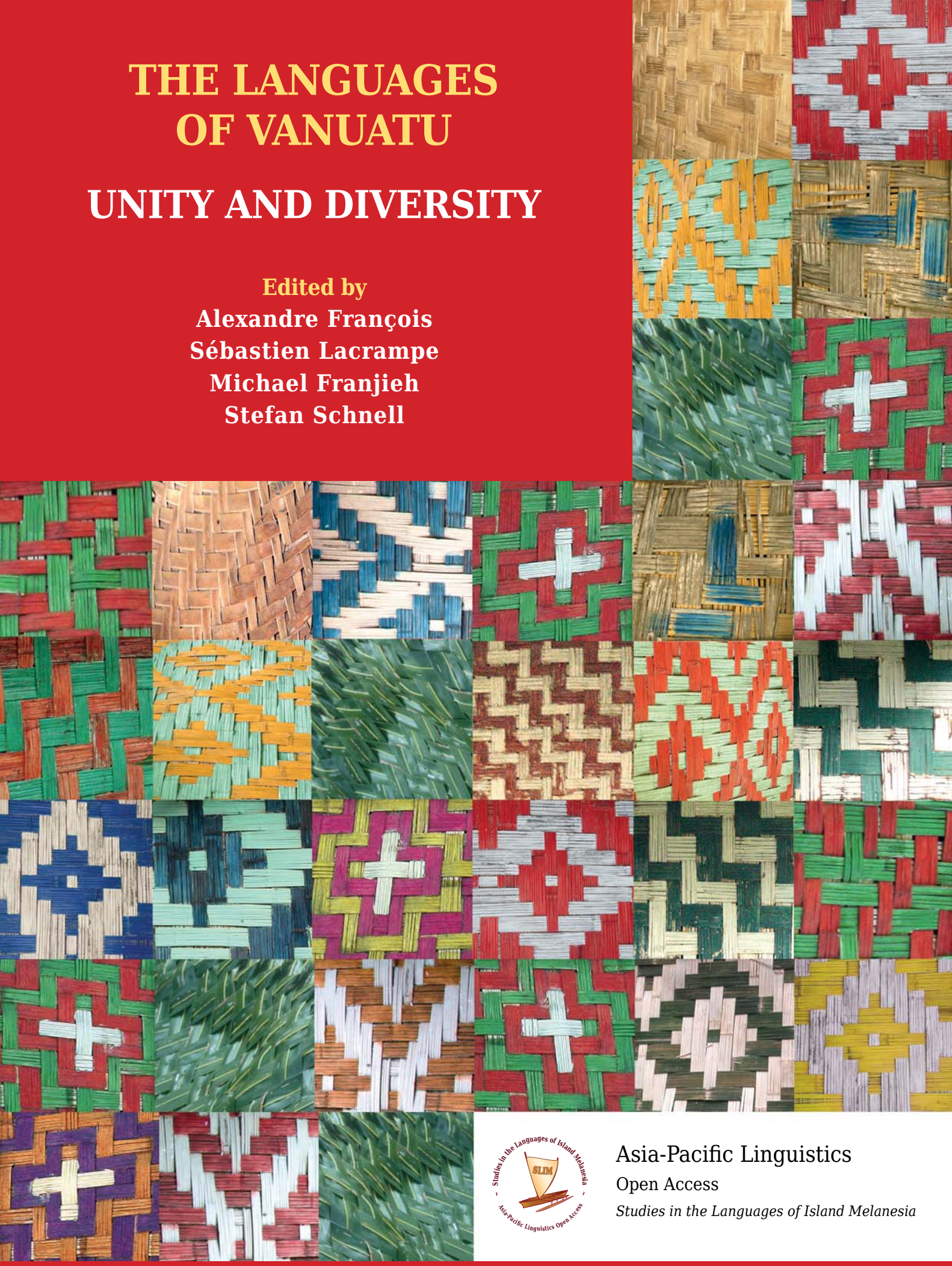
THE LANGUAGES OF VANUATU

UNITY AND DIVERSITY

Edited by
Alexandre François
Sébastien Lacrampe
Michael Franjieh
Stefan Schnell



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The languages of Vanuatu: Unity and diversity

edited by

Alexandre François; Sébastien Lacrampe; Michael Franjieh; Stefan Schnell

With an estimated 138 different indigenous languages, Vanuatu is the country with the highest linguistic density in the world. While they all belong to the Oceanic family, these languages have evolved in three millennia, from what was once a unified dialect network, to the mosaic of different languages that we know today. In this respect, Vanuatu constitutes a valuable laboratory for exploring the ways in which linguistic diversity can emerge out of former unity.

This volume represents the first collective book dedicated solely to the languages of this archipelago, and to the various forms taken by their diversity. Its ten chapters cover a wide range of topics, including verbal aspect, valency, possessive structures, numerals, space systems, oral history and narratives. *The languages of Vanuatu: Unity and Diversity* provides new insights onto the many facets of Vanuatu's rich linguistic landscape.

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College of Asia and the Pacific
The Australian National University

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The exceptional linguistic density of Vanuatu

Introduction to the volume

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Abstract

The Republic of Vanuatu, a small archipelago of island Melanesia, is home to 138 distinct Oceanic languages, for which we provide here a new list and map. This updated figure, obtained by combining earlier sources and more recent information from experts, makes Vanuatu the country with the highest language density in the world, whether compared to its land surface, or to its population. This modern density is not due to genealogical diversity, but reflects three millennia of *in situ* diversification from a single ancestor, Proto Oceanic. This historical process took the form of multiple linguistic innovations that spread across the dialect continuum in entangled patterns, bringing about the mosaic we know today. Vanuatu's linguistic diversity is now increasingly threatened by the spread of the national language, Bislama. The various chapters in this volume describe and discuss some of the cultural and linguistic features that make Vanuatu such a diverse archipelago.

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1 Studying the languages of Vanuatu

The present publication constitutes the first edited volume specifically dedicated to the languages of Vanuatu. With as many as 138 distinct languages [§2.1], this archipelago of the South Pacific still keeps many treasures hidden; yet the last two decades have seen a steady increase in the number of scholars dedicated to the exploration of these languages.

During the twentieth century, the languages of what was then known as the Condominium of the New Hebrides were initially documented by a handful of missionaries and early scholars, including Robert Codrington (1830–1922), Daniel MacDonald (1846–1927), Sidney Ray

(1858–1939), Arthur Capell (1902–86). The 1970s saw renewed scholarship in the domain with the publication, in 1976, of Darrell Tryon's *New Hebrides Languages*, a compendium of basic vocabulary lists in 179 distinct linguistic varieties (whether languages or dialects). About the same period, other scholars undertook the description of several languages – e.g. John Lynch in Tanna; Jean-Michel Charpentier in South Malakula; Terry Crowley in Paama; Ross Clark on Polynesian outliers. As the New Hebrides became independent in 1980 under the name *Vanuatu*, linguists would also increasingly pay attention not only to its many vernacular languages, but also to Bislama, the new country's national language [§3.3].

The early years of independence were followed by a moratorium on research, from 1985 to 1994 (Taylor & Thieberger 2011:xxviii). In 1995, encouraged by Ralph Regenvanu the new director of the Vanuatu Cultural Centre, the country opened up to foreign academics again. Many people were then aware of the useful role linguists could play in documenting the linguistic wealth of the archipelago, while its many languages were still being actively spoken. The following two decades have seen a sustained effort to describe and document the languages of Vanuatu, by an ever-increasing number of linguists. Many regions of Vanuatu, little explored until recently, are now being better known, improving our collective knowledge of Oceanic languages.

In November 2011, Alex François and Sébastien Lacrampe, then both attached to the Australian National University, organised the first *International Workshop on the Languages of Vanuatu*. On this occasion, as many as twenty-eight linguists were brought together – a testimony to the momentum currently enjoyed by academic scholarship in the domain. During this 2011 workshop, the idea of a joint publication specifically focusing on Vanuatu languages was first launched. Shortly thereafter, the online series *Studies in the Languages of Island Melanesia* was founded, as a venue for book-length academic manuscripts in the domain, based on the principles of peer-reviewing and of free and open access. Today, we are happy to publish this volume, the fruit of these joint efforts by a team of enthusiastic scholars. The purpose of the present chapter is to serve as an introduction to the book, by presenting the impressive linguistic density of this small archipelago of the Pacific.

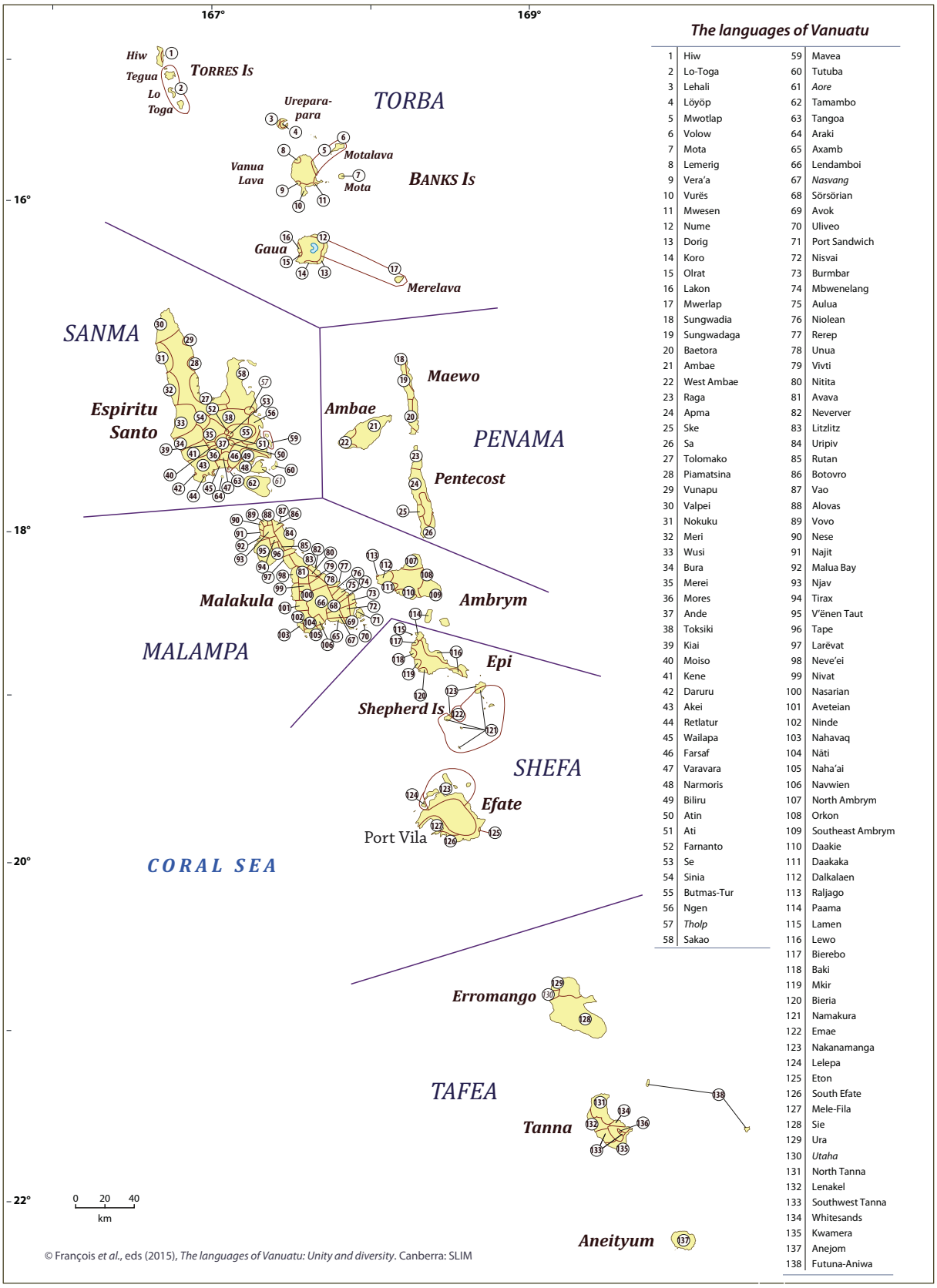
2 The languages of Vanuatu

The Republic of Vanuatu is home to 80 inhabited islands, and to a population of 243,000 (2009 census, see VNSO 2009).[1] The country's three official languages – Bislama [§3.3], French and English – were all introduced during European colonisation. Yet the archipelago is also home to a wealth of vernacular languages which were inherited from pre-colonial times, and are still spoken to this day. Altogether, the country counts 138 distinct vernacular languages – according to a new assessment we are proposing today. Adding the *lingua franca* Bislama brings to 139 the total of languages indigenous to Vanuatu.

Figure 1 provides a new reference map of Vanuatu's 138 languages (map created in March 2015 by Alexandre François and Benjamin Touati). As a complement to the map, the list of all known languages for the country will be given in *Table 2*, in the appendix.

[1] The homepage of VNSO (http://www.vnso.gov.vu) provides a "live" counter of the population of Vanuatu, revealing how rapidly it grows. As of 26 May 2015, the total number was 278,456.

