

Simplifying a system: A story of language change in Lelepa, Vanuatu

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Abstract. This paper focuses on the problem posed by the vowel surfacing during two encliticization processes in Lelepa (Oceanic, Vanuatu), with the nominalizer =*na* ‘NMLZ’ and the pronominal =*s* ‘OBL’. For instance, the verbs *faam* ‘eat’, *mat* ‘dead’ and *fan* ‘go:IRR’ are derived as *nafaamina* ‘food’, *nmatena* ‘funeral’ and *nafanona* ‘departure’. While the base forms have the same vowel /a/, those vowels surfacing before =*na* seem unpredictable. This paper discusses several possible explanations for these vowels and shows that both historical and phonological approaches are needed to account for them. Still, there is variation in the nominalisation of certain native verbs such as *raik* ‘fish with hand spear’, which is derived as either *naraikana* or *naraikina* ‘hand spear fishing’. It is shown that while *naraikana* is accounted for in diachrony, *naraikina* results from a reanalysis process indicated by intergenerational variation.

Keywords. Lelepa, Oceanic, borrowings, vowels, language change

1. Introduction¹

1.1 The Lelepa language and its speakers: a brief overview

Lelepa belongs to the Oceanic branch of the Austronesian family and is spoken in central Vanuatu. It is an SVO language which exhibits many typological features typical of Oceanic languages. It is mostly head-marking with right-aligned modifiers. Lelepa distinguishes direct from indirect possessive constructions (Lacrampe 2009), and 1st person pronouns distinguish inclusive and exclusive referents. Its number system marks singular, dual and plural; arguments are indexed on the verb. The language makes extensive use of serial verb constructions. Its phonology is also typical of Oceanic languages, with a small to medium-sized phonemic inventory consisting of 14 consonants, co-articulated labial-velars, and the 5 vowels /i e a o u/.

According to Lynch & Crowley (2001:108), Lelepa is part of a dialect chain running over the whole of central Vanuatu. This area includes the languages spoken on Efate and its satellite islands such as Lelepa, Moso, Nguna and Emao as well as those spoken in the Shepherds islands such as Tongoa and Makira. The Polynesian outliers Mele-Fila and Emae are excluded from this dialect chain.

The majority of Lelepa speakers are located on the island of Lelepa, while about a quarter are found on the recent settlement of Mangaliliu on mainland Efate. In addition, a few live in Port-Vila, the nearby capital of Vanuatu. Like many ni-Vanuatu, Lelepa speakers are multilingual and active speakers of several languages. In their case, this includes their own language; Bislama, the national language of Vanuatu; French or English, which are Vanuatu's languages of education; and either or both Nakanamanga and South Efate, which are closely related to and geographically contiguous with Lelepa. The latter two languages were also used as Christianisation languages at different times in Lelepa's history. During the first half of the 20th century, when Lelepa people had just been Christianised, South Efate was the language of the church. This language later

¹ I am grateful to Bethwyn Evans and two anonymous reviewers for comments on an earlier version of this paper, and to the audience of the ALS 2011 conference for questions and comments on my presentation which encouraged me to write the present paper. The research for this paper was supported by an Australian Postgraduate Award at the Australian National University. Finally, my gratitude goes to the Lelepa speakers without whom this research would not have been possible.

switched to Nakanamanga. Compared to these two languages, Lelepa is a “small” language with fewer speakers: it has about 400 hundred speakers, while there are around 6,000 South Efate speakers and 9,500 Nakanamanga speakers (Lynch & Crowley 2001:107). Although Lelepa speakers are fluent in these larger languages, the reverse is not true. Lelepa was never used as a vehicular language outside of its community of speakers, and is not taught in the two community schools. The transmission of the language is in the hands of parents of young children, and the language is indeed transmitted to the younger generations. However, this is not without exceptions, particularly in the Mangaliliu settlement and among speakers living in town. There is a strong exogamous tradition in Lelepa; in the past, women adopted in the community through marriage were expected to learn the language. Nowadays, however, many exogamous married couples use Bislama as their main language, and thus their children acquire Bislama or, less often, the mother’s own vernacular as their first language. For these reasons, failure to transmit the language can be observed in families in which the mother does not originate from Lelepa. In addition, Bislama is more present in the speech of younger speakers than in the speech of the elderly. This can be seen when comparing texts from speakers of different age groups: younger speakers have not only imported more Bislama loans, but also tend to analyze these loans and native forms in similar ways, as shown in section 5.

1.2 *The problem*

This paper describes a phenomenon observed when two distinct enclitics, the nominalizer =*na* ‘NMLZ’ and the oblique marker =*s* ‘OBL’ are attached to the end of phrases². First, I will present the encliticization processes relevant to the discussion and the descriptive problem posed when these enclitics attach to consonant-final hosts. I will then look at possible ways to account for the Lelepa data, first by showing that while a phonological analysis is not tenable for the use of the enclitics with native Lelepa lexemes (section 3), this data can be explained from a diachronic perspective (section 4). I will then add borrowings to the equation, and show that a phonological explanation accounts for these (section 5). In section 6, I will present a case study showing that younger speakers reanalyze

² Abbreviations used in the glosses follow the Leipzig Glossing Rules wherever possible. Additions to the Leipzig Glossing Rules are R realis, REL relativizer.

those two encliticization processes, while older speakers do not. In section 7, I will summarize the findings of this paper and conclude that this reanalysis by younger speakers shows language change in progress.

1.3 A note on orthography

The orthography used to represent the Lelepa data is phonemic. The co-articulated labial velar stop /k^hp^w/ is represented as <ḡ>, the co-articulated bilabial velar nasal /ŋ^hm^w/ is represented as <ṁ> and the velar nasal /ŋ/ as <g>.

