

The road to opacity:

Reflexes of Proto-Oceanic **-akin* in northern Vanuatu

Daniel Krauße^a – Alexandre François^{a,b}

^a LaTTiCe, CNRS, ENS-PSL & USN; ^b Australian National University

Abstract

This paper provides a systematic overview of the modern reflexes of the Proto-Oceanic applicative suffix **-akin* in the languages of northern Vanuatu. Our three focal languages are Hiw, Vurès, and Mwotlap, but data from neighboring languages are also used to demonstrate the historical development of **-akin* in the area. We describe five different development paths of **-akin*, namely (1) as a (semi-)productive applicative suffix; (2) as a non-productive suffix attaching to a verb, with recognizable yet irregular semantics; (3) as a non-productive suffix potentially linked to another root, yet with opaque semantics; (4) as a vestigial syllable in certain words, with no language-internal evidence of any suffixation process; and (5) as a preposition, through a process of degrammaticalization or debonding.

Keywords: applicatives, morphology, historical linguistics, Oceanic languages, Vanuatu languages

1 Introduction: Was POc **-akin* preserved in northern Vanuatu?

1.1 A well-known applicative suffix

A well-known morpheme of Proto-Oceanic (POc) is the verbal suffix **-akin*. It was initially reconstructed as **-aki[ni]* by Pawley (1973:120-131), who glossed it as ‘remote transitive’ (Pawley 1973:128).¹ Ross (1998:27) terms this suffix an ‘applicative’. Ross et al. (2016:23) propose to transcribe it as **-akin*, a convention we will follow throughout this paper.

Among the major works that have been specifically dedicated to reflexes of **-akin* in various Oceanic languages (e.g. Clark 1973, Harrison 1982, Ball 2008:318-377, Kikusawa 2012, Naitoro 2018), Evans’ (2003) monograph stands out, as she examines the whole Oceanic family and proposes a reconstruction for its shared ancestor Proto-Oceanic. Fine-tuning the earlier

¹The notation **-aki[ni]* captures the fact that the suffix must have taken the form **-aki* on intransitive verbs, but **-akini* on transitive ones (Clark 1973:565), the latter reflecting the combination of **-akin* with the transitivizer **-i*.

syntheses by Pawley or Harrison, Evans shows that this suffix, which she reconstructs as **-akin[i]*, had two sets of functions, namely causative and applicative; and that, when used as an applicative, **-akin[i]* would mark – depending on the verb’s meaning – such semantic roles as concomitant (e.g. ‘walk with <s.o., s.th.>’), stimulus (e.g. ‘cry for <s.o., s.th.>’), instrument (e.g. ‘chop with <s.th.>’), beneficiary (e.g. ‘cook for <s.o.>’), content (e.g. ‘speak about <s.o., s.th.>’) and product (e.g. ‘spit <s.th.>’) (Evans 2003:191-205).

The sort of derivation allowed by reflexes of **-akin* is illustrated in examples (1–3), in Manam (Western Oceanic), Kosraean (Micronesian) and Bauan Fijian (Central Pacific):

- | | | |
|-----|-----------------------|--------------------------------------|
| (1) | Manam | (Lichtenberk 1983:230) |
| | <i>wanana</i> | → <i>wanan-aʔ-</i> |
| | ‘wait’ | ‘wait for <s.th., s.o.>’ |
| | | |
| (2) | Kosraean | (Harrison 1982:190) |
| | <i>pwacr</i> | → <i>pwacr-kihn</i> |
| | ‘be happy’ | ‘be happy with <s.th., s.o.>’ |
| | | |
| (3) | Bauan Fijian | (Pawley 1973:120) |
| | <i>vana-i</i> | → <i>vana-taki</i> |
| | ‘shoot <s.th., s.o.>’ | ‘shoot with <s.th.>’ |

In (1) and (2), the reflex of **-akin* (Manam *-aʔ*, Kosraean *-kihn*) adds an argument to an intransitive verb, making it transitive. In (3), the cognate suffix *-taki* demotes the verb’s initial object and promotes instead a peripheral argument to the object position. In both cases, the suffix has a valency-altering function, whether to increase or to reshape it. This function is typical of applicatives cross-linguistically (Dixon & Aikhenvald 2000:13).

In addition to the applicative suffix proper, several works mention a preposition **(a)kini* of the same origin, and with similar functions (Pawley 1973:145-7, Evans 2003:205, Ross 2004:508, Naitoro 2018:172-184, 215-250).

The publications cited above tend to cite reflexes of **-akin* in various parts of the Oceanic family; but except for occasional mentions of Mota, NE Ambae or Tamambo, the languages of Vanuatu are seldom represented in these syntheses. The main reason is that, at the time of these early surveys, few languages of Vanuatu had yet been described in any depth. Sound change, which can be drastic in parts of Vanuatu, may also have made certain reflexes of **-akin* more difficult to detect than in more conservative areas of the Pacific. However, as more grammatical descriptions of Vanuatu languages have been published in the last decades, it has become evident that **-akin* has left traces in the archipelago, if only in the form of semi-productive morphemes. Several authors have explicitly pointed out that certain

grammatical devices, either verbal suffixes or prepositions, were likely reflexes of the POc applicative **-akin*.²

- the causative suffix *-tagi(ni)* of NE Ambae (Hyslop 2001:333),
- the transitive suffix *-ni* of Lewo (Early 2016:344),
- the inanimate transitive suffix *-ñ* of Anejoñ (Lynch 2000:85),
- the applicative suffix *-han-i* of Maskelynes (Healey 2013:229-232),
- the applicative suffix *-ikh* of Neverver (Barbour 2012:178),
- the suffix and preposition *ka* of Bierebo (Budd 2015),
- the preposition *hina* ~ *hini* of Tamambo (Jauncey 2011:235),
- the preposition *hini* ~ *(i)n(i)* of Araki (François 2002:159),
- the preposition *ki* of South Efate (Thieberger 2006: 217-220),
- the preposition *gin* of Suñwadia (Henri 2017:100)
- the oblique preposition *xini* of Tirax (Brotchie 2009:180).

In most cases, however, the connection between **-akin* and its modern reflexes is merely mentioned marginally in the context of larger grammatical descriptions. To our knowledge, no publications have yet been dedicated specifically to reflexes of **-akin* in Vanuatu.

1.2 The present study

1.2.1 The languages of northern Vanuatu

The aim of the present study is to investigate the development of **-akin* in the languages of northern Vanuatu, precisely in the 17 languages spoken in the Torres–Banks province (Figure 1). While the presence of modern reflexes of **-akin* in the area has been acknowledged in earlier works (François 2005a:482-483, 2019:350; Malau 2016:113, 156; Krauß 2021:239), it can be useful to survey the various grammatical functions they play, and their different degrees of productivity.

This study encompasses the 17 languages spoken in the Torres-Banks province of Vanuatu. Together, these languages form the “Torres–Banks linkage” (François 2011b),³ itself a subset of the broader North Central Vanuatu linkage (Clark 2009) within the Oceanic branch of the Austronesian language family. Publications on the area include the grammars of Mwotlap (François 2001), of Vera’a (Schnell 2011), of Vurës (Malau 2016); dictionaries of Mota (Codrington & Palmer 1896), Vurës (Malau 2021), Mwotlap (François 2023a); and numerous publications dedicated to various languages of the area, either in a descriptive, typological or historical perspective.

²This list only includes authors who explicitly point to **-akin*. It does not feature other authors who, like Crowley (2006:124, 158) for Naman, or Lacrampe (2014:309-310) for Lelepa, describe morphemes that are probably derived from **-akin*, but do not propose that link themselves. Note that Touati’s master’s thesis (2010) draws an explicit connection between POc **-akin[i]* and certain morphemes described by Crowley.

³For the internal genetic subgrouping of these languages, see François (2014, 2016).

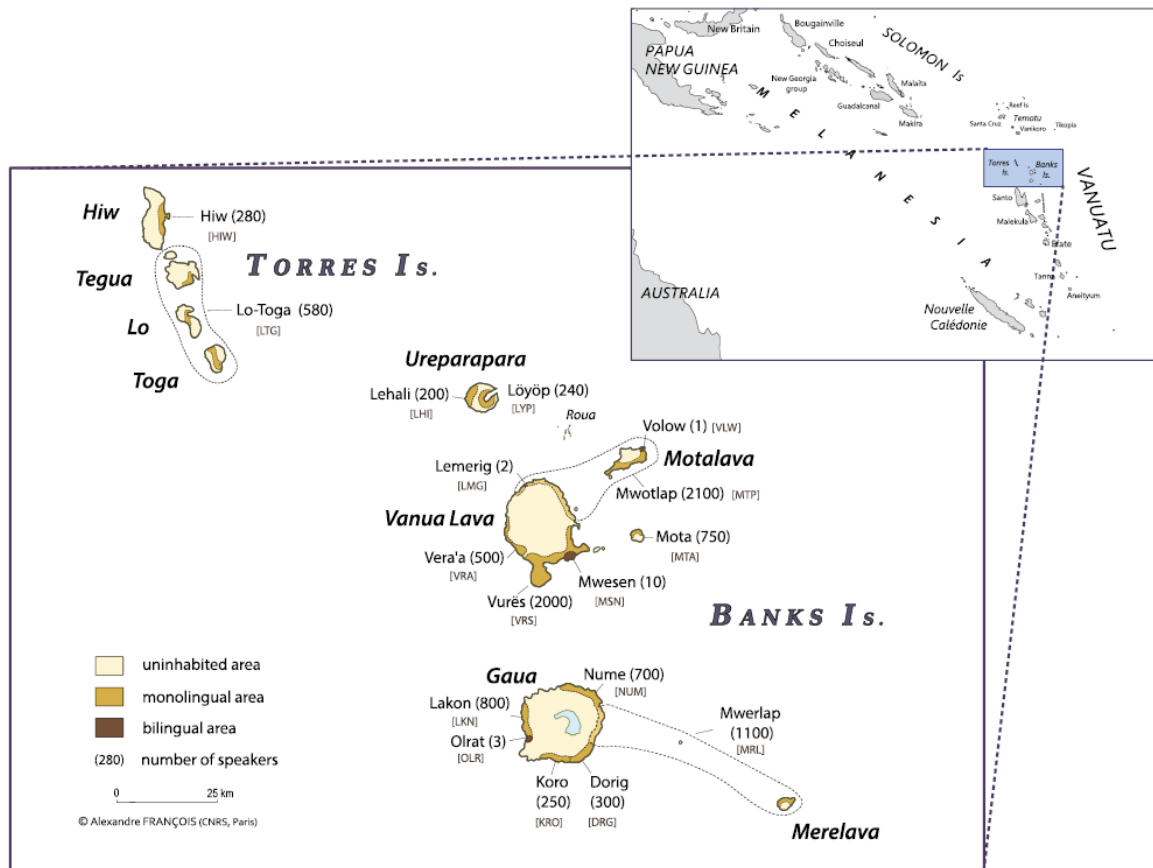


Fig. 1 – The languages of the Torres and Banks Islands, in northern Vanuatu (from François 2022)

Unless otherwise specified, we mainly draw on our own text corpora for the languages described in this study. We use ‘corpus’ here in the traditional sense referring to the entire collection of written and spoken material that we have had access to for this study. François’ total corpus consists of 4156 pages of handwritten notes, featuring 22 different languages. These field notes include: data elicited using a conversational questionnaire (François 2019); snippets of daily conversation heard during participant-observer immersion in each community; and finally, a corpus of texts – mostly narratives and sung poems – taken from 962 audio recordings (François 2023b, 104 hours in total), transcribed and annotated with the help of native speakers. Among these, 168 narratives were typed, resulting in an electronic text corpus of 250,000 words, with the largest corpora being in Mwotlap (99,300 words), Lo-Toga (21,300), Hiw (20,600) and Dorig (14,500). Most of those text corpora are freely accessible on the CNRS archive *Pangloss*.⁴ Whenever we cite a sentence from our online audio corpus, we will provide permanent links (DOI) to sentences in their original context.

The Vurès material mainly comes from fieldwork material (Krauß 2018) and consists of 37 hours of speech with a total of 52,000 words, transcribed and annotated with the help of

⁴François’ audio recordings are freely accessible at tiny.cc/Francois-archives. For the languages Hiw and Mwotlap, mentioned more specifically in this study, see tiny.cc/AF-ark_Hiw and tiny.cc/AF-ark_Mwotlap.

native speakers. Of these, elicitation targeted for verb constructions amounts to 24 hours, naturalistic data (stories, narratives, conversation) comprises four hours, and other recordings (prayers, songs) comprise nine. The entire corpus is accessible via the archive PARADISEC in the KD1 collection.⁵ Whenever we cite a sentence from this corpus, the item name is provided alongside. The present study has also benefited from examples with *-Ceg* in the Vurës grammar and dictionary by Malau (2016, 2021).

Regular sound correspondences for northern Vanuatu languages are exposed in François (2005a) for vowels, and François (2016:31) for consonants. When a linguistic innovation is shared by Torres and Banks languages together, it can be captured by positing an intermediate common ancestor called PTB “Proto-Torres–Banks” (François 2011b, 2016) – itself a descendant of Proto-Oceanic. Lists of PTB lexical reconstructions appear in François (2005a, 2013, 2016). When a reconstruction does not exist in our sources, we will occasionally propose a new PTB protoform, based on known regular correspondences.

1.2.2 *In search of applicatives in northern Vanuatu*

For a preliminary view of the reflexes of **-akin* in the Torres–Banks languages, consider examples (4a) and (4b) from Vurës. In (4a), the predicate of the clause is the intransitive (unergative) verb *bōr* ‘laugh’, which cannot take a direct object:

- (4a) Vurës⁶
līko rōrō a=bōr.
 now 3DU NSG:AOR=laugh
 ‘Now the two of them are laughing.’

By contrast, the suffix *-seg /-sɛʎ/* in (4b) permits the addition of the direct object *nē* ‘he’ (‘laugh at’):

- (4b) Vurës⁷
Rege bul-rō a=bōr-seg nē.
 people GROUP-two NSG:AOR=laugh-**APPL** 3SG
 ‘Those two are laughing **at** him.’ [function: cause/stimulus]

A similar contrast can be found in Mwotlap (5a–b), this time with a suffix *-veg /-βɛʎ/*. Just like in Vurës, the suffix works like an applicative, with the effect of making an intransitive verb transitive:

⁵Krauße’s corpus is accessible via <https://catalog.paradisec.org.au/collections/KD1>.

⁶Link to Vurës corpus: <https://catalog.paradisec.org.au/collections/KD1/items/VU20180811MOV> (04:115)

⁷Link to Vurës corpus: <https://catalog.paradisec.org.au/collections/KD1/items/VU20180811MOV> (01:59)

(5a) Mwotlap⁸

Tō kēy me-mtiy.

then 3PL PRF-sleep

'So they went to sleep.'

(5b) Mwotlap⁹Kē me-mtiy-**veg** ēgnō-n.3SG PRF-sleep-**APPL** spouse-3SG.P'She was sleeping **beside** her husband.'

[function: concomitant/comitative]

Judging by these two examples, it does appear that **-akin* has indeed survived in northern Vanuatu, with functions similar to its POc ancestor. But is it really the case that this applicative is still synchronically a suffix? Can it be added productively to various verbs to alter their valency? Or is it merely a vestigial element, which might have been a suffix historically, yet has become part of the verb's radical?

As we will see, the answer to this question depends on the language, and on the lexical verbs under consideration. On the one hand, the two Torres languages (Hiw, Lo-Toga) still have (semi-) productive reflexes of **-akin*, both as a suffix and as a preposition; on the other hand, the typical configuration across northern Vanuatu is to find vestigial traces of **-akin* that have been incorporated into the verb root. While all the languages in this study retain a reflex of **-akin* of some kind, the original applicative function has almost completely vanished in most languages. In fact, despite the impression given by the Vurës and Mwotlap examples (4) and (5) above, the ability to identify a suffix with an applicative function is really – at least for these languages – the exception rather than the rule. In the overwhelming majority of all corpus occurrences with a reflex of the suffix **-akin*, no clear function or semantics of this reflex can be established, even when there is a clear etymological relation between the suffixed and unsuffixed verb forms.