Figure 1 — A reference map of Vanuatu's 138 vernacular languages



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The languages of Vanuatu

1	Hiw	59	Mavea
2	Lo-Toga	60	Tutuba
3	Lehali	61	*Aore*
4	Löyöp	62	Tamambo
5	Mwotlap	63	Tangoa
6	Volow	64	Araki
7	Mota	65	Axamb
8	Lemerig	66	Lendamboi
9	Vera'a	67	*Nasvang*
10	Vurës	68	Sörsörian
11	Mwesen	69	Avok
12	Nume	70	Uliveo
13	Dorig	71	Port Sandwich
14	Koro	72	Nisvai
15	Olrat	73	Burmbar
16	Lakon	74	Mbwenelang
17	Mwerlap	75	Aulua
18	Sungwadia	76	Niolean
19	Sungwadaga	77	Rerep
20	Baetora	78	Unua
21	Ambae	79	Vivti
22	West Ambae	80	Nitita
23	Raga	81	Avava
24	Apma	82	Neverver
25	Ske	83	Litzlitz
26	Sa	84	Uripiv
27	Tolomako	85	Rutan
28	Piamatsina	86	Botovro
29	Vunapu	87	Vao
30	Valpei	88	Alovas
31	Nokuku	89	Vovo
32	Meri	90	Nese
33	Wusi	91	Najit
34	Bura	92	Malua Bay
35	Merei	93	Njav
36	Mores	94	Tirax
37	Ande	95	V'ënen Taut
38	Toksiki	96	Tape
39	Kiai	97	Larëvat
40	Moiso	98	Neve'ei
41	Kene	99	Nivat
42	Daruru	100	Nasarian
43	Akei	101	Aveteian
44	Retlatur	102	Ninde
45	Wailapa	103	Nahavaq
46	Farsaf	104	Nāti
47	Varavara	105	Naha'ai
48	Narmoris	106	Navwien
49	Biliru	107	North Ambrym
50	Atin	108	Orkon
51	Ati	109	Southeast Ambrym
52	Farnanto	110	Daakie
53	Se	111	Daakaka
54	Sinia	112	Dalkalaen
55	Butmas-Tur	113	Raljago
56	Ngen	114	Paama
57	*Tholp*	115	Lamen
58	Sakao	116	Lewo
		117	Bierebo
		118	Baki
		119	Mkir
		120	Bieria
		121	Namakura
		122	Emae
		123	Nakanamanga
		124	Lelepa
		125	Eton
		126	South Efate
		127	Mele-Fila
		128	Sie
		129	Ura
		130	*Utaha*
		131	North Tanna
		132	Lenakel
		133	Southwest Tanna
		134	Whitesands
		135	Kwamera
		137	Anejom
		138	Futuna-Aniwa

Both the table and the map incorporate knowledge from earlier sources (especially Tryon 1976, 1996a, 2010; Lynch & Crowley 2001; plus studies targeted at individual areas), and were cross-checked with primary data provided by field experts.[2]

2.1 Counting languages

2.1.1 Methodological issues

As is often the case in such linguistic landscapes, it is difficult to assess when two local speech traditions, or "communalects" (to use the useful term coined by Pawley & Sayaba 1971), constitute separate languages, as opposed to dialects of a single "language". The criterion of mutual intelligibility is often mentioned (e.g. Tryon 2010:286), but is notoriously difficult to assess with certainty: in the case of close languages, the notion of intelligibility is a gradient one, largely dependent on social and subjective perceptions. While this criterion remains essential to the assessment, it must be adjusted based on more controllable criteria – as we will see below.

Tryon (1976) chose to avoid this difficulty by using as his sole criterion the rates of lexical cognacy in his lists of basic vocabulary: communalects sharing more than 81 percent of basic lexicon should be considered dialects of a single language. Later, Lynch & Crowley (2001:3) used the same wordlists and the same method, yet decided to lower the threshold to 70 percent of shared lexicon. This new arbitrary figure resulted in lumping together a number of languages which Tryon had previously distinguished. While the lexicostatistical method has the advantage of being measurable, it rests on a threshold which is but an arbitrary convention. Furthermore, it looks exclusively at rates of lexical cognacy in a short list of about 200 terms, and disregards the various other linguistic criteria which could otherwise inform our judgment, and might possibly lead to different conclusions.

To take one example, the languages called *Lehali* and *Löyöp* (#3 and 4 on the map) have a basic-lexicon cognacy rating of 77.6% (Tryon 1976:95): this results in Lynch & Crowley (2001:38) classifying them as two dialects of a single language, which they call *Ureparapara*. And indeed, being relatively close languages, there is a reasonable degree of mutual intelligibility between them (roughly comparable to Spanish and Portuguese); this proximity is reinforced by longstanding traditions of intermarriage and bilingualism. However, lumping Lehali and Löyöp together as one single language solely based on lexicostatistics would fail to acknowledge the many differences between the two systems, whether in their phonologies (François 2011a:194, 198), their personal pronouns (François 2009:178), their space systems (François, this volume), and so on. Historically, Lehali shares innovations with Lo-Toga [#2] to its west, while Löyöp really subgroups with Mwotlap [#5] to its east (François 2014:183). In sum, even though they do share some vocabulary and are partly intelligible to each other, Lehali and Löyöp clearly constitute two distinct languages[3] – a view which happens to be confirmed by the social perceptions of the speakers themselves. Of course, an approach purely based on lexicostatistics may be justifiable when the only data available are basic

[2] We wish to thank Kilu von Prince, Ken Nehrbass, Liz Pearce, Benjamin Touati – and especially John Lynch and Ross Clark, for providing data and insights on their areas of expertise.

[3] This conclusion is reflected in our map and list, where Lehali and Löyöp were counted as separate.

vocabulary lists; but careful examination, whenever possible, should incorporate other dimensions, including phonology or grammar.

Sometimes, by contrast, local perceptions have to be overridden by the informed judgment of the linguist outsider. For instance, in the southern half of the Torres group, islanders insist that *Lo* and *Toga* constitute separate languages, each spoken on the island of the same name; that statement will sometimes be backed by an example or two, where word forms differ – like the 1sg possessive, which is [minɔ] in Lo and [minɛ] in Toga. However, closer investigation reveals that Lo and Toga can only be distinguished by a handful of such shibboleths, and are perfectly identical in all other respects. In such cases, it is justified to consider these two communalects as simply local varieties of a single language (called *Lo–Toga*), in spite of the popular perceptions that tend to count a separate "language" for each island.[4] This problem is particularly relevant in cases of dialect continua, which abound in Vanuatu – especially on Ambae, Pentecost (see Schneider & Gray, this volume), Santo, Efate, Tanna.

As we elaborated the list and map of Vanuatu languages, we thus relied, whenever possible, upon the informed judgment of expert linguists, and their view of how distinct each communalect was from its neighbours. Such an in-depth investigation can only be carried out by scholars who have patiently accumulated knowledge upon entire areas. The more is known about Vanuatu languages in the future, the more it will be possible to refine our judgments on these matters.

2.1.2 About the total number of languages

These methodological issues partly explain the fluctuation observed, in the scientific literature, with respect to the total number of languages in Vanuatu.

Tryon (1976) first identified 179 communalects – corresponding to his 179 basic-lexicon wordlists. Then, by merging together close varieties based on a lexicostatistical criterion, he arrived at the final number of **105** distinct languages for the whole country (1976:87).

Lynch & Crowley (2001), using a lower lexicostatistical threshold, often treated as dialects what Tryon had considered separate languages. But while this approach tended to decrease the total number for the country, their volume also documented a number of previously unacknowledged languages, most of them moribund, especially from Malakula.[5] As a result, the total figure given by Lynch & Crowley (2001:4) ends up being quite similar to Tryon's 1976 assessment, with **106** languages — including 8 extinct, 17 "moribund", and 81 "living languages still actively spoken".

After his 1976 study, Darrell Tryon revised his own estimate, and would regularly cite a higher total of **113** languages for Vanuatu (Tryon 1996a, 2006); this number of 113 has been the most frequently cited by scholars in the last decades. In 2009 however, the same Darrell

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[4] Obviously, another way to interpret speakers' statements is to point out that the term used locally to designate each local variety is not meant to be translated as *language* (as opposed to *dialect*), but simply refers to what we would otherwise call *lect* or *communalect*. In that sense, speakers are of course correct in assigning two separate lects (*vavetēme*) to the islands of Lo and Toga.

[5] This reassessment of Malakula languages resulted mostly from fieldwork undertaken in 1999-2001 by Terry Crowley, whose findings were also to be reported in his four posthumous grammars (Crowley 2006*a*, *b*, *c*, *d*).

Tryon circulated among colleagues an unpublished map that listed as many as **125** languages. The increase in number was mostly due to his more recent survey of Espiritu Santo, which he published separately as Tryon (2010).

Our estimate of **138** languages is thus, to date, the highest number ever proposed for Vanuatu. This high number may be explained in two ways. First, it reflects our propension to count as distinct languages those communalects that are locally identified as separate, and confirmed by a linguist expert to form a system of their own [§2.1.1]. The second reason for our high number is that it brings together knowledge accumulated by several experts over the last decades: it incorporates the surveys of Malakula by Terry Crowley and John Lynch, but also those of Santo by Tryon (2010) and by Ross Clark (pers. comm.); those by François (2011a, 2012) in the Torres and Banks Is; those by von Prince (2015) on Ambrym, etc. In each case, in-depth exploration has revealed the existence of more languages than were previously thought — albeit, most of the time, languages on the verge of extinction.

2.1.3 Living, moribund and extinct languages

The end of the 19th century and the beginning of the 20th saw a sudden downturn in the archipelago's demography, due to the spread of new diseases, combined with a depopulation due to forced labour (Crowley 1997; François 2012). These tragic episodes made numerous languages and dialects suddenly vulnerable, and often resulted in their extinction. Here is what the Anglican missionary and anthropologist Robert Codrington wrote in 1885 about the island of Vanua Lava in the Banks islands:[6]

> "On the island itself, each of the districts or groups of villages has its own dialect, viz. *Pak*, Lusa, Sasar, Leon, *Vatrat*, *Vuras* (Avreas), *Mosina*, *Lomrig*, Nawono, Alo Teqel, Qatpe, *Tolav*, and Qe'i. Some of these are, no doubt, very much alike, but the natives themselves thought them different; and between, for example, Pak and Mosina the difference is considerable. The dialect of Nawono, Port Patteson, is lost, the labour trade having destroyed the population, at one time considerable." (Codrington 1885:331)

Codrington cites as many as thirteen communalects for the sole island of Vanua Lava, where only four languages are spoken today – including the moribund Mwesen and Lemerig. This gives an idea of the drastic language loss which must have occurred since the end of the 19th century.

In many areas of Vanuatu, people still remember the names of former communalects, which have gone extinct during the last few generations. Quite often though, they recollect little more than the mere existence of those speech traditions, and too little information can be gathered to assess whether these were languages of their own, or mere local variants of existing languages. Such cases were not counted in the table or the map.

In a few cases, however, it has been possible to collect some data on a moribund language before it stopped being used – at least enough to assess its status. Three languages are in this situation: they are included in *Table 2* (#57, 61, 130), and shown in italics on the map. As a result, the total number of languages currently spoken in Vanuatu is closer to 135.

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[6] In this citation, I italicise the names of communalects whose existence is still remembered, and underline those which are still alive today. Note the correspondences of language names: *Lomrig* = Lemerig (#8 on our map), *Vatrat* = Vera'a (#9), *Vuras* = Vurës (#10), *Mosina* = Mwesen (#11).

In fact, it is difficult to say for sure how many languages, among the 138 of Vanuatu, are still alive. The reason is that many languages were already in the verge of extinction when they were discovered: they were only spoken, or rather remembered, by a handful of people, sometimes less than 10 or 15 individuals, usually of very old age. Lynch & Crowley (2001) counted 17 of these "moribund" languages, and our own inventory includes 18 [§2.2]. When such languages were discovered 15 years ago, it is difficult to know with certainty whether they should be counted today, or not, among the living languages of Vanuatu.

2.2 Language demography and vitality

While a few languages have speakers numbering in the thousands, the majority are spoken by smaller communities. Based on *Table 2* (p.18 sqq.), *Figure 2* gives an overview of Vanuatu's 138 vernacular languages, ranked by size of their speaker communities.[7] The three most spoken languages in the country are Uripiv (#84), Nakanamanga (#123), and Lenakel (#132) – with 9,000; 9,500; and 11,500 speakers respectively.

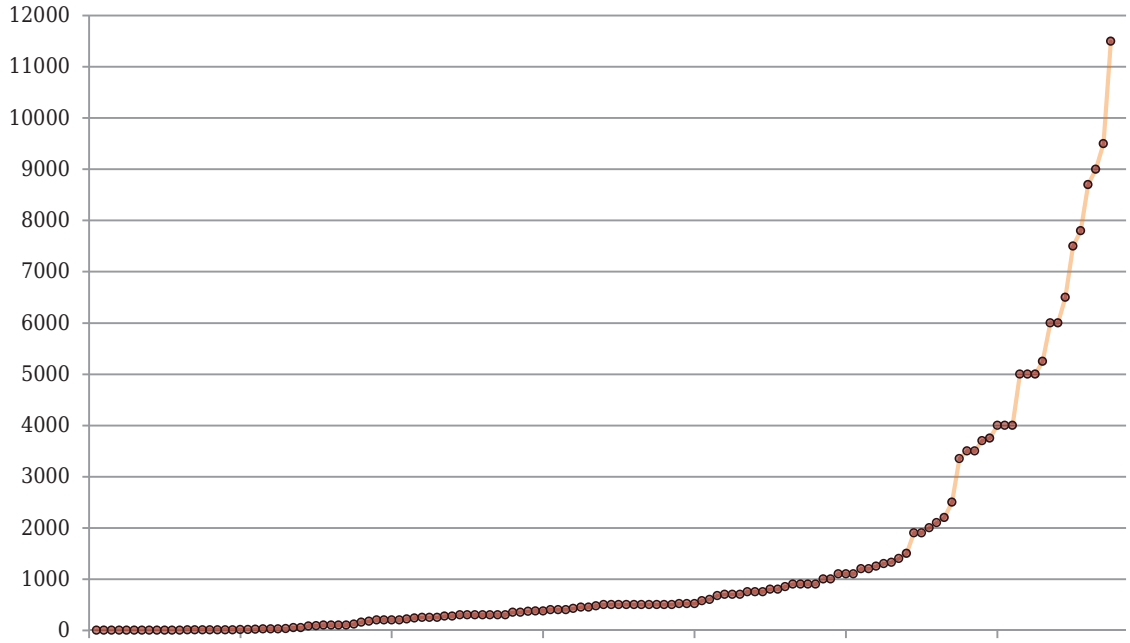

Figure 2 — The languages of Vanuatu, ranked by number of speakers (each dot is a language)

Figure 3 groups languages by categories of size: for example, the second column states that 13 languages are spoken by a group of between 16 and 100 speakers. The first bar counts moribund languages, spoken today by less than 15 speakers — not counting the four that are already extinct. The number of these moribund languages (18, about 13% of the total) shows how much of Vanuatu's linguistic diversity has already started to erode in the last few generations.

[7] Vanuatu's official census does include some data on languages, yet it does so by contrasting "Bislama" with a generic category "local language" (see *Table 1* p.17), without specifying which vernacular language is involved. As a result, the statistics on speaker numbers for individual languages can only be assessed by linguists in the field, sometimes in conditions that only allow them to provide rough estimates.

