wav - Yal07112011-TB3.wav
Some nominative-marked S arguments also seem to occur when a numeral is used as a predicate nominal, as in (128).

> Pwajen na âju.
> pwajen=a âju
> three=NOM person
> 'There were three people.' (lit. 'People were three.')
Yal-20092011-AW6_0157

More research is needed to determine the discourse conditions under which this alternation occurs.

\subsection*{6.4.2 Existence and location}

Existence in Belep is predicated using verbs which require an absolutive argument (§5.1.2). Location of a noun phrase and some forms of possession are also predicated using absolutive verbs. The relevant verbs are shown in Table 91.

Table 91: Predicate existential and locative verbs
\begin{tabular}{|l|l|l|}
\hline & Affirmative & Negative \\
\hline Existential & tu, tuya & âria \\
\hline Locative & era & cia, ciae \\
\hline
\end{tabular}

There are two predicate existential verbs in Belep. The verb tuya 'EX.GNR'which inflects obligatorily for the specificity of its argument (§5.1.4)—is used to predicate the existence of an absolutive argument (that is, an unmarked one; see §6.3.1),
while the verb âria 'NEG.EX' \({ }^{253}\) is used to predicate the non-existence of an absolutivemarked NP. For example, in (13), the existence of the absolutive noun phrases \(O r\) ' Or phratry' and Waap 'Waap phratry' (see §1.2) is predicated using generic tuya 'EX.GNR'.

\section*{(129) Ka tuya Or, ka tuya Waap.}
ka tuya or ka tuya waap
LK EX.GNR spill LK EX.GNR topple
'And there is Or [phratry], and there is Waap [phratry].'
Yal-20092011-AW3_0012
In (130), the existence of the absolutive noun phrase \(\hat{j} j u\) 'people' is predicated by the bound specific form of the existential verb, \(t u\) 'EX.SPC'.
(130) La êna, la la Belep, ka tuи âju la bwe dau.
la= êna la=la Belep ka tu âju=la bwe dau
3PL.SUBJ= know.GNR 3PL.INDEP=LOC Belep LK EX.SPC person=LOC top islet 'They knew, those on Belep, that there were people on the islet.'
Yal-20092011-AW2_0056

To predicate the non-existence of an NP , speakers use the negative existential verb âria 'NEG.EX'. For instance, in (131), âria predicates the non-existence of mwa pwalaic 'one house', followed by the non-existence of any âju 'people'.
(131) Âria mwa pwalaic ki la tue. Âria âju. âria mwa pwalaiyi=xi la= tu-e âria âju NEG.EX house one=REL 3PL.SUBJ= find-3SG.ABS NEG.EX person 'There was not a single house that they found. There were no people.'

Yal-28072010-BGMCG-sousmarin_0117
In (132), the non-existence of \(\hat{u} j e l a\) 'their power' is predicated using âria 'NEG.EX'.
(132) Âria ûjela.
âria ûje-la
NEG.EX kidney-3PL.POSS
'They had no power.' (lit. 'Their power did not exist.')
Yal-20092011-AW5_0068

\footnotetext{
\({ }^{253}\) The negative existential verb aria is etymologically related to the proclitic used for sentential negation, âri \(=\) ' \(\mathrm{NEG}^{\prime}\) (§6.7).
}

In addition to predicating non-existence, the main discourse function of negative existential verb âria is in the adjacency pair for expressing gratitude (133).

\section*{(133) P1: Olelio!}
ole-li-o
thank-TR-2SG.ABS
'Thank you!'
P2: (Bwa) Âria!
bwa= âria
CONT= NEG.EX
'You're welcome!' (lit. 'It's nothing.')
Existential verbs tuya 'EX.GNR' and âria 'NEG.EX' do not occur with pronominal arguments.

There are two predicate locative verbs in Belep: locative era 'PRED.LOC' and negative locative cia 'NEG.LOC'. To predicate the location of a full noun phrase, \({ }^{254}\) Belep speakers use the predicate locative verb era 'PRED.LOC'. \({ }^{255}\) For example, in (134), the location of cae pwalaic 'a reef' is predicated using era. Note that the English translation does not capture the Belep distinction between existential and locative predication.
(134) Era cae, cae pwalaic, te ci liyeda. PRED \(S\) [era] cae [cae pwalaic] te \(=\quad c i=\) liyeda
PRED.LOC reef reef one 3SG.SUBJ= sit=LOC.DST.UH 'There's a reef, a reef, it sits up there.'
Yal-20092011-AW2_0034

In (135), the NP whose location is predicated with era 'PRED.LOC' is the participial (§7.2.9) âju bwa tu covan 'a person riding'.

\footnotetext{
\({ }^{254}\) The location of a pronominal referent is predicated using predicate nominals, discussed above (§6.4.1).
\({ }^{255}\) This verb was most likely formed as an etymological extension of the locative pronoun era ' 3 SG.PRED' (discussed in §6.4.1 above). The related bound form era- 'DEM.PRES' is a presentative demonstrative pronoun (§4.2.2).
}
```

(135) Te be duun,
te= be duu-n
3SG.SUBJ= beat back-3SG.POSS

```
yami era âju bwa tu covan nexen.

PRED
[era] [âju bwa \(=\) tu \(=\) covan] \(=\) exen
ya-mi
'He hit his back, the place where there was a person riding.'
Yal-28072010-BGMCG-tahitian_0262
To predicate the non-location of a full noun phrase or a pronominal referent, Belep speakers use the absolutive verb cia 'NEG.LOC', \({ }^{256}\) which may inflect to agree with the specificity of its absolutive argument (its specific form may be either cia or ciae; see §5.1.4). In example (136), the nonexistence of Kawo, a personal name, is predicated in a location understood from context.

Ôcia Kawo.
PRED S
[ 0 ô cia] [Kawo]
REAL NEG.LOC Kawo
'Kawo wasn't there.'
Yal-20092011-AW1_0235

In (137), the non-existence of the absolutive argument mwadeng 'my nose' is predicated with cia 'NEG.LOC' in a location understood from context.
(137) "Cia mwadeng."
cia mwade-ng
NEG.LOC nose-1SG.POSS
'I don't have a nose.' (lit. 'My nose isn't there.')
Yal-20092011-AW5_0107

In (138) and (139), the referent whose non-location is predicated is represented by an anaphoric absolutive pronoun (§5.6). In (138) the pronominal verb suffix is -e ' 3 SG.ABS';
in (139) the pronominal verb suffix is -er ‘ 3 SG.ABS' (see §5.6.2 for a discussion of the difference between these two suffixes).

\footnotetext{
\({ }^{256}\) Analogous to negative verb kia 'to not be' in Nêlêmwa (Bril 2002).
}
(138) Te cuur rexeng, ka mon ciae.
te= cur=exeng ka mona cia-e
3SG.SUBJ= stand=LOCDC LK side.DH NEG.LOC-3SG.ABS
'He would be standing here, and then not be here.'

> Yal-20092011-AW6_0092
(139) «Ah, mo âria, mo ciaer,» wali la teâmaa, Teâ Pûnivaac.
\begin{tabular}{lllll} 
mo & âria & mo & cia-er & wa-li=la \\
LK3 & NEG.EX & LK3 & NEG.LOC-3SG.ABS & DEM.MAN-DET.A.PRX=NOM
\end{tabular}
teâmaa Teâ Pûnivaac
high.chief Teâ Pûnivaac
'"Ah, well, there isn't any, it's not here," said the chieftain, Teâ Pûnivaac.' Yal-20092011-AW5_0064

The existential and locative verbs discussed in this section may also be used to predicate some types of possession. For instance, in the Belep predicate existential in (140) and the predicate locative in (141), the English translations use a predicate possessive construction. Other expressions which might use a predicate possessive in English, such as the one in (142), normally use a predicate existential or locative in Belep. The question in (142) is commonly used to make small talk with a newly introduced person.

\section*{(142) Tuи avamw?}
tu ava-mw
EX.SPC sibling-2SG.POSS
'Do you have any siblings?' (lit. 'Do your siblings exist?')

\subsection*{6.4.3 Attribution}

There is no word class of adjectives in Belep (see §3.2). Most property concepts are expressed as intransitive verbs which take a nominative argument (§5.1.1); a few are expressed as nouns. Consequently, the predication of a property concept takes the form either of a regular intransitive clause or of a predicate nominal (§6.4.1).

The property concepts most commonly expressed cross-linguistically by adjectives-age, dimension, value, and color (Dixon 1977)—are all expressed by
nominative verbs in Belep. For example, in (143), the nominative verb ulac 'to be old' expresses the predicated attribute. Its anaphoric \(S\) argument is indexed by the verbal proclitic \(t e=\) ' 3 SG.SUBJ'.
(143) Teô ulac. Te mwanaoli maac.

PRED
[te=ôulac] te mwanao-li maac
3SG.SUBJ=REAL be.old 3SG.SUBJ= approach-TR death
'He was old. He was approaching death.'
Yal-20092011-AW1_0023

In (144), the predicated attribute is expressed by the verb ulayar 'to be big'. The S argument \(u v i\) 'yams' is marked by the nominative case marker \(=a\) (§6.3.2).

Ka ô ulayar ra uvi,
PRED S
ka [ \(\hat{0} \quad\) ulayar] \(=\mathbf{a}\) [uvi]
LK REAL be.big=NOM yam
'and the yams were big,'
Yal-28072010-BGMCG-igname_0086
In (145), the verb \(\hat{o}\) 'to be (morally) good, to be (physically) well' expresses the predicated attributive. The S argument \(\hat{a} j u\) 'person' is marked by the nominative case marker \(=l a\).

Toma teô ô la âju.
PRED
toma \([t e=\hat{\mathbf{o}} \quad\) ô] \(=\mathbf{l a} \quad\) [âju]
but 3SG.SUBJ=REAL be.good=NOM person
'But that person was healed.' (lit. 'But the person was good.')
Yal-28072010-BGMCG-lune_0042
Example (146) shows a predicate attributive using the verb yâno 'to be blue'. The S argument is dan 'sky'.
"Eh, te jua yâno la dan!"

\section*{PRED S}
[te= jua yâno]=la [dan]
3SG.SUBJ= very be.blue=NOM sky
"Hey, the sky is really blue!""

Only a few property concepts are expressed as nouns in Belep. One example is the class 1 noun \(g a\) - 'sympathy, poverty’ (§4.1.1). This attributive is predicated as a predicate nominal (§6.4.1), as in example (147), which shows a common expression of sympathy in discourse.
(147) Gaan!
gaa-n
poverty-3SG.POSS
'Poor him/her!' or 'S/he is poor.'

\subsection*{6.5 Question formation}

Belep uses a wide variety of question-formation strategies. There are interrogative pronouns (§4.5.3), interrogative determiners (§4.3.2.3), interrogative verbs, intonational patterns, tags, and word-order patterns that will be further discussed in this section.

\subsection*{6.5.1 Yes-no questions ('closed' questions)}

In Belep, rising intonation is normally the only indication of a yes-no question.
Example (148) shows a statement te dadabwa 'he is black' in line 1, which is repeated in line 2.

\(\hat{E} \hat{e}\), te wali maar ri te dadabwa.
êê \(t e=w a-l i \quad m a-r=i \quad t e=\quad d a d a b w a\)
yes 3SG.SUBJ= DEM.MAN-DET.A.PRX similarity-3GNR.POSS=GEN 3SG.SUBJ= black
'But he was black, he was l- Yeah, he was, like, black.'
Yal-28072010-BGMCG-tahitian_0205
The intonation curves for the two statements of te dadabwa 'he is black' are represented in Figure 50 (continuing intonation) and Figure 51 (final intonation).

Figure 50: Intonation curve for te dadabwa, continuing intonation


Figure 51: Intonation curve for te dadabwa, final intonation


We see that these statement intonations are characterized by, in the case of continuing intonation, a fairly flat and even pitch, and in the case of final intonation, a gradual pitch fall throughout the utterance. In contrast, example (149), shows the yes-no question te ulo 'is it red?'.
(149) Ganan, te ulo?
gana-n te= ulo
color-3SG.POSS 3SG.SUBJ= be.red
'His color, is it red?'
05102010-MTAD-jeu 3:33-3:38.2
Figure 52 shows an intonation curve for the question in (149). The intonation pattern is characterized by a sharp rise in pitch in the last syllable of the clause, as well as at the end of the first intonation unit (i.e. the topic ganan 'his color'). \({ }^{257}\)

Figure 52: Intonation curve for te ulo?, a yes-no question


\footnotetext{
\({ }^{257}\) There is a difference in frequency range between the statement and question examples because the speaker for example (97) te dadabwa 'he is black' is male while the speaker for example (98) te ulo? 'is it red?' is female. The male speaker's pitch range is from 50 to 350 Hz , while the female speaker's pitch range is from 100 to 400 Hz . The pitch windows are the same size.
}

Negative (§6.7) yes-no questions are formed in the same way as affirmative ones; that is, with a sharp rise in pitch in the last syllable of the clause. In (150), there is a small rise in pitch in line 3 in the final syllable of \(d u\) liva 'our bones', followed by a sharp pitch rise in the last syllable of ajuma 'people' in line 4.
(150) Texa wak xa mwaak,
\begin{tabular}{|c|c|c|}
\hline te=xa & wa-x=a & mwaak \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{3SG.SUBJ=ADD DEM.MAN-DET.D.PRX=NOM rabbitfish
'The rabbitfish was like,'}} \\
\hline & & \\
\hline \multicolumn{3}{|l|}{"Âri yo li âmi ca bae-} \\
\hline âri= \(\quad \mathrm{yo}=\mathbf{l i}\) & â-mi & \(\mathbf{c a =}\) \\
\hline NEG= 2SG.IND & P=GEN DEM.NEW-DET.A.DST & ITER= \\
\hline "'Aren't you the & one who always eats-"" & \\
\hline
\end{tabular}
bae du liva? Nyami ava-
bae du=li-va nya-mi ava=
bite bones=GEN-1PL.EXCL.ABS DEM.IDF-DET.A.DST 1PL.EXCL.SUBJ= "'eats our bones? When we-""
ca giva li âju-ma?"
\(\mathbf{c a}=\) gi-va=li âju-ma
ITER= attack-1PL.EXCL.POSS=GEN person-AC
""[when] the people always kill us?"
Yal-01082010-MFD_0034-0035
Yes-no questions may also be formed with a tag. Two common ones are yo kiyie 'you see?', normally produced in the highly reduced form [јәке]; and ai 'right?', which is phonologically related to the particle ai 'no' (§6.5.3) and the linker ai 'or’ (§7.1.2), but which is produced in the reduced form [ər]when used as a tag. \({ }^{258}\) An example of the tag yo kiyie 'you see?' is found in (40).
(151) Texa duelila, yo kiyie?
te=xa due-li-la [jәке]
3SG.SUBJ=ADD admire-TR-3PL.ABS TAG
'And she admired them, you know?'
Yal-20092011-AW1_0169

\footnotetext{
\({ }^{258}\) In Nêlêmwa, the alternation linker \(a i\) 'or' also serves the function of a question tag.
}

In (40), speaker AW uses the tag yo kiyie 'you see?' and rising intonation to make sure his listener is tracking with him. A similar function is served by his use of the tag ai 'right?' in (152); the listener's expected response is in the affirmative.
(152) Mo pwai pwajen nilen, ai? mo pwai pwajen=i-len [əI]
LK3 only three=GEN- TAG
3TR.ABS
'But there were only three of them, you know?'
Yal-20092011-AW6_0156

\subsection*{6.5.2 Question-word questions ('open' questions)}

Question-word questions, called 'open' questions in Bril (2002), are formed in a variety of ways, though they tend strongly to favor predication of the questioned element.

To question an argument of a clause, Belep speakers may use an interrogative determiner suffix on a noun (§4.3.2); a verb phrase enclitic; or an interrogative pronoun (§4.5.3).

The interrogative determiner suffix is \(-v a\) 'DET.Q', meaning 'which?', as in (57).
(57) Tamwava?

\section*{tamwa-va}
woman-DET.Q
'Which woman?'
It can also be affixed to any demonstrative pronoun (§4.5.2) and predicated. For example, in (58) -va 'DET.Q' is suffixed to the demonstrative pronoun wa- 'DEM.MAN' to act as a nominative verb (§5.1.1) meaning 'how; in what manner?'.
(58) Yo wava ma yo uya?
yo= wa-va ma yo= uya
2SG.SUBJ= DEM.MAN-DET.Q LK4 2SG.SUBJ= arrive
'How did you arrive?' (lit. 'You did which manner such that you arrived?')
Yal-05102010-PT1.wav - Yal-05102010-PT3.wav

Other interrogative pronouns formed in this manner include yava? 'where?, in what place?' and nyava? 'which one?'. As the -va determiner is unusual in my corpus, more data is needed to further examine its use.

To question the location of an action, the verb phrase enclitic \(=(l)\) iva 'LOC.Q'
(§5.11) is used as in (153) and (154).

\section*{(153) Yo cayi liva?}
yo \(=\quad\) cayi \({ }^{\mathbf{2 5 9}}=\) liva?
2SG.SUBJ= be.from=LOC.Q
'Where are you from?' or 'Where did you come from?'
Yal-05102010-PT1.wav - Yal-05102010-PT3.wav
(154) "Awuli Cabak, yo liva?" Awuli Cabak yo=liva?
Awuli Cabak 2SG.INDEP=LOC.Q
'Awuli Cabak, where are you?'
Yal-19092011-PA_0031
There are four interrogative pronouns, \(t i\) 'who?', da 'what?', neen 'when?' and pwaneen 'how many?' which may either occur in situ-that is, in the same location in the clause that the questioned argument would; be predicated as predicate nominals (§6.4.1); or occur in a cleft construction. The pronouns \(t i\) 'who?' and \(d a\) 'what?' are simple clitics (as defined by Zwicky 1977) and are invariant in terms of case (§4.5.3), save for a morphophonemic alternation whereby \(t i\) is realized as [ri] if it occurs in its encliticized form (§3.1.2.6). The usage of pronouns neen 'when?' and pwaneen 'how many?' is not well understood at this time and requires further study.

In example (155), nominative-marked \(t i\) 'who?' occurs in situ in the same clausal location as Maxeek, a personal name, in example (156).

\footnotetext{
\({ }^{259}\) The verb cayi 'to be from' has likely lexicalized from the verb group \(c a=c i[\) ITER \(=\) sit]; a remnant of this structure is still found in the typical response to the question in (102): \(n a=t u=m e c i=l a \ldots[1 \mathrm{SG} . \mathrm{SUBJ}=\) go.DH=CTP sit=LOC] 'I come from..."
}
(155) Te ta la ti?
te= \(\quad \mathbf{t a}=\mathbf{l a}=\mathbf{r i}\)
3SG.SUBJ= go.UH=NOM=who?
'Who went up?'
Yal-28072010-BGMCG-tahitian_0249
(156) Te tame la Maxeek,
te= ta=me=la Maxeek
3SG.SUBJ= go.UH=CTP=NOM Maxeek
'Maxeek came up,'
Yal-28072010-BGMCG-tahitian_0107
The interrogative pronouns may also appear in place of a questioned absolutive argument as in (157), or in place of a questioned possessor as in (158).
(157) «Ho, tuya da lexen ?»
tuya da=lexen
EX.GNR what?=LOC.A
""Ho, what do we have here?"' (lit. "What exists here?"')
Yal-19092011-PA_0020
(158) «Naveri?»
nave=ri
fire-who?
""Whose fire is this?""
Yal-20092011-AW6_0052
In addition to occurring in situ to index the argument of a verb, interrogative pronouns in Belep are also used as predicate nominals (§6.4.1), as in (153).
(159) «Jua yo ai ti? Kawo?"
jua yo ai ti Kawo
very 2 SG.INDEP or who? Kawo
'Is it really you or who? Kawo?'
Yal-20092011-AW1_0282
Predicated interrogative pronouns are often used in equative constructions (§6.4.1), with the genitive (§6.3.3) S argument being indexed either by a full noun phrase, as in (171), or by an anaphoric pronominal suffix (§5.6), as shown in example (161).
(160) «Ti li âjuma lali?»
\(\mathbf{t i = l i}\) âju-ma la-li
who?=GEN person-AC DEM.PL-DET.A.PRX
""Who are those people?"" (lit. ""Those people are who?"")
Yal-20092011-AW6_0079
(161)
```

    "Tilio?"
    \(\mathbf{t}=\mathbf{l} \mathbf{i}-\mathbf{0}\)
    who?=GEN-2SG.ABS
    ""Who are you?"' (lit. "'You are who?"")
    ```

Yal-20092011-AW1_0299
Interrogative pronouns in Belep also participate in a cleft construction (Payne 1997, Givón 2001) which I will call interrogative clefting. Cross-linguistically, cleft constructions are defined as "predicate nominal[s] consisting of a noun phrase and a relative clause that relativizes that noun phrase" (Payne 1997: 280). Interrogative clefting in Belep is a type of focus construction (§6.8.2) which places the question word at the beginning of the clause-a common position for the question word in VO languages like Belep (Greenberg 1966). In the Belep interrogative cleft construction, the S argument of the predicated interrogative pronoun is a relative clause headed by a relative pronoun (§7.3.3). This structure is represented schematically in (162).

\section*{PREDICATE}

S
[INTERR. PRON.] \(=\) GEN \(\frac{\text { [DEM.PRON.-DET VERB GROUP] }]}{\text { relative clause }}\) relative clause

Example (163) shows an instance of interrogative clefting. The interrogative pronoun \(t i\) 'who?' is predicated, while the genitive-marked S argument âmi âyuan na pewola 'the one she liked among them' is a relative clause headed by a relative pronoun, as discussed in §7.3.3.

Me ti li âmi âyuan na pewola?

S
[me ti]=li [â-mi âyua-n=a pewo-la]
IRR who?=GEN DEM.NEW-DET.A.DST desire-3SG.POSS=LOC middle-3PL.POSS 'Who among them did she like?' (lit. 'The one she liked among them was who?') Yal-20092011-AW1_0173

Another example of interrogative clefting is shown in (21), where the relative clause is âli ina mwima laak 'the one who made these things'.
(164) Ti li âli îna mwima laak?

PRED S
[ti]=li [â-li îna mwi-ma laa-k]
who?=GEN DEM.NEW-DET.A.PRX make.GNR DET.INAN-AC DEM.PL-DET.D.PRX
'Who made these things?' (lit. 'The one who made these things is who?')
Yal-05102010-PT1.wav - Yal-05102010-PT3.wav

To question an NP whose grammatical role is unknown, Belep speakers generally use interrogative verbs. A list of some of these is given in Table 92, though there may be others.

Table 92: Interrogative verbs
\begin{tabular}{|l|l|l|}
\hline Interrogative verb & English translation & Notes \\
\hline ca & 'to be in what state?'' & nominative verb; §5.1.1 \\
\hline cââmw, câmwi & 'to do what with something?' & nominative intr., bound tr.; §5.1.5.1 \\
\hline iva, ivi & 'to be where?' & \begin{tabular}{l} 
absolutive verb, infl. for spc.; \\
§5.1.2, §5.1.4
\end{tabular} \\
\hline wa & 'to go where?' & nominative verb; §5.1.1 \\
\hline
\end{tabular}

To inquire about a state, Belep speakers use the nominative intransitive (§5.1.1) verb \(c a\) 'be in what state?, be how?'. The verb \(c a\) is usually used to inquire after someone's health, and its usage implies that the speaker believes something is wrongBelema often respond to the question \(T e c a\) ? 'How are you?' by saying Arria 'It's nothing'. A similar usage of \(c a\) 'to be how?' is shown in (165).
(165) «Âina, yo ca? Avang, yo ca?»
\begin{tabular}{|c|c|c|c|c|}
\hline ây & & ca & & \\
\hline man-DET.D.MPX & 2SG.SUBJ= & be.how? & sibling-1SG & \(2 \mathrm{SG} . \mathrm{SUBJ}=\) \\
\hline
\end{tabular} 'Hey man, are you okay? Brother, how are you?'
"Ah, mo te mwany na leeng, teme tunao li maac,»
\begin{tabular}{lll} 
mo & te= & mwany \\
LK3 & 3SG.SUBJ \(=\) & \begin{tabular}{l} 
na=lee-ng \\
bad
\end{tabular} \\
interior=DAT-1SG.POSS
\end{tabular}
te=me tu-nao=li maac
3SG.SUBJ=IRR find-1SG.ABS=GEN death
'Ah, well I feel horrible, I might die,'
Yal-20092011-AW6_0050

The nominative intransitive verb (§5.1.1) cââmw 'to do what with something?' is
used to inquire about an action completed using an instrument. Its bound lexically
transitivized form (§5.1.5.1) is câmwi 'to do what with?', as in example (166).
"Yome pae wîna ma yome câmwie?" yo=me pa-e wî-na ma yo=me câmwi-e 2SG.SUBJ=IRR take-SPC DEM.INAN-DET.D.MPX LK4 2SG.SUBJ=IRR do.what.TR-3SG.ABS ""What are you going to do with it if you take it?"" (lit. "'You would take this thing so that you would do what with it?"')

Yal-20092011-AW1_0292
The verb iva 'to be where?' is an intransitive absolutive verb (§5.1.2) which inflects to agree with its argument in specificity (§5.1.4). In (167), the specific form ivi questions the location of the absolutive argument wagaji 'our boat'.
"Ka ivi wagaji ?"
ka ivi waga-ji
LK where.SPC boat-1DU.INCL.POSS
""And where is our boat?""
Yal-01082010-MFD_0016

This verb is also commonly used to inquire about a name-one literally asks 'where is his/her/its name?' rather than 'what is his/her/its name?'. In example (168), iva is used to question a name.
(168) BG: Wîli yeek, bu lila yeek.
wîlli yeek bu=li-la yeek
DEM.INAN-DET.A.PRX plant fishhook=GEN-3PL.POSS plant
'That wooden thing, their wooden fishhook.'
```

