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Habituality in four Oceanic languages of Melanesia

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Abstract: Our knowledge about tense, aspect and modality (TMA) in the Oceanic languages of Melanesia has so far been severely limited by the lack of available data. Habituality in particular, as one of the less described TMA categories, has not yet been widely discussed for this group of languages. Based on corpus data and elicitations, we give a detailed overview of four languages, identifying common trends and addressing specific questions of general concern. These include the relation of habituality to (im)perfectivity and the relation between habituality and irrealis.

Keywords: aspect, Oceanic, reduplication, modality

1 Introduction

The Oceanic language family roughly includes between 450 (Lynch et al. 2002) and 520 (Hammarström et al. 2017) individual languages. Most of them are spoken in Melanesia, specifically in Papua New Guinea, the Admiralty Islands, the Solomon Islands, Vanuatu, and New Caledonia. In contrast to some of the bigger Oceanic languages of Polynesia such as Samoan or Maori, most of the Oceanic languages of Melanesia are spoken by relatively small communities of speakers, often do not have a standardized variety, a written tradition, or official status. Accordingly, they are often comparatively under-documented.

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It should therefore not come as a surprise that our knowledge about tense and aspect in this group of languages is rather fragmentary. At the same time, habitual aspect is one of the less described aspectual categories and many of the existing grammatical descriptions do not address this category explicitly. There are of course exceptions to this generalization. To name but two, Bril (2016) reports a marker *kua* for Nêlêmwa (New Caledonia), which appears to be restricted to habitual contexts, mostly of the past:

- (1) *I u kua khabwe*
 3SG PFT FREQ say
 ‘He’d often say it’ [Bril 2016: 91]
- (2) *Kio I kua shaya shi-n.*
 NEG 3SG FREQ work side-POSS.3SG
 ‘He does/did not often work at home.’ [Bril 2016: 91]

There are a few other Oceanic languages which have been reported to have markers that exclusively express habituality. For example, Bali-Vitu has a system of portmanteau subject proclitics that express TMA distinctions along with person-number features of the subject; this system is said to distinguish between the categories of realis, realis perfect, and realis habitual (Ross 2002a). The auxiliary or preverbal particle *rere* in Siar is said to specifically express habitual aspect (Ross 2002b), similar to the auxiliary *fani* in Kokota (Palmer 2002). Banoni and Port Sandwich have both been reported to have a post-verbal marker expressing habituality (Lynch and Ross 2002a, b). This picture seems to confirm the claim by Filip (2015) contra Dahl (1985) that dedicated habitual markers are not exceptional cross-linguistically, but rather more widespread than previously acknowledged. On the other hand, none of these languages have so far undergone sufficiently detailed investigations to confirm that the markers in question are in fact exclusively used for the expression of habituality.

In any case, in the languages under investigation, we did not find markers that expressed habituality to the exclusion of other perfective or modal meanings. We attempted to identify the main ways of expressing habitual aspect in our four subject languages, based on existing accounts, general and targeted elicitations, and especially corpus data. We found that the languages do show significant similarities in how they express habitual aspect, some of which may be characteristic of the related languages in this region more broadly. At the same time, we also found significant variation, which speaks to the diversity of Oceanic languages of Melanesia. The main means of expressing habituality in the four subject languages are:

1. Auxiliaries deriving from a verb with the meaning *stay*;
2. Reduplication;
3. In Ma'ŕea: an imperfective affix.

Crucially, in all four languages, habituality does not have to be expressed explicitly.

While a full theoretical exploration of our findings is outside the scope of this paper, our results offer an interesting window on some of the questions that have long accompanied the study of habituality. In the next section, we will briefly give some background on these theoretical questions and explain how our findings relate to them. We will then give an overview of the subject languages and our methodology. In Sections 4 to 7, we will discuss each of the subject languages in detail. We summarize our results and draw conclusions in Section 8.

2 Theoretical background

In this section, we want to clarify some of the terms we use and give some background of the theoretical questions to which our findings are potentially relevant. In particular we will comment on the following points:

1. the definition of habituality and genericity;
2. the relation between habituality and the distinction between perfective and imperfective aspect;
3. the relation between habituality and the distinction between realis and irrealis mood;
4. the relation between habituality and tense.

First of all, we would like to comment on the term **habituality**. Comrie (1976: 27) suggests the following definition:

The feature that is common to all habituais [...] is that they describe a situation which is characteristic of an extended period of time.

Krifka et al. (1995) define **characterizing sentences**, which comprise habituais, as

propositions which do not express specific episodes or isolated facts, but instead report a kind of *general property*, that is, report a regularity which summarizes groups of particular episodes or facts.

Many authors distinguish between **genericity** and **habituality**. However, the distinction between the two terms is by no means trivial and varies between

authors and linguistic subfields. According to Krifka et al. (1995), there are two types of generic statements: (1) those referring to kinds as *The potato was first cultivated in South America* and (2) generalizations over events as *John smokes a cigar after dinner*. This latter type of generic statement is also often described as a habitual. In this sense, habituals may be understood as a subclass of generics.

By contrast, in Dahl (1985), the distinction between **generics** and **habituals** is the distinction between what is **generally** the case and what is **usually** the case (also compare Dahl 1995). In a similar vein, Boneh and Doron (2012) distinguish between a habitual operator **Hab**, which is an existential quantifier and a generic operator **Gen**, which is a universal quantifier.

For this article, we took all these distinctions into consideration, but did not find them to play a major role in our subject languages. As far as we could find, statements about kinds can be expressed by the same means as statements about habits of an individual; and whether or not a characterizing statement may have exceptions does not appear to play a major role in how these meanings are expressed. On the other hand, we did not systematically elicit data for all our subject languages to exhaustively test the impact of these distinctions. So far, we can only conclude that they do not figure prominently in the expressions of genericity and habituality in our subject languages. As a result, we do not systematically distinguish between kind-referring statements such as *snakes eat small birds and mammals* and characterizing expressions such as *Mary works in her field every day*. Moreover, while we considered both stative and non-stative event descriptions, the focus of this article is on non-stative ones.

The main phenomenon under investigation may be defined as ‘descriptions of regularly recurring events that characterize the behavior of individuals or kinds over a certain period of time’. This is not meant to be a theoretically strict definition, but only as a working characterization that helped us identify relevant contexts.

In this article, we will frequently use the term **habitual aspect** to refer to these types of statements. By doing so, we do not intend to take a specific stand on the exact relation between habituality, aspect and mood. Starting with the relation between habituality and aspect, there is considerable disagreement in the literature. While Comrie (1976) classifies habituality as a special case of imperfective aspect, most later authors have leaned towards to a more complex assessment of the situation. Thus, Dahl (1985) treats habituals and generics as their own aspectual category, not subordinate to imperfective. Citing Mønnesland (1984: 54), Dahl (1985: 79) stresses the hybrid nature of habitual aspect in terms of its perfectivity:

one can use a pf. verb, thus stressing each individual total event, or use an ipf. verb, which means that the stativeness of unlimited repetition takes precedence'. The first solution is normally chosen in Russian, Polish, and Bulgarian, whereas the second is preferred (even if it is not always the only possible alternative) in Czech, Slovak, Sorbian (a West Slavic language spoken on the territory of the German Democratic Republic) and Slovene. In Serbo-Croatian both aspects are possible.

A similar view is taken by Hengeveld and Mackenzie (2008). Arche (2014) analyzes habituals as imperfective descriptions of series of perfective, or bounded, events (also compare Ferreira 2016 for a related view). Filip (2015) proposes that habituality, or characterizing genericity is not a sub-category of tense or aspect at all, but constitutes a separate and independent category.

In our study, we found that habituality is often expressed by the same means as other types of imperfective aspect, in particular auxiliaries that have developed from verbs meaning *stay*, reduplication and an imperfective aspectual affix in the case of Ma'ŋea. This strengthens the position that habituality is a special case of imperfective aspect. At the same time, we also found some intriguing support for the view that habitual aspect is semantically more complex than imperfective or perfective aspect alone: In particular in Daakaka and Ma'ŋea, reduplication is frequently combined with an additional marker of imperfectivity to express habituality.

Another question that is frequently and controversially discussed concerns the reality status of habitual statements.

As Givón (1994: 270) puts it:

The status of the *habitual*, a swing modal category par excellence, is murky for good reasons. From a communicative perspective, habitual-marked clauses tend to be strongly asserted, i.e. pragmatically like *realis*. Semantically, however, they resemble *irrealis* in some fundamental ways. To begin with, unlike *realis*, which typically signals that an event has occurred (or state persisted) at some specific time, a habitual-marked assertion does not refer to any particular event that occurred at any specific time. Further, the *reference properties* of NPs under the scope of habitual resemble those of NPs under the scope of *irrealis*.

The last of these observations is responsible for the classification of habituals as non-veridical by Giannakidou (1995). Cross-linguistically, these considerations are reflected by the fact that many languages use markers associated with *irrealis* to express habituality (see Cristofaro 2012 and references therein for a comprehensive overview). In our subject languages, the distinction between *realis* and *irrealis* statements is relatively prominent. We find the *murkiness* diagnosed by Givón (1994) reflected by the fact that, in all four subject

languages, habitual statements can occur both in realis (or unmarked) environments and in utterances specified for irrealis.

Lastly, various authors have discussed the relation between habituality and tense. Dahl (1985) and others have observed that quite a number of languages exhibit specific markers of habituality that are restricted to past contexts such as English *would* or *used to* (even though Binnick 2006 has argued that *used to* does not necessarily express habitual aspect at all). We could not find markers that were specific to expressing habituality in the past. While few publications comment on habitual aspect in future contexts, we tried to find such contexts too and have included our findings in the article. We did however not find anything unexpected in these contexts.