In sum, this study will highlight a cline of morphological erosion, from a productive suffix with a clear applicative function to becoming a residual part of lexical verbs. In other words, we will show how the former applicative **-akin* in northern Vanuatu has followed a road towards opacity.

The present study unfolds as follows. Section 2 will show how regular sound correspondences make it possible to establish with certainty the historical link between POc **-akin* and certain modern verbal endings. Section 3 will examine closely the reflexes of the verbal suffix **-akin* in three selected languages – Hiw, Vurës and Mwotlap – and classify their functions; in doing so, we will identify four different outcomes of the former applicative. Finally, section 4 will describe some prepositions descended from **akin*, both conservative and innovative ones.

⁸Link to Mwotlap corpus: <https://doi.org/10.24397/pangloss-0007414#S100>.

⁹Link to Mwotlap corpus: <https://doi.org/10.24397/pangloss-0002298#S54>.

2 Insights from historical phonology

The antecedent of POc **akin[i]* was the Proto-Austronesian (PAN) applicative **akən* with an irregular sound change (Evans 2003:203). In principle, the final vowel of POc **-akin* poses a problem for a direct succession of PAN **akən* as POc **akin*, since **-akən* would yield POc **-akon* (PAN **ə* regular developed into POc **o*). Pawley & Reid (1979:125, fn. 15) provide a hypothetical explanation of how to arrive at **-akin* from **-akən* via pronominal suffixes. It has also been argued that **akən* was present in PAN as a preposition, from which */-akan/* in the languages of Indonesia and */-akin/* in Proto-Oceanic developed (Pawley & Reid 1979:124-125, Starosta *et al.* 1981:402, Adelaar 1984:410).¹⁰

When it comes to the descendants of POc **-akin*, Evans (2003:231, 2010:181) has shown how the form had split early on – perhaps as early as POc – into two morphemes: a verbal suffix, and a preposition. This split is indeed confirmed in northern Vanuatu: knowledge of regular sound correspondences allows us to reconstruct, at the level of their shared ancestor Proto-Torres–Banks (PTB), two distinct proto-forms: an oblique preposition **yini*, and a verbal suffix **-áyɪ*. Both protoforms showed penultimate stress, which was the rule in PTB.

On the one hand, modern prepositions of the form */yin/* in a few languages [cf. §4.1] point to a PTB reconstruction **yini*, stressed on the penultimate syllable; this form **yini* is a regular reflex of POc **kini*, which is also reconstructable as a preposition at the level of POc (Pawley 1973:145). That form **kini*, in turn, results from the apheresis of POc **akin-i* – that is, the free form **akin* suffixed with the transitivizer suffix **-i* (Clark 1973, Evans 2003:190).

On the other hand, Torres–Banks languages point to a verb-final form PTB **-áyɪ*, stressed on */a/*: this is the regular reflex of POc **-akin*, with expected loss of the word-final consonant (François 2005a:479).¹¹ The first column of Table 1 shows the regular reflexes of **-akin* in the area's 17 languages, ranked geographically, from northwest to southeast (cf. map in §1.2.1). The middle column illustrates the reflexes of **-akin* with the verb 'listen', for which most languages in the area reflect a local etymon **roŋotáyɪ* (François 2005a:482) – itself a reflex of POc **roŋo(R)* 'hear, feel' suffixed with **-akin*.¹² Finally, the last column shows the regular outcome of sound change in a similar phonological environment: we choose the verb 'marry, be married', which reconstructs as PTB **láɪɪ* < POc **laki* (a form which does not involve the applicative suffix **-akin*).

¹⁰For a more detailed discussion on the development and the different semantics of POc **akin* (and its predecessor **-akən*), cf. Kikusawa (2012); for discussions on **-akən* in other Malayo-Polynesian languages, cf. Adelaar (1992: 147-148, 2011:347-348) and Zobel (2002:425).

¹¹Northern Vanuatu languages do show sporadic reflexes of POc **-i* (François 2005a:479-481); but none reflects the combination of **-akin* with *-i*, namely **-akin-i*.

¹²When a reflex of **roŋotáyɪ* is missing, we provide in brackets a reflex of another **-akin* reflex, namely **m^[w]amb^[w]u-sáyɪ* 'breathe, rest' (after François 2005a:482). For a more detailed discussion of the Vurës reflex of **m^[w]amb^[w]u-sáyɪ*, cf. §3.3.3.

Table 1 – Reflexes of **-akin* in the Torres and Banks languages, compared with sound change in similar environments

	POc <i>*-akin</i> > PTB <i>*-áyi</i>	POc <i>*ronjoR</i> 'hear' + <i>*-akin</i> > PTB <i>*ronotáyí</i> 'listen'	'marry' PTB <i>*láyi</i>
Hiw	/ɔy/ -og	ḡlonɔy̥ rōñtog	jɔy
Lo-Toga	/-ɛ/ -ë	ronɛ rōñtë	lɛy
Lehali	/-æ/ -ä	jenɬæ yēñtä	lɛ
Löyöp	/-ɪ/ -ē	jɔŋɬɪ yoñjē	lɪ
Volow	/-ɛy/ -eg	jɔŋɬɛy yoñteg	lɛy
Mwotlap	/-ɛy/ -eg	jɔŋɬɛy yoñteg	lɛy
Lemerig	/-ɛy/, /-ɪ/ -eg, -ē	(mœpsɪ) (mēpsē)	lɛy
Vera'a	/-a/, /-ɛ/ -a, -e	ron ⁿ da roñda	lɛy
Vurës	/-ɛy/ -eg	ronɬɛy rōñteg	lɛy
Mwesen	/-ɛ/ -e	ronɛ roñte	lɛy
Mota	/-ay/ -ag	ronotay roñotag	lay
Nume	/-ɛ/ -e	ronɔɛ roñote	lɛy
Dorig	/-a:y/, /-ɪy/ -āg, -ēg	(ma: ^m bsɪy) (mābsēg)	la:y
Koro	/-ɛay/ -āg	(mɛmsɛay) (mɛmsäg)	lɛay
Olrat	/-a:/ -aa	ronɬa: roñtaa	la:
Lakon	/-æy/ -āg	ronɬæy roñtäg	læy
Mwerlap	/-a/ -a	ronɬa roñta	lɛy

A major sound change in the area (François 2005a) was a process of syllabic reduction, whereby all sequences of two open syllables **CVCV* (with penultimate stress) were regularly reduced to a closed syllable **CVC*. That reduction was accompanied by a regular process of umlaut or metaphony, which was different across languages but mostly regular within each language: e.g., **-áCi* regularly became *-ɛC* in Lo-Toga, Mwesen and Mwotlap, but it is reflected as **-ɔC* in Hiw, as **-a:C* (with long /a/) in Dorig, etc. Some languages show more than one regular reflex for **-áCi*: e.g. in Vera'a it is /a/ or /ɛ/; in Vurës /ɛ/ or /œ/.¹³

Besides the change to the stressed vowel, all languages show a regular change POc **k* > **y̥*. In word-final contexts, this velar constrictive /y̥/ optionally devoices to [x] in Mota or Lemerig, and regularly lenites to an approximant [ɰ] in other languages: e.g. Hiw *yog* 'marry', phonologically /jɔy/, usually surfaces as [jɔɰ] (François 2010b:396). This lenition of /y̥/ has gone further in certain languages, as it was regularly lost in word-final position in languages such as Lehali or Löyöp (François 2016:31) – with compensatory lengthening in the case of Olrat (François 2005a:462). As the comparison with **láyi* shows, the deletion of /y̥/ has been even more frequent in the case of the applicative **-áCi*. In sum, the proto-suffix **-akin* has

¹³In Lehali, the regular outcome of **-áCi* is /æ/ (François 2005a:490): e.g. POc **kani* > 'eat' /yæn/, **tani* > /tæn/ 'cry', **api* > /æp/ 'fire'. The verb 'marry' (**laki* > /lɛ/) is one of the rare exceptions to this rule.

been reduced to a sequence -VC in some languages (> **-áyí* > -ɔʏ, -ɛʏ, -ɪʏ, -æʏ, -aʏ), and to a mere vowel -V in others (> **-áyí* > -a, -a:, -æ, -ɛ, -ɪ).¹⁴

Modern reflexes of the suffix **-akin* are preceded by a consonant C, which is known as the thematic consonant (Evans 2003:207-230, 2010:185-190). In some cases, the consonant reflects the etymon's final consonant, which was exceptionally preserved thanks to the suffix's vowel. For example, the POc root **si[n,ŋ]aR* 'shine' (Osmond 2003:163) preserved its final **R* when followed by a suffix, whether it was the transitivizer **-i* or the applicative **-akin* (François 2011a:151):

- (6a) POc **si[n,ŋ]aR* 'shine' + **-i* > **siŋár-i*
 > MTA *siñar*, VRS *siñer* 'illuminate'
- (6b) POc **si[n,ŋ]aR* 'shine' + **-akin* > **siŋar-áyí*
 > MTA *siñarag*, MTP *hiñyeg* 'illuminate'

Yet in many cases, the thematic consonant is non-etymological. For example, even though the POc root **ronjoR* 'hear, feel' is reconstructed with a final **R*, the suffixed form **ronjotáyí* shows a thematic consonant /t/, of unknown origin. Non-etymological thematic consonants are not specific to northern Vanuatu and have been discussed for various parts of the Oceanic family (Evans 2003:213-216, 2010:186; Naitoro 2018:251-286): see, for example, (3) in §1.1, where **-akin* was reflected as /-taki/ with a non-etymological consonant. Ross (1998:27) observes that the thematic consonant in Boumaa Fijian is "apparently a lexically determined choice between -t- and -v-". For the languages of northern Vanuatu, no such preference for one or another thematic consonant can be established;¹⁵ that said, we'll see that Hiw tends to choose /ŋ/ or /β/ for its most productive suffix [§3.2], and that Mota and Mwotlap generalized /β/ as they developed new prepositions [§4.2].

The following sections will focus on the semantics rather than the morphology. Occasionally, when discussing the etymology of certain forms, we will point to reconstructions in Proto-Torres-Banks (cf. François 2005a:492-502), Proto-North-Central-Vanuatu (Clark 2009), or Proto-Oceanic (Ross, Pawley & Osmond 1998, 2003, 2011, 2016).

¹⁴From now on, all forms will be presented in the languages' orthographies: e.g. MTP *mōkheg* for /ŋ mʷɔkhɛʏ/ 'breathe'. An appendix provides notes on the orthographies of Torres-Banks languages.

¹⁵Our pool of 102 lexemes with -Ceg in Mwotlap shows the following sounds as thematic consonants, here indicated with the number of occurrences: -t- (21), -y- (19), -v- (17), -l- (10), -h- (9), -m̃- (9), -g- (6), -s- (3), -b- (2), -ñ- (2), -w- (2), -d- (1), and -n- (1). The distribution of the thematic consonant in the 63 Vurès lexemes with -Ceg is different: -s- (18), -r- (14), -v- (6), -l- (6), -g- (5), -m̃- (4), -t- (4), -n- (3), -ñ- (2) and -w- (1). For the 47 Hiw lexemes with -Cog, the thematic consonants are distributed as follows: -v- (15), -f̃- (12), -ñ- (9), -t- (7), -n- (2), -s- (1) and -y- (1). Note that Mwotlap -y- reflects POc **r/R*, whereas Hiw -y- reflects POc **l*.

3 The different outcomes of the former applicative

3.1 Four different scenarios

All Torres–Banks languages have preserved reflexes of PTB **-áyi*, in the form of a verb-final syllable that is recurrent in our corpora. Many verbs of Mota end in /-ay/, many verbs of Mwotlap or Vurës end in /-ey/, and so on and so forth; but what is the exact status of those verb-final syllables? Can they still be analyzed as suffixes everywhere?

This question cannot be answered easily and needs to be assessed on a case-by-case basis: language after language, and (for each language) verb after verb. Ultimately, we identify four different types of configurations across modern Torres–Banks languages:

1. The reflex of **-akin* is a (semi-) productive applicative suffix, with a transparent function and regular semantics.
2. The reflex of **-akin* is a non-productive suffix attached to an existing verb in the language, with a semantic function that is transparent yet irregular.
3. The reflex of **-akin* is a syllable (a former suffix) attached to an existing verb in the language, with a semantic function that is now opaque.
4. The reflex of **-akin* is a vestigial syllable petrified on a verb, with no corresponding simple verb in synchrony. (The underlying verb root can sometimes be reconstructed through language comparison, but not always.)

Scenario 1 is very rare: it happens only in a few languages and does not even cover all reflexes of **-akin* in those languages. Scenarios 2 and 3 require careful analysis to determine whether a verb with and without the suffix **-akin* is attested, as they rarely – if ever – occur together in spontaneous speech; yet, these two scenarios are relatively frequent. While #2 is still compatible with an analysis in terms of suffixation, this is much more challenging for #3. The most common scenario is #4: these are all the cases where we can presume the presence of former **-akin* due to the shape of a modern reflex, yet there is no language-internal argument to identify any verb-final suffix.

For every language, the typical case is to have verbs that illustrate several of these outcomes: that is, even a language with some (semi-) productive use of **-akin* reflexes (Scenario 1) will also have a number of verbs that pertain to scenarios 2, 3 or 4.

The next subsections discuss the detailed development of **-akin* in three focal languages, namely Hiw, Vurës and Mwotlap.

3.2 -Cog in Hiw

Hiw, the northernmost language of Vanuatu, reflects **-akin* as a verb-final syllable *-(C)og*. If we exclude nouns – which are not concerned by **-akin* reflexes – our corpus includes a total of 47 lexemes showing that ending.

3.2.1 Scenario #1: A semi-productive applicative

At one end of the spectrum, Hiw has many verbs ending in *-(C)og*, which not only exist alongside their shorter counterpart, but involve a regular semantic contribution with respect to that plain verb. This *-(C)og* element, which can combine with different sorts of verbs, therefore still qualifies as a productive suffix. It surfaces as *-nog* for certain verbs, but most frequently as *-vog*; we will use the latter as its citation form.

The main functions of the *-vog* suffix are typical of an applicative. When *-vog* is suffixed to an intransitive verb, it makes it transitive. For example, a motion verb (e.g. *n̄wuyē* ‘return’) can combine with *-vog* to encode *caused accompanied motion*¹⁶ (e.g. ‘return with <s.th.>; bring <s.th.> on the way back’):

- (7) Hiw¹⁷
Oye ne pēy’ i gengon, ne n̄wuyē-vog.
 take ART basket of food 3SG return-APPL
 ‘He seized the food basket and **brought** it back. [liter. ‘return-with (it)]’
- (8) Hiw¹⁸
Sise yop ne wēt alē ike sawe-vog ne temēt.
 3PL pound ART (music) then 2SG dance-APPL ART headdress
 ‘They will play the *n̄wēt* drums, and you will dance **with** your headdress on.’
- (9) Hiw¹⁹
Sōgē voyi-vog n̄wuy’ ye me, tevog n̄wuy’ ye wuyog me.
 pig run:PL-APPL return DOM:3SG HITH carry return DOM:3SG again HITH
 ‘The pigs would **carry** him back, **take** him back to his place.’
 [liter. ‘run-with back him’]

Note that the suffixed form *voyi-vog* ‘run-with’ behaves like any transitive verb, including in its ability to be followed by a serialized verb (*n̄wuyē* ‘return’); the pronoun *ye*²⁰ – syntactically the object of the first verb *voyi-vog* – follows the whole serial construction, in the same way as in the second clause, *tevog n̄wuy’ ye* (liter. ‘carry back him’).²¹

¹⁶For a typological survey of *caused accompanied motion* events such as ‘bring’ or ‘take’, see Margetts *et al.* (2022).

