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The phonological history of consonants in Neverver, a Western Malekula language

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Abstract

Neverver is an actively spoken language of the island of Malekula in Vanuatu, belonging to the Western Malekula linkage. In this paper, consonants in Neverver are analysed with respect to established reconstructions from Proto Oceanic and the putative Proto North-Central Vanuatu. While Neverver is a conservative language, retaining POc consonants in many reflexes, the language also provides evidence of a number of change processes witnessed in the languages of North-Central Vanuatu more generally, including lenition, crossover between plain and prenasalised consonants, conditioned and sporadic consonant loss, and the merger of a number of phonetically similar consonants. Many of the same diachronic processes are found in Neverver's close relative, Naman, as well as in other Western Malekula languages. While the languages of Malekula are clearly related, none of the phonological innovations have proven to be subgroup-defining. The development of a contrastive prenasalised bilabial trill, unique to Neverver among the Central-Western Malekula languages, remains the best documented example of a phonological innovation likely spread through language contact. Neverver contributes further evidence to an hypothesis that the languages of Malekula were originally dialectally related, and that over time, waves of innovation have spread, leading to the synchronic situation with more than forty distinct languages.

1. Introduction

The island of Malekula in Vanuatu is home to over forty indigenous languages (François et al. 2015: 3), all of which belong to the Central Vanuatu linkage (Clark 2009; Lynch 2016). Neverver, also known as Bushman's Bay and Lingarak (Lingarakh), is one of these languages, spoken in the northern central region of Malekula, in the villages of Limap and Lingarakh, by a population of approximately 550 speakers. Neverver was the subject of a doctoral dissertation and subsequent grammar (Barbour 2012a). According to John Lynch (2016: 80), Neve'ei, Larevet, and the moribund Naman language are Neverver's closest relatives.[1, 2]

In this paper, the phonological history of Neverver consonants is examined, and commentary is offered in relation to the history of Neverver's Central-Western Malekula relatives, and other languages of the Western Malekula Linkage. Studies of the history of Neverver vowels and aspects of its morphology remain in preparation.

[1] I am very grateful for the detailed comments, suggestions, and corrections from two anonymous reviewers. Their input has improved the quality of this paper in substantive ways. All errors that remain are my own.

[2] An introductory sketch of Neve'ei, under the toponym Vinmavis, was presented by Crowley (2002: 638–649), and a longer grammar sketch of the language was published by Musgrave (2007). Crowley conducted some initial data collection with Larevet speakers. This material was incorporated into Lynch's (2016) Malekula subgrouping. The Larevet language is the subject of an ongoing documentation project (Barbour 2013–2024). A brief overview of its phonology can be found in Barbour (2015). A grammar sketch of the now moribund Naman language was written by Crowley (2006). Subsequently, Lynch (2019a) completed a detailed study of the phonological history of Naman, providing the inspiration for this work.

1.1. Historical comparative research on Neverver

Neverver data was first recorded under the name Nesan, by A. Bernard Deacon, a British anthropologist who travelled to Malekula Island in 1926–1927. A list of kinship terms that are recognisably Neverver appear in Deacon's (1934: 125) *Malekula: A vanishing people in the New Hebrides.* Half a century on, Darrell Tryon (1972) recorded Neverver data under the toponym Bushman's Bay, which designates a coastal region over which the Neverver speakers have customary title. He later records the language under the indigenous toponym Lingarak, publishing Neverver data as Language 89, in his comparative analysis of the New Hebrides languages (Tryon 1976). In Tryon's study, approximately 180 Neverver lexemes are listed. Tryon (1976: 80, 87) classifies Neverver as a Central Malekula language of the Malekula Interior, along with Neve'ei (as Vinmavis), Naman (as Litzlitz), and Larevet (Larevat). Also included in this grouping are the languages of Tape (as Maragus) and V'ënen Taut (as Big Nambas).

Small quantities of Neverver data occur in publications by John Lynch dating from 2009, drawing on documentation work, including unpublished lexical field data, from Barbour's documentation project on Neverver (Barbour 2012b). Lynch (2009) discusses reflexes of *q and *R in a selection of Malekula languages, including Neverver. Lynch (2016) provides an updated classification of the Malekula languages. Refining Tryon's (1976) subgrouping, Lynch identifies Neverver as being a member of a Central-Western Linkage, which belongs in turn to the Western Malekula Linkage (Lynch 2016: 428). Like Tryon, Lynch finds that Neverver is closely related to Neve'ei, Naman, and Larevet, and he positions V'ënen Taut and Tape as being more distantly related to Neverver, falling into the small North-Western Malekula sub-group with Tirax.

Neverver data cited in Lynch (2016) demonstrates a small number of phonological changes, including the change from prenasalised bilabial plosive to prenasalised bilabial trill preceding a back vowel. A total of nine reflexes from Neverver are reported in Lynch (2016), and a further three Neverver lexemes are included in Volume 5 of *The Lexicon of Proto Oceanic* (Ross, Pawley & Osmond 2016), attributed to personal communications from John Lynch. Neverver's numerals one to five, along with one additional lexeme and a clausal structure, are included in Volume 6 of *The lexicon of Proto Oceanic* (Ross, Pawley & Osmond 2023), citing Barbour (2012a).

Ross Clark (2009) did not have access to Neverver data when preparing **Leo Tuai: A Comparative Lexical Study of North and Central Vanuatu Languages,* although he does sample four Malekula languages: V'ënen Taut and Ninde from the west of the island and Uripiv and Port Sandwich (Lamap) from the east. In his work, Clark (2009) argues somewhat tentatively for an interstage language – Proto North-Central Vanuatu (PNCV) – from which the languages of Malekula descend.

While Neverver has been known to the (anthropological-)linguistic world for nearly a century, a full analysis of Neverver's phonological history has yet to be undertaken. This paper represents a partial remedy to the research gap, with its focus on consonants. The findings presented in this paper draw on the analysis of a database developed by the author. The database comprises over 500 reflexes in Neverver matched to POC and/or PNCV etyma.[3] POC reconstructions are reported from volumes 1 to 6 of *The Lexicon of Proto Oceanic* (Ross, Pawley & Osmond 1998, 2003, 2008, 2011, 2016, 2023) unless otherwise indicated; PNCV reconstructions are largely from Clark (2009) unless otherwise noted.

[3] Neverver reflexes were identified by the author from the Neverver corpus (Barbour 2004–2024). A handful of the matches were first identified by students of a research class who were assigned Neverver data for historical analysis in 2023. Each student looked for etyma of Neverver lexemes in a specific volume of Ross et al. (1998, 2003, 2008, 2011, 2016). Where the students encountered possible etyma for Neverver before the author had completed her examination of the volumes, the matching of etyma and reflexes are attributed to individual students (see Appendix).

1.2. Neverver's synchronic consonant inventory

Neverver has 19 contrastive consonants, six of which are complex segments with prenasalisation. The inventory includes a typologically rare contrastive prenasalised bilabial trill /ᵐʙ/. This complex segment is found in several of the languages of Malekula (Lynch 2016; Rangelov et al. 2023), but it is not contrastive in Neverver's closest relatives. There is also a plain voiceless bilabial trill [ʙ̥], which occurs as an allophone of /p/, in the environment of a following high back vowel /u/. As a synchronic segment, /p/ is not attested in Neverver's closest relatives Naman or Neve'ei, and it is only found in borrowed lexemes in Larevet.

Neverver's alveopalatal affricate, transcribed <*j*> in Barbour's (2012a) orthography, is prenasalised /ⁿdʒ/. Phonetically, it varies from prenasalised affricate [ⁿdʒ] to prenasalised fricative [ⁿs]; for some younger speakers it is articulated without prenasalisation in word-final position as [s] (Barbour 2012a: 36–37). The bilabial and velar fricatives are voiced, although both are prone to devoicing in word-final position, and before voiceless segments (Barbour 2012a: 34).

Neverver's full consonant inventory is presented in Table 1:

	Bilabial	Alveolar	Palatal	Velar	Labio-velar
Nasal	m	n		ŋ	
Plosive – Plain	p	t		k	
Plosive – Prenasalised	ᵐb	ⁿd		ᵑg	
Fricative	β	s		ɣ	
Affricate – Prenasalised			ⁿdʒ		
Trill – Plain		r			
Trill – Prenasalised	ᵐʙ	ⁿr			
Approximant		l	j		w

Table 1. Neverver's consonant inventory (after Barbour 2012a: 24)[4]

Neverver has five well established vowels, /i, e, a, o, u/ (Barbour 2012a: 44–45). Two contrastive front rounded vowels /y, ø/ are attested in the speech of older community members, but these only occur in a small number of lexemes. Almost all speakers produce [u] in place of /y/, and [e] in place of /ø/ (Barbour 2012a: 45–46). The representation of Neverver in this paper uses the IPA symbols presented in Table 1.

1.3. From Proto Oceanic to Neverver

Neverver is one of more than one hundred distinct languages of Vanuatu. Lynch and Crowley (2001: 4) identify 106 Vanuatu languages, while François et al. (2015: 2-6), guided by linguistic evidence as well as by local perceptions, identify as many as 138 languages. Excepting Polynesian Outliers, the languages of Vanuatu are understood to descend from Proto Oceanic via the Southern Oceanic Linkage (Ross et al. 2023: 11). The precise nature of the relationship between the Vanuatu languages remains somewhat opaque, although a settlement pattern from the northern islands to the southern, and from southern Vanuatu to New Caledonia and the Loyalty Islands is assumed (Lynch et al. 2001: 112-114). Clark (1985, 2009) makes a tentative case for the languages of the north and central regions of Vanuatu sharing a single ancestor, Proto North-Central Vanuatu (PNCV). He observes that "considerable numbers of innovations were able to spread over wide areas of NCV at a time before many critical sound changes had taken place, and when a wide-ranging communication network must have been still

[4] Phonemic realisations of Neverver's contrastive segments are presented in this work for maximum transparency of form. Neverver's orthography uses several non-IPA symbols: <*ng*> for /ŋ/, <*b, d, g*> for /ᵐb, ⁿd, ᵑg/, <*v*> for /β/, <*kh*> for /ɣ/, <*j*> for /ⁿdʒ/, <*bb*> for /ᵐʙ/, <*dr*> for /ⁿr/, and <*y*> for /j/ (Barbour 2012: 70–71).

in place" (Clark 2009: 66). Lynch (2018, 2019a, 2019b) argues that the communication network also encompassed the languages of the southern islands of Vanuatu, with some evidence of shared innovations extending throughout the archipelago and carried into the languages of New Caledonia and the Loyalty Islands.

Echoing speculations about the presence of "a wide-ranging communication network" during the settlement era, François et al. (2015: 12) suggest that Vanuatu was populated by speakers of "what was once a single language spoken across a vast social network". This social network was unlikely to have been homogeneous (cf. François 2014), and the early diversity, as well as ongoing diversification, and the diffusion of changes within the network, likely fed into the development of the "entangled web of linguistic linkages" (François et al. 2015: 12) that is present throughout the archipelago today. Understanding that diversity was present in the early stages of settlement provides a context for interpreting the data presented in this paper. Some Neverver lexemes have not participated in innovations identified by Clark (2009) as apparently being universal in northern and central Vanuatu. In other lexemes, we find unexpected changes, likely reflecting local innovations in Neverver, which may or may not have extended into Neverver's closest relatives. At least one innovation is best explained as contact-induced change from further afield.

It is important to keep in mind that Clark's (2009) reconstructions and hypotheses about Proto North Central Vanuatu were based on data from a subset of just 15 Vanuatu languages. As more documentation is carried out and more fine-grained comparative research is undertaken, it is likely that many of Clark's putative PNCV reconstructions will need to be revisited. Revisions may see PNCV reconstructions extended to include reflexes from the languages of a larger Southern Oceanic grouping (cf. Lynch 2019a), or they may be reduced to post-settlement innovations, affecting a smaller selection of the northern and/or central languages. The conceptualisation of NCV as a unified subgroup seems certain to give way to a linkage-based interpretation of the relationship between languages.

The reconstructed consonant inventory for POC and the regularly occurring relationships with Neverver consonants are presented in Table 2.

Labial Consonants		Coronal Consonants		Dorsal Consonants	
POC	Neverver	POC	Neverver	POC	Neverver
*p^{w}, *p	> *β* (*^{m}b*, *^{m}ʙ*, *p*)	*t	> *t*, *s*, *^{n}d*	*k^{w}	> *^{ŋ}g*, *ɣ*
*b^{w} [^{m}b^{w}], *b [^{m}b]	> *^{m}b*, *^{m}ʙ*	*d [^{n}d]	> *^{n}d*, *^{n}ʤ*	*k	> *ɣ* (*k*, *^{ŋ}g*, *Ø*)
*m^{w}, *m	> *m*	*n, *ñ [ɲ]	> *n*, *Ø*	*g [^{ŋ}g]	> *^{ŋ}g* (*ɣ*, *ŋ*)
*w	> *Ø*† (*w*, *β*)	*s, *c	> *s*	*ŋ	> *ŋ*
		*j [^{n}ʣ]~[^{n}ʤ]‡	> *^{n}ʤ* (*s*)	*R	> *r* (*Ø*)
		*r	> *r* (*^{n}r*)	*q	> *Ø* (*ɣ*, *i*, *ŋ*)
		*dr [^{n}r]	> *^{n}r* (*^{n}d*, *r*)		
		*l	> *l*		
		*y [j]	> *Ø* (*j*)		

Table 2. Correspondences between POC consonants (after Ross 1988) and Neverver

† Zeros in this table represent consonant loss from non-final positions; a brief discussion of the more general process of final consonant loss is presented in §1.4.

‡ Ross et al. (2016: 33) record orthographic *j* as a "voiced alveolar or palatal affricate" with the values [ʣ] and [ʤ] in the Oceanic daughter languages. As a nasal grade consonant in Proto Oceanic (cf. Ross et al. 2023: 27), *j likely had the values [^{n}ʣ]~[^{n}ʤ].

In this work, Clark's (2009) PNCV reconstructions are included wherever possible, as they have been of considerable value in understanding the relationship between Proto Oceanic and Neverver. Where Neverver reflexes can be identified for both PNCV and POC etyma, a distinction can be made between sound changes that are evident in Clark's (2009) reconstructions, apparently shared by all of the languages of northern and central Vanuatu (at least in the specified lexeme), and those that must be later

innovations, occurring after settlement of central Vanuatu. Where there is a direct pathway from a POC reconstruction through PNCV to the Neverver reflex, data are reported as in (1a). In some lexemes, the clearest etymon for Neverver is the POC reconstruction, with the PNCV etymon displaying a sound change that did not occur in Neverver. In such cases, data are reported as in (1b):

(1) a. POC > PNCV > *Neverver*
b. POC [PNCV] > *Neverver*

A feature of Clark's (2009) PNCV reconstructions is that all comprise open syllables. To preserve this hypothesised phonotactic constraint, either a paragogic vowel is added to consonant-final POc etyma (represented as ^{N}*-Ci in Clark's work), or a final POC consonant is dropped in PNCV. Neverver's synchronic phonotactic constraints permit closed syllables; thus, there are reflexes that more closely reflect POc etyma than PNCV, with some displaying reflexes of final POc consonants. A detailed studies of vowels and their interactions with consonants, modelled after François's (2005) study of the vowels of northern Vanuatu languages, is needed to establish whether there is evidence of paragogic vowels in Pre-Neverver.

