Kilu von Prince (Humboldt-Universität zu Berlin) Ana Krajinović (Humboldt-Universität zu Berlin, The University of Melbourne) Anna Margetts (Monash University) Nick Thieberger (The University of Melboure) Valérie Guérin (The Cairns Institute, James Cook University)

Habituality in four Oceanic languages of Melanesia

Roles of authors: Kilu von Prince is responsible for the overall structure and most of the comparative analysis as well as most of the background and conclusion sections and the section on Daakaka. Ana Krajinović contributed significantly to the theoretical background section and wrote most of the section on Nafsan. Anna Margetts provided substantial data and analysis for the section on Saliba-Logea, in addition to the corpus data cited. Nick Thieberger contributed mostly to the Nafsan section through the analyses in the South-Efate corpus and additional comments and suggestions. Valérie Guérin contributed mostly to the section on Mavea, through the analyses of corpus data as well as additional insights and comments.

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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.

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.

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'(p. 91)
- (2) Kio i kua shaya shi-n.

 NEG 3SG FREQ work side-Poss.3SG

 'He does/ did not often work at home.' (known from past experience)

There are a few other Oceanic languages which have been reported to have markers that exclusively express habituality. For example, Bali-Vitu is has a system of portmanteau subject proclitics that express TAM 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 & 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 Mavea: 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 habituals [...] is that they describe a situation which is characteristic of an extended period of time.

Krifka *et al.* (1995) define *characterizing sentences*, which comprise habituals, 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 & 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 tended 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 & Mackenzie (2008). Arche (2014) analyses 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 subcategory 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 Mavea. 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 Mavea, 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. All the

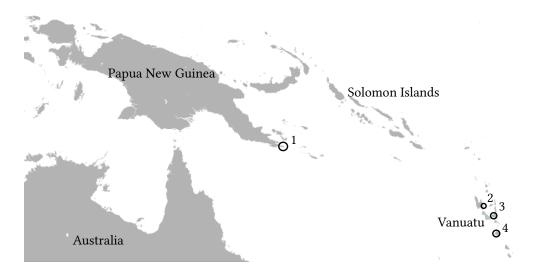


Figure 1: Locations of the subject languages. 1: Saliba-Logea; 2: Mavea; 3: Daakaka; 4: Nafsan:

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 proclitic 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, Maűea 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 Mavea, 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.

Moreover, while all the languages in this study share a clusivity distinction, their

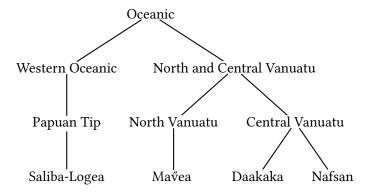


Figure 2: Family relations between the subject languages

pronominal systems and in particular their paradigms of subject agreement markers still differ quite significantly: Daakaka and Mavea have four number distinctions (singular, dual, paucal, plural), whereas Nafsan has three and Saliba-Logea has two. In Mavea and Nafsan, at least some subject agreement markers are portemanteau 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. Mavea: 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. 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 TAM-categories. We will report on the results from one particularly relevant context for Mavea, Nafsan and Daakaka. This context comes from Vander Klok (2013), which is a storyboard about Bill who always forgets his



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

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.

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.

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

Table 1: Structure of the verbal complex in Daakaka

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 **téé-**pyakilye] baséé pyan bweti levyak te baséé ente 3PC=REAL CONT look-RES.search bird under stem banyan disc bird this

mwe sóró tetes 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.

| Person | Singular | Plural | Dual | Paucal |
|--------|----------|--------|------|--------|
| 1EXCL | na | kinye | kana | kisi |
| 1INCL | | ra | da | si |
| 2 | ko | ki | ka | kasi |
| 3 | Ø | ya | J | /e |

Table 2: The system of subject agreement markers in Daakaka

| | enclitic | proclitic | monosyllabic |
|-----------------|------------|-----------|--------------|
| Pos. Realis | = <i>m</i> | mw= | mwe/mV |
| Neg. Realis | | | to |
| Pos. Potential | =p | w= | wV |
| Neg. Potential | = <i>n</i> | | nV |
| Distal | =t | t= | tV |
| Open Polarity | | | doo |
| Change of State | | | bwet |

Table 3: List of TMA markers in Daakaka

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 [vyanten swa dove REAL open 3sg.poss disc 3sg.poss food REAL lack man one mwe ane]

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 ma mini person REAL eat ASR coconut DIST bear.fruit person REAL drink vyos an 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 ge myane day every REAL forget thing.of-3sg.poss 3pl REAL be.like with hat, ambrela, sus.
 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 mwelili nyoo time some ASR POT NEC forget CLF-3SG.POSS thing small.pl 3pl na ka wa liye pwer myane nge yen s-an gyes=an COMP ASR POT take stay with 3SG in 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 yurmiline and REAL=COP person one COMP REAL know COMP POT forget sisye nyoo.
 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, ki, REAL go on place.of work=nmlz real.cont forget cup key sanglas, at, myane sus. 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 ane and real redup-forget stuff.of-3sg.poss 3pl stuff.of-3sg.poss tr gyes=an nyoo.