CG: Iva naran?
iva nara-n
where.GNR name-3SG.POSS
'What's its name?'

```

Yal-28072010-BGMCG-hamecon_0093-0094
The customary greeting in Belep is to inquire where someone is going (rather than e.g. how they are feeling, etc.). This is accomplished with the nominative intransitive (§5.1.1) verb wa 'to go where?'. For example, in (169), the speaker animates a character's greeting to the Dubageni, a type of demon.
(169) «Wa Dubageni, yo wa ?»
wa Dubageni yo= wa
grandparent type.of.demon 2 SG.SUBJ= go.where?
""Grandfather Dubageni, where are you going?""
Yal-05092011-AP1_0012-0013
Example (170) shows a more general use of the verb \(w a\) 'to go where?'.
(170) Texa waak xa Maxeek, «Ji wa?"
\begin{tabular}{llll} 
te=xa & wa-x=a & Maxeek \(\mathbf{j i =}\) & wa? \\
3SG.SUBJ=ADD & DEM.MAN-DET.D.PRX=NOM & Maxeek & 1DU.INCL.SUBJ= go.where?
\end{tabular}
'And Maxeek was like, "Where are we going?""
Yal-28072010-BGMCG-tahitian_0121
To question a verb, Belep speakers generally use the derived verb \(t u d a\) 'to do what?', which attaches the denominal verbalizer proclitic \(t u=\) ' \(V B L Z\) ' (§3.5.4) to the interrogative pronoun \(d a\) 'what?'. An example is shown in (140).
«Ma na pan tu da?" ma na= pana tu= da LK4 1SG.SUBJ= go.TV VBLZ= what?
""What am I going to do?""

To question a reason, Belep speakers use an equative construction (§6.4.1) with the predicate nominal puu-r 'origin-3GNR.POSS' (§7.2.8) and the interrogative pronoun \(d a\) 'what?', as in (172).
(172) "Caivak, puur ri da yo go ?"
caivak pu-r=i da yo= go
rat origin-3GNR.POSS=GEN what? 2SG.SUBJ= cry
"'Rat, why are you crying?" (lit. 'because of what')
Yal-01082010-MFD_0025

\subsection*{6.5.3 Answering, agreeing, and disagreeing}

Belep speakers use three particles (§3.2.5) to respond to yes-no questions: \(\hat{e} \hat{e}\) 'yes', elo 'okay', and ai 'no'. These words have a number of other discourse functions as well.

The particle \(\hat{e} \hat{e}\) 'yes' has the characteristic intonation pattern of disyllabic words (§2.7.1). An intonation curve for this word is shown in Figure 53. Speakers may also produce this particle as [mp] with the same intonation.

Figure 53: Intonation curve for \(\hat{e ̂ e ̂}\) 'yes'


Belep speakers use \(\hat{e} \hat{e}\) 'yes' to agree with their interlocutor. For example, in (173), speaker BG pauses to perform a word search in line 1, eventually producing janu 'spirits' as the genitive-marked subject (§6.2.2). Meanwhile, his interlocutor CG produces another possible word to fill the blank in line 2: ulayama 'the ancestors, the elders'. Speaker BG then agrees with the validity of this word in line 3 , using the particle \(\hat{e} \hat{e}\) 'yes'.
(173) BG: laô wanem vaer ri ...janu, \(\mathbf{l a}=\mathbf{0} \quad\) wane=va-er=i janu 3PL.SUBJ=REAL walk=INSTR-3SG.ABS=GEN spirit '[they] were walking with him, ...the spirits,'

CG: ulayama, ulaya-ma old.man-AC 'ancestors,'

BG: \(\hat{E} \hat{e}\), ulayama.
êê ulaya-ma
yes old.man-AC
'Yes, the ancestors.'
Yal-28072010-BGMCG-tahitian_0299-0301
To acknowledge the receipt of new information, to accept the premise of an interlocutor's speech, or to agree to do something, Belep speakers use elo 'okay'. For instance, in (174), MT explains a game rule to AD , who acknowledges receipt of this information with elo.
(174) MT: Leô pwai ci êê ou ai.
le=ô pwai ci êê ou ai
3DU.SUBJ=REAL only sit yes or.LN no
'They can only be yes or no.'
AD: Elo.
elo
okay
'Okay.'
Yal-15102010-MTAD_3:44.989-3:47.757

If elo is used with the sharply rising intonation of a yes-no question (§6.5.1), its meaning is 'really?'. For example, in (175), MT responds to AD's statement with elo, indicating both that she is accepting the new information and requesting confirmation.
(175) AD: Naô tue.
na=ô tu-e
1SG.SUBJ=REAL find-3SG.ABS
'I found it.'
MT: Elo ? Bwa kaxi?
elo bwa= kaxi
okay CONT= look
'Oh, really? Let me see?'
AD: Nyak?
nya-k
DEM.IDF-DET.D.PRX
'This one?'
Yal-15102010-MTAD_18:12.603-18:16.1
Example (167) illustrates more clearly the difference between êe 'yes' and elo 'okay'. In line 3 elo is used to acknowledge receipt of information, while BG's \(\hat{e} \hat{e}\) in line 5 is used to provide agreement with what CG said in line 4.

BG: \(\quad\) Te tala ti?
te= \(\quad \mathbf{t a}=\mathbf{l a}=\mathbf{r i}\) ?
3SG.SUBJ= go.UH=NOM=who?
'Who went up?'
CG: Yo.
yo
2SG.INDEP
'You.'
BG: Elo, nao.
elo nao
okay 1SG.INDEP
'Okay, me.'
CG: Ai, ave ma ulayiik.
ai ave ma ulayii-k
no 1DU.EXCL.INDEP LK4 old-DET.D.PRX
'No, we two with that old man.'
BG: \(\hat{E} \hat{e}\), or ma Orilô.
\(\hat{\text { êe }}\) or ma Orilô
yes 2DU.INDEP LK4 Orilô
'Yeah, you two with Orilô.'
Yal-28072010-BGMCG-tahitian_0249-0250
Speakers can also use the independent pronoun yo '2SG.INDEP' as an agreement token; it is generally used to indicate that permission has been granted or approval offered, as in (177), a constructed example that is representative of discourse I have overheard.
(177) S1: Na pan nawe tolabang. na= pana nawe tolaba-ng
1SG.SUBJ= go.TV leave basket-1SG.POSS
'I'm going to go put my purse down.'
S2: Yo.
yo
2SG.INDEP
'Go ahead.'
It is unknown whether other second person independent pronouns can also serve this function.

The particle ai 'no' has many functions in Belep; its use as a disjunctive coordinator is discussed in §4.4.4 and its use as a question tag is discussed in §6.5.1. It is also used in answering and disagreeing. To respond negatively to a question, speakers of Belep use ai 'no', as in line 2 in (178).
(178) MT: Nyami yudu? Ai ? Tere
\begin{tabular}{llll} 
nya-mi & \begin{tabular}{ll} 
yudu & ai
\end{tabular} & \(\mathbf{t e}=\mathbf{r e}\) \\
DEM.IDF-DET.A.DST & red.mullet & no & 3SG.SUBJ=ACT
\end{tabular}
'That one, a red mullet? No? Is it even-'
AD: \(\quad A i\).
ai
no
'No.'
MT: no pwalaic?
no pwalaic
fish one
'a fish?'
Yal-15102010-MTAD_4:46.75-4:52.107
Particle \(a i\) 'no' is also used to disagree, as in (179), where the speaker animates a
negotiation between two characters, Ixe and Kawo, who repeatedly use ai 'no' to indicate that they disagree with their interlocutor.
(179) «Ai. Enyi yome cavac, na cavac ya modemw.
\begin{tabular}{llllll} 
ai enyi & yo=me & cavac & na= & cavay=a & mode-mw \\
no if & 2SG.SUBJ=IRR
\end{tabular}\(\quad\)\begin{tabular}{l} 
leave
\end{tabular} \begin{tabular}{l} 
1SG.SUBJ= \\
leave=LOC
\end{tabular}\(\quad\)\begin{tabular}{l} 
together-2SG.POSS
\end{tabular}

Na kuar ri na ci la pwemwa."
na= kuar=i na= ci=la pwemwa
1SG.SUBJ= refuse=GEN 1 SG.SUBJ= sit=LOC village
'[Ixe:] "No. If you leave, I'm going with you. I don't want to stay at home.""
"Ai," te âri u leen ni Kawo. «Ai.
\begin{tabular}{llll} 
ai & te \(=\) & âri & \(\mathbf{u}=\mathbf{l e e}-\mathbf{n =}=\mathbf{i}\) \\
no & 3SG.SUBJ \(=\) & say & toward=DAT-3SG.POSS.SPC=GEN
\end{tabular}\(\quad\)\begin{tabular}{l} 
Kawo \\
Kawo
\end{tabular}

Yo ci. Yome ci la pwemwaji. »
yo= ci yo=me ci=la pwemwa-ji
2SG.SUBJ= sit 2 SG.SUBJ=IRR sit=LOC village-1DU.INCL.POSS
"'No," Kawo said to her. "No. You stay. You should stay at home."
Yal-20092011-AW1_0102-0105

Finally, particle ai 'no' can be used as in example (146), where it functions as a negative imperative to mean 'Don't!'
(180) Na nyi kewee ka to jie, «Ai!"


Ka me to ji-e, "Ai!" ka me= to ji-e ai
LK IRR= call give-3SG.ABS no
'I immediately chased after him and called to him, "No!" and then called to him, "No!""

Yal-28072010-BGMCG-tahitian_0078

\subsection*{6.6 Imperatives and prohibitives}

There is no morphology that is unique to imperatives in Belep; they are indicated primarily by the omission of the subject agreement proclitic (§5.7) or by context.

Prohibitives are formed using a set of verb group proclitics (§5.2) which fall into a position class between the subject agreement proclitics and the aspectual proclitics. This is similar to Nêlêmwa, where imperatives use modal particles (Bril 2002).

\subsection*{6.6.1 Imperatives}

The simplest imperatives in Belep are formed in the same way as declarative clauses, except that the subject agreement proclitic (§5.7) is omitted. For example, (181) shows a constructed example of a declarative clause with a subject agreement proclitic, while (182) shows a parallel imperative clause where the subject proclitic is omitted.
(181) Te pame.
te \(=\quad \mathbf{p a}=m e\)
3SG.SUBJ= go.TV=CTP
'S/he comes.'
(182)

Pame!
\(\mathbf{p a = m e}\)
go.TV=CTP
‘Come!’

A discourse example of an imperative is found in (1), where CG directs BG to speak
Belep (rather than French) and does not use a subject agreement proclitic.
(183) Mo tao pulu Belep!
mo tao= pulu Belep
LK3 HAB= speak Belep
'Hey, speak Belep!'
Yal-28072010-BGMCG-tahitian_0114
Speakers can produce a more polite imperative by using the aspectual proclitic \(b w a=\) 'CONT’ (§5.4.4). The cognate of this particle in Nêlêmwa has been described as emphatic, producing increased surety of the predication (Bril 2002). However, in Belep imperatives, it seems to have the opposite effect, decreasing a speaker's epistemic attachment to the predication and rendering the imperative more polite. For example, in (184), the character animated by the speaker is requesting help, so he uses the more polite \(b w a=\).
(184) «Iya, bwa ponaoda?»
iya bwa= po-nao=da
octopus \(\mathrm{CONT}=\) load-1SG.ABS=DIR.UH
"'Octopus, would you take me up [to the beach]?""
Yal-01082010-MFD_0043
In some cases, speakers may use a subject agreement proclitic in an imperative, as in (185) - (187). In these cases, imperatives are morphosyntactically identical to declaratives and their pragmatic force is understood from context. Prosodic cues may also indicate an imperative, but this is not obligatory. For example, in (185), the imperative is not distinguishable from the declarative 'You come home' except through context.
(185) "Yo pame la pwemwa,"
\(\mathbf{y o}=\quad\) pa=me=la pwemwa
2 SG.SUBJ= go.TV=CTP=LOC village
"'Come home,"
Yal-20092011-AW1_0030
In (186), the imperative pragmatic force is also understood through context, since subject agreement proclitics are used.
"Yome jua îna ôe, yome nue," yo=me jua îna ô-e yo=me nu-e
2 SG.SUBJ=IRR very make.GNR be.good-3SG.ABS 2 SG.SUBJ=IRR wrap.with.leaves-3SG.ABS "'Prepare it well, wrap it with leaves,""
Yal-20092011-AW1_0072

In (187), the speaker quotes his own earlier production of imperatives using subject agreement proclitics.
(187) Naxa waak, «Yome bwageo.
\begin{tabular}{llll} 
na=xa & waa-k & yo=me & bwage-o \\
1SG.SUBJ=ADD & DEM.MAN-DET.D.PRX & 2SG.SUBJ=IRR & return-2SG.ABS
\end{tabular}

\section*{Yome bwageo, Maxeek.}
yo=me bwage- \(\quad\) Maxeek
2SG.SUBJ=IRR return-2SG.ABS Maxeek
Yoxame tu mwa la yamidu Âmwany."
yo=xa=me tu mwa=la ya-midu Âmwany
2SG.SUBJ=ADD=IRR go.DH again=LOC DEM.LOC-DET.D.DH Âmwany
'And I was like, "You go back. You go back, Maxeek. And you go down there to Âmwany again.""

Yal-28072010-BGMCG-tahitian_0148-0150
Note that in (186) and (187), the irrealis modal =me 'IRR' (§5.5.2) is used to make the imperative more polite. Inclusion of the subject agreement proclitic in imperatives is more common for nonsingular and first person addressees and may be obligatory in these cases. For example, the paucal subject agreement proclitic is used in the imperative in (188), and the first person dual proclitic is used in (189).
(188) Ôna paramenao.
ôna= parame-nao
2TR.SUBJ= forgive.TR-1SG.ABS
'Forgive me.'
Yal-09082010-JBM-coutume_0003
(189) Te âri u le Ixe, "Jime cavac."
te \(=\quad\) âri \(\mathbf{u}=l \mathbf{l} \quad\) Ixe \(\mathbf{j} i=m e \quad\) cavac
3SG.SUBJ= say toward=DAT Ixe 1DU.INCL.SUBJ=IRR leave
'She said to Ixe, "Let's leave.""
Yal-20092011-AW1_0063-0064

Other clauses with an imperative pragmatic force include those using the deontic linker ki (§7.2.6).

\subsection*{6.6.2 Prohibitives}

There are two prohibitive proclitics in Belep, wara= 'NEG.IMPER' and kara= 'NEG.NEC'. Their position class in the verb group (§5.2) immediately precedes any aspectual proclitics. Like imperatives, prohibitives may omit the subject agreement proclitic (§5.7), though this is unusual if the addressee is not second person singular. The pattern whereby prohibitives use the same construction as imperatives with a nondeclarative sentential negation strategy is fairly common among Oceanic languages (van der Auwera et al. 2011).

The prohibitive proclitic wara \(=\) is used to form a negative imperative, as in the overheard examples in (190) and (191).
(190) Wara migie !
wara= migi-e
NEG.IMPER= touch-3SG.ABS
'Don't touch it!'
(191) Wara pa kôêlinao.
wara \(=\quad\) pa= \(=\) kôê-li-nao
NEG.IMPER= CAUS \(=\) tired-TR-1SG.ABS
'Don't make me tired.'
If the addressee is second person singular, the subject proclitic may be omitted, as in line 1 of (192), or it may be included as in line 2 . Note that line 2 also contains an imperative without a subject proclitic (§6.6.1).
(192) "Wara, wara maac,» te âri u le naen, \(\begin{array}{ll}\text { wara }= & \text { wara }=\end{array} \begin{aligned} & \text { maac } \text { te }= \\ & \text { NEG.IMPER }=\end{aligned} \quad \begin{aligned} & \text { âri } \mathbf{u}=\mathbf{l e} \quad \text { nae-n } \\ & \text { NEG.IMPER }=\end{aligned} \quad \begin{aligned} & \text { dieG.SUBJ }= \\ & \text { say toward=DAT child-3SG.POSS }\end{aligned}\)

Teâ Pûnivaac. «Yo wara maac, mo ci."
Teâ Pûnivaac yo= wara= maac mo ci
Teâ Pûnivaac 2 SG.SUBJ= NEG.IMPER= die LK3 sit "'Don't, don't die," she said to her child, Teâ Pûnivaac. "Don't die, but stay."" Yal-20092011-AW5_0102

Example (193), a young woman's motherly advice to her present and future children, also shows the alternation between the omission and inclusion of the second person singular subject proclitic in prohibitives. The prohitibitives are indicated by square brackets.
(193) Name âri u le naeng ma
\begin{tabular}{llll} 
na=me & âri \(\mathbf{u}=\mathbf{l e}\) & nae-ng & ma \\
1SG.SUBJ \(=I R R\) & say toward=DAT & child-1SG.POSS & LK4
\end{tabular}

2 te wara wânem mi bwan.
\begin{tabular}{llll}
{\([\) te \(=\)} & wara \(=\) & wânem=i & bwan \(]\) \\
3SG.SUBJ \(=\) & NEG.IMPER \(=\) & walk=GEN & night
\end{tabular}

3 Name âri u le ânomale, "Wara wânem mi bwan.
\begin{tabular}{lllll} 
na=me & âri \(\mathbf{u}=\mathbf{l e}\) & \begin{tabular}{l} 
âno-male
\end{tabular} & [wara= & wânem=i bwan] \\
child-pair
\end{tabular}\(\quad\)\begin{tabular}{ll} 
NEG.IMPER= & walk=GEN \\
night
\end{tabular}
\(4 \quad\) O wara tu jaar. Wara up, wara ûdu.
[ \(\mathbf{0}=\) wara \(=\) tu= jaar] [wara= up] [wara= ûdu] 2DU.SUBJ \(=\) NEG.IMPER \(=\) VBLZ \(=\) be.happy NEG.IMPER \(=\) smoke NEG.IMPER= drink
\(5 \quad\) Surtout wânem mi bwan, te jua mwany nya nyali.


6 Wara pae daana nyanya, mo te nyana mwany nya daana nyanya.» [wara \(=\) pa-e dana nyanya] mo te \(=\) nyana mwany=a dana nyanya NEG.IMPER \(=\) take-TR road Mom LK3 3SG.SUBJ= big.thing be.bad=NOM road Mom 'I would say to my child that he mustn't walk at night. I would say to my kids, "Don't walk at night. Don't party. Don't smoke, don't drink. Above all don't walk at night, that's really bad. Don't follow Mom's example, because Mom's example is really bad.""

Yal-27092011-LPLY

In (193), prohibitives in lines 3, 4, and 6 omit subject proclitics, while those in lines 2 and 4 include them. This is likely because the prohibitives in lines 2 and 4 do not have second singular addressees (they are third singular and second dual, respectively); a similar example is found in (194), where the addressee is first singular.
(194) Na wara pulu mwany.
na= wara= pulu mwany
1SG.SUBJ= NEG.IMPER= speak be.bad
'I will not curse.' (lit. 'Don't curse.')
DY classroom
The prohibitive proclitic kara \(=\) 'NEG.NEC' indicates a negative necessity, as in (195). It can occur with or without a subject proclitic, as in (196).
(195) Kara migie !
kara \(=\) migi-e
NEG.NEC= touch-3SG.ABS
'You mustn't touch it.'
(196) (Yo) Kara tu.
( \(\mathbf{y o}=\) ) kara= tu
2SG.SUBJ= NEG.NEC go.DH
'You mustn't go down.'
Yal-22092011-TB.wav
According to speakers, the meaning of kara \(=\) is similar to that of the sentential negative proclitic kiaxi \(=(\S 6.7 .1)\); however, there are not enough examples of its use in discourse to distinguish it from other similar morphemes. More research is needed to understand the function of prohibitive kara=.

\subsection*{6.7 Negation}

Most negation of predicates-including that of predicate nominals (§6.4.1)—is accomplished in Belep using the verb group proclitic âri= 'NEG'; another verb group proclitic kiaxi \(=\) 'NEG.NEC' is also used (§6.7.1). There are also a number of inherently negative verbs (§6.7.2) and some inherently negative nouns used in predicate nominals. A number of other negation strategies are discussed elsewhere: negative existentials and locatives in \(\S 6.4 .2\); negative interrogatives in \(\S 6.5\); negative imperatives in \(\S 6.6 .2\). There is no constituent negation in Belep.

\subsection*{6.7.1 Regular predicate negation}

In predicate negation, negative proclitics \(\hat{a r i}=\) ' NEG ' and kiaxi \(=\) ' \(\mathrm{NEG} . \mathrm{NEC}{ }^{\prime}{ }^{260}\) are attached to the verb group (§5.2) ore predicate nominal, typically appearing clauseinitially and always preceding the subject agreement proclitic. Most predicate negation uses âri= 'NEG', as in examples (197) - (132), where a verbal predicate is negated.
(197) Ari te baele,
âri=re= bae-le
NEG=3SG.SUBJ= bite-3DU.ABS
'He didn't eat them,'
Yal-28072010-BGMCG-lune_0047
(198) Toma âri te wânem mo te paralysé.
toma âri=re \(=\) wânem mo=re \(\quad\) [paralize]
but NEG=3SG.SUBJ= walk LK3=3SG.SUBJ= paralyzed.LN
'But he didn't walk, because he was paralyzed.'
Yal-28072010-BGMCG-lune_0014
(199) Toma âju, âri na kiyie. toma âju âri= na= kiyi-e but person NEG= 1SG.SUBJ= see.SPC-3SG.ABS 'But the person I didn't see.'

Yal-28072010-BGMCG-tahitian_0094
Proclitic \(\hat{a} r i=\) ' NEG ' is also used to negate predicate nominals, as in (200).
(200) Mo âri Dau Ar, naran ni Dau Belep.
mo âri= dau ar nara-n=i dau Belep
LK3 NEG= islet sun name-3SG.POSS=GEN islet Belep
'And it was not Dau Ar [the Isle of the Sun], but rather Dau Belep [the Isle of Belep].'

Yal-20092011-AW6_0190
When a modal morpheme is present ( \(\S 5.5, \S 5.4 .4)\), it typically precedes the negative proclitic. For example, modal me 'IRR' precedes âri= 'NEG' in (201).

\footnotetext{
\({ }^{260}\) The negative morpheme is homophonous with the verb âri 'to say'. A morpheme of similar function, kio 'NEG' is used in Nêlêmwa (Bril 2002).
}
(201) "mo me âri na uli da."
mo me âri= na= uli da
LK3 IRR NEG= 1SG.SUBJ= pour blood
'But I'm not going to commit bloodshed.'
Yal-20092011-AW1_0259

In (202), realis modal \(\hat{o}\) ' REAL ' precedes \(\hat{a} r i=\) ' NEG ', which modifies the predicate nominal koxo 'many'.
(202) Ô âri koxo li lami pwai ci.
ô âri= koxo=li la-mi pwai ci
REAL NEG= many=GEN DEM.PL-DET.A.DST only sit
'Those who only stayed were not many.'
Yal-28072010-BGMCG-sousmarin_0107
In (92), \(b w a=\) is used before the negative proclitic \(\hat{a r} i=\) to mean 'not yet'.
(203) Te bwa âno, bwa âri te - jua âri te ulac.
te= bwa= ânô bwa= âri= te \(=\) jua âri= te \(=\) ulac 3SG.SUBJ \(=\) CONT \(=\) be.young CONT \(=\) NEG \(=3\) SG.SUBJ \(=\) very \(\mathrm{NEG}=3\) SG.SUBJ \(=\) be.old 'He was still young, he wasn't yet - he wasn't old at all.'
Yal-20092011-AW3_0006

The other negative proclitic kiaxi= 'NEG.NEC' is rare in my corpus and more work remains to be done to understand its function. Examples are shown in (204) and (205), where it appears to indicate a negative necessity. In both of these examples, kiaxi= negates a subordinate clause marked with ma 'LK4' (§7.2.2).
(204) le cobae âjuma la Yade, ma kiaxi la kiyile, le \(=\) coba-e âju-ma=la Yade ma kiaxi= \(\quad \mathbf{l a}=\quad\) kiyi-le 3DU.SUBJ= hide.from-SPC person-AC=LOC Yade LK4 NEG.NEC= 3PL.SUBJ= see.SPC-3DU.ABS 'they hid from the people of Yade, so that they wouldn't see them,'
Yal-20092011-AW6_0063-0064
"Jime cavac yena, ma kiaxi la kiyiji."
\(\mathbf{j i = m e} \quad\) cavaya yena ma kiaxi= \(\quad \mathbf{l a}=\quad\) kiyi-ji 1DU.INCL.SUBJ=IRR leave now LK4 NEG.NEC= 3PL.SUBJ= see.SPC-1DU.INCL.ABS 'Let's leave now, so that they don't see us.'
Yal-20092011-AW1_0190

Belep kiaxi= may be etymologically related to the negative existential in Nêlêmwa, which is kia (Bril 2002).

\subsection*{6.7.2 Inherently negative predicates}

A number of Belep verbs and predicate nominals are inherently semantically marked as negative. These include the absolutive verbs âria 'NEG.EX', cia 'NEG.LOC' (discussed in §6.4.2), and mwanyi 'to not know' (§5.1.2), as well as those shown in Table 93.

Table 93: Inherently negative predicates
\begin{tabular}{|l|l|l|}
\hline \begin{tabular}{l} 
Belep \\
predicate
\end{tabular} & English translation & Notes \\
\hline âlalic & 'to be impossible' & \begin{tabular}{l} 
pred. nom. (§6.4.1) w/subordinator = \\
(§7.2.7)
\end{tabular} \\
\hline koon, koni & \begin{tabular}{l} 
'to not be able to, to not \\
know'
\end{tabular} & \begin{tabular}{l} 
nom. intr. (§5.1.1); bound tr. w/stem \\
mod. (§5.1.5.1); see also §5.9.6
\end{tabular} \\
\hline kuar, kuari & 'to refuse, to not want' & \begin{tabular}{l} 
nom. intr. (§5.1.1); bound tr. w/stem \\
mod. (§5.1.5.1); see also §7.2.7.1
\end{tabular} \\
\hline mwauju & 'to have no idea' & \begin{tabular}{l} 
pred. nom. (§6.4.1) w/subordinator =li \\
(§7.2.7)
\end{tabular} \\
\hline niva & 'to lose track of, to not notice'' free tr. (§5.1.3.1) \\
\hline ngini & 'to not be able to see' & bound tr. (§5.1.3.2) \\
\hline
\end{tabular}

See the indicated sections for further information on each of these predicates; only the predicate nominal âlalic 'to be impossible' will be further discussed here.

Example (85) shows the use of predicate nominal âlalic 'to be impossible'
without an \(S\) argument.
(206)
me âlalic mo buâny.
me âlalic mo buâny
IRR be.impossible LK3 stone
'they couldn't because of the stones.' (lit. 'it was impossible')
Yal-28072010-BGMCG-sousmarin_0111
Predicate âlalic can also be used in an equative construction (§6.4.1) with a subordinator
(§7.2) such as \(k i{ }^{\prime}\) REL' (207) or ma 'LK4' (208) marking the subordinate clause.
(207) Alalic ki yome kuar.
âlaliyi=xi \(\quad y o=m e \quad\) kuar
be.impossible=REL 2 SG.SUBJ=IRR refuse 'It is impossible for you to refuse.'

\section*{(208) Alalic ma la gilen.} âlalic ma la= gi-len be.impossible LK4 3PL.SUBJ= attack-3TR.ABS
'They couldn't kill them.' (lit. 'It was impossible')

> Yal-20092011-AW6_0095

\subsection*{6.8 Topicalization and focalization}

Pragmatically marked clauses with topicalized or focused referents are primarily formed in Belep using deviations from the standard word order and predication of the marked elements. There is no unique morphology to indicate topicalization, while focalization involves a closed set of enclitics (§3.1.2.6) and some focus constructions.

\subsection*{6.8.1 Topicalization}

Topicalized arguments in Belep are unmarked for case and appear at the beginning of the clause as exceptions to the normal verb-initial pattern (§6.1), creating a Topic-Comment structure with an intonation break between the two parts. This structure is consistent with the three-part referent-foregrounding sequence observed for topicalization in English (Geluykens 1988, Keenan \& Schieffelin 1976), whereby the intonation break between the topic and the comment is often filled by backchanneling from the interlocutor. For example, in (209) the clause-initial topic naerama 'children' is set apart from the clause that modifies it by an intonation break.
(209) Ka naerama, la îbi jawu.
\begin{tabular}{lllll} 
ka & nae-ra-ma & \(\mathbf{l a}=\) & îbi & jawu \\
LK & child-3GNR.POSS-AC & 3PL.SUBJ \(=\) & gather & dead.leaves \\
'And the children, they collected trash & [to burn].'
\end{tabular}

Yal-17072009-TB-weekend_0009-0011
In (210) the topic is caivak 'rat'.

\section*{(210) Ka caivak, te âva la bwe radeau. \\ ka caivak te \(=\) âva=la bwe [ка \({ }^{\text {n }}\) do] \\ LK rat 3SG.SUBJ= fish.GNR=LOC top raft.LN \\ 'And the rat, he fished on the raft.'}

In (211) the topicalized NP is pwairamale 'the pair of girls'.
(211) Pwairamale, le tao tu, pwaira-male le= tao= tu girl-pair 3DU.SUBJ= HAB= go.DH
'The two girls, they often went down,'
Yal-19092011-PA_0069
In (212), the topic is Teâ Nêlêmwa, a proper name which means 'the chieftain of the
Nenema people [in Poum]'.
(212) Teâ Nêlêmwa, te cuur, Teâ Nêlêmwa te cuur Teâ Nêlêmwa 3 SG.SUBJ= stand 'Teâ Nêlêmwa, he stood up,'
Yal-20092011-AW1_0175

Arguments other than nominative-marked ones may be topicalized as well. Example (213) shows the topicalization of a genitive subject. The noun phrase âjuma la Yade, marked with genitive \(=i\) in line 1 , acts as the topic of the clause in line 2.
(213) Laô kiyilen ni âjuma la Yade.
\begin{tabular}{llll}
\(\mathbf{l a =}\) & \begin{tabular}{l} 
kiyi-len=i
\end{tabular} & \begin{tabular}{l} 
âju-ma=la
\end{tabular} & \begin{tabular}{l} 
Yade \\
3PL.SUBJ=REAL
\end{tabular} \\
see.SPC-3TR.ABS=GEN \\
person-AC=LOC & Yade
\end{tabular}

Âjuma la Yade, la kiyilen.
âju-ma=la Yade la= kiyi-len
person-AC=LOC Yade 3PL.SUBJ= see.SPC-3TR.ABS
'The people of Yade saw them. The people of Yade, they saw them.'
Yal-20092011-AW6_0078

Example (123) shows the topicalization of an absolutive argument, in this case the 3 TR independent pronoun len.
(214) Toma len, cialen, toma len cia-len
but 3TR.INDEP NEG.LOC-3TR.ABS
'But they, they weren't there,'

A variety of linkers can also be used to topicalize a noun phrase. For example, linker \(k a\) 'LK’ (§7.1.1.2) can serve as a topicalizer as in (215).
(215) Ka puluac ka jia, ka pulu-aya=xa jia
LK language-2PL.POSS=LK gift
tere jia ulayama lami cêboac,
\begin{tabular}{llll} 
te \(=\mathbf{r e}\) & jia ulaya-ma & la-mi & cêbo-ac \\
3SG.SUBJ=ACT & gift old.man-AC & DEM.PL-DET.A.DST & grandparent-2PL.POSS
\end{tabular}
'And your language, it's a gift, it's actually a gift from your ancestors,'
Yal-14092011-PT2-avenir_0008-0009
Causal linker mo 'LK3’ (§7.1.3) and evidential linker kara 'well’ (§7.1.5) can also be used in topicalization, as in example (216).
(216) Ka nyami la mayaravan, kara mo tuu keloop vier bleu.
ka nya-mi=la
LK DEM.IDF-DET.A.DST=LOC
kara mo tu kelov=i-era [blœ]
well LK3 EX.SPC hat=GEN-3SG.ABS blue.LN
'And the one next to it, well he has a blue hat.'
Yal-15102010-MTAD_24:30-24:40

\subsection*{6.8.2 Focalization}

The function of marked or contrastive focus (Chafe 1976, Givón 2001, König 1991) in Belep is served mainly by two focus enclitics, actual \(=r e\) ' \(А С\) ' and additive \(=x a\) 'ADD'. Enclitic \(=r e\) ' ACT ', which occupies the FOCUS position class within the verb group (§5.2), attaches to the phonological word which includes the subject agreement proclitic. Its meaning may be translated as 'actually'; it "counters the assumed presupposition [on the part of the hearer] that the truth value of the entire clause is in question" (Payne 1997: 268). Enclitic \(=x a\) 'ADD' attaches to a clause or NP, indicating that the entity they index, counter to the hearer's perceived expectations, has a role in some state of affairs. Noun phrases can also be focused by being predicated (§6.4.1), and interrogative pronouns can be focused in an interrogative cleft construction (§6.5.2). No focalization pattern for
declarative clauses (Givón 2001) that directly parallels this cleft structure has been observed in Belep.

\subsection*{6.8.2.1 Actual \(=\) re}

The enclitic \(=r e\) ' \(\mathrm{ACT}^{\prime}\) ', which can be translated 'actually', is used within the verb group (§5.2) to indicate that the truth value of the clause is contrary to the hearer’s perceived expectations. Enclitic \(=r e\) 'ACT' attaches to the end of the phonological word which includes the subject agreement proclitic, any modal enclitics (§5.5), and the clause-chaining enclitic \(=x a\) 'ADD' (§7.1.1.3).

Examples (217) - (219) show instances of actual \(=r e\) 'ACT' within a clause. In (217), the character animated by the speaker is lying about his murderous intent, claiming that he is not going to use his weapon to kill, he just enjoys carrying it.

\section*{(217) «Enyi na cavac, na wânem, nare pae." enyi na= cavac na= wânem na=re pa-e if 1SG.SUBJ= leave 1SG.SUBJ= walk 1SG.SUBJ=ACT take-3SG.ABS "Whenever I leave or walk, I actually take it.""}

Yal-20092011-AW1_0262
The character animated by the speaker in (217) uses \(=r e\) to counter the perceived suspicions of his interlocutor that he is not being truthful. In example (218), which is drawn from a religious text, the speaker uses \(=r e\) to counter the perceived doubts of his congregation.
(218) Ka temere uya la mwimi te nooxee.
\begin{tabular}{lll} 
ka & te=me=\(=\mathbf{r e}\) & uya=la \\
LK & 3 SG.SUBJ=IRR=ACT & \begin{tabular}{l} 
arrive \(=\) NOM
\end{tabular}
\end{tabular}
mwi-mi=re noxe-e
DEM.INAN-DET.A.DST=3SG.SUBJ solicit.SPC-3SG.ABS
'And what \(\mathrm{s} / \mathrm{he}\) asked for will actually happen.'
Yal-25072010-PT-homily_0045

In example (219), speaker BG is contrasting his actions with the beliefs of another character in the narrative. He narrates that his brother-in-law accused him of abandonment, but uses \(=r e\) ' ACT ' to indicate that real events were counter to his brother-in-law's beliefs.
(219) Mo âri ave keja, mo avere tao ci lexeng. mo âri= ave= keja mo ave=re tao= ci=lexeng LK3 NEG= 1DU.EXCL.SUBJ= run LK3 1DU.EXCL.SUBJ=ACT HAB= sit=LOC.DC 'But we didn't run away, because we actually were here the whole time.'

Yal-28072010-BGMCG-tahitian_0278

\subsection*{6.8.2.2 Additive \(=x a\)}

Enclitic \(=x a\) 'also', glossed 'ADD', is used at the end of an intonation unit-a clause, or a focused NP—as an additive focus marker meaning 'also, too'. It indicates that some entity is involved in the relevant event, counter to the hearer's perceived expectations. Its scope is determined based on the context; a sentence such as constructed example (220) may focus either the agent or the patient, depending on the speaker's intent.
(220) Te pae waangaxa.
te= pa-e wanga \(=\) xa

3SG.SUBJ= take-SPC boat=ADD
'S/he takes the boat too.'
'S/he also takes the boat.'
Yal-03112011-IM1.wav - Yal-03112011-IM2.wav
In example (221) from discourse, the NP tamwa Puma 'a woman from Balade' is focused using \(=x a\) 'ADD' to indicate that she participated in the relevant state of affairs, despite the hearer's perceived expectations.
(221) Nyan ka tamwa Pumaxa.
nya-n ka tamwa Puma=xa
mother-3SG.POSS LK woman Balade=ADD
'His mother, she was also from Balade.'
Yal-20092011-AW4_0030

In (222), =xa 'ADD' focuses keloop vier 'his hat', whose non-existence is counter to the hearer's perceived expectations.

\section*{(222) Aria keloop vieraxa. âria kelov=i-era=xa \\ NEG.EX hat=GEN-3SG.ABS=ADD \\ 'Also, he doesn't have a hat.'}

Yal-05102010-MTAD_22:15-22:20
Enclitic \(=x a\) 'ADD' is clearly etymologically related to additive linker \(k a\) ' LK ' (§7.1.1); however, its distribution is different from that of \(k a\). In addition to being used as a focus morpheme, enclitic \(=x a\) 'ADD' is used in clause-chaining (§6.8.2). See §7.1.1.3 for a discussion of this clause-chaining function.

\subsection*{6.9 Voice and valency}

The morphological expression of valence was described in §5.1.5 and §5.3. This section will analyze other ways that the functions of voice and valency are performed in Belep, including periphrastic causatives, reflexive and passive meanings, and quotatives.

\subsection*{6.9.1 Periphrastic causatives}

In addition to the morphological causative using proclitic \(p a=\) 'CAUS' (§5.3.1), Belep speakers also make use of a periphrastic causative using subordinator ma 'LK4' (§7.2.2). This causative construction involves less direct causation than the morphological causative; it is represented in Table 94.

Table 94: Structure of periphrastic causatives

\section*{CAUSE}
[CAUSER \(j i\)-CAUSEE]
SUBJ \(=\) give-ABS

CAUSED EVENT
\(m a\) [CLAUSE] LK4

In this periphrastic causative construction, the main clause verb is the bound transitive (§5.1.3.2) jie 'to give' with the causer as the main clause subject and the causee as the absolutive argument of the main clause. The subject of the subordinate caused-event ma-
clause is co-referential with the causee. For example, in (223), the causer is indexed by the subject agreement proclitic \(l a=\) ' 3 PL.SUBJ' (§5.7) in the main clause. The causee is indexed by the absolutive suffix -la '3PL.ABS' (§5.6) in the main clause, and by the subject agreement proclitic \(l a=\) ' 3 PL.SUBJ' in the subordinate clause.

\section*{(223) La jila ma la ci.}

'They made them stay.' (lit. 'they \(y_{i}\) gave them \(\mathrm{m}_{\mathrm{j}}\) that the \(\mathrm{y}_{\mathrm{j}}\) would sit')
Yal-20092011-AW3_0066
In (224), the causer is indexed by the subject proclitic \(l e=\) ' 3 DU.SUBJ' in the main clause, while the causee is indexed by the absolutive suffix \(-e\) ' 3 SG.ABS' in the first clause and the subject proclitic \(t e=\) ' 3 SG.SUBJ' in the subordinate clause .
(224) Lexa ta jie ma te cuur ri, le=xa ta ji-e ma=re cur=i
3DU.SUBJ=ADD go.UH give-3SG.ABS LK4=3SG.SUBJ stand=LOC
'They went up and made him stand there,' (lit. 'gave him that he stand there')
Yal-20092011-AW6_0098
In example (225), the unstated causer 'they' causes the caused event te mae 'she sleeps'.

\section*{(225) ka ô jie ma te mae.}
ka \(\hat{\mathbf{o}}\) ji-e ma=re mae
LK REAL give-3SG.ABS LK4=3SG.SUBJ sleep
'and [they] put it to sleep' (lit. '[they] gave \(\mathrm{it}_{\mathrm{i}}\) that \(\mathrm{it}_{\mathrm{i}}\) would sleep')
Yal-28072010-BGMCG-tayamu_0096
Main clause verbs other than jie 'to give' may also be used in periphrastic causatives. For example, the verb nawee 'to leave' is used in example (226) in a similar construction to that shown in Table 94.
(226) "Nawenao ma na maac." nawe-nao ma na= maac deposit-1SG.ABS LK4 1SG.SUBJ= die 'Let me die.' (lit. 'Leave me that I die.')

\subsection*{6.9.2 Reflexives}

Belep, like Nêlêmwa (Bril 2002), has no distinct morpheme with a reflexive meaning. Instead, the function of reflexivity is accomplished using a clause in which the nominative-marked (§6.3.2) and absolutive arguments (§6.3.1) are co-referential.

For example, the bound transitive verb (§5.1.3.2) bwagee 'to return (oneself)' is normally used reflexively, as in (227), where the clause teme bwagee contains the coreferential subject proclitic (§5.7) \(t e=\) ‘ 3 SG.SUBJ’ and absolutive suffix (§5.6) \(-e\) '3SG.ABS'.
(227) Teme bwagee ai teme,
\begin{tabular}{llll} 
te \(=\mathbf{m e}\) & \begin{tabular}{l} 
bwage- \\
3SG.SUBJ \(=\) IRR
\end{tabular} & \begin{tabular}{ll} 
return-3SG.ABS & ai
\end{tabular} & \(\mathbf{t e}=\mathbf{m e}\) \\
or & 3 SG.SUBJ \(=\) IRR
\end{tabular}
teme toveni wayap.
te=me toveni wayap
3SG.SUBJ=IRR finish war
'He must turn [himself] around or he must, he must end the war.'
Yal-20092011-AW4_0050
In example (91), the free transitive verb (§5.1.3.1) yala 'to shake' is used reflexively; the 3PL subject of the second clause (indexed by the 3 PL.INDEP pronoun in the first clause) is co-referential with the absolutive suffix -la '3PL.ABS'.

\section*{(228) Ka ô ta la la, ka yalaela la na gawe.}
\begin{tabular}{lllllll} 
ka & ô & ta=la & la & ka & yala-e-la=la & na \\
LK & REAL & go.UH=NOM & 3PL.INDEP & LK & shake-TR- & gawe \\
interior & stream
\end{tabular}
'And they went up and rinsed themselves off in the stream.'
Yal-17072009-TB-weekend_0025
Most transitive verbs can be used reflexively. Table 95 lists some of these verbs which are attested to occur in a reflexive construction, with co-referential subject and absolutive argument.

Table 95: Reflexive verbs
\begin{tabular}{|l|l|l|}
\hline Belep & Transitive meaning & Reflexive meaning \\
\hline pwedee & 'to turn sth.' & 'to turn oneself' \\
\hline pwaxa & 'to wash sth.' & 'to wash oneself' \\
\hline karo & 'to shave sth.' & 'to shave oneself' \\
\hline tawa & 'to cut sth.' & 'to cut oneself' \\
\hline \multicolumn{3}{|c|}{ Yal-23082010-IM1.wav - Yal-23082010-IM3.wav } \\
\hline
\end{tabular}

Reciprocity uses a different construction; see §5.3.2.

\subsection*{6.9.3 Passives}

There is no unique morphological or syntactic passive construction in Belep. The function of the passive is served by using a 3PL subject in an ordinary transitive construction. For example, in (229), the speaker wishes to downplay the subject of the clause, marked with subject proclitic \(l a=\) ' 3 PL.SUBJ'.
(229) Avar, la tolila li jewe.
avar la= to-li-la=li jewe
other 3PL.SUBJ= call-TR-3PL.ABS=GEN goblin
'The others, they are called jewe.' (lit. 'they call them jewe')
Yal-11082010-ET2-jewe_0006
If the speaker in (229) had not been trying to downplay the subject, he might have used the subject proclitic \(j a=\) ' 1 PL.INCL.SUBJ' instead (i.e. to say 'we call them jewe'). Another example of the passive meaning is found in (230), where the subject is unimportant; what is important is the woman's marital status.

\section*{(230) La tu buac yinao.}
\(\mathbf{l a}=\quad \mathbf{t u}=\quad\) buay=i-nao
3PL.SUBJ= VBLZ= bride.price=GEN-1SG.ABS
'I am reserved [for marriage].' (lit. 'They have done a buac for me'; see §1.2.2)

\subsection*{6.9.4 Quotatives}

To perform an indirect quotation, Belep speakers use the verb âri 'to say' followed by a subordinate clause marked with the linker \(k a\) (§7.2.1). Examples of this construction are shown in (231) and (232).
(231) Texa âri ka, ka naramw, ka te ô ki te ce. te=xa âri ka ka nara-mw ka te \(\hat{\mathbf{o}=x i=r e}\) 3SG.SUBJ=REAL say LK LK name-2SG.POSS LK 3SG.SUBJ= good=REL=3SG.SUBJ settle 'He would say that, that Thy kingdom come.' (lit. 'that Your name, that it must be widespread')

Yal-25072010-PT-homily_0018-0020
(232) Avexa âri ka, ai. ave=xa ââri ka ai 1DU.EXCL.SUBJ=ADD say LK no 'And we said no.'

Yal-28072010-BGMCG-tahitian_0277
For direct quotatives, Belep speakers predicate a form of the demonstrative pronoun wa- 'DEM.MAN’ (§4.5.2) with an attached determiner suffix (§4.3.2). This intransitive predicate acts as a nominative verb (§5.1.1) whose S argument indexes the quoted referent. This predication may precede (233) or follow (234) the quoted speech, from which it is separated by an intonation break.
(233) Texa waak xa Awuli Cabak, «Ho, tuya da lexen?»
te=xa wa-x=a Awuli Cabak [o] tuya da=lexen 3SG.SUBJ=ADD DEM.MAN-DET.D.PRX=NOM Awuli Cabak EX.GNR what?=DC.A 'And Awuli Cabak was like, "Hey, what have we here?""

Yal-19092011-PA_0022
In (233), the quotative predicate is waak 'to be like' (formed from proximal deictic suffix \(-k\) ); while in (234) the quotative predicate is wali 'to be like' (with proximal anaphoric suffix \(-l i)\).
(234) "Name ta ma yavi Kawo,» te wali la teâmaa.
na=me ta ma yavi Kawo te wa-li=la teâmaa 1SG.SUBJ=IRR go.UH LK4 search.TR Kawo 3SG.SUBJ= \(\overline{\text { DEM.MAN-DET.A.PRX=NOM high.chief }}\) "'I'm going to go up and search for Kawo," said the chieftain.'

Yal-20092011-AW1_0276

\subsection*{6.10 Periphrastic tense}

The temporal location of an event is not expressed morphologically in Belep; only mood (§5.5) and aspect (§5.4) are valid inflectional categories. If the expression of
temporal location is necessary, Belep speakers use a variety of periphrastic strategies involving the temporal nouns represented in Table 96.

Table 96: Temporal nouns
\begin{tabular}{|l|l|l|l|}
\hline Belep & English translation & Belep & English translation \\