2. The =na and =s enclitics

2.1 The nominalizing enclitic =na ‘NMLZ’

In the nominalizing process, verb roots take the proclitic *na=* ‘ART’, a vestigial article, and the enclitic *=na* ‘NMLZ’, a nominalizer, to derive nouns. This is a productive process which applies to the main subclasses of verbs (intransitive, ambitransitive³ and transitive) in the language. The nominalizer *=na* is most often hosted by verbs, but it can also attach to nouns. When it is hosted by verbs, the verb is nominalised: e.g. *fsa* ‘speak’ derived as *nafsana* ‘language’. It can also attach to nouns which function as objects. In such cases, the enclitic has scope over both the noun and the preceding verb; what is nominalised is a verb with its incorporated object, as seen in (1). In this example, the article *na=* occurs before the verb root *fak* ‘go.to:IRR’ which is then followed by its object *maketi* ‘market’. The nominalizer *=na* attaches to the verb + object combination. The resulting deverbal noun *nafak maketina* ‘going to the market’ refers to the common activity of going to the market in the capital to sell market produce. The object *maketi* is a loanword adapted from Bislama *market* ‘market’:

- (1) *na= fak maketi =na*
 ART=go.to:IRR market =NMLZ
 ‘going to the market’

³ Ambitransitive verbs are able to function underived with or without an object.

Table 1 shows intransitive, transitive and ambitransitive verb roots and their derived counterparts. This process is quite straightforward and it is largely possible to predict the nominalised form of a verb. However, we can see that the vowel of the proclitic *na=* is dropped with certain forms, such as *nfouna* ‘weaving’ and *nseiseina* ‘meeting’. Phonological factors explain the deletion of this vowel: before fricatives followed by vowels, /a/ is deleted. Thus the vowel is deleted in *nfouna* and *nsalena* ‘dance ceremony’, but not in *nafsana*, as the fricative *f* is not followed by a vowel but forms a cluster with the following *s*.

	Verbs	Gloss	Deverbal nouns	Gloss
Intransitives	<i>fou</i>	‘weave:IRR’	<i>n=fou=na</i>	‘weaving’
	<i>fsa</i>	‘speak:IRR’	<i>na=fsa=na</i>	‘language’
	<i>maroa</i>	‘think’	<i>na=maroa=na</i>	‘thought, idea’
	<i>seisei</i>	‘meet’	<i>n=seisei=na</i>	‘meeting’
Transitives	<i>loŋa</i>	‘see’	<i>na=loŋa=na</i>	‘view, opinion’
	<i>suasua</i>	‘agree’	<i>na=suasua=na</i>	‘agreement’
Ambitransitives	<i>tae</i>	‘know’	<i>na=tae=na</i>	‘knowledge’

Table 1. Examples of vowel-final verbs and their corresponding deverbal nouns.

All verbs in table 1 are vowel-final, and in the derivation process the enclitic simply follows the verb root. Lelepa is not a codaless language and many verbs end in consonants, thus it is necessary to see how the process applies with consonant-final verbs. This is shown in table 2 with verbs such as *mer* ‘act’ being nominalized as *namerina* ‘action, way’. Nominalized forms are given in the third column. As expected, the enclitic =*na* occurs in these forms. Less expected, however, is a vowel (in bold letters in Table 2 and subsequent ones) which occurs between the last consonant of the verb and =*na*. Looking at all the examples, it can be seen that this vowel can surface as any of the five different vowels *i*, *e*, *a*, *o*, and *u*. It seems that this vowel is required as it is present in all given examples. In addition, this vowel is also always stressed, conforming to the Lelepa stress rule whereby penultimate morae are stressed. Thus in these examples, stress falls on the last vowel of the verbs roots, and in the nominalised forms, it falls on the penultimate vowel.

Verbs	Gloss	Deverbal nouns	Gloss
<i>mer</i>	‘act’	<i>namerina</i>	‘action, way’
<i>mat</i>	‘dead’	<i>nmatena</i>	‘funeral’
<i>tin</i>	‘pregnant’	<i>natinana</i>	‘pregnancy’
<i>sur</i>	‘defecate’	<i>nasurana</i>	‘need to defecate’
<i>marmar</i>	‘rest’	<i>marmarona</i>	‘holidays’
<i>fol</i>	‘lie:IRR’	<i>nafolona</i>	‘lie’
<i>mun</i>	‘drink’	<i>namununa</i>	‘drinking’

Table 2. Examples of consonant-final verbs and their corresponding deverbal nouns.

Because this vowel only occurs during the process of encliticization, it must be accounted for. Is it predictable on phonological grounds or alternatively, is this vowel underlying and unpredictable? Furthermore, if it is predictable, what are the rules conditioning its occurrence? In contrast, if this vowel is lexically determined, is it part of the root or of the enclitic? These questions are answered in the following sections. The remainder of this section introduces the other encliticization process relevant to the present study, with the oblique marker =*s* ‘OBL’.

2.2 The oblique enclitic =*s* ‘OBL’

Being an enclitic, the oblique marker =*s* attaches to the end of phrases, and to a variety of word classes such as nouns, verbs, pronouns, and others. This enclitic is a pronominal which references 3rd person oblique arguments and adjuncts whose referents are known from preceding clauses or discourse context. Thus its function is completely different from that of the nominalizer =*na*, which is a derivational morpheme. Referents of the oblique enclitic typically include locations, instruments, and indirect or secondary objects of ditransitive verbs. In (2), the antecedent of =*s* is *wara* ‘place’, an argument of the first occurrence of the verb *wuru* with the role of location. The oblique =*s* attaches to the end of the relative clause introduced by the relativizer *na* ‘REL’. This relative clause specifies the noun *wara*; the presence of =*s* is expected as relative clauses in Lelepa require that the relativized nominal be cross-referenced within the relative clause.