 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

The auxiliary *pwer* is often shortened to *pwe* and often contracts with a preceding realis marker m- to the form bwe(r) [$^{m}b^{w}er$]. 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 bwye na Buwu bwe kolir ane, bwye an ma ge=tak
DISC song COMP B. REAL.CONT sing TR song DEF REAL 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.

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'.

¹There 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.

(13) ko w=esi ka ya=p téé ane mees te ya=m puo,
2s pot=see asr 3pl=pot look tr food disc 3pl=real be.plentiful
ya=m du bangbang sukuo ma ge=te kyun
3pl=real cont play be.together real 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 we 3PL=REAL be.plentiful 3PL=REAL REDUP-talk just go place ASR POT yuop ya=m gii-kii or mwe yuop 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 an-ane
 3sg ...real.cont redup-eat bird part-3sgposs real.cont redup-eat
 tyu
 chicken
 '[the hawk] eats some of the other birds, it eats chickens,' (0410)
- (17) [...] vyap myató nya ló, ye=m du vyan te nate-yaa
 ...[] old.woman old 3DU two 3DU=REAL stay go DISC child-3DU.POSS
 nyoo ya=m du deng-deng webung ke-kevene
 3PL 3PL=REAL CONT REDUP-cry day 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 w=i
 ASR 3PL=POT stay REDUP-see 2SG home and 1SG ASR 1SG POT=COP
 ten dóór kyun.
 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, te vyanten chicken REAL return come home come stay home DISC man ya=m du es-esi teenem

 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.

te mwe ka na=p lingi ngok a ente kyun na=m sengane
DISC REAL ASR 1SG=POT put 2SG and this just 1SG=REAL give
mw=i ten [ka ko=p pwe es-esi nye yan]
REAL=COP assigned.to COMP 2SG=POT CONT REDUP-see 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 vap myató nyoo ya=tdu só-sóró-usili, talk-NMLZ COMP old.man old 3PL 3PL=DIST stay REDUP-talk-RES.follow ya=tka-ka meerin myaop te dyanga kuane 3PL=DIST CONT REDUP-say long.time volcano DIST lack house pwer Teveltes Ambrym, te DIST stay T. 1PL.INCL.OBJ A. '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 myanok te and 3sg dist crawl on leg-2sg.poss disc pot must look tr sore disc bwis yen myanok pass.under in sore 'when it crawls onto your leg, it always looks for wounds and then enters the wound' (2215)

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.

²As 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.

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:

vyanten nya na ye=m gomu [ka ye=p gomu te lee ka wa person 3DU COMP 3DU=REAL grab ASR 3DU=POT grab DISC tree ASR POT tevene nya] 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=mkuowilye [ka ko=pvyan, ka we dyanga, te 2sg=real know COMP 2SG=POT go COMP coconut POT lack DISC ka ko = pkamerane s-am apyang yan ar an na leevyo ASR 2SG=POT start.fire CLF-2SG.POSS fire on place DEF COMP tree.fern mu du ar an, ko=p tilya beke-sye nyoo,

REAL stay place DEF 2SG=POT be.together twig-3SG.POSS 3PL

beke-sye na ma gaó, myas-myas mu vu] te ko=m

twig-3SG.POSS COMP REAL dry REDUP-dry REAL good DISC 2SG=REAL

tebweti s-am apyang yan

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.

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

| | General form | Irrealis | Perfect |
|------------|--------------|----------|-------------------|
| 1sg | a= | ka= | kai= |
| 2sg | ku= | ρ̃a= | kui= |
| 3sg | i= | ke= | ki= |
| 1dl (incl) | ta= | tak= | takai= |
| 1dl (excl) | ra= | rak= | rakai= |
| 2dl | ra= | rak= | rakai= |
| 3dl | ra= | rak= | rakai=, rai= |
| 1pl (incl) | tu= | tuk= | tu=, tui=, tukoi= |
| 1pl (excl) | u= | ko= | ui=, koi= |
| 2pl | u= | ko= | koi= |
| 3pl | ru= | ruk= | rui=, rukui= |

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

| TMA marker | Proclitic | Function |
|------------|---------------------|---------------------------------|
| pe | perfect, general | • |
| po fo | general irrealis | posterior posterior irrealis |
| f/fla | general, irrealis | potential/conditional |