Several Neverver forms cannot be reconstructed back to POC but only to subsequent interstages. These reconstructions are coded to reflect the interstage for which evidence was available at the time of reconstruction. The list in (2) presents conventions employed in this work, following Lynch (2019a, 2019b, 2020) to signal the various interstages between POC and Neverver.

(2)

*reconstruction	Proto Oceanic
^{E}*reconstruction	Proto Eastern Oceanic
^{R}*reconstruction	Proto Remote Oceanic
^{S}*reconstruction	Proto Southern Oceanic
^{N}*reconstruction	Proto North-Central Vanuatu
^{Mal}*reconstruction	Proto Malekula
^{Nvr}*reconstruction	Pre-Neverver

1.4. Processes observable in the data

In addition to both regular and sporadic *retention* of consonants, numerous diachronic processes can be observed when comparing Neverver consonants with reconstructions of POC and PNCV. These include regular, conditioned, and sporadic *loss*. Both *final vowel loss* and *final consonant loss* are evident in the data. Lynch (2014: 3) considers final vowel loss to be a widespread and almost exceptionless process in the languages of Malekula, identifying only a small number of sporadic final vowel retentions. Excluding nouns that historically took a possessor suffix[5], the final vowels of POC roots are lost in 92% of Neverver reflexes.

Final consonant loss is also reported as a characteristic of North-Central Vanuatu languages, with Clark (2009: 17) describing it as a regular process. Lynch (2018: 22), however, reports evidence of some final consonant retention among the Malekula languages. Consistent with this observation, no final consonant is fully lost in Neverver, and indeed the language displays variability in the application of the process. Table 3 shows the tokens and percentages of final consonant loss.

[5] Unusually for a Malekula language and for Vanuatu languages more generally, Neverver does not use possessor suffixes in any part of its productive possessive system; instead, independent pronouns are used to express possession (Barbour 2012: Chapter 5). Synchronically, inalienable possessions invariably end with the phoneme /-n/, which is likely derived from the Proto Oceanic third person singular possessor suffix reconstructed as *-ña (Lynch et al. 2002: 76). In Neverver, the final /-n/ is fused to the noun root.

	*m#	*p#	*t#	*s#	*n#	*l#	*r#	*k#	*ŋ#	R#	*q#	Total
Retained	1	3	6	6	6	1	4	2	2	2	3	n=36
	16.6	19	25	37.5	25	33.3	66.7	15	20	12	14	23%
Lost	5	13	18	10	18	2	2	11	8	15	18	n=120
	83.3	81	75	62.5	75	66.7	33.3	85	80	88	86	77%

Table 3. Final consonant retention and loss in Neverver

The overall rate of final consonant loss is 77% (tokens: 120/156). At 62.5%, the percentage of final *s loss is somewhat lower than average. This lower percentage is similar to the percentage of final *s loss in Tepërav (Espiegle Bay), reported by Barbour et al. (2022: 71). In Tape, V'ënen Taut, and Nese, only 50% of tokens of final *s undergo loss (Lynch 2005: 93), suggesting that POC *s is more likely to be retained than most other final consonants. Reflexes of POC *r also provide an exception to the general trend of loss, with final *r being retained more often than it is lost in Neverver, although there are admittedly very few reflexes of final *r.

In considering final consonant loss, Lynch (2009: 513) concludes that "POC final consonants were *not* regularly lost in PNCV, but [...] they were regularly lost in some NCV languages and/or in some etyma, irregularly lost in others, and retained with a following vowel in yet others." Neverver illustrates irregular loss, and retention, but there is no evidence of a following vowel in synchronic data (although a detailed study of vowels may yet provide some traces of a paragogic vowel, as per François (2005)).

In nonfinal positions, there is evidence of the sporadic loss of almost all POC consonants, and for POC *w, *y and *q, loss is the regular, although not exceptionless, outcome.

The regular *merger* of POC consonants considerably reduces Neverver's consonant inventory. The loss of labialisation reduces contrasts among bilabial obstruents from six to three; the alveolar fricative and palatal plosive merge in favour of the fricative; the palatal nasal mergers with the alveolar nasal, and when not otherwise lost, the dorsal consonant *R mergers with coronal *r.

The weakening or *lenition* from plosive to fricative is evident in Neverver reflexes. Neverver preserves both the lenition of *p > ^{N}*v as /β/ reported by Clark (2009: 16) and displays the post-settlement lenition of *k > ^{N}*k > *ɣ*. The latter process of lenition was noted by Clark (2009: 10) to occur in most of the languages he examined.

Conditioned lenition can be seen in the process of *palatalisation,* which affects POC *t. This segment regularly palatalises to /s/ before a front vowel (always before *i and in one of four roots reflecting *te). The voiced equivalent of *d palatalizing to /^{n}ʤ/ is attested before *i in two of three roots reflecting *di. There is limited evidence of strengthening (*fortition*), in the sporadic shifts from *w > β, and from nasal consonant to prenasalised plosive.

Nasal crossover from voiceless oral plosive to voiced prenasalised plosive occurs in the data, affecting *p$^{(w)}$ > ^{m}*b*, *t > ^{n}*d*, and *k > ^{ŋ}*g* as pre- and post-settlement developments. To a lesser extent, there is crossover from the plain alveolar trill *r to the prenasalised trill /^{n}r/. Lynch (2019a: 23) observes a particular pattern of verb-initial nasal crossover in Naman, which he describes "as a relic of a productive process marking the realis-irrealis distinction". The process is described by Lynch (1975) and presented in some detail by Crowley (1991), although it remains unclear to what extent Malekula languages are affected by this process. With reference to Naman data, Lynch (2019a: 23) notes that crossover also occurs in noninitial positions. In such positions, the process could not have been triggered by a preceding mood marker containing a nasal consonant. A second morphological context for nasal crossover in initial consonants occurs where the common noun article *na (Crowley 1985) is accreted to a nominal root. In Neverver, the article is accreted to over 87% of Neverver's common nouns (Barbour 2012a: 77). Nasal crossover is attested in this context, although it is by no means regular. The reverse process of *oral crossover,* from prenasalised to plain consonant, is sporadically seen in the shifts of *j [^{n}ʣ]~[^{n}ʤ] > *s* and *dr [^{n}r] > *r*.

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Consonant gemination can also be observed. This change is related to Neverver's morphological process of *reduplication* (Barbour 2012a: Chapter 8), whereby CV(C)~ forms are affixed. In some lexemes, it is likely that gemination is the result of historical *CV~ reduplication, followed by vowel loss. A full analysis of reduplication and gemination from an historical perspective is in progress.

In the following sections of the paper, a comparison of Neverver reflexes with their POC (and PNCV) etyma is presented, organised by labial, coronal, and dorsal places of articulation.

2. Labial Consonants

Three regular changes occur between Proto Oceanic and Neverver among the labial consonants. Firstly, labialised consonants merge with their plain oral, prenasalised, and nasal counterparts. The loss of labialisation is systematic, and while most of the resulting consonants are directly retained, there are some exceptions. Secondly, the voiceless bilabial plosives generally undergo lenition during the settlement era, although one-third of tokens are reflected as other labial phonemes, including some that are retained as *p. Thirdly, the prenasalised bilabial trill /^{m}ʙ/ emerges from the sequence *bu (and more rarely *bo). This trill was likely an allophone of ^{Nvr}*^{m}b in the recent history of Pre-Neverver, but the loss of some back vowels (Lynch 2016: 407) and the incomplete application of the trilling rule has led to the contrastive phonemic status of the bilabial trill in Neverver today.

Table 4 shows the dominant process affecting labial consonants in Neverver. Where retention accounts for the largest number of reflexes, the second most commonly occurring reflex is also listed. In some cases, more than one secondary process occurs. Percentages are not given for ancestral phonemes where there are fewer than ten tokens in total in the corpus of Neverver reflexes. Where reflexes do not conform to the regular outcome for a given ancestral sound, some can be explained, but many more cannot be accounted for in terms of phonological environments or interacting phonological processes.

POC	Neverver	Retentions & Change Processes	Affected tokens (all tokens)	Percentage of tokens affected
*p	> *β*	lenition	n=66(100)	66%
*p^{w}	> *β*	merger with *p: loss of labialisation, lenition	n=5(8)	
*b [^{m}b]	> *^{m}b*	retention	n=20(40)	50%
	> *^{m}ʙ*	conditioned trilling	n=15	37.5%
*b^{w} [^{m}b^{w}]	> *^{m}b*	merger with *b: loss of labialisation	n=15(16)	93.75%
*m	> *m*	retention	n=57(60)	95%
	> *Ø*	loss	n=3	5%
*m^{w}	> *m*	merger with *m: loss of labialisation	n=10(11)	91%
*w	> *Ø*	loss	n=8(13)	61.5%

Table 4. Outcomes for POC bilabial consonant tokens

An important observation is that none of the retentions and changes pertaining to bilabial consonants are exceptionless. POC *m comes closest, being retained in 95% of tokens. The lenition of POC *p to /β/ is far from complete, affecting only 66% of *p reflexes. Neverver's conservatism in this regard provides evidence that the lenition of *p is not universal in central Vanuatu.

2.1. POc *p and *p^{w}

The regular reflex of both POC *p and *p^{w} is /β/. POC *p undergoes lenition to ^{N}*v. This change is regularly reflected in Neverver, although not all instances of *p > β in Neverver.

(3)	*papine- ‘man’s sister, female parallel cousin’ > ^{N}*vavine ‘man’s sister’[6]	> *βiβin* ‘sister’
	*pano ‘go (away)’, *pa, ‘go away; move in a transverse direction’	> *βu*
	*piri[-] ‘plait a cord, twist, wrap around’ > ^{N}*viri ‘plait, braid, twist’	> *βir*
	*poli ‘barter, buy, sell’ (Grace 1969: 67) > ^{N}*voli (^{N}*vuli)	> *βul*
	*pulan ‘moon, month’ > ^{N}*vula	> *na-βul*
	*lapi ‘take, get, give’ > ^{N}*lavi ‘carry, take’	> *laβ*
	*mapo ‘heal, be healed, cured, especially of wounds and sores’ > ^{N}*mavo	> *maβ*

A number of *p tokens undergo nasal crossover to ^{N}*b [^{m}b]. Where crossover occurs, it prevents the application of lenition, and thus must precede it. In some lexemes, crossover can be interpreted as a form of voicing assimilation, motivated by accretion of the common noun article *na; in other lexemes, crossover is an unconditioned and sporadic change.

(4)	*lapuat ‘big, important’ > ^{N}*laba ‘big, many’	> *la^{m}b, la^{m}bla^{m}b*
	*pai, *i pai ‘where at?’ > ^{N}*bea (^{N}*vea) ‘where?’	> *a-^{m}bi, te-^{m}bi*
	*paraq ‘spongy mass inside sprouting coconut’; possibly also ‘brain’ [^{N}*vara]	> *ne-^{m}baru-n* 1. ‘brain’ 2. ‘plant shoots’
	*paRu ‘*Hibiscus tiliaceus*’ [^{N}*vaRu]	> ni-^{m}bal-^{ŋ}ga

Through crossover, the sequence ^{N}*bu [^{m}bu] is generated in some lexemes. In Neverver, the outcome is a bilabial trill, followed by the high back vowel /u/, with *po and *pu shifting to *bu prior to the application of the trilling rule.

(5)	*p^{w}iRa ‘elephantiasis’ > ^{E}*puRa (Geraghty 1990: 66) > ^{N}*bura	> *netal-^{m}ʙur; ^{m}ʙur* ‘be swollen’
	*ponuq ‘full’ (Ross 1988: 131) > [^{N}*vunu] ^{N}*bunu ‘finished, all, full’	> *^{m}ʙun*
	*puko ‘morning’	> *mita-^{m}ʙuɣ*

While Clark (2009) records the regular reflex of POC *p as ^{N}*v, some instances of *p are retained in Neverver, indicating that the shift of *p > ^{N}*v did not occur systematically in the language varieties spoken by the settlers of Vanuatu. Neverver seems particularly conservative in this regard. The final item in (6), *poros, *poRos-i-, produces a doublet, being reflected both as *pus* [ʉ̥us] and as *βusβus-iɣ*. The first form *pus* displays the retention of *p and is used to refer to squeezing liquids from a leaf to prepare traditional medicines. The second form *βusβus-iɣ* displays the regular lenition of *p > *β* in a verb that is specifically used to refer to squeezing grated coconut flesh to extract coconut milk. Two reflexes in (6) present forms with a geminate consonant in Neverver (*ppis* [p:is] and *ppanɣo* [p:anɣo]).

(6)	*paRa(ŋ) ‘molar tooth’	> *ni-liβ-parpar*
	*pai ‘weave’ [^{N}*vai ‘weave, plait’]	> *ni-pe-ian* ‘weaving’
	*panako ‘steal’ [^{N}*vanako]	> *panɣo, ppanɣo* [p:anɣo]
	*pisi[-] ‘bind up, tie up, wind round, wrap’ [^{N}*vi=vi-si]	> *ppis* [p:is]
	*posi ‘squeeze, wring (coconuts to extract cream)’ (also *poros, *poRos-i- ‘squeeze out, wring out (liquid)’)	> *pus* [ʉ̥us] ‘squeeze sap from leaf to make traditional medicine’

[6] Clark’s (2009) PNCV representations are standardised to follow established Oceanic conventions for ease of comparison: *Cw is written as ^{N}*C^{w}, *q as ^{N}*g, *g as ^{N}*ŋ, and *z as ^{N}*j. The glottal stop ^{N}*ʔ is retained from Clark.

Almost all instances of final *p are lost, as illustrated in (7a). Reconstructions for PNCV indicate that this loss had taken place by the time of Vanuatu settlement. Reflexes in (7b) illustrate lexemes where final *p undergoes lenition to /β/, rather than loss.

(7) a. *toRap 'belch' > *ⁿdor-iɣ*
*sorop 'hang' > *sar(-iɣ)*
*sosop 'put lips to, kiss, suck, absorb (moisture)' > *susu* 'kiss'
*maŋa(p) (V) 'open wide, gape', (N) 'open mouth; gap, space' > ᴺ*maŋa > *maŋmaŋ*
*maqurip 'be alive, live, flourish; be in good health, recover health' > ᴺ*maʔuri > *maur*

b. *irip, *irip-i- (V) 'fan' > ᴺ*iri-vi (N, V) 'fan' > *riβriβ* (V), *na-ɣa-riβriβ* (N)
*oŋap 'pant, be out of breath' > *ŋaβ*

Reflexes have been found for a set of 18 PNCV reconstructions displaying ᴺ*v, for which there are no available POC matches. Two are reconstructed as far back as Proto Southern Oceanic, also with ˢ*v. All but one of the Neverver reflexes show retention of ᴺ*v as /β/. The exception, in (8b), reflects ᴺ*vu as Neverver *pu* [ʊ̥u].[7]

(8) a. ˢ*mʷalava 'twins' (Lynch 2020: 35) > ᴺ*malava > *ni-mlaβ*
ᴺ*vaŋa 'fire, burn' > *βaŋ, βaŋβaŋ*
ᴺ*viniti 'join mat at seam' > *βna*
ᴺ*voge 'white, clean; albino' > 1. *na-βoŋ* 'albino'
> 2. *βoŋβoŋ* 'pure'

b. ᴺ*vuke 'swell up' > *pu* [ʊ̥u]

POC *pʷ loses labialisation and undergoes lenition to ᴺ*v. This process is largely complete by NCV settlement and results in the merger of *pʷ and *p. Only one reflex has been identified in Neverver for PNCV *vʷ. In this lexeme, labialisation is lost in Neverver.