- (2) *A= wuru wara na a= to wuru =s.*
 1SG.SBJ:R= pass place REL 1SG.SBJ:R=stay:AUX pass =OBL
 ‘I passed by the place I used to pass by.’

While in (2) =*s* attaches to a verb, in (3) it attaches to a noun. The noun *kapu* ‘traditional pudding’ hosts the enclitic =*s*. The referent of the enclitic is a previously mentioned bird which was shot and used as filling for the traditional pudding:

- (3) *E= pi nlakan a= to pat kapu =s.*
 3SG.SBJ:R=COP because 1SG.SBJ:R=stay:AUX make traditional.pudding =OBL
 ‘This is why I was making traditional pudding with it.’

Table 3 below gives further examples of the =*s* enclitic. It shows that it attaches to members of the major open word classes (nouns and verbs) as well as members of minor closed ones (pronouns, possessive pronominals, determiners and adverbials). Enclitics in Lelepa do not attach to prepositions, conjunctions and subordinators which typically occur at the left edge of phrases: this is expected from a left-headed language. These examples show that =*s* displays the behaviour of an enclitic, that is; the ability to attach to the right edge of phrases. For instance, when =*s* attaches to noun phrases, it may be hosted by the head noun or by the last optional modifier following the head.

	Hosts	Gloss	=s encliticised words	Gloss	Free translation
Verbs	<i>to</i>	‘stay’	<i>to=s</i>	‘stay=OBL’	‘stay there’
	<i>tum̃alua</i>	‘depart’	<i>tum̃alua=s</i>	‘depart=OBL’	‘depart from it’
	<i>sralesko</i>	‘believe’	<i>sralesko=s</i>	‘believe=OBL’	‘believe in it’
Nouns	<i>kapu</i>	‘traditional pudding’	<i>kapu=s</i>	‘traditional.pudding=OBL’	‘(make) traditional pudding with it’
	<i>nsalena</i>	‘dance ceremony’	<i>nsalena=s</i>	‘dance.ceremony=OBL’	‘(organise a) dance ceremony there’
Pronouns	<i>konou</i>	‘1SG’	<i>konou=s</i>	‘1SG=OBL’	‘(tell) me about it’
Possessive pronominals	<i>nae</i>	‘3SG:POSS’	<i>tai kiki nae=s</i>	‘sibling small 3SG:POSS=OBL’	‘(tell) his younger sibling about it’
Determiners	<i>nge</i>	‘DEF’	<i>nge=s</i>	‘DEF=OBL’	‘(the place we killed) the (pig) at’
Adverbials	<i>kusū</i>	‘too much’	<i>kusū=s</i>	‘too.much=OBL’	‘too much of it’

Table 3. Examples of vowel-final hosts and corresponding =s encliticized words.

Table 3 shows the oblique enclitic =s attached to a variety of vowel-final hosts. However, it can also be hosted by consonant-final hosts, as shown in table 4. Section 2.1 showed that the enclitic =na is preceded by a vowel when hosted by a consonant-final form, and that this vowel needs to be accounted for. As table 4 shows, a similar phenomenon happens when =s is hosted by a consonant-final form: a vowel occurs between the last consonant of the host and the =s enclitic. As observed with the encliticization of =na, this vowel can be any of the five *i*, *e*, *a*, *o*, *u* vowels.

Hosts	Gloss	=s encliticised words	Gloss	Free translation
<i>pag</i>	‘climb’	<i>pagis</i>	‘climb:OBL’	‘climb on it’
<i>sil</i>	‘enter’	<i>silis</i>	‘enter:OBL’	‘enter it’
<i>sasak</i>	‘sit’	<i>sasakes</i>	‘sit:OBL’	‘sit on it’
<i>matmat</i>	‘happy’	<i>matmates</i>	‘happy=OBL’	‘happy about it’
<i>nafnag</i>	‘food’	<i>nafnagas</i>	‘food:OBL’	‘(make) food for it’
<i>mutuam</i>	‘devil’	<i>mutuamas</i>	‘devil:OBL’	‘(tell) the devil about it’
<i>nag</i>	‘2SG:POSS’	<i>nagos</i>	‘2SG:POSS:OBL’	‘(tell) your (father) about it’
<i>los</i>	‘wash’	<i>losos</i>	wash:OBL	‘wash there’
<i>matur</i>	‘sleep’	<i>maturus</i>	sleep:OBL	‘sleep on it’
<i>pten</i>	‘shellfish sp’	<i>ptenus</i>	shellfish.sp:OBL	‘(spread) shellfish.sp on it’

Table 4. Examples of consonant-final hosts and corresponding =s encliticized words.

3. A phonological problem?

Section 2 has presented the =na and =s encliticization processes and shown that when these enclitics attach to a consonant-final host, a vowel occurs between the last consonant of the host and the following enclitic. This vowel, which can be either *i*, *e*, *a*, *o* or *u*, is not accounted for. The purpose of this section is to address this problem using phonological analysis.

At first sight, a morphophonological explanation, in which an epenthetic segment is added between two morpheme boundaries, seems a plausible hypothesis. While Lelepa has a (C)(C)(C)V(C)(C) syllable structure, meaning that consonant clusters are possible within and across syllable boundaries, the most common syllable still is CV, and the language prefers CV.CV.CV... structures. With this in mind, it seems perfectly reasonable to assume that an epenthetic vowel is inserted between two consonants coming together at morpheme boundaries, to satisfy the preference for CV.CV.CV... structures. In addition, the variation in the form of the inserted vowel can be easily explained by a process of progressive assimilation, as the vowel under investigation can only assimilate with a preceding vowel of the host. It is now possible to formulate the following hypothesis and to test it against an expanded data set as given in table 5:

“The vowel occurring between a consonant-final host and the enclitics =na ‘NMLZ’ or =s ‘OBL’ is epenthetic, and assimilates to the last vowel of the host.”