3 Data and methodology

The languages in this study all belong to Oceanic group within the vast family of Austronesian languages. They are all spoken in Melanesia, either in New Guinea (Saliba-Logea) or in Vanuatu. The rough locations of their main speaker communities are indicated in Figure 1. Their family relations are sketched in Figure 2.

Figure 1: Locations of the subject languages. 1: Saliba-Logea, 2: Maŵea, 3: Daakaka, 4: Nafsan.

All the subject languages have certain structural properties in common, some of which are listed below (also compare Dunn et al. 2008):

1. serial verb constructions;
2. reduplication of verbs (and sometimes nouns);
3. a distinction between inclusive and exclusive person features;
4. a rather tight-knit predicate structure obligatorily including a prefixed or pro-clitic subject agreement marker and the verb root, which may optionally be reduplicated; Depending on the language, this structure may be augmented by different types of mostly preverbal tense, aspect and mood (TMA) markers;
5. grammatical differentiation between alienable and inalienable possession. Daakaka, Ma'ŋea and Saliba-Logea have an additional system of possessive classifiers, but Nafsan does not.

However, there are also significant differences between the subject languages. Saliba-Logea in particular differs from the Vanuatu languages in two important ways.

Firstly, the basic word order of Saliba-Logea is SOV, while the Vanuatu languages share the order of SVO. Secondly, in Saliba-Logea, TMA marking is optional, while in Daakaka and Ma'ŋea, every assertive sentence needs to contain a marker conveying some TMA information. For Nafsan, our research indicates that the subject proclitics that have been described as simultaneously encoding realis are in fact neutral with respect to TMA information. In this sense, it can also be said to have optional TMA marking, like Saliba-Logea.

Figure 2: Family relations between the subject languages.

Moreover, while all the languages in this study share a clusivity distinction, their pronominal systems and in particular their paradigms of subject agreement markers still differ quite significantly: Daakaka and Ma'ŵea have four number distinctions (singular, dual, paucal, plural), whereas Nafsan has three and Saliba-Logea has two. In Ma'ŵea and Nafsan, at least some subject agreement markers are portmanteau morphemes which also encode TMA information, but not in Daakaka and Saliba-Logea.

We will also see that all the languages in this study differ significantly with respect to their paradigms of TMA markers.

For this study, we explore corpora that have been created from documentary fieldwork for each language. The corpora we use are the following:

1. Daakaka: von Prince (2013)
2. Nafsan: Thieberger (2006a)
3. Ma'ŵea: Guérin (2006)
4. Saliba-Logea: Margetts et al. (2017)

There are several stories, themes and genres that are shared widely across this region. This allowed us to identify comparable contexts across corpora that we looked at in detail. They include accounts of how life used to be in the past as compared to today; traditional stories about how certain animals came to exhibit the characteristics we see today; and instructions about how to perform certain techniques and crafts.

We have imported these corpora from their native SIL Toolbox format to the ANNIS platform hosted by Humboldt-Universität zu Berlin for improved facilities for searching and analysis (Zipser and Romary 2010; Druskat 2018). We rely on corpus data, along with elicitation data from generic questionnaires such as the one in Dahl (1985) and existing descriptions.

Last but not least, some of us have already completed elicitations based on storyboards that target specific TMA-categories. We will report on the results from one particularly relevant context for Ma'ŵea, Nafsan and Daakaka. This context comes from Vander Klok (2013), which is a storyboard about Bill who always forgets his stuff on his way to work. The corresponding picture is shown in Figure 3.

Since more fieldwork targeted specifically at habitual aspect has not been carried out so far, and since all four subject languages are still relatively under-documented, it is possible that our findings do not exhaust the possibilities of expressing habitual aspect in each language. They do however offer a reliable view on frequent expressions and general trends.

Figure 3: *Bill is very forgetful.* Frame from the storyboard Vander Klok (2013).

4 Daakaka

4.1 Introduction

Daakaka is spoken by roughly one thousand speakers most of whom live in the West of the island of Ambrym, Vanuatu. The facts reported in this section were first described in von Prince (2015). The core verbal complex consists of a subject agreement marker, which encode four number distinctions and four person distinctions; a clitic encoding TMA and polarity values of the clause; optionally an imperfective auxiliary; the verb root, which may be reduplicated; optionally a resultative suffix and/or a transitivizing enclitic. The main verb can also be followed by one or more serial verbs. Table 1 gives an overview of the basic structure of the verbal complex.

Table 1: Structure of the verbal complex in Daakaka.

SBJ.AGR	(=)TMA	(AUX)	(REDUP-)	Verb	(-RES)	(=TR)
<i>na, ...</i>	<i>=m, ...</i>	<i>du, pwer</i>	<i>...</i>	<i>...</i>	<i>...</i>	<i>=ne</i>

The following sentence illustrates a verb complex with an auxiliary and resultative suffix in addition to the obligatory elements, which are printed in bold:

- (3) [**ye=m**   *du*   **tée-pyakilye**]   *basée pyan bweti levyak*
3PC=REAL CONT look-RES.search bird   under stem banyan
te basée ente mwe sóró tetes
DISC bird   this REAL talk again
‘they were looking for the bird under the banyan tree, then the bird
spoke again’ [5645/46]

Table 2 shows the system of subject agreement markers. The paradigm of TMA markers is given in Table 3. Their exact shape depends on their environment. They can be enclitic to a preceding subject agreement marker or proclitic to the proceeding verb if it starts with a vowel. In the case of a third person singular or inanimate subject, there is no subject agreement marker to cliticize to. In this case, the TMA markers are realized as monosyllabic words, where the vowel is determined loosely by the subsequent verb. Table 3 shows the paradigm of TMA and polarity markers.

Table 2: The system of subject agreement markers in Daakaka.

Person	Singular	Plural	Dual	Paucal
1EXCL	<i>na</i>	<i>kinye</i>	<i>kana</i>	<i>kisi</i>
1INCL		<i>ra</i>	<i>da</i>	<i>si</i>
2	<i>ko</i>	<i>ki</i>	<i>ka</i>	<i>kasi</i>
3	∅	<i>ya</i>		<i>ye</i>

Table 3: List of TMA markers in Daakaka.

	Enclitic	Proclitic	Monosyllabic
Pos. Realis	<i>=m</i>	<i>mw=</i>	<i>mwe/mV</i>
Neg. Realis			<i>to</i>
Pos. Potential	<i>=p</i>	<i>w=</i>	<i>wV</i>
Neg. Potential	<i>=n</i>		<i>nV</i>
Distal	<i>=t</i>	<i>t=</i>	<i>tV</i>
Open Polarity			<i>doo</i>
Change of State			<i>bwet</i>

4.2 Optionality

In Daakaka, a simple assertion about the episodic past or present is marked only by the realis marker:

- (4) *maa mwe wuo an, te an mees mwe dyanga*
 dove REAL open 3SG.POSS DISC 3SG.POSS food REAL lack
[vyanten swa mwe ane]
 man one REAL eat
 ‘The dove opened his [dish], but his food was not there, someone had eaten it’ [4665]

The same form can also be used for habitual and generic clauses, as illustrated by the following example:

- (5) *[vyanten ma ane], ka ó te pa, vyanten*
 person REAL eat ASR coconut DIST bear.fruit person
ma mini vyos an
 REAL drink coconut DEF
 ‘People eat [coconuts], when the coconut palm bears fruit, people drink the coconuts’ [3272]

This is however not the most common way to relate habitual meanings. Far more frequently, habitual meanings are expressed by an imperfective auxiliary in combination with a reduplicated verb form, or with only one of these two forms.

At the same time, no single expression in Daakaka can be claimed to be canonical for habitual aspect. When von Prince ran the Vander Klok (2013) storyboard, five different speakers produced the habitual context in five different ways, ranging from an unmarked structure with simple realis as in (6), over the auxiliary *mas*, over a subordinate structure with *kuowilye* that usually describes abilities, to the imperfective marker *bwe* and finally a reduplicated verb:

- (6) *Webung kevene mwe yurmiline suku-on nyoo, ma*
 day every REAL forget thing.of-3SG.POSS 3PL REAL
ge myane hat, ambrela, sus.
 be.like with hat umbrella shoes
 ‘Every day he forgot his things, like his hat, umbrella, and shoes.’

- (7) *taem wuoswa ka we mas yurmiline s-an sye*
time some ASR POT NEC forget CLF-3SG.POSS thing
mwelili nyoo na ka wa liye pwer myane nge yen
small.PL 3PL COMP ASR POT take stay with 3SG in
s-an gyes=an
CLF-3SG.POSS work=NMLZ
‘sometimes he would always forget his small things that he would take with him to his work’
- (8) *A mw=i vyanten swa na mo kuowilye ka we*
and REAL=COP person one COMP REAL know COMP POT
yurmiline sisye nyoo.
forget things 3PL
‘And he was a person who would sometimes forget his things.’ (lit. ‘...who could forget his things’)
- (9) *Mwe vyan yan mili gyes=an, bwe yurmiline kap,*
REAL go on place.of.work=NMLZ REAL.CONT forget cup
ki, sanglas, at, myane sus.
key sunglasses hat with shoes
‘He went to his work place, he would forget his cup, keys, sunglasses, hat and shoes.’
- (10) *...a mwe yur-yurmiline suku-on nyoo, suku-on*
and REAL REDUP-forget stuff.of-3SG.POSS 3PL stuff.of-3SG.POSS
ane gyes=an nyoo.
TR work=NMLZ 3PL
‘and he repeatedly forgot his things, his tools for work.’