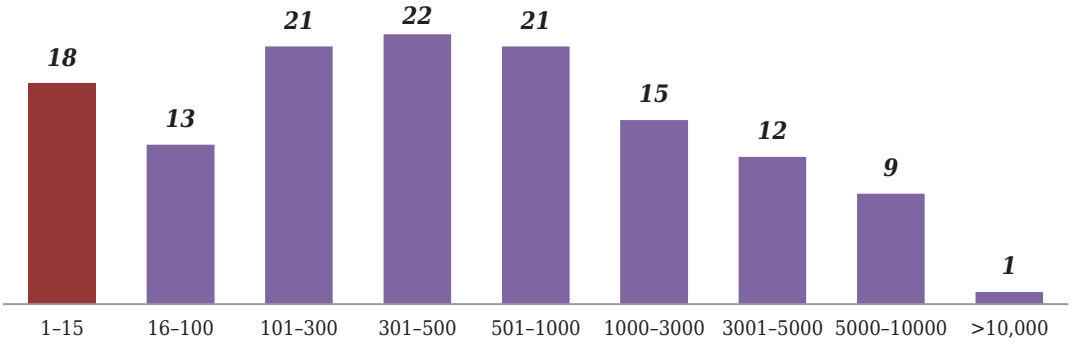

Figure 3 — The size of speech communities in Vanuatu (in number of speakers)

Languages with less than 15 speakers are clearly doomed to become extinct in the years to come: they are the descendants of earlier language communities that were once thriving, yet have receded drastically in the last generations under the pressure of other languages. That said, one should be cautious before painting too dark a picture of Vanuatu's languages, just based on demographics. While a few hundred speakers is definitely a low number by world's standards, it doesn't necessarily entail a language's fragility. Evidently, the language ecology of traditional Vanuatu was always built around language communities that would typically have the size of one or two villages with no more than a few hundred members, and still be in their full strength (François 2012). Most of Vanuatu's languages are in fact still healthy today, because – except for the moribund ones – they are still transmitted to children. In this regard, they are safe from immediate endangerment (Crowley 1995, 2000).

2.3 An exceptional density

With a total land area of 12,189 sq km, Vanuatu has an average of 88 sq km per language: this is presumably the densest linguistic landscape in the world. By way of comparison, the geographical density of languages in Papua New Guinea – another Melanesian country renowned for its linguistic wealth – has been estimated to be of one language every 900 sq km (Pereltsvaig 2012:167). The author considered the latter density rate to be "unparalleled elsewhere", a statement obviously contradicted by the Vanuatu data.

Another way to assess a country's linguistic density is by referring to its demography. Compared to its current population of 243,000 inhabitants (VNSO 2009), the figure of 138 languages entails an average of 1760 speakers per language. Again, this constitutes the world's highest density in number of languages *per capita* (Crowley 2000).

In fact, the numbers are even more extreme if one remembers what the country's population used to be during last century. We mentioned already the drastic depopulation which affected the whole archipelago at the turn of the 20th century [§2.1.3]. The first census of the then New Hebrides was carried out in 1967, and counted a total population of 77,988 (Tryon 1996b:1374) – that is, 3.1 times smaller than it has become today.[8] The 138 languages

[8] By 1967, the country's population had already begun to bounce back from its lowest point, which Vienne (1984:63) situates around 1940 (at least for the north). Language density was then at its peak.

we count today in Vanuatu had to live through that demographic bottleneck of last century. At that point, the average size of a language community in Vanuatu was thus as low as 565 speakers per language – a world record for sure.

The extreme density of Vanuatu is consistent with general attitudes observed throughout Melanesia in general (Pawley 1981, Unseth & Landweer 2012), whether regarding linguistic or cultural diversity. While all communities share a cultural background typical of Pacific societies in general, they also like to emphasise the many details that differ among them: this may be differences in food items and recipes, rules of marriage and kinship, artistic practices, oral literature, and so on. A conspicuous example is the diversity of musical traditions: musical instruments, poetic genres, dances, melodies and rhythms, form a variegated mosaic across the whole Vanuatu archipelago (François & Stern 2013). This taste for diversity results in each island, or even each village, having its own recognisable identity, distinct from its immediate neighbours.

3 The linguistic history of Vanuatu

By contrast with a country like Papua New Guinea, the impressive linguistic density of modern Vanuatu is not caused by deep-level genetic diversity. Indeed, all its languages belong to the same family: Oceanic, the eastern branch of the Austronesian phylum.

Among them, three languages (Emae, Mele–Fila, Futuna–Aniwa) are Polynesian outliers – that is, members of the Polynesian subfamily of Oceanic that are spoken west of their Tonga–Samoa homeland (Clark 1994); they likely arrived in the country during the last millennium. As for the non-Polynesian languages of Vanuatu, they historically developed *in situ* from the speech of the archipelago's first settlers. Archaeological evidence suggests that these early settlers were bearers of the cultural complex known as *Lapita* (Kirch 1997; Bedford 2003), who reached the shores of Vanuatu around 3100–3000 BP (Bedford *et al.* 2006; Bedford & Spriggs 2008). The language spoken by these early Lapita settlers is generally understood to be Proto Oceanic, the language ancestral to all Oceanic languages of the Pacific (Pawley & Green 1984; Pawley 2007).

3.1 Internal subgrouping hypotheses

There have been attempts to subgroup Vanuatu languages — apart from the Polynesian ones, that is. If conceived under the tree model, such subgrouping takes the form of intermediate nodes cascading down from Proto Oceanic to modern languages. Essentially, two proposals have been made in the literature.[9] The first hypothesis was developed by Clark (1985:219; 2009), and separates two subgroups: *South Vanuatu* vs. *North–Central Vanuatu*, the latter in turn splitting into North vs. Central Vanuatu.[10]

An alternative hypothesis was formulated by Lynch (2000a). He proposed to group Vanuatu and New Caledonia together, under a node called *Southern Oceanic* (see also Lynch & Ozanne-Rivierre 2001, François 2011b). The latter would split into *North Vanuatu* vs. all

[9] See Clark (2009:3–9) for a review of earlier proposals.

[10] On our map, *SV* includes the ten languages numbered #128 to 137. As for *NCV*, it encompasses all other languages apart from the three Polynesian ones (122, 127, 138).

the rest (called *Nuclear Southern Oceanic*); and this southern group would, in turn, include *Central Vanuatu* languages on one hand, and *Southern Melanesian* on the other — itself the parent of *South Vanuatu + New Caledonia*. Lynch's ideas were summarised by Ross *et al.* (2008:8) in their overview of recent Oceanic subgrouping hypotheses, in the form of *Figure 4* (see also Lynch *et al.* 2002:113).

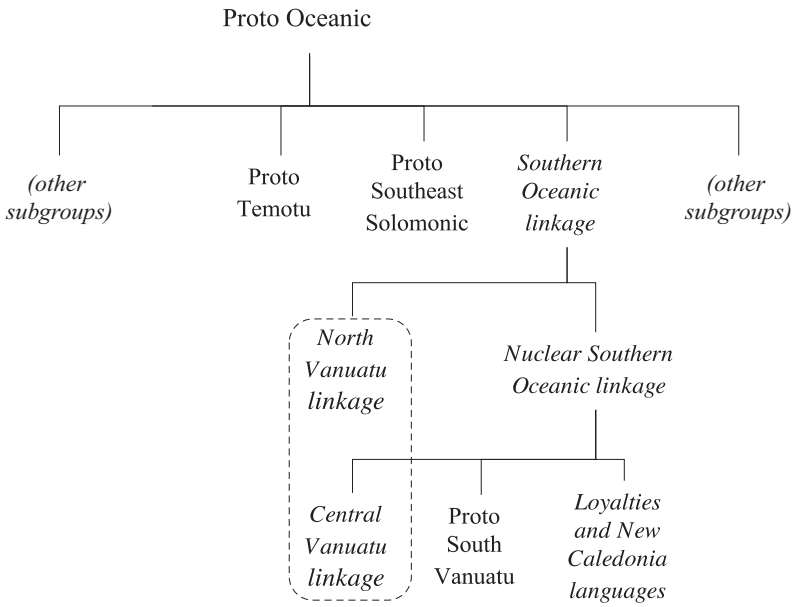

Figure 4 — A possible tree for the Oceanic family, showing the distribution of Vanuatu languages across three separate subgroups (Ross *et al*. 2008:8, citing Lynch 2000a)

One notable feature of *Figure 4* is the dotted line that circles around *North Vanuatu* and *Central Vanuatu*: it reflects the many innovations which these two "dialect networks" shared together as they were "reintegrated" together (Ross *et al.* 2008:10). Such cases of reintegration are clearly problematic for the tree model (see Pawley 2012): how can two subgroups share innovations together, when they do not fall under the same node? Does the dotted line also represent relations of genealogy, in the same way as the genetic ties ordinarily represented on a tree? If so, we would be here faced with a case of *intersecting subgroups*, as CV would belong to a *CV–SV*(–Caled.) subgroup on one side, and to an *NV–CV* subgroup on the other side. Yet the concept of "intersecting subgroups" is at odds with an orthodox view of a family tree: under a strict approach, only one of the intersecting sets of shared innovations can be seen as genuinely genealogical in nature, while the other set would have to be ignored somehow, e.g. by deciding that it reflects "language contact". A problem with such a reasoning is that it forces us to arbitrarily dismiss a large number of relevant data, mostly to salvage the central assumption of the tree model – namely, that genealogical subgroups should not be allowed to crosscut.

3.2 A non-cladistic view of language genealogy in Vanuatu

A solution to this conundrum can be achieved quite simply, by realising that the demands inherent to the tree model are in fact illegitimate: the ban against intersecting subgroups is merely an artefact of that model, and corresponds to nothing in the real history of languages (see Heggarty *et al.* 2010). In a dialect chain or continuum, it is common for innovations to

form entangled patterns, and for genealogical subgroups to intersect – a pattern which trees are unable to capture (François 2014). The history of Oceanic languages is thus better represented using a non-cladistic method, i.e. not based on the tree analogy.

Some authors have described the frequent crosscutting of isoglosses among Vanuatu languages. Clark (1985) spoke of "groups, chains, clusters and waves". Tryon (1976:55, 80; 1996) proposed a "classification" of Vanuatu languages in the form of intersecting clusters. Such an approach is encapsulated in the concept of *linkage*, proposed by Ross (1988, 1997): a *linkage* is a set of related languages whose internal genealogy cannot be represented by a tree, because it arose through an accumulation of intersecting innovations (see Lynch *et al.* 2002:92). In *Figure 4* above, several subgroups were already labelled *linkages*. As a whole, Vanuatu is best understood as a "linkage of linkages", that is, a vast dialect chain composed of smaller chains. This non-cladistic view of language genealogy is illustrated in *Figure 5*.

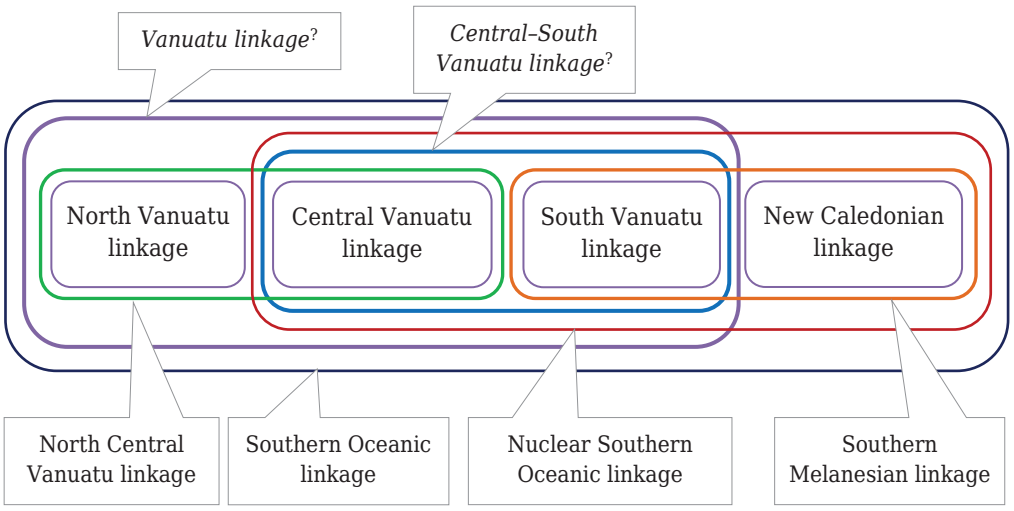

Figure 5 — A possible non-cladistic genealogical diagram of the Southern Oceanic linkage

In *Figure 5*, labels in plain characters refer to subgroups which have been already proposed in the literature; those in italics are linkages which have never been proposed, but could possibly be shown to exist, based on patterns of shared innovations. The figure mostly aims to illustrate how genealogical subgroups, identified using the Comparative method, can be represented in a non-tree fashion, in a way consistent with the concept of *linkage*. As for claiming the factual accuracy of this particular diagram, this could only be done by demonstrating that each linkage is supported by at least one individual isogloss; such an endeavour would be useful, but goes beyond the scope of this chapter.[11]

An exploration inside the diagram's smaller units (e.g. the "North Vanuatu linkage") would, again, reveal the same chain-like structure at all levels of observation, in a recursive way – all the way down to individual languages. Such a non-cladistic approach is demonstrably the key to some problems encountered in subgrouping studies. For example, the South Efate language has been sometimes subgrouped with *(North-)Central Vanuatu* (Lynch 2000b,

[11] For a rigorous, quantitative method based on the concept of linkage, see the presentation of *Historical Glottometry* in François (2014) and Kalyan & François (f/c).

2004), and sometimes with *South Vanuatu* (cf. Lynch 2001), due to conflicting evidence in favour of either hypothesis. While unsolvable in a tree-based model, this conundrum is solved by considering that South Efate simply belongs to these two genealogical subgroups simultaneously, and lies at their intersection.[12]

In sum, the linguistic diversity observed today in Vanuatu results from three millennia of diversification from what was once a single language spoken across a vast social network – in a way similar to the fragmentation of Latin into a multitude of Romance languages and dialects. During the centuries following its initial settlement, Vanuatu formed a vast dialect continuum in which communalects remained in constant contact through trade, interisland marriage and other forms of alliances. Every time a linguistic innovation emerged somewhere in the network, it would diffuse to a more or less extended portion of the network. The isogloss it defined was sometimes limited to just a village, sometimes to several islands, and sometimes swept through even larger territories as it expanded across entire archipelagoes. Rather than yielding neat subgroups, this wave-like process of diversification naturally resulted in a map of constantly intersecting isoglosses. The modern outcome is an entangled web of linguistic linkages: a long chain where languages get gradually different as one travels across the territory.

3.3 The modern pressure of Bislama

Vanuatu's linguistic diversity has shown remarkable resilience as it lived through the 19th and 20th centuries, with limited damage. Some languages have gone extinct, but many have survived to this day.