The data in table 5 are representative of the problem, in that they show all possible known environments in which each different instance of the vowel under study occurs. The first column shows consonant-final hosts, while the third column gives encliticized words. Note that the data presents both words encliticized with =*na* and =*s*, since both processes have similar outputs: (i) they both require that a vowel be inserted between consonant-final hosts and the enclitics, and (ii) whichever enclitic occurs on a particular host, the inserted vowel is the same, as shown with *msak* ‘sick’ giving the encliticized forms *namsakina* ‘sickness’ and *msakis* ‘sick:OBL’. The data in table 5 are also organised to make the analysis process straightforward: individual data rows are grouped into larger rows according to the last vowel of the hosts, and these larger rows are in turn ordered according to the conventional *i-e-a-o-u* vowel order. Further, encliticized words are ordered according to the vowel under study and following the same order: within a larger row, words with *i* before the enclitic are ordered before those with *e* before the enclitic, and so on.

Host	Gloss	Encliticized word	Gloss
<i>sil</i>	‘enter’	<i>silis</i>	‘enter:OBL’
<i>fsa pseik</i>	‘teach:IRR’	<i>nafsa pseikina</i>	‘education’
<i>tin</i>	‘pregnant’	<i>natinana</i>	‘pregnancy’
<i>mer</i>	‘act’	<i>namerina</i>	‘action, way’
<i>agnem</i>	‘1SG:EXCL:POSS’	<i>agnemis</i>	‘1SG:POSS:OBL’
<i>maet</i>	‘angry’	<i>namaetona</i>	‘anger’
<i>pten</i>	‘shellfish sp’	<i>ptenus</i>	shellfish.sp:OBL
<i>msak</i>	‘sick’	<i>namsakina</i>	‘sickness’
		<i>msakis</i>	‘sick:OBL’
<i>faam</i>	‘eat:IRR’	<i>nafaamina</i>	‘feast, food’
<i>pag</i>	‘climb’	<i>pagis</i>	‘climb:OBL’
<i>tkark</i>	‘last born’	<i>tkarkis</i>	‘last.born:OBL’
<i>mat</i>	‘dead’	<i>nmaten</i>	‘funeral’
<i>sasak</i>	‘sit’	<i>sasakes</i>	‘sit:OBL’
<i>matmat</i>	‘happy’	<i>matmates</i>	‘happy=OBL’
<i>suar</i>	‘walk’	<i>nasuarana</i>	‘walk’
<i>nafnag</i>	‘food’	<i>nafnagas</i>	‘food:OBL’
<i>mutuam</i>	‘devil’	<i>mutuamas</i>	‘devil:OBL’
<i>marmar</i>	‘rest’	<i>marmarona</i>	‘holidays’
<i>nag</i>	‘2SG:POSS’	<i>nagos</i>	‘2SG:POSS:OBL’
<i>fan</i>	‘go:IRR’	<i>nafanona</i>	‘departure’
<i>nkap</i>	‘fire’	<i>nkapus</i>	‘fire:OBL’
<i>ṗog</i>	‘night’	<i>naṗogina</i>	‘night’
<i>los</i>	‘wash’	<i>losos</i>	wash:OBL
<i>fol</i>	‘lie:IRR’	<i>nafolona</i>	‘lie’
<i>lot</i>	‘pray’	<i>nalotuna</i>	‘Christianity’
<i>suk</i>	‘tight’	<i>nasukina</i>	‘union’
<i>nagrun</i>	‘woman’	<i>nagrunis</i>	‘woman:OBL’
<i>sur</i>	‘defecate’	<i>nasurana</i>	‘need to defecate’
<i>mun</i>	‘drink’	<i>namununa</i>	‘drinking’
<i>matur</i>	‘sleep’	<i>maturus</i>	sleep:OBL

Table 5. Expanded data set.

The hypothesis proposing the insertion of an epenthetic vowel assimilating to the last vowel of the host is tested and rejected below. Table 6 summarises the co-occurrences of the pre-enclitic vowels with the last vowel of the hosts, and shows that there is no clear assimilation of the vowel under study towards the vowel of the host.

In particular, table 6 shows that when hosts have *a* as their last vowel, the vowel before the enclitic can be any of the five *i, e, a, o, u* vowels. The assimilation hypothesis seems fairly weak, since if it were verified it would entail that any vowel before the enclitic has assimilated to *a*, which is not shown by the data. It also shows that *i* occurs before the enclitic with any of the five vowels. Again, this

does not look like a process of assimilation at all, since any host vowel can trigger *i*, and at least another vowel with very different features.

		Host vowel				
		<i>i</i>	<i>e</i>	<i>a</i>	<i>o</i>	<i>u</i>
Vowel under study	<i>i</i>	+	+	+	+	+
	<i>e</i>	-	-	+	-	-
	<i>a</i>	+	-	+	-	+
	<i>o</i>	-	+	+	+	-
	<i>u</i>	-	+	+	+	+

Table 6. Summary of vowel co-occurrences.