All these different expressions are explored in more detail below.

4.3 Aspectual auxiliaries

Daakaka has two imperfective auxiliaries, *pwer* and *du*, which also have main verb counterparts with the meaning *stay*, *be at*. The difference between *pwer* and *du* is that *pwer* is specific to singular subjects, while *du* can only be used with plural subjects.¹

¹ There is an exception to that rule: *pwer* can also mean ‘sleep’, which is not the case for *du*. In this meaning, *pwer* is not restricted to singular subjects.

The auxiliary *pwer* is often shortened to *pwe* and often contracts with a preceding realis marker *m-* to the form *bwe(r)* [ʷbʷɛr]. These auxiliaries are not specific to habitual contexts but can express other types of imperfective aspect as well. They frequently express progressive aspect:

- (11) *te bwe na Buwu bwe kolir ane, bwe an ma*
 DISC song COMP B. REAL.CONT sing TR song DEF REAL
ge=tak
 like=PROX
 ‘And the song that Buwu was singing goes like this:...” [0970]

Example (12) shows a non-generic habitual relating to the working routine of the subject.

- (12) *vilye ar-an na mwe pwe gene san too*
 place place-3SG.POSS COMP REAL CONT make 3SG.POSS garden
ar-an mw=I ‘yen letakó’
 place-3SG.POSS REAL=COP in sago.palm
 ‘The place where she made her garden is called “In the sago palms”’ [4215]

In the following example, the imperfective plural auxiliary *du* is used to express a generic property of a bird species called *eya*, ‘white-eye’.

- (13) *ko w=esi ka ya=p téé ane mees te ya=m,*
 2SG POT=see ASR 3PL=POT look TR food DISC 3PL=REAL
puo ya=m du bangbang sukuo ma
 be.plentiful 3PL=REAL COP play be.together REAL
ge=te kyun
 be.like=MED just
 ‘you can see them look for food, there are many of them, they spend time together like this’ [0439]

In addition to those aspectual auxiliaries, Daakaka also sometimes uses the modal auxiliary *mas* to mark habitual contexts, which is described in more detail in Section 4.5.

4.4 Reduplication

As in many Oceanic languages of the region, reduplication in Daakaka is very productive and can have a wide range of functions. It can derive attributes from

verbs and express various kinds of pluractionality – this can imply that an action is performed repeatedly by the same actors, or that it is performed on various patients or by various agents (von Prince 2015).

Reduplicated verbs without further aspectual marking can occur in habitual contexts, but typically only in contexts where the plurality of the subject alone is enough to license its use:

- (14) *ya=m puo ya=m só-sóró kyun vyan or ka*
 3PL=REAL be.plentiful 3PL=REAL REDUP-talk just go place ASR
we yuop ya=m gii-kii or mwe yuop
 POT be.dawn 3PL=REAL REDUP-chirp place REAL be.dawn
 ‘they are many and they all talk and announce the rising sun; they tweet
 and it dawns’ [0456-57]

But there is reason to believe that the reduplication process does contribute to the habitual interpretation. Crucially, in negative habitual contexts, reduplication also occurs quite often, even with generic singular subjects such as in (15):

- (15) *a ko to sen-sene ne string*
 and 2SG NEG.REAL REDUP-hook TR line
 ‘But you don’t catch [the butterflyfish] with a line’ [1942]

However, the most frequent structure to be found in habitual contexts features a combination of the imperfective auxiliaries *pwer* and *du* described in Section 4.3 and a reduplicated verb form. Also in reverse, such combinations of the imperfective auxiliaries and reduplicated verbs typically express a habitual meaning. To the extent that there is any structure specific to habitual aspect in Daakaka, this would be it.

There is no structural distinction between kind-referring generic contexts such as (16) and more narrowly habitual ones such as (17). In (16), we see a context that describes general features of a species (hawks) and we find a combination of an imperfective auxiliary and a reduplicated verb form. In (17), we find the same structure expressing a regularly recurrent action by concrete individuals.

- (16) *nge ...bwe an-ane baséé di-sye, bwe*
 3SG ...REAL.CONT REDUP-eat bird part-3SG.POSS REAL.CONT
an-ane tyu
 REDUP-eat chicken
 ‘[the hawk] eats some of the other birds, it eats chickens’ [0410]

- (17) [...] *vyap myató nya ló, ye=m du vyan te*
 [...] old.woman old 3DU two 3DU=REAL stay go DISC
nate-yaa nyoo ya=m du deng-deng webung
 child-3DU.POSS 3PL 3PL=REAL CONT REDUP-cry day
ke-kevene
 REDUP-every
 ‘[...] there were two women and their children cried every day’ [3033]

Also, the same structure can be used for habitual assertions about the future as well as habitual descriptions of the past or present. Both of the following sentences come from a story which explains how the megapode and the chicken, who used to be very good friends, came to look so different and lead such different lives. The first of the following two examples is a stretch of direct speech by the megapode to the chicken, talking about the future. The second sentence then describes the current state of affairs.

- (18) *Ka ya=p du es-esi ngok teenem a nye ka na*
 ASR 3PL=POT stay REDUP-see 2SG home and 1SG ASR 1SG
w=i ten dóór kyun.
 POT=COP assigned.to dark.bush just
 ‘They shall see you in the village and I, I will go to the bush.’ [1347]
- (19) *tyu, mwe kuoli me teenem, me pwer teenem,*
 chicken REAL return come home come stay home
te vyanten ya=m du es-esi teenem
 DISC man 3PL=REAL stay REDUP-see home
 ‘The chicken went back to the village, it came to stay in the village and people see it in the village’ [1355]

Another example for a habitual description, with auxiliary and reduplication, referring to the future is given below. Like other future habitual contexts, this one is non-factive.

- (20) *te mwe ka na=p lingi ngok a ente kyun na=m*
 DISC REAL ASR 1SG=POT put 2SG and this just 1SG=REAL
sengane mw=i ten [ka ko=p pwe es-esi
 give REAL=COP assigned.to COMP 2SG=POT CONT REDUP-see
nye yan]
 1SG at
 ‘then she said, I will leave you and only this I give to you [so you will keep seeing me in it]’ [2541]

The same combination of auxiliary and reduplicated verb form is typically used in contexts of a past state of affairs that no longer holds. In these cases, the distal marker *t* indicates that what used to be the case is no longer the case (von Prince 2017).

- (21) *sóróusi-an na yap myató nyoo ya=t du*
 talk-NMLZ COMP old.man old 3PL 3PL=DIST stay
só-sóró-usili, ya=t du ka-ka meerin
 REDUP-talk-RES.follow 3PL=DIST CONT REDUP-say long.time
myaop te dyanga kuane ér Ambrym, te
 volcano DIST lack house 1PL.INCL.OBJ A. DIST
pwer Teveltes
 stay T.
 ‘The story which the elders used to tell, they said that long ago the volcano
 was absent from our home on Ambrym, it was on Malekula’ [3570]

4.5 Other means of expressing habitual aspect

Apart from the expressions explored so far, Daakaka has an inventory of adverbials such as *webung kevene* ‘every day’ and the (partial) loans from Bislama *taem kevene* ‘every time, always’ and *oltaem* ‘always’ to explicitly mark the regular re-occurrence of an event.

It also borrows the auxiliary *mas* ‘must’ from Bislama to express law-likeness:²

- (22) *a nge te go yan ly-em te we mas téé ane*
 and 3SG DIST crawl on leg-2SG.POSS DISC POT must look TR
myanok te bwis yen myanok
 sore DISC pass.under in sore
 ‘when it crawls onto your leg, it always looks for wounds and then enters
 the wound’ [2215]

² As can already be seen from that one example, *mas* cannot really be translated as ‘must’. There is however no other single expression in English that would correspond even roughly to the use of *mas* in Daakaka.

Another option that we find in Daakaka is the use of the subordinating verb *kuowilye* ‘know’, which can generally be used to express possibility or ability. This is described in the following section.

4.6 Habituality and irrealis

Most habitual contexts in Daakaka are marked as realis. We have seen in (21) above that the distal marker is frequently used in contexts of habitual states of affairs in the past that have ceased to continue into the present – these contexts are frequently translated into English by *would* or *used to*. The distal marker also expresses counterfactuality in conditionals and complement clauses. In this sense, one might say that past habituals are associated with irrealis mood in Daakaka. However, von Prince (2017) has argued that the distal can refer to the actual past as well as to counterfactual developments and that the discontinuity reading is a result of its contrast to the realis marker. In this sense, it would be wrong to take examples such as (21) as evidence for a connection between habituality and non-reality, since the distal marker in these cases refers to actual events.

The main non-realis marker in Daakaka is the positive potential marker, along with its negative counterpart. These can also be found in habitual contexts quite frequently. In most cases, this has to do with the indicative conditionals and generic temporal clauses that are often to be found in these environments. However, in some cases the use of the potential mood marker is not conditioned by these structures but appears to contribute to the habitual reading. In the following example, the potential mood marker alternates with the realis marker in the description of a ritual in which a piece of wood is made to move:

- (23) *vyanten nya na ye=m gomu [ka ye=p gomu te lee*
 person 3DU COMP 3DU=REAL grab ASR 3DU=POT grab DISC tree
ka wa tevene nya]
 ASR POT throw.against 3DU
 ‘the two men who hold it, they will hold it and the wood will shake them’
 [2683/4]

Another quite common situation is illustrated in the next example: Here, the habitual use of the treefern leaves as kindling is described as a generic possibility. This possibility is explicitly referred to as such by the verb *kuowilye* ‘know, be possible’.