So far, the country’s traditional social ecology has mostly resisted the global pressure towards linguistic levelling, typical of the modern world. However, times are changing fast, and the Republic of Vanuatu is undergoing rapid urbanisation – a corollary of which is the decline of its linguistic diversity. The urban centres, Port Vila and Luganville, constitute a new setting, where internal immigrants quickly abandon their vernacular languages, and shift to the country's national language, Bislama (Vandeputte-Tavo 2014). This English-based pidgin/creole[13] has been adopted since the beginning of the 20th century as the country's *lingua franca* (Tryon & Charpentier 2004), and became Vanuatu's national language upon its independence in 1980.

Even though French and English, the colonial languages, are still officially the languages of instruction, the pressure to abandon Vanuatu’s vernacular languages really comes from Bislama, and its solid association with modern life. Based on raw statistics from the 2009 census, François (2012:104) calculated that only 63.2 percent of the national population declared using a heritage language at home – compared to 33.7 percent who favour Bislama. This figure, incidentally, represents a dramatic ten-point drop from the 73.1 percent which had been recorded just ten years earlier. The results of that study are reproduced in

[12] Thieberger (this volume) contributes to this reflection, by pointing out the longstanding social links of the South Efate community with Erromango to its south.

[13] The term “pidgincreole” proposed by Bakker (2008:138) suits well the status of Bislama.

Table 1.[14] The comparison of figures from 1999 and 2009 goes a long way in highlighting the growing influence of Bislama, and the speedy erosion of the country's linguistic diversity.

Table 1 — Main language used at home, by regional province: percentages comparing 1999 and 2009 census data

	1999			2009		
Province (N to S)	Local language	Bislama	other	Local language	Bislama	other
TORBA	90.6	8.3	1.1	85.6	13.8	0.6
SANMA	60.1	36.2	3.7	51.1	46.5	2.4
→ incl. Luganville	23.8	67.2	9.0	14.0	81.9	4.1
PENAMA	94.1	5.3	0.6	91.8	7.6	0.6
MALAMPA	83.0	16.0	1.0	74.4	24.8	0.8
SHEFA	50.4	39.2	10.4	39.7	53.4	6.9
→ incl. Port Vila	31.2	52.4	16.4	22.4	67.8	9.8
TAFEA	95.6	3.6	0.8	91.2	8.0	0.8
National, rural	**85.3**	13.3	1.4	**77.1**	21.7	1.2
National, urban	29.3	**56.4**	14.3	20.5	**70.9**	8.6
National	***73.1***	23.3	3.6	***63.2***	33.7	3.1

4 Presentation of the volume

The linguistic landscape of Vanuatu is thus one in which all the languages share a common ancestor, yet have gone through three millennia of steady diversification from that ancestor. As a result, its languages and cultures show a complex blend of *unity* and *diversity*. Whether we look at phonology or morphosyntax, semantics or pragmatics, oral traditions or social practices, the typical observation combines some features which are shared (almost) everywhere in the country – whether due to their common inheritance, or to later convergence – and other features which were only developed in one particular area.

The present volume, titled ***The languages of Vanuatu: Unity and diversity***, brings together nine case studies of Vanuatu languages and cultures. Each chapter will mention facts which are common throughout the country, but will also concentrate on patterns peculiar to one specific area, or even to a single language. The chapters will follow a cline: from strictly grammatical topics, to studies where languages are analysed in light of their social environment – and finally, to topics of a more ethnographic nature, discussing oral traditions.

The first chapter, by **Elizabeth Pearce**, examines aspect marking in Unua, a language of Malakula (#78 on the map). In this chapter, the author takes a formal approach to account for the position and scope of a number of Unua markers, whose function is to encode various values of event boundedness (perfect, perfective, terminative, result). The Unua data is compared to Mandarin Chinese; and while these two languages are unrelated and typologi-

[14] The table includes detailed statistics for each province, the location of which is shown on our map (*Figure 1* p.7).

cally dissimilar in many ways, they both relie on similar strategies to encode certain aspects. The author then discusses how these strategies fit the *hierarchy of functional projections* (Cinque 1999) – a hypothesis whereby sentential constituents follow an underlying ordering. Pearce shows that both Unua and Mandarin Chinese conform to Cinque's hierarchy, yet with some necessary terminological adjustments.

Pete Budd investigates the structural and multi-functional properties of the form *ka* in Bierebo (Epi island, #117). A reflex of POc **akin[i]*, this morpheme *ka* shows variable structural distributions associated with various functions: it occurs as the head of instrumental PPs, as an oblique marker in so-called 'pseudo-transitive' constructions, and as an applicative suffix deriving transitive from intransitive verbs. Budd demonstrates how these variable properties are structural, and functionally related to each other. The preposition *ka* is also involved in the typologically rare construction of 'instrumental shift' where the instrumental NP appears in a frontal position for the purpose of foregrounding the instrument participant.

Looking at Sakao in northern Espiritu Santo (#58), **Benjamin Touati** examines a prefix whose phonological form copies the vowel of the radical, and which he calls "the initial vowel copy": e.g. *a̲-ra* 'pig', *ɛ̲-rɛmrɛm* 'thought'. This vowel copy is a morpheme, whose grammatical functions recall those of articles in neighbouring languages. While it is occasionally found on verbs, it is mostly prefixed on nouns – or at least, on *common nouns*, as opposed to personal nouns which go unprefixed. Touati shows that the copying prefix's contribution is to provide their host with a number of syntactic functions which they cannot access otherwise.

The difference between common and personal nouns in Oceanic is also a key to **Michael Franjieh**'s chapter on North Ambrym (#107). In possessive phrases of the type ⟨Possessed Possessor⟩, the possessed noun takes a construct suffix *-n* when the possessor nominal is a common noun, yet it is absent when the possessor is a personal noun. Franjieh argues that the construct suffix developed from the POc 3SG possessor suffix, and shows that it also appears in three other construction types: bound prepositional, verbal prepositional, and verbal constructions. In these constructions, the construct suffix also marks objects which, similarly to possessors, are also common nouns. Franjieh concludes by arguing that this construct suffix replaced the original POc object markers that occurred in verbal prepositional and verbal constructions.

Moving across the Selwyn Strait from North Ambrym to South Pentecost, **Murray Garde** investigates variation within the different numeral systems of Sa (#26). He argues that the selection of a numeral system is influenced by the social and cultural differences between speech community members. On the one hand, adherents to the *Kastom* ideology, and to the traditional cosmology, use a compound system that combines an imperfect decimal counting system, a vestigial decimal system, and a third paradigm reserved to monetary use. On the other hand, followers of Christianity and of Western habits, or *skulan*, make use of a more simple numeral system similar to those found in other Central Vanuatu languages: a combination of an imperfect decimal system with Bislama borrowings.

The relationship between languages and their environment also plays a key role in the chapter by **Alexandre François**, a study of the space systems used in the Torres and Banks Islands (#1–17 on the map). The 17 languages spoken there share a paradigm of space directionals, encoding such meanings as 'up', 'down', 'in', 'out', 'across', etc.; and everywhere, these basic spatial meanings are mapped onto the landscape to encode geocentric directions

such as 'southeast', 'inland', 'oceanwards', among others. Yet crucially, this mapping shows considerable cross-linguistic diversity, with as many as ten different systems attested in the region. After describing these ten systems synchronically, François proposes a unified theory to reconstruct their historical development, from what was initially a single ancestral system.

Cindy Schneider and Andrew Gray present a detailed outline of phonotactic, lexical, and morphosyntactic differences between the dialects of the Apma language (#24) spoken on Pentecost island. The authors argue that this kind of language variation deserves to be the object of detailed language documentation; they discuss how such findings can be incorporated into language description, which to date often focusses on the purely systemic aspects of a single variety, neglecting the systematic variation observed between dialects.

The last two chapters of our volume look at the traditions of verbal art and oral literature which are still lively today in the archipelago. **Dorothy Jauncey** describes the art of storytelling in Tamambo (#62), on Malo island. She documents four different genres of oral narratives: histories of ancestors; stories of supernatural characters; etiological tales, telling about the origin of certain aspects of the natural world; and stories from the mythical times. For each genre, a complete story is presented in bilingual format, and provided with an analysis of their form as well as their contents. Through her analysis of Tamambo oral narratives, Jauncey draws links between the *rules* they follow and the *roles* they play in the construction of the community's identity and morals.

Finally, **Nick Thieberger** examines a small corpus of texts from the oral tradition of South Efate (#126), highlighting links with Erromango, the next island to the south. The stories cited by the author strongly suggest sustained contact between South Efate and Erromango people. This observation, incidentally, aligns with the most recent subgrouping hypotheses regarding South Efate and southern Vanuatu (Lynch 2001, 2004).

Obviously, the topics tackled in this collection of studies are but a drop in the ocean, compared to the wealth of subjects that could be inspired by the languages and cultures of Vanuatu. Yet they already provide a valuable overview of the country's linguistic diversity, with a geographical coverage ranging from the far north to the southern islands. They also discuss a large array of issues, ranging from morphology and syntax to pragmatics, dialectology, folkloristics and oral history. Altogether, this volume gives a fair idea of the research currently undertaken by the community of linguists working on Vanuatu; it will hopefully inspire more research projects in the years and decades to come.

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6 Appendix: A new list of Vanuatu languages

The table below provides information an updated list of Vanuatu languages. The sources and principles followed to establish this list were presented in Section 2.

For each language listed in *Table 2*, the first column indicates its number on our map (*Figure 1* p.3). The second column indicates the language name as recommended by experts, often based on the preferences of the local speaker community. The third column lists the alternative names that are also used to refer to the same language, either by the community or by the scientific literature. This is followed by the latest assessment on the number of speakers, based on recent information from experts whenever possible; otherwise, we are reproducing the figures cited in published sources (mostly Lynch & Crowley 2001). Then come the language's ISO 639-3 code when it exists, and the region or island where the language is spoken.

As stated earlier (fn.7 p.7), individual figures for language size should be understood as tentative. Given the rapid growth of Vanuatu's population, it is likely that numbers assessed many years ago have since increased – at least for those languages whose vitality is stable. Conversely, figures given long ago for moribund languages may have to be decreased. Such issues could only be solved, ideally, by incorporating into the regular national census a specific survey about language proficiency, carried out by linguistically trained investigators, capable of identifying individual vernaculars.

Table 2 — Data on the 138 vernacular languages of Vanuatu

MAP	LANGUAGE	OTHER NAMES	SPKRS	ISO	REGION
1	Hiw	Hiu	280	hiw	Torres Islands (Hiw)
2	Lo-Toga	Loh, Toga	580	lht	Torres Islands (Lo, Toga, Tegua)
3	Lehali		200	tql	Banks Islands (Ureparapara)
4	Löyöp	Lehalurup	240	urr	Banks Islands (Ureparapara)
5	Mwotlap	Motlav	2100	mlv	Banks Islands (Motalava)
6	Volow	Valuwa	1	mlv	Banks Islands (Motalava)
7	Mota		750	mtt	Banks Islands (Mota)
8	Lemerig	Sasar	2	lrz	Banks Islands (Vanua Lava)
9	Vera'a	Vatrata	500	vra	Banks Islands (Vanua Lava)
10	Vurës	Vureas, Mosina	2000	msn	Banks Islands (Vanua Lava)
11	Mwesen	Mosina	10	msn	Banks Islands (Vanua Lava)
12	Nume	Tarasag	700	tgs	Banks Islands (Gaua)
13	Dorig	Wetamut	300	wwo	Banks Islands (Gaua)
14	Koro		250	krf	Banks Islands (Gaua)
15	Olrat		3	olr	Banks Islands (Gaua)
16	Lakon	Lakona; Vurē	800	lkn	Banks Islands (Gaua)
17	Mwerlap	Merlav	1100	mrm	Banks Islands (Merelava)
18	Sungwadia	Marino; North Maewo	500	mrb	Maewo
19	Sungwadaga	Central Maewo	1400	mwo	Maewo
20	Baetora	South Maewo, Sungaloge	1330	btr	Maewo

MAP	LANGUAGE	OTHER NAMES	SPKRS	ISO	REGION
21	Ambae	Lolovoli; Aoba	5000	omb	Ambae
22	West Ambae	Duidui	8700	nnd	Ambae
23	Raga	Hano	6500	lml	Pentecost
24	Apma		7800	app	Pentecost
25	Ske	Seke	300	ske	Pentecost
26	Sa	Saa	3900	sax	Pentecost
27	Tolomako	Bigbay	900	tlm	Espiritu Santo
28	Piamatsina		250	ptr	Espiritu Santo
29	Vunapu		380	vnp	Espiritu Santo
30	Valpei		300	vlp	Espiritu Santo
31	Nokuku		250	nkk	Espiritu Santo
32	Meri	Tasmate, Oa	300	tmt	Espiritu Santo
33	Wusi	Kula	350	wsi	Espiritu Santo
34	Bura		300		Espiritu Santo
35	Merei	Tiale, Lametin	400	lmb, mnl	Espiritu Santo
36	Mores	Ko	200	mrp	Espiritu Santo
37	Ande	Morouas	500		Espiritu Santo
38	Toksiki	Soisoru, Roria	200	rga	Espiritu Santo
39	Kiai	Fortsenal	450	frt	Espiritu Santo
40	Moiso		100		Espiritu Santo
41	Kene		300		Espiritu Santo
42	Daruru		100		Espiritu Santo
43	Akei	Tasiriki	4000	tsr	Espiritu Santo
44	Retlatur		100		Espiritu Santo
45	Wailapa	Ale	500	wlr	Espiritu Santo
46	Farsaf	Narango, Nambel	400	nrg	Espiritu Santo
47	Varavara	Amblong, Aje	300	alm	Espiritu Santo
48	Narmoris		220	plb	Espiritu Santo
49	Biliru	Tambotalo	3	tls	Espiritu Santo
50	Atin		120		Espiritu Santo
51	Ati	Polonombauk, Meris	85		Espiritu Santo
52	Farnanto		100		Espiritu Santo
53	Se	Fanafo	20		Espiritu Santo
54	Sinia	Navut	520	nsw	Espiritu Santo
55	Butmas-Tur	Ati, Farafi	520	bnr	Espiritu Santo
56	Ngen	Shark Bay	450	ssv	Espiritu Santo, Litaro
57	Tholp	Nethalp	0		Espiritu Santo
58	Sakao	Hog Harbour, Nkep	4000	sku	Espiritu Santo
59	Mavea	Mav̆ea, Mafea	34	mkv	Espiritu Santo, Mavea
60	Tutuba		500	tmi	Espiritu Santo, Tutuba
61	Aore		0	aor	Espiritu Santo, Aore
62	Tamambo	Malo, Tamabo	4000	mla	Espiritu Santo, Malo
63	Tangoa	Movono	370	tgp	Espiritu Santo, Tangoa