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

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.

me mal ni teetwei tkanwan i=tfel kia apu mana ru=siwer but time of before so 3sg=thus dem grandfather group 3pl=walk preg nalotwen 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 pa, 3PL=go for DET-learn-NMLZ 3PL=return go eat:IRR 3PL.PRF=again go me kineu kai, a=tu, a=pi te-ni e-sum mas nen a=to. and 1sG ES 1sG=stand 1sG=be DET-of Loc-house just 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 ki nlaun ni like M. and K. 3pl 1du.excl=hab walk go.around prep country of Vanuatu
 V.
 'So Mumu and Kotkot used to walk around Vanuatu.' (050.002)
- (30) malnen tiawi ru=to sol sernale ru=to sol sernale then ancestors 3PL=HAB bring everything 3PL=HAB bring everything pak nana naplaki nlauwen ale sernrak ru=pa ru=sol sernale to HESIT feast dance okay:BI always 3PL=go 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 nrak pei. kava 1sg=нав drink-тк-3sg.овј but 1sg=tell for alcohol 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 pam kit day because COMP 3SG=have devil 3SG=one COMP 3SG=HAB eat 1PL nanre ni naur Egun 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 i=to pan every day 3sg=нав go.to work and every day 3sg=нав go pak naor nawesien, me naliati laap i=to weswes go i=to work and 3sG=HAB go.to place work, but day many 3sg=нав metpaakor te sernale. 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 ke=fan every day Bill 3sg=go comp 3sg.irr=work every time comp 3sg=go.irr weswes, ke=mas metpaakor namrun.

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 a part of the description:

(39) A=to Vanuatu. A=tae paam kapu. 1sg=hab Vanuatu 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 ni and time of grandfather group 3sg=not similar=dst neg2 time of apu mana wel aliat.tap go te-ni Erakor ruk=fo pan grandfather group like Sunday and det-of E. 3pl.irr=pos.irr go preg nasumtap Ertap 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 Eratap.' (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 Epag. wik kaaru ru=fla okay:BI week next 3PL=COND again go.to E. week other 3PL=COND mer pak Efil. go tete mal natokon nra ruk=fo mai pak again go.to Vila and some time village two 3PL.IRR=POS.IRR come go.to Erakor. me ru=ta pnut mau 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 p̃a=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 Mavea

6.1 Introduction

Mavea, also known as Mavea or Mafea is spoken by about 30 people on the eponymous island of Mavea 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.

| SBJ.AGR | COND | NEG | IT/INCPT | NUM | IMPF | REDUP- | Verb | ADV | TR | ОВЈ |
|---------|------|-------|-----------|---------|-------|--------|------|-----|------------|-------|
| i-, | то- | sopo- | ḿе-/pete- | r-/tol- | l(o)- | | | | = <i>i</i> | =a/NP |

Table 6: The verbal complex in Mavea (cf. Guérin, 2011)

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

| | Realis | Irrealis | Realis/ Irrealis | | | |
|-------|--------|----------|------------------|------|--------|--|
| | Sin | gular | Plural | Dual | Paucal | |
| 1INCL | | | da- | dar- | datol- | |
| 1EXCL | na- | ka- | ki- | kir- | kitol- | |
| 2 | ko- | ko- | ki- | kir- | kitol- | |
| 3 | то- | i- | ra- | rar- | ratol- | |

Table 7: Subject agreement markers in Mavea (Guérin, 2011: 211)

pomoro, mo-sopo-me-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)

For singular subjects, there are two lists of subject agreement markers, depending on whether a sentences 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 Mavea, assertions about bounded past events typically contain no other verbal prefixes than the (realis) subject agreement marker. This is illustrated in (46):

(46) *paio 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 Mavea, 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-Mavea ra-lo-to ra-lo-veia then work clf-const clf.man-Mavea 3pl-impf-stay 3pl-impf-make kavura [ra-alali inana uta] copra 3pl-search food garden 'so, the work of Mavea 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) *matiu nortovono da-lo-an matiu 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, Mavea 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-va mo-va 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-va ro mo-lo-to suruvu comp wild.man 3SG-full then 3SG-stay 3SG-go then 3SG-IMPF-stay 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 turvaite ko-ma ko-lo-onea* FUT 2SG-IMPF-stay 2SG-IMPF-look.after every.time 2SG-come 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, Mavea 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 Mavea. 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'.

⁴Guérin (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 Mavea can reduplicate nouns as well as verbs to indicate a plural reference, in contrast to Daakaka and Nafsan.