When *kuowilye* expresses possibilities rather than knowledge, its complement clause is always headed by the potential mood marker. In the following example, the potential marker encodes a sequence of clauses as complements to the possibility expressed by *kuowilye*, before the speaker switches back to realis mood.

- (24) *ko=m kuowilye [ka ko=p vyan, ka ó we dyanga,*
 2SG=REAL know COMP 2SG=POT go COMP coconut POT lack
te ka ko=p kamerane s-am apyang yan ar
 DISC ASR 2SG=POT start.fire CLF-2SG.POSS fire on place
an na leevyo mu du ar an, ko=p tilya
 DEF COMP tree.fern REAL stay place DEF 2SG=POT be.together
beke-sye nyoo, beke-sye na ma gaó, myas-myas
 twig-3SG.POSS 3PL twig-3SG.POSS COMP REAL dry REDUP-dry
mu vu] te ko=m tebweti s-am apyang yan
 REAL good DISC 2SG=REAL start CLF-2SG.POSS fire on
 ‘you can go, when there are no coconuts, you can start your fire with it
 where there are treeferns, take its leaves, its really dry leaves, then you
 start your fire with them’ [2850-4]

In sum, the default mood for habitual contexts in Daakaka is realis. Past habituals are often marked by the distal mood marker. The potential mood occurs in stretches of discourse, typically in the context of conditionals and complement clauses, but sometimes also in unembedded clauses, where it alternates with realis mood.

5 Nafsan

5.1 Introduction

Nafsan is also known as South-Efate, after the region of Efate island in Vanuatu where it is spoken by about six thousand speakers. The data used in this article were collected in Erakor village, situated on the outskirts of Port Vila. Grammatical elements with TMA values in Nafsan can occupy different morphosyntactic positions, typically preceding the verb. The set of these morphosyntactic slots is frequently referred to as *preverbal complex* in Oceanic languages. Thieberger (2006b) offers the composition of the preverbal complex as shown in (25). ‘Sub’ refers to subject agreement markers usually called *subject proclitics* and they are the only obligatory marking of the verb.

The subject proclitics are also portmanteau morphemes that carry TMA values, at least in the case of the irrealis and perfect proclitics. They cliticize to the next available element, and this can be a TMA marker, an auxiliary verb, a benefactive phrase, or the verb.

(25) Sub=(TMA) (auxiliary verb) (benefactive phrase) **Verb**

The subject proclitics are divided into three paradigms given in Table 4. Each paradigm can combine with specific TMA markers, as shown in Table 5.³ The auxiliary verbs, on the other hand, do not seem to pose any restrictions on the choice of subject proclitics.

Table 4: Subject proclitics in Nafsán based on Thieberger (2006b).

	General form	Irrealis	Perfect
1SG	<i>a=</i>	<i>ka=</i>	<i>kai=</i>
2SG	<i>ku=</i>	<i>ḡa=</i>	<i>kui=</i>
3SG	<i>i=</i>	<i>ke=</i>	<i>ki=</i>
1DL (INCL)	<i>ta=</i>	<i>tak=</i>	<i>takai=</i>
1DL (EXCL)	<i>ra=</i>	<i>rak=</i>	<i>rakai=</i>
2DL	<i>ra=</i>	<i>rak=</i>	<i>rakai=</i>
3DL	<i>ra=</i>	<i>rak=</i>	<i>rakai=, rai=</i>
1PL (INCL)	<i>tu=</i>	<i>tuk=</i>	<i>tu=, tui=, tukoi=</i>
1PL (EXCL)	<i>u=</i>	<i>ko=</i>	<i>ui=, koi=</i>
2PL	<i>u=</i>	<i>ko=</i>	<i>koi=</i>
3PL	<i>ru=</i>	<i>ruk=</i>	<i>rui=, rukui=</i>

Table 5: TMA markers in Nafsán, based on Thieberger (2006b).

TMA marker	Proclitic	Function
<i>pe</i>	perfect, general	perfect
<i>po</i>	general	posterior
<i>fo</i>	irrealis	posterior irrealis
<i>f/fla</i>	general, irrealis	potential/conditional

³ The terms *realis* and *prospective* from Thieberger (2006b) were substituted here by *general form* and *posterior* respectively.

5.2 Optionality

As in the other subject languages, a sentence in Nafsan need not have specific aspectual marking to express habituality. The same form that is typically used for episodic past and present states and events can also be used for habitual meanings.

In Nafsan, the general form of subject proclitics functions as an agreement marker that gets its TMA interpretation from the context of the story. It has also been called ‘realis’ by Thieberger (2006b), because of its frequent usage in contexts with past and present reference. In (26), we can see that the event of ‘walking to prayers’ receives a habitual interpretation from the context, but there is no specific grammatical marker that would be the source of the habitual interpretation.

- (26) *me mal ni teetwei tkanwan i=tfel kia apu mana*
 but time of before so 3SG=thus DEM grandfather group
ru=siwer preg nalotwen
 3PL=walk make prayer
 ‘But in the olden days that’s the way it was, the grandparents would walk to prayers’ [081.017]

The general subject proclitic without any further marking can also be used for habitual present contexts:

- (27) *Ru=pan reki na-faitau-wen, ru=ler mai fam, rui=mer*
 3PL=go for DET-learn-NMLZ 3PL=return go eat:IRR 3PL.PRF=again
pa, me kineu kai, a=tu, a=pi te-ni e-sum mas
 go and 1SG ES 1SG=stand 1SG=be DET-of LOC-house just
nen a=to.
 COMP 1SG=stay
 ‘They go [to] school, they come back to eat, they go again, but I stay here. I am just a home person.’ [082.011]

5.3 Aspectual auxiliaries

In Nafsan the verb *to* ‘stay’ can function as an auxiliary verb with progressive, habitual, and generic meaning. Example (28) shows *to* with a progressive interpretation.

- (28) *ale kusu i=to fit lefek ki naur*
 okay rat 3SG=PROG run around PREP island
 ‘So the rat kept running around the island’ [101.033]

Past habituals can be set in a context of a narrative taking place in the past, like (29). The past reference can also be more explicitly marked by different adverbials, like *malnen* ‘then’ in (30). In (30), we can also see that the predicates marked by *to* establish a habitual reference, while the last clause remains grammatically unmarked for habituality. The adverbial *sernrak* ‘always’ and the general form of the subject proclitic on the verb are sufficient in this context for the habitual interpretation.

- (29) *taos Mumu go Kotkot gar ra=to siwer userek*
 like M. and K. 3PL 1DU.EXCL=HAB walk go.around
ki nlaun ni Vanuatu
 PREP country of V.
 ‘So Mumu and Kotkot used to walk around Vanuatu’ [050.002]

- (30) *malnen tiawi ru=to sol sernale ru=to sol*
 then ancestors 3PL=HAB bring everything 3PL=HAB bring
sernale pak nana naḗlaki nlawen ale sernrak ru=pa
 everything to HESIT feast dance okay:BI always 3PL=go
ru=sol sernale
 3PL=bring everything
 ‘At this time the old people carried everything. They would take everything to feasts and dances. So every time they went, they took everything’ [071.003, 071.004]

Besides past habituals, we can also find *to* in present habituals as in (31), (32) and (33).

- (31) *me mees nen i=welkin teesa ru=to preg nalag mana*
 but today that 3SG=thus child 3PL=HAB make song group
 ‘But today, children sing songs and so on’ [081.016]

- (32) *Nmalok a=to min-gi-ø, me a=tli reki alkol*
 kava 1SG=HAB drink-TR-3SG.OBJ but 1SG=tell for alcohol
nrak pei.
 time first
 ‘I drink [kava], but I’m telling you about alcohol in those days.’ [040.050]

- (33) *aliat nlaken kin i=piatlak ntwam i=skei kin i=to*
 day because COMP 3SG=have devil 3SG=one COMP 3SG=HAB
pam kit nanre ni naur Egun
 eat 1PL side of island E.
 ‘because there is this devil who eats us, this side of Nguna island’
 [094.013]

In elicitations based on Vander Klok (2013) (see Section 3), four out of seven speakers used *to* to express the habitual recurrence of Bill’s walk to work and his forgetting things, as in (34):

- (34) *Ser naliati i=to pak nawesien go ser naliati*
 every day 3SG=HAB go.to work and every day
i=to pan weswes go i=to pak naor nawesien, me
 3SG=HAB go work and 3SG=HAB go.to place work but
naliati laap i=to metpaakor te sernale.
 day many 3SG=HAB forget some everything
 ‘He goes to work every day, but many times he forgets everything.’
 [20170810- AK-061]

The auxiliary *to* is also prominently used in generic, kind-referring predicates. In her recent fieldwork, Ana Krajinović had the opportunity to create a small riddle for children which characterizes different animals. Each page describes an animal without saying which animal it is and at the bottom of the page there is the question ‘Who am I?’ The book contains riddles about 6 animals. The auxiliary *to* was consistently used to express generic statements with non-stative verbs. The following examples come from the description of a gecko.

- (35) *A=to paam lipep.*
 1SG=HAB eat butterfly
 ‘I eat butterflies.’
- (36) *A=to sak ki nlak naniu.*
 1SG=HAB climb PREP tree coconut
 ‘I climb on the coconut tree.’
- (37) *A=to krak pelpel.*
 1SG=HAB crawl quickly
 ‘I am fast.’