MAP	LANGUAGE	OTHER NAMES	SPKRS	ISO	REGION
64	Araki		8	akr	Espiritu Santo, Araki
65	Axamb	Ahamb	750	ahb	Malekula
66	Lendamboi	Small Nambas, Letemboi	800	nms	Malekula
67	Nasvang		275		Malekula
68	Sörsörian		3		Malekula
69	Avok		500		Malekula, Avok
70	Uliveo	Maskelynes	1100	klv	Malekula, Maskelynes
71	Port Sandwich	Lamap	1200	psw	Malekula
72	Nisvai	Vetbon	200		Malekula
73	Burmbar	Banam Bay, Vartavo	900	vrt	Malekula
74	Mbwenelang		<10		Malekula
75	Aulua		750	aul	Malekula
76	Niolean	Repanbitip	90	rpn	Malekula
77	Rerep	Pangkumu, Tisman	380	pgk	Malekula
78	Unua	Onua	520	onu	Malekula
79	Vivti		<5		Malekula
80	Nitita		<5		Malekula
81	Avava	Katbol, Navava; Bangsa’	700	tmb	Malekula
82	Neverver	Lingarak, Nevwervwer	1250	lgk	Malekula
83	Litzlitz	Naman	15	lzl	Malekula
84	Uripiv	Uripiv-Wala-Rano-Atchin, Northeast Malakula	9000	upv	Malekula, Atchin, Uripiv
85	Rutan		?		Malekula
86	Botovro	Mpotovoro	430	mvt	Malekula
87	Vao		1900	vao	Malekula, Vao
88	Alovas		?		Malekula
89	Vovo		475		Malekula
90	Nese	Matanvat	160		Malekula
91	Najit		<5		Malekula
92	Malua Bay	Middle Nambas	500	mll	Malekula
93	Njav		10		Malekula
94	Tirax	Mae, Dirak	1000	mme	Malekula
95	V’ënen Taut	Big Nambas	3350	nmb	Malekula
96	Tape	Maragus	15	mrs	Malekula
97	Larëvat	Laravat, Larevat	680	lrv	Malekula
98	Neve’ei	Vinmavis	500	vnm	Malekula
99	Nivat		<10		Malekula
100	Nasarian		5	nvh	Malekula
101	Aveteian	Dixon Reef	50	dix	Malekula
102	Ninde	Labo	1100	mwi	Malekula
103	Nahavaq	South West Bay, Siesip	700	sns	Malekula
104	Nāti		25		Malekula
105	Naha’ai	Malvaxal, Malfaxal	600	mlx	Malekula
106	Navwien		5		Malekula

MAP	LANGUAGE	OTHER NAMES	SPKRS	ISO	REGION
107	North Ambrym		5250	mmg	Ambrym
108	Orkon	Fanbak	30		Ambrym
109	Southeast Ambrym		3700	tvk	Ambrym
110	Daakie	Port-Vato	1300	ptv	Ambrym
111	Daakaka	South Ambrym, Baiap	1200	bpa	Ambrym
112	Dalkalaen		1000		Ambrym
113	Raljago	West Ambrym, Lonwolwol	<10	crc	Ambrym
114	Paama	Paamese	6000	paa	Paama
115	Lamen	Lamenu, Varmali	850	lmu	Epi, Lamen
116	Lewo	Varsu	2200	lww	Epi
117	Bierebo	Bonkovia-yevali	900	bnk	Epi
118	Baki	Burumba, Paki	350	bki	Epi
119	Mkir	Maii	180	mmm	Epi
120	Bieria	Bieri, Vovo, Wowo	25	brj	Epi
121	Namakura	Makura, Namakir	3750	nmk	Efate, Shepherds (Tongoa, Tongariki)
122	Emae	Makatea	400	mmw	Shepherd Is (Emae)
123	Nakanamanga		9500	llp	Efate, Shepherd Is (Nguna, Tongoa)
124	Lelepa	Havannah Harbour	400	lpa	Efate, Lelepa
125	Eton		500	etn	Efate
126	South Efate	Erakor	6000	erk	Efate
127	Mele-Fila	Ifira-Mele	3500	mxe	Efate, Mele, Ifira
128	Sie	Se, Sie, Erromanga	1900	erg	Erromango
129	Ura		6	uur	Erromango
130	Utaha		0	iff	Erromango
131	North Tanna		5000	tnn	Tanna
132	Lenakel	Netvaar	11500	tnl	Tanna
133	Southwest Tanna	Nawal	5000	nwi	Tanna
134	Whitesands	Narak	7500	tnp	Tanna
135	Kwamera	Nafe, Nife	3500	tnk	Tanna
137	Anejom̃	Aneityum	900	aty	Aneityum
138	Futuna-Aniwa	West Futuna	1500	fut	Futuna, Aniwa

Completing and terminating
On aspect marking in Unua

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Abstract This paper investigates the aspectual roles played by a small number of functional particles in sentences in Unua, a language of Malakula, Vanuatu. Unua verb paradigms encode a realis/irrealis contrast but do not encode the past/nonpast distinction. Particles occurring variously in postverbal or clause-final positions are used to express perfective, perfect, terminative and completive aspect. As in Mandarin Chinese, which uses postverbal versus clause-final *le* distinguishing perfective and perfect aspect, Unua employs a particle *ju*/*goj* in comparable locations in the clause and with comparable functions. The paper proposes that a comparable syntax applies in the two languages in the derivation of clauses expressing these aspectual functions and it shows how this analysis can be seen to tie in with the proposals of Cinque (1999) as to a universal hierarchy of functional projections in the structure of the clause.

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1 Introduction

Different languages apply different grammatical devices to signal both temporal reference and aspect. Unua, a co-dialect with Pangkumu of Unua-Pangkumu, a language of the Southeast coast of Malakula, Vanuatu, is a member of the Oceanic branch of Austronesian languages. In Unua the verb paradigms encode a realis/irrealis contrast, but they do not distinguish present and past tense. The irrealis is used in the representation of future events or states of affairs which have not been actualized with respect to the time frame of the discourse. The realis form of the verb can be used to represent events or states of affairs which are realized or being realized either in the past or the present with respect to the discourse time reference. The presence of the realis/irrealis mood contrast and the absence of a tense contrast in Unua is a characteristic typical of Central Vanuatu languages (Lynch 1998:136).

Although Unua does not formally distinguish past from present in its verb morphology, this does not mean that there is massive ambiguity as to the time reference of sentences containing realis verbs. Default interpretations apply with reference to the discourse time frame, but there are also other devices that can be included in sentences to convey temporal and aspectual properties. In this paper I present an investigation of the aspect encoding devices that are used in Unua sentences to denote the completion or the termination of the event or the state expressed by the sentence. As part of my analysis I also consider the use of other aspect marking devices which can have implications as to time reference. A goal of the paper is to attempt to develop an understanding of how the aspect encoding devices that are used in Unua may be compared with the use of such devices in other languages which lack formal marking of tense distinctions in their verb paradigms.

As a background to the investigation, section 2 sets out some of the considerations that come into play in the analysis with respect to interactions that can be observed between classes of predicates and tense/aspect properties. Section 3 undertakes the analysis of the various aspectual devices used in Unua to mark completive, terminative, and perfect and perfective aspect. Section 4 then considers how the aspect marking system of Unua might be viewed from a cross-linguistic perspective through (i) a comparison with features of aspect marking in Mandarin, a language which also lacks the grammatical encoding of tense, and (ii) with respect to the hierarchical organization of aspectual functions that is proposed in Cinque (1999). From the comparison of Unua and Mandarin we will see that both languages have a comparable syntax in the use of markers encoding result states, and perfective and perfect aspect. When the analysis applied to Unua and to Mandarin is set against the proposals of Cinque (1999) as to a universal ordering of functional projections within the clause, it indicates that both languages instantiate the mirror-image surface ordering with respect to Cinque's proposed hierarchy. This kind of linear ordering implies the use of iterative (phrasal) displacements in the derivation of the surface forms.

2 Aspect and classes of predicates

2.1 Predicate classes

Languages can place restrictions on the use of aspectual markings which are dependent on the class of the sentence predicate. A well known instance of such a restriction is the ungrammaticality of the English progressive with stative verbs:

(1) a. *Max is knowing the answer. STATIVE
b. Max is playing tennis. NON-STATIVE

Event interpretations apply in different ways to predicates that have a natural end point versus those that do not:

(2) a. Max played tennis during the holidays. (could be many times)
b. Max met my brother during the holidays. (once)

The predicate in (2a) is an activity predicate without an end point and, pragmatically, given the understanding of the time span of the *during the holidays* adjunct, the most natural interpretation of (2a) is that there was more than one event of playing tennis. In (2b), the

predicate has a natural end point and, despite the presence of the time adjunct, we understand that the sentence refers to a single event of meeting my brother.

Two of the four kinds of predicates of the influential Vendler (1967) classification have a natural end point and these are termed 'bound' in the table in (2).

(3) Predicate characteristics: (Vendler 1967, Kearns 2000)

	CHANGE	DURATION	BOUND
State	–	+	–
Activity/Process	+	+	–
Accomplishment	+	+	+
Achievement	+	–	+

Predicates with a natural end point are also termed telic, contrasting with unbounded predicates which are atelic. Of the two types of telic predicates in (3), both encode change, but whereas accomplishments have duration, achievements do not have duration. Thus, in the past tense sentences in (4), both predicates have an end point, but (4a) has duration, whereas (4b) doesn't.

(4) a. Max built a house. +DURATION: Accomplishment
b. Max won the lottery. –DURATION: Achievement

That is, we understand that building a house is a process carried over a period of time, but we regard winning the lottery as an instantaneous happening. Building a house is thus an Accomplishment and winning the lottery is an Achievement.

Another difference between the two kinds of telic predicates is that an Accomplishment is agentive whereas an Achievement is non-agentive.[1] Although Max is the subject in all of (2a,b) and (4a,b), Max has the Agent role in (2a) and (4a), whereas in (2b) and (4b) Max is some kind of Patient. If we add agentivity into the table in (3), we get the following array of predicate characteristics:

(5) Predicate characteristics including agentivity:

	CHANGE	DURATION	BOUND	AGENT
State	–	+	–	–
Activity/Process	+	+	–	+
Accomplishment	+	+	+	+
Achievement	+	–	+	–

When agentivity is included we see that Accomplishments share more properties with Activities than they do with Achievements. Thus, the Activity predicate in (6a) differs from the Accomplishment in (6b) only for telicity.

[1] For standard tests showing up the two-way agentivity division in the aspectual classes, see Kearns (2000:211-214). However, the non-discrete nature of what defines the agent role is discussed further in Kearns (2000). As discussed in some depth in Dowty (1991), an interesting issue is the question of what are the primitives in the interplay of predicates, argument roles and event structure in the construction of sentences. See also Dowty (1979) for his analysis of the semantic representation of propositions expressing the different classes of aspectual predicates. Thanks to a reviewer for leading me to this (small) elaboration of the role of agentivity with respect to the aspectual classes.

(6) Boundedness (telicity)

a. Max walked along the road. –bound: ACTIVITY
b. Max walked to the store. +bound: ACCOMPLISHMENT

In (6b) the locative PP identifies the end point of an activity and so the predicate as a whole is an Accomplishment, but in (6a) *along the road* is not an end point so the predicate of (6b) is an Activity.

So there are quite a few properties that are inherent to the distinctions between the different classes of predicates. With respect to boundedness or completion, since telicity can be viewed as an inherent characteristic of particular classes of predicates, we might wonder why it would ever be an option for grammatical markers of completion to be included with such predicates. We might suppose that markers of completion would at least be redundant with predicates that are inherently telic, as seems to be the case if we add a statement of completion to (6b):

(7) #Max walked to the store and he got there. TELIC

In (7) the addition of the completion statement is semantically redundant and it seems to have the effect of making the sentence semantically anomalous in the absence of perhaps of a particular discourse context pertaining to shared knowledge of behaviour attributed to Max.

The examples in (6) showed the contrasting of Activity and Accomplishment predicates. However, if we change the verb forms in these examples to the progressive, what is an Accomplishment in (6b) becomes an Activity:

(8) a. Max is walking along the road. ACTIVITY
b. Max is walking to the store. ACTIVITY

In (8b), the focus is on the process (a "process stage" in the terms of Kearns 2000: 216) and there is no entailment that the end point is or will be reached. Thus, in contrast to (6b) the end point of (8b) can readily be negated:

(9) a. ? Max walked to the store, but he didn't make it there, because…
b. Max is walking to the store, but he won't make it there because…

We see from these cases that the predicate class does not depend just on the predicate-argument structure of the clause: grammatical aspect is also a part of what goes to make up the defining properties of predicate classes. Interpretations applied to sentences including aspectual markings are therefore not independent of other sentence content, including the class of predicate and the presence or not of VP-internal content. With languages lacking formal tense distinctions, it is potentially the case that marking of completion and termination may have a greater role to play in the specification of boundedness.

2.2 Unua realis verbs and predicate class

The Unua verb has contrasting Realis and Irrealis paradigms as shown in (10) with the verb *xa* 'go':

(10)

		Realis	***Irrealis***
	1	no-xa	**b**-a-xa
Sg	2	u-xa	**b**-u-xa
	3	i-xa	**b**-i-xa
	1 INCL	rru-xa	rru-**b**-xa
Du	1 EXCL	mor-xa	mor-**b**-xa
	2	mur-xa	mur-**b**-xa
	3	ru-xa	ru-**b**-xa
	1 INCL	rra-xa	rra-**b**-xa
Pl	1 EXCL	mam-xa	mam-**b**-xa
	2	mum/mim-xa	mum/mim-**b**-xa
	3	ra-xa	ra-**b**-xa

A further Realis paradigm, which is restricted to use in relative clauses and reduced relative clauses (Pearce 2011), has *m-* where the Irrealis paradigm has *b-*. Other affixes which can be prefixed directly before the verb root are *mo-* 'CONT' and *ber-* 'Inceptive'. These affixes may in turn be preceded by the negative prefix *seb-*. A strong negation with future reference combines *seb-* with a prefix *t-* in the position of the Irrealis *b-*.

The Realis inflected verb of the Unua clause thus does not encode any contrast between past and present time reference:[2]

(11) Max i-r-i naur soxa.
Max 3SG-write-TR letter one
'Max wrote a letter./Max was writing a letter./Max is writing a letter.'