¹⁷Link to Hiw corpus: <https://doi.org/10.24397/pangloss-0003266#S42>.

¹⁸Link to Hiw corpus: <https://doi.org/10.24397/pangloss-0003252#S62>.

¹⁹Link to Hiw corpus: <https://doi.org/10.24397/pangloss-0003252#S94>.

²⁰The form *ye* /jə/ of Hiw results from the coalescence of an accusative marker *i* glossed DOM (‘differential object marking’), used only with human objects (François 2019:343), and a 3sg object suffix *-e* /ə/: *i* + *-e* → *ye*.

²¹For an overview of verb serialization in Hiw, see François (2010a:511, 2017:311).

In fact, this verb *tevog*, glossed ‘carry <s.th.>’ in (11), is also a case of the applicative *-vog*, suffixed to the verb *tō* ‘go_{SG}, walk (singular or dual subject)’.²² Its peculiarity is to be the only case in Hiw of an applicative where the verb radical has altered its phonological shape: compare *tō* /to/ < **toa* with *tevog* /təβɔɣ/ < **toa-βáyɪ*. Despite its non-predictable phonological shape, *tevog* still behaves synchronically like an applicativized form of *tō*, insofar as it inherits from it the property of being exclusively used with singular (or dual) subjects. Just like *tō* ‘go_{SG}’ contrasts with *vën* ‘go_{PL}’, *tevog* contrasts with *vënnōg*:

- *tevog* ‘go_{SG} with’ = [1 or 2 agents] ‘carry <s.th.>’
- *vënnōg* ‘go_{PL} with’ = [≥3 agents] ‘carry <s.th.>’

(10) Hiw²³

*Tom ike peon at w̄rog, sise vën-**nōg** i-ke iy.*
 if 2SG FUT live through 3PL go:PL-APPL DOM-2SG inside

‘If you manage to survive (the ordeal), they will **carry** you inside (your house).’

Verbal number in Hiw normally works on an absolutive basis, i.e. indexes the number of the object of transitive verbs. However, applicatives are an exception to this rule: they keep indexing the number of their subject, in line with the simple (intransitive) verbs they are derived from (François 2019:350). This is evidence that the process of applicative suffixation is still perceived, in synchrony, as a morphological operation, which inherits the semantic properties of its underlying verb. The applicative here is not petrified or vestigial, it is quite transparent in its mechanism.

While the applicative *-vog* is frequently suffixed to motion verbs to encode events of *caused accompanied motion* such as (7)-(10), it can also attach to static verbs:

(11) Hiw²⁴

*Se toge-**vog** tañwöy ne togekëse.*
 3pl stay:PL-APPL just ART game

‘They were just playing their games.’ [*liter.* ‘staying **with** their games’]

Rather than *caused accompanied motion* (CAM) of the type ‘go with’, such cases are better described in terms of *stative accompaniment*, of the type ‘be with’ (cf. Schnell 2022).

When the plain (unsuffixed) verb is already transitive, the applicative can modify the verb’s object, effectively promoting an oblique participant into the object slot. Thus, in a way

²²Together with its neighbor Lo-Toga, Hiw has developed a rich system of “verbal number” encoded by suppletion (François 2019). It has 33 pairs of lexical verbs, which contrast in the number of their subject or their object. Even though the contrast is between “non-plural” (singular, dual) and “plural”, for the sake of simplicity we will gloss these verbs as “SG” vs. “PL”. For example, *vëyag* ‘run:SG’, used with a singular or dual subject, contrasts with *voyi* ‘run:PL’ for more than two participants – cf. ex. (9) and Table 2.

²³Link to Hiw corpus: <https://doi.org/10.24397/pangloss-0003252#S62>.

²⁴Reference in Hiw corpus: Hiw.Coconut.09.

reminiscent of the Fijian example (3) [§1.1], Hiw contrasts *kaṛe* ‘shoot <s.o.>’ with *kaṛe-ṇog* ‘shoot <an arrow>’:

(12) Hiw²⁵

Meṛavtit kaṛe ne quṛot taṇwuy.

(hero) shoot ART flying.fox ten

‘Megravtit shot ten flying-foxes.’

(13) Hiw²⁶

Noke nēne on kaṛe-ṇog teṇwog ne mesoṛ=ekye!

1SG DEM SBJV shoot-APPL first ART arrow=1SG.P

‘Let me be the first to shoot (with) my arrow!’

Table 2 recapitulates the most prominent cases, in our Hiw corpus, of the *-vog* applicative, when it involves a semantic derivation that is regular and predictable. Note that *caused motion* is here short for *caused accompanied motion* (Margetts *et al.* 2022).

Table 2 – Hiw verbs showing the applicative suffix *-Cog*, with regular semantics

plain V	suffixed V	semantic type
<i>tō</i> ‘go _{SG} ’	<i>tevog</i> ‘go _{SG} with, carry’	caused motion
<i>vēn</i> ‘go _{PL} ’	<i>vēn-ṇog</i> ‘go _{PL} with, carry’	caused motion
<i>vēyag</i> ‘run _{SG} ’	<i>vēyag-vog</i> ‘run _{SG} with <s.th.>’	caused motion
<i>voyi</i> ‘run _{PL} ’	<i>voyi-vog</i> ‘run _{PL} with <s.th.>’	caused motion
<i>ṇwuye</i> ‘return’	<i>ṇwuye-vog</i> ‘return with, bring back’	caused motion
<i>vēn</i> ‘climb’	<i>vēn-ṇog</i> ‘climb with, carry up’	caused motion
<i>ōy</i> ‘slide’	<i>ōy-vog</i> ‘surf <the waves>’	caused motion
<i>yōy</i> ‘stay _{SG} ’	<i>yōy-vog</i> ‘stay _{SG} with, have <s.th.>’	static accompaniment
<i>toge</i> ‘stay _{PL} ’	<i>toge-vog</i> ‘stay _{PL} with, have <s.th.>’	static accompaniment
<i>sesu</i> ‘bathe’	<i>sesu-vog</i> ‘bathe with <clothes+> on’	static accompaniment
<i>sawe</i> ‘dance’	<i>sawe-vog</i> ‘dance with <s.th.> on’	static accompaniment
<i>kēṛē</i> ‘shout (deep)’	<i>kēṛē-vog</i> ‘send signal for <dance>’	purposive
<i>eye</i> ‘shout (high)’	<i>eye-vog</i> ‘send signal for <dance>’	purposive
<i>kaṛe</i> ‘shoot <s.th., s.o.>’	<i>kaṛe-ṇog</i> ‘shoot <arrow>’	instrumental
<i>soṛ</i> ‘spear, poke <s.th.>’	<i>soṛ-ṇog</i> ‘poke with <finger>’	instrumental

²⁵Link to Hiw corpus: <https://doi.org/10.24397/pangloss-0003258#S3>.

²⁶Link to Hiw corpus: <https://doi.org/10.24397/pangloss-0003256#S198>.

Hiw's neighbor Lo-Toga has also preserved the *-akin applicative in similar contexts, in the form of a suffix *-gë* /-ʁε/ or *-vë* /-βε/: e.g. *vën* 'go' → *vën-gë* 'go with, take away'; *toge* 'stay' → *toge-vë* 'stay with' (François 2005:482–3).

(14) Lo-Toga²⁷

Nihe ge vin. Ni vin-gë ne megole.
 3PL PL:AO climb 3SG:AO climb-APPL ART child
 'They all began climbing; she was climbing **with** her baby.'

(15) Lo-Toga²⁸

Hōr qihe ne lite, ōr si-vë ne lite me.
 3DU break ART firewood 3DU:AO walk-APPL ART firewood HITH
 'They went to cut firewood and **brought** it home.'
 [*liter.* 'walk-with']

3.2.2 Scenario #2: Transparent yet irregular semantics

While the verbs listed in Table 2 illustrate the most transparent uses of the applicative, it is important to note that many verbs are more difficult to analyze semantically. These verbs can still be seen, in modern Hiw, as bearing a suffix *-(C)og*; except, the semantic contribution of that suffix is less predictable. Table 3 cites several verb pairs involving such "irregular semantics".

Table 3 – Hiw: Verbs suffixed with the applicative suffix *-(C)og*, with irregular semantics

plain V	suffixed V	
<i>tō</i> 'go _{SG} '	<i>teñog</i> 'go _{SG} away from <s.o.>'	abitive
<i>vën</i> 'go _{PL} '	<i>vënñog</i> 'go _{PL} away from <s.o.>'	abitive
<i>giy</i> 'dig out <s.th.>'	<i>giyñog</i> 'dig <hole>'	diathetic change
<i>soṛ</i> 'poke <s.th.>'	<i>soṛñog</i> 'poke <fingers> somewhere'	diathetic change
<i>yañwe</i> 'hit <s.th.> w. stick'	<i>yañwetog</i> 'smash <s.th.> on ground'	diathetic change
<i>qēt</i> [SBJ:PL] 'die'	<i>qētñog</i> [OBJ:PL] 'kill'	causative
<i>ṛote</i> [OBJ:PL] 'beat'	<i>ṛotevog</i> [OBJ:PL] 'beat'	(no change)
<i>ṛōñ</i> 'hear, feel'	<i>ṛōñtog</i> 'listen, attend to'	intentionality
<i>yë</i> 'see, look'	<i>yëvog</i> 'watch, observe'	intentionality

²⁷Link to Lo-Toga corpus: <https://doi.org/10.24397/pangloss-0003291#S34>.

²⁸Link to Lo-Toga corpus: <https://doi.org/10.24397/pangloss-0003285#S13>.

Table 3 suggests several semantic subregularities:

- *teṛog* and *vënṛog* are clearly derived from the motion verbs *tō* and *vën* we discussed earlier (respectively, singular vs. plural subject). Here, the meaning of the former applicative, which we propose to call ‘abitive’ (Lat. *ab-ire* ‘move away’), does correspond to some sort of oblique relation (‘walk away from <s.o.>, leave <s.o.>’); yet this appears to be an isolated sense taken here by the *-(C)og* suffix (François 2019:350);²⁹
- *qēt-ṛnog* ‘kill <many people>, massacre’ is the causative counterpart of *qēt* ‘<many people> die’;³⁰
- three verbs (*giyṇog*, *soṛṇog* and *yaṇwetog*) illustrate a semantic shift which we’ll propose to describe as a change in (secondary) diathesis of certain action verbs [see §3.4.2 for Mwotlap]; but the exact meaning is here is difficult to predict;³¹
- *ṛōṇ-tog* and *yë-vog* involve agentivity and intentionality of their subject (‘listen’; ‘observe’), compared with the non-agentive simple verbs *ṛōṇ* (‘hear’) and *yë* (‘see, look’);
- Some pairs appear to be synonymous, with no clear change in meaning or in valency: e.g. *ṛote* = *ṛotevog* ‘beat <plural object>’; *giy* = *giyṇog* ‘dig’.

Transparent as they may be, these subregularities are often confined to just one or two verbal pairs and can hardly be generalized to the applicative suffix as a whole. All these examples pertain to our scenario #2: these are cases when the reflex of **-akin* does attach to an existing verb, yet involves an ad hoc semantic contribution, which couldn’t really be attributed to a regular morpheme. If it is still to be analyzed as a suffix, it is one whose semantic contribution is not productive anymore, but vestigial.

Incidentally, it may not be a coincidence that the vestigial suffixes involve thematic consonants (/ŋ, β, ʷ, t/) that are more diverse than the two (/ŋ, β/) associated with the more productive occurrences of the applicative suffix [Table 2].

3.2.3 Scenario #3: Opaque semantics

Table 4 illustrates some pairs that truly are semantically opaque – to such an extent that it is even doubtful whether the two phonologically similar verbs are in fact related at all. For example, *oyetog* ‘await <s.th., s.o.>’ could possibly result – phonologically speaking – from an extension of *oye* ‘take <s.th.>’, but the meaning is unclear.

²⁹Naitoro (2018:170-171) identifies several languages from the Makira subgroup (Solomon Islands) where reflexes of **-akin* encode exactly the meaning ‘(go...) away from’. But while that meaning seems to be areally frequent in the Makira area, in Hiw it survives only in this pair of verbs *teṛog*, *vënṛog*, and nowhere else – to our knowledge – in the Torres–Banks languages. Mwotlap, for example, encodes the abitive meaning using a serial construction: see (38) in §3.4.1 below.

³⁰While the causative function of **-akin* has been identified in several Oceanic languages (Evans 2003:201-202), this meaning is only vestigial in Hiw, being unique to the pair *qēt-qētṛnog*.

³¹For a presentation of “secondary diathesis” of bivalent verbs, cf. Lemaréchal (1989:199-241).

Table 4 – Hiw: Potential verb pairs involving a former applicative, with dubious semantic link

plain V		suffixed V	
<i>ta</i>	'do, make'	<i>tavog</i>	'rock <a baby>'
<i>oye</i>	'take <s.th.>'	<i>oyetog</i>	'await <s.th., s.o.>'
<i>mok</i>	'put down <s.th.>'	<i>moketog</i>	'let go, give up <s.th.>'

If it is the case that *tavog* 'rock <a baby>' is in fact unrelated to the verb *ta* 'do, make', then this *tavog* could well fall in the Scenario #4 – namely, verbs that end in -(C)og, but which might not even include a reflex of *-akin after all.

3.2.4 Scenario #4: A vestigial syllable

As a matter of fact, many verbs ending in -(C)og really pertain to scenario 4. Their -(C)og syllable has become simply part of a modern lexeme, with no corresponding shorter verb in the language, and no clear etymology:

- (16) Hiw: verbs ending in -(C)og with no language-internal etymology

rēptog 'near, close'; *sanog* 'give birth to'; *tegtegagnog* 'lie, tell lies'; *p̄rog* 'stow <many things>'; *wōtog* 'throw away <one thing>', *t̄rog* 'throw away <many things>'; *tōw̄rog* 'char <s.th.> on fire'; *v̄eyenog* 'mix, blend [intr.]'; *vit̄rog* 'cover with <leaves>'; *wsog* 'pull, pull off <s.th.>'; *wunog* 'carry <s.th.> on head'; *yañevog* 'hide <s.th.>'; *yiñetog* 'not know'; *yiqerog* 'pour out, throw away'.

To these verbs, one may add a list of postverbs – i.e., postverbal modifiers, which commonly originate in former (serialized) verbs (François 2017:317):

- (17) Hiw: postverbs (possibly from earlier verbs) ending in -(C)og with no language-internal etymology: *teñwog* '(do) first'; *tērog₁* '(do) firmly'; *tērog₂* '(do) tentatively'; *vērog* '(do) also'; *ptog* '(take) off, away'; *weyog* '(do) again'; *w̄rog* 'through'; *wūrog* '(do) well'.

The words in (16–17) may or may not contain a reflex of *-akin: this cannot be assessed, at least not language-internally. However, language comparison can sometimes help us identify the lost root and ascertain that we are well dealing with a former applicative – cf. Table 5.