5.4 Reduplication

In Nafsan, reduplication does not appear to be as productive as in the other subject languages. According to Thieberger (2006b), reduplication can be used to express pluractionality or intensification, but many of the corresponding examples, the relation between the base form and the reduplicated form is not as transparent as one might expect, as in *mar* ‘breathe’ vs. *marmar* ‘rest’. In other cases, reduplication can be used for detransitivizing a verb root or for nominalizing it. In many cases, however, the difference between the bare verb root and the reduplicated form is either entirely obscure or not perceivable at all.

In our study of Nafsan, reduplication could not be found to play any significant role in the expression of habituality.

5.5 Other means of expressing habitual aspect

Like Daakaka, Nafsan occasionally uses the auxiliary *mas* from the homophonous Bislama word which roughly translates as ‘must, always, absolutely’. In the corpus data, it is quite rare and not attested in habitual contexts. But in the elicitation based on Vander Klok (2013), two out of seven speakers used *mas* to express the regular recurrence of Bill’s forgetfulness, as illustrated by (38):

- (38) *Ser naliati Bill i=pan nen ke=weswes. Ser nrak nen*
 every day B. 3SG=go COMP 3SG.IRR=work every time COMP
ke=fan weswes, ke=mas metpaakor namrun.
 3SG=go.IRR work 3SG.IRR=must forget something
 ‘Bill goes to work every day. Every time he goes to work, he forgets something.’ [20170801-AK-018]

Nafsan can also use the verb *tae* ‘know, can’ to express habituals. In the above mentioned riddle ‘Who am I?’ the verb *tae* was used to express a generic statement about a girl from Vanuatu. This is a part of the description:

- (39) *A=to Vanuatu. A=tae paam kapu.*
 1SG=HAB V. 1SG=can eat laplap.
 ‘I live in Vanuatu. I eat laplap.’

5.6 Habituality and irrealis

In Nafsan, we often find irrealis proclitics in habitual contexts. Kind-referring generics seem to prefer the general proclitic and the auxiliary *to*.

Another important part of the irrealis marking of habituals is that besides the irrealis proclitic they seem to require the posterior irrealis marker *fo*. The main function of *fo* is marking the predicate as posterior to a given reference time.

- (40) *me mal ni apu mana i=ta tefla=n mau mal*
 and time of grandfather group 3SG=not similar=DST NEG2 time
ni apu mana wel aliat.tap go te-ni Erakor
 of grandfather group like Sunday and DET-of E.
ruk=fo pan preg nasum̃tap Ertap
 3PL.IRR=POS.IRR go make church E.
 ‘But in the days of our grandparents it was not like that. In those days, on Sundays, those from Erakor would go to Church at Ertap’
 [081.008, 081.009]

The usage of irrealis in past habituals seems to be related to the basic irrealis function of expressing possibilities or predictions in the relative future in Nafsan. One reason to draw this conclusion comes from comparing the irrealis-marked habituals with potential-marked habituals. In the same story from which example (40) was taken, we find the potential marker *fla* expressing a possibility in a habitual context, where it is clear that those possibilities had to be recurrent in the temporal frame that was set in the earlier example (40).

In example (41) we can see a sequence of habitual events with the first two clauses marked by the marker *fla* and the last one with irrealis and the posterior *fo*.

- (41) *ale wik nentu ru=fla mer pak Eḗag. wik kaaru*
 okay:BI week next 3PL=COND again go.to E. week other
ru=fla mer pak Efil. go tete mal natokon nra
 3PL=COND again go.to Vila and some time village two
ruk=fo mai pak Erakor. me ru=ta pnut mau
 3PL.IRR=POS.IRR come go.to E. but 3PL=not quiet NEG2
 ‘Then the next week they might go to Pango. The week after they might go to Vila. Then sometimes the two villages would come to Erakor. They didn’t stop’
 [081.011, 081.012, 081.013]

Although habitual statements in irrealis mood mostly refer to past contexts in the corpus data, we can find cases with present or kind-referring meaning:

- (42) *Nanwei ke=fo pan lel nafnag [...] Me mees nmatu*
 male 3SG.IRR=POS.IRR go look.for food [...] but today woman
ke=mur ke=fuuri ke=freg kapu, ga ke=fan
 3SG.IRR=want 3SG.IRR=prepare 3SG.IRR=make laplap and 3SG.IRR=go
tme-n slat nafnag.
 REFL-3SG.DP take food
 ‘Men would go and get the food [...] But today it is the woman who
 prepares food, makes laplap, who fetches food herself.’ [065.027, 065.028]

The same combination of irrealis and posterior marking is also used for future habitual contexts:

- (43) *me ĩa=fo to mai leperkat emat nigneu*
 and 2SG.IRR=POS.IRR stay come watch.over grave 1SG.POSS
 ‘And you will come to look after my grave’ [014.008]

One out of seven speakers with whom Ana Krajinović ran the storyboard by Vander Klok (2013) produced irrealis forms to express a habitual context:

- (44) *Ser naliati nen kin ke=fareki nawesien, ke=fo siwer*
 every day COMP COMP 3SG.IRR=go.to work 3SG.IRR=POS.IRR walk
raki nawesien.
 to work
 ‘Every day he goes to work, he walks.’ [20170813-AK-081]

6 Ma’ŕea

6.1 Introduction

Ma’ŕea, also known as Mavea or Mafea is spoken by about 30 people on the eponymous island of Ma’ŕea off the island of Santo, Vanuatu. Assertive clauses generally contain a close-knit verb phrase that can contain a variety of TMA and polarity markers, in addition to subject agreement markers. The basic structure as described by Guérin (2011) is shown in Table 6.

Table 6: The verbal complex in Ma’vea (cf. Guérin 2011).

SBJ.AGR	COND	NEG	IT/INCPT	NUM	IMPF	REDUP-	VERB	ADV	TR	OBJ
<i>i-, ...</i>	<i>mo-</i>	<i>sopo-</i>	<i>m̃e-/pete-</i>	<i>r-/tol-</i>	<i>l(o)-</i>				<i>=i</i>	<i>=a/NP</i>

The following example shows a verbal complex that incorporates a fairly large number of the above categories:

- (45) *Mo-l-tang ro, ...mo-rong tamlo ait mo-varvara. Mo-rongo=a*
3SG-IMPF-cry then 3SG-hear man one 3SG-speak 3SG-hear=3SG
pomoro, mo-sopo-m̃e-l-tang.
like.this 3SG-NEG-IT-IMPF-cry
‘He was crying then [...] he heard a man talk. He heard him, he did not cry
anymore.’ [06020.024–026]

Table 7: Subject agreement markers in Ma’vea (Guérin 2011: 211).

	Realis	Irrealis	Realis/Irrealis		
	Singular		Plural	Dual	Paucal
1INCL			<i>da-</i>	<i>dar-</i>	<i>datol-</i>
1EXCL	<i>na-</i>	<i>ka-</i>	<i>ki-</i>	<i>kir-</i>	<i>kitol-</i>
2	<i>ko-</i>	<i>ko-</i>	<i>ki-</i>	<i>kir-</i>	<i>kitol-</i>
3	<i>mo-</i>	<i>i-</i>	<i>ra-</i>	<i>rar-</i>	<i>ratol-</i>

For singular subjects, there are two lists of subject agreement markers, depending on whether a sentence expresses realis or irrealis. The full paradigm of subject agreement markers is shown in Table 7.

Among the verbal prefixes, we will find the imperfective prefix *l(o)* to be particularly relevant for the expression of habituality. In fact, *l(o)* is the most important means of expressing habituality in the language, while auxiliaries and reduplication play a subordinate role at best.

The prefix *m̃e-* has been described as expressing iterative aspect, which one might suspect to also play a role in related aspectual contexts. However, it appears both from the corpus data and from the description in Guérin (2011) that *m̃e-* literally means ‘again, back’ or ‘not anymore’ in combination with negation, rather than expressing iterativity more generally.

For the examples here, we cite the morpheme-level of annotations from the corpus data, which does however not always correspond to the underlying forms.

6.2 Optionality

In Ma'ŕea, assertions about bounded past events typically contain no other verbal prefixes than the (realis) subject agreement marker. This is illustrated in (46):

- (46) *ŕaio aite mo-at=i=ao*
 shark one 3SG-bite=TR=1SG
 'a shark bit me!' [06015.114]

The same form can also be used for habitual descriptions, even though this form is less frequent in habitual contexts than a verbal complex containing an imperfective marker, which is described in more detail below. The following sentence reports habitual activities of the people of Ma'ŕea, where the first two predicates are prefixed with the imperfective marker, while the last one remains unmarked for aspect.

- (47) *ro sasa no-n ta-Ma'ŕea ra-lo-to ra-lo-ŕeia*
 then work CLF-CONS CLF.man-Ma'ŕea 3PL-IMPF-stay 3PL-IMPF-make
kavura [ra-alali inana uta]
 copra 3PL-search food garden
 'so, the work of Ma'ŕea men, they make copra, they take food from the garden' [06034.019]

Similarly, in the following sentence, the first predicate contains the imperfective marker, but the second one does not:

- (48) *m̕atiu nortovono da-lo-an m̕atiu pal [da-davoia]*
 coconut now 1PL.INCL-IMPF-eat coconut like 1PL.INCL-plant
 'coconuts now, we eat coconuts, like, we plant them' [06043.129]

6.3 Aspectual auxiliaries

Like the other Vanuatu languages in this study, Ma'ŕea also has a verb *to* 'stay, be at'. This verb is not among the three auxiliaries described by Guérin (2011: 80), which are *adi* 'can', *leng* 'cannot' and *ria* 'must'.