In the present time reading of (11) (normally expressed in English through the use of the progressive) there is an ongoing activity of writing a letter and the end point has not been reached. In the past tense readings, as shown in the alternative translations, either the activity is ongoing and the end point has not been reached or the activity has been completed and the end point has been attained. The Realis thus does not encode a perfective versus imperfective contrast.

The ongoing nature of an activity can be made explicit by the inclusion of the progressive marker, the prefix *mo-*:

(12) Max i-**mo**-r-i naur soxa.
Max 3SG-CONT-write-TR letter one
'Max was writing a letter./Max is writing a letter.'

In (12) both the past and present readings portray an ongoing activity and in both cases the activity could be interrupted so that the end point would not be reached.

[2] Non-standard glosses applying to the Unua data are as follows: C = Complementizer, CONT = Continuous, IO = Indirect Object, NGEN = Ngenitive (form = *nen*), RSLT = Result, TR = Transitive, and XGEN = XGenitive (form = *xi(se)-*). Terms borrowed from Bislama, the Vanuatu creole language, are given in italics in the text line.

Extra-clausal information can provide contexts for the disambiguation of sentences like (11) and (12), but there are also particular kinds of markers that can be added into the clause to specify the nature of its temporality. Section 3 undertakes the examination of the use of a range of such markers in Unua, encompassing both particle and predicate-like forms.

3 Expressions of completion/termination in Unua

3.1 Overview

We will see in this section that there are a variety of grammatical devices which can be used in Unua to signal that there is an end point to an activity or the completion of an activity:

(13) Marking boundedness and completion in Unua

A. **Results:** A result state can be specified through the compounding of the verb head with a following predicate form (*toxni* 'Result', *-xotvi* 'break', *bbuni* 'kill') or by the addition of an independent predicate after the verb (*bbuni* 'kill', *imej* 'dead', *ikasi* 'complete', …).

B. **Perfect and perfective particles:** The particles *ju*, *goj* and *goj nu* signify that an event or a state is located or initiated in a time relative to a reference time, perfective in postverbal position and perfect in clause-final position.

C. **Terminative predicate:** Postverbal *inog* signifies the termination of an event or a process.

The subsections following present the analysis of data pertaining to each of (13A-C).

3.2 Predicates expressing results

3.2.1 Result morphology

The examples in (14)-(15) below illustrate the use of *-toxni* as a morphological increment signifying a result state.[3] Unua has an independent verb *tox* 'stay, remain, have' (Clark 2009 reconstructs Proto North Central Vanuatu (PNCV) **toka* 'sit, stay, be in a place') and a particle *ni* used as a marker of an indirect or oblique argument. However, in its uses as an independent verb, *tox* occurs without following *ni*.

(14) Bbue nga i-**su-su** i-xa go i-**sua-toxni** batin nixe demen rin.
pig DEM 3SG-DUP-push 3SG-go and 3SG-head.butt-RSLT trunk tree huge PL
'the pig was pushing away and it butted down huge trees.' [AV.30]

(15)a. Iesu i-**ri** xini, i-bbuns-i arres se-n rin,
Jesus 3SG-turn-TR 3SG 3SG-look-TR person GEN-3SG PL
'Jesus turned around, he looked at this people,' [Mark 8:33]

[3] The references accompanying Unua data are coded as described in Pearce (2015). In essence, sources represented as 'XX.xx' are from recorded narratives, and '*Matt/Luke/Mark x:xx*' identify texts of *New Testament* translations: Bembe (2005/2006/2007). 'X' stands for a letter and 'x' stands for a number.

b. Go vingo i-**ri-toxni** konoj nen, go i-jvi-jv-i re Iesu bati-n.
and woman.the 3SG-turn-RSLT stopper NGEN and 3SG-DUP-pour-TR LOC Jesus head-3SG
'And the woman screwed off the stopper and poured it on Jesus' head.' [Mark 14:3]

In (14) *-suatoxni* marks an end state, the trees are pushed down, contrasting with *-susu ixa* in which the reduplication and the presence of *ixa* are markers of an ongoing process. In (15a), turning around (*-ri*) can be viewed as a process, but with *-ritoxni* we have the end result that the stopper came off.

The examples in (16) show *jiv* 'pour' in contrasting uses with and without suffixed *-toxni* in sentences with non-past time reference.

(16)a. Avra i-mro-g go vetxur b-i-mavor go *uaen* b-i-**jiv.**
if 3SG-like-that and container IRR-3SG-break and wine IRR-3SG-pour
'If that happens then the container will break and the wine will spill out.' [Mark 2:22]

b. Arres nga b-i-vena b-i-muxmux ni nue, go b-u-sebe-mn-i
person DEM IRR-3SG-come IRR-3SG-sip IO water and IRR-2SG-NEG-drink-TR

b-u-**jiv-toxni** vex re roxe ngo go rre-be-ke-i.
IRR-2SG-pour-RSLT to LOC laplap.leaf the and 1INC.PL-IRR-see-TR
'The person should come up and sip some water, but you should not drink it, you should spit it out on the laplap leaf and we will see.' [CI.40]

In (16a), without suffixed *-toxni*, the focus is on the pouring out which will result from the breaking of the container. In (16b), in the presence of *-toxni* and the following locative, the focus is on the object of the pouring, the end state reached by that object.

Whilst such uses of *-toxni* are synchronically productive, there are certain verbs used with *-toxni* that have lexicalized interpretations:[4]

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[4] The lexicalized uses of forms with *toxni* shown in (i) are in contrast with the more predictable interpretations applied to the *toxni* forms in (ii):

(i) Verbs with incorporated lexicalized *toxni*

bsitotoxni	'smash'	*bsi*	'fall on top of'
gratoxni	'remove meat from laplap'	*gara*	'carry'
kartoxni	'take off'	*kare*	'put on/wear'
rutoxni	'send out'	*ru*	'vomit'
suatoxni	'push down'	*su(a)*	'push'
vartoxni	'leave'		

(ii) Verbs with incorporated *toxni* with predictable interpretations

jertoxni	'tie up'	*jari*	'tie'
jibtoxni	'mend/join'	*jib*	'join'
jivtoxni	'pour out'	*jvi/jvi*	'pour'
postoxni	'sell off'	*pos (ni)*	'sell'
revtoxni	'take out/off'	*ravi*	'take'
ritoxni	'turn/screw off'	*ri*	'turn'
suatoxni	'push down'	*su(a)*	'push'
vostoxni	'pick up'	*vosi*	'pick up'
vurtoxni	'pay off'	*vur/vri*	'pay/buy'
xirtoxni	'dig up'	*xir/xri*	'dig'

(17)a. xini i-**kare** morin rin rroni nasum.
SG 3SG-wear clothes PL with necklace
'he put on (her) clothes and (her) necklace.' [DT.22]

b. Xina no-**kar-toxni** morin rin.
SG 1SG-cover-RSLT clothing PL
'I took off (my) clothes.' [DT.53]

In what appears to be the same verb root, at least historically, *-toxni* supplies the 'off' meaning in (17b), contrasting with the 'on' meaning with a bare verb form *-kare* in (17a).

Although in the examples seen in (14) – (17), predicates with *-toxni* all have 'off' as part of their result meaning, in (18) the inclusion of *-toxni* signifies the completion of the activity expressed by the verb to which it is attached.

(18) Ke ava se-n i-**vos-i** i-xa go i-se-**vos-toxni** rre.
so older.sibling GEN-3SG 3SG-pick.up-TR 3SG-go and 3SG-NEG-pick.up-RSLT NEG
'So the older sister went on trying to pick her up but she couldn't pick her up.'[SH.33-34]

With *jari* 'tie/tie to', once again, the inclusion of *toxni* appears to provide a focus on the result state with the meaning 'tie up':

(19)a. go ra-**jar-i** nixe iog.
and 3PL-tie-TR boat there
'and they tied the boat up there.' [Mark 6:53]

b. ra-xa ro-**rrur-to-toxni** Ber Sasai ra-**jar-i** vere-n raru barago-n raru,
3PL-go 3PL-seize-DUP-RSLT Ber Sasai 3PL-tie-TR arm-3SG 3DU leg-3SG 3DU
'they went and seized hold of Ber Sasai and they tied his arms and legs.' [BS.84]

c. Arres i-rrirang b-i-xa b-i-vevnax ji-xi moxmuramur bi-soxa, i-jxe.
person 3SG-not.able IRR-3SG-go IRR-3SG-steal DIR-XGEN strong.man IRR-one 3SG-not

Avra i-mro-g xini b-i-**jer-to-toxni** moxmuramur ngo bi-vemu.
if 3SG-like-that 3SG IRR-3SG-tie-DUP-RSLT strong.man the IRR-before
'A person is not able to go and steal at a strong man's place. If he was to do that he would first tie up the strong man.' [Mark 3:27]

To tie something to something else, as in (19a), entails the realization of an end-state. The same consideration applies to the understanding of *rrur* 'seize' in (19b) and to *jari* 'tie up' in (19b). The inclusion of (reduplicated) *-toxni* with the different verbs, *vos* in (18), *rrur* in (19b) and *jer* (19c) appears to be reinforcing the end-state interpretation. This use of *-toxni* can be understood as comparable to the use in English of *fast* in collocations like *hold fast*. In this use, *-toxni* is most transparently related to the independent verb *tox* 'stay/remain'. As can be seen in (19c), the compounding of *jar(i)* with *(to-)toxni* shows evidence of a vowel shift in the resulting form: *-jer-to-toxni*. This /a/ → [e] shift is not restricted to compounds with *(to-)toxni*, but is found in other cases of verb compounding as well. As will be seen below it applies variably with the forms *vrrarr-bbuni* ~ *vrrerr-bbuni* 'kill-kill' in (26) below and with the forms *tai xotvi* ~ *te-(xot-)xotvi* 'cut off/up' in (21). The characteristic which is common to verbs undergoing this alternation is that, in their uses as independent verbs, they have the form: *… a(C)-i*. This common pattern suggests that the process is one of assimilation, in which the low vowel raises to *e* in the presence of the following high *i* in the context of *i*-dropping in

compound formation. As a case of assimilation, this vowel shift can be classed as a weakening change.

Another resultative predicate form which however does not give evidence of uses as an independent verb is *xotvi*. Clark (2009) shows the PNCV forms: **koti* 'cut' (< ProtoOceanic (POc) **koti* 'cut off') and PNCV **koto-vi* 'cut, cross' (< POc **koto* 'cut (across)'. But no independent verb reflex of PNCV **koti* has been found in Unua with the 'cut' meaning. I here gloss the Unua form *xotvi* as 'break'. Following a head verb, *xotvi* may induce reductions in the form of the head verb, as seen in the examples in (20) and (21b), second occurrence, and (21c).

(20) *vase* 'make/cause' + *xotvi*

Nabong	ingot	arres	ra-jar-i	xini	xini	ginxe	nga	m-i-terter	go
day	many	person	3PL-tie-TR	3SG	IO	vine	C	REL-3SG-strong	and

i-mo-**vas-xot-xotv-i**
3SG-CONT-make-DUP-break
'Many times people tied him with strong ropes but he kept breaking them.'[Mark 5:4]

(21) *tai* 'cut' + *xotvi*

a.

i-**ta-i**	mama	se-n	nga	turin.	Nixe	nga	i-**ta-i**	**xotv-i**.
3SG-cut-TR	mama	GEN-3SG	C	pandanus.sucker	stick	DEM	3SG-cut-TR	break-TR

'his mama's pandanus sucker was cut. That sucker was cut off.' [PB.142]

b.

Go	vax	soxa	ma,	Namar	i-ra	arres	navur	se-n	soxa	xise	b-i-xa
and	times	one	only	chief	3SG-send	person	fight	GEN-3SG	one	XGEN	IRR-3SG-go

b-i-**ta-i**	**xotv-i**	sernixe	Jon	go	b-i-vos-i	vena.	Go	arres	ninge
IRR-3SG-cut-TR	break-TR	neck	John	and	IRR-3SG.pick.up-TR	come	and	person	one.PROX

i-xa	vex	re	naim	baso,	go	i-**te-xotv-i**	Jon	sernixe-n.
3SG-go	to	LOC	house	special	and	3SG-cut-break-TR	John	neck-3SG

'And at once, the King sent one of his soldiers to go and cut off John's head and to bring it back. And that one went to the prison and cut off John's head.'[Mark 6:27]

c.

go	ru-**te-xot-xotv-i**	raru	go	ru-tevn-i	raru.
and	3DU-cut-DUP-break-TR	3DU	and	3DU-bury-TR	3DU

'and they cut them into pieces and buried them.' [NO.07]

d.

Rate	ro-gom-**xotv-i**	bbujindes	go	re-vexut	re	naut	soxa	nexse-n	Genesaret,
3PL	3PL-run-break-TR	lake	and	3PL-ashore	LOC	place	one	name-3SG	Gennesaret

'They crossed over the lake and landed at a place called Gennesaret,' [Mark 6:53]

With the reduplication of -*xotvi* in (21c), we have the meaning 'cut into pieces' and, without reduplication in the examples (21a,b), *xotvi*, supplies the 'off' result meaning of 'cut off'. As noted by an anonymous reviewer, the repeated actions encoded in (20) apply to a series of objects, but in (21c) the repeated actions are applied to a single object. As seen in the two occurrences of *xotvi* in (21b), the presence/absence of reduction in the form of the head verb does not give rise to any semantic distinction. In (21d) the resultative interpretation applies in the understanding: 'complete the crossing of the lake'.

3.2.2 Result predicates

There are two syntactically distinct ways in which a verb can occur in the complement structure of a main verb with the result interpretation. In one type of construction the main verb is directly followed by a result predicate. In another type of construction the result is expressed in a complement clause. The first of these two types of construction bears similarities with the result morphology in that, in a number of cases, the presence of the result predicate may induce reductions in the form of the main verb.[5] The second type of construction has characteristics comparable to those of causative complements.

The example in (22) shows *bbuni* 'kill' in uses following a main verb which identifies the process leading to the killing.

(22) go misinov i-**tunis-i** **bbun-i** jurej
and dust 3SG-burn-TR kill-TR worm
'and the dust burnt the worm dead' [JN.11]

Although in the example in (22) *bbuni* lacks the T/A/M affixes of an independent verb, this predicate can occur as a main verb with the meaning 'kill' (23), as also can *vrrarri* (24).