- (53) mo-tur na taro aro mo-tikelia napar filae nira ra-to atano 3sG-stand.up loc time here 3sG-reach today plover 3pl 3pl-stay ground mo-van-vano atano ale fao nna mo-lo-to aulu 3sG-REDUP-walk ground then swamphen 3sG 3sG-impf-stay above pere-na vuae branch-3sG.Poss tree 'It is like that until today, plover birds stay on the ground, they walk on the ground; as for swamphens, they stay in trees.' (06016.062)
- (54) na sivi ro ko-mo-onea-ira sivi ro nna mo-an-an tal-ran but parrot then 2sg-cond-see-3pl parrot then 3sg 3sg-redup-eat day-day na talapong ro mo-suruvu 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-va 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 va tal-ran mo-lo-song-song then bat 3sG-afraid 3sG-cannot go time.of-day 3sG-IMPF-REDUP-hide

na only'Flying Fox is afraid, she doesn't go out during the day she only hides.' (06040.020)

(57) mo-lo-ma turvaite 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 sentence describes 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 turvaite ko-ma ko-lo-onea* FUT 2SG-IMPF-stay 2SG-IMPF-look.after every.time 2SG-come 2SG-IMPF-look 'you will look after it, everyday you will come and look at it' (06043.100)
- (59) [...] turvaite mo-va 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 matiu ro mo-to
 3sg-neg-look here some growth-3sg.poss coconut then 3sg-stay
 mo-lo-ontaia malum 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-va pulua mo-lo-va 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 Daakaka and Nafsan.

6.6 Irrealis and habituality

Mavea 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 factor, 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 Suauic 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

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

Table 8: Subject agreement markers in Saliba-Logea

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.

| Prefix | Gloss | Function |
|-----------|--------------|---|
| he- | CAUS- | a causative marker |
| kai_1 - | DETR | detransitivization/ playfulness |
| kai_2 - | BODY.WEIGHT- | a classificatory prefix specifying that an action involves the body |
| ta- | RES- | detransitivizing |
| hai- | RECP- | reciprocity |

Table 9: A table of verbal prefixes in Saliba-Logea

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

⁵To 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).

| Suffix | Gloss | Function |
|--------|----------|--------------------------------|
| -i | -TR | transitivizer |
| -ma | -to.sp | directional, towards speaker |
| -ko | -already | perfective, 'already' |
| -wa | -to.AD | directional, towards addressee |

Table 10: A table of some of the most frequent verbal suffixes in Saliba-Logea

aspect, by detransitivizing the verb root or by transitivizing them 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 ede child 3sg.sbj-fall-go.down and.then dog 3sg.sbj-fall-go.down 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 [...]' (BudoiNualele_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 ye-wase slipper.lobster ana 3sg.sbj-search 3sg.sbj-go on.and.on 3sg.sbj-search kasaya na ... 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 ...mwauyope 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 *gwauyala* 'happy' in (73) and (74).

```
(73) Ye-gwauyala.
3sG-happy
'She is/ was happy.'
(74) Ye-gwau-gwauyala.
```

(74) Ye-gwau-gwauyala.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 'dry-ish', 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' stem 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 it 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 se-laoma ...but IRR NEG 3PL-go feast place near.AD PP.SG CONJ 3PL-come dedekawai se-bawa 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.' (BudoiNualele 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 taba nige
3sg.sbj-grow only 3sg.sbj-go.up and.then 3sg.sbj-go.up ART IRR NEG
ye-lala
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.

| Language | Optional | Aux. stay | Redup. | Impf. |
|--------------|----------|-----------|--------|-------|
| Daakaka | + | + | + | _ |
| Nafsan | + | + | _ | _ |
| Mavea | + | + | + | + |
| Saliba-Logea | + | _ | + | _ |

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

⁶So 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).

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 \acute{v} ea, 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 va tal-ran mo-lo-song-song then bat 3sG-afraid 3sG-cannot go time.of-day 3sG-IMPF-REDUP-hide na only 'Flying Fox is afraid, she doesn't go out during the day she only hides.' (06040.020)

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 an-ane
3sg ...REAL.CONT REDUP-eat bird part-3sg.Poss REAL.CONT REDUP-eat
tyu
chicken
'[the hawk] eats some of the other birds, it eats chickens,' (0410)

These observation 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.

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; ADV – adverb; AD – address; 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; DETR – detransitivizer; DET – determiner; 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 – hestation; 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; NUM – num; OBJ – object; PART – particle; PFT – perfective; PL – plural; POS – posterior; POSS1 – possessive class 1; POSS2 – possessive class 2; POSS – possessive; 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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Correspondence address: Kilu von Prince Humboldt-Universität zu Berlin Unter den Linden 6 10099 Berlin