Even so, it appears that *to* can also serve as an auxiliary in that it can occur before a verb without interfering subject agreement markers:

- (49) *ra-r-an nna mo-lo-ŵa mo-ŵa mo-v i-evuia ro mo-to*
 3PL-DL-eat 3SG 3SG-IMPF-go 3SG-go 3SG-say 3SG.IRR-finish then 3SG-stay
ma veasi mo-opul ro mo-to mo-ŵa ro mo-lo-to
 COMP wild.man 3SG-full then 3SG-stay 3SG-go then 3SG-IMPF-stay
suruvu
 sleep
 ‘they ate it for a while, finished it then it came that the wild man was full,
 then he was about to fall asleep’ [06036.059]

These cases are however too rare to draw definite conclusions from. They might be related to structures involving the verb *tur(u)* ‘stand up’, that are described as serial verb constructions expressing duration in Guérin (2011: 274).

In a much more common pattern, *to* is followed by a fully inflected second predicate. This second predicate can have a wide range of different meanings such as ‘go’, ‘speak’, ‘look’, ‘cry’ and ‘take’. Even though this structure does not correspond to a canonical auxiliary structure, the function of *to* in these environments may well be described as that of an imperfective auxiliary. In many such cases, *to* expresses a continuous or progressive aspect. This can be seen from the following examples:

- (50) *mo-rongoa ra-r-to ra-r-lo-varvara*
 3SG-hear 3PL-DL-stay 3PL-DL-IMPF-speak
 ‘he heard them talking’ [06018.011]
- (51) *ro na-to na-lo-tang*
 then 1SG-stay 1SG-IMPF-cry
 ‘so I’m crying’ [06020.034]

It also occurs in habitual contexts. This can be seen in the following example:

- (52) *me ko-lo-to ko-lo-ontaia tur’vaite ko-ŵa*
 FUT 2SG-IMPF-stay 2SG-IMPF-look.after every.time 2SG-come
ko-lo-onea
 2SG-IMPF-look
 ‘you will look after it, everyday you will come and look at it’ [06043.100]

In addition to these aspectual structures, there is also the aforementioned modal auxiliary *adi* ‘can’, which can occur in habitual contexts. This is described in more detail in Section 6.5.

In sum, Ma’vea can be said to have an auxiliary *to* which has developed diachronically from a verb meaning *stay, be at*. This auxiliary is apparently cognate with Nafsan *to* and Daakaka *du*. It also expresses imperfective aspect and can occur in habitual contexts, although its role in expressing habitual aspect is probably marginal in comparison with the imperfective prefix *lo* described in Section 6.5.

6.4 Reduplication

Verbal reduplication is a productive process in Ma’vea. Guérin (2011) describes the following functions and meanings:⁴

- detransitivization
- pluractionality
- reciprocity
- intensification (with stative property-denoting verbs)
- continuous aspect of stative verbs
- derivation of nouns and adjectives

Reduplicated verb forms occur in habitual contexts, at least in kind-referring generic ones. Since kind-referring generic statements always range over individuals, it is not entirely clear that the reduplicated form in these cases is not a way to express the plurality of the subject, even though in many of these cases, the subject agreement marker encodes a singular rather than a plural subject. At the same time, you can see in both of the following examples that reduplication in these contexts is not obligatory, at least not for stative verbs such as *to* ‘stay’ and *suruvu* ‘sleep’.

- (53) *mo-tur na taro aro mo-tikelia napar p̃ilae nira ra-to*
 3SG-stand.up LOC time here 3SG-reach today plover 3PL 3PL-stay
atano mo-ŵan-ŵano atano ale p̃ao nna mo-lo-to
 ground 3SG-REDUP-walk ground then swampen 3SG 3SG-IMPF-stay

---

⁴ Guérin (2011) also distinguishes between partial and total reduplication. However, we consider the cases described as total reduplication to be more adequately analyzed as repetitions. Also note that Ma’vea can reduplicate nouns as well as verbs to indicate a plural reference, in contrast to Daakaka and Nafsan.

aulu pere-na vuae
 above branch-3SG.POSS tree

‘It is like that until today, plover birds stay on the ground, they walk on the ground; as for swampheens, they stay in trees’ [06016.062]

- (54) *na si’i ro ko-mo-onea-ira si’i ro nna mo-an-an*
 but parrot then 2SG-COND-see-3PL parrot then 3SG 3SG-REDUP-eat
tal-ran na talapong ro mo-suruvu
 day-day only night then 3SG-sleep

‘But Parrot, if you want to see them, Parrot he eats during the day only. At night he sleeps’ [06040.025/26]

6.5 Other means of expressing habituality

As described in Guérin (2011: 228), the expression that is most strongly associated with habitual aspect in the language is the imperfective prefix *lo-*. This morpheme can also express other imperfective aspects than habituality. Thus, the following example shows the use of this prefix in a progressive context:

- (55) *mo-lo-kot-kot mo-lo-’a mo-onea taroa aite*
 3SG-IMPF-REDUP-wander 3SG-IMPF-go 3SG-look bird one
 ‘he was wandering, he saw a pigeon’

[06013.009]

Also, as we have seen above, not all habitual contexts require this prefix. But in the vast majority of habitual contexts, we find the prefix *lo-*. Guérin (2011) already describes it as a marker of habituality, citing elicited kind-referring examples. In the corpus, we also find the imperfective prefix *lo-* in many kind-referring contexts. The following two example sentences come from a story that is similar to the one about the chicken and the megapode mentioned before in Section 4. This story is about Parrot and Flying Fox, who used to be good friends. Then one day, they painted each other and Parrot got wonderful bright colors, but Flying Fox only got black. At the end of the story, the persistent result of this event is described in generic terms. We find the imperfective prefix *lo-* with all non-stative predicates here, as well as reduplication in some of the same predicates. As mentioned in Section 2, this combination of two aspectual expressions might be taken as an indication that habituality is more complex than either imperfectivity or pluractionality.

- (56) *ro karae mo-ntao mo-leng ʔa tal-ran*
 then bat 3SG-afraid 3SG-cannot go time.of-day
mo-lo-song-song na
 3SG-IMPF-REDUP-hide only
 ‘Flying Fox is afraid, she doesn’t go out during the day she only hides’
 [06040.020]
- (57) *mo-lo-mā turʔaite talapong nna mo-lo-an-an*
 3SG-IMPF-come every.time night 3SG 3SG-IMPF-REDUP-eat
 ‘she always comes at night to eat’
 [06040.024]

The same means of expressing habituality are also used for non-generic habituals and irrespective of temporal reference to the past or future. Thus the following sentences are taken from the same text. The first sentence expresses a directive speech act directed toward the future. The following two sentences describe that the command was obeyed, so we see a past reference. In both cases, the imperfective prefix *lo-* is used, sometimes in combination with *to* ‘stay’. Note that we are dealing with a non-generic habitual context in each case.

- (58) *me ko-lo-to ko-lo-ontaia turʔaite ko-mā*
 FUT 2SG-IMPF-stay 2SG-IMPF-look.after every.time 2SG-come
ko-lo-onea
 2SG-IMPF-look
 ‘you will look after it, everyday you will come and look at it’ [06043.100]
- (59) [...] *turʔaite mo-ʔa mo-lo-onea mo-lo-onea sara ma*
 [...] every.time 3SG-go 3SG-IMPF-look 3SG-IMPF-look place COMP
 ‘everyday she went to look at it’ [06043.108]
- (60) *mo-sopo-onea aro tea tovu-i mātiau ro mo-to*
 3SG-NEG-look here some growth-3SG.POSS coconut then 3SG-stay
mo-lo-ontaia mālum nna
 3SG-IMPF-look.after quiet 3SG
 ‘She had never seen a coconut sprout. Then she looked after it carefully’
 [06043.110]

Cases of discontinuous past are also not grammatically differentiated from habitual or generic contexts of the present. The following sentences are from the familiar story about Megapode and Chicken. Megapode complains about Chicken, who has painted him only in dull black and reflects on the good old

times which are now therefore over. Again, we see the imperfective prefix as a marker of habituality here:

- (61) *da-r-lo-to momos*
 1PL.INCL-DL-IMPF-stay well
 ‘[w]e used to be good to each other’ [06041.029]
- (62) *da-r-lo-ŵa pulua mo-lo-ŵa nno ko-komoa nao*
 1PL.INCL-DL-IMPF-go together 3SG-IMPF-go 2SG 2SG-spoil 1SG
 ‘we were always together, [now] you [have mistreated me]’ [06016.057]

Finally, in addition to the aspectual auxiliary *to* described in Section 6.3, there is a modal auxiliary that can be used to express habitual aspect. This is *adi* ‘can’, which mostly expresses abilities and circumstantial possibilities. In the corpus, it is not very frequent and does not occur in habitual contexts. However, in recent elicitations by Valérie Guérin based on Vander Klok (2013), three independent speakers used essentially the same structure to describe the forgetfulness of the story’s protagonist Bill, as illustrated below:

- (63) *Pil aro nna mo-adi perpero inao*
 Bill here 3SG 3SG-can forget thing
 ‘this Bill here, he is a forgetful man’ [VG20171049.003]

See also Sections 4.5 and 5.5 for modal auxiliaries in Daakaka and Nafsan.