It is now clear that these pre-enclitic vowels are unpredictable and have to be regarded as underlying segments. The fact that these underlying vowels only ever occur in processes of encliticization has muddied the waters and led to a misleading analysis which posited consonant-final underlying forms for those hosts taking the =*na* and =*s* enclitics. Phonologically-motivated processes of medial and final vowel deletion have been shown to occur in certain Efate languages (Schütz 1969:17-18, Clark 1985:19-21, Thieberger 2006:68-70). This is also the case of Lelepa, particularly with final vowels. This was seen with the data in table 5 in which final vowels are deleted unless they are followed by enclitics, in which case they surface and carry stress.

This suggests that Lelepa children learn which vowel occurs with the encliticized forms of particular lexemes: this statement will be shown to be important later, in section 5. For the time being, this paper will strengthen the analysis that the vowels occurring before the enclitics are underlying; it will focus particularly on where those vowels come from. This is the purpose of the next section.

4. A diachronic problem?

Phonological analysis has shown that the pre-enclitic vowels are lexically determined. Forms presented in tables 2, 4 and 5 as consonant-final are in fact vowel-final, the final vowel being the vowel occurring just before the enclitics =*na* and =*s*. These forms are revised in table 7.

Hosts	Gloss	Encliticized word	Gloss
<i>sili</i>	‘enter’	<i>sili=s</i>	‘enter=OBL’
<i>fsa pseiki</i>	‘teach:IRR’	<i>na=fsa pseiki=na</i>	‘education’
<i>tina</i>	‘pregnant’	<i>na=tina=na</i>	‘pregnancy’
<i>meri</i>	‘act’	<i>na=meri=na</i>	‘action, way’
<i>agnemi</i>	‘1SG:EXCL:POSS’	<i>agnemi=s</i>	‘1SG:EXCL:POSS=OBL’
<i>maeto</i>	‘angry’	<i>na=maeto=na</i>	‘anger’
<i>ptenu</i>	‘shellfish sp’	<i>ptenu=s</i>	shellfish.sp=OBL
<i>msaki</i>	‘sick’	<i>na=msaki=na</i>	‘sickness’
		<i>msaki=s</i>	‘sick=OBL’
<i>faami</i>	‘eat:IRR’	<i>na=faami=na</i>	‘feast, food’
<i>pagi</i>	‘climb’	<i>pagi=s</i>	‘climb=OBL’
<i>tkarki</i>	‘last born’	<i>tkarki=s</i>	‘last.born=OBL’
<i>mate</i>	‘dead’	<i>n=mate=na</i>	‘funeral’
<i>sasake</i>	‘sit’	<i>sasake=s</i>	‘sit=OBL’
<i>matmate</i>	‘happy’	<i>matmate=s</i>	‘happy=OBL’
<i>suara</i>	‘walk’	<i>na=suara=na</i>	‘walk’
<i>nafnaga</i>	‘food’	<i>nafnaga=s</i>	‘food=OBL’
<i>mutuama</i>	‘devil’	<i>mutuama=s</i>	‘devil=OBL’
<i>marmaro</i>	‘rest’	<i>marmaro=na</i>	‘holidays’
<i>nago</i>	‘2SG:POSS’	<i>nago=s</i>	‘2SG:POSS=OBL’
<i>fano</i>	‘go:IRR’	<i>na=fano=na</i>	‘departure’
<i>nkapu</i>	‘fire’	<i>nkapu=s</i>	‘fire=OBL’
<i>ḥogi</i>	‘night’	<i>na=ḥogi=na</i>	‘night’
<i>loso</i>	‘wash’	<i>loso=s</i>	wash=OBL
<i>folo</i>	‘lie:IRR’	<i>na=folo=na</i>	‘lie’
<i>lotu</i>	‘pray’	<i>na=lotu=na</i>	‘Christianity’
<i>suki</i>	‘tight’	<i>na=suki=na</i>	‘union’
<i>nagruni</i>	‘woman’	<i>nagruni=s</i>	‘woman=OBL’
<i>sura</i>	‘defecate’	<i>na=sura=na</i>	‘need to defecate’
<i>munu</i>	‘drink’	<i>na=munu=na</i>	‘drinking’
<i>maturu</i>	‘sleep’	<i>maturu=s</i>	sleep:OBL

Table 7. Revised phonemic forms.

Showing that these vowels are underlying allows for a synchronic description. However, a historical analysis provides a more detailed explanation of the data. If there is an underlying segment which only surfaces in certain circumstances, then there are good reasons to look at this problem from a diachronic perspective. If an underlying segment is present in synchrony, then it is likely that this segment was present at an earlier stage of the language. Thus, considering the problem at hand, it would be interesting to compare Lelepa modern forms with their reconstructed ancestral forms. This would show whether the final vowel of hosts, which occurs only in encliticized forms, is present historically. If this hypothesis is verified, then this would be additional evidence for positing these vowels as underlying. On the other hand, if these vowels are not present in reconstructed

forms, or if reconstructed forms show different vowels, then we would need to find another explanation.

This comparison is done in Table 8, which compares Lelepa forms with reconstructed forms from Proto Oceanic (POc) and Proto North Central Vanuatu (PNCV). POc is the reconstructed ancestor language of all Oceanic languages, while PNCV is the putative ancestor of Oceanic languages spoken in northern and central Vanuatu (Clark 2009:3) and thus may be seen as an intermediate stage between POc and modern northern and central Vanuatu languages⁴. Considerable lexical and grammatical reconstruction has been undertaken for Oceanic. Reconstructed forms used in table 8 are taken from Ross, Pawley & Osmond (2003, 2007, 2008, 2011), Clark (2009) and Evans (2003).