(23) ra-gara xini, ra-gara se ro-b-**bbun-i** re xemer
3PL-carry 3SG 3PL-carry C 3PL-IRR-kill-TR LOC xemer
'they carried him, they carried him to kill him in the xemer' [BS.61]

(24) I-**vrrarr-i** raru tuen morix ni nue
3SG-kill-TR 3DU other near IO river
'he killed one of the two near the river' [NR.25]

These two verbs are found cooccurring in collocations in which *vrrarri* is followed by *bbuni*. In these collocations, *vrarri* bears the subject agreement prefix and may occur compounded with *bbuni*, as in (25b,c) below, or may appear as an independent word bearing the transitive suffix, as in (25a,d):

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[5] Thanks to an anonymous reviewer for pointing out that the distinction that I make between result morphology (section 3.2.1) and result predicates (this section) corresponds to what Thieberger (2006) distinguishes as asymmetrical vs. symmetrical compounds in the South Efate constructions that he describes. In symmetrical compounds, the V_2 of a V_1 – V_2 sequence occurs in other constructions in the language as an independent verb. In asymmetrical compounds, whilst the second item of the sequence may have verb root characteristics (or it may belong to another grammatical category), it does not occur synchronically as an independent verb. The forms that are described under the Result morphology heading in section 3.2.1 thus fall into the asymmetrical compound category. But, under Thieberger's definitions, we can only count as compounds constructions in which no other morphology intervenes between the V_1 and the V_2 of a V_1–V_2 sequence. Given that in the Unua data we encounter variability with respect to the strict contiguity criterion, with, for example *te-xotvi* versus *tai xotvi* in (21b), the former of these expressions would count as a compound, but the latter would not. In the present section we will see another case of crossover in the formal characteristics of constructions with *bbun-i* 'kill-TR', which, however, can occur also as an independent verb. For the convenience of comparison with other predicates with comparable semantics and (partially) comparable syntactic characteristics, I have chosen to discuss result *bbuni* in the present section, rather than in the section on result morphology where it may more properly belong in terms of its formal characteristics in this use.

(25) a. go veverongon mem-vena se mam-ba-**vrrarr-i** **bbun-i** motara
and now 1INCL.PL-come GEN 1EXCL.PL-IRR-kill-TR kill-TR old.man
'and now we come to kill the man dead' [DT.55]

b. go i-rrang b-i-**vrrarr-bbun-i** noxobb
and 3SG-not.able IRR-3SG-kill-kill-TR fire
'and he was not able to put out the fire' [WC.33]

c. *Ale*, re-ber-**vrrerr-bbun-i** go ra-b-xan-i re-ber-**vrrerr-bbuni**
alright 3PL-INCPT-kill-kill-TR and 3PL-IRR-eat-TR 3PL-INCPT-kill-kill-TR
'Alright, they were about to kill him and then eat him, they were about to kill him' [BS.88]

d. go tata se-n i-tumrax go i-vrrarr-i mu mokiki, ke i-**vrrerr-i** **bbun-i**
and dad GEN-3SG 3SG-get.up and 3SG-kill-TR again boy so 3SG-kill-TR kill-TR
mokiki i-xa go i-tevn-i[6]
boy 3SG-go and 3SG-bury-TR
'and his dad got up and killed the boy in his turn, so he killed the boy dead and buried him.' [SW.42]

The examples in (25) thus give variable evidence of a close syntactic relation between the two predicates:[7] the transitivity suffix *-i* which is present on *vrrarri* in (25a) and (25d) is absent in (25b) and (25c). The vowel assimilation effects are particularly striking in (25c) given the contrast with "bare" *vrrarri* in the clause preceding the occurrence with the weakened vowel.

In all of the examples in which *bbuni* occurs as a reinforcing result predicate, when the object of the clause is overt, it follows the two-predicate sequence, as in (22) and (25a,b,d). In the other type of construction in which the result is expressed in a complement clause, the predicate in the result clause follows the overt argument that it modifies, as in the following examples:

(26) a. go tue-n re-vaxe xise re-b-bar-i **mokiki** **b-i-mej**
and brother-3SG 3PL-plan XGEN 3PL-IRR-beat.up-TR boy IRR-3SG-die
'and his brothers planned to beat the boy dead' [GS.54]

b. B-u-seb-bar-i **arres** **b-i-mej**
IRR-2SG-NEG-beat.up-TR person IRR-3SG-die
'You should not beat anyone dead' [Mark 10:19]

The fully clausal result predicates in (26) are in contrast with post-main verb *bbuni* in the examples in (22) and (25) in that the result predicate bears agreement and T/A/M prefixes and it follows the argument that it modifies. These examples also show the use of the completive *-mej* in constructions in which the main verb is in the irrealis (giving rise to the use of the irrealis form of *-mej*).

In the following examples a main verb cooccurs with both types of result constructions:

[6] It is also the case that some speakers use *vrrerri* rather than *vrrarri* as independent verbs or alternate in uses of the two forms.

[7] Some notions of how the surface forms might be derived are sketched out in section 4.2.

(27)a. i-vrrerr-bbun-i motara i-mej.
3SG-kill-kill-TR old.man 3SG-die
'he killed the man dead.' [BD.97]

b. Mur-b-bar-i bbun-i memru mor-b-mej go mur-b-ta-i xot-xotv-i
2DU-IRR-beat.up-TR kill-TR 1EXCL.DU 1EXCL.DU-IRR-die and 2DU-IRR-cut-TR DUP-in.pieces-TR
mur-b-tevn-i memru.
2DU-IRR-bury-TR 1EXCL.DU
'You will beat us dead and you will cut us up into pieces and bury us.' [NO.03]

The result clause construction that we have seen in uses with *mej* is syntactically comparable with the standard causative construction that is used with the main verb *vase* 'make':

(28)a. mama se raru xini i-berax b-i-**vase** **tasi-n** **ngo** **b-i-sus**.
mama GEN 3DU 3SG 3SG-not.want IRR-3SG-make brother-3SG PROX2 IRR-3SG-give.suck
'their mother did not want to feed her brother.' [VT.12]

b. I-mo-**vase** **xina** **no-mo-kbex** **ni** **nu**.
3SG-CONT-make 1SG 1SG-CONT-jump IO EMPH
'He was making me go jumping right up.' [BD.91]

The uses of *bbuni* as a postverbal result predicate and of *mej* as the verb of a result clause appear as entrenched collocations. In other instances in which the modified argument is non-overt the diagnostics to distinguish between the complement clause construction and the incorporated predicate construction may not be available. In the example in (29) below the evidence that we have seen so far suggests that *mej* is likely to be the verb of a result clause complement. However in the example in (30), without other compelling evidence, it may be the case that the single syllable verb which is the second predicate of a sequence is prohibited from occurring without an affix, either the appropriate agreement and T/A/M markers or the default form prefix *-i*.[8]

(29) go arres ngaro **re-bar-i** **i-mej**.
and person the.PL 3PL-beat.up-TR 3SG-die
'and the people beat him dead.' [Mark 12:5]

(30) ra-xa **ra-jar-i** **i-ser**,
3PL-go 3PL-tie-TR 3SG-hang
'they went and strung him up,' [BS.79]

The result clause interpretation would apply to both (29) and (30) on the understanding that the second verb in each case is a result predicate associated with a (3SG) non-overt argument. On the alternative non-clausal analysis, *imej* in (29) and *iser* in (30) are like postverbal *bbuni* and *xotxotvi* in (22). The latter two predicate forms, however, lack subject agreement prefixes, whereas single syllable *-mej* and *-ser* bear the 3SG *i-* prefix. In order to

[8] Single syllable modifying predicates occur with the *i-* prefix, as in:

(i) Nato, xina no-vase i-vo xini xai.
chicken 1SG 1SG-make 3SG-good IO 2SG
'Chicken, I have behaved well towards you.' [BI.31]

determine if the prefix in these cases counts as 3SG agreement or as the default prefix (see fn.9), we would need to see if this prefix can occur on *-mej/-ser* when the potential understood argument is other than 3SG.[9]

Another predicate form *kas-i* 'complete-TR' appears with the 3SG prefix of an inflected verb when it follows a main verb. First, the examples in (31) show *kasi* as an independent main verb in uses with the 'complete' meaning. In another use, shown in (32), *kasi* occurs as the modifier of a locative argument, roughly signifying 'complete coverage'.

(31)a. Demej ngo i-kese nexse norrom ngaro i-xa go i-**kas-i** rate kebeg.
devil PROX2 3SG-call.out name yam the.PL 3SG-go and 3SG-complete-TR 3PL all
'The devil went on calling out the names of the other yams until he completed all of them.' [NW.22]

b. I-vo se xande mim-b-**kas-i** majingen ngo nga tabbu xande
3SG-good GEN 2PL 2PL-IRR-complete-TR work the C ancestor 2PL
re-m-tebatin vemu.
3PL-REL-begin before
'It is good if you complete the work that your ancestors began before.' [Matt 23:32]

(32)a. Naxerr nga navir m-i-vir i-**kas-i** mamren i-tebatin re mavren
time C lightning REL-3SG-shine 3SG-complete sky 3SG-begin LOC side
nga rrueri go i-xa i-nog re mavren nga xobbuar,
C east and 3SG-go 3SG-end LOC side C west
'When the lightning struck it completely lit up the sky beginning from the east side all the way to the west side,' [Matt 24:27]

b. Go arres ro-sbo majingen se-n i-**kas-i** naut kebeg nga Siria.
and person 3PL-discuss work GEN-3SG 3SG-complete-TR place all C Syria
'And people talked about his work through the whole of Syria.' [Matt 4:24]

In the examples in (33), even in the absence of an overt locative argument, *kasi* is used independently to convey the 'complete coverage' meaning.

(33) a. I-rve-rve-i nesur i-nog i-tuv-ni i-xa i-xa i-**kas-i**,
3SG-DUP-pull off-TR dry.coconut.leaf 3SG-end 3SG-throw-IO 3SG-go 3SG-go 3SG-complete-TR
go i-tuv-ni se b-i-sri goj nu.
and 3SG-throw-IO GEN IRR-3SG-burn FOC.already now
'She pulled off dry coconut leaves and she went on throwing them everywhere and she threw them to burn them all up.' [WC.20]

b. Go i-sursur, i-sursur i-sursur i-sursur rririvji i-xa i-xa i-**kas-kas-i**.
and 3SG-burn 3SG-burn 3SG-burn 3SG-burn around 3SG-go 3SG-go 3SG-DUP-complete-TR
'And it was burning and burning and burning completely all around.' [WC.26]

3.2.3 Summary

The formal characteristics of the three types of construction that include a result predicate are summarized in (34).

[9] I currently lack the relevant data on this possibility.

(34) VERB + RESULT constructions

A. **Result morphology (*-toxni, -xotvi, -bbuni*):**
- The result predicate immediately follows the main verb root.
- The result predicate has no subject agreement inflectional prefixes.
- A vowel of the main verb root can be subject to assimilation.
- The meaning of the verb + result predicate combination may be lexicalized.

B. **Result predicate (*xotvi, bbuni, ikasi*; and possibly: *imej, iser*):**
- The result predicate immediately follows the main verb.
- The result predicate may or may not bear inflectional prefixes.
- The result predicate can act as a reinforcer of the meaning of the main verb.

C. **Result clause (open class):**
- The result predicate is the main predicate of a complement clause.
- The overt argument modified by the result predicate appears between the main verb and the result predicate.

We have seen that the divisions between the (34A) and (34B) result constructions do not hold firm for certain verb + result combinations, in which the expression of the result variously appears as a morphological increment on the main verb (34A) or as a freestanding word following the verb (34B) (as in the alternations: *vrrerr-bbuni* ~ *vrrarri bbuni*). On these grounds, the forms *(-)xotvi* and *(-)bbuni* are shown as belonging in both the (34A) and (34B) classes. In the case of *imej* and *iser*, on the examples that we have seen, it is possible that these forms should simply be classed as occurring in result clauses. To this extent, the three-way classification shows divisions which could be seen as indicative of a cline in the progressive grammaticalization of independent verbs as they take on the more functional roles of predicates expressing aspectual characteristics, but still with differing semantic denotations (e.g., result *xotvi* 'break off/up' versus result *toxni* 'RSLT/end state').

The result predicates that we have seen thus either reinforce the expression of an end-state that is already expressed by the main verb (*-vrrerr-bbuni* 'kill-kill/kill dead'), or they add in the expression of an end-state which is not part of the meaning of the main verb (*-jari iser* 'tie hang/string up', *-tuvni … ikasi* 'throw all over').

3.3 Particles encoding perfective and perfect aspect

Comrie (1976: 12) distinguishes perfective and perfect aspect as follows:

> The term 'perfective' contrasts with 'imperfective', and denotes a situation viewed in its entirety, without regard to internal temporal constituency; the term 'perfect' refers to a past situation which has present relevance, for instance the present result of a past event (*his arm has been broken*).

In the terms of Comrie's definitions, the Unua particles *ju* 'already', *goj* 'FOC.already', *goj nu* 'FOC.already now' appear to function as markers of perfective and perfect aspect. The perfective versus perfect uses are positionally as well as interpretively distinct. The data shows that *goj nu* is restricted to occurring after a direct object, whereas *ju/goj* are directly post-verbal. Clause-final *goj nu* encodes relevance with respect to the "now" time and thus functions as a perfect. Post-verbal *ju/goj* marks perfective aspect. To the extent that the

positional distinction is not always manifest (as, for instance, when the clause has no direct object), there is inevitably a certain amount of ambiguity in the interpretations where *goj* occurs independently.

The examples in (35) show that *goj nu* must follow a direct object:

(35)a. Xini i-r-i naur **goj** **nu**.
3SG 3SG-write-TR letter FOC.already now
'He has already written a letter.'

b. *Xini i-r-i **goj** **nu** naur.
3SG 3SG-write-TR FOC.already now letter
[Kalangis Bembe 27/11/07]

In Unua, the independent particle *go* has a double function as the conjunction 'and' and as a marker of focus.[10] When *go* combines with *ju* as *goj* it has the focus rather than the conjoining function. When *goj* occurs with *nu* 'now', the resulting combination thus provides a more emphatic focus on relevance to present time.