6.6 Irrealis and habituality

Maŵea has a distinction between realis and irrealis subject agreement markers, but only in the first and third person singular. In most habitual contexts, the realis set of subject agreement markers are used. To the extent that irrealis markers also appear, this is mostly conditioned by a reference to the future or similar independent factors, as illustrated in (64):

- (64) *nao me ro ka-suruvu aulu pere-n vuae*
 1SG FUT then 1SG.IRR-sleep above branch-CONS tree
 ‘I will sleep in the trees’ [06016.061]

7 Saliba-Logea

7.1 Introduction

Saliba-Logea is a Suauc language of the Papuan Tip Cluster in Milne Bay Province, Papua New Guinea. Logea is a closely related dialect. Both varieties are named for the islands on which they are spoken, by a rough total of 2500 speakers (Margetts 1999). For the purposes of this paper, we do not differentiate between the two varieties, but refer to both collectively as Saliba-Logea. The verb root is always preceded by a subject agreement marker and potentially by a number of prefixes. The most complex preverbal structures we find in the corpus contain a combination of two prefixes. A sketch of the attested structures is given (65):

(65) SBJ.AGR- (prefixes/reduplication-) **Verb** (serial verb) (-suffixes)

The system of subject agreement markers in Saliba-Logea is given in Table 8.⁵

Table 8: Subject agreement markers in Saliba-Logea.

	Singular	Plural
1INCL		<i>ta-</i>
1EXCL	<i>ya-</i>	<i>ka-</i>
2	<i>ku-/ko-</i>	<i>kwa-</i>
3	<i>ye-/i-</i>	<i>se-/si-</i>

Table 9 shows the optional verbal prefixes in the language.

Table 9: Verbal prefixes in Saliba-Logea.

Prefix	Gloss	Function
<i>he-</i>	CAUS-	a causative marker
<i>kai₁-</i>	DETR	detransitivization/playfulness
<i>kai₂-</i>	BODY.WEIGHT-	a classificatory prefix specifying that an action involves the body
<i>ta-</i>	RES-	detransitivizing
<i>hai-</i>	RECP-	reciprocity

⁵ To the extent that there is more than one form per person-number feature, the distinction could be a relic of a realis-irrealis distinction, which can however not be synchronically confirmed according to Margetts (1999).

The verb complex can contain several suffixes, including suffixes marking person and number features of the object. Some of the most frequent suffixes excluding object suffixes are given in Table 10.

Table 10: Some of the most frequent verbal suffixes in Saliba-Logea.

Suffix	Gloss	Function
-i	-TR	transitivizer
-ma	-to.SP	directional, towards speaker
-ko	-already	perfective, ‘already’
-wa	-to.AD	directional, towards addressee

An example of a complex verb structure is given in (66):

- (66) ...*unai se-henu-he-numa*
...PP.SG 3PL.SBJ-REDUP-CAUS-drink
‘they were feeding her coconut juice’ [FamilyOrigin_07CM_0101]

The prefixes in Saliba-Logea primarily manipulate argument structure rather than aspect, by detransitivizing the verb root or by transitivity via a causative prefix. Serial verbs such as *gehe* ‘finish’ and suffixes like the perfective marker *-ko* can add aspectual information to the verbal predicate. There are however no suffixes or serial verbs that would generally express imperfective aspect.

7.2 Optionality

In Saliba-Logea, TMA marking is generally optional. Assertions about the episodic past do typically not receive any particular TMA marking:

- (67) *wawaya ye-beku-dobi na kedewa ye-beku-dobi*
child 3SG.SBJ-fall-go.down and.then dog 3SG.SBJ-fall-go.down
ede
PRSUP
‘the boy fell down and the dog fell down’ [FrogStory_02AZ_0113]

Likewise, the absence of any TMA marking appears to be the default for habituals in Saliba-Logea. The following sentence is taken from a description of how to make and use baskets. Like most of the text, it is unmarked for specific TMA values:

- (68) *ta-hai*   *ye-da*   *gogo*   *ta-usa-i-di*   *udiyedi*
 1INCL.SBJ-take POSS1-1INCL property 1INCL.SBJ-put.in-TR-3PL.OBJ PP.PL
ta-bahe   *ta-lau*
 1INCL.SBJ-carry 1INCL.SBJ-go
 ‘we take it, put our things in, and carry it when we go out’
 [BasketWeaving_03CW_0041/42]

Another example comes from an explanation of the properties and uses of the *sebulu* pandanus:

- (69) *sebulu*   *susu-na*   *te*   *se-hai*   *kabo*
 pandanus.type aerial.root-3SG.POSS near.SP 3PL.SBJ-take then
se-yatu-igali
 3PL.SBJ-force-split
 ‘They take the aerial root of this pandanus type and then they split it’
 [Sebulu_01dp_0002-04]

7.3 Aspectual auxiliaries

Saliba-Logea has two verbs with the meaning ‘stay’, *miya* and *bawa*. Neither of them is used to mark habitual aspect or other imperfective aspects. Nor are there other imperfective auxiliaries in the language. There are sequences of verbs, and especially directional serial verb constructions are very common. As mentioned in the introduction to Saliba-Logea, some serial verbs such as *gehe* ‘be finished’ can add aspectual information to the verbal predicate, but they encode perfective rather than imperfective meanings. Other verbs that are likely candidates for diachronic sources for the expression of habitual aspect (Bybee et al. 1994) such as *tuli* ‘sit’ or *naya* ‘wait’ are never used with aspectual meanings in the corpus, even when they occur as parts of complex predicates. The closest thing to a serial verb construction with an imperfective meaning are structures where a verb is followed by the inflected verb *lau* ‘go’. This type of structure is very common in all the subject languages and typically expresses the continued duration of a certain state of affairs and the passage of time in a narrative:

- (70) *se-miya-miya*   ***ye-lau***   ***ye-lau***   ***ye-lau***   *meta* [...]
 3PL.SBJ-REDUP-stay 3SG.SBJ-go 3SG.SBJ-go 3SG.SBJ-go PART
 ‘They were living together on and on until [...]’
 [BudoNualele_01CY_0034]

The same effect is achieved by the discourse particle *ee* which indicates duration of the event expressed by the preceding verb. It can be drawn out to iconically express varying length of time. It does not express imperfectivity as such, but rather continued duration of a certain state of affairs and typically has a telic reading which is translated as ‘on and on until’. The following example illustrates both expressions in combination:

- (71) *papapa*   *wa* *ye-wase*   ***ye-lau***   ***ee***
 slipper.lobster and 3SG.SBJ-search 3SG.SBJ-go on.and.on
ye-wase   *kasaya na* ...
 3SG.SBJ-search in.vain and.then
 ‘the lobster went searching on and on, he searched in vain and then ...’
 [BasibasiYoPapapa_01DK_0033]

In short, auxiliaries cannot be used in Saliba-Logea to encode habituality, and neither can serial verbs.

7.4 Reduplication

In Margetts (1999), reduplication is described as expressing progressive aspect and deriving nouns, attributes or adverbs from verbs.

Mosel (1994: 28) describes reduplication as expressing habitual and progressive aspect, citing the example in (72) to illustrate the former:

- (72) *...aoao-wa* *ka-na*   *paisoa* *...mwauiyope* *yo*   *baela*   *buina-di*
 ...crow-DET POSS-3SG work ...pawpaw and banana ripe-PL
ye-kai-kaiwahali-di
 3SG-REDUP-steal-3PL
 ‘...the crow’s work was ...to steal ripe pawpaws and bananas’
 [Mosel 1994: T 2.4]

More specifically, reduplication in Saliba-Logea has different aspectual meanings for different verbs. There is no clear-cut stative-active distinction in Saliba-Logea

but verbs from the different ends of the spectrum tend to behave differently in terms of their semantics of the reduplicated forms. Some stative verbs simply do not allow stem reduplication and for others the reduplicated stem has a reading of a temporary state of being or inchoative. With some stative verbs reduplication has a habitual reading while the unreduplicated form is understood to express a temporary state, such as for *gwaunya* ‘happy’ in (73) and (74).

- (73) *Ye-gwaunya*.
3SG-happy
‘She is/ was happy.’

- (74) *Ye-gwau-gwaunya*.
3SG-REDUP-happy
‘She is (habitually) happy/she has a happy nature.’

The root *pitali* ‘dry’ allows a habitual reading of the reduplicated stem, as in (76), which was suggested as a statement about a type of synthetic cloth (e.g. ‘this synthetic shirt is always dry, even when it rains’). Alternatively the reduplicated form can have a lexicalized meaning of ‘dryish’, i.e. ‘damp’.

- (75) *Ye-pitali*.
3SG-dry
‘It’s dry/it has dried.’
- (76) *Ye-pita-pitali*.
3SG-REDUP-dry
‘It’s (habitually) dry.’ or ‘it’s damp.’

The simple stem *yababa* ‘bad’ in (77) expresses that the engine is broken. While this may be a permanent state, it is clearly not intended to be, and the implication is that the engine may be fixed or replaced. In contrast, the reduplicated form of *yaba-yababa* in (78) has a reading of being generally unreliable.

- (77) *Engine ne ye-yababa*
engine DET 3SG-bad
‘The engine is broken’
- (78) *Engine ne ye-yaba-yababa*
engine DET 3SG-REDUP-bad
‘The engine is (habitually) bad/the engine is unreliable’

In the context of a human subject, *yababa* ‘bad’ typically receives a stative reading instead of an episodic reading as in (77). In these cases, the reduplicated form was rejected in elicitation.