Table 8 shows that, for those forms with known etyma, the hypothesis is verified: Lelepa final vowels are reflexes of vowels found in POc and/or PNCV reconstructions. These reconstructions show neither the absence of this vowel nor a different vowel in the same place. Note that one form is analysed differently from the others, as it is not a Lelepa reflex of POc or PNCV: *lotu* ‘pray’ is likely a Polynesian borrowing⁵. Nevertheless, the final *u* of Polynesian *lotu* is present in Lelepa *lotu*, thus the origin of this final vowel is known.

⁴ POc and PNCV have different statuses. While POc is well established, there is some debate on whether PNCV is the ancestor of a single language or not. PNCV reconstructions are used in this paper because the Lelepa data reflect them. No argument is made to support PNCV as Lelepa’s direct ancestor.

⁵ I am grateful to Chris Ballard, Bethwyn Evans, Alexandre François, Paul Geraghty, John Lynch, Meredith Osmond, Malcolm Ross and Nick Thieberger for their insights on the origins of *lotu*, which may have been introduced in Lelepa during Christianisation.

Lelepa forms	Gloss	POc etyma	Gloss	PNCV etyma	Gloss
<i>tina</i>	‘pregnant’	-	-	* <i>tiana</i>	‘pregnant’
<i>agnemi</i>	‘1PL:EXCL:POSS’	* <i>kami</i>	‘1PL:EXCL’	* <i>qama(m)i</i>	‘1PL:EXCL’
<i>maeto</i>	‘angry’	<i>maqeto(m)</i>	‘black’	* <i>ma?eto</i>	‘black’
<i>msaki</i>	‘sick’	* <i>masaki</i>	‘sick’	* <i>masaki-tV</i>	‘sick, fever’
<i>tkarki</i>	‘last born’	* <i>riki(t,q)</i>	‘small’	* <i>riki</i>	‘small’
<i>mate</i>	‘dead’	* <i>mate</i>	‘dead’	* <i>mate</i>	‘die, dead’
<i>sasake</i>	‘sit’	* <i>sake</i>	‘embark, ride on a canoe’	* <i>sake</i>	‘sit on, be on a canoe’
<i>sale</i>	‘dance’	* <i>sale</i>	‘dance’	* <i>sale</i>	‘dance’
<i>nafnaga</i>	‘food’	* <i>panan</i>	‘feed’	* <i>vaga-ni</i>	‘feed’
<i>marmaro</i>	‘rest, breathe’			* <i>maro</i>	‘breathe’
<i>nago</i>	‘2SG, 2SG:POSS’	* <i>iko</i>	‘2SG’	* <i>igo</i>	‘2SG’
<i>fano</i>	‘go:IRR’	* <i>pano</i>	‘go’	* <i>vano</i>	‘go’
<i>nkapu</i>	‘fire’	* <i>(k,g)abu</i>	‘burn, be on fire’	* <i>kabu</i>	‘fire, firewood’
<i>ḡogi</i>	‘night’	* <i>boni</i>	‘night’	* <i>bogi</i>	‘night’
<i>loso</i>	‘wash’	-	-	* <i>loso-vi</i>	‘bathe, wash’
<i>munu</i>	‘drink’	* <i>unum</i>	‘drink’	* <i>inu/ *unu</i>	‘drink’
<i>maturu</i>	‘sleep’	* <i>[ma]turuR</i>	‘sleep’	* <i>maturu</i>	‘sleep’
<i>sili</i>	‘enter’	* <i>silip-i-</i>	‘enter into somewhere’	-	-
Lelepa loaned form	Gloss	Loanword (Polynesian)	Gloss		
<i>lotu</i>	‘pray’	<i>lotu</i>	‘pray’, ‘Christian religion’, ‘religion’, ‘church’		

Table 8. Comparison of POc and PNCV reconstructions and borrowings with Lelepa reflexes.

The vowel attested before the enclitics can be explained historically for nineteen out of thirty-one Lelepa forms given in table 8, either through the reconstruction of ancestral Oceanic forms or through borrowing. Twelve forms remain with their final vowel unexplained. These forms are as follows:

- *suki* ‘tight’
- *nagrūni* ‘woman’
- *sura* ‘defecate’
- *fsa pseiki* ‘teach:IRR’
- *meri* ‘act’
- *ptenu* ‘shellfish sp’
- *faami* ‘eat:IRR’
- *pagi* ‘climb’
- *matmate* ‘happy’
- *suara* ‘walk’
- *mutuama* ‘devil’
- *folo* ‘lie:IRR’

The etymology for these forms is not currently known. This should not be considered problematic, since the hypothesis is verified in every case where a reconstruction is available. Reconstructing a proto-language is a huge task, and a

linguist working on a synchronic description should not expect that reconstructed etyma are available for every single modern form of the language under study. The lack of particular POC or PNCV etyma to compare with Lelepa forms can be explained by the fact that a particular modern form may indeed be a reflex of a particular etymon, but this etymon has not been reconstructed yet. It is also possible that the modern language may have innovated in certain ways and the current state of knowledge of the proto-language is not able to explain certain innovated forms. Yet another reason is that the modern language has borrowed a particular form from a neighbouring unrelated or distantly related language: this is what happened with *lotu*, which was borrowed from a Polynesian language.