\hline abur & 'before' 261 & bwera pwalaic & 'Monday' (lit. 'day one') \\
\hline mon & 'after' & bwera pwadu & 'Tuesday' (lit. 'day two') \\
\hline & & bwera pwajen & 'Wednesday' (lit. 'day three') \\
\hline naemi & 'back in the day' & bwera pwalavaac & 'Thursday' (lit. 'day four') \\
\hline ule & 'long ago' & bwera pwanem & 'Friday' (lit. 'day five') \\
\hline yak \({ }^{262}\) & \begin{tabular}{l} 
'yesterday, \\
a few days ago',
\end{tabular} & bwe cavaro & 'Saturday' (lit. 'Sabbath day') \\
\hline yemi & 'earlier today' & bwe cexeen & 'Sunday' (lit. 'sacred day') \\
\hline yena & 'today, now, later' & & \\
\hline iyam & 'tomorrow' & bwaêdan & 'morning'263 \\
\hline & & taan & 'daytime' \\
\hline êne denaar & \begin{tabular}{l} 
'hour' (lit. 'sun's \\
reference')
\end{tabular} & baraap & 'evening' \\
\hline gawaar & '(calendar) day' & bwan & 'nighttime, darkness' \\
\hline mwanok & 'moon, month' & & \\
\hline jao & 'year' & & \\
\hline
\end{tabular}

These nouns can serve as predicate nominals, as discussed in (§6.4.1); they can be marked as arguments of a clause with genitive \(=l i\); they can be marked with adverbial linker to 'when' (§7.2.3); or they can be unmarked adverbial modifiers.

In some cases, temporal nouns are used as arguments of a clause, where they are marked with the genitive case marker \(=l i\) or \(=i(\S 6.3 .3)\). For example, in (235) the temporal noun phrase gawaarimi la mon 'the next day' is marked as genitive with \(=l i\), indicating that it is serving as an oblique argument of the main verb \(p a\) 'to take'.

\section*{(235) ava mo pae comu li gawaarimi la mon. \\ ava= mo pa-e comu=li gawari-mi=la mon \\ 1PL.EXCL.SUBJ= live take-SPC school=GEN day-DET.A.DST=LOC side.DH 'we had school the next day.'}

Yal-17072009-TB-weekend_0041

\footnotetext{
\({ }^{261}\) See \(\S 4.4 .1\).
\({ }^{262}\) yak 'yesterday' is homophonous with ya-k [DEM.LOC-DET.D.PRX] 'here; this place' (§4.2.2).
\({ }^{263}\) Probably from bwa 'head' + êne- 'reference' + taan 'day'
}

In (236), the temporal noun bwan 'night' is marked with genitive \(=i\) and acts as an oblique argument of the verb puc 'to fly'.
(236) la puc yi bwan,
\(\mathbf{l a}=\quad\) puy=i bwan
3PL.SUBJ= fly=GEN night
'they fly at night,'
Yal-20092011-AW5_0116
When to introduces a temporal noun phrase, it adverbially describes the temporal location of the action of the matrix clause. \({ }^{264}\) For example, in (237), to precedes the temporal noun bwan 'night', which describes when the action of the matrix clause took place.
(237) la nginie, la pu ngini cae to bwan.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \(\mathbf{l a}=\) & nginie, & \(\mathbf{l a}=\) & pu= & ngini & \(\mathbf{c a e}=\mathbf{r o}\) & \multicolumn{2}{|l|}{\multirow[t]{3}{*}{}} \\
\hline .SUBJ= & miss.GNR & 3PL.SUBJ= & VOX= & miss.SPC & reef=when & & \\
\hline 'they did & they & didn't se & reef & he nigh & & & \\
\hline
\end{tabular}

Yal-20092011-AW2_0036
In (238), the temporal noun is the reduplicated bwabwaêdan 'early morning', describing when the action took place.
(238) Texa noor ra Awuli Cabak to bwabwaêdan,
\begin{tabular}{|c|c|c|c|c|}
\hline te=xa & nor=a & Awuli & Cabax \(=0\) & bwa-bwaêdan \\
\hline 3SG.SUBJ=ADD & awake=NOM & Awuli & Cabak=when & REDUP-morning \\
\hline \multicolumn{5}{|l|}{'And Awuli Cabak woke up early in the morning,'} \\
\hline & & & Yal-19092 & A 005 \\
\hline
\end{tabular}

In (239), the temporal noun introduced by to is baraap 'evening', and in (240) the
temporal noun is the dependent possessive noun phrase bwe cavaro 'Saturday' (see §4.6).
(239) "Ai elo,» kaô mae, mae to baraap.
ai \(\mathbf{e l o}=x a=\hat{0}\) mae mae=ro baraap
no yes=LK=REAL sleep sleep=when evening
'[He said] "Oh, okay," and slept, slept in the evening.'
Yal-05092011-AP1_0071

\footnotetext{
\({ }^{264}\) to may have originated as a temporal case marker and been extended to use as a linker.
}
(240) Yak to bwe cavaro, avena tu la Awe.
\begin{tabular}{|c|c|c|c|c|c|}
\hline & bw & & & & e \\
\hline erd & moment & sabbath.LN & 1TR.EXCL.SUB & go.DH=LO & Awe \\
\hline
\end{tabular} 'The other day, Saturday, we went down to Awe.'

Yal-17072009-TB-weekend_0001-0002

Note that to cannot be used to introduce a temporal noun referring to a future time (241).
(241) *yena=ro baraap
now=when evening
*'this evening'
yena=li baraap
now=GEN evening
'this evening, tonight'
Temporal nouns are also used in Belep in adverbial noun phrases which are separated from the main clause by intonation breaks or which are unmarked for case. For example, in (242) the temporal noun phrase iyam 'tomorrow' precedes the clause it modifies and is separated from it by an intonation break. In (243) iyam follows the clause it modifies; it is unmarked for case.
(242) "Iyam, jename tu la Yade." iyam jena=me tu=la Yade tomorrow 1TR.INCL.SUBJ=IRR go.DH=LOC Yade ""Tomorrow, we're going to Yade.""

Yal-20092011-AW6_0058
(243) «Jena mo pan na Belep iyam.»
jena= mo pan=a Beleva iyam.
1TR.INCL.SUBJ= stay go.TV=LOC Belep tomorrow ""We're going to Belep tomorrow.""

Yal-20092011-AW6_0127

\subsection*{6.11 Comparison}

\subsection*{6.11.1 Comparative construction}

There are no morphemes used exclusively for comparative constructions in Belep. Instead, two aspectual proclitics (§5.4), nyi= 'PUNCT' and \(m a=\) 'DIM' are used in
comparative constructions to mean, respectively, 'more' and 'less'. The Belep comparative construction is represented schematically in Table 97.

Table 97: Comparative construction
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{SUBJ \(=\)} & MARKER & QUALITY & & STANDARD \\
\hline & [ \(n y i=/ m a=\) ] & [VERB] & \(n a=l e\) & [NP] \\
\hline & more / less & & interior= & \\
\hline
\end{tabular}

As shown in Table 97, the property concept being compared is normally a verb (§6.4.3) which serves as the main verb of the clause. The marker of comparison is an aspectual verb group proclitic. The entity being compared is the subject or topic of the clause, and the standard of comparison is marked in the dative case (§6.3.4) after the noun na'interior'.

An example of this construction is found in the constructed example in (244). The topic is tolamiik 'this basket'. The aspectual proclitic \(m a=\) 'DIM' attached to the verb mama 'to be light' marks it as 'less than' the standard of comparison nyak 'this one', marked as dative.
(244) Tolamiik, ka te ma mama na le nyak. tolami \(\mathbf{x}=\mathbf{a}=\mathbf{r e}=\quad\) ma= mama na=le nya-k basket-DET.D.PRX=LK=3SG.SUBJ= DIM= be.light interior=DAT DEM.IDF-DET.D.PRX 'This basket, it's less light than that one.'
Yal-05102010-PT1.wav - Yal-05102010-PT3.wav

In the constructed example in (245), the subject wêgan 'her mercy' is compared to the standard, indexed by the dative-marked 3PL pronoun. The aspectual proclitic nyi= 'PUNCT' marks the verb \(\hat{o}\) 'to be good' as 'more than' the standard of comparison.
(245) Ba pwadu, ka te nyi ô la wêgan na lela. ba= pwadu ka=re \(=\quad\) nyi= \(\hat{\mathbf{o}}=\mathbf{l a} \quad\) wêga-n na=le-la ORD= two LK=3SG.SUBJ= PUNCT= be.good=NOM mercy-3SG.POSS interior=DAT-3PL.POSS 'The second one, she's nicer than the others.' (lit. 'Her mercy is more good than them.')
Yal-05102010-PT1.wav - Yal-05102010-PT3.wav

Comparative constructions are very rare in my corpus. Example (246) shows the use of \(n y i=\) ' PUNCT ' to indicate a comparison in line 2.

\section*{(246) Ô âri koxo li lami pwai ci, lami molep,}
ô âri= koxo=li la-mi pwai ci la-mi molep

REAL NEG= many=GEN DEM.PL-DET.A.DST only sit DEM.PL-DET.A.DST alive

\section*{toma nyi koxo li lami maac.}
toma nyi= koxo=li la-mi maac
but PUNCT = many=GEN DEM.PL-DET.A.DST die
'Those still alive were not many, while those who were dead were much more numerous.'

Yal-28072010-BGMCG-sousmarin_0107-0108

\subsection*{6.11.2 Expression of similarity}

Expression of similarity in Belep is a highly productive and idiomatic discourse phenomenon using mostly the two morphemes wa- 'DEM.MAN' (4.2.2) and \(m a-\), a class 1 noun (§4.1.1.1) meaning 'similarity'. \({ }^{265}\)

As mentioned in §4.5.2, wa- 'DEM.MAN’ can be used adverbially, as in (187). It can also serve as a nominative predicate (§5.1.1), as in (248), and a subset of these uses are quotative (see §6.9.4).
(247) calayi doo wana,
calayi doo wa-na
brush.TR earth DEM.MAN-DET.D.MPX
'[until it] brushed the earth like that,'
Yal-28072010-BGMCG-hamecon_0027
(248) Texa wak xie.
\(t e=x a \quad \frac{w a-x=i-e}{}\)
3SG.SUBJ=ADD DEM.MAN-DET.D.PRX=GEN-3SG.ABS
'And he did like that to him.'
Yal-28072010-BGMCG-tahitian_0263
In usages such as in line 3 of (249), wa- has an epistemic meaning, indicating that the events recounted by the speaker are merely his understanding.

\footnotetext{
\({ }^{265}\) The class 1 noun \(m a\) - 'similarity' is most likely the origin of the linker \(m a(\S 7.2 .1)\).
}

BG: laô wanem vaer ri ...janu, la=ô wane=va-er=i janu
3PL.SUBJ=REAL walk=INSTR-3SG.ABS=GEN spirit
'[they] were walking with him, ...the spirits,'
CG: ulayama, ulaya-ma old.man-AC 'ancestors,'

BG: \(\hat{E} \hat{e}\), ulayama. Texa wali. êê ulaya-ma \(t e=x a \quad \underline{w a}-l i\) yes old.man-AC 3SG.SUBJ=ADD DEM.MAN-DET.A.PRX 'Yes, the ancestors. That's what it was like.'

Yal-28072010-BGMCG-tahitian_0299-0301
The predicated form of \(w a\) - is also used transitively to express similarity, as in (250) - (252). In these examples, the noun phrase headed by the class 1 noun ma'similarity' acts as the P argument of the transitive clause. For example, in (250), the P argument is ma Teâ Belep 'like Teâ Belep'.
(250) Te wali ma Teâ Belep.
te wa-li ma Teâ Belep
3SG.SUBJ= DEM.MAN-DET.A.PRX similarity Teâ Belep
'He was like Teâ Belep.'
Yal-20092011-AW4_0030
If the standard of comparison is pronominal, a possessive suffix (§4.1.2.2) is used, as in (251).
(251) Te wali maamw.
te= wa-li

\section*{maa-mw}

3SG.SUBJ= DEM.MAN-DET.A.PRX similarity-2SG.POSS
'S/he is like you.' or 'S/he looks like you.'
Most commonly, the generic 3SG possessive suffix is used, e.g. in (252), where it is followed by the subordinator \(=l i\) ' \(G E N\) ' and a subordinate clause (§7.2.7). This construction is used to decrease the speaker's epistemic attachment to a clause.
(252) \(\hat{E} \hat{e}\), te wali maar ri te dadabwa.
\begin{tabular}{llll} 
êe & te= & wa-li & ma-r=i \\
yes & 3SG.SUBJ= & DEM.MAN-DET.A.PRX \\
'Yimilarity-3GNR.POSS=GEN & te \(=\) & dadabwa \\
'Yeah, he was, like, black.' & &
\end{tabular}

Yal-28072010-BGMCG-tahitian_0205
Note that for some speakers, expressions of similarity have lexicalized. Some younger speakers argue that walima is a transitive verb meaning 'to resemble'; it may also be produced [wanĩmã].

The root ma- 'similarity' can also be found in the nominative intransitive verb maraic 'to be the same', as in (253).
(253) Toma Teâ Belevale, le pe maraic, le pe Or. toma Teâ Beleva-le \(l e=\quad\) pe= maraic \(l e=\quad\) pe= Or but Teâ Belep-pair 3DU.SUBJ= RECP= be.same 3DU.SUBJ= RECP= spill 'But he and Teâ Belep, they were the same, they were both Or [phratry].'

> Yal-20092011-AW3_0026

\subsection*{6.12 Summary}

In this chapter, I have discussed basic Belep VOS word order (§6.1) and splitintransitive argument structure (§6.2), where case is marked with ditropic clitics (§6.3). Non-prototypical clauses were discussed in \(\S 6.4\), and the following sections described question formation (§6.5), imperatives and prohibitives (§6.6), negation (§6.7), and topicalization and focalization (§6.8). Periphrastic voice (§6.9) and tense (§6.10), as well as a discussion of comparatives ( \(\S 6.11\) ) concluded the chapter.

\section*{Chapter 7 \\ Clause combining}

\subsection*{7.0 Introduction}

Cross-linguistically, "there are three basic ways...in which two clauses can be linked together to form a complex sentence": coordinate and non-embedded subordinate constructions, complement clause constructions, and relative clause constructions (Dixon 2006:2-4). Coordinate constructions are defined as those where two or more clauses "are combined into a larger unit and still have the same semantic relations with other surrounding elements" (Haspelmath 2007:1). Other types of comparable non-embedded constructions may indicate temporal subordination, logical subordination, contrast, or purpose (Dixon 2006:2).Complement clauses are defined by "the syntactic situation that arises when a notional sentence or predication is an argument of a predicate" (Noonan 2007:52). Relativization is defined as a construction whereby a clause becomes part of a noun phrase (Keenan \& Comrie 1977:67).

In Belep, both coordinate (§7.1) and relative clause (§7.3) constructions are present. The question of the existence of complement clause constructions in Belep is much more problematic. Dixon (1995) argues that complementation is not a linguistic universal, being "common among the languages of Europe, Oceania and Africa but rare
in those of Australia and South America" (Dixon 1995:183). Languages which lack complementation, however, "still do have some grammatical mechanism for stating what a proposition is which is seen, heard, believed, known, liked, etc. These mechanisms are called complementation strategies" (Dixon 2006:1). In Belep, there are no clear instances of complementation where a clause acts as an argument of a predicate. Instead, there are a number of complementation strategies, which indicate semantic dependency without any markers of morphosyntactic dependency. Belep complementation strategies, and evidence for a lack of a true complement clause construction, will be discussed in §7.2.

Some combinations of clauses in Belep use case markers (§6.3) or determiner suffixes (§4.3.2) as morphosyntactic indicators. However, most coordinate constructions, complementation strategies, and relative clause constructions in Belep are accomplished by means of linkers, a Belep word class (§3.2.4). Belep linkers precede the constituent that they mark as coordinated or semantically subordinated-most linkers are capable of marking either a clause or a noun phrase; in the latter case, they function as discourse markers. Many linkers are simple clitics (Zwicky 1977), such that they have both a full and an encliticized form. The linkers used in clause-combining are represented in Table 98. Note that disjunctive linker \(a i\), additive linker \(k a\), and subjunctive linker \(m a\) also have roles in noun phrase conjunction (§4.4).

Table 98: Linkers used in clause-combining
\begin{tabular}{|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Form } & Gloss & \multicolumn{1}{|c|}{\begin{tabular}{c} 
Functions in clause- \\
combining
\end{tabular}} & Other functions of same form \\
\hline ai & 'or' & disjunctive linker & question tag, particle \(a\) a ' 'no' \(^{\prime}\) \\
\hline enyi (enyixi) & 'if' & conditional linker & noun phrase focus enclitic \\
\hline ka, =xa & 'LK' & \begin{tabular}{l} 
conjunctive linker, \\
topicalizer, subordinator
\end{tabular} & no \\
\hline ka me & 'then' & sequential linker & \\
\hline kara & 'well' & evidential linker & \\
\hline ki, =xi & 'REL' & \begin{tabular}{l} 
deontic subordinator, \\
relativizer
\end{tabular} & \\
\hline ma & 'LK4' & \begin{tabular}{l} 
subjunctive subordinator, \\
correlational linker
\end{tabular} & noun \(m a\) - 'similarity' \\
\hline mo & 'LK3' & causal linker & verb \(m o\) 'to live, to stay' \\
\hline to, =ro & 'when' & adverbial linker & \\
\hline toma, =roma & 'but' & adversative linker & \\
\hline
\end{tabular}

\subsection*{7.1 Clausal coordination}

Clausal coordinate constructions, as defined by Haspelmath (2007) above, are described as those constructions where "a main clause is linked to a second clause...each of which can stand by itself" (Dixon 2006:2), with the "optional omission of some material that would have been repeated. The non-identical material in the two original sentences [is] called the coordinands" (Drellishak 2004:17, emphasis in original). Conjunction, disjunction, causal coordination, and adversative coordination are the four basic types of clausal coordination which are normally distinguished cross-linguistically (Haspelmath 2004:5-6). Coordination strategies can be grouped into asyndetic-lacking an overt coordinating morpheme-or syndetic, where the coordinating morpheme is called a coordinator (Haspelmath 2007:6).

In Belep, both asyndetic and syndetic coordination occur. Example (1) shows an instance of asyndetic coordination, also called juxtaposition (Drellishak 2004).

\section*{(1) Te ta la teâmaa la Yade, te tu la tamwa pwalaic. \\ te= ta=la teâma=la Yade \\ 3SG.SUBJ= go.UH=NOM high.chief=LOC Yade \\ \begin{tabular}{llll} 
te \(=\) & tu=la & tamwa & pwalaic \\
3SG.SUBJ \(=\) & \begin{tabular}{l} 
go.DH=LOC
\end{tabular} & \begin{tabular}{l} 
woman
\end{tabular} & one
\end{tabular}}
'The chieftain of Yade went up, a woman went down.'
Yal-20092011-AW6_0080-0081
In Belep, syndetic coordination is vastly more common than juxtaposition and can be characterized as monosyndetic-using only one coordinator which is prepositive on the second coordinand (as defined by Haspelmath 2007:6). The Belep coordinators all fall into the word class of linkers. The most common coordinator is the conjunctive linker \(k a\) 'and', which has many functions (§7.1.1). Other coordinating linkers include disjunctive linker \(a i\) 'or' (§7.1.2), causal linker mo 'for' (§7.1.3), adversative linker toma 'but' (§7.1.4), and evidential linker kara 'well' (§7.1.5). See §4.4 for a description of noun phrase coordination.

\subsection*{7.1.1 Conjunctive linker \(\boldsymbol{k} \boldsymbol{a}\)}

Conjunctive linker \(k a\), glossed 'LK', is the most common and most versatile linker in Belep, where it primarily indicates "'And’-coordination" as described by Haspelmath (2007:1)-that is, coordination in which both of the coordinands are conceptualized as true. It is used in noun phrase coordination (see §4.4.3) and clausal subordination (§7.2.1), as well as clausal coordination where it conjoins events (§7.1.1.1) and topiccomment coordinands (§7.1.1.2). In these uses, \(k a\) is a simple clitic (Zwicky 1977), having both a free form \(k a\) and an encliticized form \(=x a ;{ }^{266}\) speaker say that these forms

\footnotetext{
\({ }^{266}\) Note that, though the encliticized form \(=x a\) is phonologically bound to the element that precedes it, it is syntactically bound to the clause that follows it and still qualifies as prepositive on the second coordinand, according to Haspelmath’s (2007:6) definition. This is not uncommon elsewhere in Belep; see §6.3.
}
are interchangeable. For example, both the free form \(k a\) in (2) and the encliticized form \(=x a\) in (3) may be used without a noticeable difference in meaning.

\section*{(2) Texa ta ka mu la mayariik xi pwemwa.}

'And he went up and moored on this side of the country.'
Yal-20092011-AW3_0047
(3) Teô tu ka înae yadan, te=ô tu=xa îna-e yada-n
3SG.SUBJ=REAL go.DH=LK make-SPC belongings-3SG.POSS
'He went down and did his magic,'
Yal-28072010-BGMCG-sousmarin_0052-0053
Another clearly related form is the verb group (§5.2) additive clitic \(=x a\), always glossed 'ADD', which is used in clausal coordination but which can never be interchanged with \(k a\). Its use in coordination will be discussed in (§7.1.1.3).

\subsection*{7.1.1.1 Event coordinator ka 'and’}

The most common use for \(k a\) is to conjoin predicates and clauses. This can occur conjoining several verbs, as in (4) - (6). In (4) below, \(k a\) conjoins the two verbs cavac 'to depart' and najie 'to leave someone'.
(4) La cavac ka najiac, ka naji pulu.
\begin{tabular}{lllllll}
\(\mathbf{l a}=\) & cavac & ka & naji-aya & ka & naji & pulu \\
3PL.SUBJ \(=\) & depart & LK & leave-2PL.ABS & LK & leave & language
\end{tabular}
'They went away and left you, and left the language.'
Yal-14092011-PT2-avenir_0012
In (5), \(k a\) conjoins the verbs wiu 'to dine' and wânem 'to walk'.
(5) Teô wiu, kaô wânem.
te=ô wiu ka=ô wânem
3SG.SUBJ=REAL dine LK=REAL walk
'He dined, and walked.'
Yal-05092011-AP1_0038
In (6), \(k a\) conjoins the verbs \(c i\) 'to sit' and no- 'to peer'.
(6) La ci ka nodume,
\begin{tabular}{llll}
\(\mathbf{l a}=\) & ci & ka & no=du=me \\
3PL.SUBJ \(=\) & sit & LK & \begin{tabular}{l} 
peer=DIR.DH=CTP
\end{tabular}
\end{tabular}

\section*{ka kiyi karavaama to la ta.}
\begin{tabular}{lllll} 
ka & kiyi & karava-ma=ro & la= & ta. \\
LK & see.SPC & pirogue-AC=when & 3PL.SUBJ= & go.UH
\end{tabular}
'They sat and peered down here, and saw the pirogues going up.'
Yal-20092011-AW3_0045
Examples (7) and (8) below show the use of \(k a\) to conjoin multiple verb phrases. In (7), the verb phrases texa maac yi cawi 'he was hungry', bae noli 'ate that fish', and bae wagale 'ate their boat' (indicated by brackets) are conjoined with \(k a\).
(7) Ka mon, texa maac yi cawi ka bae noli,
\begin{tabular}{lllllll} 
ka & mon & \(\{\mathbf{t e}=\mathbf{x a}\) & \begin{tabular}{l} 
may=i \\
LK
\end{tabular} & \begin{tabular}{l} 
sawi \\
side.DH
\end{tabular} & 3SG.SUBJ=ADD & ka \\
die=GEN & hunger & LK & bite & no-li \(\}\) \\
fish-DET.A.PRX
\end{tabular}

\section*{ka bae wagale,}
ka \{bae waga-le\}
LK bite boat-3DU.POSS
'And then, he was hungry and ate \({ }^{267}\) that fish, and ate their boat,' Yal-01082010-MFD_0012-0013

In (8), the verb phrases uya la na mwa 'leave the house', tu la pao 'go outdoors', tu 'go down', mae 'sleep', and tale talan 'make his bed' are all conjoined with \(k a\).

\footnotetext{
\({ }^{267}\) Belep verb wiu 'to dine' is intransitive (§5.1.1), while verb bae 'to bite' is transitive (§5.1.3.1). Both may be translated into English as 'to eat'.
}
(8) Texa, teme uya la na mwa,
\begin{tabular}{lllll} 
te=xa & te=me & uya=la & na & mwa \\
3SG.SUBJ=ADD & 3SG.SUBJ=IRR & \begin{tabular}{ll} 
appear=LOC & interior
\end{tabular} & house
\end{tabular}
ka tu la pao.
\begin{tabular}{lll} 
ka & tu=la & pao \\
LK & go.DH=LOC & outdoors
\end{tabular}

Ka me tu ka mae, tale talan ka mae.
\begin{tabular}{llllllll} 
ka me me & tu & ka & mae & tale & tala-n & ka & mae \\
then & go.DH & LK & sleep & cover & bed-3SG.POSS & LK & sleep
\end{tabular} 'And he, he would leave \({ }^{268}\) the house, and go outdoors. And would go down and sleep, prepare his bed and sleep.'
Yal-28072010-BGMCG-lune_0011-0013

In most cases where \(k a\) is used to conjoin two or more predicates or clauses, it is ungrammatical to use a subject agreement proclitic on any clause but the initial one; this holds for both same-subject and different-subject coordination (although see an exception in (21) below). Normally, if speakers wish to coordinate clauses with the same subject, the subject proclitic must either be omitted from the second clause (9), or the additive clause-chaining enclitic \(=x a\) (§7.1.1.3) must be used (10). In the ungrammatical utterance in (11), the second of the clauses conjoined with \(k a\) contains a disallowed subject agreement proclitic.

\section*{(9) Na ta ka wiu.}
\begin{tabular}{lll} 
na= & ta & ka \\
1SG.SUBJ \(=\) & mo.UH \\
'I & LK & dine
\end{tabular}
Yal-03112011-IM1.wav - Yal-03112011-IM2.wav

\section*{(10) Na ta, naxa wiu.}
\begin{tabular}{|c|c|c|}
\hline na= & ta & na=xa \\
\hline 1SG.SUBJ= & go.UH & 1SG.SUBJ=ADD \\
\hline 'I go up, an & I dine. & \\
\hline
\end{tabular}

\footnotetext{
\({ }^{268}\) The Belep word uya is usually glossed 'to arrive' in deference to speakers' typical French gloss arriver 'to arrive, to happen'; however a more accurate gloss would be 'to cross a boundary into the speaker's view; appear'. Its opposite, nam 'to disappear', is more accurately glossed 'to cross a boundary and leave the speaker's view'. In example (7), the speaker makes his bed outside so that he can watch the moon. \({ }^{269}\) This clause was not checked for grammaticality with a native speaker; however, similar clauses appear in my corpus. For example:
}
(11) *na= ta ka na= wiu

1SG.SUBJ= go.UH LK 1SG.SUBJ= dine
*'I go up and I dine’
Yal-03112011-IM1.wav - Yal-03112011-IM2.wav
If speakers wish to conjoin clauses with different subjects, they must use the additive
clause-chaining enclitic \(=x a\) (§7.1.1.3) as shown in (12); the use of \(k a\) ' LK ' is ungrammatical (13).

\section*{(12) Na ta, texa wiu.}
\begin{tabular}{llll} 
na= & ta & te= \(\mathbf{x a}\) & wiu \\
1SG.SUBJ= & go.UH & 3SG.SUBJ=ADD & dine \\
'I go up, and s/he dines. \({ }^{270}\) &
\end{tabular}

> Yal-03112011-IM1.wav - Yal-03112011-IM2.wav

\section*{(13) *na= ta ka te= wiu \\ 1SG.SUBJ= go.UH LK 3SG.SUBJ= dine}
*'I go up and s/he dines'
Yal-03112011-IM1.wav - Yal-03112011-IM2.wav

\subsection*{7.1.1.2 ka in topicalization}

Linker \(k a\) also serves the function of linking a topic and a comment. In (122), the Topic \(+k a+\) Comment structure is used twice: \(k a\) follows the topic âyimi ulac 'the oldest boy' to introduce the comment naran ni Teâ 'his name was Teâ'; then \(k a\) follows the topic ba pwadu 'the second [boy]' to introduce the comment mweyau '[it was] Mweyau.'


Yal-28072010-BGMCG-tahitian_0073
\({ }^{270}\) This clause was not checked for grammaticality with a native speaker; however, similar clauses appear in my corpus. In the example below, the 3 SG subject proclitic \(t e=\) occurs twice; the first time, it indexes a pirogue, while the second time it indexes the chieftain. In the second instance, additive enclitic \(=x a\) is used rather than conjunctive linker \(k a\).
Nyami teme cavac, texa kuar ra teâmaa.
nya-mi te cavac te=xa kuar=a teâmaa DEM.IDF-DET.A.DST 3 SG.SUBJ=IRR depart 3 SG.SUBJ=ADD not.want=NOM high.chief 'When \(\mathrm{it}_{\mathrm{i}}\) [the pirogue] left, the chieftain \({ }_{\mathrm{j}}\) didn't want it to.'
\begin{tabular}{llll} 
Âyimi ulac, ka naran ni Teâ. & \\
\begin{tabular}{lllll} 
âyi-mi & ulac & ka & nara-n=i & teâ \\
man-DET.A.DST & be.old & LK & name-3SG.POSS=GEN & teâ
\end{tabular}\(l\)
\end{tabular}

Ka ba pwadu, ka Mweyau.
\begin{tabular}{lllll} 
ka & \(\mathbf{b a}=\) & pwadu & ka & mweyau \\
LK & ORD \(=\) & two & LK & mweyau
\end{tabular}
'The oldest boy, his name was Teâ. And the second, it was Mweyau.'
Yal-20092011-AW1_0014-0016
In (15), \(k a\) links the topic \(u v i\) ' yams' with the comment te tao ci lexeda' 'they were still sitting up there'.
(15) Toma uvi, ka te tao ci lexeda.
\begin{tabular}{lllll} 
toma & uvi & ka=re & tao= & ci=lexeda \\
but & yam & LK=3SG.SUBJ & HAB= & sit=UH
\end{tabular} 'But the yams, they \({ }^{271}\) were still sitting up there.'

Yal-28072010-BGMCG-igname_0077
In (16), \(k a\) links the topic âju 'people' with the comment jago la Ono 'there were many at Ono.'
(16) Toma âju, ka jago la Ono. toma âju ka jago=la Ono but person LK many=LOC Ono 'But the people, there were a lot of them at Ono.'

Yal-28072010-BGMCG-sousmarin_0072
In (17), \(k a\) appears twice: in line 1, it appears in its encliticized form linking the topic \(n a\) bwe Grande-Terre 'on the Mainland' with the comment Belep 'it's Belep'; in line 2, ka appears in its full form linking the topic na lexeng 'here' with the comment Bewa 'it's Bewa'.

\footnotetext{
\({ }^{271}\) There is no plural number in Belep (§4.2); uvi 'yam' in example (14) refers back to wela uvi 'their yams (to eat)' (see §4.1.4), which is translated into English as a plural noun.
}
(17) Toma, na bwe Grande-Terre ka Belep. toma na bwe [grandter]=xa Belep
but interior top Mainland.LN=LK Belep 'But, on the Mainland, [the name of the yam species] is Belep.'

2 Toma na lexeng ka Bewa.
toma na=lexeng ka Bewa
but interior=DC LK Bewa
'But here, it's Bewa.'
Yal-28072010-BGMCG-igname_0089-0092

\subsection*{7.1.1.3 Additive =xa 'ADD' in clause chaining}

As discussed above in §7.1.1.1 and §7.1.1.2, the conjunctive linker ka ' LK ', which serves as a prepositive coordinator on the second coordinand in clausal conjunction, is a simple clitic with free and bound forms. The additive verb group clitic \(=x a\) 'ADD', though clearly etymologically related to the conjunctive linker, has a separate use and function. Occurring only bound within the verb group preface (§5.2), additive \(=x a\) 'ADD' is not interchangeable with the form \(k a\), which is ungrammatical in this position. \({ }^{272}\) In these instances, \(=x a\) is encliticized to the subject agreement proclitic, creating a phonological word completely made up of clitics (§3.1.2.6). It is not uncommon for a coordinator of this sort to come in second position (Payne 1997). \({ }^{273}\)

The primary use of the verb group additive clitic \(=x a\) 'ADD' is in clause-chaining, the creation of a sequencing link with the clause that preceded it. Unlike coordination with \(k a\) (§7.1.1.1), clauses chained with additive \(=x a\) may alternate or recycle the subject agreement proclitic. For example, in (18), two clauses with different subject agreement proclitics are chained using enclitic \(=x a\) after the second subject agreement proclitic; no \(k a\) is used to conjoin them.

\footnotetext{
\({ }_{272}^{272}\) Additive \(=x a\) also occurs as a focus enclitic (see \(\S 6.8 .2 .2\) ).
273 "[S]ometimes in VO languages the coordinating conjunction follows the first element of the second clause" (Payne 1997:338).
}
(18) Te pae fusil sous-marin nie, avenaxa pan.
\begin{tabular}{lll} 
te \(=\) & pa-e & [pyzisumarın]=i-e \\
3SG.SUBJ \(=\) & take-SPC & \begin{tabular}{l} 
underwater.speargun.LN=GEN-3SG.ABS
\end{tabular}
\end{tabular}
avena=xa pan
3TRI.SUBJ=ADD go.TV
'He took his underwater speargun; and we went on.'
Yal-28072010-BGMCG-tahitian_0020-0021
In example (19), the subject and topic of lines 1-3 is one character (Coigo), but in line 4 the speaker changes the subject of the narration to a different character (Belep). As this switch in topic occurs, the speaker uses \(=x a\) on the new subject agreement proclitic, signaling a new chaining element.
(19) te înae yadan,
te= îna-e yada-n
3SG.SUBJ= make-SPEC belongings-3SG.POSS
2 panang, panang ngie, te înae.
panang panang=i-e te= îna-e
sorcery sorcery=GEN-3SG.ABS 3SG.SUBJ= make-SPC
3 Te înae ma teme maac ya Belep.
\(\begin{array}{lllll}\text { te }= & \text { îna-e } & \text { ma=re=me } & \text { may=a } & \text { Belep } \\ \text { 3SG.SUBJ }= & \text { make-SPC } & \text { LK4=3SG.SUBJ=IRR } & \text { die=NOM } & \text { Belep }\end{array}\)
4 Texa, Belep, âri te êna,
\begin{tabular}{lllll} 
te \(=\mathbf{x a}\) & Belep & âri= & te \(=\) & êna \\
3SG.SUBJ=ADD & Belep & NEG \(=\) & 3SG.SUBJ \(=\) & know.GNR
\end{tabular}
'he [Coigo] did his thing, sorcery, his sorcery-he did it. He did it so that Belep would die. And he, Belep, he didn't know.'

Yal-20092011-AW6_0026-0028
In example (20), \(=x a\) is used to chain multiple clauses with the same subject.
(20) Ka mon texa tame la,
\begin{tabular}{llll} 
ka & mon & te= \(\mathbf{x a}\) & ta=me=la \\
LK & side.DH & 3SG.SUBJ=ADD & go.UH=CTP=NOM
\end{tabular}

2 texa pame la,
\begin{tabular}{ll} 
te=xa & pa=me=la \\
3SG.SUBJ=ADD & go.TV=CTP=NOM
\end{tabular}

\section*{3 buny, texa waak,}
buny, te=xa waa-k
great.crested.tern 3SG.SUBJ=ADD DEM.MAN-DET.D.PRX
'And then up came the, came the, tern, and he was like...'
Yal-01082010-MFD_0013-0015
In (20), the same subject agreement proclitic is repeated multiple times with \(=x a\)
encliticized to it, though it always refers to the same referent. Example (21) below shows the differing uses of the additive linker and enclitic in clausal conjunction and chaining. It illustrates a point of possible confusion for the listener and immediate clarification by the speaker.
(21) To jier ka tame ka lexa wiu. Le puer ka lena wiu.
\begin{tabular}{lllllll} 
to & ji-er & ka & ta=me & ka & le=xa & wiu \\
call & give-3SG.ABS & LK & go.UH=CTP & LK & 3DU.SUBJ=ADD & dine
\end{tabular}
le= puer ka lena= wiu
3DU.SUBJ= cook LK 3PA.SUBJ= dine
'[Cebaba] called her [Kawo] and [she] came and they [2] dined. They [2] cooked and they [3] dined.'
Yal-20092011-AW1_0145

In (21), the speaker is telling a story about a man named Cebaba who is living with his grown daughter. As Cebaba woos a new wife, Kawo, the speaker narrates that to jier '[he] called her [Kawo]' and tame '[she] came'-these two clauses are conjoined with ka. Then the speaker adds that lexa wiu 'they [2] dined'. In this part of the story, enclitic \(=x a\) is used to indicate that the subject has changed, while events are still occurring sequentially. The next line le puer ka lena wiu 'they [2] cooked and they [3] dined' is a clarification: it is unclear which two of the three active participants (Cebaba, his
daughter, and Kawo) did the dining, and the speaker clarifies that it was Kawo and the daughter who prepared food and the three of them who ate it. This instance is an exception to the observation that two clauses with different subject agreement proclitics are not generally conjoined with \(k a\); it is likely allowed in this instance because the participants to which the two pronominals refer significantly overlap.

While it is clear that =xa 'ADD' has an important role in clausal coordination, the difference in meaning between use of \(=x a\) and use of conjunctive linker \(k a\)-as demonstrated by the availability of both (9) and (10) above-is unknown.

\subsection*{7.1.2 Disjunctive linker ai'or'}

The disjunctive linker ai 'or' is used in disjunctive clausal coordination-that is, coordination where only one of the coordinands is conceptualized as true-as well as in disjunctive noun phrase coordination (see §4.4.4). In example (153), ai conjoins the noun phrases \(y o\) '2SG.INDEP' and \(t i\) 'who?'.

\section*{(22) Jua yo ai ti? Kawo? jua yo ai ti Kawo truly 2SG.INDEP or who? Kawo 'Is it really you or who? Kawo?'}

Yal-20092011-AW1_0282
In example (47), ai conjoins the clauses tu ma âvae no 'go down and catch fish' and tu ma pae weji ânemar 'go down and get some troca to eat'.

\section*{(23) Tu ma âvae no,}
\begin{tabular}{llll} 
tu & ma & âva-e & no \\
go.DH & LK4 & fish.for-SPC & fish
\end{tabular}
ai tu ma pae weji ânemar.
\(\begin{array}{llllll}\text { ai } & \text { tu } & \text { ma } & \text { pa-e } & \text { we-ji } & \text { ânemar } \\ \text { or } & \text { go.DH } & \text { LK4 } & \text { take-SPC } & \text { food-1DU.INCL.POSS } & \text { top.snail }\end{array}\)
'Go down to catch fish, or go down to get some troca \({ }^{274}\) to eat.'
Yal-20092011-AW1_0065

\footnotetext{
\({ }^{274}\) See §4.1.4 on noun classifiers.
}

In example (227), ai coordinates the clauses teme bwagee 'he must turn around' and teme toveni wayap 'he must end the war'.
(24) Teme bwagee ai teme,
\begin{tabular}{llll} 
te \(=\mathbf{m e}\) & bwage-e & ai & te=me \\
3SG.SUBJ=IRR & return-3SG.OBJ & or & 3SG.SUBJ=IRR
\end{tabular}


Yal-20092011-AW4_0050
A phonologically reduced form of disjunctive linker \(a i, e i\), is used as a final tag for yesno questions, or to elicit feedback from the listener (§6.4.1). Note that the disjunctive linker \(a i\) 'or' is segmentally indistinguishable from the particle \(a i\) 'no'; however, the particle receives stress and undergoes stress-induced lengthening, while the linker is unstressed.

\subsection*{7.1.3 Causal linker mo 'for'}

Causal linker mo, glossed 'LK3', is used most basically in clausal coordination. As a prepositive coordinator on the second coordinand (according to Haspelmath's (2007:6) definition), mo links two predications which bear some causal or correlative relationship. Neither clause is grammatically subordinate to the other-both are fully independent clauses. The clause introduced by mo may provide a purpose, a reason, an excuse, or an alternative. For example, in (25), the mo-clause te mwany nya doo 'the earth is bad' is provided as an explanation for why it is âlalic 'impossible' to plant crops there.
(25) Alalic, mo te, te mwany nya doo. âlalic \(\underline{\mathbf{m o}}=\) re te \(=\quad\) mwany \(=\mathbf{a}\) doo impossible LK3=3SG.SUBJ 3SG.SUBJ= be.bad=NOM earth 'It's impossible, for the, the earth is bad.'

Yal-20092011-AW6_0116

In (26), the clause introduced by mo provides an explanation for the listener's expected question.
(26) Ari te baele mo te tele.
\begin{tabular}{llll} 
âri \(=\) & te \(=\) & bae-le & \(\mathbf{m o}=\) re
\end{tabular}\(\quad\)\begin{tabular}{l} 
te-le \\
NEG \(=\) \\
3SG.SUBJ \(=\) \\
bite-3DU.ABS
\end{tabular}\(\quad\)\begin{tabular}{l} 
LK3=3SG.SUBJ \\
plant-3DU.ABS
\end{tabular}
'He didn't eat them for he planted them.'
Yal-28072010-BGMCG-lune_0047
In (26), the mo-clause te tele 'he planted them' is provided as an explanation for âri te baele 'he didn't eat them'. In (27), mo introduces only a noun phrase, buâny 'stones', which provides the explanation for âlalic 'it's impossible'.
(27) Yuи, mais âlalic, mo buâny.
\begin{tabular}{lllll} 
yu-u & mais & \begin{tabular}{l} 
âlalic \\
dig-DETR
\end{tabular} & \begin{tabular}{lll} 
but.LN & mo & \begin{tabular}{l} 
buâny \\
impossible
\end{tabular} \\
sK3
\end{tabular}
\end{tabular} '[They] dug up everything, but it was impossible because of the stones.'

Yal-28072010-BGMCG-sousmarin_0111
In example (28), the mo-clause ji âma avan 'we are brothers' provides an explanation for na kuar ri ji wayap 'I don't want us to make war'.
(28) «Ai, na kuar ri ji wayap, mo ji, ji mewu, ji âma avan.»
\begin{tabular}{llllll}
\(\mathbf{a i}\) & \(\mathbf{n a}=\) & \(\mathbf{k u a r}=\mathbf{i}\) & \(\mathbf{j i =}\) & wayap & \(\mathbf{m o}\) \\
no & 1SG.SUBJ \(=\) & \(\mathbf{j i}\) \\
not.want=GEN & 1DU.INCL.SUBJ= & make.war & \(\frac{\text { LK3 }}{}\) & 1DU.INCL.INDEP
\end{tabular}
\(\begin{array}{llll}\mathbf{j i =} & \text { mewu } & \mathbf{j i =} & \text { âma= }\end{array} \begin{aligned} & \text { ava-n } \\ & \text { 1DU.INCL.SUBJ }= \\ & \text { genus }\end{aligned}\) 1DU.INCL.SUBJ \(= \begin{cases}\text { DYAD }= & \text { sibling-3SG.POSS }\end{cases}\)
"'No, I don't want us to make war, for we, we are the same, we are brothers.""
Yal-20092011-AW4_0033

In addition to the clausal coordination function of \(m o\), it also serves to introduce clauses or noun phrases which provide an explanation. At the beginning of an intonation unit, mo serves as a discourse marker indicating that the purpose of what follows is to answer a potential question of the listener's. In (29), it occurs twice, in lines 2 and 4.
\begin{tabular}{llll} 
ai & \(\mathbf{m 0}\) & \begin{tabular}{l} 
bwa \(=\)
\end{tabular} & \begin{tabular}{l} 
tu=lexedu=la \\
no
\end{tabular}
\end{tabular}
na yewa-ri-li
interior time-3GNR.POSS-DET.A.PRX
'No, for there still were some down there back then.'
\(4 \quad\) BG: Êê, mo purur ri âmi la bwa modame la yak xa Wayibole.

bwa= mo=da=me=la ya-x=a Wayibole

CONT= live=DIR.UH=CTP=LOC DEM.LOC-DET.D.PRX=LOC Wayibole 'Yeah but, because they were still living up here at Wayibole.'

Yal-28072010-BGMCG-sousmarin_0102
In (29), \(m o\) is used at the beginning of an intonation unit in lines 2 and 4, where it
introduces a clause which explains the reason for the speaker's disagreement. In (30), mo is used to introduce the noun phrase answer to a question-word question.
(30) Ti li âmi kawu Fédération ?
\(\mathbf{t i = l}\) â-mi kawu fédération
who=GEN DEM.NEW-DET.A.DST guardian Federation.LN
'Who is the president of the [Women's] Federation?'
Mo Larisa.
mo Larisa
LK3 Larisa
'It's Larisa.'
Yal-05102010-PT1.wav - Yal-05102010-PT3.wav

In (31), after a digression to explain the habits and appearance of kawina 'firefly', the speaker returns to the topic of his story with a clause prefaced by mo.
(31) Kara mo yer, te câye, nyan, ka kawina.