(9) a. *pʷasa 'sore on skin' > ᴺ*vosa > *no-βos*
*pʷa(ra)raq 'thunder' > ᴺ*vara > *ne-ᵐbal-βar* 'lightning'
*pʷaja(R) (VI) 'clap hands', *pʷajaR-i- (VT) 'slap with open hand' > ᴺ*voja 'clap, slap' > *βuⁿʤ* 'slap'
*sapʷi 'carve into shape' [ᴺ*javi 'axe, cut with axe'] > *ssaβ* [s:aɸ] 'sharpen'

b. ᴺ*savʷa 'dance' > *suβ*

Three reflexes of *pʷ show oral-to-nasal crossover from POC *pʷ to /ᵐb/, with accompanying loss of labialisation. This crossover follows the pattern seen for *p, although it is interesting to note that *pʷotu > ᴺᵛʳ*ᵐbotu > *ni-ᵐbutu-an* does not result in a trill. In the reflexes in (10b), crossover can be understood as morphophonemic voicing assimilation, triggered by accretion of the common noun article.

(10) a. *pʷasa(r,R), *pʷasa(r,R)-i- 'slap, hit' > *ᵐbar*

[7] The occurrence of the voiceless trilled allophone of /p/ in ᴺ*vuke 'swell up' > *pu* [ʊ̥u] is consistent with Rangelov et al.'s (2023: 19) claim that a voiceless bilabial trill is a reflex of ᴺ*vu in the Malekula languages. However, POC *p regularly undergoes lenition to /β/ in environments before *u without trilling (e.g. *pulan 'moon, month' > ᴺ*vula > *na-βul*). Not only that, the lenition of *p to /β/ in Neverver is incomplete. There are examples of POC *p > *p* without a reconstructed PNCV interstage (e.g. *posi 'squeeze, wring' > *pus* [ʊ̥us]). It is possible that *pu* [ʊ̥u] 'swell up' directly reflects an earlier POC *p without intermediate lenition. Instead, the trilled allophone *p > *p* [ʊ̥]/__*u could have emerged by analogy, following the well-established change of *b > ᵐʙ /__*u,o.

b. *pʷotu ‘hill, mountain’ [ᴺ*vuti] > *ni-ᵐbutu-an*
*pʷalala ‘bald’ > ᴺ*bʷala (*bʷale) ‘shell, hollow thing’ > *ne-ᵐbal-ɣas-n* ‘bald head, skull’

2.2. POc *b [ᵐb] and *bʷ [ᵐbʷ]

The regular reflex of the two prenasalised plosives, POc *b [ᵐb] and *bʷ [ᵐbʷ], is /ᵐb/. POc *b is regularly retained as ᴺ*b through to Neverver /ᵐb/, particularly before nonback vowels.

(11) ᴱ*bakuRa ‘*Calophyllum* sp., probably *C. kajewskii*’ (Geraghty 1990: 56) > ᴺ*bakura > *ne-ᵐbaɣur*
*bati ‘tusk, canine tooth’ > ᴺ*bati ‘(upper canine) tooth’ > *ni-ᵐbas-n* ‘tusk’
*beta ‘breadfruit’ [ᴺ*batavu] > *ni-ᵐbet*
*bebek ‘butterfly’ > ᴺ*bebe ‘butterfly, moth’ > *ni-ᵐbem-ⁿʤa* ‘fruit moth’
*biRi-biRi ‘*Hernandia nymphaefolia*’ > ᴺ*biri=biri > *ni-ᵐbirᵐbir*
*bilake ‘banded rail’ (Lynch 2019a: 24) > ᴺ*b(ʷ)ilake > *ni-ᵐbilaɣ-ᵐbisᵐbis*
*siba ‘cut, slice’ > ᴺ*siba ‘knife, cut with knife, peel’ > *ni-siᵐb* ‘knife’

Where *b [ᵐb] occurs before a back vowel, the outcome is regularly the prenasalised bilabial trill. The sound change can be formulated as *b [ᵐb] > ᵐʙ / ___*u(o). The emergence of the prenasalised bilabial trill in the Malekula languages was first described by Lynch (2016) and explored in more depth by Rangelov et al. (2023).

(12) *bune ‘wild pigeon’ > ᴺ*bune ‘fruit dove (*Ptilinopus*)’ > *ni-ve-ᵐʙun* ‘red bellied dove’
*bubu ‘grandparent, grandchild’ [ᴺ*bu=bu-a] > ᵐʙuᵐʙu ‘grandfather’
*abu[a] ‘grandparent, grandchild’ > ᴺ*abu[a] > *ni-ᵐʙua* ‘grandmother’
ᴺ*bula ‘thigh (bone)’ > *ne-ᵐʙul-en*
*buku ‘tie (a knot); fasten’ > ᴺ*buku ‘lump, knot, joint’ > *ni-ᵐʙuɣ-in* ‘joint, of tree, plant’
*butu(k-i-) ‘knock, pound, beat’ (Clark 2009: 92) > ᴺ*butu ‘stamp, step on’ > ᵐʙut ‘stamp, step’
*buto-‘navel, umbilical cord’ > ᴺ*buto (*bito) > *ni-ᵐʙ(u)te-n*
*bulut ‘stick something to something’ [ᴺ*bulu-ti ‘sticky stuff, stick to, join’] > *ni-ᵐʙula-ɣa* ‘*Cordia dichotoma*’
*boŋi ‘night, day of twenty-four hours’ > ᴺ*boŋi ‘day’ > *na-ᵐʙuŋ*

A small number of items meet the conditions for trilling in the ancestral form but preserve the original plosive. This appears to be due to loss of the conditioning vowel prior to trilling (13a), a vowel change prior to trilling (13b), or the weaker effect of the conditioning vowel *o (13c).

(13) a. *buliŋ ‘roll’ > ᵐbliŋ, ᵐbluŋ ‘turn under, tie in knot’; ᵐbliŋᵐbliŋ ‘braid’
ᴺ*bulata ‘dry banana leaf’ > *no-ron-ᵐblat* (also paper)
ᴺ*kubu-i (ᴺ*kubʷi) ‘throw stick at (fruit)’ > *ɣuᵐb, ɣoᵐb*

b. ᴺ*busi ‘wart’ > *ni-ᵐbisᵐbis*
ᴱ*bola ‘woven coconut leaves’ > ᴺ*bora ‘coconut leaf basket’ > *na-ɣatu-ᵐbir*

c. *bo[-], *boe (N) ‘odour, scent’; *bo (VI) ‘have an odour, be smelly’ > ᴺ*b(o,u)[-] > ᵐbo ‘be rotten’
ᴺ*katabola ‘tree sp. (*Dracontomelon*)’ > *na-ɣatᵐbol*

Changes to *b [ᵐb] have generated doublets in some cases. In the reconstruction *baga ‘banyan (*Ficus*)’, *b undergoes crossover to /p/ in *ne-paŋ-laᵐb* ‘k.o. banyan’ but is retained as *b in *ne-ᵐbaŋ* ‘banyan (generic)’. In *bula ‘burn, be alight’, *b undergoes oral crossover in one reflex with /p/ in *pupul-ɣaᵐʙ*

~ *peppel-ɣa^{m}ʙ* 'wave burning branch, shine light around'. POc *bula should be a candidate for trilling, but crossover precedes trilling. Instead, the voiceless bilabial trill allophone of /p/ occurs in one variant of this lexeme [ʙ̥uʙ̥ulɣa^{m}ʙ̥] (note also the devoicing of the word-final prenasalised bilabial trill). In another reflex of *bula, after oral crossover, the voiceless plosive undergoes lenition to /β/ in *ne-βla-n* 'charcoal, coals'.

The regular and almost exceptionless reflex of POc *b^{w} [^{m}b^{w}] is /^{m}b/. Labialisation is preserved through to PNCV in most cases, and subsequently lost, resulting in the merger of *b^{w} [^{m}b^{w}] and *b [^{m}b] to Neverver /^{m}b/.

(14) ^{E}*bwaRabwaRa 'female pig' (Clark 2009: 94) > ^{N}*bwarabwara > *ni-^{m}bar^{m}bar*
^{S}*bwau- 'knee, joint' > ^{N}*bwau 'knee' > *ne-^{m}bau-n* 'knee'
^{E}*bwerok 'fungus, mushroom' (Clark 2009: 96) > ^{N}*bwero > *ni-^{m}ber*
*bwilo 'cup, coconut shell, skull' (Lynch 2019a: 26) > *ni-^{m}bil-ɣas*
[^{N}*bwilo-si 'hollow filled with liquid']
^{N}*bwili 'close the eyes' > *^{m}bil*
^{N}*bwaŋo- 'mouth, front of house' > 1. *ni-^{m}boŋo-n* 'mouth'
> 2. *^{m}boŋ-^{n}dali* 'doorway'

2.3. POc *m and *m^{w}

The regular reflex of both POc *m and *m^{w} is /m/ in Neverver. POc *m is regularly retained as /m/.

(15) ^{E}*(ma)luR 'shady' (Geraghty 1990: 63) > ^{N}*malu 'shade, shady, shadow' > *mol* 'be shady, cloudy'
*lima 'five' (Ross 1988: 344) > ^{N}*lima > *lim*
*meme (VI), *[me]me-i- (VT) 'chew; premasticate food for baby' [^{N}*mama-ʔi] > *memem*
*mimiq, *mimiR 'urinate' (Lynch 2009: 63) [^{N}*me=me-re] > *mamaɣ*
*molis 'citrus fruit or citrus-like fruit' > ^{N}*molis (Lynch 2018: 23) > *na-mul*
^{E}*damu 'k.o. yam' > ^{N}*damu 'yam (*Dioscorea*)' > *ni-^{n}dam*

In some lexemes, initial *m is strengthened to the prenasalised plosive /^{m}b/. This occurs in the environment of the accreted common noun article *na.

(16) ^{S}*mala 'hawk' > ^{N}*bala 'hawk' > *ne-^{m}bal, ne-^{m}bal-jesjes* 'hawk'
^{N}*malaji 'leftover food' > *ne-^{m}blas-n*
^{N}*maloku 'kava (*Piper methysticum*)' > *ni-^{m}bloɣloɣ*
^{N}*makobu 'gecko sp.' > *ni-^{m}bɣo^{m}ʙ*

Reflexes of Clark's PNCV ^{N}*malakeja 'blue, green' display three different forms in (17). Two preserve the initial PNCV *m; in the third, initial *m is reflected as a prenasalised plosive. The reflexes undergo loss of either an initial or antepenultimate vowel of the PNCV root. In terms of syllabification, the loss of the initial vowel produces a morpheme initial CC sequence. Complex onsets are generally disallowed by the phonotactic constraints of Neverver. However, complex onsets comprising plosive + liquid are attested in compound structures (Barbour 2012a: 49-59. The fortition of ^{N}*m > *^{m}b* in 'green turtle' is therefore likely to be a response to phonotactic constraints.

(17) ^{N}*malakeja 'blue, green' > *mlaɣi^{n}ʤ* 'green' (*i-mlaɣi^{n}ʤ* 'it is/was green')
> *n(e,i)-le-melɣe^{n}ʤ* 'green tree lizard' (*ni-le* 'lizard')
> *ni-^{m}baɣ-^{m}blaɣi^{n}ʤ* 'green turtle' (*ni-^{m}baɣ* 'turtle')

The labialised nasal *m^{w} regularly loses labialisation following the PNCV period, resulting in the merger of *m^{w} and *m.

(18) *m^{w}aqane ‘male’ > ^{N}*m^{w}ane ‘woman’s brother’ > *man* ‘male’
[^{N}*ata m^{w}aʔane ‘man, male’]
*m^{w}alau ‘Bismarck scrub fowl, *Megapodius eremita*’ > *noto-mla*
> ^{N}*m^{w}alau
*m^{w}ata ‘snake’ > ^{N}*m^{w}ata > *ne-mat*
^{E}*m^{w}a(q)ele ‘a cycad, *Cycas rumphii*’ > ^{N}*m^{w}ele > *ni-mel*
*m$^{(w)}$inum (VI) ‘drink’ (Lynch 2018: 20) > *min*
*jamu (VI), *jam^{w}-i- (VT) ‘chew (betelnut)’ > ^{N}*jam^{w}a > *^{n}ʤem* ‘chew’
‘chew, fibrous residue’
^{N}*tam^{w}ata (*tam^{w}ate) ‘peace, calm’ > *ne-tmat*
^{N}*m^{w}ala=m^{w}ala ‘naked’ > *malmal*
^{N}*m^{w}ajoe (*m^{w}ajoi) ‘star, planet, Venus’ > *ni-βini-m^{n}ʤo* ‘star’
^{N}*m^{w}alu-e ‘come out, leave’ > *malu*

Just one lexeme was identified as reflecting the loss of labialisation at the time of settlement: ^{S}*m^{w}alava ‘twins’ (Lynch 2020: 35) > ^{N}*malava > *ni-mlav*.

2.4. POc *w

POc *w is regularly lost in Neverver. An accompanying vowel is often lost as well.

(19) *waga ‘canoe’ > ^{N}*waga > *nu-a^{ŋ}g ~ n-ua^{ŋ}g*
*waiR ‘fresh water’ > ^{N}*wai ‘(fresh) water’ > *ni-o* ‘water’
*kawit, *kawit-i- ‘hook, to catch hold of, fruit crook’ > *na-ɣatɣat* (N) ‘hook’
*tasiwa ‘snapper, *Lutjanus* spp.’ > *ne-tas* ‘fish (generic)’
^{N}*sukawa ‘year’ > *ni-siɣa*
*mawiRi ‘left-hand, be on the left; left side or direction’ > *mer*
> ^{N}*mawiri

The lexeme *waga > *nu-a^{ŋ}g* is articulated with a transitional semivowel between the accreted article and nominal root as [nu^{w}a^{ŋ}k]. It is possible to analyse the transitional semivowel as a remnant of initial **w*. Alternatively, we might parse this lexeme as *n-ua^{ŋ}g*, analysing *na-w > *nu* as involving the coalescence of *a and *w. A similar process is identified in Naman by Lynch (2019a: 24), although the outcome is /o/ (Naman *n-oa^{ŋ}g* ‘canoe’).

POc *w is retained in two lexemes and is strengthened to /β/ in two lexemes. All four tokens in (20) involve initial *w, although in the cases of fortition, neither morpheme occurs initially in speech: *βer* ‘speak’ is preceded by an obligatory subject index; and *βli* is preceded by *no-ɣo,* the generic term for ‘vine’.

(20) a. *waRisa ‘two days from today’ > ^{N}*waRisa > *was*
*wasi ‘wash’[8] > *was*

b. ^{E}*waRa ‘speak’ [^{N}*v^{w}ara ‘speak, say, call’] > *βer*
*wa(l,R)e-wa(l,R)e ‘*Flagellaria* sp.’ (Lynch 2019a: 24) [also *waR[e] (Ross 2008a: 147)] > *no-ɣo-βli* ‘k.o.vine’

[8] While Neverver *was* ‘wash’ could be treated as a borrowing from Bislama *wasem*, originating from the English verb, Ross (2016: 481) proposes that there is sufficient evidence to reconstruct POc *wasi. Bislama loans commonly retain transitive *-em* endings in Neverver (e.g. *minim* ‘mean’, *nilim* ‘nail’, *pasem* ‘pass’, *serem* ‘share’), but this ending is not attested with *was*, supporting Ross’s analysis of POc *wasi, which becomes Neverver *was* after final vowel deletion.