Table 5 – Hiw: Vestigial reflexes of the former applicative, revealed by language comparison

plain V	etymology	cognates
<i>yiñetog</i>	'not know'	< *liŋataɣi MTA <i>liña</i> ~ <i>luña</i> 'be out of sight' cf. MTP <i>lēnteg</i> 'not know'
<i>yañevog</i>	'hide <s.th.>'	< *li[u ²]ŋa-βaɣi (irregular V) MTA <i>liña</i> ~ <i>luña</i> 'be out of sight' cf. MTA <i>luñavag</i> , MTP <i>lōñveg</i> 'hide'
<i>yiqerog</i>	'pour out <s.th.>'	< *li[w ²]o-raɣi (irregular C) MTA <i>liwo</i> 'pour out', <i>liworag</i> 'pour out quickly' cf. MTP <i>luwyeg</i> , LYP <i>lyewyē</i> 'pour out'
<i>v̄eyenog</i>	'mix, blend'	< *βalo-ŋaɣi MTA <i>valorlor</i> 'be mixed' < <i>va-</i> + <i>lor</i>

plain V		etymology	cognates
<i>wōtog</i>	‘throw away’	< * <i>wut-ayi</i>	VRS <i>wōt</i> ‘throw’, cf. LTG <i>wutē</i> ‘throw away’
<i>rēptog</i>	‘near, close’	< * <i>riβit-ayi</i>	LTG <i>revtē</i> , VRS <i>rivteg</i> , MTA <i>rivtag</i> < PNCV * <i>rivita</i> ‘near’
<i>tegtegagnog</i>	‘lie, tell lies’	< * <i>[ta]yayan-ayi</i>	cf. MTA <i>gaganag</i> ‘show, tell’, VRS <i>gagneg</i> ‘tell’
<i>teṛog</i>	‘(do) firmly’	< * <i>taur-ayi</i>	MTA <i>taur</i> , MTP <i>tēy</i> ‘hold’ < PTB * <i>tauri</i> ‘hold in o.’s hands’

3.3 -Ceg in Vurës

The modern reflex of the suffix *-akin in Vurës is -Ceg /Cɛy/. Unlike Hiw, Vurës does not have a productive applicative suffix by which a common verb like *tog* ‘stay’ could be augmented as **togveg* with the intended meaning ‘stay with’: there is no such verb in Vurës. In some cases, we may find a pair of a base verb and a verb suffixed in -Ceg, but cases of a transparent semantic relation (Scenario #1) – e.g. *ōn* ‘lie’ vs. *ōnveg* ‘lie near’ – are the exception rather than the rule. In a few cases, we can establish a connection between a base verb and a verb suffixed with -Ceg, but the effect of the suffix -Ceg is irregular or unexpected (Scenario #2), e.g. *var* ‘step on <s.th., s.o.>’ vs. *varseg* ‘stand firmly on <s.th., s.o.>’. Most often, the relationship between the suffixed and the unsuffixed form is rather opaque (Scenario #3), e.g. *van* ‘go’ vs. *vangeg* ‘put <s.th., s.o.> in line’ (likely to originate from the idea of ‘cause to go’). In the majority of all occurrences with -Ceg, no base verb is attested in the contemporary language (Scenario #4).

In her grammar of Vurës, Malau (2016:113) only lists 15 verb forms ending in -Ceg, along with their identifiable bare root. While she terms this an “applicative suffix”, she explains having found “no consistency in the semantic role of the object of the derived transitive”; she concludes by claiming that “it is not possible to generalize about the semantic role of the introduced O argument as it differs for each verb” (Malau 2016:156). She further explains that the suffix also occurs on a small number of transitive verbs, which have no underived intransitive counterpart (Malau 2016:113).

The verbal system of Vurës is also discussed in Krauß (2021:239). He also treats -Ceg in Vurës as an applicative suffix, “which increases the valency [of the verb root] by one” and “permits the addition of another core argument”; this description fits the majority of the cases in his list.

Malau’s (2016) dictionary of Vurës always treats verbs ending in -Ceg as root forms and never as derivatives of another verb root: i.e. *gilgeg* ‘stand up <post>’ and *gil* ‘dig’ are listed as separate entries. Out of 3,500 headwords, approximately 1,050 lemmas are verbs. Of these, we have identified a number of instances which contain a possible continuation of the suffix *-akin. By conducting a careful search through all the available material in Malau’s and Krauß’s corpora, we have arrived at a list of 63 Vurës lexemes containing a final syllable -Ceg. While looking for these examples, we decided to include only lexemes that are synchronically verbs; we thus excluded postverbs such as *wareg* ‘well’ or *viteg* ‘away’, even though they may

originate in verbs.³² We also excluded verbs ending in *-ëg* such as *tutrëg* ‘trip over’,³³ as well as verbs ending in *-ëg* (e.g. *qētëg* ‘start’) because Vurës <ë> /ɪ/ does not originate in POc **a_i* (cf. François 2005a:491). Unlike Hiw [§3.2], all verbs with the suffix *-Ceg* in Vurës are polysyllabic, i.e. verbs like *leg* ‘marry’ (< POc **laki*) cannot contain a reflex of **-akin*.

3.3.1 Scenario #1: A semi-productive applicative

Of all the 63 attested cases with *-Ceg* in Vurës, only 20 have an unsuffixed equivalent in the contemporary language. That said, we must distinguish between at least two cases, in line with our earlier observations on Hiw [§3.2], namely those with regular semantics and those with irregular semantics. Out of these 20 verb pairs, the expected valency increase with regular semantics can only be observed in 5 cases: these are pairs which are clearly linked semantically, and where the syllable *-Ceg* can be analyzed as a semi-productive applicative suffix. These pairs are listed in Table 6, along with the semantic effect of *-Ceg*.

Table 6 – Vurës verbs suffixed with the applicative suffix *-Ceg*, with regular semantics

plain V		suffixed V		semantic type
<i>bōr</i>	‘laugh’	<i>bōr-seg</i>	‘laugh at <s.o.>’	stimulus
<i>teñ</i>	‘cry’	<i>teñ-seg</i>	‘cry for <a dead person>’	stimulus
<i>ōn</i>	‘lie down’	<i>ōn-veg</i>	‘lie near <s.th.>’	location
<i>dor[dor]</i>	‘make noise’	<i>dor-seg</i>	‘beat on <s.th.>’	location
<i>lām</i>	‘beat <s.o.>, bash <s.th.>’	<i>lām-seg</i>	‘bash against <s.th.>’	location

An example of a verb pair with regular, applicative-like semantics is *ōn* ‘be lying down’ (intransitive) vs. *ōnveg* ‘be lying near’ (transitive). This difference is illustrated in examples (18) and (19). The unsuffixed (intransitive) verb *ōn* requires a locative preposition on the peripheral object *totonon* ‘his seat’, whereas the suffixed (transitive) verb *ōnveg* promotes the peripheral object *ev* ‘the fire’ to the direct object position. In most cases, it is possible to replace *ōnveg* with *ōn* + preposition, as shown in (20), however the reverse is not necessarily the case, as the use of *ōnveg* is rather idiomatic.

³²See our comment above on Hiw postverbs, in §3.2.4. The Vurës postverb *viteg* ‘away’ is cognate with a form *veteg* in Mwotlap (see (38) in §3.4.1), which can be used as a verb meaning ‘put down’ – suggesting a possible verbal origin of that lexeme. For the sake of consistency, we include Mwotlap *veteg* in our lists (since it exists as a verb), but we exclude Vurës *viteg*.

³³Theoretically, verbs ending in *-ëg* /-œɣ/ could also be derived from **-akin*, because /ɛ/ and /œ/ are both regularly found as reflexes of **-áCi* in Vurës [see §2]: e.g. POc **kani* > VRS *gen* /ɣɛn/ ‘eat’, but POc **paRi* > VRS *vër* /βœr/ ‘stingray’ (François 2005a: 447–448). However, we have not been able to identify a clear example of a verb ending in *-ëg* that can really be traced back to **-akin*, and the default hypothesis is that a single suffix should evolve identically for all forms in the same language, namely as *-eg* /-ɛɣ/.

- (18) Vurës³⁴
 O *nötu* *m̃irm̃iar* *gō=ōn* *lo* *totonon-n*.
 ART small child PRS=lie.down LOC place-3SG.P
 ‘The small child is lying **in** his seat.’
- (19) Vurës (Malau 2016:158)
Ni=ōn-veg *o* *ev*.
 AOR:3SG=lie.down-APPL ART fire
 ‘He lay **by** the fire.’
- (20) Vurës (constructed)
Ni=ōn *rivteg* *o* *ev*.
 AOR:3SG=lie.down near ART fire
 ‘He lay by the fire.’

The origin of *ōn-veg* can be very well reconstructed, as we know that the base verb *ōn* originates from the POC root **qenop* ‘lie down’ (Malau 2016:157; Ross et al. 2016:378), with a metathesis of the root’s vowels (**qenop* > PTB **eno* > pre-Vurës **one* > VRS /ʊn/ *ōn*, cf. François 2014:178). As for *ōn-veg*, it shows a thematic consonant -v- which arguably reflects the root’s final consonant **p*: **qenop* + **-akin* > PTB **enoβ-ayi* > **oneβ-ayi* > /ʊnβeɣ/ *ōnveg*.

The case of *lam̃* ‘beat <s.o, s.th.>’ and its applicativized counterpart *lam̃-seg* ‘bash against <s.th.>’ is different. While the suffix -Ceg in *ōn-veg* described above displays a valency increase, this is not the case for *lam̃seg*, as both the simple and the suffixed forms are transitive. Rather than alter the valency, the effect of -Ceg here is to change the verb semantics to focus on a different target; this can be compared with the Mwotlap pair *lam̃* vs. *lam̃-heg*, which we’ll analyze in §3.4.1.2.

3.3.2 Scenario #2: Transparent yet irregular semantics

An applicative suffix may not only be suffixed to intransitive verbs, making them transitive, but in principle, it could also affect verbs that are already bivalent; this typically results in the promotion of a peripheral object to the (direct) object position – as we saw earlier for other languages [cf. (3) for Fijian in §1.1, and (13) for Hiw]. However, no such cases are exactly attested in Vurës. Instead, when the basic verb is transitive, the suffixed form usually exhibits semantic narrowing – e.g. *var* ‘step on <s.th.>’ vs. *varseg* ‘stand firm on <s.th.>’. Sometimes, the suffix -Ceg may even have a detransitivizing function, e.g. *mem* ‘put down’ vs. *memseg* ‘breathe, rest’. These cases are discussed further below. Table 7 provides a list of verb pairs where the suffixed variant displays irregular semantics.

³⁴Link to Vurës corpus: <https://catalog.paradisec.org.au/collections/KD1/items/VU20180818ELI> (02:02)

Table 7 – Scenario 2 in Vurës: Verbs with the applicative suffix *-(C)eg*, with irregular semantics

plain V		suffixed V	
<i>bēm</i>	'carry <s.th.> on back'	<i>bēmñeg</i>	'carry <s.th.> on shoulder'
<i>dor</i>	'make noise'	<i>dorveg</i>	'bang <s.th.> together'
<i>gōq</i>	'dig hole to plant <s.th.>'	<i>gōkleg</i>	'dig <s.th.> out'
<i>sus</i>	'poke <s.th.>, push <s.th.> in'	<i>susgeg</i>	'push <stake> into hole'
<i>sus</i>	'poke <s.th.>, push <s.th.> in'	<i>susñeg</i>	'push <s.th.>'
<i>var</i>	'stomp, step on <s.th., s.o.>'	<i>varseg</i>	'stand firm'
<i>vēl</i>	'divide <s.th.>'	<i>vēlereg</i>	'divide <s.th.> & put together'
<i>wur</i>	'sweep <s.th.>'	<i>wurveg</i>	'to clean <s.th.>'

The verb pairs in Table 7 permit a closer examination of the suffix's effect on the verb meaning and the valency. If *-Ceg* was still a productive applicative in Vurës in those cases, the expected effect on intransitive verbs would be a valency increase by one for all verbs with this suffix, and the applicative suffix on transitive verbs should routinely promote a peripheral argument to the object position. However, this is not the case for the verbs listed in Table 7: even though the simple and the suffixed verbs are undoubtedly cognate, synchronically it is difficult to assess the function of the suffix *-Ceg*. Even if we established a function of the suffix for individual pairs, the same function would not be found with other verb pairs. In some cases of the pairs listed in Table 7, we can also observe semantic narrowing from the plain verb to the suffixed one, again with no change in valency. For example, while *sus* has the general meaning 'poke', the attested form *susgeg* specifically describes an action of pushing something into a tight space, e.g. a stake into the ground. As far as we know, this semantic narrowing is atypical of applicatives.

The opposite effect, namely semantic broadening, can be seen in another case, namely *wur* 'sweep' and *wurveg* 'clean'. While *wurveg* is a very common verb referring to cleaning in general (21), *wur* is only attested once in our corpus (22), used in a resultative serial verb construction with *winiwin* 'be clean', and describing the specific action of using a broom.

- (21) Vurës³⁵
I no mö=wurveg na gëvrō-ñ.
 HUM.ART 1SG PRF=clean POSS.ART house-2SG.POSS
 'I **cleaned up** your house.'

- (22) Vurës³⁶
Wur winiwin o gövur.
 sweep be.clean ART house
 'Sweep the house clean.'

³⁵Link to Vurës corpus: <https://catalog.paradisec.org.au/collections/KD1/items/VU20180803ELI> (01:32)

³⁶Link to Vurës corpus: <https://catalog.paradisec.org.au/collections/KD1/items/VU20191019ELI> (01:81)

3.3.3 Scenario #3: Opaque semantics

Several occurrences with a potential reflex of **-akin* in Vurës can be linked to a bare form in the contemporary language, yet the meanings of the two forms are so distant that one may even doubt whether there exists any connection between the two at all, or whether they are pure coincidences in the modern languages. These pairs are listed in Table 8.

Table 8 – Vurës: Potential verb pairs involving a former applicative, with dubious semantic link

plain V		suffixed V	
<i>gar</i>	'bite <s.th., s.o.>'	<i>garveg</i>	'cuddle <s.o.>'
<i>gil</i>	'dig <s.th.> (up)'	<i>gilgeg</i>	'stand up <post>'
<i>mamar</i>	'implore <s.o.>, plead'	<i>mamarseg</i>	'be sorry (for <s.o.>')'
<i>mem</i>	'put <s.th.> down'	<i>memseg</i>	'breathe, rest'
<i>quq</i>	'rinse mouth [intr.]'	<i>quqseg</i>	'spit out <liquid>'
<i>tur</i>	'stand'	<i>tureg</i>	'give <s.th.> to many people'
<i>van</i>	'go'	<i>vangegeg</i>	'put <s.th., s.o.> in line'

Let us first observe the couple *gar* 'bite' vs. *garveg* 'cuddle'. From a strict synchronic, language-internal point of view, these are the sort of words that young language learners are exposed to, and for which they may try to figure out a possible semantic link; in this particular case, the meaning is too distant to make this attempt successful. Interestingly, language comparison allows us to unravel this conundrum, and show that *gar* and *garveg* are in fact from two separate roots. Indeed, Codrington & Palmer's (1896) dictionary cites two lexical sets in Mota:

- MTA *gara* 'clench the teeth, bite' → *garavag* 'hold <s.th.> in mouth'
- MTA *garo* 'bend the arms' → *garovag* 'throw the arms round <s.th.>'

Evidently, the phenomenon of syllabic reduction, which has taken place in Vurës but not in Mota (François 2005a), has resulted in the deceptive similarity between two verbs that had in fact separate origins: *gar* 'bite' < PTB **ɣara* (< POC **kaRat* 'bite') vs. *garveg* 'cuddle' < PTB **ɣaro-βayi*, from a root **ɣaro* ('bend the arms'?) which has left no other trace in modern Vurës.³⁷ This shows how certain apparent verbal pairs pertaining to our Scenario #3 can in fact be shown, at least sometimes, to result effectively from a historical coincidence.

Consider now the pair *mamar* 'implore <s.o.>, plead' and *mamarseg* 'be sorry for <s.o.>': these are two verbs which are likely to be cognate, yet whose exact semantic relation is

³⁷As we will see in Table 15 [§3.4.4], Mwotlap has the form *gayveg* 'hold in mouth', pertaining to Scenario #4, because it lacks any simple reflex of **ɣara* 'bite'. Because Mwotlap has lost any reflex of **ɣaro(βayi)*, and Vurës has lost **ɣaroβayi*, modern speakers of these two languages – many of whom are bilingual – are left with a confusing pair of false friends, namely MTP *gayveg* 'hold in mouth' vs. VRS *garveg* 'cuddle'.

difficult to pinpoint. While *mamar* is a rare verb that is only attested twice in our corpus (23), its equivalent *mamarseg* occurs several dozen times, exemplified in (24).³⁸ The latter word is also frequently used as an intransitive, stative predicate ('be sorry') and as an interjection (*Mamarseg!* 'Alas!').³⁹

- (23) Vurës⁴⁰
Kemem ga=mamar nēk tabo nēk i=möllumlum vitia aē
 1PL.EX PRS=implore 2SG PURP 2SG AOR:2SG=be.slow IAM ANA
lō qōñ rōrō.
 LOC day two
 'We're **asking** you to be slow with it in the next two days.'