\begin{tabular}{llllllll} 
kara \\
well & mo & yer & te \(=\) & câye & nya-n & ka & kawina \\
3SG.INDEP & 3SG.SUBJ \(=\) & \begin{tabular}{ll} 
change & mother-3SG.POSS.SPC
\end{tabular} & LK & firefly
\end{tabular} 'Well, so her, she changed, his mother did, into a firefly.'
Yal-20092011-AW5_0116

In general, in both its clausal coordination and its discourse marking functions, mo is characterized as introducing an explanatory or clarifying predication. Its likely etymological origin is the full verb mo 'to live, to stay' and it is likely also related to the modal use of \(m o\) in a serial verb construction (§5.9.3).

\subsection*{7.1.4 Adversative linker toma 'but'}

Adversative linker toma 'but' is used to introduce a contrasting or unexpected element, whether a noun phrase or a clause. In (32), the clause introduced by toma contrasts with the preceding clause.
(32) Tamwali, tamwa la Belep, toma te yamw mwa Pwewo.
\begin{tabular}{lll} 
tamwa-li & tamwa=la & Belep \\
woman-DET A.PRX & woman=LOC & Belep
\end{tabular}
woman-DET.A.PRX woman=LOC Belep
\begin{tabular}{llll} 
toma & te \(=\) & \begin{tabular}{l} 
yamw=a \\
but
\end{tabular} & \begin{tabular}{l} 
Pwewo \\
3SG.SUBJ \(=\)
\end{tabular} \\
marry=LOC
\end{tabular}\(\quad\)\begin{tabular}{l} 
Pouébo
\end{tabular}
'This woman was from Belep, but she married in Pouébo.'
Yal-20092011-AW2_0016

In (33), the clause introduced by toma contrasts with the preceding clause.
(33) Te u parie toma bwa âri ave âva lie.
\begin{tabular}{lll}
\(\mathbf{t e}=\) & \(\mathbf{u}=\) & pari-e \\
3SG.SUBJ \(=\) & DUB \(=\) & tell.TR-3SG.ABS
\end{tabular}

'He sort of told about it, but we never did fish with it.'
Yal-28072010-BGMCG-hamecon_0089
In (34), toma (line 3) introduces a noun phrase tayamo 'old woman', which is an unexpected element in this story-the two women in the story were expecting to see a baby.

Le nodame ka kiyi mwija pwalaic
\begin{tabular}{llllll} 
le & no=da=me & ka & kiyi & mwija & pwalaic \\
3DU.SUBJ \(=\) & \begin{tabular}{l} 
keer=DIR.UH=CTP
\end{tabular} & LK & see.SPC & thing & one
\end{tabular}

2 to te uya, uya la na mwa,
\begin{tabular}{|c|c|c|c|}
\hline to \(=\) re & uya & uya=la & na \\
\hline when=3SG.SUBJ & ar & appear=LOC & interior \\
\hline
\end{tabular}

\section*{3 ma te tu, toma tayamo !}
ma=re tu toma tayamo

LK4=3SG.SUBJ go.DH but old.woman
'They looked up and saw something appearing, coming out of the house to come down, but it was an old woman!'

Yal-28072010-BGMCG-tayamu_0220-0222

\subsection*{7.1.5 Linker kara 'well'}

The Belep linker kara 'well', like its English counterpart, is used to negotiate common ground (Jucker 1993). It normally occurs when speakers try to establish a shared frame of reference. Though this function is not normally included in types of coordination, kara seems to have some uses similar to other coordinators; it often occurs concurrently with mo 'LK3’ (§7.1.3). In example (35), kara acts as a linker between a topic nyali, premier vayi 'that one, the first cow' and a comment, âria yadan 'he doesn't have any clothes on'.
(35) Bwa kaxi! Nyali, premier vayi, kara mo âria yadan. bwa= kaxi nya-li [premie] vayi CONT= look DEM.IDF-DET.A.PRX first.LN cow.LN kara mo âria yada-n well LK3 NEG.EX belongings-3SG.POSS 'Hey! That one, the first cow, well he doesn't have any clothes on.'
Yal-05102010-MTAD_16:51-16:55

The use of kara in the topic-comment construction in (35) indicates that the speaker is directing her interlocutor's attention to a shared referent before she continues. Another example of the negotiation of common ground using kara occurs in (36), where two characters in a narrative-Ciaup, the chief of Nic, and his wife Kawo-are animated by
the speaker. Ciaup uses kara twice (in lines 1 and 3 ) while trying to establish common ground with Kawo, who has just come back from the dead.
(36) "Naok.» "Kara mo na tame paeo."
\begin{tabular}{llllll} 
nao-k & kara & mo & na= & ta=me & pa-e- \\
1SG.INDEP-DET.D.PRX & well & LK3 & 1SG.SUBJ= \(=\) & go.UH=CTP & \begin{tabular}{l} 
take-SPC-2SG.ABS
\end{tabular}
\end{tabular} '[Kawo:] "Here I am." [Ciaup:] "Well then, I've come to take you.""

2 Te wali u le teâmaa, «Naok! »
\begin{tabular}{lllll}
\(\mathbf{t e}=\) & wa-li & \(\mathbf{u}=\mathbf{l e}\) & teâmaa & nao-k \\
3SG.SUBJ \(=\) & DEM.MAN-DET.A.PRX & \begin{tabular}{l} 
toward=DAT
\end{tabular} & high.chief & 1SG.INDEP-DET.D.PRX
\end{tabular} 'She said to the chief, "Here I am!""

3 «Kara na tame paeo
kara na= ta=me pa-e-o
well 1SG.SUBJ= go.UH=CTP take-SPC-2SG.ABS
'[Ciaup:] "Well I've come to take you'
4 ma ji tu la pwemwaji.»
ma \(\mathbf{j i} \quad\) tu=la pwemwa-ji
LK4 1DU.INCL.SUBJ= go.DH=LOC village-1DU.INCL.POSS
'so that we go back home.""
Yal-20092011-AW1_0303-0304
In (36), the speaker uses kara 'well' to indicate the character's surprise and acceptance of the news that Kawo has come back to life.

Example (37) shows the use of kara (line 4) between a digression and a return to the topic at hand, where the purpose of the digression is to make sure the speaker and listener share the same point of reference.

2 BG: Bwayayo ai ?
Bwayayo ei
Bwayayo TAG
'Wasn't it Bwayayo?'
3 CG: Manya, kara, toma na pwayili ka le mo li, naran ni Bwayayo.
\begin{tabular}{lllll} 
manya & \(\frac{\text { kara }}{\text { wait }}\) & \begin{tabular}{l} 
toma \\
well
\end{tabular} & \begin{tabular}{l} 
na \\
interior
\end{tabular} & \begin{tabular}{l} 
pwayi-li \\
inhabited-DET.A.PRX
\end{tabular}
\end{tabular}

4
ka le= mo=li nara-n=i Bwayayo

LK 3DU.SUBJ= live=GEN name-3SG.POSS=GEN Bwayayo
'Wait, well, but in the place where they lived, it was called Bwayayo.'
Yal-28072010-BGMCG-tayamu_0007-0009
Here the speakers use kara to negotiate their common knowledge.

\subsection*{7.2 Complementation strategies}

All languages have some construction "for stating what a proposition is which is seen, heard, believed, known, liked, etc." (Dixon 2006:1). In many languages, this function is served by complementation, where "certain verbs...can take a clause, instead of [a noun phrase] as a core argument" (Dixon 2006:1). These complement clauses are typically divided into finite and non-finite types (Payne 1997); finite, or s-like, complements, may be indicative or subjunctive, and non-finite complements may include infinitives and participles (Noonan 2007:75). \({ }^{275}\)

In Belep, there is no evidence of clauses which act as arguments of other clauses. For example, in (38) - which requires a complement clause to translate it into Englishthere are two independent clauses, texa noxeve 'he asked us' and avena pan 'we go'.

\footnotetext{
\({ }^{275}\) Noonan (2007) also lists parataxis and nominalizations as types of complement clause; however, they would be more accurately termed complementation strategies, as Dixon (2006:7; footnote) points out.
}

\section*{Texa noxeve ma avena pan,}
\begin{tabular}{lllll}
\(\{\mathbf{t e}=\mathbf{x a}\) & noxe-ve \(\}\) & ma & \{avena= & pan \(\}\) \\
3SG.SUBJ=ADD & \begin{tabular}{lll} 
solicit.TR-1DU.EXCL.ABS
\end{tabular} & LK4 & 1PA.EXCL.SUBJ= & go.TV
\end{tabular} 'And he asked us to go,' (lit. 'And he asked us [2] and we [3] go,')

Yal-28072010-BGMCG-tahitian_0011

The second clause avena pan is not an argument of the first clause; that position is filled by the absolutive pronominal suffix -ve (see §5.6, §5.1.3). There are no restrictions on aspect or modality in the second clause. The order of the clauses can also be reversed without a significant change in meaning, as in (39) and (40) below.
(39) Âri na ênae puur ma na tume.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & na= & êna-e & & ma & \{na= & \\
\hline NEG= & GG.SUB & now-SP & origin-3GNR.POS & LK4 & 1SG.S & go. \(\mathrm{DH}=\mathrm{C}\) \\
\hline
\end{tabular} 'I don't know why I came down here.' (lit. 'I don't know the reason that \({ }^{276}\) I came down here.')
Yal-03112011-IM1.wav - Yal-03112011-IM2.wav
(40) Ma te cavac, ka âri na ênae puur.
\begin{tabular}{lllllll}
\(\boldsymbol{m a}\{=\mathbf{=} \mathbf{=}=\) & cavac \(\}\) & ka & \multicolumn{1}{l}{ âri= } & na= & êna-e & puu-r \(\}\) \\
LK4 \(=3\) SG.SUBJ \(=\) & depart & LK & NEG \(=\) & 1SG.SUBJ \(=\) & know-SPC & origin-3GNR.POSS
\end{tabular} 'The reason why she left is not evident.' (lit. 'That she left, I don't know the reason.')

In (39) and (40), the absolutive argument slot of the verb êna 'to know' is filled by the noun puur 'origin'; \({ }^{277}\) the clauses marked by \(m a\) in both examples are independent and do not act as arguments of âri na ênae puur 'I don't know the reason'. There is, in fact, no morphosyntactic basis for distinguishing clauses such as (38) - (40) from instances of clausal coordination (§7.1). A similar situation holds for South Efate (a language of Vanuatu), where "in general subordinate clauses display no features that distinguish them

\footnotetext{
\({ }^{276}\) In English this clause must be translated as a relative clause; however, it is not one in Belep. See \(\S 7.3\) on relative clauses.
\({ }^{277}\) The noun puu-r 'origin' can refer both to a cause or purpose and to an ancestor.
}
from other clauses, apart from the subordinators that link them to the preceding main clause" (Thieberger 2006:303). \({ }^{278}\)

In the absence of morphosyntactic cues, other scholars of Oceanic languages have distinguished coordination from complementation based on a number of tests. Bril (2002) distinguishes Nêlêmwa hypotaxis from complementation using patterns in the variability of word order (circumstantials can precede the principal they modify, while complements must follow their principal), and she distinguishes complements from conjoined clauses based on restrictions on coreference between the matrix and the subordinate clause. Dixon (1995) argues that complement clauses in Fijian have all the properties of a main clause subject or object, including being able to undergo passivization. None of these tests are particularly helpful in Belep; restrictions on co-reference do not coincide easily with semantic distinctions, and there is no passive construction.

Belep is not unique in its lack of complement clauses. Many languages of Australia, such as Dyirbal, lack complementation (Dixon 1995), as does colloquial Indonesian (Englebretson 2003). Instead, in these languages, alternate grammatical means are employed for "linking a PRIMARY-B verb \({ }^{279}\) and the verb describing the action or state that the Primary-B verb refers to" (Dixon 1995:176). The full set of constructions which are used cross-linguistically for this function are called complementation strategies by Dixon \((1995,2006)\) and he divides them into three types: 1) nominalizations of the second verb, 2) apposition, or serial verb constructions, and 3) separate clauses which are linked together (Dixon 1995:179). The ways in which two

\footnotetext{
\({ }^{278}\) Note, however, that Thieberger (2006) analyzes these subordinate clauses in South Efate as complements.
279 "PRIMARY-B verbs describe actions or states that can relate to things or to other actions or states" (Dixon 1995:176)
}
clauses can be linked are subdivided further into coordinate and non-embedded subordinate constructions, complement clause constructions, and relative clause constructions (Dixon 1995:180).

Though Belep lacks complementation, it makes use of a variety of complementation strategies. The primary complementation strategy in Belep is nonembedded subordinate constructions, which are not morphosyntactically distinguishable from clausal coordination (§7.1). \({ }^{280}\) I will use the term subordination, which is also used in the grammars of Nêlêmwa (Bril 2002) and South Efate (Thieberger 2006), for these constructions, though it should be understood that the subordination in Belep is merely semantic, rather than grammatical. Subordinating morphemes will be referred to as subordinators; in Belep, these include linkers ka (§7.2.1), ma (§7.2.2), to (§7.2.3), enyi (§7.2.4), \(k a m e(\S 7.2 .5)\), and \(k i(\S 7.2 .6)\), as well as the genitive case marker \(=l i(\S 7.2 .7)\). Most subordinators may introduce either a clause or a noun phrase. Other complementation strategies used in Belep include relative clauses and other constructions using puur (§7.2.8), serial verb constructions (§7.2.9), and nominalizations (discussed in §3.5.2).

Both Nêlêmwa (Bril 2002) and Fijian (Dixon 1995) distinguish actual and virtual complementizers. Though there is no complementation in Belep, subordinators can generally be characterized as realis or irrealis, as in Table 99.

\footnotetext{
\({ }^{280}\) It is perhaps a similar characteristic that has led Bril (2002) to conclude that, in closely-related Nêlêmwa, the distinction between clausal coordination and clausal subordination is not clear-many clausal coordinators also have subordinating functions.
}

Table 99: Modality of subordinators
\begin{tabular}{|l|l|}
\hline Realis & Irrealis \\
\hline ka 'LK' & enyi 'if' \\
\hline ka me 'then' & ki 'REL' \\
\hline to 'when' & \(=\mathrm{li} /=\mathrm{i}\) 'GEN' \\
\hline & ma 'LK4' \\
\hline
\end{tabular}

In general, noun phrases and clauses marked with a realis subordinator reference instances of perception, logical progression, and the knowledge of past eventspredications speakers might wish to mark as instantiated in reality. Clauses marked with an irrealis subordinator tend to incorporate hypotheticals, deontic or conditional modalities, and future events-predications which do not necessarily have instantiation in reality. Examples of the use of these subordinators are given in the following sections.

\subsection*{7.2.1 Linker \(k a\) in subordination}

Conjunctive linker \(k a\) 'LK' is used in noun phrase coordination (§4.4.3) and clausal coordination, as discussed above in §7.1.1. Another function of \(k a\) is as a realis subordinator for discursive verbs and verbs of perception, as for example in (41) where linker \(k a\) acts as a subordinator after kiya 'to see'.
(41) Toma yena ja âmu kiyau ka tuya avar ki înau.
\begin{tabular}{lllll} 
toma & yena & \(\{\mathbf{j a}=\) & âmu \(=\) & kiya-u \(\}\) \\
but & now & 1 1PL.INCL.SUBJ \(=\) & PRF \(=\) & see-DETR
\end{tabular}
ka \(\quad\{\) tuya \(\quad\) avari=xi \(\quad\) ina-u \(\}\)
LK EX.GNR other=REL make-DETR
'But now we have seen that there are others who make them.' (lit. 'But now we have seen it and there are others who make them.')

Yal-28072010-BGMCG-hamecon_0051
In (41), the first clause ja âmи kiyau 'we have seen' is a full independent clause; the detransitive suffix \(-u\) on the verb kiya 'to see' precludes the presence of an absolutive argument. The second clause tuya avar ki innau 'there are others who make them', though introduced by subordinator \(k a\), is also a fully independent clause and does not act as the
absolutive argument of the first clause. Note that morphosyntactically there is no basis for distinguishing subordination with \(k a\) from coordination; the difference is purely semantic.

Another example of \(k a\) acting as a subordinator is found in (35), where the first verb is the intransitive param 'to forget'. Note that when \(k a\) is used as a subordinator here, coreferential subject proclitics appear in both the first and second clauses, which is ungrammatical in coordination with \(k a\) (§7.1.1.1).
(42) Te param ka te turowinao,


3SG.SUBJ= forget.NTR LK 3SG.SUBJ= insult-1SG.ABS
'He forgot that he had insulted me,' (lit. 'He forgot and he insulted me,')
Yal-28072010-BGMCG-tahitian_0329
In (43), \(k a\) is used as a subordinator after êna 'to know'. Here its cliticized form \(=x a\) is used rather than its full form (see §3.1.2.6, §3.2.4).
na êna ka âbur la âva li yeek, \{na= êna\}=xa \{âbura la= âva=li yeek\} 1SG.SUBJ= know.GNR=LK side.UH 3PL.SUBJ= go.fishing=GEN plant 'I know that, before, they fished with wooden [ones].' (lit. 'I know and before they fished with wooden [ones].')

Yal-28072010-BGMCG-hamecon_0075-0076
In (44), \(k a\) is used as a subordinator after câyi 'to change'. Here the second clause is the predicate nominal buâny 'stone'.
(44) texa câyi ka buâny.
\begin{tabular}{|c|c|}
\hline \{te=xa & \\
\hline 3SG.SUBJ=ADD & change \\
\hline
\end{tabular}
'and he turned into a stone.' (lit. 'and he changed and a stone.')
Yal-19092011-PA_0071
Linker \(k a\) is frequently used as a quotative for indirect speech, where it acts as a subordinator after the intransitive verb âri 'to say', as in (45) and (232).

Toma yer, te âri ka cexeen.
toma yer \(\left\{\mathbf{t e}=\quad\right.\) âri\} \(\frac{\text { ka }}{\mathrm{LK}}\) \{cexeen\}
but 3SG.INDEP 3SG.SUBJ= say \(\overline{\mathrm{LK}}\) sacred 'But him, he says that it's forbidden.'

Yal-20092011-AW4_0048
(46) Avexa âri ka, ai.
\begin{tabular}{llll}
\(\left\{\begin{array}{lll}\text { \{ave=xa } & \text { âri } & \text { ka }\end{array}\right.\) & \begin{tabular}{l} 
\{ai
\end{tabular} \\
1DU.EXCL.SUBJ=ADD & say & \(\frac{\mathrm{LK}}{\mathrm{LK}}\) & no
\end{tabular}
'And we said no.'
Yal-28072010-BGMCG-tahitian_0277

\subsection*{7.2.2 Linker \(m a\) in subordination}

Linker ma, glossed 'LK4', is polyfunctional. It is used in inclusory (§4.4.5) and comitative (§4.4.6) noun phrase coordination, and it also functions as a subordinator when non-embedded subordinate clauses are used as a complementation strategy. These include periphrastic causative constructions (§6.9.1), as well as clauses (§7.2.2.1) and predicate nominals (§7.2.2.2) which express an intention or goal.

\subsection*{7.2.2.1 Subjunctive ma 'so that'}

Linker \(m a\) acts as a subordinator for subjunctive clauses. Though subjunctive has been defined variously as a modality closer to irrealis than realis (Payne 1997:245) and as a type of complement clause which is sentence-like and non-indicative (Noonan 2007:61), I use it in this work to refer to a non-embedded subordinate clause which is optative, desiderative, or expresses an intended result. Such clauses are marked with linker \(m a\) in Belep, which in these instances could be translated as 'so that'. In most instances, Belep subjunctive clauses are best translated into English with an infinitive verb. For instance, example (47) shows the clause temere puae pwâna mwa, literally 'he will truly open the door', which is marked with subjunctive ma. In coordination with the preceding clause teme yamayaap 'he will try his best', the semantic content of the ma-
clause is interpreted as dependent on that of the prior clause, necessitating the translation 'He will try his best to truly open the door'.

\section*{Teme yamayaap ma temere puae pwâna mwa.}
\(\{\) te=me yamayava \(\} \quad\) ma \(\{=r e=m e=r e \quad\) pua-e pwâna mwa\} 3SG.SUBJ=IRR concentrate LK4=3SG.SUBJ=IRR=ACT open-SPC hole house 'He will try his best to truly open the door.' (lit. 'He will concentrate and he will truly open the door.')
Yal-25072010-PT-homily_0053

Another example of a subjunctive ma-clause is shown in (48). Here the predicate of the first clause is the verb phrase leô pae wagale ûjep 'they took their sugar cane boat', and the subjunctive clause is leô tu ka âva 'they went down and fished'. The implication is that the first clause was performed with the intention to perform the second clause.
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{4}{|l|}{Leô pae wagale ûjep, ma leô tu ka âva.} \\
\hline \(\boldsymbol{\{ l} \mathbf{l}=\mathbf{0}\) & pa-e & waga-le & ûj \\
\hline 3DU.SUBJ=REAL & take-SPC & boat-3DU.POSS & sugar.ca \\
\hline
\end{tabular}
\begin{tabular}{llll} 
ma & \(\{\mathbf{l e}=\hat{\mathbf{0}}\) & \(\mathbf{t u}=\mathbf{x a}\) & âva \\
LK4 & 3DU.SUBJ=REAL & go.DH=LK & go.fishing
\end{tabular}
'They took their sugar cane boat to go down and fish.' (lit. 'They took their sugar cane boat and went down and fished.')
Yal-01082010-MFD_0006

Note that the clauses coordinated with \(m a\) may have different subjects. For example, in (49), the first clause and the subjunctive \(m a\)-clause do not have co-referential subject agreement proclitics.
(49) Lami maac, la nawela ma la ci la bwe mweogo,
\begin{tabular}{llll} 
la-mi & maac & \(\{\mathbf{l a}=\) & nawe-la \(\}\) \\
DEM.PL-DET.A.DST & die & 3PL.SUBJ \(=\) & \begin{tabular}{l} 
deposit-3PL.ABS
\end{tabular}
\end{tabular}
\(\frac{\text { ma }}{\text { LK4 }}\)\begin{tabular}{l}
\(\{\mathbf{l a}=\) \\
3PL.SUBJ \(=\)
\end{tabular} \begin{tabular}{lll}
\(\mathbf{c i}=\mathbf{l a}\) \\
sit=LOC
\end{tabular}\(\quad\)\begin{tabular}{l} 
bwe \\
top
\end{tabular}\(\quad\)\begin{tabular}{l} 
mweogo \(\}\) \\
mountaintop
\end{tabular}
'The dead, they left them to lie on the mountaintop,'

> Yal-20092011-AW3_0069

Though both clauses contain the subject proclitic \(l a=\) ' 3 PL.SUBJ', they refer to different groups ('the surviving Belema warriors' and 'the dead' respectively). In (50), multiple
subjunctive \(m a\)-clauses occur. In line 2 , the subjunctive \(m a\)-clause \(y o\) wânem 'you walk' provides an intention for the performance of the first clause, bae weemw pida wiu lexeng 'have some of this food here'. An alternate subjunctive clause is begun in line 2 and continued in line 3 , and is further explicated by another subjunctive clause in line 3 .
(50) "Pana tame ka bae weemw pida wiu lexeng.
\begin{tabular}{llllll} 
pana= \(=\) & ta=me=xa & \{bae & wee-mwa & pida & wiu=lexeng \(\}\) \\
go.TV \(=\) & go.UH=CTP=LK & bite & food-2SG.POSS & tip & meal=LOC.DC
\end{tabular}

2 Ma yo wânem, ma yo-tuu ûjemw ma yo wânem. »
\(\left.\frac{\text { ma }}{\text { LK4 }} \underset{\text { 2SG.SUBJ }=}{\{\mathbf{y o}=} \underset{\text { walk }}{\text { wânem }}\right\} \quad \frac{\text { ma }}{\text { LK4 }} \quad \underset{\text { 2SG.SUBJ }=}{\text { yo }=}\)

"'Come on up here and have some of this food here. So that you can walk, so that you- you have the strength to walk."
Yal-05092011-AP1_0035-0036

In lines 2 and 3 of (50), two coordinated \(m a\)-clauses provide an intention for the first clause bae weemw pida wiu lexeng 'have some of this food here'. The ma-clause in line 3, yo wânem 'you walk' is semantically dependent on the ma-clause in lines 2-3, tuu ujemw 'you have strength', with the resulting meaning of 'you have the strength to walk'. In fact the semantic subordination here is nested, with the meaning of one \(m a\)-clause dependent upon another (marked with \(\}\) ); however, morphosyntactically, the clauses are merely coordinated. Another example of nested semantic subordination is shown in (51), where a number of non-embedded \(m a\)-clauses are chained together in morphosyntactic coordination. A separate \(m a\)-clause occurs in lines \(2,3,4,5\), and 6 . Note the considerable alternation of subjects from one clause to the next.

BG: Lexa ta ka pae.
le=xa ta=xa pa-e
3DU.SUBJ=ADD go.UH=LK take-SPC
'And they [Kloin and Orilô] went up and got him \({ }_{j}\).'
2 Pae camang ma le paedume leeng.
\{pa-e cama-ng\} ma \(\{l e=\quad\) pa-e=du=me=lee-ng\}
take-SPC father-1SG.POSS LK4 3DU.SUBJ= take-SPC=DIR.DH=CTP=DAT-1SG.POSS 'Got my father \({ }_{j}\) so they could bring him \(_{j}\) down here.'

Ma leme soigner lier rexeng.
\(\underline{\text { ma }}\{l e=m e \quad\) soigner=li-er=exeng \(\}\)
LK4 3DU.SUBJ=IRR heal.LN=GEN-3SG.ABS=LOC.DC
'So they could heal him \(_{\mathrm{i}}\) [Tayema] here.'
CG: Ma te pa cavac yi lali.
\(\underline{\mathbf{m a}}\{=r\) re \(\quad\) pa= cavay \(=\mathbf{i} \quad\) la-li\}

LK4=3SG.SUBJ CAUS= depart=GEN DEM.PL-DET.A.PRX
'So he \({ }_{j}\) could make them \({ }^{281}\) depart.'
BG: Ma te pa ca-ji bwage lali,
\(\underline{\text { ma }\{=\text { re } \quad \text { pa }=\quad \text { ca- ji bwage la-li\} }}\)
LK4=3SG.SUBJ CAUS \(=\) give return DEM.PL-DET.A.PRX
'So he \({ }_{j}\) could make them l- have them return,'
ma la pan na Poc.
\(\frac{\text { ma }}{\text { LK4 }} \begin{cases}\{\mathbf{l a}= & \text { pan=a } \\ \text { 3PL SUBJ }= & \text { Poc }\}\end{cases}\)
LK4 3PL.SUBJ= go.TV=LOC Poc
'so they would go to Poc.'
Yal-28072010-BGMCG-tahitian_0253-0256
Example (51) shows successive nesting of semantic subordination. The ma-clause in line 6 is provided as the intention of the \(m a\)-clauses in lines 4 and 5 (which are largely synonymous with each other); the \(m a\)-clause in line 4 is semantically dependent on the \(m a\)-clause in line 3 , which is semantically dependent on the \(m a\)-clause in line 2 . This clause is in turn semantically dependent on the first clause, pae camang 'took my father' in line 2. None of this dependency is morphosyntactic; each \(m a\)-clause is indistinguishable from a coordinate clause construction.

\footnotetext{
281 'them' refers to the spirits of the ancestors which are possessing Tayema, making him sick. They dwell near Poc, the island to the north of Belep.
}

\subsection*{7.2.2.2 Correlational ma 'as'}

Belep linker ma may also be used as a subordinator for predicate nominals, where it carries the meaning of 'as' or 'like'. \({ }^{282}\) Here I use the term 'correlational' to mean that \(m a\) implies a semantic correlation between the predicate nominal it marks and the absolutive argument of the preceding clause. Some examples of this usage are shown in (52) - (55).
(52) "Hé, âyua teâmaa li teme paeo ma yawan."
\begin{tabular}{lllllll}
\(\mathbf{e}\) & âyua & teâma=li & \(\{\mathbf{t e}=\mathbf{m e}\) & pa-e-o \(\boldsymbol{\}}\) & ma & \begin{tabular}{l} 
\{yawa-n \(\}\) \\
hey! \\
desire
\end{tabular} \\
high.chief=GEN & 3SG.SUBJ=IRR & take-SPC-2SG.ABS & LK4 & wife-3SG.POSS
\end{tabular} "'Hey! The chief would like to take you as his wife."' (lit. 'The chief's desire is that he takes you as his wife.')
Yal-20092011-AW1_0178

In (52), the predicate nominal marked with ma is yawan 'his wife'; it is correlated with the absolutive argument of the preceding clause, indexed by the second person pronominal suffix -o. In (53), ma marks the predicate nominal jivimw 'your skirt', which is correlated with the absolutive NP jivive 'our skirts' in the preceding clause.
(53) "Yome pa jivive ma jivimw," \{yo=me pa jivi-ve\} ma \(\{j i v i-m w\}\) 2SG.SUBJ=IRR take.GNR skirt-1DU.EXCL.POSS LK4 skirt-2SG.POSS "'You take our skirts as your skirt,""

Yal-20092011-AW4_0054
In (54), the predicate nominal naer 'child' is marked with \(m a\); it is correlated with the third singular absolutive argument of the preceding clause, indexed by the pronominal suffix -er.

\footnotetext{
\({ }^{282}\) Such constructions may result from an etymological class 1 noun ma- 'likeness, similarity' with a dependent possessor (§4.1.2.1); however, if \(m a\) in these examples were acting as a noun, we would expect it to be case-marked (§6.3). Since it is not, the most likely analysis is as a subordinator for predicate nominals.
}

Te turuer ma naer.
\{te= turu-er\} ma \{nae-r\}
3SG.SUBJ= hide-3SG.ABS LK4 child-3GNR.POSS
'She was hiding herself in the form of a child.'
Yal-28072010-BGMCG-tayamu_0136
In (55), ma marks predicate nominal baner 'friend, accompaniment', which is correlated with the absolutive NP mwija 'thing' in the preceding clause.

\section*{(55)}
me âria mwija ma baner, \{me âria mwija\} ma \{bane-r\}
IRR \(=\) NEG.EX thing LK4 friend-3GNR.POSS
'[they] wouldn't have anything as an accompaniment,'
Yal-28072010-BGMCG-tayamu_0019-0020

\subsection*{7.2.3 Adverbial linker to 'when'}

Linker to, glossed 'when', is used as a subordinator to introduce either a clause
(§7.2.3.1) or a noun phrase (§7.2.3.2) that gives some sort of adverbial information related to the preceding clause. Adverbial to is a simple clitic (Zwicky 1977) which has both a full form to and an enclitic form =ro. It may occasionally occur at the beginning of an intonation unit (56), though this is unlikely because an adverbial to-clause must follow the clause whose meaning it modifies (see the ungrammaticality of (57)). Usually, to occurs in medial position in its encliticized form \(=r o(58)\).
\begin{tabular}{lll} 
?to & \(\boldsymbol{n a} \quad \boldsymbol{b a e}\) & \(\boldsymbol{n o}\) \\
when & 1SG.SUBJ= eat & fish \\
?‘whenever I eat fish' &
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline *To & na & bae & & na & \(a\) & & & & \multirow[t]{2}{*}{\[
\begin{align*}
& \text { teec. }  \tag{57}\\
& \text { burn }
\end{align*}
\]} \\
\hline when & & eat & fish & & SG & & & & \\
\hline \multicolumn{10}{|l|}{*‘Whenever I eat fish, I repeatedly burn myself.’} \\
\hline
\end{tabular}
(58) Na ca teec to na bae no.
na= ca= teya=ro na= bae no

1SG.SUBJ= ITER= burn=when 1 SG.SUBJ= eat fish 'I repeatedly burn myself when I eat fish.'

\subsection*{7.2.3.1 Adverbial to 'as'}

When to precedes a clause, it marks that clause as adverbial-as modifying, but not serving as an argument of, the preceding clause or verb phrase (Payne 1997:316-317). Belep adverbial to-clauses-a type of non-embedded subordinate clause-are used as a complementation strategy which would often best be translated by a participle \({ }^{283}\) in languages which have them. Belep to-clauses act as modifiers of the clause, verb phrase, or noun phrase that they follow.

In example (59), to introduces the clause laô êna, literally 'they knew' (followed by a subordinate clause with \(k a\); see \(\S 7.2 .1\) ). Here the first clause is la mo, literally 'they lived'; the to-clause acts as an adverbial modifier of this main idea.
(59) La mo to laô êna, ka Nenemwa, te to ji Teâ Belep,
\(\{\mathbf{l a}=\quad \mathbf{m o}\}=\underline{\text { ro }} \quad\{\mathbf{l a}=\hat{\mathbf{o}} \quad\) êna\}

3PL.SUBJ= live=when 3PL.SUBJ=REAL know.GNR
ka Nenemwa te to ji Teâ Belep
LK Nêlêmwa 3SG.SUBJ= call give Teâ Belep
'They came to realize that Nêlêmwa, he had called Teâ Belep,' (lit. 'They lived when they knew and Nenemwa, he had called Teâ Belep,')
Yal-20092011-AW3_0037-0038

More commonly, to-clauses act as modifiers of verb phrases. In example (54), to introduces a full clause te uya, literally 'it appears', which modifies the preceding verb phrase kiyi mwija pwalaic 'saw something'. Note that this is not a relative clause (§7.3).

\section*{(60) Le nodame ka kiyi mwija pwalaic to te uya,}
le= no=da=me
3DU.SUBJ \(=\) peer \(=\) DIR.UH \(=\) CTP
\begin{tabular}{llllll} 
ka & \{kiyi & \begin{tabular}{l} 
mwija \\
LK
\end{tabular} & see.SPC & \begin{tabular}{l} 
pwalaic \(\}\) \\
thing
\end{tabular} & \begin{tabular}{l} 
to \(\{=\) one \\
when \(=3 S G . S U B J ~\)
\end{tabular}
\end{tabular} \begin{tabular}{l} 
uya \(\}\) \\
appear
\end{tabular}
'They looked up and saw something appearing,' (lit. 'saw something as it was appearing' or 'saw something when it was appearing')

Yal-28072010-BGMCG-tayamu_0220

\footnotetext{
\({ }^{283}\) Noonan (2007:72) defines participles as "adjectival or adverbial forms of verbs [which] are not the heads of constructions, but rather modify some noun which functions as the head".
}

In example (61), to introduces the clause ciae 'she wasn't there' which modifies the verb phrase tu Kawo 'find Kawo'.
\begin{tabular}{llllll} 
mo la leli \(\boldsymbol{k}\) tu Kawo to ciae, & & & & \\
mo=la & le-li & ka & \{tu & Kawo\}=ro & \{cia-e\} \\
live=NOM & DEM.DU-DET.A.PRX & LK & find & Kawo=when & NEG.LOC-3SG.ABS
\end{tabular} 'those two did go along and find Kawo had disappeared,' (lit. 'find Kawo when she wasn't there,')

Yal-20092011-AW1_0247
Noun phrases may also be modified by adverbial to-clauses. In (62), the to-clause le yabwar riyek, literally 'they rose in the distance', modifies the noun phrase âwur pwadu 'two waves'.
(62) Âwur pwadu to le yabwar riyek, lexa pame.
\begin{tabular}{|c|c|c|c|}
\hline & pwadu \(=\) =r & \{le= & yabwar=i-yek \(\}\) \\
\hline wave & two=when & 3DU. & ris \\
\hline
\end{tabular}
\(\begin{array}{ll}\text { le=xa } & \begin{array}{l}\text { pa=me } \\ \text { 3DU.SUBJ=ADD } \\ \text { go.TV=CTP }\end{array}\end{array}\)
'Two waves rising in the distance, they came.' (lit. 'two waves when they rose in the distance, and they came')

Yal-28072010-BGMCG-sousmarin_0064
Example (92) shows the to-clause name tiu и leac, literally 'I will write to you', which modifies the noun phrase yena 'now'.
(63) Ma yena to name tiu u leac,
\begin{tabular}{|c|c|c|c|c|}
\hline ma & \(\{\) yena \(\}=\underline{\text { ro }}\) & \{na=me & ti-u & \(\mathbf{u}=\mathbf{l e}-\mathrm{ac}\}\) \\
\hline LK4 & now=when & 1SG.SUBJ=IRR & prick-DETR & DA \\
\hline
\end{tabular}
'That now, as I am writing to you,'
Yal-14092011-PT2-avenir_0016

\subsection*{7.2.3.2 Temporal to 'at the time of'}

Adverbial linker \(t o,=r o\) may also be used to mark a predicate nominal as subordinate to a preceding clause, verb phrase, or noun phrase; in this usage, it may be translated as 'at the time of' because such predicate nominals are almost always temporal nouns (§6.10). These subordinate clauses describe the temporal location of the action of
the preceding clause. \({ }^{284}\) For example, in (237), to marks the predicate nominal temporal noun bwan 'night', which describes when the action of the preceding clause took place.
(64) la nginie, la pu ngini cae to bwan.
\(\mathbf{l a}=\) ngini-e \(\quad\{\mathbf{l a}=\quad \mathbf{p u}=\) ngini cae \(\}=\underline{\text { ro }} \quad\{b w a n\}\) 3PL.SUBJ= miss-3SG.ABS 3PL.SUBJ= RA= miss. reef=when night 'they didn't see it, they just didn't see the reef in the night.' (lit. 'they just didn't see the reef when it was night')

Yal-20092011-AW2_0036

In (239), the temporal noun introduced by to is baraap 'evening', and in (240) the temporal noun is the temporal noun phrase bwe cavaro 'Saturday'.
(65) "Ai elo,» kaô mae, mae to baraap.
ai elo=xa=ô mae \(\{\) mae\}=ro \(\{b a r a a p\}\)
no yes=LK=REAL sleep sleep=when evening
'[He said] "Oh, okay," and slept, slept in the evening.' (lit. 'slept when it was evening’)

Yal-05092011-AP1_0071
(66) Yak to bwe cavaro, avena tu la Awe.
\(\{\) yaxa\}=ro \(\quad\{b w e \quad\) cavaro \(\} \quad\) avena \(=\quad\) tu=la Awe yesterday=when moment sabbath.LN 1TR.EXCL.SUBJ= go.DH=LOC Awe 'The other day, Saturday, we went down to Awe.' (lit. 'yesterday when it was Saturday')

Yal-17072009-TB-weekend_0001-0002
In (240), to marks a temporal noun phrase referring to a moment in the past. Note that to cannot be used to introduce a temporal noun referring to a future time (241) since in this construction to has a semantically realis meaning.

> *yena to baraap
> yena=ro baraap
> now=when evening
> *'this evening'

Instead, the irrealis subordinator \(=l i\) is used (§7.2.7) to refer to future temporal locations, as in example (68).

\footnotetext{
\({ }^{284}\) to may have originated as a temporal case marker and been extended to use as a linker and subordinator.
}

\section*{yena li baraap}
yena=li baraap
now=GEN evening
'this evening, tonight'

\subsection*{7.2.4 Conditional linker enyi 'if’}

A clause is introduced by enyi ' \(\mathrm{if}^{\prime}{ }^{285}\) to mark it as a protasis; that is, as the subordinate clause in an 'if-then' construction which expresses the condition. The conditional enyi-clause may precede (69) or follow (105) the clause it modifies (the apodosis, which expresses the consequence).
(69) Enyi ja tânae baro ja cuginy.
 'If we hear the bell \({ }^{286}\) we exert ourselves.' (lit. 'If we hear the bell we strive.')
Yal-25072010-PT-homily_0009
(70) «Me âria âju la pwemwajen. Enyi ji cavayaroven.» \{me âria âju=la pwemwa-jen\} IRR NEG.EX person=LOC village-1TR.INCL.POSS
\(\left.\begin{array}{ll}\text { enyi } & \begin{array}{l}\text { if } \\ \text { id }= \\ \text { 1DU.INCL.SUBJ }=\end{array}\end{array} \begin{array}{l}\text { cavaya-roven } \\ \text { depart-COMPL }\end{array}\right\}\)
""There won't be anyone at home. If we both leave."
Yal-20092011-AW1_0083

In (69), the enyi-clause ja tânae baro 'we hear the bell' precedes the clause ja cuginy,
literally 'we strive', which it modifies. In contrast, in (105) the enyi-clause ji cavayaroven
'we both leave' follows the main clause me âria âju la pwemwajen 'there won't be anyone at home'.

\footnotetext{
\({ }^{285}\) It has not been determined whether the lexeme is enyi or enyixi. Speaker intuitions indicate that variation between the two is sociolinguistic; the enyixi pronunciation tends to be used more by older speakers. However, it is possible that enyixi is actually a linker combination (see §7.4) of enyi and relativizer ki. Dubois (1975e) lists <eni>, <ehni>, and <ênixii> in his dictionary. Neyret (1974a) lists <eki>. It seems more likely that enyixi is merely an older form that has decayed to enyi, since the negative marker âri= ' NEG ' underwent a similar process. Dubois (1975e) lists <hââriki, hâârixi, hârixi> as the only acceptable forms of the negative marker, while Neyret (1974a) lists <anriki>. Older speakers still occasionally use the form ârixi=, but the morpheme has almost entirely decayed to âri=.
\({ }^{286}\) baro 'bell' is derived from ba=to [INSTR= call] 'thing for calling'.
}

Conditional clauses are not limited to occurrence in such predictive, cause-andeffect statements. Clauses introduced by enyi can also describe hypothetical or generic events, as in (71) and (72).
(71) Cexeen ni te kiyi tamwa.
\begin{tabular}{llll} 
cexen \(=\mathbf{i}\) & te \(=\) & kiyi & tamwa \\
sacred=GEN & 3SG.SUBJ= & \begin{tabular}{l} 
see.SPC \\
woman
\end{tabular}
\end{tabular}

Enyi te padi mwija pwalaic ki mwany u leen.


Yal-20092011-AW4_0058-0059
(72) Toma nyali, teme cegele, enyi le cego ma leô tu.
\begin{tabular}{llll} 
toma & nya-li & te=me & cege-le \\
but & DEM.GIV-DET.A.PRX & 3SG.SUBJ=IRR & watch-3DU.ABS
\end{tabular}
\begin{tabular}{llllll} 
enyi \\
if & \(\{\mathbf{l e}=\) & cego & ma & \(\mathbf{l e}=\hat{\mathbf{0}}\) & tu \(\}\) \\
3DU.SUBJ \(=\) & descend & LK4 & 3DU.SUBJ=REAL & go.DH
\end{tabular}
'But she, she will watch for the two of them to go down [to the beach].' (lit. 'she will watch them if they descend to go down.')

Yal-28072010-BGMCG-tayamu_0147
In (71), the conditional enyi-clause te padi mwija pwalaic ki mwany u leen 'if she is showing something bad to him' is a hypothetical condition, as is the enyi-clause in (72), le cego ma leô tu'they descend to go down'.

In addition to introducing clauses, linker enyi is also used as a discourse marker to introduce a noun phrase. In these instances, enyi marks the following noun as the topic, as in the question in (73).
(73) Enyiti?
if who
'Who are you talking about?'
Examples such as (73) are found frequently in discourse. For example, in (74), the speaker marks ulayili 'that old man' as the topic with enyi in line 3 .
(74) Na tuvavan ka bwagenao, ka ta ka uc,
\begin{tabular}{llllllll} 
na= & tuva=van & ka & bwage-nao & ka & ta & ka & uc \\
1SG.SUBJ \(=\) & dive=DIR.TV & LK & return-1SG.ABS & LK & go.UH & LK & surface
\end{tabular}

2 ka oyâno, ka noda lier to teô ta,
\begin{tabular}{llllll} 
ka & oyâno & ka & no=da=li-era=ro & te= \(\hat{\mathbf{o}}\) & ta \\
LK & look & LK & peer=DIR.UH=GEN-3SG.ABS=when & 3SG.SUBJ=REAL & go.UH
\end{tabular}

3 teô ta la pwemwa, enyi ulayili,
\begin{tabular}{lllll} 
te= \(\mathbf{0}\) & \begin{tabular}{l} 
ta=la \\
3o.UH=LOC
\end{tabular} & \begin{tabular}{l} 
pwemwa \\
village
\end{tabular} & \begin{tabular}{l} 
enyi
\end{tabular} & \begin{tabular}{l} 
\{ulayi-li\} \\
old.man-DET.A.PRX
\end{tabular} \\
3SGBEAL
\end{tabular}

4 texaô ta,
te=xa=ô ta
3SG.SUBJ=ADD=REAL go.UH
'I continued to dive and returned, and went up and surfaced, and looked around, and peered up at him as he was going, he was going home, that old man, he was going,'
Yal-28072010-BGMCG-tahitian_0066-0072