Looking at the reflexes of *w, three different outcomes arise in very similar environments. The initial POC sequence *wa is lost from *waiR ‘water’ (19), retained in the reflex of *waRisa ‘two days from today’ (20a), and strengthened to /β/ from *waRa ‘speak’ (20b).

3. Coronal Consonants

POC coronal consonants are generally regularly retained in Neverver, although the data supports Clark’s (2009) analysis of two settlement-era mergers, these being *ñ and *n > ^{N}*n > *n*, along with *c and *s > ^{N}*s > *s*. Palatalisation can be observed for both *t and *d [^{n}d] before a front vowel, and there are examples of crossover among the reflexes. The coronal consonants *d [^{n}d], *c, *ñ [ɲ], and *y [j] are reflected fewer than 10 times each in the comparative corpus, making it difficult to present confident generalisations.

Table 5 shows change process affecting coronal consonants. Where retention is the most common outcome in Table 5, secondary processes are also listed. Percentages are not given for ancestral phonemes where the count for all tokens is fewer than ten in the corpus. While the mergers and the loss of *y [j] are virtually exceptionless, retention rates vary considerably for the other coronal consonants, ranging from 92% for *n to just 50% for *dr [^{n}r].

POC	Reflex in Neverver	Retentions & Change Processes	Affected tokens (all tokens)	Percentage of tokens affected
*t	> *t*	retention	n=69(106)	65%
	> *s*	palatalisation	n=16	15%
	> *Ø*	loss	n=18	17%
*d [^{n}d]	> ^{n}*d*	retention	n=3(7)	
	> ^{n}*ʤ*	palatalisation	n=2	
*s	> *s*	retention	n=63(88)	71.5%
	> ^{n}*ʤ*	crossover	n=12	13.5%
	> *Ø*	loss	n=13	14.5%
*c	> *s*	merger with *s	n=7(7)	
*j [^{n}ʣ] ~ [^{n}ʤ]	> ^{n}*ʤ*	retention	n=7(11)	64%
	> *s*	crossover	n=4	36%
*ñ [ɲ]	> *n*	merger with *n	n=3(3)	
*n	> *n*	retention	n=40(60)	67%
	> *Ø*	loss	n=17	28%
*l	> *l*	retention	n=75(82)	91.5%
	> *Ø*	loss	n=5	6%
*r	> *r*	retention	n=48(52)	92%
	> ^{n}*r*	crossover	n=2	4%
	> *Ø*	loss	n=2	4%
*dr [^{n}r]	> ^{n}*r*	retention	n=5(9)	
	> *r*	crossover	n=1	
	> ^{n}*d*	fortition	n=2	
*y [j]	> *Ø*	loss	n=3(5)	

Table 5. Outcomes for POC coronal consonant tokens

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3.1. POc *t and *d [ⁿd]

The most commonly attested outcome for both POc *t and *d [ⁿd] is retention, although several other outcomes are also observed. Examples in (21) display the retention of POc *t.

(21)
*taŋa ‘basket or bag, small, used for personal effects’ > ᴺ*taŋa ‘type of basket’	> *ne-taŋ* ‘pandanus basket’
*kuRita ‘generic for octopus’ > ᴺ*kuRita	> *no-ɣoit*
*toqa ‘fowl’ > ᴺ*toʔa	> *ni-to*
*buto-‘navel, umbilical cord’ > ᴺ*buto (*bito)	> *ni-ᵐʙ(u)te-n*
*tusi ‘write, paint’ (Lynch 2016: 403) > ᴺ*tusi ‘mark, draw, write’	> *tos*
*kutu (1) ‘louse (generic)’, (2) ‘head louse’ > ᴺ*kutu	> *na-ɣut*
*karut ‘coconut growth stage 6: green, drinkable’	> *na-ɣrat* ‘fleshless coconut’

Three other outcomes for *t have roughly equal numbers of reflexes. These are conditioned palatalisation, partially conditioned nasal crossover, and loss of final *t. Palatalisation of *t > ᴺ*t > *s* occurs regularly in the environment of a following high front vowel *i (22a), and in one lexical root before *e (22b).

(22)
a.	*tian-an ‘belly, (be) pregnant’ > ᴺ*tiana ‘pregnant’	> *sian*
	ᴺ*tibʷa-ri ‘touch’	> *sᵐber*
	*bati ‘tusk, canine tooth’ > ᴺ*bati	> *ni-ᵐbas-n* ‘tusk’
	*kati[-] ‘bite’	> *ɣas* ‘sting, bite’
	*pati [*pat] ‘four’ (Ross 1988: 130, 225) > ᴺ*vati ‘four’	> *βas*
	*ma-puti(q) ‘white’	> *maβus*, *maβis*
	*puti- ‘pick (fruit), ‘pluck (feathers), pull out (weeds etc.)’ (Clark 2009: 232) > ᴺ*vuti ‘dig up, pull out, separate edible part from waste’	> *βisβis-lu* ‘scoop out with hands’
b.	*mate ‘die, be dead’ > ᴺ*mate	> *mas*
	ᴺ*ʔata-mate ‘ghost, spirit of dead person’	> *ni-tmas-n* ‘corpse’

There is one example of what appears to be a recent crossover following palatalisation, this being **tige* ‘hop on one leg, limp’ (Ross 2016: 398), which is reflected as *ⁿʤiᵑgaⁿʤiŋ* ‘hop’, most likely via a palatalised form ᴺᵛʳ*siᵑgasiŋ.

Nasal crossover applies to some tokens of *t resulting in /ⁿd/. PNCV reconstructions indicate that this is predominantly a recent change in Neverver’s history. Neverver reflexes in (23a) and (23b) suggest that crossover is an outcome of voicing assimilation. In (23a), the presence of a preceding common noun article likely triggers nasal crossover, in a pattern of morphophonemic voicing. In (23b), there is an immediately preceding voiced consonant, somewhat analogous to the accreted article *na, which again may trigger crossover. Examples in (23c) display sporadic crossover in verb-initial position occurring at some stage between POc and modern Neverver.

(23)
a.	*toŋoR ‘mangrove, *Bruguiera* spp.; mangroves (generic)’ > ᴱ*toŋoR > ᴺ*toŋo	> *ni-ⁿdoŋ*
	*talo(s) ‘taro, *Colocasia esculenta*’	> *ni-ⁿdaro*
	*tina- ‘mother’ > ᴺ*tina ‘mother’	> *ni-ⁿda*[9]
	*taliŋa- ‘ear’ (Lynch 2016: 402) > ᴺ*daliŋa-	> *ni-ⁿdliŋ-an*

[9] A reviewer notes that occurrence of the kin term *ni-ⁿda* ‘mother’ < *tina with an accreted article is unusual; Neverver is indeed unusual in this regard. The kinship term *ni-ᵐʙua* ‘grandmother’ < *abu[a] ‘grandparent, grandchild’ behaves in the same way. These two female kin terms differ from male kin terms which do not show an accreted article: *mama* ‘father’ < *mama and *ᵐʙuᵐʙu* ‘grandfather’ < *bubu ‘grandparent, grandchild’.

b.	*mata- ‘eye, face’ > [N]*mata	> *ni-m^{n}da-n* ‘eye’
	[N]*tuŋu ‘pool’	> *ne-^{m}bel-^{n}duŋ*
c.	[N]*tule ‘sway, nod, wave’	> *^{n}du(w)el* ‘sway, nod’
	*taRam, *taRami- ‘allow, agree, co-operate’ > [N]*taRam^{w}i (*dam^{w}i) ‘allow, accept, agree’	> (*^{n}dam~*)^{n}dam-iɣ*
	*tolo(m) (VI), *tolom-i- (VT) ‘swallow’ > [N]*dolo-mi, (*dono-mi) ‘swallow’	> *^{n}dlom*
	*toRap ‘belch’	> *^{n}dor-iɣ*

POC **t* is regularly lost from word-final position (24).

(24)	*laŋit ‘sky, weather’ > [N]*laŋi ‘wind (N)’	> *ni-laŋ* ‘sky, wind’
	*pinut ‘skin, bark’ [[N]*vinu-ti ‘skin, husk, rind’]	> *ni-βin*
	*kurat ‘the dye produced from *Morinda citrifolia*’ > [E]*kurat ‘*Morinda citrifolia*’	> *na-ɣur*
	*bulit ‘gum; resin’, *bulut 'stick something to something'	> *ni-^{m}ʁula-ɣa* ‘glue berry tree, *Cordia dichotoma*’
	*laŋa(t), *laŋat-i- ‘raise, pull up, lever up’ > [N]*laŋa ‘lift flat object from surface’	> *leŋ* ‘remove husk (of coconut)

Two notable exceptions are *karut ‘coconut growth stage’ (Ross & Evans 2008: 363) > *na-ɣrat*, listed in (21), and *kaRat ‘bite’ (Ross & Osmond 2016: 266) > [N]*karat ‘stinging plant’ (Lynch 2018: 23) > *na-*(*ɣar~*)*ɣarto*.

POC *d [^{n}d] is not well attested in Neverver. A small number of items show retention (25a). Two items indicate palatalisation of *d [^{n}d] > ^{n}ʤ before the high front vowel **i* (25b), although palatalisation does not always occur, as evidenced by *p^{w}idik ‘throb’ > *βiβi^{n}d*.

(25)	a.	[E]*damu ‘k.o. yam’ > *damu ‘yam (*Dioscorea*)’	> *ni-^{n}dam*
		[S]*dodo ‘sink, drown’ (Clark 2009: 100) > [N]*dono ‘sink, be submerged’	> *^{n}don* ‘drown’
		[N]*dale?o ‘neck, throat’	> 1. *niβin-^{n}dol^{n}dol* ‘throat’ > 2. *ni-^{n}dla-n, ne-^{n}dla-ŋ* ‘neck’
		*p$^{(w)}$idik ‘throb’	> *βiβi^{n}d*
	b.	*pudi ‘banana (*Musa* cultivars)’ > [N]*vudi (*viji)	> *na-βu^{n}ʤ*
		*kadik ‘stinging black ant’ > [N]*kadik ‘black biting ant’	> *na-ɣa^{n}ʤ*

Finally, there is a shift from the prenasalised alveolar plosive to the prenasalised trill /^{n}r/: *ŋado- gums’ (Clark 2009: 102) > [N]*ŋado > *ni-^{n}ro-n*. In related languages, the plosive is variously reflected, either as a prenasalised trill in Neve’ei *nowe-^{n}re-n* (Crowley & Musgrave 2004: 137) or as a plosive in Naman *no-ŋo^{n}de-* (Lynch 2019a: 26).

3.2. POC *s, *c and *j [^{n}ʣ]~[^{n}ʤ]

Among POC *s, *c, and *j [^{n}ʣ]~[^{n}ʤ], *c merges with *s, while both *s and *j are regularly retained. In (26), the regular retention of POC *s is illustrated.

(26)	[N]*sav^{w}a, [N]*sawa ‘dance’	> *saβ*
	*sai ‘who?’ (Ross 1988: 90–91) > [N]*sei	> *i-si-ɣ*
	*siba ‘cut, slice’ > [N]*siba ‘knife, cut with knife, peel’	> *ni-si^{m}b* ‘knife’
	*sosop ‘put lips to, kiss, suck, absorb (moisture)’	> *susu* ‘kiss’
	*sua ‘meet, encounter’ > [N]*sua	> *su*

*waRisa ‘two days from today’ > [N]*waRisa ‘day after tomorrow’	> *was*
*[qase]qase- ‘chin, jaw’ [[N]*ase ‘chin, jaw’]	> *na-ɣas-n*
*pisiko ‘flesh, muscle, meat’ > [N]*visiko (*visoko)	> *ni-βisɣo-n*
*lo-loso(p), *losop-i- ‘bathe, wash by swimming’ [[N]*loso-vi]	> *lles*
[N]*rasu (V) ‘bale’, ‘baler’	> *ras* ‘scoop up with hands’
*taŋis ‘cry’ > [N]*taŋi-si (*dagi-si) ‘weep, mourn’	> *tŋis*

POc *c merges with *s as /s/. Reconstructions show that the change was complete by the Vanuatu settlement period (27).

(27)

*[ma]maca ‘dry up, evaporate, be empty of liquid’ > [N]*ma=masa ‘dry’	> *mmas* [m:as] ‘low tide’
*ŋ(a)ican ‘when’ > [N]*ŋaisa	> *aŋas*
*pica ‘how many? how much’ > [N]*visa	> *βis*
[E]*qu(c,j)uRi ‘follow (along)’ (François 2011: 186) > [N]*ʔusu-ri	> 1. *sur* ‘along, near, by’ > 2. *sir* ‘follow’

POc *j [ⁿdz]~[ⁿdʒ] > [N]*j, is regularly retained as a voiced prenasalised alveopalatal affricate /ⁿdʒ/ in Neverver (28).

(28)

*jamu (VI), *jam[w]-i- (VT) ‘chew (betelnut)’ (after Ross 1988: 78) > [N]*jam[w]a ‘chew, fibrous residue’	> *[n]dʒem*
[N]*jome ‘beads, shell money’	> *ni-[n]dʒom* ‘bead, necklace’
*(s,j)uli(q) ‘banana or taro sucker, slip, cutting, shoot (i.e. propagation material)’ [[N]*suli ‘shoot of plant, sucker; offspring’]	> *ni-[n]dʒullu-n, [n]dʒu[n]dʒulu-n* ‘banana seedling’
*juju(n), *juni- ‘push’	> *[n]dʒu[n]dʒu-k* ‘push through, into’
*p[w]aja(R) (VI) ‘clap hands’, *pwajaR-i- (VT) ‘slap with open hand’ > [N]*voja ‘clap, slap, strike’	> *βu[n]dʒ* ‘slap’
[N]*m[w]ajoe (*m[w]ajoi) ‘star, planet, Venus’	> *ni-βini-m[n]dʒo* ‘star’

A handful of *j [ⁿdz]~[ⁿdʒ] reflexes undergo oral crossover to /s/. In two cases, the crossover was complete by the NCV settlement period (29a). In the remaining reflexes, crossover occurred more recently, following NCV settlement (29b).

(29)

a.

*jalan ‘path’ > [N]*sala ‘road, path, way of doing’	> *ne-sal*
*pijo ‘a kind of edible wild cane or a reed, possibly *Saccharum spontaneum*’ > [E]*piso ‘*Saccharum* sp.’ > [N]*viso ‘naviso (*Saccharum edule*)’	> *na-βis* ‘k.o. cane’

b.

*laje ‘coral, branching coral’ > [N]*laje ‘coral’	> *ni-βi-laslas* ‘sand’
*[u]jumu (VI), *[u]jum-i- (VT) ‘suck, kiss, make kissing sound’ > [N]*jumi ‘kiss, make kissing sound’, with [E]*misi ‘suck through teeth’	> *mis-sum* ‘hail someone, sucking through lips’
[N]*malaji ‘leftover food’	> *ne-[m]blas-n*
[N]*jara ‘flow’	> *sarsar*

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3.3. POc *n and *ñ [ɲ]

There is very little evidence of *ñ [ɲ] reflected in Neverver. Where a reflex can be identified, it takes the form of the alveolar nasal /n/, meaning that *ñ has merged with *n (30). This merger appears to have been complete by the Vanuatu settlement era.