5. What about borrowings from Bislama?

The preceding sections have explained that the final vowels occurring in processes of encliticization are underlying (section 3) and that their etymology is traceable (section 4). These encliticization processes involving the enclitics =*na* and =*s* also apply to Bislama borrowings which are found in Lelepa. Example (4) and (5) show the Bislama verb *kuk* taking the enclitics =*na* in (4) and =*s* in (5). These examples show that the same vowel *u* surfaces between the last consonant of the hosts and the enclitics:

- (4) *kuk* >> *na= kuku =na*
 cook ART= cook =NMLZ
 ‘cooking’
- (5) *kuk* >> *kuku =s*
 cook cook =OBL
 ‘cook it’

Is it possible to account for this vowel? Section 2 has shown that the pre-enclitic vowels in Lelepa forms are part of the hosts, which entails that the underlying forms of the enclitics are /*na*/ and /*s*/, with no initial vowel. Thus there are two possible hypotheses to explain the occurrence of this vowel with borrowings: it may either be underlying and part of the host, or epenthetic and phonologically conditioned. These hypotheses are testable on the data presented in table 9, which

presents Bislama loans encliticized with =*na* and =*s*. This data is grouped in two main rows: the first row has forms showing a *u* before the enclitic, while the second row has forms showing an *i* before the enclitic. Forms in the table are also representative of the Lelepa corpus, which does not contain encliticized loans showing any pre-enclitic vowel other than *u* and *i*. When looking at the distribution of these two vowels, the table shows two distinct environments:

- i. The forms with *u* before the enclitics have the vowel *u* in the preceding syllable,
- ii. The forms with *i* before the enclitics have any vowel in the preceding syllable except for *u*: that is, they have *i, e, a, o*.

Bislama loans	Gloss	Encliticized loans	Gloss
<i>kuk</i>	‘cook’	<i>nakukuna</i>	‘cooking’
<i>kuk</i>	‘cook’	<i>kukus</i>	‘cook it’
<i>skul</i>	‘school’	<i>naskuluna</i>	‘education’
<i>Franis</i>	‘France’	<i>franisis</i>	‘France:OBL’
<i>fak maket</i>	‘go to the market’	<i>nafak maketina</i>	‘going to the market’
<i>kasem</i>	‘reach’	<i>kasemis</i>	‘reach it’
<i>makem</i>	‘measure’	<i>makemis</i>	‘measure it’
<i>bes</i>	‘establish a base’	<i>besis</i>	‘establish a base:OBL’
<i>lasmēt</i>	‘p.name’	<i>lasmētis</i>	‘p.name:OBL’
<i>Sebas</i>	‘Sébastien’	<i>Sebasis</i>	‘Sébastien:OBL’
<i>stat</i>	‘start’	<i>statis</i>	‘start it’
<i>Rom</i>	‘Rome’	<i>romis</i>	‘Rome:OBL’

Table 9. Encliticized Bislama loans.

Therefore, these two vowels are epenthetic vowels in complementary distribution, and we can predict their occurrence with the following rule:

- (6) If the last vowel of the host is *u*, the epenthetic vowel is *u*;
 If the last vowel of the host is any other vowel but *u*, the epenthetic vowel is *i*.

This section has shown that Bislama loans encliticized with =*na* and =*s* undergo adaptation in Lelepa: the morphophonological rule of epenthesis given in (6) accommodates consonant-final loanwords which host consonant-initial enclitics in order to avoid consonant clusters. The next section shows that this rule, which seemed to be originally restricted to loanwords, affects native words as well, and argues that this illustrates language change in progress.

6. The case of *naraikina*: language change in progress?

This section presents the case of the deverbal noun *naraikina* ‘hand spear fishing’, and its ramifications in terms of language change. It was shown that there is a two-way solution accounting for the vowels occurring before the enclitics =*na* and =*s*. With native forms, these vowels are underlying, and with loanwords, they are phonologically conditioned. Lelepa speakers thus learn that there are two ways of realising encliticized words, whether they deal with native forms or with borrowings.

Example (7) shows the morphemic analysis for *naraikina*, in which the host’s underlying form is the verb *raiki* ‘fish with hand spear’:

- (7) *na= raiki =na*
 ART= fish.w.hand.spear =NMLZ
 ‘hand spear fishing’

This form was given by a Lelepa speaker in his early thirties, who is recognised in his community for being an expert at fishing with a hand spear. I asked him if I could record him talking about this activity and its techniques. In the course of the recording this speaker uttered the form *naraikina* a number of times. Once the recording was completed, I went on transcribing it with his assistance and that of other, older, Lelepa speakers. The first time they listened to the recording, these older speakers did not recognise *naraikina*. They judged it to be incorrect, and stated that the proper form of the word is *naraikana*, with an *a* before the enclitic instead of an *i*. In contrast to *raiki*, this gives the underlying form of the verb as being /*raika*/ and not **raiki*. Similarly to verbs presented in table 2, 4 and 5, /*raika*/ surfaces as [raik] with its last vowel dropped, except when it hosts an enclitic, in which case its last vowel surfaces before the enclitic. Is there an explanation for this variation?

The etymology of *raika* can be traced in a way similar to what was done in section 4, by using proto forms: Lelepa *raika* may partly reflect POc **ikan* ‘fish’ and PNCV **ika* ‘fish’. Although *ra* is unaccounted for—being unattested as a morpheme in Lelepa or as a proto form in either POc or PNCV, the rest of the form, and particularly its final vowel *a*, may be explained by **ika* and **ikan*, as is

Lelepa *neika* ‘fish’. However, the occurrence of *naraikina* poses a number of questions. Has the underlying form /*raika*/ not been learned by this speaker? Alternatively, could *naraikina* simply be a speech error? These questions are discussed below.

That *naraikina* is a speech error is unlikely, because this speaker uttered it several times in the one section of discourse. Rather, it looks like he has not learned the underlying form *raika*, with an *a* at the end—and there may be two reasons for that: either he has *raiki* as the underlying form of this verb, and simply adds the enclitics as would be done with any other vowel-final form, or he has stored the consonant-final *raik* and applies the epenthesis rule in (6): given that *raik* has *i* as its last syllable vowel, this rule predicts the occurrence of an epenthetic *i* between the root and the enclitic =*na*, giving the form *naraikina*.