Conditional linker enyi 'if' can also precede a relative clause (see §7.3.3), as in (75) and (76).
(75) Enyi âmi na ca bae no, na ca teec.
\(\left.\begin{array}{lllll}\text { enyi } \\ \text { if } & \begin{cases}\text { â-mi } & \text { na }=\end{cases} & \begin{array}{l}\mathbf{c a}= \\ \text { DEM.NEW-DET.A.DST }\end{array} & \begin{array}{l}\text { bae }\end{array} & \text { no }\end{array}\right\}\)
na= \(\quad\) ca \(=\quad\) teec
1SG.SUBJ= ITER= burn
'Whenever I eat fish, I burn myself.'
Yal-03112011-IM1.wav - Yal-03112011-IM2.wav
(76) Enyi âmi te tunao li maac, la ca tiaenao.
\begin{tabular}{|c|c|c|c|c|}
\hline enyi & \{â-mi & te= & tu-nao=li & aac \(\}\) \\
\hline & DEM.NEW-DET.A.DST & 3SG.SUBJ= & find-1SG.ABS=GEN & death \\
\hline
\end{tabular}
\begin{tabular}{lll}
\(\mathbf{l a}=\) & \(\mathbf{c a}=\) & tiae-nao \\
3PL.SUBJ \(=\) & ITER \(=\) & pierce-1SG.ABS
\end{tabular}
'Whenever I am sick, I have myself pricked [by a healer].'
Yal-03112011-IM1.wav - Yal-03112011-IM2.wav

\subsection*{7.2.5 Sequential linker \(k a\) me 'then'}

In many 'if-then' statements in Belep, the conditional clause (protasis) is marked with enyi while the resultative clause (the apodosis; the clause that expresses the consequence) is marked by linker ka me, glossed as 'then', as in (77).
(77) Ka enyi leô mo wiu, ka me, me âria mwija ma baner,
\begin{tabular}{llllll} 
ka & enyi & \(\{\mathbf{l e}=\hat{\mathbf{0}}\) & mo & wiu \(\}\) & ka me \\
LK & if & 3DU.SUBJ=REAL & \begin{tabular}{l} 
live \\
dine
\end{tabular} & \begin{tabular}{l} 
then
\end{tabular}
\end{tabular}
\{me âria mwija ma bane-r\} IRR NEG.EX thing LK4 friend-3SGNR.POSS 'And if they were about to eat, then they wouldn't have anything to eat as an accompaniment,'

Yal-28072010-BGMCG-tayamu_0019-0020
The function of \(k a m e\) is broader than simply marking the consequence of a conditional clause. It is used primarily to indicate a sequential clause, a predication conceptualized as being ordered sequentially after what came before it. Linker ka me is often used to temporally order clauses, such as in (78).
(78) Na nyi kewee ka to jie, «Ai!"
\begin{tabular}{lllllll} 
na= \(=\) & nyi \(=\) & kewe-e & ka & to & ji-e & ai \\
1SG.SUBJ \(=\) & PUNCT \(=\) & chase-3SG.ABS & LK & call & give-3SG.ABS & no
\end{tabular}

2 Ka me to jie, "Ai!"
\begin{tabular}{lll} 
ka me \\
then & \begin{tabular}{ll}
\(\{\) to & ji-e \(\}\) \\
call
\end{tabular} & \begin{tabular}{l} 
give-3SG.ABS
\end{tabular} \\
ai
\end{tabular}

3 Ka me to mwa, to jie: "Ai!"
\begin{tabular}{lllll} 
ka me & \(\left.\begin{array}{ll}\{t o & \text { mwa }\end{array}\right\}\)\begin{tabular}{l} 
to \\
call \\
then
\end{tabular} & \begin{tabular}{l} 
ji-e \\
call
\end{tabular} & give-3SG.ABS & ai \\
no
\end{tabular}
'I ran after him and called, "No!", then called "No!", then called again, called to him, "No!""

Yal-28072010-BGMCG-tahitian_0077-0080
In (78), \(k a\) me is used twice, in lines 2 and 3, to indicate that each time the speaker called to his brother-in-law it was located temporally after the previous time. On the other hand, \(k a m e\) is also used to sequence elements non-temporally; for example, in (79), \(k a\) me is used to sequence the introductions of two sisters, with the older one first, followed by \(k a\) \(m e\) and then the name of the younger one (a repair occurs immediately after ka me in line 2, so is it unknown what sequential clause the speaker originally had in mind).
\begin{tabular}{lll} 
Ade ic, naran ni Keyau, & \\
âde \(=\) & ic & nara-n=i \\
QT.entity \(=\) & one & name-3SG.POSS=GEN
\end{tabular} Keyau

2 ka me - nyami tayamo, naran ni Keyau,
\begin{tabular}{lllll} 
ka me & \begin{tabular}{l} 
nya-mi \\
then
\end{tabular} & \begin{tabular}{l} 
tayamo \\
DEM.GIV-DET.A.DST
\end{tabular} & \begin{tabular}{l} 
nara-n=i \\
old.woman
\end{tabular} & \begin{tabular}{l} 
Keyau \\
name-3SG.POSS=GEN
\end{tabular}
\end{tabular} \begin{tabular}{l} 
Keyau
\end{tabular}

3 ka nyami âno, Kenadu.
ka nya-mi âno Kenadu
LK DEM.GIV-DET.A.DST young Kenadu
'One of them was named Keyau, and then-the older one was Keyau and the younger, Kenadu.'

Yal-28072010-BGMCG-tayamu_0057-0059
Linker ka me is also used to introduce a sequential and contrasting element, as in (80) where it introduces the new topic jivimw 'your skirt'.
(80) "Yome pa jivive ma jivimw, ka me jivimw, jivimw yome jie ma jivive."
\begin{tabular}{|c|c|c|c|c|c|}
\hline yo=me & pa & jivi-ve & ma & jivi-mw & ka me \\
\hline 2SG.SUBJ=IRR & take.GNR & skirt-1DU.EXCL.POSS & LK4 & skirt-2SG.POSS & then \\
\hline \{jivi-mw & jivi-mw & yo=me & jie & ma jivi-ve & \\
\hline skirt-2SG.POSS & skirt-2SG & POSS 2SG.SUBJ=IRR & give & LK4 skirt-1DU. & XCL \\
\hline
\end{tabular}

Yal-20092011-AW4_0054
The morphological parse for \(k a\) me is unknown. Clearly \(k a\) is from linker \(k a\) (§7.1.1), which is also used to mark the apodosis of an 'if-then' statement, as in (81). This construction is indistinguishable from topicalization with \(k a\) (§7.1.1.2).
(81) "Enyi yo cavac, ka na cavac ya modemw."
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline enyi & \{yo= & ac\} & ka & \{na= & cavay=a & v \\
\hline if & S.SUBJ & depart & LK & 1SG.SUB & depart=LOC & together-2S \\
\hline
\end{tabular}
"'If you leave, then I'm leaving with you.""
Yal-20092011-AW1_0080

However, the origins of \(m e\) are unclear, as is the question of whether \(m e\) can occur independently. It may be etymologically related to the irrealis marker \(=m e(\S 5.5 .2)\), though its distribution is different; the irrealis marker always occurs after the subject
proclitic if there is one, while linker ka me always occurs before the subject proclitic. For example, in (82), \(k a\) me precedes the subject proclitic \(j i=\).
(82) Yo yage linao, ka me ji mo cavac pôben.
yo= yage=li-nao \(\quad\) ka me \(\quad\{\mathrm{j}=\quad\) mo cavaya pôben \(\}\) 2SG.SUBJ= help=GEN-1SG.OBJ then 1DU.INCL.SUBJ= live leave quickly 'You helped me, therefore we will leave sooner.'
Yal-03112011-IM1.wav - Yal-03112011-IM2.wav

It is unknown whether me can appear independently of \(k a\) because all of my corpus examples are ambiguous; they appear with non-prototypical clauses which would not normally have subject proclitics. In these cases, me is glossed as 'LK2'. For example, an independent \(m e\) occurs before the predicate nominal \(t i\) 'who' in (83).

\section*{(83) Toma te koni êna li ti, me ti li âmi âyuan na pewola.}
\begin{tabular}{lllll} 
toma & te \(=\) & koni & êna=li & ti \\
but & \(3 S G . S U B J=\) & never & know.GNR=GEN & who
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline me & \(\{\mathbf{t i}\}=\mathbf{l}\) & â-mi & âyua-n=a & \\
\hline K2 & who=GEN & DEM.NEW-DET.A.DST & desire-3SG.POSS=LOC & middle-3PL.P \\
\hline & didn't & ow who, who was the & e she preferred am & them.' \\
\hline
\end{tabular}
Yal-20092011-AW1_0173

In (89), an independent \(m e\) precedes the predicate nominal cao pwalu 'hard work'.

\section*{(84) Me cao pwalu na le naerama lami confirmation,}
\(\frac{\text { me }}{\text { LK2 }} \quad\)\begin{tabular}{lll} 
cao & pork & pwalu \\
heavy & \begin{tabular}{l} 
na=le \\
interior=DAT
\end{tabular}
\end{tabular}
\begin{tabular}{lll} 
nae-ra-ma & la-mi & [k̃̃fibmasjã \(]\) \\
child-3GNR.POSS-AC & DEM.PL-DET.A.DST & Confirmation.LN \\
'It is hard work for the children in Confirmation,'
\end{tabular}

Yal-25072010-PT-homily_0089
Bril (2004a) has noted a linker \(m e\) in Nêlêmwa which appears to have a function similar to that of \(m e\) in Belep. In Nêlêmwa, the infrequent use of linker \(m e\) in initial position serves as a "clause-chaining device, marking topic and referential continuity" (Bril 2004a:16). The Belep linker me may be analogous to this morpheme in Nêlêmwa.

\subsection*{7.2.6 Linker \(k i\) in subordination}

Linker (§3.2.4) \(k i\), a simple clitic with free form \(k i\) and bound form \(=x i\), is glossed 'REL’ throughout this work based on its role in relativization (§7.3.1). However, its primary use in Belep is as a subordinator (see \(\S 7.2\) above) which indicates deontic modality, defined as "concerned with moral obligation or permission" (Noonan 2007:138). For example, in (55), ki marks the following clause ave cuur reen 'we visit him' as a non-embedded subordinate clause which is concerned with permission.

\section*{(85) Te kuar rive ki ave cuur reen.}
te \(=\quad\) kuar=i-ve \(\quad \underline{\text { ki }} \quad\) \{ave \(=\quad\) cur=ee-n\}

3SG.SUBJ= refuse=GEN-1DU.EXCL.ABS REL 1DU.EXCL.SUBJ= stand=DAT-3SG.POSS
'He didn't want us to visit him.' (lit. 'He didn't want us that we visit him.')
Yal-28072010-BGMCG-tahitian_0271
Subordinator ki occurs most frequently in discourse in a grammaticalized construction which indicates moral obligation: a clausal subordination construction of the form te \(\hat{o} k i\) + CLAUSE. Here, full clause te \(\hat{o}\) 'it is good' is followed by deontic linker ki and a nonembedded subordinate clause, which is construed to have deontic modality. \({ }^{287} \mathrm{Te}\) ô ki (IPA: /te= õ ki/), which translates literally as 'it is good that...', is usually pronounced in a phonetically reduced form as [tõкі]. \({ }^{288}\) An example of the use of te \(\hat{o} k i\) to express moral obligation is found in (86) below.
(86) Ka te ô ki a tao kâye pulu,
\begin{tabular}{llllll} 
ka & \(\{\mathbf{t e}=\) & \(\hat{\mathbf{0}}\}=\mathbf{x i}\) & \(\{\mathbf{a}=\) & tao= & kâye \\
LK & 3SG.SUBJ \(=\) & be.good= \(\}\)
\end{tabular} 'And you all must always keep your language,' (lit. 'And it is good that you always keep your language.')

Yal-14092011-PT2-avenir_0013-0014

\footnotetext{
\({ }^{287}\) Deontic modality may also be expressed using the construction te \(\hat{o} l i+\) CLAUSE, where \(=l i\) is the genitive subordinator (§7.2.7). There are not enough examples of this usage in my corpus to determine the difference in meaning between te ôki and te ôli.
\({ }^{288}\) This pronunciation is used in examples (85) through (87) below, though it is not indicated in the word-by-word gloss, which only marks morphosyntactic boundaries.
}

In (86), the clause te \(\hat{o}\) 'it is good' precedes the ki-clause a tao kâye pulu 'you always keep your language'. This construction creates a modality of obligation in the ki-clause, leading to a free translation of 'And you all must always keep your language'. A similar modality of obligation is created by te \(\hat{o} k i \ldots\) in examples (87) and (88).
(87) «Te ô ki yo ci.»
\(\begin{array}{llll}\{\mathbf{t e}= & \hat{\mathbf{0}} \boldsymbol{\}}=\mathbf{x i} & \mathbf{y} \mathbf{y o} & \mathbf{c i} \\ \text { 3SG.SUBJ }= & \text { be.good=REL } & \text { 2SG.SUBJ= }= & \text { sit }\end{array}\)
"'You must stay." (lit. "'It is good that you stay."')
Yal-20092011-AW1_0082
(88) Ka te ô kite ce.
\begin{tabular}{lll} 
ka \(\{\) te \(=\) & \(\hat{\boldsymbol{o}}\}=\underline{\mathbf{x} i}\{=\mathbf{r e}\) & ce \(\}\) \\
LK & 3SG.SUBJ \(=\) be.good=REL=3SG.SUBJ & settle \\
'And may it be so.'
\end{tabular}

Yal-25072010-PT-homily_0020

\subsection*{7.2.7 Genitive \(=\boldsymbol{l} \boldsymbol{i}\) in subordination}

As a case marker, \(=l i\) or \(=i\) 'GEN' has a variety of uses, including being used to mark some genitive noun phrases (§4.1.2.4), some oblique noun phrases (§6.3.3), and the argument of some predicate nominals (§6.4.1). In this section, a further use of \(=l i\) will be discussed: it occurs as a subordinator after a verb describing an emotion or a mental state, and it introduces an irrealis non-embedded subordinate clause which is relevant to that mental state. For example, in (89), =li follows the verb êna 'to know', marking the following clause te mo la St. Joseph ai Teôgo 's/he lives in St. Joseph or Teôgo' as subordinate.
(89) Na yang ma na êna li te mo la St. Joseph ai Teôgo. na= yaang ma na= êna=li
1SG.SUBJ= search.NTR LK4 1SG.SUBJ= know. \(\bar{G} N R=\) GEN
\(\{\mathbf{t e}=\quad\) mo=la \(\quad\) [cẽjojep] ai Teôgo \(\}\)
3SG.SUBJ= live=LOC St. Joseph or Teôgo
'I seek to know whether s/he lives in St. Joseph or Teôgo.'
Yal-03112011-IM1.wav - Yal-03112011-IM2.wav

In (32), the subordinate clause na pan na pu caya, literally 'I go near Dad', is marked by subordinator \(=l i\) and follows the intransitive verb \(\hat{a} y a\) 'to fear'.
(90) "Na âya li na pan na pu caya,"
na= âya=li \(\quad\{n a=\quad\) pan=a pu caya \(\}\)

1SG.SUBJ= fear.NTR=GEN 1SG.SUBJ= go.TV=LOC side dad "'I'm afraid to go near Dad,"' (lit. 'I fear that I go near Dad,')
Yal-20092011-AW1_0039

Note that the subordinate clause in (32) does not act as an argument of the preceding clause, where the verb aya 'to fear' is intransitive. It would be required to have the transitivized form âyawe if it had an absolutive argument (§5.1.5.1).

A clause marked as subordinate with \(=l i\) or \(=i\) can also follow a predicate nominal. For example, in (91), a clause marked with \(=i\) follows the predicate nominal weeng 'my food'.
(91) me weeng ngi name cavac.
me wee-ng=i \(\quad\) \{na=me cavac
IRR food-1SG.POSS=GEN 1SG.SUBJ=IRR depart
'as food for my trip.' (lit. 'as my food that I will depart.')
Yal-20092011-AW1_0074
In (114), a clause marked with \(=i\) follows the predicate nominal jaga- \(r\) 'to be possible' (literally 'capacity-3GNR.POSS').
(92) Ka jagar ri te jie ma ja nginie.
\begin{tabular}{lll} 
ka & \begin{tabular}{l} 
jaga-r= \(=\mathbf{i}\)
\end{tabular} & \begin{tabular}{l}
\(\{\mathbf{t e}=\)
\end{tabular} \\
LK & capacity-3GNR.POSS=GEN & ji-e \(\}\) \\
3SG.SUBJ \(=\) & give-3SG.ABS
\end{tabular}
ma \(\mathbf{j a}=\quad\) ngini-e
LK4 1PL.INCL.SUBJ= miss-3SG.ABS
'He could make himself invisible.' (lit. 'It was enough that he could make it that we don't see him.')
Yal-20092011-AW6_0091

In (93), a clause marked with \(=l i\) follows the predicate nominal âyuale 'they wanted' (literally 'their desire').

\section*{Ayuale li me tuи naele.}
âyua-le=li \(\{\) me tu nae-le\}
desire-3DU.POSS=GEN IRR EX.SPC child-3DU.POSS
'They wanted to have children.' (lit. 'Their desire was that their children exist.')
Yal-28072010-BGMCG-tayamu_0028

\subsection*{7.2.7.1 Negative desiderative kuar 'to not want'}

The most common use for subordinator \(=l i,=i\) in discourse is following the negative desiderative verb kuar 'to not want'. When this verb is used without a subordinate clause, its meaning overlaps with a range of English expressions. Its intransitive form kuar may sometimes be best translated by 'to refuse', as in (94), while its transitive form kuari- is best translated by 'to dislike' (95).
(94) Ka âlalic ki yome kuar,
\begin{tabular}{llll} 
ka & âlaliyi=xi & yo=me & kuar \\
LK & impossible=REL & 2SG.SUBJ=IRR & not.want.NTR \\
'And, it's impossible that you could refuse,'
\end{tabular}

Yal-25072010-PT-homily_0062
(95) "Na kuari Ixe, mo âyuang ngi Kawo."
\begin{tabular}{llllll} 
na= & kuari & Ixe & mo & âyua-ng=i & Kawo \\
1SG.SUBJ= & not.want.TR & Ixe & LK3 & desire-1SG.POSS=GEN & Kawo
\end{tabular} "'I dislike Ixe, for I love Kawo.""

Yal-20092011-AW1_0294
When followed by the subordinator = \(l i\) and a non-embedded subordinate clause, \(k u a r\) is best translated by 'to not want'. For example, in (96) and (97), \(=i\) is used as a subordinator after kuar.
(96) Te kuar rite pan.
\begin{tabular}{|c|c|c|}
\hline te= & kuar=i & \{te= \\
\hline 3SG.SUBJ= & not.want=GEN & 3SG.S \\
\hline
\end{tabular}
'He didn't want to go.' (lit. 'He didn't want that he goes.')

> Yal-20092011-AW1_0048
(97) La kuar ri la payeeni teâmaa.
\begin{tabular}{lllll}
\(\mathbf{l a}=\) & kuar \(=\mathbf{i}\) & \(\mathbf{l a}=\) & payeni & teâmaa \\
3PL.SUBJ \(=\) & not.want=GEN & 3PL.SUBJ= & listen.TR & high.chief
\end{tabular}
'They didn't want to listen to the chief.' (lit. 'They didn't want that they listen to the chief.')

Note that, in these two examples, the subject of the first clause and the subject of the subordinate clause are co-referential. In (96), the subject is referenced by a third singular \(t e=\) in both clauses; in (97), the co-referential subject is third plural \(l a=\). Examples (98) and (99) show the use of \(k u a r+=l i\) as a complementation strategy where the two clauses have non-co-referential subjects.
(98) "Na kuar ri yo cavac ka najinao."
\begin{tabular}{llll} 
na \(=\) & kuar=i & \begin{tabular}{l} 
\{yo= \\
1SG.SUBJ \(=\)
\end{tabular} & \begin{tabular}{l} 
cavaya \(\}=\mathbf{x a}\) \\
not.want=GEN
\end{tabular}
\end{tabular} \begin{tabular}{l} 
2SG.SUBJ \(=\) \\
depart=LK
\end{tabular}\(\quad\)\begin{tabular}{l} 
naji-nao \\
let-1SG.ABS
\end{tabular} "'I don't want you to leave me." (lit. "I don't want that you depart and leave me."')

Yal-20092011-AW1_0079
(99) «na kuar riji wayap,"
\begin{tabular}{llll} 
na= \(=\) & kuar \(=\mathbf{i}\) & \(\{\mathbf{i}=\) & wayap \(\}\) \\
1SG.SUBJ \(=\) & not.want=GEN & 1DU.INCL.SUBJ= \(=\) & war
\end{tabular}
"'I don't want us to be at war."' (lit. "'I don't want that we make war."')
Yal-20092011-AW4_0033

\subsection*{7.2.8 Purposive puи-r as a complementation strategy}

Several constructions which are used as complementation strategies in Belep, including some predicate nominals (see §7.2.7) and relative clauses (discussed in detail in §7.3), may incorporate the form puu-r, which is associated with adverbial predications of reason or purpose. Puu-r falls into the word class of nouns (§3.2.1), being the generically possessed form of the class 1 (§4.1.1.1) noun \(p u\) - 'origin, reason, ancestor'. Examples (100) and (101) show the use of this noun as the argument of a clause; such usages are uncommon in Belep, as puu-r is more frequently used in a variety of complementation strategies. \({ }^{289}\)
(100) Mari, yo ki âda jua âria puumw mo pu âjuroven.
Mari yo ki âda

Mary 2SG.INDEP REL alone

\footnotetext{
\({ }^{289}\) Note that puu-r rarely occurs in its complete phase in discourse (see §2.4.2).
}
\begin{tabular}{lllll} 
jua & âria & puu-mw & mo & pu \\
truly & NEG.EX & \(\underset{\text { origin-2SG.POSS }}{\text { orju-roven }}\) \\
'Mary, you who alone truly have no ancestors but are the ancestor of all.'
\end{tabular}

Paradiso
(101)

Ma te cavac, ka âri na ênae puur.
ma=re cavac ka âri= na= êna-e puu-r
LK4=3SG.SUBJ depart LK NEG= 1SG.SUBJ= know-SPC origin-3GNR.POSS
'The reason she left is not obvious.' (lit. 'That she left, I don't know the reason.')
Yal-11112011-PT1.wav - Yal-11112011-PT2.wav
In one Belep complementation strategy, puu-r acts as a predicate nominal (§6.4.1) and is followed by subordinator \(=l i,=i(\S 7.2 .7)\) and a subordinate clause. For example, in (34), puu-r is followed by subordinator \(=i\) and a reason clause na âyawe januun 'I fear his spirit'.
(102) "Na âya li na pan na pu caya puur ri, na âyawe januun."
\begin{tabular}{llllll} 
na= & âya=li & na= & pan=a & pu & caya \\
1SG.SUBJ \(=\) & fear.GNR=GEN & 1SG.SUBJ= & \begin{tabular}{l} 
go.TV=LOC
\end{tabular} & \begin{tabular}{l} 
side
\end{tabular} & dad
\end{tabular}
\{pu-r\}=i \(\quad\) ina= âyawe januu-n\}
origin-3GNR.POSS=GEN 1SG.SUBJ= fear.SPC spirit-3SG.POSS
'I am afraid to go near Dad because, I fear his spirit.' (lit. 'I am afraid to go near
Dad, the reason is, I fear his spirit.')
Yal-20092011-AW1_0039
Another example is found in (103), where subordinate reason clause kîlr ra denaar 'the sun was bright' (marked by \(=i\) ) follows puu-r. This clause modifies the earlier proposition (not shown here) that te koni kiyi Belema 'he didn't see the Belema'.
(103) Puur ri kîirr ra denaar.
\begin{tabular}{lll} 
\{pu-r\} \(=\mathbf{i}\) & \{kîr=a & denaar \(\}\) \\
origin-3GNR POSS=GEN & be loud=NOM & daylight
\end{tabular}
origin-3GNR.POSS=GEN be.loud=NOM daylight
'Because the sun was so bright.' (lit. 'The reason was that the sun was bright.')
Yal-20092011-AW4_0014
In many cases, predicate nominal puu-r may participate in an equative construction (§6.4.1), where its genitive-marked argument is a noun phrase which functions to provide a reason or cause, as in examples (104) - (106).
(104) Puur ri wa pe âma naen nile.
\(\{p u-r\}=\mathbf{i} \quad\{w a=\quad\) pe \(=\) âma= nae-n=i-le\}
origin-3GNR.POSS=GEN NMLZ= RECP= DYAD= child-3SG.POSS=GEN-3DU.ABS 'Because of their family ties.' (lit. 'Their way of being a family is the reason.')

Yal-25072010-PT-homily_0052
In (104), the argument of the predicate nominal puи-r is the genitive-marked noun phrase wa pe âma naen nile 'their way of being a family'. In (105), the argument of puu-r is \(\hat{u}\) jen 'his power'.
(105) Tere êna. Puur ri ûjen.
\begin{tabular}{llll}
\(\mathbf{t e}=\mathbf{r e}\) & êna & \(\{\mathbf{p u - r}\}=\mathbf{i}\) & \begin{tabular}{l} 
\{ûje-n \(\}\) \\
3SG.SUBJ=ACT
\end{tabular} \\
know.GNR & \begin{tabular}{l} 
origin-3GNR.POSS=GEN \\
power-3SG.POSS
\end{tabular}
\end{tabular}
'He will actually know. Because of his power.' (lit. 'He will actually know. His power is the reason.')
Yal-20092011-AW5_0051

In (106), the argument of predicate nominal puu-r is camang 'my father'.
(106) Toma naoxa na pwai ênau to puur ri camang.
toma nao=xa na= pwai
but 1SG.INDEP=ADD 1SG.SUBJ= only
êna-u=ro \(\quad\{p u-r\}=\mathbf{i} \quad\) \{cama-ng\}
know-DETR=when origin-3GNR.POSS=GEN father-1SG.POSS
'But me too, I only know because of my father.'
Yal-28072010-BGMCG-hamecon_0084
Belep speakers use a similar predicate nominal construction puur ri da? 'why?' (lit. 'the reason is what?') to question a reason, as in (107).
(107) «Caivak, puur ri da yo âpw ?" caivak \(\{\) pu-r\}=i \(\quad\{d a\} \quad\) yo \(=\quad\) âpw rat origin-3GNR.POSS=GEN what 2SG.SUBJ= laugh "'Rat, why are you laughing?" (lit. "What is the reason that you are laughing?"") Yal-01082010-MFD_0050

The argument of predicate nominal puu-r may also be a demonstrative pronoun (§4.2.2). For example, in (108), the argument of puu-r is the demonstrative pronoun \(\hat{a}-l i\) 'DEM.NEW-DET.A.PRX'; the use of the proximal anaphoric determiner suffix implies that the reason was evident in the entirety of the preceding explanation.
(108) Laxa âmu êna ka, tuu ûje teâmaa to puur ri âli.
\begin{tabular}{llll}
\(\mathbf{l a}=\mathbf{x a}\) & âmu= & êna & ka \\
3PL.SUBJ=ADD & PRF= & know.GNR & LK
\end{tabular}
tu ûje teâma=ro \(\{\) pu-r\} \(=\mathbf{i} \quad\{\hat{a}-l i\}\)
EX.SPC power high.chief=when origin-3GNR.POSS=GEN DEM.NEW-DET.A.PRX 'And they knew that the chief was powerful because of this.'

Yal-20092011-AW2_0071
When the argument of predicate nominal puu-r is a demonstrative pronoun, it may function in turn as the head of a relative clause (§7.3.3) which predicates a reason or purpose. For example, (109) and (110) both demonstrate this structure.
(109) Puur ri âmi ava mo pae comu li gawaarimi la mon.
\begin{tabular}{llll}
\(\left\{\begin{array}{l}\text { pu-r\} }=\mathbf{i}\end{array}\right.\) & \begin{tabular}{l} 
\{â-mi
\end{tabular} & ava= & mo \\
origin-3GNR.POSS=GEN & DEM.NEW-DET.A.DST & 1PL.EXCL.SUBJ= & live
\end{tabular}
pa-e comu=li gawari-mi=la mon\}
take-SPC school=GEN day-DET.A.DST=LOC side.DH
'Because we had school the next day.' (lit. 'The fact that we had school the next day was the reason.')

Yal-17072009-TB-weekend_0041
In (109), predicate nominal puu-r has as its argument the relative clause âmi ava mo pae соти li gawaarimi la mon 'the fact that we had school the next day', which is headed by the demonstrative pronoun \(\hat{a}-m i\). In (110), the relative clause \(\hat{a} m i l a \hat{o}\) wanem vaer ri janu 'the fact that the spirits were walking with him' serves as the argument for predicate nominal puu-r.
(110) Puur ri âmi laô wanem vaer ri janu.
\{pu-r\}=i \(\{\hat{\mathbf{i}}\)-mi
origin-3GNR.POSS=GEN DEM.NEW-DET.A.DST
la=ô wane=va-er=i janu\}
3PL.SUBJ=REAL walk=INSTR-3SG.ABS=GEN spirit
'Because the spirits were walking with him.' (lit. 'The fact that the spirits were walking with him was the reason.')

Yal-28072010-BGMCG-tahitian_0299-0300

\subsection*{7.2.8.1 Linkers and puu-r}

Combinations of linkers with puu-r also occur in Belep. There are examples of
puu-r preceding to 'when' (§7.2.3), as in (111) and (112).
(111) Te wiu pur to te maac yi cawi.
te= wiu pu-ra=ro te= may=i cawi

3SG.SUBJ= dine origin-3GNR.POSS=when 3SG.SUBJ= die=GEN hunger 'He eats because he is hungry.'
Yal-03112011-IM1.wav - Yal-03112011-IM2.wav
(112) puur to te para,
\begin{tabular}{ll} 
pu-ra=ro \\
origin-3GNR.POSS=when & te= \\
3SG.SUBJ \(=\) & \begin{tabular}{l} 
para \\
tell.GNR
\end{tabular}
\end{tabular} 'because he told me,'

Yal-28072010-BGMCG-hamecon_0086
There are also instances of to 'when' preceding puи-r, as shown in example (113).
(113) Toma nao, ka na pwai ênau to puur ri camang.
\begin{tabular}{lll} 
toma & nao=xa & na= \\
but & 1SG.INDEP=LK & 1SG.SUBJ= \(=\)\begin{tabular}{l} 
pwai \\
only
\end{tabular}
\end{tabular}
êna-u=ro pu-r=i cama-ng
know-DTR=when origin-3GNR.POSS=GEN father-1SG.POSS
'But me too, I only know because of my father.'
Yal-28072010-BGMCG-hamecon_0084
Puu-r may also occur with ma 'LK4' (§7.2.2.1), as shown in example (114).
(114) Âri na ênae puur ma na tume.
\begin{tabular}{llllll} 
âri= & na= & êna-e & puu-r & ma & na=
\end{tabular} \begin{tabular}{l} 
tu=me \\
NEG= \(=\) \\
1SG.SUBJ=
\end{tabular} know-SPC \begin{tabular}{ll} 
origin-3GNR.POSS & LK4 \\
1SG.SUBJ= \(=\) & go.DH=CTP
\end{tabular} 'I don't know why I came down here.'
Yal-03112011-IM1.wav - Yal-03112011-IM2.wav

\subsection*{7.2.9 Serialization as a complementation strategy}

The modal function of same-subject serial verb constructions (SVCs) in Belep was discussed in §5.9. Switch-subject SVCs, \({ }^{290}\) by contrast, are used as a complementation strategy. This process is fairly common cross-linguistically and is also called parataxis (Noonan 2007:65) and apposition (Dixon 1995:179).

In Belep, when an SVC is used as a complementation strategy, it conforms to the pattern shown in (115), where two verb phrases (§5.10) occur in series with no linking morphology.

VP1 VP2
\{VERB ABS. \(\} \quad\{b w a=\) VERB (ABS. \()\}\)
Here, the first verb phrase obligatorily contains an absolutive (§6.3.1) argument (whether it is indexed by a full noun phrase or by a pronominal suffix) which serves as the subject of the second verb phrase. The second VP obligatorily contains the continuative aspectual proclitic \(b w a=(\S 5.4 .4)\), and no other verbal modifiers, such as mood or subject agreement, may occur within it. In SVCs which can be schematized as in (115), the first verb phrase contains a verb of perception; in my corpus, only kiya 'to see' and tue 'to find' are represented. The verb in the second verb phrase tends to be semantically stative and intransitive.

For example, in (116), the absolutive argument of the first verb phrase, indexed by the pronominal suffix \(-e\), serves as the subject for the second verb phrase bwa mae 'sleeping'. The shared argument is underlined.

\footnotetext{
\({ }^{290}\) That is, serialized clauses with different subjects.
}

Lexa tue bwa mae.
\begin{tabular}{llll}
\(\{\mathbf{l}=\mathbf{e x a}\) & tu- \(\mathbf{e}\}\) & \(\{\mathbf{b w a}=\) & mae \(\}\) \\
3DU.SUBJ=ADD & find-3SG.ABS & CONT= & sleep
\end{tabular}
'And they found her sleeping.'
Yal-20092011-AW1_0263
Note that there is no morphosyntactic link between the two verb phrases, and that the second verb phrase does not contain a subject agreement proclitic (§5.7)-to do so would be ungrammatical.. The same situation holds in (121), where the absolutive argument of \(k i y i ~ ' s e e . S P C ' ~ i s ~ i n d e x e d ~ b y ~ e e ~ a n d ~ a l s o ~ s e r v e s ~ a s ~ t h e ~ s u b j e c t ~ o f ~ b w a ~ m a a c ~ ' d e a d ' . ~\)


Yal-20092011-AW1_0274
In examples (118) - 120), the absolutive argument of the first verb phrase is indexed by a full noun phrase, which also acts as the subject of the second verb phrase. In (118), the first verb is tue 'to find'; its absolutive argument is Kawo 'Kawo [a person's name]'.

Kawo is also understood as the subject of the verb phrase bwa mo la mwa 'living in the house'.
(118) Cebaba le ulayimi banen, ka, tu Kawo bwa mo la mwa.
\begin{tabular}{lllll} 
Cebaba & le & ulayi-mi & bane-n & ka \\
Cebaba & LK2 & old.man-DET.A.DST & friend-3SG.POSS & LK
\end{tabular}
\{tu Kawo \(\} \quad\{b w a=\) mo=la mwa \(\}\)
find Kawo CONT= live=LOC house
'Cebaba and his old friend, they found Kawo living in the house.'
Yal-20092011-AW1_0225-0226
In (119), the first verb is kiyi 'see.SPC'; its absolutive argument naer pwalaic 'a child' also serves as the subject of the second verb phrase bwa go 'crying'.
(119) kiyi naer pwalaic bwa go.
\begin{tabular}{lllll}
\(\{\) kiyi & nae-ra & pwalaic \(\}\) & \begin{tabular}{l} 
(bwa \(=\) \\
soe.SPC
\end{tabular} & \(\left.\begin{array}{l}\text { go }\end{array}\right\}\) \\
child-3SG.POSS & one & CONT \(=\) & cry
\end{tabular}

Yal-28072010-BGMCG-tayamu_0045
In 120), the first verb is era (§5.1.2); its absolutive argument is âju 'person', which also serves as the subject of the second verb phrase bwa tu covan nexeng 'riding here'.
120) era âju bwa tu covan nexeng.

'there was a person riding here [on his back].'
Yal-28072010-BGMCG-tahitian_0262
In example (56), though the absolutive argument of the first verb phrase kiya 'see.GNR' is not explicitly stated within the clause, it is understood from context to be the daan 'blood' that was just mentioned. This noun phrase also functions as the subject of the second verb phrase in the serial construction, bwa ce la bwe yeek 'sitting on a branch'.
(121) La noda, te tu la daan, kiya bwa ce la bwe yeek.
\begin{tabular}{llll}
\(\mathbf{l a}=\) & no=da & te \(=\) & tu \(=\mathbf{l a}\) \\
3PL.SUBJ \(=\) & daa-n \\
peer=DIR.UH & 3SG.SUBJ \(=\) & go.DH=NOM & blood-3SG.POSS
\end{tabular}
\(\{\) kiya \(\} \quad\{b w a=c e=l a \quad\) bwe yeek \(\}\)
see.GNR CONT= settle=LOC top tree
'They looked up, his blood was flowing, [they] saw [some] sitting on a branch.'
Yal-20092011-AW5_0091

\subsection*{7.3 Relative clauses}

Most languages have some construction whereby the subject of a clause is
relativized such that the clause becomes part of a noun phrase (Keenan \& Comrie 1977:
67). Many languages are also capable of relativizing other NPs, and Keenan and Comrie's (1977) accessibility hierarchy (Figure 1), revised in Comrie and Keenan (1979), explores what roles these NPs are likely to have within the relative clause. Namely, "If a language can relativize any position on the A [ccessibility] H [ierarchy], then it can
relativize all higher positions" (Comrie \& Keenan 1979: 651); that is, all positions to the left. \({ }^{291}\)

Figure 54: Keenan and Comrie's (1977: 66) accessibility hierarchy
\[
\mathrm{SU}>\mathrm{DO}>\mathrm{IO}>\mathrm{OBL}>\mathrm{GEN}>\mathrm{OCOMP}
\]

Belep speakers are able to relativize most corresponding positions on the Accessibility Hierarchy, including subjects (see §6.2), absolutive arguments (§6.3.1), datives (§6.3.4), and locatives (§6.3.5). Temporal obliques, which do not receive casemarking in simple clauses, can also be relativized.

There are three types of relative clause construction in Belep, which will be discussed in detail in the sections that follow. In the first type (§7.3.1), the relative clause is marked with the linker \(k i,=x i\) ' REL ' (see \(\S 7.2 .6\) ) and the head NP is New information. The second type (§7.3.2), which uses an NP-suffixed determiner as the relativizer, is used when the head NP is Identifiable information. The third type (§7.3.3) uses relative pronouns \({ }^{292}\) which agree in number and animacy with the head NP. This type of relative can best be characterized as 'empty head' (Fox \& Thompson 2007) or 'free' (Andrews 2007b).

There are two main grammatical strategies in Belep by which the relativized NP's role in the relative clause can be understood by the hearer: resumptive pronouns, where an appropriate pronoun appears in the position of the \(\mathrm{NP}_{\text {rel }}\); and 'gapping', where the normal position of the \(\mathrm{NP}_{\text {rel }}\) is empty. Both of these strategies are commonly found crosslinguistically (Keenan \& Comrie 1977, Comrie \& Keenan 1979, Keenan 1985, Payne

\footnotetext{
\({ }^{291}\) Subject, direct object, indirect object, oblique, genitive, and object of comparison.
\({ }^{292}\) These relative pronouns are drawn from the set of demonstrative pronouns (§4.5.2).
}
1997). In Belep, the three types of relatives differ in terms of the strategies they employ to identify the role of the \(\mathrm{NP}_{\text {rel }}\). These differences are discussed in §7.3.4.

In the examples that follow, relative clauses will be surrounded by \(\{\ldots\}\) and the NP head will be underlined. Gapped reference to the relativized NP will be indicated by [0].

\subsection*{7.3.1 Relative clauses with relativizer \(\boldsymbol{k i}\) ' REL '}

Relativizer \(k i\) is used when the head NP of the relative clause is New
information. \({ }^{293}\) This relative clause construction can be used to relativize subjects, as in (122), or absolutive arguments as in (123) and (124). It is unknown whether kirelativization, which is fairly uncommon, can be used to relativize other types of arguments.
(122) Tere tuya âju avar ki ce.
\begin{tabular}{|c|c|c|c|c|}
\hline te=re & tuya & âju & avari \(\{=x i\) & [0] \\
\hline 3SG.SUBJ=ACT & EX.GNR & person & other=REL & \\
\hline
\end{tabular}

Ari jaroven.
âri= ja-roven
NEG= 1PL.INCL.INDEP-all
'There are actually other people who stay [on the good path]. It's not all of us.'
Yal-25072010-PT-homily_0073
Note that the relativized subject argument in (122) is gapped, while the relativized absolutive in (123) is indicated by the resumptive pronominal verb suffix \(-e\).
(123) Aria mwa pwalaic ki la tue. âria mwa pwalaiyi \(\{=x i \quad\) la \(=\quad\) tu-e \(\}\) NEG.EX house one=REL 3PL.SUBJ= find-3SG.ABS 'There was not a single house that they found.'

Yal-28072010-BGMCG-sousmarin_0117

\footnotetext{
\({ }^{293}\) A similar system is found in Nêlêmwa (Bril 2002), where the invariant relativizer is \(x e\), and Balade Nyelâyu (Ozanne-Rivierre 1998), where the relativizer is of the form \(k a\).
}
(124) Toma âria coutume ki avena îna. toma âria coutume \(\{\mathrm{ki}\) avena= îna\} but NEG.EX ritual.gift.LN REL 1TR.EXCL.SUBJ= make.GNR 'But there was no ritual gift that we performed.'

Yal-28072010-BGMCG-tahitian_0026
As these examples show, relativization with \(k i\) is most common with an existential or negative existential predicate in the main clause; the relativized NP is being introduced as New. Interestingly, ki-relativization can also occur without an NP head, as in (125).

\section*{(125) Ka âria ki tame la Weaa.}
\begin{tabular}{llll} 
ka & âria \(\{=\mathbf{x i}\) & ta=me=la & Weaa \(\}\) \\
LK & NEG.EX=REL & go.UH=CTP=LOC & Weaa
\end{tabular}
'And there was nothing that made it up to Weaa.'
Yal-28072010-BGMCG-sousmarin_0094

\subsection*{7.3.2 Relative clauses with a determiner}

In some relative clauses in Belep, a determiner suffix (§4.4.2) attaches to the lexical head NP, where it acts as a relativizer. This construction is used in Belep when the head NP is Identifiable information-that is, information which has previously been textually or situationally evoked, or which the "speaker assumes the hearer can infer [via logical or plausible] reasoning" (Prince 1981:236). Such determiner-relatives are fairly uncommon in my corpus.

If the relativized NP acts as the relative clause subject, the \(\mathrm{NP}_{\text {rel }}\) reference on the verb (the subject agreement proclitic) is gapped, as in (37) and (35), where it is indicated by [0].
(126) Âjumi ci ta la na mwanok,
\begin{tabular}{llllll} 
âju\{ \(\{-m i\) & {\([0]\)} & \begin{tabular}{ll} 
ci & ta=la \\
person-DET.A.DST
\end{tabular} & \begin{tabular}{l} 
na
\end{tabular} & mwanok \(\}\) \\
sit
\end{tabular}
person-DET.A.DST
sit go.UH=LOC interior moon
'The person who nonetheless went to the moon,'
Yal-28072010-BGMCG-lune_0066-0067
\begin{tabular}{|c|c|c|c|c|}
\hline na= & - & mi & [0] & , \\
\hline 1SG.S & know-SPC & person-DET.D.DST & & steal.TR-3DU. \\
\hline \multicolumn{5}{|l|}{'I know the person who stole them.'} \\
\hline
\end{tabular}

Yal-02112011-DY.wav
In other types of determiner-relatives, the \(\mathrm{NP}_{\text {rel }}\) is indicated by a resumptive pronoun. In (128) and (36), the relativized object is indicated by the pronominal verb inflection -er.
(128) tayamomi yo kiyier yak
\begin{tabular}{llll} 
tayamo \(\{-\mathbf{m i}\) & \(\mathbf{y o}=\) & \begin{tabular}{l} 
kiyi-era
\end{tabular} & yak \(\}\) \\
old.woman-DET.D.DST & 2SG.SUBJ \(=\) & see.SPC-3SG.ABS & yesterday \\
'the woman you saw yesterday' & &
\end{tabular}

Yal-02112011-DY.wav
(129) Gawaariik te jier ri kawuja,
gawari \(\{-\mathbf{x a = r e} \quad\) ji-er=i kawu-ja\}
day-DET.D.PRX=3SG.SUBJ
give.SPC-3SG.ABS=GEN guardian-1PL.INCL.POSS
'This day that our Lord has given,'
Yal-25072010-PT-homily_0005
In (130), the relativized NP is a dative argument, referenced by the dative case-marked pronoun \(=e e n\).
âma naenimi na pana oyer reen
\(\xrightarrow[\text { âma }=]{\text { DYAD }=}\)\begin{tabular}{ll} 
nae-ni \(\{-m i\) & \begin{tabular}{l} 
na= \\
child-3SG.POSS-DET.D.DST
\end{tabular} \\
1SG.SUBJ \(=\)
\end{tabular} \begin{tabular}{l} 
pana= \(=\) \\
go.TV
\end{tabular}\(\quad\)\begin{tabular}{l} 
oyer=e-en \(\}\) \\
visit=DAT-3SG.POSS
\end{tabular} 'the family I visited'

Yal-02112011-DY.wav
In (131), the relativized NP is a locative argument, referred to by the possessive pronominal suffix -n.
(131) yerimi na ji ariidu la nan
\begin{tabular}{lllll}
\(\boldsymbol{y e r i}\{-\mathbf{m i}\) & \(\mathbf{n a}=\) & \(\mathbf{j i}\) & \begin{tabular}{l}
\(\mathbf{a r i}=\mathbf{d u}=\mathbf{l}\) \\
pot-DET.D.DST
\end{tabular} & 1SG.SUBJ= \\
give & \begin{tabular}{l} 
na-n \(\}\) \\
rice=DIR.DH=LOC
\end{tabular} & interior-3SG.POSS
\end{tabular} 'the pot I put rice in'
Yal-02112011-DY.wav

\subsection*{7.3.3 Relative clauses with a relative pronoun}

The most common type of relative clause in Belep is demonstrative-relatives; that is, relative clauses which employ a demonstrative pronoun (§4.5.2) as a relative pronoun.

These relative pronouns are composed of bound pronominal stems to which a determiner suffix (§4.4.2) is attached. As with determiner-relatives (discussed above in §7.3.2), the determiner suffix in demonstrative-relatives acts as a relativizer. The role of the head NP, on the other hand, is filled by the bound pronominal stem, which is marked for number, animacy, and information structure (though not grammatical function). As this head NP is semantically empty rather than lexical, these Belep demonstrative-relatives are best characterized as 'empty head' relatives. Fox and Thompson (2007) define "Empty Head NPs to be those which are not lexically specific and/or which index generic groups or sets of individuals or objects" (Fox \& Thompson 2007:297). Comparable relative clauses in other languages have also been termed 'free relatives' (Andrews 2007b:213), although there is some disagreement among scholars as to whether 'empty heads' should be considered outside of or part of the relative clause (Bresnan \& Grimshaw 1978).

Belep demonstrative-relatives may occur with both New and Identifiable information as the head NP. As with determiner-relatives, a relativized subject argument is not marked within the relative clause; the subject reference on the verb is gapped, as shown in (132) and (133).
(132) Âri yo li âmi ca bae - bae du liva,