(30)
*ñu-ñu(p) ‘wash by immersing oneself, dive’ [^{N}*unu ‘dive’]	> *nunun* (V) ‘dive’
*(n,ñ)opuq ‘stonefish’ (Lynch 2019a: 23) > ^{N}*novu ‘scorpion, venomous fish’	> *niβe* ‘scorpion’
*-ña ‘3SG.POSS’ (Lynch et al. 2002 : 76)	> *-n* (inalienable noun ending)

The regular reflex of *n > ^{N}*n is /n/ in initial and medial positions (31).

(31)
*nanaq ‘pus’ > ^{N}*nana	> *ni-nan*
*panua ‘(1) inhabited area or territory, (2) community together with its land and things on it, (3) land, not sea, (with reference to weather) the visible world, land and sky’ > ^{N}*vanua ‘land, village, place’	> *ne-βanu*
*bune ‘wild pigeon’ > ^{N}*bune ‘fruit dove (*Ptilinopus*)	> *niβe-^{m}ʙun*
*papine- ‘man’s sister, female parallel cousin’ > ^{N}*vavine ‘man’s sister’	> *βiβin* ‘sister’
^{S}*niu-niu ‘palm, *Veitchia* sp.’ (Lynch 2019a: 34)	> *ni-nini*
*niuR ‘ripe coconut, coconut (generic)’ > ^{N}*niu	> *na-ni*
*kona ‘bitter, sour’ (Lynch 2016: 403) > ^{N}*kona	> *kkon* [k:on], *konkon*
*tanoq ‘earth, ground, soil; land’ > ^{N}*tano	> *ni-^{m}bi-ttan* [ni^{m}bit:an]
*tunu ‘roast on embers or in fire; burn (s.t.)’ > ^{N}*tunu ‘roast, set on fire’	> *tn* ‘roast’
*pinut ‘skin, bark’ > ^{N}*vinu-ti ‘skin, husk, rind’	> *ni-βin*

Final *n is regularly lost (32a), followed by the loss of the (now final) vowel.

In (32b), there is also sporadic loss of medial *n in the intervocalic position of *i__*a. In the case of *tina-, we might speculate that the final vowel was lost first, followed by the loss of the (now final) consonant, although the surviving vowel is /a/, rather than /i/. In *sinaR, the medial sequence *-in- is lost, and the final *aR sequence survives in *sar*. In *tinaqe, the final consonant and vowel *qe are likely lost first, leaving *tina which becomes *sina through palatalisation. The sequence *na may well have been reinterpreted as a third person singular possessive suffix. It is reconstructed as *-ña for Proto Oceanic (Lynch et al. 2002: 76), surviving as an inalienable noun ending /-n/ in Neverver (see Footnote 5; vowel changes remain to be examined in detail).

(32)
a.	*qusan ‘rain’ > ^{N}*ʔusa	> *na-us*
	*pulan ‘moon, month’ > ^{N}*vula	> *na-βul*
	*qutan ‘bushland, hinterland’ > ^{N}*ʔuta	> *kut* ‘the place’
b.	*tina- ‘mother’ > ^{N}*tina	> *ni-^{n}da*
	*sinaR (V) ‘shine, sun’ [^{N}*jiŋa-ri]	> *sar* ‘shine (of moon)’
	*tinaqe ‘intestines’ > ^{N}*tinaʔe	> *ne-sse-n* [nes:en]

3.4. POc *l, *r, and *dr [^{n}r]

Retention is the regular outcome of the POc liquids *l and *r. POc *dr [^{n}r] is only reflected in a small number of lexemes, and these lexemes show several different outcomes.

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POC *l is regularly reflected as /l/ (33).

(33)
*lala(k) 1. ‘*Trochus* spp., including *T. niloticus* and possibly *T. stellatus’*, 2. ‘rings or armlets made of this’ > [N]*lala	> *ne-lal*
*le(b,p)a (Clark 2009: 125) > [N]*leba ‘mud, dirt’	> *ni-le^{m}ble^{m}b*
*lipo- ‘tooth’ > [N]*livo	> *nu-lβu-n*
*lolo (V) ‘flood’	> *lolo-β* ‘flood, slip’
*lua ‘outside’ > [N]*lua ‘out, away’	> *lu* ‘out, completive’
[N]*mala ‘sour, bitter’	> *mmel* [m:el]
[E]*m^{w}a(q)ele ‘a cycad, *Cycas rumphii*’ > [N]*m^{w}ele	> *ni-mel*
[N]*maligo ‘cloud, dark’	> *melɣo* ‘be cloudy’
[N]*vakalo ‘fight’	> *βɣal*
*[ma]lumu ‘soft, gentle, easy’ > [N]*ma-lumu ‘soft, gentle, weak’	> *no-llo-n-mol~mol*

In just a handful of reflexes, *l is lost (34).

(34)
*kulit, *kulit-i ‘peel, remove skin of s.t., bark (a tree)’	> *kkis* [k:is] ‘peel, by hand’
*pitolon ‘hunger, famine; be hungry’ < [PMP]*bitil ‘famine, hunger’	> *ni-βis-ien* ‘famine’
*tupul ‘send out new growth’ > [N]*tovu (*tuvu) ‘grow, sprout’	> *teβ* ‘begin to grow’

POC *r is regularly retained as /r/ in Neverver in initial and medial positions (35).

(35)
a.	*raqani ‘daytime, daylight’ > [N]*rani ‘day, daylight’	> *ran* ‘be daylight’
	*riki(t,q) ‘small’ > [N]*riki	> *nite-riɣ* ‘child’
	*roŋoR ‘hear s.t., listen to s.t. > [N]*roŋo ‘hear, smell, feel’	> *roŋ* ‘want, feel’
	*rua ‘two’ (Lynch et al. 2002: 72) > [N]*rua ‘two’	> *ru*
b.	*b$^{(w)}$arapu ‘long’ > [N]*baravu ‘long, tall’	> *^{m}ber^{m}ber*
	[N]*gere ‘bottom, butt, tail’	> *ni-^{ŋ}gre-n* ‘end (of a long object’
	[N]*mariu ‘Acacia sp.’	> *ne-mari*
	*k^{w}aro-k^{w}aro, *k^{w}aru-k^{w}aru ‘k.o. skin disease, probably scabies’	> *no-ɣroɣroɣ* ‘scabies’
	*guru, *gururu ‘thunder, make loud noise’	> *na-^{ŋ}gur, na-^{ŋ}gor* ‘thunder’

There are two examples of POC *r undergoing nasal crossover to /^{n}r/ (36). In the reflex for ‘coral tree’, the common noun prefix may trigger prenasalisation as a form of morphophonemic voicing assimilation. Only the initial *r undergoes crossover; the second *r is retained.

(36)
[k]ira ‘3PL’ (Ross 1988: 367) > [N](k)ira	> *a-^{n}r*
*rarap ‘coral tree (*Erythrina*)’ [[N]*rara-vi]	> *ni-^{n}rar*

POC *r is lost from final position in *kuku(r) ‘mussel; grater made from mussel shell’ (Lichtenberk & Osmond 1998: 161–162) > (*yo*)*ɣo* ‘scrape out (i.e. a coconut)’.

POC *dr [^{n}r] shows some evidence of retention in Neverver (37a).[10] Other outcomes are also represented among reflexes, including a shift from *dr [^{n}r] to /^{n}d/ (37b), and one example of a shift to /r/ (37c).

[10] A further example of retention is seen in the reflex *ne-dram* ‘pandanus’, which almost certainly derives from **padran* (Ross 2008b: 328–329). See (56d).

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(37) a. *draRa(q) ‘blood’ [N*daRaq (Lynch 2018: 22)] > 1. *ne-ⁿre* ‘blood’
> 2. *ⁿra-n* ‘bleed’
*d(r)amʷis-i- (VI) *d(r)amʷi(s) (VT) ‘lick, taste’ > *ⁿram* ‘lick’
*madraqu (VI) ‘thirst’ [N*madou] > *ⁿromⁿrom* (by metathesis)

b. *dre(r,dr)e ‘tremble, shake’ > *ni-m-ⁿder* ‘earthquake’
*[dr,r]anum ‘fresh water’ > N*danu ‘water’ > *ni-ⁿdoŋ* ‘muddy water’

c. *(dr,d)ap(e,i) ‘snot, nasal mucus’ [N*davi] > *na-ɣaⁿʤun-raβ*

3.5. POc **y* [j]

There are very few POc etyma with *y [j] in the Neverver database, and in almost all instances, *y is lost.

(38) a. *kayu ‘tree or shrub: generic name for plants with woody stems and branches, probably not including palms or tree-ferns; wood, stick’ > N*kayu ‘tree, (piece of) wood’ > *na-ɣa*
R*maraya ‘sea eel’ > N*maraya ‘eel’ > *ni-mer*
*maya- ‘tongue’ > S*lua-mea- ‘tongue’ (Lynch 2019: 40) [N*mea] > *ne-leme-n*

b. *yaŋo-yaŋo ‘yellow’ [*aŋo=aŋo] > *jaŋjaŋ*

Final *yV [jV] is lost from both *kayu ‘tree’ > *na-ɣa* and R*maraya ‘eel’ > Nvr*ni-mara > *ni-mer*. In the latter, there is further loss of a now final *a, as well as the raising of antepenultimate *a > *e*. In the case of *maya, final *a is preserved by a relic of the 3SG possessor suffix, but the sequence *ay [aj] undergoes coalescence of the low vowel and palatal approximant, resolving as the mid-front vowel N*e during the settlement period of Vanuatu. In just one lexeme *y [j] is clearly retained from POc.

4. Dorsal Consonants

Among the dorsal consonants, retention characterises reflexes of *g [ᵑg] and *ŋ. POc *k undergoes lenition, although several other reflexes are also attested. POc *q is generally lost, while *R merges with the alveolar trill *r, where it survives. There are only two reflexes of *kʷ.

Table 6 shows change process affecting dorsal consonants. No percentages are given if total token counts are lower than 10.

POc	Reflex in Neverver	Retentions & Change Processes	Affected tokens (all tokens)	Percentage of tokens affected
*k	> *ɣ*	lenition	n=56(92)	61%
*kʷ	> *ᵑg*	loss of labialisation, crossover	n=1(2)	
	> *ɣ*	loss of labialisation, lenition	n=1	
*g [ᵑg]	> *ᵑg*	retention	n=7(14)	50%
	> *ŋ*	nasalisation	n=4	28.5%
*q	> *Ø*	loss	n=48(68)	70.5%
*ŋ	> *ŋ*	retention	n=30(35)	86%
	> *Ø*	loss	n=5	14%
*R	> *r*	merger with *r	n=37(69)	54%
	> *Ø*	loss	n=29	42%

Table 6. Outcomes for POc dorsal consonant tokens

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4.1. POc *k, *k^{w}, and *g [^{ŋ}g]

POc *k > ^{N}*k undergoes several different processes in Neverver. The regular process is lenition to /ɣ/, which applies to initial and medial *k (39).

(39) a. *kapika 'Malay apple and Rose apple, *Eugenia* spp.' > ^{E}*kapika > ^{N}*kavika 'Malay apple (*Syzygium*)' > *na-ɣaβiɣ*
*keli 'dig, harvest (tubers)' > ^{N}*keli (^{N}*kili) > *ɣil*
*kita (VI) 'see', *kita-i- (VT) 'see s.t.' > ^{N}*kita > *ɣit*
*koRi 'scraper; bivalve sp., used as a scraper; scrape with a shell' > ^{N}*kori 'scrape' > *ɣur, ɣor* 'scratch, itch'
*kurat 'the dye produced from *Morinda citrifolia*' > ^{E}*kurat '*Morinda citrifolia*' > *na-ɣur*

b. *makubu 'grandchild; kin two generations below ego' > ^{N}*makubu > *na-ɣa^{m}ʙu-n*
*bilake 'banded rail' (Lynch 2019a: 24) > ^{N}*b$^{(w)}$ilake 'buff-banded rail (*Rallus philippensis*)' > *ni-^{m}bilaɣ-^{m}bis^{m}bis*
*riki(t,q) 'small' > ^{N}*riki > *le-riɣriɣ* 'k.o. vine'
*pisiko 'flesh, muscle, meat' > ^{N}*visiko (*visoko) > *ni-βisɣo-n*
^{E}*bakuRa '*Calophyllum* sp., probably *C. kajewskii*' > ^{N}*bakura > *ne-^{m}baɣur*

POc *k is retained in a small number of lexemes (40). These lexemes include a nonsingular pronoun, in which *k is also retained in Naman (Lynch 2019a: 28), and a root final *k which Clark (2009: 231) did not reconstruct for PNCV. In (40b), the reflexes begin with geminate consonants. This initial gemination apparently blocks the regular process of lenition. In some cases, an intransitive verb root with an initial geminate *kk* [k:] corresponds to a transitive verb root with a nongeminate initial /ɣ/ (lenited from *k). At least one root is recorded with both singleton and geminate consonants in the synchronic data.

(40) a. *ka[m]i, *kamami '1EXCL.PL' (Ross 1988: 367) [^{N}*gama(m)i] > *kumam*
^{N}*koro 'trap' > *lili-kor* 'set trap'
^{N}*lakau (*lakawa) 'cross over' > *lik* 'pass'
*soka, *soka-i- 'pierce, stab' > *sok* 'pin (thatch), spear'
*(u)kuku(t) 'hang, suspend' > *kaka* 'hang (garlands)'
*puRuk 'to spray spittle etc. from the mouth for magical purposes' (Osmond 2016: 363) > ^{R}*puRuk 'cough' (François 2011a: 168) [^{N}*vuru 'cough', also ^{N}*vura-i 'spit'] > *prek* 'spit'

b. *kani[-] (VT) 'eat (s.t. starchy), eat (in general)' > ^{N}*kani > *kkan* [k:an] (VI) 'eat' (cf. *ɣan* (VT) 'eat')
^{E}*kai 'call out to (s.o.), say forcefully' > ^{N}*kai > *kke* [k:e]
*keli 'dig, harvest (tubers)' > ^{N}*keli (^{N}*kili) > *kkil* [k:il] (VT) 'dig' (cf. *ɣil* (VT) 'dig')
*kona 'bitter, sour' (Lynch 2016: 403) > ^{N}*kona > *kkon* [k:on], *kon*

Nasal crossover occurs from *k > *^{ŋ}g*. Like Naman (Lynch 2019a: 28), there are two nonsingular pronouns that undergo crossover. A small number of nouns that take the common noun marker *nV-* undergo crossover as a form of morphophonemic voicing. A verb root that may undergo an analogous crossover is ^{N}*makani 'sharp' > *m^{ŋ}ga-l*, where the preceding root nasal appears to trigger nasal crossover in the same way that a preceding common noun marker *nV-* triggers crossover. Finally, there are several verb roots where initial *k undergoes crossover. This pattern may reflect verb-initial oral-

nasal consonant alternation that was historically employed to distinguish between realis and irrealis mood (Crowley 1991, Lynch 2019a: 23). In Neverver, however, initial *k in verb roots variously undergoes lenition (39a), is retained and geminated (40b), undergoes nasal crossover (41c), or is lost (42b). The overlapping environments in which these different processes apply demonstrate the unpredictable nature of outcomes for *k.