Could *naraikina* be a witness of a change in progress in the language, and not just a form belonging to the idiolect of a speaker? To test these two hypotheses, both young and old speakers were given a set of forms and asked for the corresponding encliticized forms of these hosts. The reason for having young and old speakers doing the test is because *naraikina* was uttered by a reasonably young speaker and rejected by older speakers. All forms given to speakers are attested as encliticized words in the current Lelepa corpus. The results of this test are shown in Table 10. The first column shows the host forms given to the speakers, while the second one gives speaker’s answers. These answers are divided in two columns according to the two possibilities speakers have when encliticizing a particular host: either the encliticized form is regularly derived and surfaces with the underlying final vowel of the host, or the speaker applies the epenthesis rule in (6). In addition, for both possibilities speakers are sorted by age category (Y=young speakers; O= old speakers) and numbers of produced forms are given for each token per age category.

Ten speakers (five young speakers and five old speakers) did the test. Young speakers were between 15 and 20 years old while all older speakers were above 50 years old. Speakers between 25 and 50 were not tested, in the hope that this would give clearer patterns between the two age groups. The first observation which can be made on the data in table 10 is that older speakers only produced expected forms; that is, forms in which the underlying final vowel of the host

surfaces. This shows that these speakers have the underlying forms stored in their mental lexicon, and only apply the epenthesis rule to loanwords. Regarding younger speakers’ results, there are several interesting observations to be made. First, the epenthesis rule was applied to seven forms out of ten: this not only shows that *naraikina* isn’t an isolated case or an exception, but it also shows that on a small sample, more than half of the tokens (seven out of ten) are derived with the rule in (6). However, these seven forms have not been produced by all five young speakers, and in each case it is a minority (one to two speakers out of five) producing those forms. Nevertheless, the fact that they have been produced shows that for those speakers, the underlying forms of the hosts are ending with consonants and are derived phonologically.

Underlying forms of the hosts	Speaker’s answers					
	Expected encliticized form	Y	O	Forms applying the epenthesis rule	Y	O
<i>surki</i> ‘hide’	<i>nasurkina</i> ‘secret’	4	5	<i>nasurkuna</i>	1	0
<i>suki</i> ‘tight’	<i>sukina</i> ‘union’	4	5	<i>sukuna</i>	1	0
<i>sura</i> ‘defecate’	<i>nasurana</i> ‘need to defecate’	3	5	<i>nasuruna</i>	2	0
<i>nagruni</i> ‘woman’	<i>nagrunis</i> ‘woman:OBL’	3	5	<i>nagrunus</i>	2	0
<i>raika</i> ‘spear fish’	<i>naraikana</i> ‘spearfishing’	3	5	<i>naraikina</i>	2	0
<i>maeto</i> ‘angry’	<i>namaetona</i> ‘anger’	5	5	<i>namaetina</i>	0	0
<i>sale</i> ‘dance’	<i>nsalena</i> ‘dance ceremony’	5	5	<i>nsalina</i>	0	0
<i>mate</i> ‘dead’	<i>nmatena</i> ‘funeral’	5	5	<i>nmatina</i>	0	0
<i>fano</i> ‘go’	<i>nafanona</i> ‘departure’	4	5	<i>nafanina</i>	1	0
<i>lotu</i> ‘pray’	<i>nalotuna</i> ‘Christianity’	3	5	<i>nalotina</i>	2	0

Table 10. Encliticization test.

This section has shown that younger speakers have reanalysed the process of encliticization which treats native forms and borrowings differently. For older speakers, encliticization of native forms is lexically determined and that of Bislama loanwords is phonologically determined. Younger speakers, however, are treating both encliticization of native forms and of Bislama loanwords as phonologically determined. This reanalysis can be seen as a simplification as well as a regularisation of the system. This section has also shown that this change is in progress and not well established, as even with a very small test such as the one summarised in table 10, the reanalysis is patchy and unpredictable. A much larger

test would clearly be needed to grasp the importance of this reanalysis, in terms of number of forms as well as number of speakers, with all age groups represented. In particular, this would help in weighing the possibility of this phenomenon being change in progress or stable variation (Labov 1994).

7. Conclusion

This paper has shown that Lelepa lexemes which seem to be consonant-final are in reality vowel-final. This can be proven when those lexemes host the enclitics =*na* ‘NMLZ’ and =*s* ‘OBL’. When these forms are encliticized, a lexically conditioned vowel (section 3) which can be explained in diachrony (section 4) surfaces before the enclitics. This paper has also shown that encliticization of loanwords from Bislama is phonologically conditioned (section 5). Younger speakers are also reanalysing encliticization of native forms as being phonologically conditioned, by using the morphophonological rule of vowel epenthesis used with Bislama loanwords (section 6).

Thus, a rule originally dedicated to borrowings is now extended to native forms: those native forms are “regularised” by possibly becoming consonant-final in the mental lexicon of young speakers. A consequence of this is that the system is simplified, with encliticization becoming a phonologically determined process for all hosts, native and borrowed ones alike.

I realise that the test conducted to propose this idea is only a small one on the scale of a whole language, because only a few forms and a few speakers were tested. Still, this test shows that a trend is happening: a change in progress brought about by younger speakers who tend to use more Bislama in their Lelepa than older speakers. This is attested by my corpus in which texts by younger speakers contain a much higher rate of borrowings from Bislama than those of older speakers. This may explain why younger speakers apply the epenthesis rule to native forms, while older speakers apparently do not.

More generally, the phenomenon described in this paper shows that when surface forms exactly reflect underlying forms in a few environments, underlying forms can be lost and replaced, and language change can occur.

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