```

bae du=li-va}

```
bite bones=GEN-1PL.EXCL.ABS
"'Aren't you the one who always eats- eats our bones,""
Yal-01082010-MFD_0034-0035
(133)

\section*{Pawi, nyami cuur ra alap.}
pawi nya\{-mi [0] cur=a alap\}
beach.hibiscus DEM.IDF-DET.A.DST stand=LOC beach
'The hibiscus, the one that stands on the beach.'

If an argument other than the subject is relativized, the \(\mathrm{NP}_{\text {rel }}\) is referenced by a
resumptive pronoun. In the absolutive relatives in (134) and (218), the \(\mathrm{NP}_{\text {rel }}\) is marked by the third singular absolutive suffix \(-e\) on the verb.
nyami na, na bwawie, \(\begin{array}{llll}\text { nya }\{-\mathbf{m i} & \mathbf{n a}= & \text { na }= & \begin{array}{l}\text { bwawi-e }\} \\ \text { DEM.IDF-DET.A.DST }\end{array} \\ \text { 1SG.SUBJ }= & \text { 1SG.SUBJ }= & \text { remove.TR-3SG.ABS }\end{array}\) 'the one I adopted,' (lit. 'the one I removed,')

Yal-17072009-TB-weekend_0033
(135) Ka temere uya la mwimi te nooxee.
ka te=me=re uya=la
LK 3 SG.SUBJ=IRR=ACT arrive=NOM
mwi\{-mi=re noxe-e\}
DEM.IA-DET.A.DST=3SG.SUBJ solicit.TR-3SG.ABS
'And what \(\mathrm{s} / \mathrm{he}\) asked for will happen.'
Yal-25072010-PT-homily_0045
In (136), the relativized NP is a locative, and is marked within the relative clause by the anaphoric locational enclitic \(=i\) 'there' (§5.12).
(136) Yami teô pwec yi.
ya \(\{-\mathbf{m i}=\mathbf{r e}=\hat{\mathbf{o}} \quad\) pwey=i\}
DEM.LOC-DET.A.DST=3SG.SUBJ=REAL be.born=LOC.A 'Where she was born.'

Yal-20092011-AW1_0271
In (137) and (138), the relativized NP is a temporal oblique and is not referenced within the relative clause (i.e. it is 'gapped').
nyami le uya la Nic,
\begin{tabular}{lll} 
nya \(\{-\mathbf{m i}\) & \(\mathbf{l e}=\) & uya \(=\mathbf{l a}\) \\
DEM.GIV-DET.A.DST & Nic \\
3DU.SUBJ \(=\) & \begin{tabular}{l} 
arrive \(=\) LOC
\end{tabular} & Nic
\end{tabular} '[the time] when they arrived at Nic,'

Yal-20092011-AW1_0217
(138) nyali te ta la Teâ Belep, nya\{-li te \(=\quad \mathbf{t a}=\mathbf{l a} \quad\) Teâ Belep \(\}\) DEM.GIV-DET.A.PRX 3SG.SUBJ= go.UH=NOM Teâ Belep '[the time] when Teâ Belep came up,'

\subsection*{7.3.4 Identification of the relativized NP}

As I have already mentioned, the three types of relative clause constructions may also be distinguished from one another on the basis of the strategies they employ to mark the grammatical role of the relativized NP.

Though both ki-relatives and headless relatives employ gapping for some types of subject-relativization and resumptive pronouns for most other types (except for relativized temporal obliques), they differ in the exact point on the Accessibility Hierarchy where they draw the line between these two strategies. Briefly, for ki-relatives, only third person singular subject relatives are gapped; other subject relatives use resumptive pronouns. For example, (139) contains a subject relative with a second person singular subject; the resumptive pronoun \(y o=\) is used.
(139) Enyi ki, enyi ki yo âju ki âri yo ce ô,
 'If, if you are a person who does not stay well [on the good path],' Yal-25072010-PT-homily_0060

In (140), the subject relative has a third person plural subject; again, a resumptive pronoun \((l a=)\) is used.

\section*{Lame migila ki la ta.}
\begin{tabular}{lll}
\(\mathbf{l a}=\mathbf{m e}\) & migi-la \(\{=\mathbf{x i}\) & \(\mathbf{l a}=\) \\
3PL.SUBJ=IRR & catch-3PL.ABS=REL & 3PL.SUBJ= \(=\) \\
go.UH
\end{tabular}
'They would catch the ones that were going up.'
Yal-28072010-BGMCG-igname_0038
In contrast, demonstrative-relatives use gapping for all subject relatives. Example (45) shows a gapped subject reference for a third person plural subject relative.

\footnotetext{
\({ }^{294}\) Note that the form enyixi is most likely an older form of enyi (§7.2.4).
}
(141) La kiyier ri lami bwa molep,
 'Those who were still alive saw them,'

Yal-20092011-AW2_0073
Determiner-relatives behave more like headless relatives in that all subjects are gapped; example (142) shows that the use of a resumptive third person plural verb agreement proclitic is ungrammatical, while gapping the clitic makes it grammatical.
(142) *âjuli la bwa molep

âjumi bwa molep
âju\{-mi \(\quad[0] \quad b w a=\) molep \(\}\)
person-DET.A.DST CONT= be.alive
'people who are still alive'
Yal-02112011-DY.wav

\subsection*{7.4 Summary}

In this chapter, I have presented the set of clausal combinations that exist in Belep. Clausal coordination, in which linkers ka 'LK', ai 'or', mo 'LK3', toma 'but', and kara 'well' are used, was discussed in §7.1. A variety of Belep complementation strategies (as defined by Dixon 1995, 2006) were discussed in §7.2; most of them involve non-embedded subordinate clauses which are morphosyntactically indistinguishable from coordinate clauses. Here, linkers such as \(k a\) 'LK', ma 'LK4', to 'when', enyi 'if', \(k a\) me 'then', and \(k i\) ' REL' act as subordinators. Other complementation strategies include predicate nominals (see \(\S 7.2 .7\) and \(\S 7.2 .8\) ), serialization (§7.2.9), and nominalization using derivational morphology (discussed in §3.5.2). Note that no true complementation, where a clause acts as an argument of another clause (Noonan 2007), exists in Belepthis contrasts with related languages such as Nêlêmwa (Bril 2002), South Efate
(Thieberger 2006), and Fijian (Dixon 1995), which do have complementation. Belep relative clauses were discussed in \(\S 7.3\); they play a role in various other constructions in Belep, including subordination (see §7.2.6 and §7.2.8), and question-word questions (§6.5.2).

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\section*{Appendix A: Glossing conventions}
\begin{tabular}{|c|c|}
\hline 1DU.EXCL.ABS & -ve \\
\hline 1DU.EXCL.INDEP & ave \\
\hline 1DU.EXCL.POSS & -ve \\
\hline 1DU.EXCL.SUBJ & ave \(=\) \\
\hline 1DU.INCL.ABS & -ji \\
\hline 1DU.INCL.INDEP & ji \\
\hline 1DU.INCL.POSS & -ji \\
\hline 1DU.INCL.SUBJ & \(\mathbf{j} \mathbf{i}=\) \\
\hline 1PA.EXCL.ABS & -ven \\
\hline 1PA.EXCL. INDEP & aven \\
\hline 1PA.EXCL.POSS & -ven \\
\hline 1PA.EXCL.SUBJ & avena= \\
\hline 1PA.INCL.ABS & -jen \\
\hline 1PA.INCL.INDEP & jen \\
\hline 1PA.INCL.POSS & -jen \\
\hline 1PA.INCL.SUBJ & jena= \\
\hline 1PL.EXCL.ABS & -va \\
\hline 1PL.EXCL.INDEP & ava \\
\hline 1PL.EXCL.POSS & -va \\
\hline 1PL.EXCL.SUBJ & ava= \\
\hline 1PL.INCL.ABS & -ja \\
\hline 1PL.INCL.INDEP & ja \\
\hline 1PL.INCL.POSS & -ja \\
\hline 1PL.INCL.SUBJ & \(\mathbf{j} \mathbf{a}=\) \\
\hline 1SG.ABS & -nao \\
\hline 1SG.INDEP & nao \\
\hline 1SG.POSS & -ng \\
\hline 1SG.SUBJ & na= \\
\hline 2DU.ABS & -or \\
\hline 2DU.INDEP & or \\
\hline 2DU.POSS & -or \\
\hline 2DU.SUBJ & 0= \\
\hline 2PA.ABS & -ôn \\
\hline 2PA.INDEP & ôn \\
\hline 2PA.POSS & -ôn \\
\hline 2PA.SUBJ & ôna= \\
\hline 2PL.ABS & -ac \\
\hline 2PL.INDEP & ac \\
\hline
\end{tabular}
first dual exclusive absolutive verb suffix; §5.6
first dual exclusive independent pronoun; §4.5.1
first dual exclusive possessive nominal suffix; §4.1.2.2
first dual exclusive subject proclitic in the verb group; §5.7
first dual inclusive absolutive verb suffix; §5.6
first dual inclusive independent pronoun; §4.5.1
first dual inclusive possessive nominal suffix; §4.1.2.2
first dual inclusive subject proclitic in the verb group; §5.7
first paucal exclusive absolutive verb suffix; §5.6
first paucal exclusive independent pronoun; §4.5.1
first paucal exclusive possessive nominal suffix; §4.1.2.2
first paucal exclusive subject proclitic in the verb group;
§5.7
first paucal inclusive absolutive verb suffix; §5.6
first paucal inclusive independent pronoun; §4.5.1
first paucal inclusive possessive nominal suffix; §4.1.2.2
first paucal inclusive subject proclitic in the verb group; §5.7
first plural exclusive absolutive verb suffix; §5.6
first plural exclusive independent pronoun; §4.5.1
first plural exclusive possessive nominal suffix; §4.1.2.2
first plural exclusive subject proclitic in the verb group; §5.7
first plural inclusive absolutive verb suffix; §5.6
first plural inclusive independent pronoun; §4.5.1
first plural inclusive possessive nominal suffix; §4.1.2.2
first plural inclusive subject proclitic in the verb group;
§5.7
first singular absolutive verb suffix; §5.6
first singular independent pronoun; §4.5.1
first singular possessive nominal suffix; §4.1.2.2
first singular subject proclitic in the verb group; §5.7
second dual absolutive verb suffix; §5.6
second dual independent pronoun; §4.5.1
second dual possessive nominal suffix; §4.1.2.2
second dual subject proclitic in the verb group; §5.7
second paucal absolutive verb suffix; §5.6
second paucal independent pronoun; §4.5.1
second paucal possessive nominal suffix; §4.1.2.2
second paucal subject proclitic in the verb group; §5.7
second plural absolutive verb suffix; §5.6
second plural independent pronoun; §4.5.1
\begin{tabular}{|c|c|c|}
\hline 2PL.POSS & -ac & second plural possessive nominal suffix; §4.1.2.2 \\
\hline 2 PL .SUBJ & \(\mathrm{a}=\) & second plural subject proclitic in the verb group; §5.7 \\
\hline 2SG.ABS & -0 & second singular absolutive verb suffix; §5.6 \\
\hline 2SG.INDEP & yo & second singular independent pronoun; §4.5.1 \\
\hline 2SG.POSS & -mw & second singular possessive nominal suffix; §4.1.2.2 \\
\hline 2SG.SUBJ & yo= & second singular subject proclitic in the verb group; §5.7 \\
\hline 3DU.ABS & -le & third dual absolutive verb suffix; §5.6 \\
\hline 3DU.INDEP & le & third dual independent pronoun; §4.5.1 \\
\hline 3DU.POSS & -le & third dual possessive nominal suffix; §4.1.2.2 \\
\hline 3du.subj & \(\mathrm{le}=\) & third dual subject proclitic in the verb group; §5.7 \\
\hline 3GNR.POSS & -r & third generic possessive nominal suffix; §4.1.2.2 \\
\hline 3PA.ABS & -len & third paucal absolutive verb suffix; §5.6 \\
\hline 3PA.INDEP & len & third paucal independent pronoun; §4.5.1 \\
\hline 3PA.POSS & -len & third paucal possessive nominal suffix; §4.1.2.2 \\
\hline 3Pa.SUBJ & lena= & third paucal subject proclitic in the verb group; §5.7 \\
\hline 3PL.ABS & -la & third plural absolutive verb suffix; §5.6 \\
\hline 3PL.INDEP & la & third plural independent pronoun; §4.5.1 \\
\hline 3PL.POSS & -la & third plural possessive nominal suffix; §4.1.2.2 \\
\hline \(3 \mathrm{PL.SUBJ}\) & \(\mathbf{l a}=\) & third plural subject proclitic in the verb group; §5.7 \\
\hline 3SG.ABS & -er, -e & third singular absolutive verb suffix; §5.6 \\
\hline 3SG.INDEP & yer & third singular independent pronoun; §4.5.1 \\
\hline 3SG.POSS & -n & third singular possessive nominal suffix; §4.1.2.2 \\
\hline 3SG.SUBJ & te= & third singular subject proclitic in the verb group; §5.7 \\
\hline ABS & & absolutive suffix; §5.6, §6.3.1 \\
\hline AC & -ma & associative plural nominal suffix; §4.2.1 \\
\hline ACT & \(=\mathbf{r e}\) & actual verb group enclitic; §6.8.2.2 \\
\hline ADD & =xa & additive verb group enclitic; §6.8.2.1 \\
\hline ADU & -male & associative dual nominal suffix; §4.2.2 \\
\hline AGT & â= & agentive derivational proclitic; §3.5.2.1 \\
\hline CAUS & pa= & causative verb group proclitic; §5.3 \\
\hline CL & & numeral classifier; §4.6.3 \\
\hline COMPL & -roven & total nominal (§4.2.4) or completive verb group suffix (§5.4.11) \\
\hline CONT & bwa= & continuative aspect verb group proclitic; §5.4.4 \\
\hline CTF & \(=\) ic & centrifugal (away from the speaker) verb phrase enclitic; §5.11 \\
\hline CTP & \(=\mathrm{me}\) & centripetal (toward the speaker) verb phrase enclitic; §5.11 \\
\hline D & & deictic \\
\hline DA.IA & -a & inanimate differential absolutive verb suffix; §5.1.6 \\
\hline DA.NSG & -n & nonsingular differential absolutive verb suffix; §5.1.6 \\
\hline DAT & =(l) \({ }^{\text {e }}\) & dative case ditropic clitic; §6.3.4 \\
\hline DEM & & ALTERNATE FORM =(l)ee demonstrative pronoun; §4.5.2 \\
\hline DEM.DU & le- & dual demonstrative pronoun; §4.5.2 \\
\hline DEM.IA & mwi- & ALTERNATE FORM leesingular inanimate demonstrative pronoun; §4.5.2 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline DEM.IDF & nya- & ALTERNATE FORMS mwii-, wî-, wîisingular identifiable demonstrative pronoun; §4.5.2 \\
\hline DEM.LOC & ya- & locative demonstrative pronoun; §4.5.2 \\
\hline DEM.MAN & wa- & manner demonstrative pronoun; §4.5.2 \\
\hline & & ALTERNATE FORM waa- \\
\hline DEM.NEW & â- & new demonstrative pronoun; §4.5.2 \\
\hline DEM.PA & lenyi- & paucal demonstrative pronoun; §4.5.2 \\
\hline & & alternate form lenyii- \\
\hline DEM.PL & 1a- & \begin{tabular}{l}
plural demonstrative pronoun; §4.5.2 \\
ALTERNATE FORM laa-
\end{tabular} \\
\hline DEM.PRES & ere- & presentational demonstrative pronoun; §4.5.2 \\
\hline DET & & ALTERNATE FORM eradeterminer suffix ; §4.3.2 \\
\hline DET.A.DST & -mi & distal anaphoric determiner nominal suffix; §4.3.2.2 \\
\hline DET.A.PRX & -li & proximal anaphoric determiner nominal suffix; §4.3.2.2 \\
\hline DET.D.DST & -xe & distal deictic determiner nominal suffix; §4.3.2.1 \\
\hline DET.D.MDS & -yek & medial-distal deictic determiner nominal suffix; §4.3.2.1 \\
\hline DET.D.MPX & -na & medial-proximal deictic determiner nominal suffix; §4.3.2.1 \\
\hline DET.D.PRX & -k & proximal deictic determiner nominal suffix; §4.3.2.1 \\
\hline DET.DH & -xedu & downhill deictic determiner nominal suffix; §4.3.2.1 \\
\hline DET.DST.DH & -midu & distal downhill deictic determiner nominal suffix; §4.3.2.1 \\
\hline DET.DST.UH & -yeda & distal uphill deictic determiner nominal suffix; §4.3.2.1 \\
\hline DET.Q1 & -va & interrogative determiner nominal suffix; §4.3.2.3 \\
\hline DET.Q2 & -da & interrogative determiner nominal suffix; §4.3.2.3 \\
\hline DET.Q3 & -ra & interrogative determiner nominal suffix; §4.3.2.3 \\
\hline DET.UH & -xeda & uphill deictic determiner nominal suffix; §4.3.2.1 \\
\hline DETR & -u & detransitive verb suffix; §5.1.5 \\
\hline DIM & ma= & diminished aspect verb group proclitic; §5.4.7 \\
\hline DIR.DH & =du & downhill directional verb phrase enclitic; §5.11 \\
\hline DIR.TV & =van & transverse directional verb phrase enclitic; §5.11 \\
\hline DIR.UH & =da & uphill directional verb phrase enclitic; §5.11 \\
\hline DST & & distal \\
\hline DU & & dual number \\
\hline DUB & \(\mathbf{u}=\) & dubitative aspect verb group proclitic; §5.4.10 \\
\hline DYAD & âma= & dyadic derivational proclitic; §3.5.1.2 \\
\hline EX & tuya & existential absolutive intransitive verb; §5.1.2 \\
\hline EXCL & & ALTERNATE FORMS tuu, tu exclusive \\
\hline GE & -mene & general extender nominal (\$4.2.3) or verb group suffix (§5.4.12) \\
\hline GEN & \(=(\mathbf{l}) \mathbf{i}\) & genitive case ditropic clitic; §6.3.3 \\
\hline GNO & da= & gnomic aspect verb group proclitic; §5.4.6 \\
\hline GNR & & generic; §5.1.4 \\
\hline HAB & tao \(=\) & habitual aspect verb group proclitic; §5.4.9 \\
\hline INCL & & inclusive \\
\hline INDEP & & independent pronoun; §4.5.1 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline INSTR & \(\mathbf{b a}=\) & instrumental derivational proclitic; §3.5.2.2 \\
\hline INSTR & =va & instrumental case ditropic clitic; §6.3.6 \\
\hline & & ALTERNATE FORM = vae \\
\hline IRR & =me & irrealis verb group enclitic; §5.5.2 \\
\hline ITER & \(\mathbf{c a =}\) & iterative aspect verb group proclitic; §5.4.5 \\
\hline LK & ka & NP coordinator (§4.4.1) and clausal additive linker (§7.1.2) \\
\hline LK2 & le & binomial linker; §4.4.2 \\
\hline LK3 & mo & causal linker; §7.1.3 \\
\hline LK4 & ma & inclusory (§4.4.5) or comitative (§4.4.6) NP linker; subjunctive and correlational clausal linker ( \(\$ 7.2 .2\) ) \\
\hline LN & & loanword or instance of code-mixing; §1.6.2 \\
\hline LOC & \(=(\mathbf{l}) \mathbf{a}\) & locative case ditropic clitic; §6.3.5 \\
\hline LOC.A & =(l)i & anaphoric locational verb phrase enclitic; §5.12 \\
\hline LOC.DC & =(l)exeng & deictic center locational verb phrase enclitic; §5.12 \\
\hline LOC.DH & =(l)exedu & downhill locational verb phrase enclitic; §5.12 \\
\hline LOC.DST & =(l)exe & distal locational verb phrase enclitic; §5.12 \\
\hline LOC.DST.DH & =(l)imidu & distal downhill locational verb phrase enclitic; §5.12 \\
\hline LOC.DST.UH & =(l)iyeda & distal uphill locational verb phrase enclitic; §5.12 \\
\hline LOC.MDS & =(l)iyek & medial-distal locational verb phrase enclitic; §5.12 \\
\hline LOC.MPX & =(l)ena & medial-proximal locational verb phrase enclitic; §5.12 \\
\hline LOC.Q & =(l)iva & interrogative locational verb phrase enclitic; §5.12 \\
\hline LOC.UH & =(l)exeda & uphill locational verb phrase enclitic; §5.12 \\
\hline MDS & & medial-distal \\
\hline MPX & & medial-proximal \\
\hline NDR & -r & verb suffix indicating bound intransitive verb is unmarked for direction; §5.1.1.1 \\
\hline NEG & âri= & negative verb group proclitic; §6.7 \\
\hline NEG.EX & âria & negative existential absolutive intransitive verb; §5.1.2 \\
\hline NEG.IMPER & wara= & prohibitive verb group proclitic; §6.6.2 \\
\hline NEG.LOC & cia & negative locative absolutive intransitive verb; §5.1.2 \\
\hline & & ALTERNATE FORM ciae \\
\hline NEG.NEC & kara= & prohibitive verb group proclitic; §6.6.2 \\
\hline NEG.NEC & kiaxi= & negative verb group proclitic; §6.7 \\
\hline NOM & \(=(\mathbf{l})\) & nominative case ditropic clitic; §6.3.2 \\
\hline NTR & & intransitive; §5.1 \\
\hline ORD & \(\mathbf{b a}=\) & ordinal derivational proclitic; §3.5.1.1 \\
\hline PA & & paucal number \\
\hline PL & & plural number \\
\hline POSS & & possessive suffix; §4.1.2.2 \\
\hline PRF & âmu= & perfect aspect verb group proclitic; §5.4.2 \\
\hline PROG & âga= & progressive aspect verb group proclitic; §5.4.1 \\
\hline PRX & & proximal \\
\hline PUNCT & nyi= & punctual aspect verb group proclitic; §5.4.8 \\
\hline RA & pu= & reduced agentive verb group proclitic; §5.3 \\
\hline REAL & =0 & realis verb group enclitic; §5.5.1 \\
\hline RECP & pe= & reciprocal verb group proclitic; §5.3 \\
\hline
\end{tabular}
\begin{tabular}{lll} 
REL & \(\mathbf{k i}\) & relativizer (§7.3.1) and deontic subordinator (§7.2.6) \\
RESULT & \(\mathbf{w a =}\) & \begin{tabular}{l} 
resultative derivational proclitic; §3.5.2.3 \\
subjunctive aspect verb group proclitic; §5.4.3 \\
SBJ
\end{tabular} \\
ba & & \begin{tabular}{l} 
singular number
\end{tabular} \\
SG & SPC & -e
\end{tabular} \begin{tabular}{l} 
specific verb suffix; §5.1.4 \\
subject agreement; §5.7 \\
SUBJ
\end{tabular}

\section*{Appendix B: Cited texts}

Where possible, all examples in this dissertation are drawn from texts-recorded and transcribed instances of language use by Belep speakers. These texts are normally cited using a unique code which contains the date (in the format DDMMYYYY), the speaker's initials, and a timecode. For example, 'Yal-17072009-TB-weekend_00360037 ' is a reference to the text entitled 'Yal-17072009-TB-weekend', at the timecode 0036-0037 (this identifier refers to a unique entry in a Toolbox database). Other texts, which do not yet have an associated Toolbox database, are cited with a timecode in a different format, e.g. 'Yal-05102010-MTAD_24:21-24:29'.

The following is a list of texts from which citations are drawn, as well as short descriptions of each text.

\section*{Yal-17072009-TB-weekend}

BOUEDAOU Thérèse discusses what she and her family did last weekend.

\section*{Yal-25072010-PT-homily}

TEANYOUEN Philippe gives a sermon at the church in Waala; he deconstructs the Lord's Prayer.

\section*{Yal-28072010-BGMCG-lune}

GUELEME Benjamin and Marie-Clothilde tell the legend of a paralyzed man from Poc who was the first person to visit the moon.

\section*{Yal-28072010-BGMCG-hamecon}

GUELEME Benjamin and Marie-Clothilde describe a particular technique for fishing.

\section*{Yal-28072010-BGMCG-tahitian}

GUELEME Benjamin and Marie-Clothilde tell a story about Benjamin's brother-in-law, a Tahitian, who offended the spirits at Poc and was punished.

\section*{Yal-28072010-BGMCG-tayamu}

GUELEME Marie-Clothilde and Benjamin tell a legend about two sisters who adopt a baby, but the baby turns out to be an old woman in disguise.

\section*{Yal-28072010-BGMCG-sousmarin}

GUELEME Benjamin and Marie-Clothilde tell a legend about a tsunami that wiped out the village of Ono.

\section*{Yal-28072010-BGMCG-igname}

GUELEME Benjamin and Marie-Clothilde discuss the religious significance of a particular site.

\section*{Yal-29072010-JMT-igname}

THALE Jean-Marie describes the procedure for planting and harvesting yams.

\section*{Yal-01082010-MFD}

TEAMBOUEON Marie-France tells a legend about the octopus and the rat.

\section*{Yal-09082010-coutume}

MOILOU Jean-Baptiste performs a coutume before the Conseil des anciens.

\section*{Yal-09082010-JMTresponse}

THALE Jean-Marie performs a yayila, a response to Jean-Baptiste.

\section*{Yal-11082010-ET2-jewe}

THALE Elie tells a story about his father, who got lost because of jewe, mischievous spirits.

\section*{Yal-05092011-AP1}

POITHILI Albert tells the legend of the Dubageni, a frightening demon.

\section*{Yal-05102010-MTAD}

DAYE Alice and TEAMBOUEON Marjorie play card games.

\section*{Yal-14092011-PT2-avenir}

TEANYOUEN Philippe gives his advice for future generations of Belema.

\section*{Yal-17092011-IM-dominoes}

A group of women, including MOILOU Ignacia, play dominoes.

\section*{Yal-19092011-PA}

POITHILI Allen tells the legend of the rock formation called Kawo and Ixe.

\section*{Yal-20092011-AW1}

WAHOULO Amabili tells the story of Kawo, the daughter of Teâ Ciaup, being raised from the dead.

\section*{Yal-20092011-AW2}

WAHOULO Amabili tells the story of a shipwreck at Easter where many members of clan THALE were killed.

\section*{Yal-20092011-AW3}

WAHOULO Amabili tells the story of the battle of Koumac.

\section*{Yal-20092011-AW4}

WAHOULO Amabili tells the story of the chief's daughters Kawo and Ixe halting a battle.

\section*{Yal-20092011-AW5}

WAHOULO Amabili tells the story of Teâ Pûnivaac and his defeat by Teâ Belep.

\section*{Yal-20092011-AW6}

WAHOULO Amabili tells the story of Teâ Belep's arrival on the island.

\section*{Yal-27092011-LPLY}

PIDYO Lalita and YARIK Lisianne answer interview questions about their experience of being young people in Belep.

\section*{Balade-mariage}

A collection of handwritten lyrics for traditional wedding songs.

\section*{DY classroom}

A collection of handwritten signs posted in YARIK Darine's primary school classroom.

\section*{Paradiso}

Song lyrics for a traditional mourning song.

\section*{PT handout}

A set of typed and typewritten lists of vocabulary and grammar composed by TEANYOUEN Philippe.

Where examples could not be found in recorded texts, I have drawn them from elicitation or naturally-occurring speech that I overheard. In these cases, where possible, I have indicated the filename(s) of the recording where the example occurred. In these instances, .wav is always included in the citation code, e.g. 'Yal-07112011-TB1.wav -Yal-07112011-TB3.wav' indicates that the example was drawn from a recording session encompassed by three .wav files. These files are currently available in the archives of the ALK and of the Tjibaou Cultural Center.

\section*{Appendix C: Speakers}

The following is a list of all Belep speakers whose speech was recorded for this work. Note that many, many other Belema assisted with the project, defined words, provided translations, wrote texts, engaged me in conversation, etc., allowing me to form a more complete understanding of the language. Some speakers are referred to by initials in the text; their names are indicated here.

BOUEDAOU Edwin
TB BOUEDAOU Thérèse
AD DAYE Alice
DAYE Laurente
BG GUELEME Benjamin
MCG, CG GUELEME Marie-Clothilde
GUELEME Siméon
YG GUELEME Yasmine
IM MOILOU Ignacia
JBM MOILOU Jean-Baptiste
AP POITHILI Albert
PA POITHILI Allen
POITHILI Alexandrine
PP POITHILI Pierre
PIDJO Bruno
LP PIDYO Lalita
TEAMBOUEON Eulalie
TEAMBOUEON François
MFD TEAMBOUEON Marie-France
MT TEAMBOUEON Marjorie
JT TEANYOUEN Madeleine
PT TEANYOUEN Philippe
ET THALE Elie
JMT THALE Jean-Marie
NT THALE Nazaire
AW WAHOULO Amabili
CW WAHOULO Christine
DY YARIK Darine
LY YARIK Lisianne

\section*{Appendix D: Demonstrative pronouns}

The demonstrative pronouns (§4.5.2) consist of bound pronominal stems to which determiner suffixes (§4.3.2) must be affixed in order to form a full phonological word (§3.1.1). The table below lists all the demonstrative pronouns which were attested in my fieldwork. Those marked with an asterisk \(\left({ }^{*}\right)\) are found in my recorded corpus of naturally-occurring speech. Those marked by \(\left({ }^{\circ}\right)\) and (\#) were elicited from speakers using the questions 'Can one say \(\qquad\) ?' and 'Does \(\qquad\) exist?'. Empty spaces in the table indicate demonstrative pronouns which are unattested. In some cases, this is most likely an accidental oversight (e.g. mwiyeda is probably used by Belep speakers), though in other cases such as for the bound stem era-, ere- it is unknown whether the unattested forms are grammatical.

Table: Demonstrative pronouns


\section*{Appendix E: Sample interlinearized text}

The following is a narrative by GUELEME Benjamin (called Korowi in Belep)
and his wife GUELEME Marie-Clothilde (who goes by Clothilde or Kloin). It is a
description of an experience Benjamin had as a young man. The text is presented first in
Belep, then in a free English translation, then in the four-line interlinearization used in the rest of this work.

GUELEME Benjamin and GUELEME Marie-Clothilde, 28 July 2010 Waala, Belep

BG: Elo, name pari l'histoire ra bweeng. Nao ka ulayixedu, Maxeek. Te uya la beau-frère rive pwalaic, naran ni Tayema, tahitien. Te tu ka tame ka pae avave tamwa. Texa wali, te- leme tume, toma te ca nobwawinao, ka nobwawi pwemwang, nyayek, te ca nobwawiva.

Texa tume, ô tume li vacances pwalaic, ka înae vacances yier rexeng, yak xeve. Texa noxeve ma avena pan, avena pan na Poc, ave ma ulayina. Avexa pae waga ulayixedu digi, avenaô pan. Ave ma tiaea ween no, ka tuve- cawone ka tuvea ween ola. Avenaxa pan, te pae fusil sous-marin nie, avenaxa pan, avena panic, pan aven, pan aven, ka tabo la mayarixeda, yaxeda li Poc. Avena tewuur ra Iniwan. Avenaxa tu.

Toma âria coutume ki avena îna. Avenaô wana.
Avenaôxa tu, cawoneduic, tuic, tuic, tuic ka uya la Cager ka uya la Âmwany. Âria. Âria ola. Avenaxa pan. Avena ci- mu la bwe buâny pwalaic. Mana buâny. Toma yali, ka naran ni Pwaraweli. Avena nawe nyu, ka ô ânap. Ka ô mon ni gawaar, avenaô wiu gawaar, ka ô toven.

Avexa, ave ma Maxeek, ave pa tânema cawone ka tu ka tuve ola. Na buânyili. Avexa tu la na buâny, toma yer, Tayema, tahitien, ka te ci la bwe digi. Toma ave, aveô plonger, aveô ta ka cawone, avexa cawonevan, cawonevan. Texa, avexa migi pwalaic. Pwalaic ola. Ka naxa paedu ka jida leen. Avexa ta ma naxa ta, avexa nyi tuvadu la na buâny waak. Ave pe namavan ka namame,

Ka te cuur ka tame, toma bwe nyaxeda (ka ja wânem ma bween, wali maan, te plat ra nyana buânyili). Ave nyi tuvadu la aran. Texa wâneda la bween, wânedaic, wânedaic, avexa, ave nyi tao nyi înae ola, ave koni pau. Pwai pwalaic pa ave. Avexa nyi înau, înau ka koni pau. Texa taic, naxa, ave cawonevan, naxa, na tuvavan, naxa bwagenao, ka ta ka uc, ka oyâno, ka noda lier to teô ta, teô ta la pwemwa. Enyi ulayili. Texaô ta.

Naô taic, naxa waak : «Hé! Yo kiyi âjuyeda, teme perdu ! » Naxa kewee. Nao, naô pae tânema cawone, payee, ka kewee. Na nyi kewee ka to jie : «Ai ! » Ka me to jie, «Ai!» Ka me to mwa, «Ai!» Ka tabodu ka kewee. To na êna ka te perdu. Naxa kewee. Avexa taic, taic. Na koni mwanaolie. Ave ta, pewove li maan pwalaic, mana buâny to waak xa maan. Texa, te nam ma mayariyek, toma bwa nao lexeng. Te wadivan, toma bwa
nao la mayariik. Naxa, na kovavan, ka naô yagie, ciae. Te wali maar ri te disparu na yali. Ô ciae.

Naxa, na tao toda, na pwai kiya nabwa wî̂k, kan. Toma âju, âri na kiyie. To na pwai kiya nabwa kan to te been na bwe buâny. Te tao ta, toma âri na kiyi âju, na pwai kiya nabwa kan. Tayi ave, yaûda la bwe mweogo. Nare yaûda la moden. Tere cegon ni buâny, toma na koni kiyie. Te nyi tabo buâny nya bwe nabwa kan. Texa ta. Tayi ave, ka naô cuur ra bwe wîmi, ma na kaxi, te cegodu la na gawe, cegodu la na gawe ma teme ta. Naxa to, to, to, tovan ka âria.

Ka teô tame la Maxeek vae digi. Toma teô jua disparu, ô jua ciae. Te tame la Maxeek, ka waaxadame : «Ivie? »

Naxa waak, «Ô ciae. Teô perdu. »
Texa waak, « Ca !»
Naxa- laô paer ri ulayama. «Maxeek, laô pae. Ô ciae. Yo âya. » Âya la Maxeek. Ka ô tuic, tu la nao ka ôda la bwe bwe digi.

Texa waak xa Maxeek, «Ji wa?»
Na waak, « Ji ta. Yo ta. Ji ta la Panan. » Avexa tame, aveô tuic ka ô ta le mayin. Jua âya la Maxeek. Avexaô tame.

Toma te naji terixo, ka cixare, ka claquettes. Te wânem âria claquettes. Avexa tame, naxa waak, "Yome ta ka ulinao la mariik, naran ni Bwadalo. » Aveô ta, ta la ave ka mu la yali, Ave mu la Bwadalo. Naxa, na pa claquettes, ka pae terixo ka cixare, ka allumettes, na pae yadanada, ka uya la bwe mweogo Nyi Pwiya. Na Poc, naran ni We Tânema Kiliik.

Naxa waak, «Yome bwageo, yome bwageo Maxeek, yoxame tu mwa la yamidu Âmwany. Mo te perdu la Âmwany. Teme bwagedu la Âmwany. Toma nao, ka name yaûda la bwe mweogo, ka me tuic, me tu la Âmwany. »
Naxaô ta, ka ô nawe Maxeek, teô bwage Maxeek. Toma nao, naô yaûda la bwe ôgo. Na yaûda va wîk, yadan. Paroven. Pada, pada, ka uya la bwe âxeda, bwe mweogo na lexeda, ka uya la bwe nyana buâny pwalaic, to Ôgaxoe. Te ci la bwe daan. Naxa ta ka pae yadan, ka jin na bwe Ôgaxoe. Na pojenin wana. Mo yadanaroven.

Naxa waak, «Na nook ma a ji bwage tahitien-mi a pae. » Naxa, na nawen yadan, naxaô tu la Âmwany, bwagenaodu, ô tu ka tu Maxeek, avexaô tame. Na pae bwe ôgo, toma Maxeek te pae we. Naxare wali. Toma cao la bweeng, cao nanamiu linao. Ka ô tu la ave, ka tu la nao, ô tu Maxeek, ka ôdu la bwe waang. Texa waak, «Ka ivie? »
«Ô ciae. Toma lame jier ri ulayama ma te kova. » Avexaô tame. Avexaô pae digi ka ô tame. Tame la ave, ka kova la yamidu la Aliân. Ave kova la mariik xa Aliân, ka pame la Ima. Ave pame ce la Ima. Avexa noda, kiyi digi, pwalaic to te cavac ya na Panan, texa kejadu ka kova. Texa nome la ulayimi pae, ka kiyive. Te ta ma nawe bwagee. Texa kuar. Te kuar ra tahitien-li, mo âyuan ni texaô pame la Belep.

CG: Toma te waak, « Or riva ? »
BG : La tuer ra Panan, teôre, te ta, ka pae bwe ôgoda, ka wâneda. La paer ri ulayama, paeda, paedaic, wâneda, te bwageer ra mana pwemwa, ma na- te bwageer ri coutume. Te îna ka te bwageer ri ka tume, ka tume cego la Panan. Na cegodu la Panan, ka tuu ulac pwalaic, na Panan. Le ma yawan, lexa pe nayie, lexa âri ka ulac cavane, toma ulayili, tahitien (Toma te dadabwa, êê, te wali maar ri te dadabwa), ka go. Go u le ulayili ma te paeme la Belep. Teô cuur ra ulayili ka ô pae,
paeme, toma ave tame, ka mwa tamwa, ka cuur ra pwemwa, yami la Panan. Ave ma ulayina, Maxeek, avexa ta pajer.

Texa âri (la vieille, yer, la vieille li ulayili, mo avave ma Maxeek), texa âri ka, ô erak ma leô tue teô godume ci la yayeda. Toma te da yagier ri, na yeexamene, te da, da la pegaon, ma te âri ka tuu âju ki ce lexeng. Te înae wî̂k. Te wali maar ri te tu covan na bwe dua noon. Te tao pae. Texaô paeme la Wala.

Avexa ta la ave, ka mu, texa âri la tayamoli avexa bwagevedu ka pame la moden, avexa pame, pame, pame, ka mu lexedu, toma teô, avena pe co ma digi to teô bwagee. (Ulayili, naran ni Edouard.) Teô bwageevan na Poc, toma aveô tame ka mu lena, Ô baraap. Teô nam ma denaar. Avexa tame, pe tuve ma Maxeek, avexaô tame, ta ma yagi ulayili. Avexa tame ka tuer rexeng, yak, na mwami âbur. (Te ci lexeng nga mwave âbur, tere yak xa playi.) Avexa, avexa boyu leen. Te kuar rive. Te jua kuar rive. Ka kâyee la tayamook. Te kâyeer ri tayamook xa na baraap, bwanili. Texa, tayamook, te taxeer ri we cexeen, ma te ûdu. Texa govan na ulac- âyili, te govan na tahitien-li, ka pajeri âju wîmi me soigner-lie. Toma camang, camang te mo lexeda. Yaxeda le Joel. Texa, tume. Te to jie. Te ta la ti?

CG: Yo.
BG: Elo, nao.
CG: Ai, ave ma ulayiik.
BG: Êê, or ma Orilô. Le ta ma âyimi avang, lexa ta, naran ni Orilô. Lexa ta ka pae. Pae camang ma le paedume leeng. Ma te me soigner-lier rexeng.

CG: Ma te pa cavac yi lali.
BG: Ma te pa ca- ji bwage lali, ma la pan na Poc. Mo la tao tu covan na bwe dua noon.

Tume la camang, ka pulu mwany u leen, texa, te tabodu ka te ca mwiik, te bee. Te be duun, yami era âju bwa tu covan nexeng. Texa waak xie. Te be waak xie, ka porae. Texa bwawa la âju la bween. Êê, te wali maar ri te bwawa. Toma tao tuu ûjen. Texa, ave nyi tao cuur, toma te jua kuar rive. Te kuar rive ki ave cuur reen. Puur ri âmi te âri ka,

CG: Or, o keja cibwae.
BG: Te âri ka ave, ka ave keja ka najier, ave keja ka najier ra na yali, ma ave pan na bwe dau, dau pwadu. Avexa âri ka, ai. Mo âri ave keja, mo avere tao ci lexeng. Toma yer, ka te kiyive to aveô cavac. Ka yer âda. La pa jajani bwaan, layek, ka pa tuâgee.

Toma te âri ka te ta, nyami te or ra bwe digi ma te ta, ta leve, ka ô âri ave, mo avexaô tu per ra mode âjuma, âjuma la Poc. Ka najie. Êê, wali maar ri ave najie. (Ava âga nyi jaar, ava, bwa tuu per ra pwemwa.) Ka ôda la yer, ka pae daan to wî̂k, coaltar, la coaltar-er ri daan, ka ci la Âmwany, ka uya la Mwaan. Texa pae, toma âria, puur ri âmi laô wâne vaer ri janu, ulayama. Texa wali. Ka yali, teô raconter-moi lexeng, ka teô nyi âri ka, ave keja ka najie.

Ka înauvan, ka soigner-lier ri camang, soigner-lier ri tayamook, soigner-lie. Te yer, te soigner-lie ma te ô. Tayamook. Soigner-lie, taxeer ri we cexeen. Taxeer ri we cexeen ma te ûdu. Te jie ma te ûduli we. Texa ûduli we, texa tue ka te ô. Teô nyi bwawa la âju la bween. Te guéri-lier ri l'eau béni, na yali. Ka tao, te tao toli tayamook xi nyan. Avexaô walivan ka ô mae. Ô mae ka ô taan.

Texaô ô, ka ô toven. Ô âria, ô âria para mwa, mo teô ô na leen. Ka ô molep, ka ô bwageda la Numia to teô ô na leen. Toma histoire ra bwe wîna, bwe tahitien, to puur ri
âmi te tume, ka nyana, te tume ka jaar âyu, toma te param ka te turowinao, turowivenadume. Ka histoire ra bwe nyali, yet, toven.

Yal-28072010-BGMCG-tahitian
'BG: Okay, I'm going to tell a story about myself, me and that old man Maxeek down there. One of our brothers-in-law arrived, Tayema was his name, a Tahitian. He went down [left Tahiti] and came up [to New Caledonia] and married our sister. He was like, he- they would come down [to Belep], but he would always provoke me, and provoke the whole household, in that place, he always provoked us.

And he came down, during one vacation he came down, and took his vacation here, with us. And he asked to go to Poc with us, the two of us with that old man [Maxeek]. We took that old man's boat, a canoe, and went. We shot a few fish for him to eat, and dove- snorkeled and caught some shellfish for him to eat. And we kept going, he had his underwater speargun, and we kept going, we went away, went and went, and ended up on the other side, up above Poc. We started at Iniwan. And we went down.

But we didn't give any ritual gift. We just went.
We went down and snorkeled, down, down, down and arrived at Cager and arrived at Âmwany. There weren't any-not any shellfish. And we kept going. We stopped- moored on a rock, in front of the stone. But that place, Pwaraweli is its name. We let down the anchor and struck the sails. And it was afternoon, and we had lunch, and finished.

And we, me and Maxeek, we took our diving masks and went down to dive for shellfish by the stone. We went down by the stone. But Tayema, the Tahitian, he stayed in the canoe. But we two, we dove, we went up and snorkeled, and kept snorkeling and snorkeling, and he, we caught one. One shellfish. And I took it down and handed it up to him. We went up so that I could go up. And we repeatedly dove down at the stone like that. Together we kept disappearing and coming back.

And he [Tayema] rose and came up on top of that thing [Pwaraweli]. (We walk on it, like that, that big stone is flat.) We kept diving underneath it, and he walked up on it, walked away up, walked away up. And we, we repeatedly kept trying to get shellfish, we never got any. Only one did we get. And we kept trying and trying but never got any. And he went away up, we two kept snorkeling, and I, I kept diving, I returned, and went up and surfaced and looked around, and peered up at him as he was ascending. He was going up onto the land. That old man. He was ascending.

I went up there, and I was like, "Hey! You see that person up there, he's going to get lost!" I chased him. I, I took my snorkel off, put it down, and chased him. I sprinted and called to him, "No!" And called, "No!" And called again, "No!" And fell and kept chasing him, because I knew he would be lost. And I chased him. The two of us went away up, away up. I never got close to him. We went up, there was a promontory between us, a stone promontory like this. And he, he disappeared on the other side, but I was still here. He went around, but I was still on this side. And I, I went around, and I looked for him, and he wasn't there. It's like he disappeared in that place. He wasn't there.

And I, I kept calling up, I only saw some imprints of whatsit, his feet. But the person I didn't see. When I saw his footprints, they were wet on top of the stone. He kept ascending, but I never saw the person, I only saw his footprints. Together, we climbed to
the mountaintop. I actually climbed right with him. Stones were actually falling, but I never saw him. He kept hitting stones on his footprints. And he ascended. We were together, and I stood on top of that thing, so that I could watch as he dropped down into the stream, 'dropped down into the stream so he could go up. I called, and called, and called, and kept calling but there wasn't anything.

Maxeek came up with the canoe. But he had truly disappeared, he really wasn't there. Maxeek came up, and said up at me, "Where is he?"

I was like, "He's not here. He's lost."
He was like, "Ugh!"