- (24) Vurës⁴¹
No gō=rōñteg vita no ga=mamarseg o tañsar ga=qag ine.
 1SG PRS=feel COMP 1SG PRS=be.sorry.for ART person PRS=be.white DEM
 'I **feel sorry for** that white man.'

The transitive verb *mamar* is always followed by a direct object as in (23), or by a complement clause. In light of its transitive counterpart *mamarseg* (24), it appears that the suffix *-Ceg* here does not modify the valency; rather, it results in a semantic change of the verb.

An even more remarkable case of such a scenario is the connection between the transitive verb *mem* 'put down <s.th.>' and the intransitive (unaccusative) verb *memseg* 'breathe, rest'. As explained in §1.1, the primary function of an applicative cross-linguistically is to increase the verb's valency, yet the applicative suffix *-Ceg* here seems to have brought about, paradoxically, a case of valency decrease.⁴² Compare the transitive clause (25) and the intransitive clause (26).

- (25) Vurës⁴³
O rege me=mem o plēt la tan.
 ART woman PRF=put ART plate LOC ground
 'The woman **put** the plate on the ground.'

³⁸François (2005a:496) cites PTB **mamarosáyí* as the form ancestral to VRS *mamarseg*, alongside a shorter etymon **mamarósa* (> Lakon *mamroh* 'sad, sorry') – among other variants. The unsuffixed verb *mamar* of Vurës could reflect an even shorter protoform **mamáro(s)*.

³⁹In religious contexts, the meaning of *mamarseg* is usually 'have mercy on'.

⁴⁰Link to Vurës corpus: <https://catalog.paradisec.org.au/collections/KD1/items/VU20180807ANT> (02:47)

⁴¹Link to Vurës corpus: <https://catalog.paradisec.org.au/collections/KD1/items/VU20180803ELI> (01:19)

⁴²This unusual detransitivizing function of the applicative suffix *-akin* has also been reported for Buru (Maluku), Kara (Papua New-Guinea), Wayan Fijian (Fiji) and Micronesian languages like Mokilese (Evans 2003:192).

⁴³Link to Vurës corpus: <https://catalog.paradisec.org.au/collections/KD1/items/VU20180806ELI> (02:55)

(26) Vurës⁴⁴

Manene nē ma=gav me arēs, nē gete=memseg.

reason 3SG PRF=fly HITH far 3SG NEG=breathe

‘Because he had flown so far, he was short of **breath**.’

[liter. ‘he didn’t breathe’]

The semantic connection between *mem* and *memseg* appears opaque at first sight, but the various meanings of the Mota cognate *map* help us see the missing semantic link. Codrington & Palmer (1896:72) list a total of six glosses for *map*, namely ‘put, place, set; (of a blow or arrow) hit; appoint; leave off’. One could therefore reconstruct a mediopassive meaning of *memseg* in the sense ‘put oneself down to rest’. In fact, this verb pair is not unique to Vurës, as nearly all 17 languages of northern Vanuatu present the same outcome (François 2005a:482):

- a transitive verb meaning ‘put down <s.th.>’, reflecting an unsuffixed etymon PTB **m^[w]amb^[w]u* < PNCV **mabu(s)* (Clark 2009)
- an intransitive verb meaning ‘take rest, breathe’, which reconstructs as **m^[w]amb^[w]u-***sayi**, derived from **m^[w]amb^[w]u* via the applicative (PTB **-áyī* < POc **-akin*).

It may be a matter of debate whether it is possible to identify an uncontroversial semantic link between *mamar* and *mamarseg*, or between *mem* and *memseg*. If our hypothesis is correct, then *mamarseg* and *memseg* do include a reflex of **-akin*. Otherwise, the verb pairs in Table 8 above may all constitute mere coincidences – in a way similar to what we showed for *gar* vs. *garveg*; as such, they come close to our scenario #4.

3.3.4. Scenario #4: A vestigial syllable

The largest proportion of verbs ending in *-Ceg* belong to scenario #4. For these, we can only conjecture that they indeed reflect former **-akin*, on the basis of regular sound correspondences, of their phonological shape, and by comparison with neighboring languages. However, in most cases, no clear etymology can be presented.

The list in (27) includes 24 verbs ending in *-Ceg* with no clear etymology. Some of these verbs have highly specific meanings.

(27) Vurës verbs ending in *-(C)eg*, with no clear etymology:

anm̄eg ‘bother <s.o.>’, *dasimreg* ‘hate <s.th., s.o.>’, *dōleg* ‘mix <breadfruit dough> after pounding’, *gañveg* ‘lead <s.o.>’, *gas̄m̄eg* ‘insert <s.th.>’, *gasreg* ‘push <s.th.> into narrow gap’, *gogoreg* ‘sweep <s.th.> away’, *irseg* ‘stare at <s.o.>’, *liseg* ‘disobey <s.o.>’, *nōlseg* ‘chew <s.th.> without teeth’, *qeneg* ‘be afraid of <s.th., s.o.>’, *qereg* ‘flatten <breadfruit dish>’, *rōweg* ‘tie <s.th.> long’, *seleg* ‘lay <s.th.> down crosswise’, *sergeg* ‘lay <plaiting sections> down’, *sugneg* ‘(pigs, cows) headbutt <s.o.>’, *titreg* ‘jump repeatedly’, *tōwereg* ‘give name to <s.o.>’, *ununseg* ‘bequeath <land> after father’s death’, *vawseg* ‘clean around’, *veleg*

⁴⁴Link to Vurës corpus: <https://catalog.paradisec.org.au/collections/KD1/items/VU20180805ALI> (01:38)

'beat with/on <s.th.> to make music', *wereg* 'put and spread multiple things', *weteg* 'crack <s.th.> open', *wilikseg* 'look through <s.th.>', skim <s.th.>'

In some cases, comparison with neighbouring languages allows us to ascertain the origin of certain verbs ending in *-(C)eg*. Table 9 cites several forms with cognates in the neighbouring languages – notably Mota. The upper section of the table shows the cases where it is possible to confirm the existence of an unsuffixed etymon, and thus confirm that the Vurës verb does indeed contain a reflex of **-akin*. The middle section has similar proposals, but with less certainty on the correspondences. Finally, the bottom section of the table provides links to cognate forms in other languages; but because these cognates do not include any short (unsuffixed) form, we cannot be certain, strictly speaking, whether or not these verbs (in Vurës and other languages) really contain a vestigial reflex of **-akin*.

Table 9 – Vurës: Vestigial reflexes of the former applicative, revealed by language comparison

suffixed V	cognates and possible etymology
<i>bōgereg</i> 'feed <s.o.>'	MTA <i>puga</i> , MTP <i>bōg</i> 'feed and bring up'
<i>garveg</i> 'cuddle <s.o.>'	MTA <i>garovag</i> 'throw the arms round s.th.' < <i>garo</i> 'bend the arm'
<i>kōkṁeg</i> 'look after <s.o.>, guide <s.o.>'	MTA <i>kokoṁag</i> 'keep carefully' < <i>koko</i> 'keep close', MTP <i>kokṁeg</i> 'give refuge, comfort'
<i>liṇereg</i> 'hide <s.th.>'	MTA <i>liṇarag</i> 'hide' < <i>liṇa</i> ~ <i>luṇa</i> 'be out of sight' MTP <i>lōṇveg</i> 'hide, conceal'
<i>maṇseg</i> 'show <s.th.>'	MTA <i>maṇasag</i> 'declare' < <i>maṇa</i> 'open, gape' < POc <i>*maṇa(p)</i> 'gape' < PMP <i>*qan̄a[p,b]</i> 'gape'
<i>rivteg</i> 'be near <s.th.>, approach <s.th.>'	HIW <i>rēptog</i> , LTG <i>revtē</i> , MTP <i>yipteg</i> , MTA <i>rivtag</i> < PTB <i>*riβitayī</i> 'near, close'; PNCV <i>*rivita</i>
<i>rōṇteg</i> 'hear <s.th., s.o.>, feel <s.th.>'	cf. Table 1 in §2 < POc <i>*roṇo(R)</i> 'hear, feel'
<i>sakreg</i> 'take off'	MTA <i>sakarag</i> 'cast' < <i>saka</i> 'let go from hand'
<i>tawseg</i> 'be clear, be obvious'	MTA <i>tawasa</i> 'clear'
<i>bērseg</i> 'wring <s.th.> out'	?MTA <i>vir̄sag</i> 'wring out' < <i>vir̄</i> 'twist, wring' [but irregular C]
<i>sōwereg</i> 'plant <yam, taro>'	MTA <i>siworag</i> 'plant (yam) again' ? < <i>siwo</i> 'down'
<i>tiveg</i> 'pay <s.o.>'	MTA <i>tuvag</i> 'buy or sell with/for money' MTP <i>teveg</i> 'consecrate land with shell money' cf. ? MTA <i>tun</i> 'buy at a great price', LTG <i>tun</i> 'buy, pay'
<i>unṁeg</i> 'work constantly'	?MTP <i>inṁeg</i> 'harass' ?MTA <i>uṁa</i> 'clear away growth from garden' ? < POc. <i>*qum̄a</i> 'work, clear land'
<i>vuteg</i> 'plant <yam>'	?MTA <i>vituag</i> 'plant high' < <i>vut</i> 'dig'
<i>gabeleg</i> 'work'	MTA <i>gapalag</i> 'do, act, work'

suffixed V	cognates and possible etymology
<i>gagneg</i> 'tell <s.th.>'	MTA <i>gaganag</i> 'show, tell'
<i>ñereg</i> 'sell <s.th.>'	MTA <i>ñarag</i> 'hawk about'
<i>qeleg</i> 'plait <s.th.> together'	MTP <i>qeleg</i> 'plait together'
<i>rōñliseg</i> 'disobey <s.o.>'	MTA <i>roño leasag</i> 'suffer contentious treatment' cf. <i>liseg</i> in the list (27)
<i>sigeg</i> 'proffer <s.th.>'	MTA <i>sigag</i> 'stretch the arm'

The listing of *rōñteg* 'hear, feel' in Table 9 is unclear: there exists no contemporary form **rōñ* per se, yet there are traces of this root in the compound *rōñliseg* 'disobey' and in the obsolete phrase *rōñ gë=mēmës* 'suffer' (literally: 'feel hurt'). Krauß (2021:239) lists *rōñ* as an independent root in Vurës, but Malau (2021) provides no such root in her Vurës dictionary. This case may be one of the few examples where the cline of morphological erosion is directly visible in the contemporary language.⁴⁵

3.4. -Ceg in Mwotlap

Compared to a language like Hiw [cf. §3.2], Mwotlap has also gone down the road to opacity, much like Vurës. Except for a handful of semi-transparent verbal pairs, the vast majority of words ending in *-(C)eg* are now vestigial, with virtually no way to identify a suffix with any coherent meaning. And indeed, François's (2001) synchronic grammar of Mwotlap does not cite any reflex of **-akin*; his work does mention "applicatives", but only when discussing more recent cases of grammaticalization based on serial constructions,⁴⁶ which have taken up certain functions that were once played by **-akin* [see §3.4.1.3 below]. In fact, the only fully productive reflex of POC **akin* in Mwotlap is not an applicative suffix, but a preposition *veg* [cf. §4.2].

Our Mwotlap corpus includes a total of 102 lexical forms ending in *-(C)eg* – including 92 verbs and 10 postverbs. Just like we discussed earlier for Hiw or Vurës, not all of these forms can be unambiguously traced back to **-akin*: rather, what we see is a continuous slope, going from more transparent to more opaque functions of that syllable.

⁴⁵The same reasoning could be held for the cognate form **yoñ* in Mwotlap. Indeed, that form does not exist any longer in synchrony, but it is found in a couple of compounds – e.g. *yoñ-vavaleh* 'disobey' [etym. 'hear and dispute']; *yoñ-eh* [etym. 'hear the song'] 'during the inauguration of a song of praise, give a sign that one has heard one's own name, by giving money to the poet'.

⁴⁶Candidates for the status of (quasi) applicatives in Mwotlap are a number of bivalent postverbs, distinct from prepositions, that have the property of increasing the valency of their verbal head. These include *day* '(do V) waiting for <s.o.>', *sas* '(come) across <s.th.>', *tēy* 'hold → with', *veteg* 'put down → away from' (François 2004:141), or *goy* 'over, against, for+' (François 2000, 2005b:139). But while François does contemplate the applicative analysis, he concludes that none of these morphemes has really become a productive applicative, precisely due to the abundance of candidates, and to their semantic specificity.

3.4.1 Scenario #1: A semi-productive applicative

3.4.1.1. A transparent applicative?

Table 10 lists the verb pairs that show the highest semantic transparency in Mwotlap and would be worthy of being assigned to our Scenario #1. Out of 102 lexemes in *-Ceg*, only a handful qualify as a transparent case of applicative.

Table 10 – Mwotlap intransitive verbs suffixable with *-(C)eg*, with regular semantics

plain V		suffixed V		semantic type
<i>mitiy</i>	'sleep'	<i>mitiy-veg</i>	'sleep with <s.o.>'	comitative
<i>muwumwu</i>	'work'	<i>muwumwu-teg</i>	'work with <s.o.>'	comitative
<i>yēyē</i>	'laugh'	<i>yēyē-heg</i>	'laugh at <s.o.>'	stimulus
<i>ōy</i>	'be full'	<i>ōy-heg</i>	'be full of <s.th.>'	content

Among these, the verb pair *mitiy* → *mitiy-veg* 'sleep with' was illustrated in (5a–b) [cf. §1.2.2]. Likewise, (28–29) and (30–31) exhibit the sort of semantic relations typically encoded by an applicative. It would be tempting, for such cases, to use a gloss "APPL", at least tentatively:

(28) Mwotlap⁴⁷

Kēy yēyē tō gōskē qeleave?
 3PL laugh PRSV DEIC how
 'How come they are laughing like this?'

(29) Mwotlap⁴⁸ (François 2023a)

Nok yēyē-heg ige tekēl-mayam.
 1SG:AOR laugh-APPL people other.side-world
 'I'm laughing **at** the people in the Other World.'

(30) Mwotlap (François 2023a)

N-ēmyōñ n-ōy.
 ART-church STAT-be.full
 'The church is full (crowded).'

(31) Mwotlap (François 2023a)

Ige to-Mōtlap e, na-lo taqa-y n-ōy-heg tamtam.
 Hum:pl ORIG-Motalava TOP ART-inside belly-3pl STAT-be.full-APPL affection
 'Motalava people have their hearts filled **with** love.'

⁴⁷Link to Mwotlap corpus: <https://doi.org/10.24397/pangloss-0007408#S144>.

⁴⁸Link to Mwotlap corpus: <https://doi.org/10.24397/pangloss-0002515#S91>.

When the plain verb is intransitive, the reflex of **-akin* has the effect of making it transitive, by promoting a peripheral argument to object position: this is a classic effect of an applicative.

3.4.1.2. Searching for semantic regularities

Mwotlap has other pairs of verbs that clearly reflect the former applicative, but for which the suffix's semantic contribution is more difficult to pinpoint. Certain semantic regularities can however be identified. For some pairs, the sense is virtually identical between the two verbs, and the contribution of the suffix is difficult to assess (Table 11).