- (79) *Taubada ne ye-yababa.*
 person DET 3SG-bad
 ‘The man is bad/has a bad character.’
- (80) **Tamowai ne ye-yaba-yababa.*
 person DET 3SG-REDUP-bad
 intended: ‘The man is bad.’

The verb *bawa* ‘stay’ occurs much more often in its reduplicated form *babawa* or *bawabawa* than its simple form. This reduplicated form can be used in episodic contexts, as shown in (81):

- (81) *yo waga ne taga ye-ba-bawa kabo ka uyo-ma*
 and boat ART if 3SG.SBJ-REDUP-stay then 1EXCL.SBJ return-to.SP
 ‘and if the boat stays we will come back’ [Fishing_01BQ_0596]

But many of the contexts where the reduplicated form is found are habitual:

- (82) *ma-natu-na wa yo tama-di se-ba-bawa*
 with-child-3SG.POSS ANA and father-3PL.POSS 3PL.SBJ-REDUP-stay
 ‘A lady lived with her children and their father’
 [Gagageniyole_01AT_0025/26]

The unreduplicated form refers more frequently to episodic contexts:

- (83) *...iyamo taba nige se-lau giyahi magai me unai. Na*
 ...but IRR NEG 3PL-go feast place near.AD PP.SG CONJ
se-laoma dedekawai se-bawa
 3PL-come next.to 3PL-stay
 ‘...but they don’t go to the place where the feast will be (yet). They come and stay next to it’ [Giyahi_01AA_0102-04]

In sum, reduplication in Saliba-Logea can have a variety of functions, depending in part on the lexical meaning of the verb. Habituality is one of those functions.

7.5 Other expressions of habituality

Saliba-Logea is known for using nouns as predicates (Mosel 1994; Margetts 1999). These nominal clauses are usually stative and can also be used to express habitual and generic meanings. Two examples are given below:

- (84) *siya ka-di paisowa kai-gwali*
 3PL POSS2-3PL.POSS work DETR-spear
 ‘their work was to spear fish’ [Tautolowaiya_01AG_0011]

- (85) *paisowa-na ye laki*
 work-3SG.POSS 3SG.SBJ big
 ‘[weaving a basket] is a lot of work’ (lit. ‘its work is big’) [BasketWeaving_02CW_0013]

7.6 Habituality and irrealis

As mentioned above, finite sentences in Saliba-Logea do not contain any obligatory TMA marking at all. The default for a sentence without TMA expressions is to refer to the actual past or present, but a reference to the future or to possible alternatives to the actual world are also readily available in a corresponding context. In this sense, Saliba-Logea does not strictly implement a distinction between realis and irrealis contexts.

There are some markers that express modal meanings typically associated with irrealis, such as *taba*, which is used in conditionals and in talking about past possibilities, and *bena*, which is used to talk about the future, possibilities and obligations. These expressions can often be found in habitual contexts.

In most cases, they occur in (semantically) subordinate environments that require their presence irrespective of the habitual interpretation. Thus, generic conditionals and expressions of dispositions and possibilities are bound to play a significant role in habitual contexts. But the irrealis TMA markings we find in these environments would have to be there even if the context was not a habitual one. This is illustrated by the occurrence of *bena* below:

- (86) *i-gado*   ***bena*** *i-sae*   *i-dobi*   *na*   *kabo*
 3SG.SBJ-want POT 3SG.SBJ-go.up 3SG.SBJ-go.down and.then then
i-kaiheya   *na*   *i-lau*   *i-uyo*   *ku-nuwatu-i*
 3SG.SBJ-play and.then 3SG.SBJ-go 3SG.SBJ-return 2SG.SBJ-think-TR
 ‘he likes to go hither and yon to play (with others) and to walk off and
 return again, you know’
 [BudoaNualele_01CY_0275]

However, in some cases, they may be seen as contributing directly to a generic or non-generic habitual reading, as illustrated by the following generic description of the properties of a certain plant:

- (87) *ye-kini*   *mo* *ye-sae*   *na*   *ye-sae*   *ne*
 3SG.SBJ-grow only 3SG.SBJ-go.up and.then 3SG.SBJ-go.up ART
taba nige *ye-lala*
 IRR NEG 3SG.SBJ-bloom
 ‘it generally only grows up and up, it does not bloom, though’
 [Garden_01CY_0438]

8 Conclusions

All four subject languages have certain features in common concerning the expression of habituality:

1. Habitual contexts are not obligatorily distinguished from assertions about the episodic past or present. In all the languages under investigation, marking of habitual assertions is optional. This means that there is no obligatory differentiation between sentences that are about the episodic past or present – which is the default interpretation of sentences otherwise unspecified for TMA (cf. Smith et al. 2007).
2. There is no differentiation between generic and non-generic habituals.
3. Aspectual marking of habitual contexts, if any, is not distinguished from other pluractional and imperfective contexts. The same markers that are used to signal that a sentence is not about a single bounded event in habituals can also be used for related meanings such as progressives or iterative.
4. The primary means to express habitual and related meanings are aspectual auxiliaries, TMA affixes, and reduplication. The languages differ however in terms of which expressions are available for which meaning.

- 5. Irrealis in habitual contexts is often mentioned in the literature on Oceanic languages (e.g. Cleary-Kemp 2014).⁶ As far as we could determine for our subject languages, both realis and irrealis expressions are compatible with habitual interpretations, but the most frequent marking is realis.
- 6. The expression of habitual aspect is independent from temporal reference. Habitual contexts of the past are encoded in the same way as habituals of the present and future.

Table 11 gives an overview of the main ways to express habitual aspect in each language. Note that more marginal expressions of habituality are not included here.

Table 11: Means for expressing habitual aspect across subject languages (AUX. *stay* = auxiliary derived from a verb meaning *stay*; REDUP = reduplication; IMPF = imperfective aspect affix).

Language	Optional	AUX. <i>stay</i>	REDUP	IMPF
Daakaka	+	+	+	–
Nafsan	+	+	–	–
Ma’vea	+	+	+	+
Saliba-Logea	+	–	+	–

What is particularly interesting in the light of the ongoing debates about the nature of habituality is the observation that some of the languages in our sample combine two different means of aspectual expressions to yield a habitual interpretation.

As we have seen, in Ma’vea, the default way to express habituality involves the verbal prefix *lo-*, which simply expresses imperfectivity, including progressive aspect. In habitual contexts, this prefix is sometimes combined with a reduplicated verb root. The example below is repeated from (56):

(88) *ro karae mo-ntao mo-leng ʔa tal-ran*
then bat 3SG-afraid 3SG-cannot go time.of-day
mo-lo-song-song na
3SG-IMPF-REDUP-hide only
‘Flying Fox is afraid, she doesn’t go out during the day she only hides’
[06040.020]

⁶ So far, the research on the connection between mood and irreality has focused on past contexts, possibly because irrealis markers are less expected there compared to present and future habituals (Roberts 1990; Cristofaro 2004).

Similarly, the most frequent way to express habitual aspect in Daakaka involves reduplication of the verb in combination with one of the imperfective auxiliaries *pwer* and *du*. The example below is repeated from (16):

- (89) *nge... bwe an-ane baséé di-sye, bwe*
 3SG... REAL.CONT REDUP-eat bird PART-3SG.POSS REAL.CONT
an-ane tyu
 REDUP-eat chicken
 '[the hawk] eats some of the other birds, it eats chickens' [0410]

These observations might cautiously be taken to support the view that habitual aspect might be semantically more complex than some other aspects.

Our findings also support Givón (1994)'s initial assessment that habitual aspect is ambiguous in terms of its modal associations – we find it expressed both in environments marked as realis; and in contexts featuring modal auxiliaries or adverbs and irrealis TMA markers or portmanteau subject proclitics.

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Abbreviations

1DU	first person dual
1EXCL	first person exclusive
1INCL	first person inclusive
1PL	first person plural
1SG	first person singular
2SG	second person singular
2	second person
3DU	third person dual
3PC	third person paucal
3PL	third person plural
3SG	third person singular
3	third person
AD	address
ADV	adverb
AGR	agreement

ANA	anaphoric
ART	article
ASR	assertion marker
AUX	auxiliary
BI	Bislama loan
CAUS	causative
CLF	classifier
COMP	complementizer
COND	conditional
CONJ	conjunction
CONS	construct state
CONT	continuous
COP	copula
DEF	definite
DEM	demonstrative
DET	determiner
DETR	detransitivizer
DISC	discourse marker
DIST	distal past
DL	dual marker
DP	direct possession
DST	distant
ES	echo subject
EXCL	exclusive
FREQ	frequentative
FUT	future
HAB	habitual
HESIT	hesitation
IMPF	imperfective
INCL	inclusive
INCPT	inceptive
IRR	irrealis
IT	iterative
LOC	locative
MED	medial
NAME	name
NEC	necessity
NEG	negation
NEG2	final negation in a complex negative structure
NMLZ	nominalizer
NP	noun phrase
NUM	numeral
OBJ	object
PART	particle
PFT	perfective
PL	plural
POS	posterior

POSS	possessive
POSS1	possessive class 1
POSS2	possessive class 2
POT	potential
PP	postposition
PREP	preposition
PRF	perfect
PROG	progressive
PROX	proximate
PRSUP	presuppositional
REAL	realis
RECP	reciprocal
REDUP	reduplication
REFL	reflexive
RES	resultative
SBJ	subject
SG	singular
SP	speaker
TMA	tense, mood, aspect
TR	transitivizer

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