(41)	a.	*ka[m]u, *kamiu ‘2PL’(Ross 1988: 367) [N*gamuyu]	> *i-ᵑgam*
		kita ‘1INCL.PL’ (Ross 1988: 367) [N(k)ida]	> *i-ᵑgit*
	b.	E*pakalo, *pʷakala (?) ‘*Hibiscus* sp.’ > N*bʷakala	> *ni-ᵐbalᵑga* ‘cottonwood, beach hibiscus’ (by metathesis)
		*kumi ‘beard’ > S*kumʷi- ‘beard, chin’ (Lynch 2020: 35) > N*kumʷi	> *nu-ᵑg(u)mi-n* ‘chin’
		*keli ‘dig, harvest (tubers)’ > N*keli (N*kili)	> *na-ɣa-ᵑgil* ‘digging stick’
	c.	*kal(o,u) (Clark 2009: 160-161) > N*gali ‘stir, rub, wipe in a circle’	> *ᵑgul* ‘wipe’
		*kaRu ‘swim’ > N*karu ‘swim, bathe’	> *ᵑgar* ‘swim, paddle’
		E*kisi (Clark 2009: 115) > N*kisi ‘poke, touch with fingers’	> *ᵑgis*

The final pattern that can be observed for *k is loss. This is regular in word-final position, although not without exception (cf. *puRuk ‘to spray spittle etc. from the mouth for magical purposes’ (Osmond 2016: 363) > R*puRuk ‘cough’ (François 2011a: 168) > *prek* ‘spit’). Examples in (42b) show sporadic loss of initial *k, while examples in (42c) show sporadic loss of medial *k.

(42)	a.	*manuk ‘flying creature’ [N*manu-ku]	> *ne-man*
		*lala(k) (1) ‘*Trochus* spp., including *T. niloticus* and possibly *T. stellatus*’, (2) ‘rings or armlets made of this’ > N*lala ‘trochus shell, bracelet’	> *ne-lal*
		E*bʷerok (Clark 2009: 96) > N*bʷero (*boro) ‘mushroom’	> *ni-ᵐber*
		*bebek ‘butterfly’ > N*bebe ‘butterfly, moth’	> *ni-ᵐbem-ⁿʤa* ‘fruit moth’
		*ma-osak ‘ready to be eaten (because ripe or cooked)’ > N*ma[so]sok ‘cooked’	> *mas* ‘cooked’, *mas-ᵑga* ‘partly cooked’
		*p(ʷ)idik ‘throb’	> *βiβiⁿd*
		*tasik ‘sea, salt water’ > N*tasi	*nu-tusu*
	b.	*(k)asipeŋ ‘sneeze’	> *ⁿʤaβi*
		*[ka]ŋaRi ‘almond (*Canarium*)’ > E*[qa]ŋaRi > S*qaŋaRi > N*ʔaŋaRi	> *n-iŋa*
		*kauR ‘bamboo; bamboo wind instrument’ > N*ʔau	> *n-au* ‘cane’
		[k]ira ‘3NSG’ (Ross 1988: 367) > N(k)ira, N*n(a)-ira	> *a-ⁿr*
	c.	*b(o,u)kas(i) ‘pig’ > S*bukasi ‘pig (generic), and probably by default male pig, boar’ > N*bukasi	> *ni-ᵐʁuas* ‘male pig’
		N*vuke ‘swell up’	> *pu* [ʁ̥u]

POC *kʷ is attested in just two Neverver reflexes (43). In the first, initial *kʷ in a verb root undergoes crossover to /ᵑg/. This crossover is reconstructed to PNCV. In the other, a reduplicated base is reconstructed for POC. Initial *kʷ in both root and duplifix undergo lenition to /ɣ/. This lexeme also displays a final /ɣ/.

(43) *kʷaru(t), *kʷarut-i- ‘scratch with fingernails or claws’ > *ᵑgarᵑgar*
> ᴺ*garu(t), ᴺ*garut-i ‘scratch’
*kʷaro-kʷaro, *kʷaru-kʷaru ‘k.o. skin disease, probably scabies’ > *no-ɣroɣroɣ* ‘scabies’

POc *g [ᵑg] is regularly retained as /ᵑg/ in Neverver (44).

(44) *g(a)umu ‘Fruit Dove, *Ptilinopus* sp.’ > *ni-βi-ᵑgaum*
*gapu(l) ‘mist’ [ᴺ*kopu ‘low cloud, mist’, *ŋovu (*kovu) ‘hazy, cloudy, obscure’] > *ni-ⁿdi-ᵑgaβ* ‘mist’
ᴺ*gere ‘bottom, butt, tail’ > *ni-ᵑgre-n* ‘end (of long object)’
*guru, *gururu ‘thunder, make loud noise’ > *na-ᵑgur* (*na-ᵑgor*)
*waga ‘canoe’ > ᴺ*waga > *n-uaᵑg*
*tige ‘hop on one leg, limp’ > ⁿʤiᵑgaⁿʤiŋ < ᴺᵛʳ*siᵑgasiŋ

Oral crossover can be observed in a small number of reflexes (45a). Following crossover, the four reflexes show lenition, shifting from *g [ᵑg]> ⁽ᴺ⁾*k > ɣ. The fourth and fifth items may simply reflect ancestral **k*, although /ᵑg/ is attested in one of the Southeastern Malekula languages, Ahamb *na-ᵑgaw* ‘spider, spider web’ (Rangelov 2020: 54). Items in (45b) show the weakening of prenasalised plosive to velar nasal. The final nasal in *ⁿʤiᵑgaⁿʤiŋ* ‘hop’ in (44) also displays this weakening pattern. Where weakening is not in synchronic word-final position, it occurs following another consonant, with this adjacency the result of penultimate vowel loss.

(45) a. ᴺ*ganisu ‘nose’ > *na-ɣaⁿʤu-n*
ᴺ*maligo ‘cloud, dark’ > *melɣo* ‘be partly cloudy’
*[ma-]goRu(s) ‘dry (of vegetation)’ [ᴺ*ŋoru ‘dry (of vegetation)’] > *m-ɣurɣur* ‘withered (of leaves)’
*so(k,g)o(n) (VI) ‘gather, congregate’, *so(k,g)on-i (VT) ‘gather, bring together’ > ᴺ*soko ‘add, join’ > *soɣ* ‘join’
*gagao ~ *(g,k)a(g,k)a ‘k.o. spider’ > *ne-kka* [nek:a] ‘spider, spider web’

b. *baga ‘banyan (*Ficus*)’ > ᴺ*baga (Clark 2009: 80) > *ne-ᵐbaŋ*
*ma(i)tagaR(a) ‘*Kleinhovia hospita*’ > ᴺ*mi(i)tagaR(a) > *ni-miⁿdaŋ*
*raga(q) ‘branch’ > ᴺ*raŋa > *ne-rŋo-n-ɣa* ‘twig’
ᴺ*tigo-ni ‘push, poke’ > *sŋon* ‘push’
ᴺ*voge ‘white, clean; albino’ > 1. *na-βoŋ* ‘albino’
> 2. *βoŋβoŋ* ‘pure’

4.2. POc *q

The most common outcome of *q is loss from all positions. While most loss occurs in the settlement era, particularly from final position, the more recent loss of ᴺ*ʔ from initial and medial positions can also be observed.

(46) a. *qunsi ‘barter’ (Clark 2009: 210) > ᴺ*usi ‘ask’ > *sus*
*kaRi(q)a ‘taxon of decorative plants’ > ᴱ*gaRi(a) ‘*Cordyline* sp.’ > ᴺ*garia > *na-ɣari*
ᴱ*mʷa(q)ele ‘a cycad, *Cycas rumphii*’ > ᴺ*mʷele > *ni-mel*
*tu(q)aRi ‘long time, long ago, old’ > ᴺ*tuai (Clark 2009: 203) > *tue*
*nanaq ‘pus’ > ᴺ*nana > *ni-nan*
*piRaq ‘giant taro, elephant ear taro, *Alocasia macrorrhizos*’ > ᴺ*via > *na-βi*

	*ponuq ‘finished, all, full’ > [N]*vunu (*bunu)	> *[m]ʁun*
	*p[w]a(ra)raq ‘thunder’ > [N]*vara	> *ne-[m]bal-βar* ‘lightning’
b.	*qusan ‘rain’ > [N]*ʔusa	> *na-us*
	*quraŋ ‘crayfish, shrimp’ > [N]*ʔuraŋ	> *na-ur*
	*tuqur ‘stand’ > [N]*tuʔuru [[N]*tuʔu]	> *tur*

Not all instances of *q undergo loss in Neverver or, indeed, in the Malekula languages more generally (Lynch & Crowley 2003; Lynch 2009). Lynch (2009: 66) claims that overt reflexes of *q in Malekula languages indicate “that *q was retained as a distinct phoneme in any ‘Proto Malakula’”. Overt reflexes of *q include the velar fricative /ɣ/, indicating a merger with *k, followed by regular lenition in some lexemes (47).

(47)	*[qase]qase- ‘chin, jaw’ [[N]*ase]	> *na-ɣas-n*
	*qalawa- ‘sibling’s child’ (Lynch 2009: 64)	> *ɣala-* ‘nephew, uncle’
	*qupan ‘grey hair’	> *nu-ɣuβar* ‘grey hair’
	*qapi-ŋa ‘armpit’ > [N]*ʔavi-ŋa	> *no-ɣoβŋa-n*
	*pituqun ‘star’ [[N]*vituu]	> *[m]batiɣ-tel* ‘morning star’
	*tob[w]aq ‘belly’	> *ni(m,n)-[n]demɣ-en*
	*luaq (VI) ‘eject forcefully from body; vomit, spit out’,	> *luɣ*
	*luaq-i (VT) ‘vomit on’ > [N]*luaq-i (Lynch 2018 : 23)	

A small set of reflexes show vocalisation of initial *q > *i*, likely via a glide (cf. Lynch & Crowley 2003: 237; Lynch 2009: 66). The vocalisation of *q is observed by Lynch (2009: 63–64) in a number of Malekula languages, including Neverver, in nominal roots following the accreted common noun article (48).

(48)	*qalo ‘sun’ (Lynch & Crowley 2003: 236) > [N]*yalo	> *n-ial*
	*qapu ‘ashes, dust’ [[N]*avu]	> *n-ieβi-n*
	*qaRa(r) ‘fence’ [[N]*ara]	> *n-iar*
	*qatop ‘thatch, roof’ [[N]*ato ‘sago palm (*Metroxylon*), thatch’]	> *n-iat*
	*qope ‘canoe tree (*Gyrocarpus americanus*)’ > [N]*(ʔ)ove	> *ni-[n]d-ieβ*
	> [Mal]*du-(q)ove + ‘canoe’ (Lynch 2016: 428)	

Finally, a small set of reflexes also show an unexpected change of *q > *ŋ*. As illustrated in (47), reflexes of *q as /ɣ/ indicate that *q merged with *k and underwent lenition in some lexemes. A small number of *k reflexes did not undergo lenition but instead are reflected as /ᵑg/, via nasal crossover (41). Some reflexes of *g [ᵑg] were reported in the preceding section as the nasal /ŋ/ (45b). This provides a pathway from *q to /ŋ/ – namely, *q > [N]*ʔ > [Nvr]*k > [Nvr]*ᵑg > *ŋ*. This velar nasal reflex of *q is illustrated in (49).

(49)	[N]*dale**ʔ**o ‘neck, throat’	> *ne-[n]dlaŋ* (*ni-[n]dla-n*) ‘neck’
	*le**q**o ‘wake up, open eyes’ (Clark 2009: 126) > [N]*le**ʔ**o	> *lŋa* ‘open eyes’

4.3. POc *ŋ

POc *ŋ is retained through PNCV [N]*ŋ to Neverver /ŋ/ (50). Retention can be observed in initial and medial positions.

(50)	a.	*ŋara(s) ‘cry loudly’, *ŋaras-i- ‘cry loudly for’ > [N]*ŋara	> *ŋar*
		*ŋisi ‘bare one’s teeth, grin’ > [N]*ŋisa ‘smile’	> *ŋis*
		*ŋorok ‘grunt, growl, snore’ > [N]*ŋora	> *ŋo[n]r*
	b.	*puŋa ‘flower, blossom; to flower, bear flowers’,	> 1. *ne-ɣŋa-n* (N) ‘flower’
		*na-puŋa-na ‘flower’ > [N]*vuŋa ‘flower’	> 2. *βuŋ* (V) ‘flower’

*taŋa ‘basket or bag, small, used for personal effects’ > [N]*taŋa ‘type of basket’	> *ne-taŋ* ‘pandanus basket’
*taŋis ‘cry, wail, lament’ > [N]*taŋi-si (*dagi-si) ‘weep, mourn’	> 1. *tŋis* ‘weep in sorrow’ > 2. *taŋ* ‘grieve’

In word-final position, where there is penultimate vowel loss, *ŋ is retained (51a), although the more common word-final outcome is loss (51b).

(51)	a.	*buliŋ ‘roll’	> *[m]bliŋ, [m]bluŋ* ‘turn under, tie in knot’
		*topoŋ (VI) ‘try’, *topoŋ-i- (VT) ‘try, test, sample s.t.’	> *[n]dβuŋ*
	b.	*(k)asipeŋ ‘sneeze’	> *[n]ʤaβi*
		*quraŋ ‘crayfish, shrimp’ > [N]*ʔuraŋ	> *na-ur*
		*paRa(ŋ) ‘molar tooth’	> *ni-liβ-parpar*
		*[q]acaŋ, *[q]aca- ‘name’ [[N]*asa, [N]*kisa]	> *ni-ɣi[n]ʤa-n*

4.4. POc *R

POc*R, a dorsal consonant, either merges with coronal *r or is lost. In reflexes with *R, the merger with *r is complete by complete by the PNCV period (52).

(52)	*Rape ‘pull, drag’ > [E]*Rav(e,i) > [N]*rave (*reve)	> *reβ*
	[E]*b[w]aRab[w]aRa (Clark 2009: 94) > [N]*b[w]arab[w]ara ‘female pig’	> *ni-[m]bar[m]bar*
	*kaRaka ‘crawl on all fours’ > [N]*karaka ‘climb, crawl’	> *ɣraɣ*
	*biRi-biRi ‘*Hernandia nymphaefolia*’ > [N]*biri-biri	> *ni-[m]bir[m]bir*
	*toRas > [E]*toRa(s) ‘a taxon of hardwood trees, including *Intsia bijuga*’ > [N]*tora	> *no-tor* ‘hard wood’
	*tuRi ‘sew, thread, string together’ > [N]*turu (*duru) ‘pierce, sew’	> *tur* ‘stab, pierce’
	*kaRu ‘swim’ > [N]*karu ‘swim, bathe’	> *[ŋ]gar* ‘swim, paddle’
	*qaRa(r) ‘fence’ > [[N]*ara]	> *n-iar*
	*sinaR (V) ‘shine’ [[N]*jiŋa-ri ‘(sun) shine’]	> *sar* ‘shine (of moon)’[11]
	[E]*kaRuve ‘k.o. beach crab, probably *Ocypoda* sp., ghost crab’ > [N]*kaRuve ‘ghost crab (*Ocypode*)’	> *ni-βri* ‘crab, generic’ (by metathesis)

The other commonly occurring outcome for *R is loss. Final *R is lost almost without exception (although see *sinaR > sar immediately above).[12] Initial and medial positions see the sporadic loss of *R. In the examples in (53), *R is lost by the PNCV period more often than not.