Table 11 – Mwotlap verbs suffixable with *-(C)eg*, involving little semantic change

plain V	suffixed V	semantic type
<i>bah</i> 'end, finish' [intr]	<i>baheg</i> 'end, finish' [intr]	(no change)
<i>lēn</i> 'not know'	<i>lēnteg</i> 'not know'	(no change)
<i>lok</i> 'fold <s.th.>'	<i>lokveg</i> 'fold up <s.th.>'	(no change)

But another type of (sub)regularity involves a semantic shift we propose to call "diathetic change". Table 12 shows those transitive verbs of Mwotlap for which the applicative suffix appears to bring a regular, or at least semi-regular, semantic contribution – namely, a change in (secondary) diathesis [cf. §3.2.2 for Hiw].

Table 12 – Mwotlap transitive verbs suffixable with *-(C)eg*, involving semi-regular semantics

plain V	suffixed V	semantic type
<i>bus</i> 'splatter <s.o.>'	<i>bus-geg</i> 'spit out <s.th.>'	diathetic change
<i>lam</i> 'beat <s.o.> w/ stick'	<i>lam-heg</i> 'wave, waggle <rod+>'	diathetic change
<i>woh</i> 'slap <s.o.>'	<i>woh-yeg</i> 'smash <s.th.> on s.o.'	diathetic change
<i>wuh</i> 'hit <s.th., s.o.>'	<i>wuh-geg</i> 'tattoo <body>'	diathetic change

Indeed, when the simple verb is already transitive, the *-(C)eg* suffix can have an effect on the verb's diathesis, as it directs the verb towards a different argument. For example, the verb *bus* 'splatter <s.o.> by squirting water from o.'s mouth' takes as its object the person who is splattered:

- (32) Mwotlap (François 2023a)
Tog busbus no!
 PROH splatter 1sg
 'Stop splattering me (squirting water from your mouth)!'

Its applicative counterpart *busgeg* takes as its object the content of the splattering (water, blood...). A story thus tells how a spellbound shark was spitting red flowers instead of blood:

(33) Mwotlap⁴⁹

*Na-bago e kē ni-bus-**geg** ne-geg.*
 ART-shark DEF 3sg AOR:3sg-splatter-APPL ART-amaranth
 ‘(The shark) was spitting **out** red amaranths.’

This use of **-akin* corresponds to the function identified as ‘product’ (Pawley & Reid 1979, Evans 2003:197): compare, for Bauan Fijian, *kasivi-ti* ‘spit on <s.th.>’ with *kasivi-taki* ‘spit <s.th.> out’.

Likewise, while a simple verb describes an action that is directed to an external target, the suffixed form describes a similar action or gesture, but this time focusing on its “internal” effect. For example, *laṁ* means ‘beat <s.o., s.th.> with a stick or a rod’, where the affected object is, for example, a drum:

(34) Mwotlap (François 2023a)

lge be-wha e kēy laṁlaṁ nē-vētōy.
 Hum:pl for-music TOP 3pl IPFV~beat ART-drum
 ‘The musicians are beating the drums.’

The applicativized form *laṁheg* ‘wave <rod+>, waggle <rope+>’ describes a similar gesture of the body, but instead of focusing on an external target (like a drum), *laṁheg* describes the effect of the same gesture on the very object one is holding (a rod), or even on the body itself (the arm). Thus, the verb *laṁheg* is used for ‘cast <a fishing rod>’, ‘stretch out <o.’s arms>’, ‘wag <one’s tail>’. It also describes the gesture of kicking out one’s legs in the water while swimming:

(35) Mwotlap (François 2023a)

Kēy laṁ-heg na-yño-y lē-bē.
 3pl beat-APPL ART-leg-3pl LOC-water
 (description of swimming) ‘They kick their legs out in the water.’

While both *laṁ* and *laṁheg* are bivalent verbs, they differ in their *secondary diathesis*, i.e. the exact semantic role of their object [cf. §3.2.2 for Hiw, and fn. 31]. In fact, this type of semantic shift is also typical of applicatives: recall the examples we saw earlier, for Fijian [§1.1] or for Hiw [§3.2], of a plain verb ‘shoot <s.o.>’ (oriented towards an external target) vs. its suffixed counterpart ‘shoot <an arrow>’ (oriented towards the shooting object itself). English is generally ambiguous on its secondary diathesis, as it doesn’t distinguish between these two uses of *shoot*. Likewise, English uses the same verb form for *poke a hole with my finger* and *poke my finger into the hole*; or for *spray the wall with paint* and *spray paint on the wall* (Levin 1993:49). The difference in secondary diathesis is not always encoded formally in English, but some Oceanic languages may encode this using a reflex of **-akin*.

⁴⁹Link to Mwotlap corpus: <https://doi.org/10.24397/pangloss-0007414#S16>.

3.4.1.3. Does Mwotlap have an applicative suffix?

These observations raise the question whether we should identify an applicative suffix in Mwotlap, at all. The last section listed cases of (semi-) regular transparency in the use of **-akin* reflexes; and yet, one cannot help but notice how few and far-between such examples are in Mwotlap. While the (putative) applicative can turn ‘laugh’ into ‘laugh at <s.o.>’, it cannot be used routinely to create transitive verbs like ‘be angry at <s.o.>’, or ‘dream of <s.o.>’. Clearly, if Mwotlap has a suffix *-Ceg*, it is not productive at all, and is only transparent in a very small number of cases.

In this respect, Mwotlap differs from Hiw. We saw how Hiw has kept a productive reflex of **-akin* at least for caused accompanied motion [§3.2.1]; but the equivalent meanings would be encoded by different strategies in modern Mwotlap. The most common construction would involve verb serialization (François 2006:234), e.g. with the verb *tēy* ‘hold’ in the postverbal position:

- (36) Mwotlap⁵⁰
- | | | | | | | | |
|------------|-----------|-------------|-------------------|-----------|-----------|------------|----------------|
| <i>Nok</i> | <i>so</i> | <i>kalō</i> | <i>tēy</i> | <i>kē</i> | <i>me</i> | <i>hiy</i> | <i>kōmyō</i> . |
| 1sg:AOR | IRR | exit | hold | 3sg | HITH | DAT | 2du |
- ‘Let me **bring** her out to you.’
[compare with Hiw (10)]

- (37) Mwotlap (François 2001:672)
- | | | | | |
|-----------|---------------|-------------------|--------------|-------------------|
| <i>No</i> | <i>ta-lak</i> | <i>tēy</i> | <i>qiyig</i> | <i>na-savat</i> . |
| 1sg | FUT-dance | hold | today | ART-sandal |
- ‘I’ll be dancing **with** my shoes on.’
[compare with Hiw (8)]

The fact that (37) means ‘dance with my shoes on (my feet)’ – rather than literally ‘dance holding my shoes (in my hand)’ – is evidence that *tēy* has already grammaticalized into some sort of applicative postverb, at least for encoding caused accompanied motion.

Likewise, the semantic function we call “abitive”, namely ‘(move) away from <s.o.>’, is still encoded with a reflex of **-akin* in Hiw [Table 3, §3.2.2], but Mwotlap has relexified it using a bivalent form *veteg* (a verb ‘put down, leave’, grammaticalized into an abitive postverb ‘away from’):

- (38) Mwotlap⁵¹
- | | | | | | |
|------------|---------------|------------|------------|---------------------|--------------|
| <i>Wun</i> | <i>sisqet</i> | <i>nok</i> | <i>mat</i> | <i>veteg</i> | <i>nēk</i> . |
| maybe | near | 1sg:AOR | die | leave | 2sg |
- ‘I’m afraid I will soon die **on** you.’
[abitive sense ‘away from’]

⁵⁰Link to Mwotlap corpus: <https://doi.org/10.24397/pangloss-0002300#S91>.

⁵¹Link to Mwotlap corpus: <https://doi.org/10.24397/pangloss-0003310#S15>.

In sum, Mwotlap has developed new productive strategies to encode most of the meanings that used to be encoded by *-*akin*. As for the direct reflex of that former suffix – the verbal ending -(C)*eg* – it is now merely vestigial in Mwotlap.

Another clue that -(C)*eg* is vestigial is the extreme instability when it comes to the nature of the thematic consonant (C). Just in the examples we've seen so far, we found cases of /β, t, h, j, ʎ/... This rather confirms that no single phonological form has emerged as the default form of a (putative) applicative suffix. Again, this contrasts with Hiw, which has virtually generalized the form -*vog* as the default for its productive suffix.⁵²

In sum, positing an applicative suffix -(C)*eg* would not be economical in the case of Mwotlap, as it would only be supported by a handful of verb pairs – and contradicted my many more.

3.4.2. Scenario #2: Transparent yet irregular semantics

Many verb pairs exist, whose semantic relation can be identified, yet lacks regularity in the language. This corresponds to our scenario #2.

For example, *et* 'see, look' contrasts with *etveg* 'watch, observe', but this semantic shift is isolated in Mwotlap.⁵³ The verb *ak* means 'do, make', and *akteg* is an interrogative verb 'do what?'; yet this is the only example we know in Vanuatu, where a (putative) applicative would turn a verb into its interrogative equivalent. Table 13 lists all the pairs where the verb ending in -*Ceg* is clearly cognate with a simple verb, but where the semantic relation is adhoc and non-predictable.

Table 13 – Mwotlap: Verbs reflecting the former suffix -(C)*eg*, with irregular semantics

plain V		suffixed V	
<i>ak</i>	'do, make <s.th.>'	<i>akteg</i>	'do what?'
<i>et</i>	'see, look <s.th.>'	<i>etveg</i>	'watch, observe <s.th.>'
<i>oy</i>	'wear around neck'	<i>oyveg</i>	'carry in o.'s arms'
<i>siy</i>	'peel <s.th.>'	<i>siyveg</i>	'scrape <s.th.> w. blade'
<i>gil</i>	'dig, dig out <s.th.>'	<i>gilgeg</i>	'plant <house> in ground'
<i>deñ</i>	'bang <gong>'	<i>deñeg</i>	'knock loudly <s.th., s.o.>'
<i>man</i>	'intoxicate; bewitch'	<i>manheg</i>	'cast a spell on <s.o.>'
<i>gengen</i>	'eat'	<i>gengenyeg</i>	'commit a sin'
<i>luw</i>	'pour <sand+>'	<i>luwyeg</i>	'shed, get rid of <s.th.>'
<i>yak</i>	'pick up <s.th.>'	<i>yakseg</i>	'rake up <dead leaves>'

⁵²We will see later that Mwotlap did select /β/ as the default consonant when it degrammaticalized the applicative into a preposition *veg* /βɛɣ/ [cf. §4.2].

⁵³Compare Hiw *yëvog* and *rōñtog* in Table 3 [§3.2.2].

<i>goy</i>	'(sea) sweep in'	<i>goyveg</i>	'clean up <s.th.>'
<i>taq</i>	'stoop, bend over'	<i>taqyeg</i>	'carry out <work>'
<i>tēm</i>	'push <s.th., s.o.>'	<i>tēngēg</i>	'prop up, support <s.th.>'
<i>vah</i>	'plant, stick in ground'	<i>vahyeg</i>	'lay <mat> on ground'

Today, each pair has been split across two separate lexemes, with no way of identifying any stable “applicative suffix” in synchrony. Even if we can make hypotheses on what semantic path was followed in certain cases, the words have now been disconnected for such a long time that the language’s “lexical tectonics” (François 2022) led them to drift apart across the conceptual space.

3.4.3. Scenario #3: Opaque semantics

As for the verb pairs in Table 14, they are so odd that one can legitimately doubt whether the two verbs are even related at all. They either reflect drastic semantic change, or accidental resemblance between two unrelated roots.

Table 14 – Mwotlap: Potential verb pairs involving a former applicative, with dubious semantic link

plain V		suffixed V	
<i>gam</i>	'sail on ocean'	<i>gamteg</i>	'lead, walk <s.o.>'
<i>yow</i>	'leap, fly away'	<i>yoweg</i>	'stretch <rope+>'
<i>yow</i>	'leap, fly away'	<i>yowyowveg</i>	'serve, assist <s.o.>'
<i>mōl</i>	'return'	<i>mōleg</i>	'be clear; clarify <s.th.>'
<i>mōk</i>	'put <s.th.> s.where'	<i>mōkheg</i>	'take rest, breathe'
<i>suw</i>	'anoint w. liquid'	<i>suwyeg</i>	'throw away <s.th.>'
<i>tīt</i>	'punch <s.o.>'	<i>tīteg</i>	'stumble' [intr.]
<i>won</i>	'complete <s.th.>'	<i>wonyeg</i>	'take care of; destroy <s.th.>'
<i>won</i>	'complete <s.th.>'	<i>wonñeg</i>	'release, abandon <s.th.>'
<i>yap</i>	'pull <s.th.>'	<i>yaveg</i>	'push <s.th. long> in hole'

3.4.4. Scenario #4: A vestigial syllable

A final configuration is when Mwotlap has only retained the form ending in *-(C)eg*, and lost the corresponding plain verb. For example, *tañyeg* 'release', *lōñveg* 'hide', or *hiñyeg* 'illuminate', lack any corresponding short verb. This configuration holds for 55 lexemes among the 102 forms in our inventory. A full list of these 55 words would go beyond this study, but a sample is provided in (39):

- (39) Mwotlap: sample of verbs ending in *-(C)eg* with no corresponding simple verb
akmēhteg 'be angry'; *akvisileg* 'reject <s.o.>'; *beheg* 'carry <s.th.> on side'; *dalm̄neg* 'cast <net, lasso>'; *ēpgeg* 'cast <net>'; *m̄ōgteg* 'clean up <s.th.>'; *hēgeg* 'start singing <song>'; *kokm̄neg* 'give comfort to <s.o.>'; *alveg* 'beckon <s.o.>'; *kekeheg* 'move, wiggle'; *sēmteg* 'push <s.th.> w. o.'s foot'; *vēhbeg* 'hang <s.th.>'; *vētleg* 'send <s.th.>'; *hiñyeg* 'shine on <s.th.>, illuminate'; *yoñteg* 'hear, feel, listen'; [*mētēgteg* 'be afraid, fear <s.o., s.th.>'] ...

Just like we saw for Hiw, Mwotlap also has a number of postverbs which may quite possibly originate in former verbs. Some of these also end in *-(C)eg*:

- (40) Mwotlap: postverbs (possibly from earlier verbs) ending in *-(C)eg* with no clear etymology:
totogyeg '(do) for the first time'; *yosveg* '(do) abundantly'; *vasawyeg* '(talk+) carelessly'; *heleg* '(do) only'; *tokosm̄neg* '(eat) exceedingly'; *tatamyeg* '(do) in sequence'; *soloteg* '(do) haphazardly ~ abundantly'; *kokoym̄neg* '(desire) intensely'.

And again, comparative linguistics can be of help in reconstructing some of these words. Sometimes, it proves helpful in ruling out certain candidates. For example, the list (39), which was constructed with a structural and synchronic criterion, includes a verb *mētēgteg* 'be afraid, fear <s.o., s.th.>': strictly speaking, this form ending in *-teg* looks like it could perfectly incorporate the former applicative suffix **-akin*. However, comparison with other languages (e.g. Lo-Toga /mætəŋtɔŋ/, Lemerig /mœʔœŋʔœŋ/) shows that the last syllable results not from a sequence **-táyɪ*, but **-táyɪ* – two contexts which have been regularly merged in Mwotlap, but not in other languages. In fact, MTP *mētēgteg* reflects a protoform **matàŋutáyɪ* (François 2005a:437), which is simply the reduplication of POc **matakut* 'be afraid'. For this reason, the form *mētēgteg* in (39) is enclosed in brackets: while it fits the structural definition of that list, historical linguistics can show that it does not, in fact, reflect the former applicative.