And I- the [spirits of] the elders took him. "Maxeek, they took him. He's not there. You're afraid." Maxeek was afraid. And I went down, went down I did and climbed into the canoe.

Maxeek was like, "Where are we going?"
I was like, "Let's go up. You go up. Let's go up to Panan." And we came up, we went away and came back with the motor running. Maxeek was really scared. And we came up.

But he [Tayema] had left his t-shirt, and cigarettes, and flip-flops. He had been walking without his shoes. And we came up, and I was like, "Go up and leave me on this seashore, Bwadalo is its name." We went up, went up we did and moored in that place. We moored at Bwadalo, and I, I took flip-flops, and took the t-shirt and cigarettes, and matches, I took his belongings up, and arrived on top of the mountaintop Nyi Pwiya. On Poc. It's called We Tânema Kiliik.

And I said, "You go back, you go back, Maxeek, you go down again to that place Âmwany. Because he got lost at Âmwany. He'll return at Âmwany. While as for me, I'm going to climb onto the mountaintop, and then go down, go down to Âmwany."

I went up and left Maxeek, Maxeek went back. While as for me, I climbed up the mountain. I climbed with whatsit, his belongings. Took it all, took it up, took it up, and arrived on top of a thing up there, on top of the mountaintop up there, and arrived on top of a big stone, Ôgaxoe. It sits on the path. And I went up and took his belongings, and put them on top of Oggaxoe. I placed them like that. That is, all his stuff.
And I was like, "I ask that you return the Tahitian that you took." And I, I left his belongings, and I went down to Âmwany, returned down, went down and found Maxeek, and we came up. I took the mountain [path], while Maxeek took the water [path]. I actually did that. But I was working, my thoughts were working.
And we went down, and I went down, found Maxeek, and [he] got out of the boat. He was like, "Well, where is he?"
[I said,] "He's not there. But the [spirits of] the elders are going to give him back." And we came up. We took the canoe and came up. Came up we did, and came out at Aliân. We left this shore of Aliân, and came to Ima. We came and settled at Ima. We looked up and saw a canoe, as it was leaving Panan. It ran down and left. And that old man who was paddling it [Edouard] looked over and saw us. He [Edouard] was going up [in his canoe] to let him [Tayema] return [to Belep]. And he was really unhappy. That Tahitian was really unhappy, because he wanted to go to Belep.

CG: But he was like, "Where were you?"
BG: He was found at Panan, he had actually, he went up, and took the mountain up, and walked up. The [spirits of the] elders took him, took him up, took him
up and away, walked up, he returned at the front of the island, that I- the coutume brought him back. It made him return there and come down, and come drop down at Panan. I got out at Panan, and there's this one old man [Edouard], at Panan. He and his wife, they had been surprised to see him. They said that the Javanese, I mean the Tahitian (but, he was dark-skinned, yeah, he was like, black), that he had cried. Cried to this old man to take him to Belep. That old man got up and took him, brought him here, but we came up, and the woman's house, it stands at their home, there at Panan. We with that old man Maxeek, we went up to question her.

She said (the old woman, her, the wife of that old man, Maxeek's and my sister), she said that, there he was, they found him, he was crying and sitting up there. But he was all scratched there, in the trees and stuff, his body was bloody, bloody, and he said that, there was a person sitting here, he [Tayema] was doing like this. It was like, he [the person] was riding on the back of his [Tayema's] neck. It kept overwhelming him. And he [Edouard] brought him [Tayema] to Wala.

And went up we did, and moored, that old woman said we should return and go with him [Tayema]. We came and came and came, and moored down there, but he, we met the canoe as it was coming back. (That old man's name was Edouard.) He went back to Poc, but we two came up [to Belep] and moored over there [in the bay of Wala]. It was evening. The sun was setting. And the two of us came up, me and Maxeek together, and we came up, came up to look for that old man [Tayema]. And we came up and found him here, in this place, in the old house (our old house sat here, its place was here). And we, and we greeted him [Tayema]. He refused us. He really hated us. And this old woman [Clothilde] was looking after him, this old woman was looking after him in the evening, that night. And she, this old woman, gave him some sacred water [seawater], to drink. And that old man- that man kept crying, that Tahitian kept crying, and asking people for something to heal him. But my father, my father, he lived up there. That place up there with Joel. And, he came down, she called him. Who went up?

CG: You.
BG: Okay, me.
CG: No, me and that old man.
BG: Yeah, you and Orilô. She and my brother, they went up (his name is Orilô), and they went up and got him. Got my father so they could bring him down to me. So that he could heal him here.

CG: So that he could make them [the spirits] leave.
BG: So that he could make them l- cause them to return, so that they would go to Poc. Because they kept riding on the back of his neck.

My father came down and cursed at him, and he, he fell on him and kept doing like this to him, he beat him. He beat his back, the place where the person was riding. And he did like this to him. He beat him like this, and massaged him. And the person on him was removed. Yeah, it was like it was removed. But it still had power. And he, we kept going to him, but he really didn't want us. He really didn't want to see us.

CG: Because he said that you two, you had run away and abandoned him.
BG: He said that we had, that we had run away and left him, we had run away and left him in that place, so that they could go to the islets, the two islets. And we said, no. We didn't run away, we actually were here the whole time. But as for him, he saw us
leaving. He [believed that he] was alone. They made him crazy in the head, those [spirits] over there, they made him tell untruths.

But he said that he went up, when he came out in his canoe to go up [to Belep], go up with us, that we didn't, that we were partying with people, the people of Poc. And left him. Yeah, it was like we had left him. (We often party, us, there's still parties at home [on Poc].) And climbed up he did, and took the path they had, whatsit, paved, they paved the road, at Amwany, and it goes to Mwan. And he took it, but there wasn't anything there, because the spirits, the elders, were walking with him. And it was like that. In that place, he told that to me here, and he kept insisting that we had run away and left him.

And he kept doing it, and my father healed him, this old woman [Clothilde] healed him, healed him. It was her, she healed him so he was well. This old woman. Healed him, gave him holy water. Gave him holy water to drink. She had him drink water. And he drank water, and he found that he was well. The person on him was suddenly gone. She healed him with holy water, in that place. And he kept, he kept calling this old woman his mother. And we kept doing like that and then we slept. Slept and then it was day.

He was well, and it was finished. There's no more, there's no more to the story, for he was well. And he lived, and he returned to Nouméa when he was well. But the story on that topic, the Tahitian, because he came down, and that one, he came down and was pleased with everything, but he forgot that he had insulted me, insulted us down here. And the story about that topic, that's all, it's done.'
(1) Elo, name pari l'histoire ra bweeng.
\begin{tabular}{lllll} 
elo & na=me & pari & [listwar]=a & bwee-ng \\
yes & 1SG.SUBJ=IRR & tell.SPC & story.LN=LOC & top-1SG.POSS
\end{tabular}
'Okay, I'm going to tell a story about myself.'
(2) Nao ka ulayixedu, Maxeek.
nao ka ulayi-xedu Maxeek
1SG.INDEP LK old.man-DET.DH Maxeek
'Me and that old man Maxeek down there.'
(3) Te uya la beau-frère rive pwalaic,
te= uya=la [boprer]=i-ve pwalaic

3SG.SUBJ= arrive=NOM brother.in.law.LN=GEN-1DU.EXCL.ABS one
'One of our brothers-in-law arrived,'
(4) naran ni Tayema, tahitien.
nara-n=i Tayema [taisjẽ]
name-3SG.POSS=GEN Tayema Tahitian.LN
'Tayema was his name, a Tahitian.'
(5) Te tu ka tame ka pae avave tamwa.
te= tu ka ta=me ka pa-e ava-ve tamwa
3SG.SUBJ= go.DH LK go.UH=CTP LK take-SPC sibling-1DU.EXCL.POSS woman
'He went down and came up and married our sister.'
(6) Texa wali:
te=xa wa-li
3SG.SUBJ=ADD DEM.MAN-DET.A.PRX
'He was like:'
(7) Te-leme tume, toma te ca nobwawinao,
te= le=me tu=me tomate \(=\quad \mathbf{c a}=\) nobwawi-nao
3SG.SUBJ= 3DU.SUBJ=IRR go.DH=CTP but 3SG.SUBJ= ITER= provoke.TR-1SG.ABS 'He- They would come down, but he would always provoke me,'
(8) ka nobwawi pwemwang, nyayek, ka nobwawi pwemwa-ng nya-yek
LK provoke.TR village-1SG.POSS DEM.IDF-DET.D.MDS
'and provoke the whole household, in that place,'
(9) te ca nobwawiva.
te= ca= nobwawi-va
3SG.SUBJ= ITER= provoke-1PL.EXCL.ABS
'he always provoked us.'
(10) Texa tume, ô tume li vacances pwalaic,
te=xa tu=me \(\hat{\mathbf{o}} \quad\) tu=me=li \(\quad\) [vakãja] pwalaic
3SG.SUBJ=ADD go.DH=CTP REAL go.DH=CTP=GEN vacation.LN one 'And he came down, during one vacation he came down,'
(11) ka înae vacances yier rexeng, yak xeve.
ka îna-e [vakãj]=i-er=exeng ya-k=e-ve
LK make-SPC vacation.LN=GEN-3SG.ABS=LOC.DC DEM.LOC-DET.D.PRX=DAT-1DU.EXCL.POSS 'and took his vacation here, with us.'
(12) Texa noxeve ma avena pan,
te=xa noxe-ve ma avena= pan
3SG.SUBJ=ADD ask.TR-1DU.EXCL.ABS LK4 1PA.EXCL.SUBJ= go.TV
'And he asked us [2] that we [3] go,
(13) avena pan na Poc, ave ma ulayina.
avena= pan=a Poc ave ma ulayi-na
1PA.EXCL.SUBJ= go.TV=LOC Poc 1DU.EXCL.INDEP LK4 old.man-DET.D.MPX 'that we go to Poc, the two of us with that old man [Maxeek].'
(14) Avexa pae waga ulayixedu digi, avenaô pan.
(15) Ave ma tiaea ween no, ka tuve-
ave= ma= tia-e-a we-na no ka tuve
1DU.EXCL.SUBJ= DIM= pierce-SPC-DA.NSG food-3SG.POSS fish LK dive.TR
'We shot a few fish for him to eat, and dove-'
(16) cawone ka tuvea ween ola.
cawone ka tuve-a we-na ola
snorkel.LN LK dive.TR-DA.NSG food-3SG.POSS shellfish 'snorkeled \({ }^{295}\) and caught some shellfish for him to eat.'
(17) Avenaxa pan, te pae fusil sous-marin nie,
avena=xa pan te pa-e [pyzisumarin]=i-e
1PA.EXCL.SUBJ=ADD go.TV 3SG.SUBJ= take-SPC underwater.speargun.LN=GEN-3SG.ABS
'And we kept going, he had his underwater speargun,'
(18) avenaxa pan, avena panic, pan aven, pan aven,
avena=xa pan avena= pan=ic pan aven
1PA.EXCL.SUBJ=ADD go.TV 1PA.EXCL.SUBJ= go.TV=CTF go.TV 1PA.EXCL.INDEP
'And we kept going, we went away, went and went,'
(19) ka tabo la mayarixeda, yaxeda li Poc.
ka tabo=la maya-ri-xeda ya-xeda=li \(\quad\) Poc
LK fall=LOC part-3GNR.POSS-DET.UH DEM.LOC-DET.UH=GEN Poc
'and ended up on the other side, up above Poc.'
(20) Avena tewuur ra Iniwan. Avenaxa tu.
avena= tewur=a Iniwan avena=xa tu
1PA.EXCL.SUBJ= begin=LOC Iniwan 1PA.EXCL.SUBJ=ADD go.DH
'We started at Iniwan. And we went down.'
(21) Toma âria coutume ki avena îna.
toma âria [kutym] ki avena= îna
but NEG.EX ritual.gift.LN REL 1PA.EXCL.SUBJ= make.GNR
'But we didn't give any ritual gift.'
(22) Avenaô wana.
avena=ô wa-na
1PA.EXCL.SUBJ=REAL DEM.MAN-DET.D.MPX
'We just went.'
(23) Avenaôxa tu, cawoneduic,
avena \(=\hat{\mathbf{o}}=\mathbf{x a}\) tu cawone=du=ic
1PA.EXCL.SUBJ=REAL=ADD go.DH snorkel.LN=DIR.DH=CTF
'We went down and snorkeled,'

\footnotetext{
\({ }^{295}\) The Belep word cawone may either be a noun meaning 'Japanese person' (from Fr. japonais [ [Japone]) or a verb meaning 'to snorkel, dive with a mask'. The latter meaning comes from a particular type of snorkel, common in Belep, which is made in Japan.
}
(24) Tuic, tuic, tuic ka uya la Cager ka uya la Âmwany, tu=ic ka uya=la Cager ka uya=la Âmwany go.DH=CTF LK arrive=LOC Cager LK arrive=LOC Âmwany 'Down, down, down and arrived at Cager and arrived at Âmwany.'
(25) Âria. Âria ola. Avenaxa pan.
âria âria ola avena=xa pan
NEG.EX NEG.EX shellfish 1PA.EXCL.SUBJ=ADD go.TV
'There weren't any. Not any shellfish. And we kept going.'
(26) Avena ci- mu la bwe buâny pwalaic.
avena= ci mu=la bwe buâny pwalaic
1PA.EXCL.SUBJ= sit moor=LOC top stone one
'We stopped- moored on a rock.'
(27) Mana buâny. Toma yali, ka naran ni Pwaraweli
mana buâny toma ya-li ka nara-n=i Pwaraweli
front stone but DEM.LOC-DET.A.PRX LK name-3SG.POSS=GEN Pwaraweli
'In front of the stone. But that place, Pwaraweli is its name.'
(28) Avena nawe nyu, ka ô ânap.
avena= nawe nyu ka \(\hat{0}\) ânap
1PA.EXCL.SUBJ= leave anchor LK REAL strike.sail
'We let down the anchor and struck the sails.'
(29) Ka ô mon ni gawaar, avenâ̂ wiu gawaar,
\(\begin{array}{llllll}\text { ka } \hat{\mathbf{o}} & \text { mon=i } & \text { gawaar } & \text { avena= } \\ \text { LK REAL } & \text { side.DH=GEN } & \text { day } & \text { 1PA.EXCL.SUBJ=REAL } & \begin{array}{l}\text { wiu } \\ \text { dine }\end{array} & \begin{array}{l}\text { gawaar } \\ \text { day }\end{array}\end{array}\)
'And it was afternoon, and we had lunch.'
(30) Ka ô toven. Avexa, ave ma Maxeek,
ka \(\hat{\boldsymbol{o}}\) toven ave=xa ave ma Maxeek
LK REAL finish 1DU.EXCL.SUBJ=ADD 1DU.EXCL.INDEP LK4 Maxeek
'And finished. And we, me and Maxeek,'
(31) ave pa tânema cawone ka tu ka tuve ola.
\begin{tabular}{lllllll} 
ave \(=\) & pa & tânema & cawone & ka tu & ka tuve & ola \\
1DU.EXCL.SUBJ \(=\) & take.GNR & eye & Japanese.LN & LK go.DH & LK & dive.TR \\
shellfish
\end{tabular}
(32) Na buânyili. Avexa tu la na buâny, na buânyi-li ave=xa tu=la na buâny interior stone-DET.A.PRX 1DU.EXCL.SUBJ=ADD go.DH=LOC interior stone 'In the stone. We went down in the stone.'
(33) toma yer, Tayema, tahitien, ka te ci la bwe digi.
\begin{tabular}{llllllll} 
toma & yer & Tayema & \begin{tabular}{l} 
[taisjẽ]
\end{tabular} & \begin{tabular}{l} 
ka \\
but
\end{tabular} & 3SG.INDEP & Tayema & Tahitian.LN \\
LK & 3SG.SUBJ \(=\) & \begin{tabular}{l} 
ci=la \\
sit=LOC
\end{tabular} & \begin{tabular}{l} 
bwe \\
top
\end{tabular} & \begin{tabular}{l} 
digi \\
canoe
\end{tabular}
\end{tabular} 'but Tayema, the Tahitian, he stayed in the canoe.'
(34) Toma ave, aveô plonger,
toma ave ave=ô [plõze]
but 1DU.EXCL.INDEP 1DU.EXCL.SUBJ=REAL dive.LN 'But we two, we dove,'
(35) aveô ta ka cawone, avexa cawonevan, cawonevan, ave=0 ta ka cawone ave=xa cawone=van 1DU.EXCL.SUBJ=REAL go.UH LK snorkel.LN 1DU.EXCL.SUBJ=ADD snorkel.LN=DIR.TV 'We went up and snorkeled, and kept snorkeling and snorkeling,'
(36) Texa, avexa migi pwalaic. Pwalaic ola.
te=xa ave=xa migi pwalaic pwalaiya ola
3SG.SUBJ=ADD 1DU.EXCL.SUBJ=ADD hold one one shellfish
'And he, we caught one. One shellfish.'
(37) Ka naxa paedu ka jida leen.
ka na=xa pa-e=du ka ji=da=lee-n
LK 1SG.SUBJ=ADD take-3SG.ABS=DIR.DH LK give=DIR.UH=DAT-3SG.POSS
'And I took it down and handed it up to him.'
(38) Avexa ta ma naxa ta,
ave=xa ta ma na=xa ta

1DU.EXCL.SUBJ=ADD go.UH LK4 1SG.SUBJ=ADD go.UH
'We went up so that I could go up.'
(39) Avexa nyi tuvadu la na buâny wak.
ave=xa nyi= tuva=du=la na buâny waa-k
1DU.EXCL.SUBJ=ADD PUNCT= dive=DIR.DH=LOC interior stone DEM.MAN-DET.D.PRX
'And we repeatedly dove down at the stone like that.'
(40) Ave pe namavan ka namame,
ave \(=\quad\) pe= nama=van ka nama=me
1DU.EXCL.SUBJ= RECP= disappear=DIR.TV LK disappear=CTP
'Together we kept disappearing and coming back,'
(41) Ka te cuur ka tame, toma bwe nyaxeda,
ka te \(=\quad\) cura=xa ta=me toma bwe nya-xeda
LK 3SG.SUBJ= stand=LK go.UH=CTP but top DEM.IDF-DET.UH
'And he rose and came up, but on top of that thing,'
(42) Ka ja wânem ma bween, wali maan,
ka ja= wânem=a bwee-n wa-li maa-n
LK 1PL.INCL.SUBJ= walk=LOC top-3SG.POSS DEM.MAN-DET.A.PRX similarity-3SG.POSS
'We walk on it, like that,'
(43) te plat ra nyana buânyili,
te= \(\quad[p l a r]=\mathbf{a} \quad\) nyana buânyi-li
3SG.SUBJ= flat.LN=NOM big.thing stone-DET.A.PRX
'That big stone is flat,'
(44) ave nyi tuvadu la aran.
ave= \(\quad\) nyi \(=\quad\) tuva \(=d u=l a \quad\) ara-n
1DU.EXCL.SUBJ= PUNCT= dive=DIR.DH=LOC underside-3SG.POSS
'we kept diving underneath it.'
(45) Texa wâneda la bween, wânedaic, wânedaic,
te=xa wâne=da=la bwee-n wâne=da=ic
3SG.SUBJ=ADD walk=DIR.DH=LOC top-3SG.POSS walk=DIR.UH=CTF
'And he walked up on it, walked away up, walked away up'
(46) Avexa, ave nyi tao nyi înae ola, ave=xa ave \(=\) nyi \(=\) tao \(=\) nyi= îna-e ola 1DU.EXCL.SUBJ=ADD 1DU.EXCL.SUBJ= PUNCT= HAB= PUNCT= make-SPC shellfish 'And we, we repeatedly kept trying to get shellfish,'
(47) ave koni pau. Pwai pwalaic pa ave.
\begin{tabular}{llllll} 
ave \(=\) & koni & pa-u & pwai & pwalaiya & pa
\end{tabular} \begin{tabular}{l} 
ave \\
1DU.EXCL.SUBJ \(=\)
\end{tabular} \begin{tabular}{ll} 
never & take-DETR
\end{tabular} only \begin{tabular}{l} 
one
\end{tabular} 'we never got any. Only one did we get.'
(48) Avexa nyi înau, înau ka koni pau.
ave=xa nyi= îna-u îna-u ka koni pa-u

1DU.EXCL.SUBJ=ADD PUNCT= make-DETR make-DETR LK never take-DETR 'And we kept trying and trying but never got any.'
(49) Texa taic, naxa, ave cawonevan,
\begin{tabular}{llll} 
te=xa & ta=ic & na=xa & ave \(=\) \\
3SG.SUBJ=ADD & go.UH=CTF & 1SG.SUBJ=ADD & 1DU.EXCL.SUBJ= \(=\)
\end{tabular} \begin{tabular}{l} 
cawone=van \\
snorkel.LN=DIR.TV
\end{tabular}
'And he went away up, we two kept snorkeling,'
(50) naxa, na tuvavan, naxa bwagenao,
\begin{tabular}{lllll} 
na=xa & na= & tuva=van & na=xa & bwage-nao
\end{tabular}

1SG.SUBJ=ADD 1SG.SUBJ= dive=DIR.TV 1SG.SUBJ=ADD return-1SG.ABS 'and I, I kept diving, I returned,'
(51) ka ta ka uc, ka oyâno
ka ta ka uc ka oyâno
LK go.UH LK surface LK look
'and went up and surfaced and looked around,'
(52) ka noda lier to teô ta,
ka no=da=li-era=ro te=ô ta
LK peer=DIR.UH=GEN-3SG.ABS=when 3SG.SUBJ=REAL go.UH
'and peered up at him as he was ascending,'
(53) teô ta la pwemwa. Enyi ulayili.
\(\mathbf{t e}=\mathbf{0} \quad \mathbf{t a}=\mathbf{l a} \quad\) pwemwa enyi ulayi-li
3SG.SUBJ=REAL go.UH=LOC home if old.man-DET.A.PRX
'he was going up onto the land. That old man.'
(54) Texaô ta. Naô taic,
te=xa=0̂ ta na=ô ta=ic
3SG.SUBJ=ADD=REAL go.UH 1SG.SUBJ=REAL go.UH=CTF
'He was ascending. I went up there,'
(55) naxa waak: «Hé!»
\(\begin{array}{lll}\text { na=xa } & \text { waa-k } & \text { e }\end{array}\)
1SG.SUBJ=ADD DEM.MAN-DET.D.PRX hey
'and I was like, "Hey!""
(56) "Yo kiyi âjuyeda, teme perdu!»
yo = kiyi âju-yeda te=me [рекdy]
2SG.SUBJ= see.SPC person-DET.UH 3SG.SUBJ=IRR lost.LN
"'You see that person up there, he's going to get lost!""
(57) Naxa kewee.
na=xa kewe-e
1SG.SUBJ=ADD chase-3SG.ABS
'I chased him.'
(58) Nao, naô pae tânema cawone, payee, ka kewee.
nao na=ô pa-e tânema cawone paye-e ka kewe-e

1SG.INDEP 1SG.SUBJ=REAL take-SPC eye Japanese.LN put-3SG.ABS LK chase-3SG.ABS
'I, I took my snorkel off, put it down, and chased him.'
(59) Na nyi kewee ka to jie: "Ai!»
na= nyi= kewe-e ka to ji-e ai
1SG.SUBJ= PUNCT= chase-3SG.ABS LK call give-3SG.ABS no
'I sprinted and called to him, "No!""
(60) Ka me to jie, "Ai!» Ka me to mwa, "Ai!»

Ka me to ji-e ai ka me to mwa ai
LK IRR call give-3SG.ABS no LK IRR call again no
'And called, "No!" And called again, "No!""
(61) Ka tabodu ka kewee. To na êna ka te perdu.
ka tabo=du ka kewe-e to na= êna ka te= [pesdy] LK fall=DIR.DH LK chase-3SG.ABS when 1SG.SUBJ= know LK 3SG.SUBJ= lost.LN 'And fell and kept chasing him, because I knew he would be lost.'
(62) Naxa kewee. Avexa taic, taic.
\begin{tabular}{|c|c|c|c|c|}
\hline na=xa & kewe-e & ave=xa & ta=ic & ta=ic \\
\hline 1SG.SUBJ=ADD & chase-3SG.ABS & 1DU.EXCL.SUBJ=ADD & go.UH=CTF & go.UH=CTF \\
\hline
\end{tabular}
'And I chased him. The two of us went away up, away up.'
(63) Na koni mwanaolie.
na= koni mwanao-li-e
1SG.SUBJ= never approach-TR-3SG.ABS
'I never got close to him.'
(64) Ave ta, pewove li maan pwalaic, ave \(=\) ta pewo-ve=li mana pwalaic 1DU.EXCL.SUBJ= go.UH middle-1DU.EXCL.POSS=GEN point one
'We went up, there was a promontory between us,'
(65) mana buâny to waak xa maan.
mana buânya=ro wa-x=a
maa-n
point stone=when DEM.MAN-DET.D.PRX=NOM similarity-3SG.POSS 'a stone promontory like this.'
(66) Texa, te nam ma mayariyek,
te=xa \(\quad\) te \(=\quad\) nam=a maya-ri-yek
3SG.SUBJ=ADD 3SG.SUBJ= disappear=LOC part-3GNR.POSS-DET.D.MDS
'And he, he disappeared on the other side,'
(67) toma bwa nao lexeng.
toma bwa= nao=lexeng
but CONT= 1SG.PRED=LOC.DC
'but I was still here.'
(68) Te wadivan, toma bwa nao la mayariik.
\begin{tabular}{llll}
\(\mathbf{t e}=\) & wadi=van & toma \(\mathbf{b w a}=\mathbf{n a o}=\mathbf{l a}\) & maya-rii-k \\
3SG.SUBJ= go.around=DIR.TV but \(\quad\) CONT= & 1SG.PRED=LOC part-3GNR.POSS-DET.D.PRX
\end{tabular}
'He went around, but I was still on this side.'
(69) Naxa, na kovavan, ka naô yagie,
na=xa na= kova=van ka na=ô yagi-e
1SG.SUBJ=ADD 1SG.SUBJ leave=DIR.TV LK 1SG.SUBJ=REAL search.TR-3SG.ABS 'And I, I went around, and I looked for him,'
(70) ciae. Te wali maar ri
\(\begin{array}{lll}\text { cia-e } & \text { te }= & \text { wa-li }\end{array} \quad \begin{aligned} & \text { ma-r=i } \\ & \text { NEG.LOC-3SG.ABS } \\ & \text { 3SG.SUBJ }=\end{aligned}, \begin{array}{ll}\text { DEM.MAN-DET.A.PRX } \\ \text { similarity-3GNR.POSS=GEN }\end{array}\) 'and he wasn't there. It's like'
(71) te disparu na yali.
te= [dispary] na ya-li
3SG.SUBJ= disappeared.LN interior DEM.LOC-DET.A.PRX
'he disappeared in that place.'
(72) Ô ciae. Naxa, na tao toda,
\(\hat{0}\) cia-e na=xa na= tao= to=da
REAL NEG.LOC-3SG.ABS 1SG.SUBJ=ADD 1SG.SUBJ= HAB= call-DIR.UH
'He wasn't there. And I, I kept calling up,'
(73) na pwai kiya nabwa wîklk, kan.
na= pwai kiya nabwa wîl-k ka-n
1SG.SUBJ= only see.GNR imprint DEM.IA-DET.D.PRX foot-3SG.POSS
'I only saw some imprints of whatsit, his feet.'
(74) Toma âju, âri na kiyie.
toma âju âri= na= kiyi-e
but person NEG= 1 SG.SUBJ \(=\) see.SPC-3SG.ABS
'But the person I didn't see.'
(75) To na pwai kiya nabwa kan to te been na bwe buâny.
to na= pwai kiya nabwa ka-na=ro te \(=\) ben=a bwe buâny when 1SG.SUBJ= only see.GNR imprint foot-3SG.POSS=when 3SG.SUBJ= be.wet=LOC top stone 'When I saw his footprints, they were wet on top of the stone.'
(76) Te tao ta, toma âri na kiyi âju,
te \(=\quad\) tao \(=\) ta toma âri= na= kiyi âju
3SG.SUBJ= HAB= go.UH but NEG=1SG.SUBJ= see.SPC person 'He kept ascending, but I never saw the person,'
(77) na pwai kiya nabwa kan.
na= pwai kiya nabwa ka-n
1SG.SUBJ= only see.GNR imprint foot-3SG.POSS
'I only saw his footprints.' \({ }^{296}\)

\footnotetext{
\({ }^{296}\) That is, Tayema is invisible at this point in the narrative.
}
(78) Tayi ave, yaûda la bwe mweogo.
tayi ave yaûda=la bwe mweogo
scoop 1DU.EXCL.INDEP climb=LOC top mountaintop
'Together, we climbed to the mountaintop.'
(79) Nare yâ̂da la moden.
na=re yaûda=la mode-n
1SG.SUBJ=ACT climb=LOC together-3SG.POSS
'I actually climbed right with him.'
(80) Tere cegon ni buâny, toma na koni kiyie.
te=re cego-n=i buânya=roma na= koni kiyi-e
3SG.SUBJ=ACT drop-DA.NSG=GEN stone=but 1SG.SUBJ= never see.SPC-3SG.ABS
'Stones were actually falling, but I never saw him.'
(81) Te nyi tabo buâny nya bwe nabwa kan.
te \(=\) nyi= tabo buâny=a bwe nabwa ka-n
3SG.SUBJ= PUNCT= hit stone=LOC top imprint foot-3SG.POSS
'He kept hitting stones on his footprints.'
(82) Texa ta. Tayi ave,
te=xa ta tayi ave
3SG.SUBJ=ADD go.UH scoop 1DU.EXCL.INDEP
'And he ascended. We were together,'
(83) ka nâ̂ cuur ra bwe wîmi,
\begin{tabular}{llll} 
ka & na=人 & cur=a & bwe \\
LK & 1SG.SUBJ=REAL & stand=LOC \\
stap & top & DEM.IA-DET.A.DST \\
'and I stood on top of that thing,' &
\end{tabular}
(84) ma na kaxi, te cegodu la na gawe,
ma na= \(\quad\) kaxi=re \(=\quad \operatorname{ceg} o=d u=l a \quad\) na gawe

LK4 1SG.SUBJ= look=3SG.SUBJ= drop=DIR.DH=LOC interior torrent 'so that I could watch as he dropped down into the stream,'
(85) cegodu la na gawe ma teme ta.
\begin{tabular}{lccll} 
cego=du=la & na & gawe & ma=re==me & ta \\
drop=DIR.DH=LOC & interior & torrent & LK4=3SG.SUBJ=IRR & go.UH \\
'dropped down into the stream so he could go up.' &
\end{tabular}
(86) Naxa to, to, to, tovan ka âria.
na=xa to to=van ka âria
1SG.SUBJ=ADD call call=DIR.TV LK NEG.EX
'I called, and called, and called, and kept calling but there wasn't anything.'
(87) Ka teô tame la Maxeek vae digi.
ka te=ô ta=me=la Maxexa=va-e digi
LK 3SG.SUBJ=REAL go.UH=CTP=NOM Maxeek=INSTR-SPC canoe
'Maxeek came up with the canoe.'
(88) Toma teô jua disparu, ô jua ciae.
toma te=ô jua [dispary] \(\hat{\boldsymbol{o}}\) jua cia-e
but 3SG.SUBJ=REAL really disappeared.LN REAL really NEG.LOC-3SG.ABS 'But he had truly disappeared, he really wasn't there.'
(89) Te tame la Maxeek, ka waaxadame : "Ivie?»
\begin{tabular}{lll}
\(\mathbf{t e}=\) & \(\mathbf{t a}=\mathbf{m e}=\mathbf{l a}\) & Maxeex=a wa-xa=da=me \\
3SG.SUBJ \(=\) go.UH=CTP=NOM & Maxeek=LK DEM.MAN-DET.D.PRX=DIR.UH=CTP & ivi-e \\
be.where-SPC
\end{tabular}
'Maxeek came up, and said up at me, "Where is he?""
(90) Naxa waak, «Ô ciae. Teô perdu.»
na=xa waa-k \(\hat{\mathbf{o}}\) cia-e te=ô \(\quad\) [рекdy]

1SG.SUBJ=ADD DEM.MAN-DET.D.PRX REAL NEG.LOC-3SG.ABS 3SG.SUBJ=REAL lost.LN 'I was like, "He's not here. He's lost.""
(91) Texa wakk, «Ca!»
te=xa waa-k ca
3SG.SUBJ=ADD DEM.MAN-DET.D.PRX ugh
'He was like, "Ugh!" [laughter]
(92) Naxa-lâ̂ paer ri ulayama,
\(\left.\begin{array}{llll}\text { na=xa } & \mathbf{l a =} \hat{\mathbf{o}} & \begin{array}{l}\text { pa-er=i }\end{array} & \begin{array}{l}\text { ulaya-ma } \\
\text { 1SG.SUBJ=ADD }\end{array} \\
\text { 3PL.SUBJ=REAL }\end{array}\right)\)\begin{tabular}{l} 
take-3SG.ABS=GEN
\end{tabular}
'And I- the [spirits of] the elders took him.'
(93) "Maxeek, lâ̂ pae. Ô ciae."
\(\mathbf{l a}=\hat{\mathbf{o}} \quad\) pa-e \(\quad \hat{\mathbf{o}} \quad\) cia-e
3PLSUBJ=REAL take-3SG.ABS REAL NEG.LOC-3SG.ABS
"'Maxeek, they took him. He's not there."
(94) «Yo âya.» Âya la Maxeek.
yo= âya âya=la Maxeek
2SG.SUBJ= be.afraid be.afraid=NOM Maxeek
"'You're afraid." Maxeek was afraid.'
(95) Ka ô tuic, tu la nao ka ôda la bwe bwe digi.
\begin{tabular}{llllllll} 
ka & ô & tu=ic & tu=la & nao & ka & ôda=la & bwe \\
digi
\end{tabular}
"Anl in top canoe
'And I went down, went down I did and climbed into the canoe.'
(96) Texa wak xa Maxeek, «Ji wa?»
\begin{tabular}{llll} 
te=xa & wa-x=a & Maxeek & ji=
\end{tabular}\(\quad\) wa 'Maxeek was like, "Where are we going?"'
(97) Na waak, «Ji ta."
na= waa-k \(\mathbf{j i =} \quad\) ta
1SG.SUBJ= DEM.MAN-DET.D.PRX 1DU.INCL.SUBJ= go.UH
'I was like, "Let's go up."'
(98) «Yo ta. Ji ta la Panan.»
\(\mathbf{y o}=\quad\) ta \(\mathbf{j i}=\quad \mathbf{t a}=\mathbf{l a} \quad\) Panan
2SG.SUBJ= go.UH 1DU.INCL.SUBJ= go.UH=LOC Panan
"'You go up. Let's go up to Panan.""
(99) Avexa tame, aveô tuic
ave=xa ta=me ave=ô tu=ic
1DU.EXCL.SUBJ=ADD go.UH=CTP 1DU.EXCL.SUBJ=REAL go.DH=CTF
'And we came up, we went away'
(100) ka ô ta le mayin.
ka \(\hat{\mathbf{o}}\) ta=le mayin
LK REAL go.UH=DAT motor.LN 'and came back with the motor running.'
(101) Jua âya la Maxeek. Avexaô tame,
\begin{tabular}{llll} 
jua & âya=la & Maxeek & ave=xa=人 \\
really & be.afraid=NOM & \begin{tabular}{l} 
Maxeek
\end{tabular} & ta=me \\
1DU.EXCL.SUBJ=ADD=REAL
\end{tabular}\(\quad\)\begin{tabular}{l} 
go.UH=CTP
\end{tabular}
'Maxeek was really scared. And we came up,'
(102) Toma te naji terixo, ka cixare, ka claquettes.
toma te \(=\) naji terixo ka cixare ka [klaket]
but 3SG.SUBJ= leave tshirt.LN LK cigarettes.LN LK flipflops.LN
'But he [Tayema] had left his t-shirt, and cigarettes, and flip-flops.'
(103) Te wânem âria claquettes.
te= wânem âria [klaket]
3SG.SUBJ= walk NEG.EX flipflops.LN
'He had been walking without his shoes.'
(104) Avexa tame, naxa waak,
\begin{tabular}{llll} 
ave=xa & ta=me & na=xa & waa-k \\
1DU.EXCL.SUBJ=ADD & go.UH=CTP & 1SG.SUBJ=ADD & DEM.MAN-DET.D.PRX
\end{tabular}
'And we came up, and I was like,'
(105) «Yome ta ka ulinao la mariik,
\begin{tabular}{lllll}
\(\mathbf{y o}=\mathbf{m e}\) & ta & ka & uli-nao=la & marii-k \\
2SG.SUBJ=IRR & go.UH & LK & pour-1SG.ABS=LOC & seashore-DET.D.PRX
\end{tabular}
"'Go up and leave me on this seashore,'
(106) naran ni Bwadalo."
nara-n=i Bwadalo
name-3SG.POSS=GEN Bwadalo
'Bwadalo is its name."'
(107) Aveô ta, ta la ave
ave=ô ta ta=la ave
1DU.EXCL.SUBJ=REAL go.UH go.UH=NOM 1DU.EXCL.INDEP
'We went up, went up we did'
(108) ka mu la yali,
ka mu=la ya-li
LK moor=LOC DEM.LOC-DET.A.PRX
'and moored in that place,'
(109) Ave mu la Bwadalo, naxa,
ave \(=\quad\) mu=la Bwadalo na=xa
1DU.EXCL.SUBJ= moor=LOC Bwadalo 1SG.SUBJ=ADD
'We moored at Bwadalo, and I,'
(110) na pa claquettes, ka pae terixo ka cixare, ka allumettes,
na= pa \(\quad\) [klaket] ka pa-e terixo ka cixare ka [alumet]

1SG.SUBJ= take.GNR flipflops.LN LK take-SPC tshirt.LN LK cigarettes.LN LK matches.LN
'I took flip-flops, and took the t-shirt and cigarettes, and matches,'
(111) na pae yadanada, ka uya la bwe mweogo Nyi Pwiya.
na= pa-e yada-na=da ka uya=la bwe mweogo Nyi Pwiya
1SG.SUBJ= take-SPC belongings-3SG.POSS=DIR.UH LK arrive=LOC top mountaintop Nyi Pwiya
'I took his belongings up, and arrived on top of the mountaintop Nyi Pwiya.'
(112) Na Poc, naran ni We Tânema Kiliik.
na Poc nara-n=i We Tânema Kiliik
interior Poc name-3SG.POSS=GEN We Tânema Kiliik
'On Poc. It's called We Tânema Kiliik.'
(113) Naxa wakk, "Yome bwageo,
\begin{tabular}{llll} 
na=xa & waa-k & \begin{tabular}{l} 
yo=me
\end{tabular} & \begin{tabular}{l} 
bwage-o \\
1SG.SUBJ=ADD
\end{tabular} \\
DEM.MAN-DET.D.PRX & 2SG.SUBJ=IRR & return-2SG.ABS
\end{tabular}
'And I said, "You go back,'
(114)
yome bwageo Maxeek,
yo=me bwage-o Maxeek
2SG.SUBJ=IRR return-2SG.ABS Maxeek
'you go back, Maxeek,'
(115) yoxame tu mwa la yamidu Âmwany.
\begin{tabular}{lll} 
yo=xa=me & tu \(\quad\) mwa=la & ya-midu \\
2SG.SUBJ=ADD=IRR & go.DH again-LOC & DEM.LOC-DET.DST.DH
\end{tabular}\(\quad\)\begin{tabular}{l} 
Âmwany \\
'you go down again to that place Âmwany.'
\end{tabular}
(116) Mo te perdu la Âmwany. Teme bwagedu la Âmwany.
\(m o=r e=\quad[p e r d y]=l a\) Âmwany te=me bwage=du=la Âmwany
LK3=3SG.SUBJ= lost.LN=LOC Âmwany 3SG.SUBJ=IRR return=DIR.DH=LOC Âmwany
'Because he got lost at Âmwany. He'll return at Âmwany.'
(117) Toma nao, ka name yaûda la bwe mweogo, ka me tuic, toma nao ka na=me yaûda=la bwe mweogo ka me tu=ic but 1SG.INDEP LK 1SG.SUBJ=IRR climb=LOC top mountaintop LK IRR go.DH=CTF 'While as for me, I'm going to climb onto the mountaintop, and then go down,'
(118) me tu la Âmwany.»
me tu=la Âmwany
IRR go.DH=LOC Âmwany
'go down to Âmwany."
(119) Naxâ̂ ta, ka ô nawe Maxeek, teô bwage Maxeek.
\(\mathbf{n a}=\mathbf{x a}=\hat{\mathbf{o}} \quad\) ta ka \(\hat{\mathbf{o}}\) nawe Maxeek te=ô bwage Maxeek
1SG.SUBJ=ADD=REAL go.UH LK REAL leave Maxeek 3SG.SUBJ=REAL return Maxeek 'I went up and left Maxeek, Maxeek went back.'
(120) Toma nao, naô yaûda la bwe ôgo.
toma nao na=ô yaûda=la bwe ôgo
but 1SG.INDEP 1SG.SUBJ=REAL climb=LOC top mountain
'While as for me, I climbed up the mountain.'
(121) Na yaûda va wî̂k, yadan.
na= yaûda=va wîil-k yada-n
1SG.SUBJ= climb=INSTR DEM.IA-DET.D.PRX belongings-3SG.POSS
'I climbed with whatsit, his belongings.'
(122) Paroven. Pada, pada, ka uya la bwe âxeda, pa-roven pa=da pa=da ka uya=la bwe â-xeda take-COMPL take=DIR.UH take=DIR.UH LK arrive=LOC top DEM.NEW-DET.UH 'Took it all, took it up, took it up, and arrived on top of a thing up there,'
(123) bwe mweogo na lexeda, ka uya la bwe nyana buâny pwalaic, to Ôgaxoe.
bwe mweogo na=lexeda ka uya=la bwe nyana buânya pwalaic to Ôgaxoe top mountaintop interior=LOC.UH LK arrive=LOC top big.thing stone one when Ôgaxoe 'on top of the mountaintop up there, and arrived on top of a big stone, Ôgaxoe.'
(124) Te ci la bwe daan. Naxa ta ka pae yadan,
\begin{tabular}{lllllll} 
te \(=\) & ci=la & bwe & daan & na=xa & ta=xa & pa-e
\end{tabular} yada-n 'It sits on the path. And I went up and took his belongings,'
(125) ka jin na bwe Ôgaxoe. Na pojenin wana.
ka ji-n=a bwe Ôgaxoe na= pojeni-na wa-na
LK give-DA.NSG=LOC top Ôgaxoe 1SG.SUBJ= place-DA.NSG DEM.MAN-DET.D.MPX 'and put them on top of Ôgaxoe. I placed them like that.'
(126) Mo yadanaroven, naxa waak,
mo yada-na-roven na=xa waa-k
LK3 belongings-3SG.POSS-all 1SG.SUBJ=ADD DEM.MAN-DET.D.PRX
'That is, all his stuff. And I was like,'
(127) «Na nook ma a ji bwage tahitien-mi a pae.»

"I ask that you return the Tahitian that you took.""
(128) Naxa, na nawen yadan,
\begin{tabular}{|c|c|c|c|}
\hline na=xa & na= & nawe-na & yada-n \\
\hline 1SG.SUBJ=ADD & 1SG.SUBJ= & leave-DA.NSG & belongings-3SG.POSS \\
\hline
\end{tabular}
'And I, I left his belongings,'
(129) naxaô tu la Amwany, bwagenaodu,
na=xa=0̂ tu=la Âmwany bwage-nao=du
1SG.SUBJ=ADD=REAL go.DH=LOC Âmwany return-1SG.ABS=DIR.DH
'and I went down to Âmwany, returned down,'
(130) ô tu ka tu Maxeek, avexaô tame.
ô tu ka tu Maxeek ave=xa=ô ta=me
REAL go.DH LK find Maxeek 1DU.EXCL.SUBJ=ADD=REAL go.UH=CTP
'went down and found Maxeek, and we came up.'
(131) Na pae bwe ôgo, toma Maxeek te pae we.
\begin{tabular}{llllllll} 
na= & pa-e & bwe & ôgo=roma & Maxeek & te \(=\) & pa-e & we \\
1SG.SUBJ \(=\) & \begin{tabular}{l} 
take-SPC \\
top
\end{tabular} & mountain=but & Maxeek & 3SG.SUBJ \(=\) & take-SPC & water
\end{tabular}
'I took the mountain [path], while Maxeek took the water [path].'
(132) Naxare wali. Toma cao la bweeng,
na=xa=re wa-li toma cao=la bwee-ng

1SG.SUBJ=ADD=ACT DEM.MAN-DET.A.PRX but work=LOC top-1SG.POSS
'I actually did that. But I was working,'
(133) cao nanamiu linao.
cao nanami-u=li-nao
work think-DETR=GEN-1SG.ABS
'my thoughts were working.'
(134) Ka ô tu la ave, ka tu la nao,
ka \(\hat{0}\) tu=la ave ka tu=la nao
LK REAL go.DH=NOM 1DU.EXCL.INDEP LK go.DH=NOM 1SG.INDEP
'And we went down, and I went down,'
(135) ô tu Maxeek, ka ôdu la bwe wang. Texa waak,
\(\hat{o}\) tu Maxeek ka ôdu=la bwe waang te=xa waa-k
REAL find Maxeek LK descend=LOC top boat 3SG.SUBJ=ADD DEM.MAN-DET.D.PRX
'found Maxeek, and [he] got out of the boat. He was like,'
(136) «Kaivie?» «Ô ciae.
ka ivi-e \(\quad \hat{\mathbf{o}} \quad\) cia-e
LK be.where-3SG.ABS REAL NEG.LOC-3SG.ABS
""Well, where is he?" [I said,] "He's not there.'
(137) Toma lame jier ri ulayama ma te kova.»
\begin{tabular}{lllll} 
toma & \begin{tabular}{ll} 
la=me & ji-er=i
\end{tabular} & ulaya-ma & ma=re= & kova \\
but & 3PL.SUBJ=IRR & give-3SG.ABS=GEN & \begin{tabular}{l} 
old.man-AC \\
LK4=3SG.SUBJ=
\end{tabular} & \begin{tabular}{l} 
leave
\end{tabular}
\end{tabular}
'But the [spirits of] the elders are going to give him back."'
(138) Avexâ̂ tame. Avexaô pae digi
ave \(=\mathbf{x a}=\hat{\mathbf{o}} \quad \boldsymbol{t a}=\mathbf{m e} \quad\) ave \(=\mathbf{x a}=\hat{\mathbf{o}} \quad\) pa-e digi
1DU.EXCL.SUBJ=ADD=REAL go.UH=CTP 1DU.EXCL.SUBJ=ADD=REAL take-SPC canoe 'And we came up. We took the canoe'
(139) ka ô tame. Tame la ave,
ka \(\hat{0} \quad\) ta=me \(\quad \boldsymbol{t a}=m e=l a \quad\) ave
LK REAL go.UH=CTP go.UH=CTP=NOM 1DU.EXCL.INDEP
'and came up. Came up we did,'
(140) ka kova la yamidu la Aliân.
ka kova=la ya-midu=la
Aliân
LK leave=LOC DEM.LOC-DET.DH=LOC Aliân
'and came out at Aliân.'

Ave kova la mariik xa Aliân,
\begin{tabular}{lll} 
ave \(=\) & \begin{tabular}{l} 
kova=la \\
1DU.EXCL.SUBJ=
\end{tabular} & \begin{tabular}{l} 
marii-k=a \\
leave=LOC
\end{tabular} \\
seashore-DET.D.PRX=LOC
\end{tabular}\(\quad\)\begin{tabular}{l} 
Aliân \\
Aliân
\end{tabular}
'We left this shore of Aliân,'
(142) ka pame la Ima.
ka pa=me=la Ima
LK go.TV=CTP=LOC Ima 'and came to Ima.'
(143) Ave pame ce la Ima.
ave= \(\quad \mathbf{p a}=m e \quad\) ce=la Ima
1DU.EXCL.SUBJ= go.TV=CTP settle=LOC Ima
'We came and settled at Ima.'
(144) Avexa noda, kiyi digi, pwalaic to te cavac ya na Panan,
ave=xa no=da kiyi digi pwalaiya=ro=re= cavay=a na Panan
1DU.EXCL.SUBJ=ADD peer=DIR.UH see canoe one=when=3SG.SUBJ= leave=LOC interior Panan 'We looked up and saw a canoe, as it was leaving Panan,'
(145) texa kejadu ka kova.
te=xa keja=du ka kova
3SG.SUBJ=ADD run=DIR.DH LK leave
'It ran down and left.'
(146) Texa nome la ulayimi pae, ka kiyive.
te=xa no=me=la ulayi-mi pa-e ka kiyi-ve
3SG.SUBJ=ADD peer=CTP=NOM old.man-DET.A.DST take-3SG.ABS LK see.SPC-1DU.EXCL.ABS
'And that old man who was paddling it [Edouard] looked over and saw us.'
[Tayema was with him.]
(147) Te ta ma nawe bwagee. Texa kuar.
te ta ma nawe bwage-e te=xa kuar
3SG.SUBJ= go.UH LK4 leave return-3SG.ABS 3SG.SUBJ=ADD not.want
'He [Edouard] was going up [in his canoe] to let him [Tayema] return [to Belep].
And he was really unhappy.'
(148) Te kuar ra tahitien-li, mo âyuan ni

'That Tahitian was really unhappy, because he wanted'
(149) texaô pame la Belep.
te=xa=ô \(\quad\) pa=me=la Belep
3SG.SUBJ=ADD=REAL go.TV=CTP=LOC Belep
'to go to Belep.'
(150)

CG: Toma te waak, «Or riva?» toma te \(=\) waa-k or=iva but 3SG.SUBJ= DEM.MAN-DET.D.PRX 2DU.PRED=LOC.Q 'But he was like, "Where were you?""
(151) BG: La tuer ra Panan, teôre, te ta,
 'He was found at Panan, he had actually, he went up,'
(152) ka pae bwe ôgoda, ka wâneda.
ka pa-e bwe ôgo=da ka wâne=da
LK take-SPC top mountain=DIR.DH LK walk=DIR.UH
'and took the mountain up, and walked up.'
(153) La paer ri ulayama,
\(\mathbf{l a}=\quad\) pa-er=i ulaya-ma
3PL.SUBJ= take-3SG.ABS=GEN old.man-AC
'The [spirits of the] elders took him,'
(154) paeda, paedaic,
pa-e=da pa-e=da=ic
take-3SG.ABS=DIR.UH take-3SG.ABS=DIR.UH=CTF
'took him up, took him up and away,'
(155) wâneda, te bwageer ra mana pwemwa,
wâne=da te= bwage-er=a mana pwemwa
walk=DIR.UH 3SG.SUBJ= return-3SG.ABS=LOC point country
'walked up, he returned at the front of the island,'
(156) ma na- te bwageer ri coutume.
ma na= te \(=\) bwage-er=i
[kutym]
LK4 1SG.SUBJ= 3SG.SUBJ= return-3SG.ABS=GEN ritual.gift.LN
'that I- the coutume brought him back.'
(157) Te îna ka te bwageer ri ka tume,
te \(=\) îna ka te \(=\) bwage-er=i ka tu=me

3SG.SUBJ= make.GNR LK 3SG.SUBJ= return-3SG.ABS=LOC.A LK go.DH=CTP
'It made him return there and come down,'
(158) ka tume cego la Panan.