(53)	a.	*saliR ‘flow, of water’ > [N]*sale ‘float, flow’	> *sal* ‘float’
		[E]*(ma)luR ‘shady’ (Geraghty 1990: 63) > [N*]malu	> *mol* ‘be shady, cloudy’
		*niuR ‘ripe coconut, coconut (generic)’ > [N]*niu ‘coconut’	> *na-ni*
		*toŋoR ‘mangrove’ > [E]*toŋoR > [N]*toŋo	> *ni-[n]doŋ*
		*pusuR ‘bow and arrow’ > [N]*vusu ‘bow’	> *ni-βis*
		*patu(R), *patuR-i ‘tie, plait, weave (mats, baskets)’ > [N]*vatu ‘weave, plait’	> *βet*
		*[ma]turu(R) (VI) ‘sleep, to be asleep’ > [N]*maturu	> *matur*

[11] See discussion of the loss of medial *n in §3.3.

[12] François (2011a: 151) observes that final *R is retained on rare occasions in reflexes of *sinaR ‘shine’ in the northern Vanuatu languages of Mota and Mwotlap. Neverver provides evidence of final *R retention further south in Vanuatu with *sar*.

b.	*Rumaq ‘dwelling house’ [^{N}*yum^{w}aq]	> *aiem* ‘home’
	*tapoRa ‘a nut-bearing tree sp.’ > ^{E}*tapoRa ‘*Terminalia* spp.’ > ^{N}*tavoRa	> *no-tβo*
	*[ka]ŋaRi ‘canarium almond, *Canarium indicum*’ > ^{E}*[qa]ŋaRi > ^{N}*ʔaŋaRi	> *n-iŋa*
	*kaRo ‘vine, rope; vein’ > ^{N}*karo ‘vine, rope’	> *no-ɣo* ‘vine’

Lynch (2009: 62) compiles a number of observations about the retention and loss of *R that are supported in the Neverver data: *R is retained before *a and *o, and between identical vowels, but lost before *i. François (2011a) identifies a series of isoglosses dividing North-Central Vanuatu into regions where *R is increasingly lost from north to south. The languages of Malekula almost all fall between isogloss 13 and isogloss 14 on François’s (2011: 167) isogloss map. Neverver data is largely consistent with François’s (2011) findings, with a few exceptions. The reconstruction ^{E}*paRage ‘*Pangium edule*’ (Ross 2008b: 336) > ^{N}*vaRage ‘tree sp. (*Pangium*), dance rattles’ (Clark 2009: 217) reportedly loses *R in all Malekula languages (François 2011a: 163). In Neverver, the reflex shows retention of **R*, in *ni-^{m}bi^{ŋ}g-βar* (although note that either *^{m}bi^{ŋ}g* or *βar* in Neverver’s reflex could arguably reflect ^{E}*paRage). A second example is ^{E}*kaRuve ‘k.o. beach crab’ (Pawley 2011: 176), which is likely reflected in *ni-βri* ‘crab, generic’, by metathesis. Clark (2009: 111) also records the reflex *xaur* in the Rerep (Unua) language of Eastern Malekula, indicating that *R survives as /r/ at least sometimes in reflexes of ^{E}*kaRuve in the Malekula languages. The data from Neverver indicate that a more conservative language variety (or at least, a variety with some more conservative lexemes) must have existed among the settler-varieties of Vanuatu.

5. Neverver, Naman, and the Central-Western Malekula languages

As might be expected, the comparison of synchronic consonant inventories in Neverver and Naman reveals similar inventories, although there are key differences that can be traced to different diachronic processes at work in the two languages. Among labial consonants, both Neverver and Naman have lost contrastive labialisation. Neverver is the only Central Western language that retains a contrastive /p/ segment. In Naman, the lenition of *p > *β* has been systematic. Neve’ei also lacks a /p/ segment, while Larevet only uses /p/ in modern borrowings from English/Bislama (Barbour 2016: 140). In Neverver, at least some tokens of /p/ are directly reflected from Proto Oceanic (see §2.1), for example *panako ‘steal’ (Lynch 2019a: 32) > Neverver *panɣo* or *ppanɣo* [p:anɣo] ‘steal’ compared with Naman’s *venox* (Lynch 2019a: 32).

The other difference in labials is the emergence of the contrastive bilabial trill in Neverver, from sequences of *b [^{m}b] followed by a back vowel. There is no evidence of a bilabial trill in Naman (Crowley 2006a: 25), nor does Barbour (2016) report one for Larevet, or Musgrave (2007) for Neve’ei. In Neverver, the trill occurs in *na-^{m}ʙuŋ* ‘day’ from *boŋi ‘night, day of twenty-four hours’ (Ross 2003: 295–297), but the plosive is retained in Naman’s *^{m}buŋ* (Lynch 2019a: 24), in Larevet’s *nə-^{m}bəŋ* (Barbour 2016: 153), and in Neve’ei’s *na-buŋ* (Musgrave 2007: 8). Bilabial trills are widely distributed through the central and southern Malekula regions (Rangelov et al. 2023). Lynch (2016: 405, 407) hypothesises that the bilabial trill is not diagnostic of any Malekula subgroup and speculates that the geographic proximity of trilling languages points to the spread of the bilabial trill through contact, rather than inheritance. It should be noted that the current location of the Neverver-speaking community places it in contact with languages that have a contrastive bilabial trill, including the Southwestern Malekula language of Avava (Crowley 2006d: 30-32), and the Eastern Malekula languages of Uripiv (McKerras 2001)[13], and Unua (Pearce 2015: 15-19).

[13] While McKerras (2001) recorded the bilabial trill from older speakers during his time on Uripiv Island as a missionary linguist, in more recent work recording new generations of speakers, no evidence of the trill has been found (Moore 2019: 25-26).

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In the inventories of coronal consonants, we find a single prenasalised affricate in Neverver /ⁿʤ/, reflecting Proto Oceanic *j [ⁿʣ]~[ⁿʤ]. In Naman, there are contrasting affricates: one prenasalised /ns/ [ⁿʧ~ⁿs], which is the regular reflex of *j (Lynch 2019a: 25); and one plain /ʧ/ [ʧ~ts].[14] Where Neverver regularly reflects *s > *s*, Naman reflects *s as either /s/ or the plain affricate /ʧ/. Lynch (2019a: 25) finds no systematic conditioning factors to explain which POc *s occurrences are reflected as /s/ or /ʧ/ in Naman. Even after palatalisation of *ti, the Naman reflex may be /s/ or /ʧ/. Nasal crossover, a process that yields a prenasalised affricate /ⁿʤ/ or /ⁿs/ from *s, is characterised by its sporadic nature, and it differs in its application between lexemes in the two languages. Examples of these various correspondences between Neverver and Naman are presented in (54).

(54)		Reconstruction	Neverver	Naman
	a.	*sake ‘go upward’	*saɣ*	*sax*
		*(s,j)iko ‘kingfisher’ > ᴺ*siko	*na-siɣ*	*ne-ʧəx*
		*pisiko ‘flesh, meat, muscle’	*ni-βisɣo-n*	*ne-ʧoxo-*
		ᴺ*savʷa, ᴺ*sawa ‘dance’	*saβ*	*sav*
	b.	*tian-an ‘belly, (be) pregnant’	*sian*	*sien*
		ᴺ*tibʷa-ri ‘touch’	*sᵐber*	*ʧəᵐber*
	c.	*sipi(r,R)i ‘rainbow lory’	*ni-sᵐʙur*	*ni-ⁿsəv* (crossover)
		ᴺ*sova ‘cough, breathe with difficulty’ (Lynch 2019a: 25)	ⁿʤoβ (crossover)	*ʧev*
		ᴺ*savu(a) ‘compressed air’	ⁿʤaβi ‘sneeze’ (crossover)	ⁿsivu-x ‘sneeze’ (crossover)

Outcomes for *R, *r, *dr [ⁿr] and *d [ⁿd] show differences between Neverver and Naman, and between these Central Western languages and languages in the Northern Malekula subgroup. Where *R survives, it merges with *r in the Malekula languages (Lynch 2009: 60) and in the North-Central Vanuatu languages more generally (Clark 2009: 17). In the languages of Northern Malekula, further mergers take place, with *R, *r, *dr [ⁿr] and *d [ⁿd] merging to the single reflex /r/ (Lynch 2019b: 68), illustrated in (55) with data from Tepërav (Barbour et al. 2022). In Naman, the expected merger of *R and *r occurs, and although there is little data, Lynch speculates that the reflex of ‘blood’ indicates a merger of *dr [ⁿr] with *d [ⁿd] in Naman. As in Tepërav and Naman, *R and *r merge in Neverver, but *dr [ⁿr] and *d [ⁿd] remain distinct. There are rather few lexemes that reflect either *dr or *d, but at least some show retention; and there are also cases of *r and *d [ⁿd] being reflected as /ⁿr/, generating further instances of the phoneme in synchronic data in Neverver.

(55)		Reconstruction	Neverver	Naman	Tepërav
	a.	ᴱ*bakuRa ‘*Calophyllum* sp.’	*ne-ᵐbaɣur*	*ᵐbakur*	*ᵐbexor*
	b.	*raqani ‘daytime, daylight’	*ran* (VI)	*ran* (VI)	*le-ran*
		*rarap ‘coral tree (*Erythrina*)’	*ni-ⁿrar*	*ne-ⁿdar*	*rerav*
	c.	*ŋado ‘gums’	*ni-ⁿro-n*	*no-ŋoⁿde-*	---
		ᴺ*dali ‘go around, turn’	ⁿdel-βus	ⁿdel-vəx	*rel*
	d.	*drara(q) ‘blood’	*ne-ⁿre*	*ne-ⁿde*	*ne-re*

Data in (55) show that from POc *R, *r, *dr [ⁿr], and *d [ⁿd], Neverver inherits three phonemes /r/, /ⁿd/ and /ⁿr/; mergers in Naman apparently result in two phonemes /r/ and /ⁿd/; and mergers in Tepërav result

[14] In Naman, the plain affricate is represented orthographically as <*j*> and the prenasalised as <*ns*> by Crowley (2006a) and Lynch (2019a). I use /ʧ/ for the plain affricate and /ⁿs/ for Crowley’s <*ns*>.

in a single phoneme /r/. Note that in their synchronic inventories, the Central-Western Malekula languages Naman, Neve'ei, and Larevet all have a contrastive /ⁿd/, and Larevet also has /ⁿr/.

The dorsal consonants are reflected more consistently in Neverver and Naman, with regular retention of *g [ᵑg] and *ŋ and lenition of *k > *ɣ*. POc *q shows regular loss, as well as instances of both lenition of *q > *k > *ɣ*, and vocalisation *q (> *y [j]) > *i* in the two languages.

In considering Neverver's place within the Central-Western Malekula languages (Neverver, Naman, Neve'ei, and Larevet), Lynch (2016: 426) describes their relationship as constituting a linkage that is "fairly loose". The strongest evidence that links the Central-Western Malekula languages is their participation in a small number of lexical irregularities – irregularities that also affect some other Western Malekula languages. Following Lynch (2016: 425), the three innovations with the broadest distribution in Central-Western Malekula are presented in (56), along with names of other Western Malekula languages that display the same innovation. The fourth lexical irregularity in the list arises from this work, reflecting *padran [paⁿran] 'pandanus' (Ross 2008b: 328). It is attested in three of the four Central-Western languages, but has not been identified elsewhere. In each case, the common noun article appears to be accreted to the inherited root. Whether this happened through the replacement of the initial syllable *pa, or through metathesis, with the now final labial plosive realised as a labial nasal, is unclear.

(56) a. ᴺ*bʷakala '*Hibiscus* sp.' > *bʷalaga (by metathesis, crossover of *k > *g*)
Neverver *ni-ᵐbalᵑga*
Neve'ei *ne-ᵐbʷelaᵑgu*
Naman *ᵐbelaᵑg*
Larevet *ᵐbalᵑgo*
Also attested in Nāti, Avava, Nahavaq

b. ᴺ*maloku 'kava' > *bʷaloku (unexpected fortition of *m > *bʷ)
Neverver *ni-ᵐbloɣloɣ*
Neve'ei *ni-ᵐbuluxlux*
Naman (*meləx* – retains nasal)
Larevet *ᵐbelaxlax*
Also attested in Avava, Tirax, Nasarian, Nahavaq, Ninde

c. *bisu 'finger(nail), toe(nail)' > *sibu- (by metathesis)
Neverver *le-siᵐbo* 'middle finger'
Neve'ei *ni-ⁿsiᵐbi-*
Naman *ⁿsəᵐbə-*
Larevet *ⁿʧəbə-*
Also attested in Avava

d. *padran 'pandanus' > *nV-ⁿram[15]
Neverver *ne-ⁿram*
Neve'ei *ne-ⁿram*
Naman *ni-rum*
Larevet (*nə-max* < *pakum by metathesis)

[15] Elsewhere in Western Malekula (and indeed in Malekula more generally), reflexes of POc *poipoi 'pandanus sp.' (Ross 2008b: 329) > ᴺ*vaivo (Clark 2009: 213) are attested, for example *viu* in V'ënen Taut (Dodd 2014: 63) and *naa-viu* in Tape (Crowley 2006c: 28) (see also *nə-va* in the Northern Malua Bay language (Wessels 2013: 163) and *nə-vaiv* in the South-Eastern Uluveu language (Healey 2013: 149)). There are also a few reflexes of ᴺ*barovu (Clark 2009: 80) in Western Malekula languages, for example *ᵐbirip* in Avava (Crowley 2006d: 147) and *nə-ᵐbəxəp* in Ninde (Clark 2009: 80).

The four lexical irregularities in (56) point to an overlapping diffusion of innovations through a network of languages that are spoken in geographically contiguous (or at least nearby) areas of Malekula Island. The people within this network maintain contact with each other today, through intermarriage, trade, and other religious and cultural activities.

Further data collection, and a detailed lexical comparison between the languages of Malekula will be needed to identify the extent of these innovations and others as yet unknown, potentially clarifying the extent of interactions between speakers of the different languages (cf. François's (2014) comparative study of the Northern Vanuatu languages).

6. Conclusion

This investigation into Neverver consonants contributes to understandings of the history of the languages of Malekula, providing a companion piece to Lynch's (2019a) study of Naman, another Central-Western Malekula language. Neverver is distinguished from its close relatives primarily in the development of a contrastive prenasalised bilabial trill. The partial preservation of the voiceless bilabial plosive, along with the differential application of various other diachronic processes, have led to observable differences between Neverver on the one hand, and Naman and the other Central-Western Malekula languages on the other.

Neverver retains POC phonemes in reflexes of some etyma; in reflexes of other etyma, the same phonemes undergo change, indicating the "partial diffusion of an innovation" (Kalyan & François 2019: 169). Even the most conservative retentions, and the most regular of sound changes, conditioned or otherwise, are not without exception. Some of the diachronic processes observed in this study remain active in the synchronic lexicon of Neverver, witnessed in alternations between for example, prenasalised and plain consonants.

It seems unlikely that Malekula was settled by speakers of an invariant Proto-Malekula language, from which all changes can be traced. Rather, evidence from Neverver supports the understanding that the island was settled by speakers of several different dialects, with closer relationships between settlers of the northern, eastern and western regions of Malekula respectively. Among these dialects, more "conservative pockets" (cf. François 2011b: 190) have persisted, evidenced through the retention of ancestral phonemes in some Neverver lexemes that have elsewhere been lost or changed. Researching the languages of northern Vanuatu, François (2011b: 191) reached the conclusion that, "the only single ancestor uncontroversially shared by the modern languages of northern Vanuatu is Proto-Oceanic". Regarding the languages of Malekula in central Vanuatu, evidence from Neverver points to the same conclusion.