Conversely, many forms in *-eg* can be shown to involve the former suffix, even when the corresponding plain verb has been lost in the language – just like we showed for Hiw [§3.2.4] and for Vurès [§3.3.4]. Thus, although **yoñ* does not exist in Mwotlap, it is not difficult to recognize that *yoñteg* 'hear, feel, listen' reflects the PTB etymon **ronotayɪ* found in most Torres-Banks languages [Table 1, §2]. Likewise, Mwotlap *alveg* 'beckon <s.o.>' has a cognate in Hawaiian *aloha*, going back to a POc root **qalop* 'greet, beckon'; this shows that the *-v-* in *alveg* is conservative of the original consonant, followed by the former suffix: **qalop* + *-akin* > **ʔaloβ-ayɪ* > MTP /alβeŋ/ *alveg*. Table 15 brings together all cases where the presence of the former **-akin* suffix can be confirmed by language comparison, based on regular sound correspondences.

Table 15 – Mwotlap: Vestigial reflexes of the former applicative, revealed by language comparison

plain V	protoform	cognates
<i>hiñyeg</i> 'illuminate'	< *siŋa-rayi	MTA <i>siñar</i> 'shine', <i>siñar-ag</i> 'illuminate' [(6b), §2] cf. DRG <i>sñār</i> 'moon' (François 2022:112)
<i>yoñteg</i> 'hear, feel, listen'	< *roŋo-tayi	[cf. Table 1 §2]. POc *roŋoR 'hear, feel'
<i>lōñveg</i> 'hide <s.th.>'	< *luŋa-βayi	MTA <i>liña</i> ~ <i>luña</i> 'be out of sight' cf. MTA <i>luñavag</i>
<i>luwyeg</i> 'pour out <s.th.>'	< *liwo-rayi	MTA <i>liwo</i> 'pour out', <i>liworag</i> 'pour out quickly' cf. LYP <i>lyewyē</i> 'pour out', HIW <i>yiqeřog</i>
<i>alveg</i> 'beckon <s.o.>'	< *ʔalo-βayi	MTA <i>alovag</i> ; POc *qalop: HAW <i>aloha</i>
<i>gayveg</i> 'hold <s.th.> in mouth'	< *ɣara-βayi	MTA <i>garavag</i> 'have in mouth', POc *kaRat 'bite'
<i>hayveg</i> 'enter'	< *saro-βayi	MTA <i>sarovag</i> 'enter', <i>saro</i> 'draw into'
<i>kokm̃eg</i> 'give comfort'	< *ŋgoŋgo-mʷayi	MTA <i>koko</i> 'keep close', cf. MTA <i>kokom̃ag</i> 'keep carefully'
<i>sōñteg</i> 'stow, pack up'	< *soŋo-tayi	MTA <i>sogo</i> 'give, bring', <i>sogon</i> 'stow' < PNCV *soko 'add, join'
<i>sosm̃eg</i> 'shove <s.th.>'	< *soso-mʷayi	cf. MTA <i>sosomag</i> 'stuff', <i>soso</i> 'stuff, be stuffed'
<i>sēmteg</i> 'push w. toe'	< *siᵐbe-tayi	MTA <i>sipe</i> 'pick w. finger or toes' cf. MTA <i>siperag</i> 'pick out w. finger, toe, stick'

4 The emergence of prepositions

The previous sections showed how the applicative function of *-akin has been somewhat preserved in the languages of northern Vanuatu, but in a very sporadic way. In some languages, like Vurës or Mwotlap, we can only identify a handful of verb pairs where that applicative function can still be detected, but the vast majority of words have lost that connection. Even the Torres languages (Hiw, Lo-Toga), where a reflex of *-akin can still be synchronically analyzed as an applicative suffix, have a wealth of verbal forms where that same reflex has lost any motivation, and has followed the road down all the way to opacity.

That said, there is still one type of reflex which has kept some level of productivity in some languages of this area: these are prepositions. Two types of prepositions can be identified, that ultimately go back to *-akin:

- Conservative prepositions, reflecting an ancient prepositional use that dates back to early stages of Proto-Oceanic (< PTB *ɣini < POc *kini);
- Innovative prepositions, which appear to have emerged more recently, via a reanalysis of the verb-final applicative (< PTB *-(C)áyi)

Neither of these types of prepositions is widespread in the Torres–Banks area: whether we look for the conservative or the innovative type, these are distributed patchily, and found in no more than 2 or 3 languages out of the 17 spoken in the area.

4.1 Conservative prepositions

As hinted earlier in §2, **akin[i]* must have split early on – perhaps as early as POC itself – into two outcomes: a verbal suffix **-akin[i]*, and a free preposition **(a)kin[i]*. This development has been described for other Oceanic languages (cf. Evans 2003:205–206, 2010:181, Ross 2004:508, Naitoro 2018:172–184, 215–250), and is reflected in northern Vanuatu in the form of **yini*, which can be reconstructed as an oblique preposition in Proto-Torres–Banks.

Every language of north Vanuatu has a variety of prepositions, but only a minority kept reflexes of PTB **yini*, in the form of *gin* /yin/. In the Torres & Banks area, these languages are Hiw, Dorig and Mwerlap. Hiw *gin* is only used as a locative preposition, or rather a formative for locative adverbs, in combination with demonstratives: e.g. *gin* + proximal deictic *ene* → *gin-ene* ‘here’. Mwerlap has a suffixable preposition *gin* (François 2005a:484), which commonly combines with personal suffixes:

- (41) Mwerlap [gq.AF:V12:50.Mrl]
Në nu-vvorop gin-eak.
 1sg STAT-thank OBL-2sg
 ‘I am grateful **to** you.’

In Dorig, *gin* is a productive preposition used mostly for locative relations:

- (42) Dorig⁵⁴
Tuar m-tur gin o kēr-in, tuar m-tur gin o qāt-in.
 one PRF-stand OBL ART end-3sg.P one PRF-stand OBL ART head-3sg.P
 ‘One of them stood **at** the bow, the other **at** the stern.’
- (43) Dorig⁵⁵
Wrisis so-ttañ gin sē neñ, i tma-ñ gēn sa le.
 (Spirit) IRR-touch OBL someone TOP HUM.ART father-2sg.P FOC₁ this FOC₂.
 ‘If Wrisis lays his hand **on** someone, that will be your father.’

Dorig *gin* also encodes some more abstract oblique relations:

⁵⁴Link to Dorig corpus: <https://doi.org/10.24397/pangloss-0002306#S23>.

⁵⁵Link to Dorig corpus: <https://doi.org/10.24397/pangloss-0003197#S17>.

(44) Dorig⁵⁶

O sav gongon m-la **gin** nēk, kmār so-briñ lala nēk.
 ART which problem PFT-take OBL 2sg 1ex:DU POT₁-help POT₂ 2sg

“Whatever trouble may happen **to** you, we’ll be able to help you.”

Related prepositions are reported for other Vanuatu languages. Thus, *gin* in Suñwadia (Maewo I.) serves both as an instrumental and oblique preposition (Henri 2011:100). Further south, Araki has an oblique preposition *hini*, with variants *hin* ~ *ini* ~ *in* ~ *ni* ~ *n*, which is also from **akin*[i] (François 2002:159, fn.):

(45) Araki (François 2012:113)

O=slei-á **ini-a** !
 2s:lrr=give-OBJ:1sg OBL-3s

“Give it to me!” [liter. *Provide me with it!*]

Finally, as he analyzes the Bierebo language of Epi, Budd (2009:189, 199) draws a connection between **akin* and the morpheme *ka*, which he discusses further in Budd (2015). This form is used as an applicative (-*ka*) with valency-increasing properties, but also as an oblique preposition (*ka*).

In sum, several languages of Vanuatu have kept reflexes of POc **akin*, not just as a verbal suffix, but also as a preposition *[a]*kini* (> PTB **ȳini*). It is likely that these two morphemes were already separate at the time of the early settlement of Vanuatu.

4.2 Innovative prepositions, resulting from degrammaticalization

Some languages of north Vanuatu have also developed prepositions that are ultimately rooted in POc **akin*, but instead of evolving through the PTB preposition **ȳini*, they result from a more recent reanalysis of the verbal suffix as a free form. The reanalysis or degrammaticalization of a bound morpheme, such as a suffix into a free particle, has been labelled *debonding* (cf. Norde 2009:5, 186-227, Willis 2017:33).⁵⁷ The languages with the clearest examples of debonding affecting reflexes of **akin* are Mwotlap, Mota and Hiw.

Section 3.4 showed how frequent it is for Mwotlap verbs to end with a syllable -(C)*eg*, whether that form is synchronically analyzable or not. While the thematic consonant varies a lot, it is commonly /v/, resulting in a frequent final syllable -*veg*: e.g. (5b) *me-mtiy-veg* ‘sleep with’ [§1.2.2] illustrated one of the few examples of a transparent applicative function. In parallel, Mwotlap has degrammaticalized that syllable *veg* /βɛɣ/, i.e. reanalyzed it into a free word.

⁵⁶Link to Dorig corpus: <https://doi.org/10.24397/pangloss-0002306#S41>.

⁵⁷This development is the exact opposite of what happened in Malay, where the applicative suffix -*kan* has developed from the preposition *akan* (Harrison 1982:188, Adelaar 1984:410, 1992:149), ultimately being from **akən* (Adelaar 2011:348, Ross 2002).

One common use of *veg* is as a preposition taking a human object and encoding the *content* after a verb of speech ('about s.o. '), or the *stimulus* after a verb of thought or emotion ('for, about s.o. '):

(46) Mwotlap⁵⁸

Mey na-tm̃an en kē ni-lololwon veg kē.
 REL ART-man DEF 3sg AOR-sorrowful OBL 3sg
 (after her death) "Her husband was devastated **about** her."

(47) Mwotlap⁵⁹

Kēy malaklak tō veg tita nōnōm en.
 3pl rejoice PROG OBL mother 2sg.P DEF
 "They were rejoicing **about** your mother."

The status of *veg* as a morphologically independent word is shown by the ability to pause before it, and to have TAM particles separating it from the verb – like the progressive particle *tō* in (47). One further step in the evolution of **-akin* in Mwotlap has been its further reanalysis into a conjunction *veg*, used as a clausal linker 'because':

(48) Mwotlap⁶⁰

Nēk tit-van vēhte, veg mahē mal qōn!
 2sg NEG:POT₁-go NEG:POT₂ because place IAM night
 "You can't go there, **because** it's already dark!"

Even though *veg* originates in the **-akin* suffix, it has clearly gained morphosyntactic autonomy. The conjunction can even head a predicate by itself, as in this negative statement:

(49) Mwotlap (François 2005b:129)

Et= veg te so n-eh itōk.
 NEG₁= because NEG₂ COMP ART-song good
 "It is not **because** the song is nice."

The neighboring language Mota has also innovated a preposition *vag*, which Codrington & Palmer (1885:238) label "a separable suffix, equivalent in meaning to 'with'". This can be, again, formulated as a case of degrammaticalization, as the former suffix was reanalyzed as a comitative preposition:

⁵⁸Link to Mwotlap corpus: <https://doi.org/10.24397/pangloss-0003310#S16>.

⁵⁹Link to Mwotlap corpus: <https://doi.org/10.24397/pangloss-0002300#S175>.

⁶⁰Link to Mwotlap corpus: <https://doi.org/10.24397/pangloss-0002300#S36>.

(50) Mota⁶¹

Nira me togtoga, o tavne i tuwale, vag raso-na.
 3pl PFT stay~DUR ART woman NUM one COMIT sister-3sg
 “Once upon a time, there was a woman, **with** her sister.”

Finally, we saw how Hiw has different reflexes of **-akin*, including a productive applicative suffix *-nog* ~ *-vog* [§3.2.1]. In addition, our Hiw corpus shows the existence of two rare prepositions: *og* /ɔŋ/ and *tog* /tɔŋ/; both reflect a process of degrammaticalization from the verbal suffix. The first of these prepositions, namely *og*, encodes the stimulus or cause of certain states:

(51) Hiw⁶²

Tomñwëtom noke mē̄r og i-ke, pa noke
 if 1sg be.angry OBL DOM-2sg but 1sg
tat not mati-ke.
 NEG:IRR hit:SG to.death:SG-2sg
 “Even if I’m furious **at** you, I won’t kill you.”

In principle, examples like (51) are ambiguous, due to the morphological proximity with the verb: are we dealing with a free preposition, or with an applicative suffix *mē̄r-og* (‘be angry at’)? Unfortunately, the test of the TAM morphology, which was useful in the Mwotlap example (47), is not available, because in Hiw postverbal TAM morphology always follows the object (François 2017:306). That said, the same morpheme *og* is found with other verbs, which suggests it may indeed have been reanalyzed into a preposition:

(52) Hiw⁶³

Tekñwa ñwati-ne ve toge momeřög og ye pe.
 HUM:PL brother-3sg IPFV AUX:PROG be.enraged OBL DOM:3sg now
 “His brothers were now enraged **at** him.”

(53) Hiw [gq.AF:V08:15.Hiw]

Tom nine ti not ne meta-ne ti,
 COMP 3sg CTRF₁ hit:SG ART eye-3sg CTRF₂
woteye ne meta-ne ta pō og-Ø.
 maybe ART eye-3sg POT blind OBL-it
 “If he had hit her eyes, she could have become blind **because of** it.”

⁶¹Link to Mota corpus: <https://doi.org/10.24397/pangloss-0003249#S2>.

⁶²Link to Hiw corpus: <https://doi.org/10.24397/pangloss-0003252#S137>.

⁶³Link to Hiw corpus: <https://doi.org/10.24397/pangloss-0003256#S58>.

The second preposition has the form *tog*. It occurs after certain experiencer predicates (e.g. ‘easy’, ‘difficult’, ‘pleasant’...), and introduces the participant for whom this predicate holds true – a semantic relation which many languages encode using an experiencer dative (Haspelmath 2001:66). Being normally followed by a human object, the Hiw preposition *tog* governs the special accusative for humans, glossed DOM ‘Differential object marking’ [cf. fn.17, §3.2.1]:

(52) Hiw⁶⁴

Tameṛēn tō ṅwuye wuyog vën, teṛōnye tog ye pe.
 when go:SG return again thither easy OBL DOM:3sg now
 “When he reached [the Underworld] again, it was now much easier **for** him.”

(52) Hiw⁶⁵

Wye tog i tekṅwa ti ye, Pupu Samuel
 good OBL DOM HUM:PL PAST ADV:INAN grandpa S.
ve vegevage vati tekṅwa ti ye.
 IPFV talk show HUM:PL PAST ADV:INAN
 “Luckily **for** us [*liter.* good for people], Grandpa Samuel told us about it all.”

In sum, Hiw has followed the same sort of debonding process as the cognate morphemes *vag* in Mota, or *veg* in Mwotlap; except, it innovated not one but two oblique prepositions – both descendants from POc **akin*.

5 Conclusion

The objective of this paper was to examine the modern reflexes of the Proto-Oceanic applicative suffix **-akin* in the languages spoken in northern Vanuatu, building upon earlier work by Pawley (1973), Clark (1973) and Evans (2003) on valency-changing devices in Proto-Oceanic. In light of the numerous grammatical descriptions of languages spoken in Vanuatu published in the last decades, it has become increasingly apparent that reflexes of this suffix are still present throughout the archipelago – yet with diverse functions, and with different degrees of productivity. The northernmost region, namely the Torres and Banks islands, are no exception to this.

Through the analysis of our corpora – with a particular focus on Hiw, Mwotlap and Vurës – we identified four distinct outcomes of the suffix **-akin*. We ranked these pathways in a logical order, from the most productive and transparent uses to the most opaque and vestigial cases. These four outcomes are illustrated in Table 16, for our three focal languages, citing examples from our previous sections.

⁶⁴Link to Hiw corpus: <https://doi.org/10.24397/pangloss-0003257#S40>.

⁶⁵Link to Hiw corpus: <https://doi.org/10.24397/pangloss-0003257#S50>.