ka tu=me cego=la Panan
LK go.DH=CTP drop=LOC Panan
'and come drop down at Panan.'
(159) Na cegodu la Panan, ka tuu ulac pwalaic, na Panan.
na= \(\quad\) cego=du=la Panan ka tu ulaya pwalaic na Panan

1SG.SUBJ= drop=DIR.DH=LOC Panan LK EX.SPC old.man one interior Panan 'I got out at Panan, and there's this one old man [Edouard], at Panan.'
(160) Le ma yawan, lexa pe nayie,
\begin{tabular}{lllll} 
le & ma & yawa-n & le=xa & pe=
\end{tabular} \begin{tabular}{l} 
nayi-e \\
3DU.INDEP
\end{tabular} LK4 \begin{tabular}{ll} 
wife-3SG.POSS & 3DU.SUBJ=ADD
\end{tabular} RECP= \begin{tabular}{ll} 
be.surprised.TR-3SG.ABS
\end{tabular}
'He and his wife, they had been surprised to see him.'
(161) lexa âri ka ulac cavane, toma ulayili, tahitien,
le=xa âri ka ulaya cavane toma ulayi-li [taisjẽ]
3DU.SUBJ=ADD say LK old.man Javanese.LN but old.man-DET.A.PRX Tahitian.LN 'they said that the Javanese, I mean the Tahitian,'
(162) (Toma te dadabwa,
toma te= dadabwa
but 3SG.SUBJ= be.black
'(But, he was dark-skinned,'
(163) êê, te wali maar ri te dadabwa.)
\begin{tabular}{lllll}
\(\hat{\mathbf{e}} \mathrm{e}\) & te= & wa-li & ma-r=i & te \(=\)
\end{tabular}\(\quad\)\begin{tabular}{l} 
dadabwa \\
yes \\
3SG.SUBJ \(=\) \\
DEM.MAN-DET.A.PRX
\end{tabular} 'yeah, he was like, black.), 297
(164) Ka go. Go u le ulayili
ka go go u=le ulayi-li
LK cry cry toward=DAT old.man-DET.A.PRX
'that he had cried. Cried to this old man'
(165) ma te paeme la Belep.
ma te \(=\quad\) pa-e=me=la Belep
LK4 3SG.SUBJ= take-3SG.ABS=CTP=LOC Belep
'to take him to Belep.'
(166) Teô cuur ra ulayili ka ô pae, paeme,
te=ô cur=a ulayi-li ka ô pa-e pa-e=me
3SG.SUBJ=REAL stand=NOM old.man-DET.A.PRX LK REAL take-3SG.ABS take-3SG.ABS=CTP
'That old man got up and took him, brought him here,'
(167) toma ave tame, ka mwa tamwa, ka cuur ra pwemwa,
toma ave \(=\) ta=me ka mwa tamwa ka cur=a pwemwa but 1DU.EXCL.SUBJ= go.UH=CTP LK house woman LK stand=LOC home 'but we came up, and the woman's house, it stands at their home,'

\footnotetext{
\({ }^{297}\) This is the speaker's explanation for why he had momentarily forgotten that Tayema was Tahitian rather than Javanese.
}
(168)
yami la Panan. Ave ma ulayina, Maxeek, ya-mi=la Panan ave
ma ulayi-na
Maxeek
DEM.LOC-DET.A.DST=LOC Panan 1DU.EXCL.INDEP LK4 old.man-DET.D.MPX Maxeek 'there at Panan. We with that old man Maxeek,'
(169) avexa ta pajer.
ave=xa ta pajer
1DU.EXCL.SUBJ=ADD go.UH question
'we went up to question her.'
(170) Texa âri (la vieille, yer, la vieille li ulayili,
te=xa âri [laviej] yer [laviej]=li ulayi-li
3SG.SUBJ=ADD say old.woman.LN 3SG.INDEP old.woman.LN=GEN old.man-DET.A.PRX
'She said (the old woman, her, the wife of that old man,'
(171) mo avave ma Maxeek),
mo ava-ve ma Maxeek
LK3 sibling-1DU.EXCL.POSS LK4 Maxeek
'Maxeek's and my sister), \({ }^{298}\)
(172) texa âri ka, ô erak ma leô tue
te=xa âri ka \(\hat{o}\) era-k ma le=ô tu-e
3SG.SUBJ=ADD say LK REAL DEM.PRES-DET.D.PRX LK4 3DU.SUBJ=REAL find-3SG.ABS 'she said that, there he was, they found him,'
(173) teô godume ci la yayeda.
\(\begin{array}{llll}\text { te= } & \text { go=du=me } & \begin{array}{l}\text { ci=la }\end{array} & \text { ya-yeda } \\ \text { 3SG.SUBJ=REAL } & \begin{array}{l}\text { cry=DIR.DH=CTP } \\ \text { sit=LOC }\end{array} & \text { DEM.LOC-DET.DST.UH }\end{array}\)
'he was crying and sitting up there.'
(174) Toma te da yagier ri, na yeexamene,
toma te \(=\) da \(=\) yagi-er=i na yeexa-mene
but 3SG.SUBJ= GNO= scratch-3SG.ABS=LOC.A interior plant-GE
'But he was all scratched there, in the trees and stuff,'
(175) te da, da la pegaon, ma te âri ka

3SG.SUBJ= be.bloody be.bloody=NOM body-3SG.POSS LK4 3 SG.SUBJ= say LK
'his body was bloody, bloody, and he said that,'
tuи âju ki ce lexeng. Te înae wî̀k.
tu âju ki ce=lexeng te= îna-e wîilk
EX.SPC person REL settle=LOC.DC 3SG.SUBJ= make-SPC DEM.IA-DET.D.PRX
'there was a person sitting here, he [Tayema] was doing like this.'

\footnotetext{
\({ }^{298}\) Here the speaker avoids saying the woman's name because she is his sister.
}
(177) Te wali maar ri
te= wa-li ma-r=i
3SG.SUBJ= DEM.MAN-DET.A.PRX similarity-3GNR.POSS=GEN
'It was like,'
(178) te tu covan na bwe dua noon.
te= tu= covan=a bwe dua noo-n
3SG.SUBJ= VBLZ= horse.LN=LOC top back neck-3SG.POSS
'he [the person] was riding on the back of his [Tayema's] neck.'
(179) Te tao pae. Texaô paeme la Wala.

'It kept overwhelming him. And he [Edouard] brought him [Tayema] to Wala.'
(180) Avexa ta la ave, ka mu,
\begin{tabular}{llll} 
ave=xa & ta=la & ave & ka mu \\
1DU.EXCL.SUBJ=ADD & go.UH=NOM & 1DU.EXCL.INDEP & LK moor
\end{tabular}
'And went up we did, and moored,'
(181) texa âri la tayamoli
te=xa âri=la tayamo-li
3SG.SUBJ=ADD say=NOM old.woman-DET.A.PRX
'that old woman said'
(182) avexa bwagevedu
ave=xa bwage-ve=du
1DU.EXCL.SUBJ=ADD return-1DU.EXCL.ABS=DIR.DH
'we should return'
(183) ka pame la moden,
ka pa=me=la mode-n
LK go.TV=CTP=LOC with-3SG.POSS
'and go with him [Tayema],'
(184) avexa pame, pame, pame, ka mu lexedu, toma tê̂, ave=xa pa=me ka mu=lexedu toma te=ô 1DU.EXCL.SUBJ=ADD go.TV=CTP LK moor=LOC.DH but 3SG.SUBJ=REAL 'we came and came and came, and moored down there, but he,'
(185) avena pe co ma digi to teô bwagee.
avena= pe co na digi=ro te=ô bwage-e 1PA.EXCL.SUBJ= RECP= meet LK4 canoe=when 3SG.SUBJ=REAL return-3SG.ABS 'we met the canoe as it was coming back.'
(Ulayili, naran ni Edouard.)
ulayi-li nara-n=i Edouard
old.man-DET.A.PRX name-3SG.POSS=GEN Edouard '(That old man's name was Edouard.)'
(187) Teô bwageevan na Poc, te=ô bwage-e=van=a Poc
3SG.SUBJ=REAL return-3SG.ABS=DIR.TV=LOC Poc 'He went back to Poc,'
(188) toma aveô tame ka mu lena, toma ave=ô ta=me ka mu=lena
but 1DU.EXCL.SUBJ=REAL go.UH=CTP LK moor=LOC.MPX
'but we two came up [to Belep] and moored over there [in the bay of Wala],'
(189) ô baraap. Teô nam ma denaar.
ô baraap te=ô nam=a denaar
REAL evening 3 SG.SUBJ=REAL disappear=NOM sun
'it was evening. The sun was setting.'
(190) Avexa tame, pe tuve ma Maxeek, ave=xa ta=me pe= tu-ve ma Maxeek 1DU.EXCL.SUBJ=ADD go.UH=CTP RECP= find-1DU.EXCL.ABS LK4 Maxeek 'And the two of us came up, me and Maxeek together,'
(191) avexaô tame, ta ma yagi ulayili.
ave \(=\mathbf{x a}=\hat{\mathbf{o}} \quad \mathbf{t a}=\mathbf{m e}\) ta ma yagi ulayi-li 1DU.EXCL.SUBJ=ADD=REAL go.UH=CTP go.UH LK4 search.TR old.man-DET.A.PRX 'and we came up, came up to look for that old man [Tayema].'
(192) Avexa tame ka tuer rexeng, yak,
ave=xa ta=me ka tu-er=exeng ya-k 1DU.EXCL.SUBJ=ADD go.UH=CTP LK find-3SG.ABS=LOC.DC DEM.LOC-DET.D.PRX 'And we came up and found him here, in this place,'
(193) na mwami âbur,
na mwa-mi âbur
interior house-DET.A.DST side.UH
'in the old house,'
(194)
te ci lexeng nga mwave âbur,
\(\left.\begin{array}{lll}\text { te }= & \mathbf{c i}=\text { lexeng=a } & \text { mwa-ve }\end{array} \quad \begin{array}{l}\text { âbur } \\
\text { 3SG.SUBJ }=\text { sit=LOC.DC=NOM }\end{array}\right)\) house-1DU.EXCL.POSS \begin{tabular}{l} 
side.UH
\end{tabular}
'our old house sat here,'
(195)
tere yak xa playi. Avexa,
te=re \(\quad\) ya-x=a
3SG.SUBJ=ACT DEM.LOC-DET.D.PRX=NOM
playi ave=xa
'its place was here. And we,'
place.LN 1DU.EXCL.SUBJ=ADD
(196) avexa boyu leen. Te kuar rive.
\(\begin{array}{lll}\text { ave }=\mathbf{x a} & \begin{array}{l}\text { boyu=lee-n }\end{array} & \text { te }=\end{array} \quad \begin{aligned} & \text { kuar=i-ve } \\ & \text { 1DU.EXCL.SUBJ=ADD } \\ & \text { greet=DAT-3SG.POSS }\end{aligned}\) 3SG.SUBJ= \(=\) not.want=GEN-1DU.EXCL.ABS
'and we greeted him [Tayema]. He refused us.'
(197) Te jua kuar rive.
te= jua kuar=i-ve
3SG.SUBJ= really not.want=GEN-1DU.EXCL.ABS
'He really hated us.'
(198) Ka kâyee la tayamook.
ka kâye-e=la tayamoo-k
LK keep-3SG.ABS=NOM old.woman-DET.D.PRX
'And this old woman [Clothilde] was looking after him,'
(199) Te kâyeer ri tayamook xa na baraap, bwanili.
te \(=\) kâye-er=i tayamo-x=a na baraap bwani-li
3SG.SUBJ= keep-3SG.ABS=GEN old.woman-DET.D.PRX=LOC interior evening night-DET.A.PR
'This old woman was looking after him in the evening, that night.'
(200) Texa, tayamook, te taxeer ri we cexeen,
te \(=\) xa tayamoo-k te taxe-er=i we cexeen
3SG.SUBJ=ADD old.woman-DET.D.PRX 3SG.SUBJ= distribute-3SG.ABS=GEN water sacred
'And she, this old woman, gave him some sacred water [seawater],'
(201) ma te ûdu. Texa govan na ulac- âyili,
ma te \(=\) ûdu te=xa go=van=a ulac âyi-li
LK4 3SG.SUBJ= drink 3SG.SUBJ=ADD cry=DIR.TV=NOM old.man man-DET.A.PRX
'to drink. And that old man- that man kept crying,'
(202) te govan na tahitien-li,
te= go=van=a [taisjẽ]-li
3SG.SUBJ= cry=DIR.TV=NOM Tahitian.LN-DET.A.PRX
'that Tahitian kept crying,'
(203) ka pajeri âju wîmi me soigner-lie.
ka pajeri âju wî-mi me [swane]-li-e
LK question.TR person DEM.IA-DET.A.DST IRR heal.LN-TR-3SG.ABS
'and asking people for something to heal him.'
(204) Toma camang, camang te mo lexeda.
toma cama-ng cama-ng te= mo=lexeda
but father-1SG.POSS father-1SG.POSS 3SG.SUBJ= live=LOC.UH
'But my father, my father, he lived up there.'
(205) Yaxeda le Joel. Texa, tume.
\begin{tabular}{lll} 
ya-xeda=le & Joel te=xa & tu=me \\
DEM.LOC-DET.UH=DAT & Joel 3SG.SUBJ=ADD & go.DH=CTP
\end{tabular}
'That place up there with Joel. And, he came down,'
(206) Te to jie. Te ta la ti?
\begin{tabular}{lllll} 
te \(=\) & to & ji-e & te \(=\) & ta=la=ri? \\
3SG.SUBJ & call & give-3SG.ABS & 3SG.SUBJ \(=\) & go.UH=NOM=who?
\end{tabular}
'She called him. Who went up?'
(207) CG: Yo.
yo
2SG.INDEP
'You.'
(208) BG: Elo, nao.
elo nao
okay 1SG.INDEP
'Okay, me.'
(209) CG: Ai, ave ma ulayiik.
ai ave ma ulayii-k
no 1DU.EXCL.INDEP LK4 old-DET.D.PRX
'No, me and that old man.'
(210) BG: Êê, or ma Orilô.
\begin{tabular}{llll}
\(\hat{\boldsymbol{e}} \hat{\boldsymbol{e}}\) & \(\boldsymbol{o r}\) & \(\boldsymbol{m a}\) & Orilô \\
yes & 2DU.INDEP & LK4 & Orilô
\end{tabular}
'Yeah, you and Orilô.'
(211) Le ta ma âyimi avang, lexa ta,
le= ta ma âyi-mi ava-ng le=xa ta

3DU.SUBJ= go.UH LK4 man-DET.A.DST sibling-1SG.POSS 3DU.SUBJ=ADD go.UH
'She and my brother, they went up,'
(212) naran ni Orilô. Lexa ta ka pae.
\begin{tabular}{llll} 
nara-n=i & \begin{tabular}{l} 
Orilô \\
name-3SG.POSS=GEN \\
Orilô
\end{tabular} & 3DU.SUBJ=ADD & ta=xa \\
go.UH=LK & pa-e \\
take-3SG.ABS
\end{tabular} 'his name is Orilô. And they went up and got him.'
(213) Pae camang ma le paedume leeng.
pa-e cama-ng ma le= pa-e=du=me=lee-ng
take-SPC father-1SG.POSS LK4 3DU.SUBJ= take-3SG.ABS=DIR.DH=CTP=DAT-1SG.POSS
'Got my father so they could bring him down to me.'
(214) Ma te me soigner-lier rexeng,
\(\mathbf{m a}=\mathbf{r e}=\mathbf{m e}\)
LK4=3SG.SUBJ=IRR
[swaje]-li-er=exeng heal.LN-TR-3SG.ABS=LOC.DC
'So that he could heal him here,'
(215) CG: Ma te pa cavac yi lali.
ma=re \(=\quad\) pa= cavay \(=\mathbf{i} \quad\) la-li
LK4=3SG.SUBJ= CAUS= depart=GEN DEM.PL-DET.A.PRX
'So that he could make them leave.'
(216) BG: Ma te pa ca-ji bwage lali,

'So that he could make them l- cause them to return,'
(217) ma la pan na Poc.
ma la= pan=a Poc
LK4 3PL.SUBJ= go.TV=LOC Poc
'so that they would go to Poc.'
(218) Mo la tao tu covan na bwe dua noon.
mo \(\mathbf{l a}=\quad \operatorname{tao}=\quad \mathbf{t u}=\quad \operatorname{covan}=a \quad\) bwe dua noo-n

LK3 3PL.SUBJ= \(\mathrm{HAB}=\mathrm{VBLZ}=\) horse.LN=LOC top back neck-3SG.POSS
'Because they kept riding on the back of his neck.'
(219) Tume la camang, ka pulu mwany u leen, tu=me=la cama-ng ka pulu mwanya u=lee-n
go.DH=CTP=NOM father-1SG.POSS LK speak be.bad toward=DAT-3SG.POS
'My father came down and cursed at him,'
(220) texa, te tabodu
te=xa te \(=\quad \boldsymbol{t a b o}=\mathbf{d u}\)
3SG.SUBJ=ADD 3SG.SUBJ= fall=DIR.DH
'and he, he fell on him'
(221) ka te ca mwiik, te bee.
ka te= ca= mwii-k te= be-e
LK 3SG.SUBJ= ITER= DEM.IA-DET.D.PRX 3SG.SUBJ= beat-3SG.ABS
'and kept doing like this to him, he beat him.'
(222) Te be duun,
te= be duu-n
3SG.SUBJ= beat back-3SG.POSS
'He beat his back,'
(223) yami era âju bwa tu covan nexeng.
ya-mi era âju bwa= tu= covan=exeng
DEM.LOC-DET.A.DST PRED.LOC person CONT= VBLZ= horse.LN=LOC.DC
'the place where the person was riding.'
(224) Texa wak xie.
te=xa waa-x=i-e
3SG.SUBJ=ADD DEM.MAN-DET.D.PRX=GEN-3SG.ABS
'And he did like this to him.'
(225) Te be waak xie, ka porae.
te \(=\) be waa-x=i-e ka pora-e
3SG.SUBJ= beat DEM.MAN-DET.D.PRX=GEN-3SG.ABS LK massage-3SG.ABS
'He beat him like this, and massaged him.'
(226) Texa bwawa la âju la bween.
te=xa bwawa=la âju=la bwee-n
3SG.SUBJ=ADD remove=NOM person=LOC top-3SG.POSS
'And the person on him was removed.'
(227) Êê, te wali maar rite bwawa.
êê te wa-li ma-r=i te= bwawa
yes 3SG.SUBJ= DEM.MAN-DET.A.PRX similarity-3GNR.POSS=GEN 3SG.SUBJ= remove
'Yeah, it was like it was removed.'
(228) Toma tao tuи ûjen. Texa,
toma tao \(=\) tu ûje-n te=xa
but HAB= EX.SPC power-3SG.POSS 3SG.SUBJ=ADD
'But it still had power. And he,'
(229) ave nyi tao cuur, toma te jua kuar rive.
ave \(=\quad\) nyi \(=\) tao \(=\) cuu-r toma te \(=\) jua kuar=i-ve
1DU.EXCL.SUBJ= PUNCT= HAB= stand-NDR but 3SG.SUBJ= really not.want=GEN-1DU.EXCL.ABS 'we kept going to him, but he really didn't want us.'
(230) Te kuar rive ki ave cuur reen.
te= kuar=ri-ve ki ave= cur=ee-n
3SG.SUBJ= not.want=GEN-1DU.EXCL.ABS REL 1DU.EXCL.SUBJ= stand=DAT-3SG.POSS
'He really didn't want to see us.'
(231)

Puur ri âmi te âri ka, pu-r=i â-mi te= âri ka origin-3GNR.POSS=GEN DEM.NEW-DET.A.DST 3SG.SUBJ= say LK 'Because he said that,'
(232) CG: Or, o keja cibwae.
or \(\quad \mathbf{o}=\quad\) keja cubwa-e

2DU.INDEP 2DU.SUBJ= run throw-3SG.ABS
'You two, you had run away and abandoned him.'
(233) BG: te âri ka ave, ka ave keja ka najier,
te= âri ka ave= keja ka naji-er
3SG.SUBJ= say LK 1DU.EXCL.SUBJ= run LK leave-3SG.ABS
'He said that we had, that we had run away and left him,'
(234) ave keja ka najier ra na yali,
ave= keja ka naji-er=a na ya-li
1DU.EXCL.SUBJ= run LK leave-3SG.ABS=LOC interior DEM.LOC-DET.A.PR
'we had run away and left him in that place,'
(235) ma ave pan na bwe dau, dau pwadu.
ma ave= pan=a bwe dau pwadu
LK4 1DU.EXCL.SUBJ= go.TV=LOC top islet two
'so that we could go to the islets, the two islets.'
(236) Avexa âri ka, ai.
ave=xa âri ka ai
1DU.EXCL.SUBJ=ADD say LK no
'And we said, no.'
(237) Mo âri ave keja, mo avere tao ci lexeng.
mo âri= ave= keja mo ave=re tao= ci=lexeng
LK3 NEG= 1DU.EXCL.SUBJ= run LK3 1DU.EXCL.SUBJ=ACT HAB= sit=LOC.DC
'We didn't run away, we actually were here the whole time.'
(238) Toma yer, ka te kiyive to
toma yer ka=re \(=\quad\) kiyi-ve=ro
but 3SG.INDEP LK=3SG.SUBJ= see.SPC-1DU.EXCL.ABS=when
'But as for him, he saw us'
(239) aveô cavac. Ka yer âda.
ave= \(\hat{\mathbf{o}} \quad\) cavac ka yer âda
1DU.EXCL.SUBJ=REAL depart LK 3SG.INDEP alone
'leaving. He [believed that he] was alone.'
(240) La pa jajani bwaan,
\(\mathbf{l a}=\quad \mathbf{p a}=\) jajani bwaa-n
3PL.SUBJ= CAUS= be.crazy head-3SG.POSS
'They made him crazy in the head,'
(241) layek, ka pa tuâgee.
la-yek ka pa= tuâge-e
DEM.PL-DET.D.MDS LK CAUS= tell.untruths-3SG.ABS
'those [spirits] over there, they made him tell untruths.'
(242) Toma te âri ka te ta,
toma te \(=\) âri ka te \(=\) ta
but 3 SG.SUBJ= say LK 3 SG.SUBJ= go.UH
'But he said that he went up,'
(243) nyami te or ra bwe digi ma te ta,
nya-mi te \(=\) or=a bwe digi ma=re= ta
DEM.IDF-DET.A.DST 3SG.SUBJ= spill=LOC top canoe LK4=3SG.SUBJ= go.UH 'when he came out in his canoe to go up [to Belep],'
(244) ta leve, ka ô âri ave,
ta=le-ve ka \(\hat{0}\) âri= ave=
go.UH=DAT-1DU.EXCL.POSS LK REAL NEG= 1DU.EXCL.SUBJ=
'go up with us, that we didn't,'
(245) mo avexaô tu per ra mode âjuma,
mo ave=xa= \(\hat{\mathbf{o}} \quad \mathbf{t u}=\) per=a mode âju-ma
LK3 1DU.EXCL.SUBJ=ADD=REAL VBLZ= party.LN=LOC together person-AC 'that we were partying with people,'
(246) âjuma la Poc. Ka najie.
âju-ma=la Poc ka naji-e
person-AC=LOC Poc LK leave-3SG.ABS
'the people of Poc. And left him.'
(247) Êê, wali maar ri ave najie.
êê wa-li ma-r=i ave= naji-e
yes DEM.MAN-DET.A.PRX similarity-3GNR.POSS=GEN 1DU.EXCL.SUBJ= leave-3SG.ABS
'Yeah, it was like we had left him.'
(248) (Ava âga nyi jaar, ava,
ava= âga= nyi= jaar ava
1PL.EXCL.SUBJ= PROG= PUNCT= be.happy 1PL.EXCL.INDEP
'(We often party, us,'
(249) bwa tuи per ra pwemwa.)
bwa= tu per=a pwemwa
CONT \(=\) EX.SPC party=LOC village
'there's still parties at home [on Poc].)'
(250) Ka ôda la yer, ka pae daan to wîkk,
ka ôda=la yer ka pa-e dana=ro wîlk
LK mount=NOM 3SG.INDEP LK take-SPC path=when DEM.IA-DET.D.PRX 'And climbed up he did, and took the path they had, whatsit,'
(251) coaltar, la coaltar-er ri daan,
[koltar] la= [koltar]-er=i daan
asphalt.LN 3PL.SUBJ= asphalt.LN-3SG.ABS=GEN path
'paved, they paved the road,'
(252) ka ci la Âmwany, ka uya la mwan.
ka ci=la Âmwany ka uya=la Mwan.
LK sit=LOC Âmwany LK arrive=LOC Mwan
'at Amwany, and it goes to Mwan.'
(253) Texa pae, toma âria, puur ri âmi
te=xa pa-e toma âria pu-r=i â-mi
3SG.SUBJ=ADD take-3SG.ABS but NEG.EX origin-3GNR.POSS=GEN DEM.NEW-DET.A.DST
'And he took it, but there wasn't anything there, because'
(254) laô wâne vaer ri janu, ulayama.
la=ô wâne=va-er=i janu ulaya-ma
3PL.SUBJ=REAL walk=INSTR-3SG.ABS=GEN spirit old.man-AC
'the spirits, the elders, were walking with him.'
(255) Texa wali. Ka yali
te=xa wa-li ka ya-li
3SG.SUBJ=ADD DEM.MAN-DET.A.PRX LK DEM.LOC-DET.A.PRX
'And it was like that. In that place,'
(256)
teô raconter-moi lexeng,
te=ô [rakõtemwa]=lexeng
3SG.SUBJ=REAL tell.me.LN=LOC.DC
'he told that to me here,'
(257) ka teô nyi âri ka, ave keja ka najie.
ka te=ô nyi= âri ka ave= keja ka naji-e
LK 3SG.SUBJ=REAL PUNCT= say LK 1DU.EXCL.SUBJ= run LK leave-3SG.ABS
'and he kept insisting that we had run away and left him.'
(258) Ka înauvan, ka soigner-lier ri camang,
ka îna-u=van ka [swape]-li-er=i cama-ng

LK make-DETR=DIR.TV LK heal.LN-TR-3SG.ABS=GEN father-1SG.POSS
'And he kept doing it, and my father healed him,'
(259) soigner-lier ri tayamook, soigner-lie.
[swaje]-li-er=i tayamoo-k [swaje]-li-e
heal.LN-TR-3SG.ABS=GEN old.woman-DET.D.PRX heal.LN-TR-3SG.ABS
'this old woman [Clothilde] healed him, healed him.'
(260) Te yer, te soigner-lie
\(\begin{array}{lll}\text { te }= & \text { yer } & \text { te }= \\ \text { 3SG.SUBJ }= & \text { 3SG.INDEP } & \text { 3SG.SUBJ }=\end{array} \begin{aligned} & \text { [swane]-li-e } \\ & \text { heal.LN-TR-3SG.ABS }\end{aligned}\)
'It was her, she healed him'
(261) ma te ô. Tayamook.
ma=re= \(\quad \hat{\mathbf{o}}\) tayamoo-k
LK4=3SG.SUBJ= be.good old.woman-DET.D.PRX
'so he was well. This old woman.'
(262) Soigner-lie, taxeer ri we cexeen.
\begin{tabular}{lll} 
[swane]-li-e & taxe-er=i & we cexeen \\
deal &
\end{tabular}
heal.LN-TR-3SG.ABS distribute-3SG.ABS=GEN water sacred
'Healed him, gave him holy water.'
(263) Taxeer ri we cexeen ma te ûdu.

(264) Te jie ma te ûduli we.
te \(=\) ji-e ma=re \(=\quad\) ûdu-li we
3SG.SUBJ= give-3SG.ABS LK4=3SG.SUBJ= drink-TR water
'She had him drink water.'
(265) Texa ûduli we, texa tue ka te ô.
te=xa ûdu-li we te=xa tu-e ka te= ô

3SG.SUBJ=ADD drink-TR water 3SG.SUBJ=ADD find-3SG.ABS LK 3SG.SUBJ= be.good 'And he drank water, and he found that he was well.'
(266) Teô nyi bwawa la âju la bween.

'The person on him was suddenly gone.'
(267) Te guéri-lier ri l'eau béni, na yali.
te= [geri]-li-er=i [lombeni] na ya-li
3SG.SUBJ= heal.LN-TR-3SG.ABS=GEN holy.water.LN interior DEM.LOC-DET.A.PRX
'She healed him with holy water, in that place.'
(268)

Ka tao, te tao toli tayamook xi nyan.
ka \(\boldsymbol{t a o}=\) te \(=\) tao to-li tayamoo-x=i nya-n
LK HAB= 3SG.SUBJ= HAB= call-TR old.woman-DET.D.PRX=GEN mother-3SG.POSS
'And he kept, he kept calling this old woman his mother.'
(269) Avexaô walivan ka ô mae.
ave \(=\mathbf{x a}=\hat{\mathbf{o}} \quad\) wa-li=van ka \(\hat{\mathbf{o}}\) mae
1DU.EXCL.SUBJ=ADD=REAL DEM.MAN-DET.A.PRX=DIR.TV LK REAL sleep
'And we kept doing like that and then we slept.'
(270) Ô mae ka ô taan.
ô mae ka \(\hat{\mathbf{o}}\) taan
REAL sleep LK REAL day
'Slept and then it was day.'
(271) Texaô ô, ka ô toven.
te=xa=ô \(\quad \hat{\mathbf{o}} \quad\) ka \(\hat{o} \quad\) toven
3SG.SUBJ=ADD=REAL be.good LK REAL finish
'He was well, and it was finished.'
(272) Ô âria, ô âria para mwa,
ô âria \(\hat{o}\) âria para mwa
REAL NEG.EX REAL NEG.EX story again
'There's no more, there's no more to the story,'
(273) mo teô ô na leen.
\(\mathbf{m o}=\mathbf{r e}=\hat{\mathbf{0}} \quad \hat{\mathbf{o}} \quad\) na=lee-n
LK3=3SG.SUBJ=REAL be.good interior=DAT-3SG.POSS
'for he was well.'
(274) Ka ô molep,
ka \(\hat{\mathbf{o}}\) molep
LK REAL be.alive
'And he lived,'
(275) ka ô bwageda la Numia to
ka \(\hat{\mathbf{o}} \quad\) bwage \(=\) da \(=1 a \quad\) Numia \(=\) ro
LK REAL return=DIR.UH=LOC Nouméa=when
'and he returned to Nouméa'
(276) teô ô na leen.
te=ô \(\quad \hat{\mathbf{o}} \quad\) na=lee-n
3SG.SUBJ=REAL be.good interior=DAT-3SG.POSS
'when he was well.'
(277) Toma histoire ra bwe wîna, bwe tahitien, toma [istwar]=a bwe wî-na bwe [taisjẽ]
but story.LN=LOC top DEM.MAN-DET.D.MPX top Tahitian.LN 'But the story on that topic, the Tahitian,'
(278) to puur ri âmi te tume,

'because he came down,'
(279) ka nyana, te tume ka jaar âyu, ka nya-na te= tu=me ka jara âyu LK DEM.IDF-DET.D.MPX 3SG.SUBJ= go.DH=CTP LK be.happy any 'and that one, he came down and was pleased with everything,'
(280) toma te param ka te turowinao, toma \(=\) re \(=\) param ka te \(=\) turowi-nao but=3SG.SUBJ= forget LK 3SG.SUBJ= insult-1SG.ABS 'but he forgot that he had insulted me,'
(281) turowivenadume. Ka histoire ra bwe nyali,
turowi-vena=du=me ka [istwar]=a bwe nya-li
insult-1PA.EXCL.ABS=DIR.DH=CTP LK story.LN=LOC top DEM.IDF-DET.A.PRX 'insulted us down here. And the story about that topic,'
(282) yet, toven.
yet toven
done finish
'That's all, it's done.'```


[^0]:    ${ }^{1}$ A French census placed the number of speakers located in Belep at 930 in 2004 (ISEE 2004). According to former mayor Jean-Baptiste Moilou, the total population of Belema was 1676 people in 2010 (J.B. Moilou, p.c., August 9, 2010.

[^1]:    ${ }^{2} \mathrm{http}$ ://www.nouvelle-caledonie.gouv.fr/site/La-Nouvelle-Caledonie/Presentation
    ${ }^{3}$ Indigenous Melanesians of New Caledonia refer to themselves as Kanaks.
    ${ }^{4}$ That is, those who favor political independence from France.
    ${ }^{5}$ This islet is called $/{ }^{n}$ dau at/ [ ${ }^{n}$ dau ar], translated as 'isle of the sun' in the Belep language. In most published sources, it is spelled $<$ Art>.
    ${ }^{6}$ This islet is called /poc/ in the Belep language; in published sources, it tends to be spelled $<$ Pott $>$ or $<$ Phwoc>. It was historically a kingdom separate from Belep and had its own language, which is now lost. It maintains great religious significance for all Belema.

[^2]:    ${ }^{7}$ The Hoot ma Waap region is named after two legendary brothers, called in Belep Or 'to spill' and Waap 'to topple'. The brothers gave their names to the two phratries (defined below) in the Far North; each chefferie in this region belongs either to the $<$ Hoot $>$ or the $<$ Waap $>$ (sometimes $<$ Whaap>) phratry.

[^3]:    ${ }^{8}$ The Belep noun teâ has a variety of meanings; it may be a title for the chief of a group of people; it may refer to a chef de clan (the eldest man in a family), or to the chieftain's eldest son.
    ${ }^{9}$ These are dynastic titles, rather than personal names; for example, the high chief of Koumac, Te $\hat{a}$ Kumwaak, was César Boarat in 2012.
    ${ }^{10}$ The Belema are part of the Or or $<$ Hoot $>$ phratry (Dubois 1975d), though the differentiation between the two phratries has become uncertain since French colonization.

[^4]:    ${ }^{11}$ «Éloignée de tout, cette petite commune vit en quasi autarcie. Ce qui lui a permis de rester authentique et de toujours défendre une certaine idée de l'indépendance. Aujourd'hui, elle cherche pourtant à s'ouvrir davantage sur le monde et à casser cette image qui lui colle à la peau. » (translation mine)
    ${ }^{12}$ «Si vous vous y rendez, prévoyez une petite coutume pour le chef de tribu, car les traditions sont encore plus fortes ici qu'ailleurs...» (translation mine)

[^5]:    ${ }^{13}$ Belep religious belief holds that people have two (or possibly three) souls: the janu 'spirit', the totem animal, which is the life-force given by one's ancestors, and which returns to one's ancestral homeland at death; and the kânu 'soul', the double, the carrier of the individual's personality, which goes to Caviluumw 'the Underworld' at death. Belema also have an âyua- 'desire', a person's will or the power of love, which is used to translate the Christian concept of the soul, and goes to the Christian Heaven at death (I. Moilou, p.c.).
    ${ }^{14}$ The Belep noun mewu- 'variety' is used to refer both to a person's clan name and to a species of plant or animal; for example mewu aju 'a person's clan name'; mewu pawi 'species of hibiscus'. To inquire as to someone's given name, the locative question verb iva 'where?' is used, e.g. iva naramw? 'where is your given name?' The same construction is used to ask after a clan name, e.g. iva mewuumw? 'where is your clan name?'
    ${ }^{15}$ As is the custom in New Caledonia, surnames are written all in capital letters. The clan Guele is shown in parentheses since the only remaining members are very old; it will die out within a generation. The two TEAMBOUEON clans are distinguished from each other by the location of their clan lands, although this is not part of their surnames. There is also a YАМАМОTO family, composed of descendants of a single Japanese settler who arrived after French colonization.

[^6]:    ${ }^{16}$ At least three species of Dioscorea yam are habitually cultivated in Belep, although their scientific names are unknown.

[^7]:    ${ }^{17}$ The flying fox is the only mammal native to New Caledonia.
    ${ }^{18}$ The etymology of the Belep clan name WAHOULO is likely /wa $=u l o /\{$ RESULT $=$ be.red $\}$ 'redness'.

[^8]:    ${ }^{19}$ There are a number of other taboos between opposite-sex siblings and cousins: they may not see each other naked, share clothing, sit on the same bench, etc.

[^9]:    ${ }^{20}$ These norms are highly variable from tribu to tribu; even in Balade, the discourse norms for la coutume are quite different.
    ${ }^{21}$ The scope of this word-whether it applies to all coutumes or merely some-is unknown.

[^10]:    ${ }^{22}$ This was a coutume of apology. The speaker's brother-in-law, an ignorant Tahitian, entered the sacred place without performing a pwawak and was punished by being turned invisible and held hostage by the spirits. This pwawak was performed to appease the spirits and apologize.
    ${ }^{23}$ Yal-28072010-BGMCG-tahitian_0143-0170

[^11]:    ${ }^{24}$ The word buac is also the name of a tree, Fagraea berteroana (French bois tabou 'taboo tree'), which is used to carve the rooftop spires that adorn and protect Kanak cases 'huts'.

[^12]:    25 'Lapita' is a term used by archaeologists to refer to a certain type of pottery which is found throughout the Pacific and is considered to be evidence of a common material culture in the region. Lapita pottery has been linked with the Austronesian people (Spriggs 1997).

[^13]:    ${ }^{26}$ This presumption has yet to be verified.

[^14]:    ${ }^{27}$ Note that the Belep primary school is a private Catholic institution rather than one under the control of the French government.
    ${ }^{28}$ French chefferie 'chiefdom' refers literally to the chief's home and metonymically to traditional Kanak governance structures.
    ${ }^{29}$ French mairie 'city hall' refers literally to the building where the mayor's office is located and metonymically to colonial French government structures.

[^15]:    ${ }^{30}$ This comparison uses Belep words collected in my field work and Balade Nyelâyu words from OzanneRivierre's (1998) dictionary. The wordlist used for comparison is a list of Austronesian basic vocabulary (Greenhill et al. 2008); in approximately 100 words, 25 tokens differed phonologically to a significant degree between the two language varieties.

[^16]:    ${ }^{31}$ This was particularly noticeable for a few gender-variant males, who exhibited many characteristics of female speech in both Belep and French.

[^17]:    ${ }^{32} \mathrm{http}: / /$ www.ac-noumea.nc/sitevr/spip.php?rubrique48

[^18]:    ${ }^{33}$ The few Belep children who speak French or another language at home invariably learn Belep from their teachers and peers at school, since it is necessary for social interaction. I know of at least three families in which this has happened.

[^19]:    ${ }^{34} \mathrm{http}: / /$ audacity.sourceforge.net/

[^20]:    ${ }^{35} \mathrm{http}: / /$ trans.sourceforge.net/en/presentation.php
    ${ }^{36} \mathrm{http}: / /$ www.sil.org/computing/toolbox/
    ${ }^{37} \mathrm{htp}: / / \mathrm{www} .1 \mathrm{lat-mpi.eu/tools/elan/}$
    ${ }^{38}$ http://linguisticsoftwareconverters.zong.mine.nu/

[^21]:    ${ }^{39}$ Phonemic aspiration contrasts are found in Nixumwak (Bril 2000); Yuanga (Schooling 1992); Balade Nyelâyu (Ozanne-Rivierre 1998); Caaàc (Hollyman 1981); Pije, Nemi, and Jawe (Haudricourt \& OzanneRivierre 1982); and the Voh-Koné varieties (Rivierre \& Ehrhart 2006).
    ${ }^{40}$ This characteristic is shared by Leti (Hume 1997); Hawaiian also contains heterosyllabic vowel sequences (Elbert \& Pukui 1979).

[^22]:    ${ }^{41}$ This phenomenon, called 'phase shift' in this work, is also found in Leti (Hume 1997) and Rotuman (Blevins 1994).

[^23]:    ${ }^{42}$ Only one word has been found to contain the vowel $/ \mathrm{y} /: / \mathrm{a}{ }^{\mathrm{m}}$ by/ 'periwinkle'.

[^24]:    ${ }^{43}$ I hypothesize that the phonemic distinctions in the Belep phoneme inventory served a more robust discriminatory function at some time in the past. The distinctions may have diminished in importance due to such factors as the loss of folkways and thus the words to describe them; universal diglossia and codeswitching (removing the necessity of learning the more obscure, high-register Belep words); and the disruption of linguistic transfer to the younger generations.
    ${ }^{44}$ Labiovelar consonants are phonemically and phonetically distinct from sequences of labial consonant + /u/ (see §2.1.2.1).

[^25]:    ${ }^{45}<$ Moilou> is the name of one of the clans in Belep.
    ${ }^{46}$ The toponym <Mwan> is the name of an area in Poc, the islet north of Art.
    ${ }^{47}$ The toponym / wala/ <Waala $>$ is the name of the main village in Belep, where the mairie and the church are located.

[^26]:    ${ }^{48}$ Castanospermum australe.

[^27]:    ${ }^{49}$ Lutjanus sebae.
    ${ }^{50}$ Called sardine prêtre in French.
    ${ }^{51}$ Lethrinus nebulosus.
    ${ }^{52}$ Artocarpus altilis.
    ${ }^{53}$ The French term <bougna> is used throughout New Caledonia to refer to a type of traditional Kanak dish which is prepared in coconut leaves inside an earth oven. Typical ingredients are coconut milk, yams, sweet potatoes, taro, potatoes, manioc, and meat (fish, chicken, pork, etc.). Even Kanak groups who did not traditionally prepare bougna have adopted the practice in an effort to cater to tourists. According to Dubois (1975c), the Belep word /loloi/ 'bougna' is borrowed from Drehu, the language of Lifou, one of the Loyalty Islands.

[^28]:    ${ }^{54}$ See $\S 4.1 .4$ on noun classifiers.

[^29]:    ${ }^{55}$ Accipiter haplochrous.
    ${ }^{56}$ Toponym for the islet north of Art.
    ${ }^{57}$ Sterna bergii.
    ${ }^{58}$ In some pronunciations. Other speakers say $/{ }^{\mathrm{D}} \mathrm{gã} /$.

[^30]:    ${ }^{59}$ Siganus fuscescens.

[^31]:    ${ }^{60}$ Immature Accipiter haplochrous.
    ${ }^{61}$ A type of food poisoning caused by eating fish contaminated with ciguatoxin.

[^32]:    ${ }^{62}$ The toponym $<$ Waala $>$ is the name of the main village in Belep.
    ${ }^{63}$ Only the Belep word /ãm ${ }^{m}$ by/ 'periwinkle' contains the vowel /y/. This word may be a loan from Nêlêmwa /ha ${ }^{\mathrm{m}} \mathrm{bu} /$ 'periwinkle' (Bril 2000).
    ${ }^{64}$ See $\S 2.2 .2$. 2 on vowel hiatus.

[^33]:    ${ }^{65}$ See §2.1.2.5 on neutralizations.

[^34]:    ${ }^{66}$ These three phonemes have been reconstructed for Proto-Oceanic by Lynch (2002).

[^35]:    ${ }^{67}$ These values were gathered based on a single speaker; tokens were collected both in isolation and in a carrier phrase. The labiovelar $/ \mathrm{p}^{\mathrm{w} /}$ was excluded from this study.

[^36]:    ${ }^{68}$ Reflexes of Belep words were determined by comparison with cognates in Balade Nyelâyu (OzanneRivierre 1998) and Nêlêmwa (Bril 2000), as well as by notations of aspiration in Dubois' (1975c) Belep dictionary.
    ${ }^{69}$ He was nominated by the Belema Language Committee as one of the best speakers. He was recorded in a quiet room using an Edirol R-09 at 44.1 KHz , 16-bit PCM wav format. Belep words were written beside their French glosses. Each word appeared in at least two wordlists, in a randomized order. Each time a word appeared in a wordlist, the speaker was asked to produce it twice: once in isolation and once in a carrier phrase
    ${ }^{70}$ For voiceless stops, VOT was measured from the onset of aperiodic noise in the waveform to the onset of periodic voicing; that is, from the beginning of the burst to the beginning of the vowel. Where a release burst was not visible on the waveform (notably for $/ \mathrm{c} /$ ), VOT was measured using the beginning point of visible high frequency noise on the spectrogram.

[^37]:    ${ }^{71}$ After calculating the raw duration values for the VOT, I adjusted the VOT values to control for rate of speech (Boucher 2002). The following formula was used to convert raw VOT values into a percentage of the segment duration: corrected VOT = raw VOT / ( raw VOT + duration of following vowel ). A correction for vowel duration was also performed.
    ${ }^{72}$ The only heteroscedastic variable was aspiration in a carrier phrase; however, as the overall ANOVA for aspiration was not significant, no correction was necessary. There were no sphericity problems.

[^38]:    ${ }^{73}$ Note that none of these studies includes an acoustic analysis.

[^39]:    ${ }^{74}$ Rivierre (1973) disagrees, arguing that New Caledonian prenasalized stops are in fact phonemic nasals with an allophonic stop release conditioned by a following oral vowel. There is etymological evidence for this assertion.
    ${ }^{75}$ Some phonemic evidence exists in Belep to counter the assertion that NC sequences are single phonemes. Inflectional noun and verb stem modifications often correlate prenasalized stops with nasal

[^40]:     to indicate that the nasal part of the NC sequence has some degree of phonemic value to speakers. However, in this work I consider this correspondence to be largely the result of historical sound changes, rather than synchronic Belep phonology.

[^41]:    ${ }^{76}$ Prenasalized stops were measured in Praat using the methodology Gordon \& Maddieson (1999) used for Ndumbea, a Southern New Caledonian language. The nasal portion was measured from the onset of periodicity in the waveform to the point where the waveform changed shape and decreased in amplitude. The oral portion was measured from here to the burst transient (1999:85). Boundaries were marked only at zero crossings; that is, points where the waveform crossed the x -axis (Smith 1978). The labiovelar $/ \mathrm{mb} \mathrm{b} /$ was excluded from this study.

[^42]:    ${ }^{77}$ Speakers use bilabial graphemes $<\mathrm{p}>,<\mathrm{b}>$, and $<\mathrm{m}>$ to write these phonemes (§2.5), despite the fact that they are normally allophonically labialized before back vowels (§2.3.1.1).

[^43]:    ${ }^{78}$ Ozanne-Rivierre (1998) describes a similar situation in Balade Nyelâyu as the result of a historical process whereby intervocalic * $n$ in the proto-language became intervocalic $/ 1 /$ in the modern language. "In intervocalic position, a nasal $l[I \overline{]}]$ developed whose effect is to nasalize the surrounding vowels...This nasal $-l$ - derives historically from an older intervocalic *-n-." Then, intervocalic /n/ was reintroduced into Balade Nyelâyu through borrowings from European languages (Ozanne-Rivierre 1998:21-22).

[^44]:    ${ }^{79}$ Tokens for the singleton oral vowels averaged here were collected from multisyllabic words where the vowel was taken from the first syllable, which was open and followed by $/ \mathrm{t} /[\mathrm{r}]$ This was chosen as the best medial consonant for the vowel to precede, since the other choices were prenasalized stops, $[\mathrm{w}],[\mathrm{v}],[\mathrm{j}]$, [ъ], and [1]. The tokens represented in Figure 8 and Figure 9 include those produced in isolation, as well as those produced in the carrier phrase /na ãti __ ãõtaic/ [nã ãci __ ãõraic] 'I say __ one time'. Formants were measured one-third of the way into the vowel using Praat, unless background noise interfered with the correct measurement at that point.

[^45]:    ${ }^{80}$ Tokens for the singleton oral vowels averaged here were collected from a) monosyllabic words, where the syllable was closed by a voiceless stop (indicated by a square in the plot); and b) multisyllabic words where the vowel was taken from the first syllable, which was open and followed by /t/ [r] (indicated by a circle in the plot). In total, 195 tokens from a male speaker (age 70) and 182 tokens from a female speaker (in her 20s) were collected from 37 words, split between those produced in isolation and those produced in a carrier phrase.

[^46]:    ${ }^{81}$ In Hawaiian, sequences of unlike vowels which are not diphthongs are termed 'clusters' (Elbert \& Pukui 1979). In Leti, an Austronesian language spoken in Indonesia, "there are no diphthongs; each transcribed vowel corresponds to a syllable peak" (Hume 1997:69). Cross-linguistically, long vowels that can be analyzed as double vowels may be called geminates (Ladefoged 1993:250).