When first speculating on the relationship of the Vanuatu languages, Clark (1985: 203) commented that, "borrowing of both core vocabulary and grammatical features must be accepted as probably endemic, and capable of distorting the picture of purely genetic affiliations". With this in mind, and drawing on more recent conceptualisations of the possible relationships between languages through time (cf. Kalyan & François 2019), much work remains to be done to uncover further evidence of shared phonological and morphosyntactic features, as well as phonological and morphosyntactic innovations, to trace patterns of inheritance and diffusion through the Malekula languages.

References

Barbour, Julie. 2004–2024. Neverver corpus. Hamilton, New Zealand: University of Waikato. Unpublished research materials.

Barbour, Julie. 2012a. *A grammar of Neverver.* Boston, MA: De Gruyter Mouton

Barbour, Julie. 2012b. Nossorian an Neverver: Neverver word list. Hamilton, New Zealand: University of Waikato. Unpublished manuscript.

Barbour, Julie. 2013–2024. Larevet corpus. Hamilton, New Zealand: University of Waikato. Unpublished research materials.

Barbour, Julie. 2016. An account of possession in Larevet. *Language and Linguistics in Melanesia, 34*(1). 139–163.

Barbour, Julie, Gayleen Tarosa & Kanauhea Wessels. 2022. The language varieties of Malua Bay and Espiegle Bay (Tepërav), Malekula: A comparative study of consonants. *Language and Linguistics in Melanesia,* 40(1). 60–107.

Clark, Ross. 1985. Languages of North and Central Vanuatu: Groups, chains, clusters and waves. In Andrew Pawley & Lois Carrington (eds), *Austronesian linguistics at the 15th Pacific Science Congress,* 199–236. Canberra, Australia: Pacific Linguistics, C-88.

Clark, Ross. 2009. **Leo tuai. A comparative lexical study of North and Central Vanuatu languages.* Canberra, Australia: Pacific Linguistics, 603.

Crowley, Terry. 1985. Common noun phrase marking in Proto-Oceanic. *Oceanic Linguistics* 24. 135–193.

Crowley, Terry. 1991. Parallel development and shared innovation: Some developments in the Central Vanuatu Inflectional Morphology. *Oceanic Linguistics* 30(2). 179–222.

Crowley, Terry. 2002. Vinmavis. In John Lynch, Malcolm Ross & Terry Crowley (eds.), *The Oceanic languages*, 638–649. Richmond, England: Curzon.

Crowley, Terry. 2006a. John Lynch (ed.). *Naman: A vanishing language of Malakula (Vanuatu).* Canberra, Australia: Pacific Linguistics, 576.

Crowley, Terry. 2006b. John Lynch (ed.). *Nese: A diminishing speech variety of Northwest Malakula (Vanuatu)*. Canberra, Australia: Pacific Linguistics, 577.

Crowley, Terry. 2006c. John Lynch (ed.). *Tape: A declining language of Malakula (Vanuatu)* (Pacific Linguistics 575). Canberra, Australian: Pacific Linguistics, 575.

Crowley, Terry. 2006d. John Lynch (ed.). *The Avava language of Central Malakula (Vanuatu)*. Canberra, Australia: Pacific Linguistics, 574.

Crowley, Terry & Jill Musgrave. 2004. Nabusian Neve'ei: Neve'ei dictionary. Hamilton, New Zealand: University of Waikato. Unpublished manuscript.

Deacon, A. Bernard. 1934. Camilla H. Wedgwood (ed.). *Malekula, a vanishing people in the New Hebrides.* London: G. Routledge and Sons.

Dodd, Royce R. 2014. *V'ënen Taut: Grammatical Topics in The Big Nambas Language of Malekula.* Hamilton, New Zealand: University of Waikato MA thesis.

François, Alexandre. 2005. Unraveling the history of the vowels of the seventeen northern Vanuatu languages. *Oceanic Linguistics* 44(2). 443-504.

François, Alexandre. 2011a. Where *R they all? The geography and history of *R-loss in Southern Oceanic languages. *Oceanic Linguistics* 50. 140–197.

François, Alexandre. 2011b. Social ecology and language history in the northern Vanuatu linkage: a tale of divergence and convergence. *Journal of Historical Linguistics* 1(2). 175-246. https://doi.org/10.1075/jhl.1.2.03fra

François, Alexandre. 2014. Trees, waves and linkages: models of language diversification. In Claire Bowern & Bethwyn Evans (eds.), *The Routledge handbook of historical linguistics*, 161-189. London & New York: Routledge.

François, Alexandre, Michael Franjieh, Sébastien Lacrampe & Stefan Schnell. 2015. The exceptional linguistic density of Vanuatu. In Alexandre François, Michael Franjieh, Sébastien Lacrampe & Stefan Schnell (eds.), *The languages of Vanuatu: Unity and diversity*, 1–21. Asia-Canberra, Australia: Pacific Linguistics, A-PL 21.

Geraghty, Paul, 1990. Proto-Eastern Oceanic *R and its reflexes. In Jeremy H. C. S. Davidson (ed.), *Pacific Island languages: Essays in honour of G. B. Milner*, 51–93. London and Honolulu: School of Oriental and African Studies, University of London & University of Hawaii Press.

Grace, George W. 1969. A Proto-Oceanic finder list. *University of Hawaii Working Papers in Linguistics* 1(2). 39–84.

Healey, David. 2013. *A grammar of Maskelynes: the language of Uluveu Island, Vanuatu*. Port Vila, Vanuatu: University of the South Pacific PhD thesis.

Kalyan, Siva & Alexandre François. 2019. When the waves meet the trees: a response to Jacques and List. *Journal of Historical Linguistics* 9(1). 167-176.

Lichtenberk, Frantisek & Meredith Osmond. 1998. Food Preparation. In Malcolm Ross, Andrew Pawley & Meredith Osmond (eds.). *The lexicon of Proto Oceanic. Vol. 1: Material culture*, 143–171. Canberra, Australia: Pacific Linguistics, C-152.

Lynch, John. 1975. Oral/nasal alternation and the realis/irrealis distinction in Oceanic languages. *Oceanic Linguistics* 14(2). 87–99.

Lynch, John. 2005. Final Consonants in Remote Oceanic. *Oceanic Linguistics* 44. 90–112.

Lynch, John. 2009. Irregular sound change and the post-velars in some Malakula languages. In Alexander Adelaar and Andrew Pawley (eds.), *Austronesian historical linguistics and culture history: A festschrift for Bob Blust*, 57–72. Canberra, Australia: Pacific Linguistics, 601.

Lynch, John. 2014. Unexpected final vowel retention in Malakula. *Open Linguistics* 1. 1–16.

Lynch, John. 2016. Malakula internal subgrouping: phonological evidence. *Oceanic Linguistics* 55. 399–431.

Lynch, John. 2018. Final consonants and the status of Proto-North-Central Vanuatu. *Language & Linguistics in Melanesia* 36. 14–24.

Lynch, John. 2019a. The phonological history of Naman, as Western Malakula language. *Language & Linguistics in Melanesia* 37. 21–41.

Lynch, John. 2019b. The phonological history of Nese, a Northern Malakula language. *Language & Linguistics in Melanesia* 37. 61–82.

Lynch, John. 2020. The phonological history of Uripiv, an Eastern Malekula language. *Language & Linguistics in Melanesia* 38. 10–36.

Lynch, John., Malcolm Ross & Terry Crowley. 2002. *The Oceanic languages.* Richmond: Curzon.

Lynch, John & Terry Crowley. 2001. *Languages of Vanuatu: a new survey and bibliography.* Pacific Linguistics, 517.

Lynch, John & Terry Crowley. 2003. More reflexes of Proto-Oceanic *q in Vanuatu languages. *Oceanic Linguistics* 42(1). 233–238.

McKerras, Ross. 2001. *Uripiv*. Summer Institute of Linguistics, Port Vila, Vanuatu. Unpublished manuscript.

Moore, Alice. 2019. A grammar sketch of Uripiv. Hamilton, New Zealand: University of Waikato MA thesis.

Musgrave, Jill. 2007. *A grammar of Neve'ei, Vanuatu*. Canberra, Australia: Pacific Linguistics, 587.

Osmond, Meredith. 2016. *Health and disease.* In Malcolm Ross, Andrew Pawley & Meredith Osmond (eds.), *The lexicon of Proto Oceanic. The culture and environment of ancestral Oceanic society. Vol. 5: People: Body and mind,* 334-366. Canberra, Australia: Asia-Pacific Linguistics, A-PL 28.

Pawley, Andrew. 2011. Aquatic invertebrates. In Malcolm Ross, Andrew Pawley & Meredith Osmond. (eds.). 2011. *The lexicon of Proto Oceanic. Volume 4 – Animals,* 162-215. Canberra, Australia: Pacific Linguistics, 621.

Rangelov, Tihomir. 2020. A grammar of the Ahamb language (Vanuatu). Hamilton, New Zealand: University of Waikato PhD Thesis. https://hdl.handle.net/10289/14038

Rangelov, Tihomir, Mary Walworth & Julie Barbour. 2023. A multifaceted approach to understanding unexpected sound change: The bilabial trills of Vanuatu's Malekula Island. *Diachronica 40(3),* 384–432. https://doi.org/10.1075/dia.21051.ran

Ross, Malcolm. 1988. *Proto Oceanic and the Austronesian languages of western Melanesia*. Canberra, Australia: Pacific Linguistics, C-98.

Ross, Malcolm. 1996. Reconstructing food plant terms and associated terminologies in Proto Oceanic. In John Lynch and Fa'afo Pat (eds), *Oceanic studies: Proceedings of the first international conference on Oceanic linguistics,* 163–221. Canberra, Australia: Pacific Linguistics, C-133.

Ross, Malcolm. 2003. Time. In Malcolm Ross, Andrew Pawley & Meredith Osmond (eds.), *The lexicon of Proto Oceanic. Vol. 2: The physical environment,* 285–324. Canberra, Australia: Pacific Linguistics, 545.

Ross, Malcolm. 2008a. Wild plants of the coastal strand. In Malcolm Ross, Andrew Pawley & Meredith Osmond (eds.), *The lexicon of Proto Oceanic. Vol. 3: Plants,* 129-172. Canberra, Australia: Pacific Linguistics, 599.

Ross, Malcolm. 2008b. Nut and fruit trees. In Malcolm Ross, Andrew Pawley & Meredith Osmond (eds.), *The lexicon of Proto Oceanic. Vol. 3: Plants,* 311–353. Canberra, Australia: Pacific Linguistics, 599.

Ross, Malcolm. 2011. Proto-Oceanic *k^{w}. *Oceanic Linguistics* 50. 25–49.

Ross, Malcolm. 2016. Posture and movement. In Malcolm Ross, Andrew Pawley & Meredith Osmond (eds.), *The lexicon of Proto Oceanic. The culture and environment of ancestral Oceanic society. Vol. 5: People: Body and mind,* 367–456. Canberra, Australia: Pacific Linguistics.

Ross, Malcolm & Bethwyn Evans. 2008. The coconut palm. In Malcolm Ross, Andrew Pawley & Meredith Osmond (eds.), *The lexicon of Proto Oceanic. The culture and environment of ancestral Oceanic society. Vol. 3: Plants,* 355–387. Canberra, Australia: Pacific Linguistics, 599.

Ross, Malcolm & Meredith Osmond. 2016. Bodily conditions and activities. In Malcolm Ross, Andrew Pawley & Meredith Osmond (eds.), *The lexicon of Proto Oceanic. The culture and environment of ancestral Oceanic society. Vol. 5: People: Body and mind,* 209–333. Canberra, Australia: Pacific Linguistics.

Ross, Malcolm, Andrew Pawley & Meredith Osmond (eds.). 1998. *The lexicon of Proto Oceanic. Volume 1 – Material culture*. Canberra, Australia: Pacific Linguistics, C-152.

Ross, Malcolm, Andrew Pawley & Meredith Osmond (eds.). 2003. *The lexicon of Proto Oceanic. Volume 2 – The physical environment.* Canberra, Australia: Pacific Linguistics, 545.

Ross, Malcolm, Andrew Pawley & Meredith Osmond (eds.). 2008. *The lexicon of Proto Oceanic. Volume 3 – Plants*. Canberra, Australia: Pacific Linguistics, 599.

Ross, Malcolm, Andrew Pawley & Meredith Osmond. (eds.). 2011. *The lexicon of Proto Oceanic. Volume 4 – Animals.* Canberra, Australia: Pacific Linguistics, 621.

Ross, Malcolm, Andrew Pawley & Meredith Osmond. (eds.). 2016. *The lexicon of Proto Oceanic. Volume 5 – People: Body and mind*. Canberra, Australia: Asia-Pacific Linguistics, A-PL 28.

Ross, Malcolm, Andrew Pawley & Meredith Osmond. (eds.). 2023. *The lexicon of Proto Oceanic. Volume 6 – People: Society*. Canberra, Australia: Asia-Pacific Linguistics.

Tryon, Darrell T. 1972. The languages of the New Hebrides: A checklist and general survey. *Papers in the linguistics of Melanesia no. 3*, 43–84. Canberra, Australia: Pacific Linguistics.

Tryon, Darrell T. 1976. *New Hebrides languages: An internal classification.* Canberra, Australia: Pacific Linguistics, C-50.

Wessels, Kanauhea. 2013. Malua Bay: A description of the Malua Bay language (Malekula, Vanuatu). Hamilton, New Zealand: University of Waikato MA thesis.

Appendix

The identification of the following etyma of Neverver lexemes is attributed with thanks to students of LINGS301-23B *Research Apprenticeship*, at Te Whare Wānanga o Waikato, the University of Waikato, in Kirikiriroa Hamilton, Aotearoa New Zealand:

1. *bulut ‘stick something to something’ > *ni-^{m}ʙula-ɣa* ‘k.o. tree, berries can be squeezed to make glue when ripe, Cordia dichotoma’ (Hazaa Al Hatmi)
2. *daleʔo ‘neck, throat’ > *ni-^{n}dla-n*, *ne-^{n}dlaŋ* ‘neck’ (Mashhurakhon Askarova)
3. *d(r)am^{w}is-i- (VI), *d(r)am^{w}i(s) (VT) ‘lick, taste’ > *^{n}ram* (VT) ‘lick’ (Emma-Rose Gibney; Mashhurakhon Askarova)
4. *madraʔu (VI) ‘thirst’ > *^{n}rom^{n}rom* ‘be thirsty’ (by metathesis) (Mashhurakhon Askarova)
5. *pai ‘weave’ > *ni-pe-ian* ‘weaving’ (Hazaa Al Hatmi)

6. *paRa(ŋ) ‘molar tooth’ > *ni-liv-parpar* ‘back teeth’ (Mashhurakhon Askarova)
7. *paraʔ ‘spongy mass inside sprouting coconut’; possibly also ‘brain’ > *ne-^{m}baru-n* ‘1. brain, 2. plant shoots’ (Mashhurakhon Askarova)
8. *puaq ‘fruit’ > *ne-βa-n* (Aeryn Andis)
9. *qupan ‘grey hair’ > *nu-ɣuβar* ‘grey hair’ (Mashhurakhon Askarova)
10. *raga(q) ‘branch’ > *raŋa > *ne-rŋo-n-ɣa* ‘twig’ (Hazaa Al Hatmi)
11. *qapi-ŋa ‘armpit’ > ^{N}*ʔavi-ŋa > *no-ɣoβŋa-n* ‘armpit’ (Mashhurakhon Askarova; Thomas Clarke)
12. *sua ‘meet’ > *su* ‘meet’ (Aeryn Andis)
13. ^{N}*varas-i ‘step on’ > *βras* ‘trample’ (Aeryn Andis)