Table 16 – Recapitulation of the four distinct outcomes observed for reflexes of *-akin

Outcome	Hiw	Vurës	Mwotlap
#1 semi-productive applicative suffix	vëyag 'run' → vëyag- vog 'run with' [§3.2.1]	teñ 'cry' → teñ- seg 'cry for' [§3.3.1]	ōy 'be full' → ōy- heg 'be full of' [§3.4.1]
#2 suffix with transparent yet irregular semantics	giy 'dig out' → giy- ñog 'dig <hole>' [§3.2.2]	wur 'sweep' → wur- veg 'clean' [§3.3.2]	ak 'do, make' → ak- teg 'do what?' [§3.4.2]
#3 possible former suffix, with opaque semantics	oye 'take' → ??? oyet og 'await' [§3.2.3]	mem 'put down' → ??? mem seg 'breathe' [§3.3.3]	mōl 'return' → ??? mō leg 'clarify' [§3.4.3]
#4 vestigial word-final syllable	??? → wō tog 'throw' [§3.2.4]	??? → liñ ereg 'hide' [§3.3.4]	??? → hay veg 'enter' [§3.4.4]

The development of *-akin evidently went down a continuum of increasing arbitrariness, as reflexes of the original applicative suffix ended up their route in the form of a petrified, desemanticized, opaque syllable at the end of many words. But while the word-final reflexes of *-akin followed this road towards opacity, some languages found a way to revive it, so to speak, by reanalyzing it as a free preposition. Such is the fifth outcome we identified, in addition to the four listed above [§4.2].

This is how the same linguistic area witnessed both the demise of a former morpheme and its resurrection in a new shape, with new functions.

APPENDIX

Orthography of the 17 Torres-Banks languages

Forms in this study are given using the practical orthographies adopted for northern Vanuatu languages. Many conventions are unproblematic, and reflect their expected phonetic value: this is the case of *p, t, k, l, r, m, n, s, h, w*, as well as *a* and *i*. Some conventions are specific to some languages; we only indicate here those in use in this paper.

- *b, d, g* represent prenasalised stops [ᵐb], [ᵐd], [ᵐg];
- *g* is a voiced velar fricative [ɣ], realised as approximant [ɰ] syllable-finally
- *ñ* is [ɲ]; *m̃* is [ɲᵐ]; *j* is [tʃ]; *y* is [j]
- *q* is [kʷ] in Hiw, Lo-Toga, Lehali, Mwerlap; [kᵑʷ] elsewhere
- *r̃* in Hiw is [g̃]
- *v* is [v]~[f] in Vera'a, Mota, Mwerlap; [v]~[β] elsewhere
- in the Torres (Hiw and Lo-Toga), *e* is [ə]; *ë* is [ɛ] in Lo-Toga, [e] in Hiw
- in the Banks (all other languages), *e* is [ɛ]; *ë* is [œ]
- *ē* is [i]; *ō* [ʊ] contrasts everywhere with *o* [ɔ]; *ö* is [ø];
- *ā* is [a:] in Dorig; *ä* is [ɛ̃a] in Koro, [æ] elsewhere.
- *u* is [y] in Vurës, [u] elsewhere

List of abbreviations

List of glossing abbreviations

APPL – applicative; COMIT – comitative; COMP – complementizer; CTRF – counterfactual; DEF – definite; DEM – demonstrative; DOM – differential object marker; DU – dual; DUR – durative; EX – exclusive; FOC – focus; FUT – future; GROUP – group of people; HITH – hither; HUM – human; IAM – iative; IPFV – imperfective; IRR – irrealis; LOC – locative; NEG – negator; NMZ – nominalizer; NSG – non – singular; NUM – numeral; OBJ – object; OBL – oblique; ORIG – origin; P – possessive; POT – potential; PROG – progressive; PROH – prohibitive; PRST – present; PRT – preterite; REL – relativizer; s.o. – someone; s.th. – something; SBJV – subjunctive; SG – singular; STAT – stative; TOP – topic.

NB: In glosses, <...> indicates the typical object of a transitive verb: e.g. MTP *ha* ‘draw <water>’, ‘kill <many people>’.

Language names

DRG – Dorig; HIW – Hiw; KRO – Koro; LHI – Lehal; LKN – Lakon; LMG – Lemerig; LTG – Lo-Toga; LYP – Löyöp; MRL – Mwerlap; MTA – Mota; MTP – Mwotlap; MSN – Mwenen; NUM – Nume; OLR – Olorat; VRA – Vera’a; VRS – Vurës; POc – Proto Oceanic; PNCV – Proto North Central Vanuatu; PTB – Proto Torres-Banks.

References

- Adelaar, A. 1984. Some Proto-Malayic affixes. *Bijdragen tot de Taal-, Land- en Volkenkunde* 140(4): 402–421.
- 1992. *Proto Malayic: The Reconstruction of its Phonology and Parts of its Lexicon and Morphology*. Canberra: Pacific Linguistics.
- 2011. Javanese -aké and -akən: A Short History. *Oceanic Linguistics* 50(2): 388–350.
- Ball, D. L. 2008. Clause structure and argument realization in Tongan ([PhD Thesis](#)). Stanford University.
- Barbour, J. 2012. *A Grammar of Neverver*. Berlin, Boston: De Gruyter Mouton.
- Budd, P. 2009. Topics in the grammar of Bierebo, Central Vanuatu, with a focus on the Realis/Irrealis categories ([PhD Thesis](#)). London: School of Oriental and African Studies.
- 2015. Move the ka: Valency and instrumental shift in Bierebo. In François et al. (eds.), 53–76.
- Clark, R. 2009. **Leo tuai: A comparative lexical study of north and central Vanuatu languages*. The Australian National University.
- Codrington, R. H. & J. Palmer. 1896. *A dictionary of the language of Mota, Sugarloaf Island, Banks Islands*. London: Society for Promoting Christian Knowledge.
- Crowley, Terry. 1982. *The Paamese language of Vanuatu*. Canberra: Pacific Linguistics.
- 2006. *Naman: A vanishing language of Malakula, Vanuatu*. Edited by John Lynch. Canberra: Pacific Linguistics.
- Dixon, R.M.W. & A. Aikhenvald. 2000. *Changing valency: Case studies in transitivity*. Cambridge: Cambridge University Press.
- Early, R. 2016. *A Grammar of Lewo, Vanuatu*. Unpublished manuscript.
- Evans, B. 2003. *A study of valency-changing devices in Proto-Oceanic*. Canberra: Pacific Linguistics.
- 2010. Proto Oceanic *akin[i]: reconstructing change in progress. In John Bowden, Nikolaus Himmelmann & Malcolm D. Ross (eds.), *A journey through Austronesian and Papuan linguistic and cultural space: Papers in honour of Andrew Pawley*, 179–196. Canberra: Pacific Linguistics.

- François, A. 2000. Dérivation lexicale et variations d'actance: Petits arrangements avec la syntaxe. *Bulletin de la Société de Linguistique* 95(1). 15–42.
- 2001. Contraintes de structures et liberté dans l'organisation du discours: Une description du mwotlap, langue océanienne du Vanuatu ([PhD Thesis](#)). Université Paris-IV Sorbonne.
- 2002. *Araki. A disappearing language of Vanuatu*. Canberra: Pacific Linguistics.
- 2004. Chains of freedom: Constraints and creativity in the macro-verb strategies of Mwotlap. In I. Brill & F. Ozanne-Rivierre (eds.), *Complex predicates in Oceanic languages: Studies in the dynamics of binding and boundness* (Empirical Approaches to Language Typology), 107–143. Berlin: Mouton de Gruyter.
- 2005a. Unraveling the History of the Vowels of Seventeen Northern Vanuatu Languages. *Oceanic Linguistics* 44(2): 443–504.
- 2005b. A typological overview of Mwotlap. *Linguistic Typology* 9(1). 115–146.
- 2010a. Pragmatic demotion and clause dependency: On two atypical subordinating strategies in Lo-Toga and Hiw (Torres, Vanuatu). In I. Brill (ed.), *Clause hierarchy and Clause linking: The syntax and pragmatics interface* (Studies in Language Companion Series 121), 499–548. Amsterdam, New York: Benjamins.
- 2010b. Phonotactics and the prestopped velar lateral of Hiw: Resolving the ambiguity of a complex segment. *Phonology* 27(3). 393–434.
- 2011a. Where *R they all? The geography and history of *R loss in Southern Oceanic languages. *Oceanic Linguistics* 50(1). 140–197.
- 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.
- 2012. Ditransitive alignment and referential hierarchies in Araki. *Linguistic Discovery*, 10: 3.
- 2013. Shadows of bygone lives: The histories of spiritual words in northern Vanuatu. In R. Mailhammer (ed.), *Lexical and Structural Etymology* (Studies in Language Change), 185–244. Berlin: DeGruyter.
- 2014. Trees, waves and linkages: Models of language diversification. In Bower, C. & B. Evans (eds.): *The Routledge Handbook of Historical Linguistics* (pp. 161–189). New York: Routledge.
- 2016. The historical morphology of personal pronouns in northern Vanuatu. In K. Pozdniakov (ed.), *Reconstruction et classification: Tendances actuelles. Special issue of Faits de Langue* 47, 25–60.
- 2017. The economy of word classes in Hiw, Vanuatu: Grammatically flexible, lexically rigid. *Studies in Language* 41(2). 294–357.
- 2019. A proposal for conversational questionnaires. In A. Lahaussois & M. Vuillermet (eds.), *Methodological Tools for Linguistic Description and Typology* (Language Documentation & Conservation Special Publication 16), 155–196. Honolulu: Univ. of Hawaii.
- 2022. Lexical tectonics: Mapping structural change in patterns of lexification. *Zeitschrift für Sprachwissenschaft* 41(1). 89–123.
- 2023a. *A Mwotlap French–English cultural dictionary* (3rd ed.). Electronic file, work in progress. CNRS; Australian National University. [<https://tiny.cc/Mwotlap-dict>]
- 2023b. Fonds Alexandre François: Field recordings from Vanuatu and the Solomon Islands. *Pangloss Collection – CoCoON* (Collections de Corpus Oraux Numériques). Paris: CNRS HumNum. Open access. [<https://tiny.cc/Fonds-A-Francois>].
- François, A, S. Lacrampe, M. Franjeh & S. Schnell (eds.). 2015. *The Languages of Vanuatu: Unity and Diversity* (Studies in the Languages of Island Melanesia 5). Canberra: Asia-Pacific Linguistics Open access. <http://hdl.handle.net/1885/14819>.
- Harrison, S. P. 1982. Proto Oceanic *aki(ni) and the Proto Oceanic periphrastic causative. In A. Halim, L. Carrington & S. Wurm (eds.) *Papers from the Third International Conference on Austronesian Linguistics. Vol. 1: Currents in Oceanic*, pp. 179–230. Canberra: Pacific Linguistics.

- Haspelmath, M. 2001. Non-canonical marking of core arguments in European languages. In Alexandra Y. Aikhenvald, R.M.W. Dixon & Masayuki Onishi (eds.), *Non-canonical Marking of Subjects and Objects* (Typological Studies in Language 46), 53–84. Amsterdam: Benjamins..
- Healey, D. S. 2013. A Grammar of Maskelynes: The Language of Uluveu Island, Vanuatu ([PhD Thesis](#)). The University of the South Pacific.
- Henri, A. 2011. *Le sūnwadia: Éléments de description d'une langue du Vanuatu*. Leuven, Paris: Peeters.
- Hyslop, C. 2001. *The Lolovoli dialect of the North-East Ambae language, Vanuatu*. Canberra: Pacific Linguistics.
- Jauncey, D. 2011. *Tamambo: The language of west Malo, Vanuatu*. Canberra: Pacific Linguistics.
- Kikusawa, Ritsuko. 2012. On the development of applicative constructions in Austronesian languages. 国立民族学博物館研究報告 [*Bulletin of the National Museum of Ethnology*] 36(4), pp. 413–455.
- Krauß, D. 2018. Recordings from Vanua Lava, Vanuatu. Collection KD1 at catalog.paradisec.org.au [Open Access]. <https://dx.doi.org/10.26278/WHWD-0Y52>
- 2021. Towards a Theory of Complex Predicates in Australian and Oceanic Languages. An Analysis of Coverb Constructions in Wagiman and Serial Verb Constructions in Vurës ([PhD Thesis](#)). University of Newcastle, Australia.
- Lacrampe, S. 2014. Lelepa: Topics in the grammar of a Vanuatu language. PhD dissertation. Canberra: Australian National University.
- Lemaréchal, A. 1989. *Les parties du discours, Syntaxe et sémantique* (Linguistique Nouvelle). Paris: Presses Universitaires de France.
- Levin, B. 1993. *English verb classes and alternations: A preliminary investigation*. Chicago: University of Chicago Press.
- Lichtenberk, F. 1983. *A grammar of Manam* (Oceanic Linguistics Special Publications, 18). Honolulu: University of Hawaii Press.
- Lynch, J. 2000. *A grammar of Anejoñ*. Canberra: The Australian National University.
- Malau, C. 2016. *A grammar of Vurës, Vanuatu*. De Gruyter Mouton.
- 2021. *A dictionary of Vurës, Vanuatu*. ANU Press.
- Margetts, Anna, Sonja Riesberg & Birgit Hellwig (eds.). 2022. *Caused Accompanied Motion: Bringing and taking events in a cross-linguistic perspective* (Typological Studies in Language, 134). Amsterdam: John Benjamins.
- Naitoro, K. 2018. Morphs in search of meaning: Southeast Solomonian transitive morphology in diachronic perspective. PhD dissertation. Canberra, ACT: Australian National University.
- Osmond, M. & A. Pawley. 2016. Perception. In Ross, Pawley & Osmond (eds). *The Lexicon of Proto Oceanic: The culture and environment of ancestral Oceanic society. Vol. 5 People: body and mind*. Canberra: Pacific Linguistics.
- Pawley, A. 1973. Some problems in Proto-Oceanic grammar. *Oceanic Linguistics* 12. 103–188.
- Pawley, A. K. & L. A. Reid 1979. The evolution of transitive constructions in Austronesian. In Paz Buenaventura Naylor (ed.) *Austronesian studies: Papers from the Second Eastern Conference of Austronesian Languages*, 103–130. Ann Arbor: Center for South and Southeast Asian Studies, University of Michigan.
- Ross, M. D. 1998. Proto Oceanic phonology and morphology. In Ross, M., A. Pawley & M. Osmond (1998). *The lexicon of Proto Oceanic: The culture and environment of ancestral Oceanic society. Volume 1 – Material culture*.
- 2002. The history and transitivity of western Austronesian voice and voice-marking. In Fay Wouk & Malcolm D. Ross (eds.) *The history and typology of western Austronesian voice system*, 17–62. Canberra: Pacific Linguistics
- 2004. The morphosyntactic typology of Oceanic languages. *Language and Linguistics* 5(2). 491–541.

- Ross, M. D., A. Pawley & M. Osmond (2016). *The lexicon of Proto Oceanic: The culture and environment of ancestral Oceanic society. Volume 5 – People: body and mind*. The Australian National University.
- Schnell, Stefan. 2022. Caused accompanied motion constructions in Vera'a. In Margetts *et al.* (eds.), 243–271.
- Starosta, S., A. Pawley & L. A. Reid (1981). The evolution of focus in Austronesian. Unabridged version of a paper read at the Third International Conference on Austronesian Linguistics. January, 24–29, 1981. Denpasar, Bali, Indonesia.
- Thieberger, N. 2006. *A Grammar of South Efate: An Oceanic Language of Vanuatu*. Honolulu: University of Hawai'i Press.
- Touati, B. 2010. Étude des reflets de *-akini dans les langues océaniques (MA Thesis): Université de Paris-IV Sorbonne.
- Willis, D. 2017. Degrammaticalization. In A. Ledgeway & I. Roberts (Eds.), *The Cambridge Handbook of Historical Syntax* (Cambridge Handbooks in Language and Linguistics, pp. 28–48). Cambridge: Cambridge University Press.
- Zobel, E. 2002: The position of Chamorro and Palauan in the Austronesian family tree: evidence from verb morphosyntax. In F. Wouk & M. Ross (eds.): *The history and typology of western Austronesian voice systems*. 405–434. Canberra: Pacific Linguistics.
-