The "now" time reference of *goj nu* is the "now" time of the discourse context, as in the following:

(36)a. *Ale*. Rrav i-rron **goj** **nu**, rrav i-rron, nemen rin nemen rin ra-sar.
OK canoe 3SG-sink FOC.already now canoe 3SG-sink bird PL bird PL 3PL-fly
'OK. The canoe having sunk now, the canoe (having) sunk, and, the birds,
the birds flew away.' [RR.47]

b. re-vena ra-xa vex re naim se motara ngo **goj** **nu**, ra-xa
3PL-come 3PL-go to LOC house GEN old.man the FOC.already now 3PL-go
ro-rrur-to-toxni Ber Sasai
3PL-seize-DUP-RSLT Ber.Sasai
'having come back now to the house where the man was they went
and got hold of Ber Sasai' [BS.54]

In these examples *goj nu* references (prior) events relative to the time of the discourse context, which, in both (36a,b) is past time.

It is also the case that events that have not yet taken place can be referenced to a "now" time:

(37)a. I-vra go: "Rru-b-xa voxbe?"
3SG-say and 1INCL.DU-IRR-go to.where
'She said: "Where are we going?"'

I-vra: "Rru-b-xa **goj** **nu**, rru-b-xa vex aim.'
3SG-say 1INCL.DU-IRR-go FOC.already now 1INCL.DU-IRR-go to home
'He said: "Let's go now, let's go home."' [SW.22]

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[10] The use of *go* as a focus marker is seen in forms elicited as translations of English sentences with initial cleft constituents, e.g.:

(i) Nabbubb ngo go rrate rra-ta-i.
grass the FOC 1INC.PL 1INC.PL-cut-TR
'It was the grass that we cut.' [SO 20/7/06]

b. Ii, no-kro ju. Rrarru! Rru-b-xa **goj** **nu** ma.”
yes 1SG-awake already 1INCL.DU 1INCL.DU-IRR-go FOC.already now only
‘Yes, I am awake. Let’s go! Let’s just go right now.’ [NR.15]

In the examples in (37) *goj nu* occurs in clauses in which the irrealis verb references events which are not yet actualized, but which are to be actualized from the “now” point in time.

In a variant form of this marking of perfect aspect *goj* appears with the inflectional marker *i-*:

(38)a. Ke i-ngar **i-goj** **nu** mama se-n nga i-ngar i-ngar ni
so 3SG-cry 3SG-FOC.already now *mama* GEN-3SG C 3SG-cry 3SG-cry IO
i-vra b-e-ke-i.
3SG-want IRR-1SG-see-TR
‘So she burst out crying, his *mama* was crying and crying because she wanted to see him.’ [PB.159]

b. Ra-xa go re-ke-i xini i-ve nevet ngo **i-goj.**
3PL-go and 3PL-see-TR 3SG 3SG-be stone the 3SG-FOC.already
‘They went and saw that he had turned into the stone now.’ [RBa.39]

In (38b), *igoj* occurs without following *nu*, but, given its position after the verb complement, it is here occurring as a variant of perfect *goj (nu)*. In other constructions, the *i-* marking typically occurs on predicates with adverbial or adjectival modifying functions.

In contrast with *goj nu*, in the examples in (39) post-verbal particles *ju/goj* appear to behave primarily as markers of anteriority:

(39)a. Nano no-jbar-i aim go tue xina i-r-i **ju/goj** naur xeru.
yesterday 1SG-reach-TR home and brother 1SG 3SG-write-TR already/FOC.already letter two
‘Yesterday I arrived home and my brother had already written two letters.’

b. Nano no-jbar-i aim go tue xina i-r-i naur xeru.
yesterday 1SG-reach-TR home and brother 1SG 3SG-write-TR letter two
‘Yesterday I arrived home and my brother wrote two letters.’ [Kalangis Bembe 27/11/07]

In both (39a) and (39b) the presence of *nano* ‘yesterday’ locates the events in the past. In (39b), the event of the writing of the two letters is understood as sequential to the arrival, but in (39a), in the presence of *ju/goj*, the letters have been written before the arrival. The particles *ju/goj* here mark the anteriority of an event with respect to a reference time. The difference between *ju* and *goj* is that *goj* simply appears as more emphatic than *ju*.

One of the difficulties in distinguishing between perfect and perfective is that both aspects convey termination when applied to non-stative predicates denoting events located in the past. The termination is necessarily understood as anterior to a time reference point. Perfect aspect marks the relevance of the event with respect to the time reference viewpoint and perfective aspect provides a view over the whole event, rather than to some internal stage of the event (as is denoted in the use of imperfective aspect). If it is correct to assume that *ju/goj* are markers of perfective aspect in (39a), then it would seem to be the case that Unua is employing these particles to denote anteriority in the absence of other formal devices for the marking of past tense.

The examples following show further instances in which the use of *ju* is compatible with the perfective interpretation:[11]

(40)a. No-ngar ni mama i-xa **ju** vex maxat.
1SG-cry IO mama 3SG-go already to high
'I am crying because mama has gone up above.' [BO.62]

b. No-xa no-rav-i **ju** vena vex ji xai."
1SG-go 1SG-take-TR already come to DIR 2SG
'I went and I have brought her back to you.' [BO.105]

c. No-vra-i ni **ju** xai, no-vra:
1SG-say-TR IO already 2SG 1SG-say
'I already said to you, I said:' [WW.10]

d. go vinkiki ngo mama se-n i-vra xni **ju** avra,
and girl the mama GEN-3SG 3SG-say IO already if
'and the girl's mother had already said to her that if,' [CS.35]

e. motara Ber Sasai i-rej rroni **ju** vindra ngo
old.man Ber Sasai 3SG-say with already old.woman the
'the man Ber Sasai had already spoken with the woman' [BS.65]

These examples have the flavour of a perfective rather than of perfect: the focus seems to be on the fact that something has taken place, rather than on the assertion of the event being relevant to a now time.

In cases in which *ju* is used with a stative predicate, the interpretation becomes that of an inchoative, thus an achievement:

(41) a. Rate tebeg veverngo re-rex **ju**
3PL all now 3PL-married already
'They are all married now.' [RA.187]

b. motara Bongbae se Aulua i-mej **ju**
old.man Bongbae GEN Aulua 3SG-die already
'old man Bongbae from Aulua has already died/is already dead' [SA.189]

The verb *mej* is ambiguous between stative 'dead' and achievement 'die'. The verb *kasi* 'marry' in Unua is an accomplishment predicate, in apparent contrast with stative *rex* 'married'. In both (41a,b) the meanings appear to be those of achievements rather than of statives.

The examples in (40a,c) and (41a,b) have shown perfective uses of postverbal *ju/goj* with the anteriority reading relative to a present time reference point and with those in (39a) and (40b,d) relative to past time reference. These particles can also denote anteriority relative to (unrealized) future, as in the following examples:

(42) a. i-mo-vsexn-i xina no-mej **ju**, tuo-g re-bar-i bbun-i **ju** xina
3SG-CONT-show-TR 1SG 1SG-die already brother-1SG 3PL-beat.up-TR kill-TR already 1SG
'it is a sign that I am already dead, my brothers have already killed me' [GS.60]

[11] Other evidence (Pearce 2015) shows that postverbal *ni*, *xni* and *rroni* in (40c,d,e) are cliticized to the verb and that these elements do not therefore count as interveners in the postverbal placement of *ju*.

b. Go ru-mo-non rrarra nga b-i-mmes ru-mo-bbuns-i nga b-i-mmes
and 3DU-CONT-stay wait C IRR-3SG-dry 3DU-CONT-watch-TR C IRR-3SG-dry

goj i-xa i-xa i-xa i-xa go ru-ke-i morin nen rrese raru
FOC.already 3SG-go 3SG-go 3SG-go 3SG-go and 3DU-see-TR covering NGEN mother 3DU

i-vena i-rrum re narog,
3SG-come 3SG-fall LOC pudding
'And they were waiting for it to dry out, while they were watching for it to dry out they saw their mother's skin fall into the pudding,' [SS.24]

In the context from which it is extracted, although the verb is not in the irrealis,[12] (42a) is an explanation of the significance of something that could happen at a future time. Within that hypothesized future time, what may happen is a sign that the speaker is already dead. In (42b), the inclusion of *goj* after the irrealis state predicate *bimmes* once again gives rise to the inchoative interpretation 'dried out', as against simply 'dried'.

In postverbal position the particles *ju* and *goj* thus function as typical markers of the perfective in the terms of our understanding of the definition spelt out in Comrie (1976): they reference the time of an event or a state of affairs relative to a subsequent time, the time reference anchor of the discourse context. Whether the event or state of affairs that they mark is completed or not is a function of the predicate class of the construction in which they appear. The perfective particle can cooccur with a result state predicate, as in the following example:

(43) ra-vrrarr-i **bbun-i** **ju** i-matur maxat.
3PL-kill-TR kill-TR already 3SG-sleep high
'they have already killed him dead he lies up there.' [NR.31]

Whilst the presence of *bbuni* in the first clause of (43) establishes a result state interpretation, the inclusion of *ju* in this clause marks the time reference contrast with the time reading associated with the verb of the second clause: past versus present.

3.4 'Ended': *inog*

The predicate *nog* 'end' is used in a clause in the third person singular form with the function of marking the closure or termination of an event or an activity. In an extension of this function, *nog* is used as an adverbial introducing the resumption of a narrative. It can be difficult to distinguish between these two functions in particular instances (especially in the absence of a boundary-marking pause). Before trying to understand these special functions, we first consider the use of *nog* as the main verb of a clause, as in the examples in (44).

(44)a. Jirvaren se xina **i-nog** iog.
story GEN 1SG 3SG-end there
'My story ends there.' [SS.65]

[12] In the context of this extract from a story, the scenario that is evinced is predicted to take place at some future time. The speaker places himself within that future time, thus using the realis forms of the verbs, corresponding to a "narrative present".

b. Reken nabburen se rrarru **i-nog**.
today friend GEN 1INCL.DU 3SG-end
'Today our friendship is over.' [BI.32]

c. go mesaxit ngo **i-seb-nog** rre.
and sickness the 3SG-NEG-end NEG
'and the sickness did not end.' [Luke 8: 43]

In its use as a main verb, *nog* corresponds most closely to English *end* rather than to *finish*. Consider the difference between *end* and *finish* in accordance with the context specified before (45a,b):

(45) Context: *I have been making a basket and, subsequently, I say:*

a. I finished the basket.
b. *I ended the basket.

When used transitively, *end* is understood as 'stop/put an end to', as in (46a), or, more marginally as 'put an end on', as in (46b):

(46)a. I ended the fight between those two.
b. ?I ended the story that I was writing.

In (45a) *finish* is agentive and the sentence has the same interpretation as (47a):

(47)a. I finished making the basket.
b. ?I ended making the basket.

The only possible interpretation for (47b) is one with the terminative 'stop' meaning. With the 'stop' interpretation, the making of the basket is not completed, the process of making the basket is interrupted.

In the Unua examples in (44) the independent predicate *nog* has the non-agentive terminative 'end' meaning. To represent the end of an agentive activity, *i-nog* '3SG-end' is used after the verb signifying the activity. Very often in this function *inog* follows one or more occurrences of *ixa* '3SG-go', which is used to represent an ongoing activity, as in the examples in (48):[13]

(48)a. Ke, i-mre ru-teng **i-xa** **i-nog**, i-vun re tevense-n, i-vra:
so 3SG-like 3DU-cry 3SG-go 3SG-end 3SG-remonstrate LOC husband-3SG 3SG-say
'And so when they stopped crying, she remonstrated with her husband, saying:'
[SS.34]

b. motara soxa, *ale,* i-xa vex raman i-xa go i-um i-um **i-xa** **i-xa**
old.man one alright 3SG-go to LOC.garden 3SG-go and 3SG-clear 3SG-clear 3SG-go 3SG-go

[13] A reviewer asks whether *inog* occurs only after a process/activity verb or whether it may also occur after a punctual verb, such as 'cough'. I have not found clear cases of *inog* following a punctual verb and, as the reviewer suggests, the prediction would be that, if such is possible, the interpretation would be iterative (as in the English contrast: *he coughed* Punctual versus *he was coughing* Iterative). That is, for Unua, the predicted contrast would be: *ipur* 'he coughed' versus *ipur inog* 'he stopped coughing'. In the latter, the interpretation would be Iterative and, in the former there is possible ambiguity between the Punctual and Iterative interpretations.

i-nog. *Ale* i-sr-i bitinxe,
3SG-end OK 3SG-burn-TR tree
'a man, OK, he went to the garden, he went and he went on clearing things up until it was done. OK, he burnt down trees,' [SW.02]

c. I-majing **i-xa** **i-nog**, go i-vena i-non, go i-ngavngav.
3SG-work 3SG-go 3SG-end and 3SG-come 3SG-sit and 3SG-rest
'When he finished working, he came and sat down and rested.' [NV.02]

d. *Ale*, i-*wet* rrarra apen i-vjixn-i nixe **i-xa** **i-xa** **i-nog**, go i-vra:
OK 3SG-wait wait below 3SG-stick-TR wood 3SG-go 3SG-go 3SG-end and 3SG-say
'OK, she waited, she waited, and below the other one went on sticking the sticks until that was finished and then she said:' [WW.36-37]

Although in the following examples *ixa* is not present after the verb, the use of the verb repetition signals that the activity is an ongoing process. The presence of *inog* here again denotes the termination of a (drawn out) activity:

(49)a. Nabong soxa xasuv i-ta rrav, i-ta rrav **i-nog**, i-rve-i i-rng-i rites.
day one rat 3SG-cut canoe 3SG-cut canoe 3SG-end 3SG-pull-TR 3SG-put-TR LOC.sea
'One day the rat carved a canoe; once he had finished the canoe, he dragged it and put it into the sea.' [RR.05]

b. I-rve-rve-i nesur **i-nog** i-tuv-ni i-xa i-kas-i, go i-tuvn-i
3SG-DUP-pull-TR dry.coconut.leaf 3SG-end 3SG-throw-IO 3SG-go 3SG-complete and 3SG-throw-TR

se b-i-sr-i goj nu.
GEN IRR-3SG-burn-TR FOC.already now
'She pulled off dry coconut leaves and threw them around everywhere. And she threw them to be ready to burn now.' [WC.20]

c. i-traxn-i, i-traxn-i neriv rin, i-traxn-i neriv rin **i-nog** go i-vra:
3SG-tie up-TR 3SG-tie.up-TR arrow PL 3SG-tie.up-TR arrow PL 3SG-end and 3SG-say
'she bound them up, she bound up the arrows, and when she finished binding up the arrows then she said:' [WT.34]

The examples in (49) show that terminative *inog* follows the direct object of a transitive verb. In the examples (49a) and (49c) the activity verb that is modified by *inog* comes after another occurrence of the same verb. It is possible that the verb repetition is another means of encoding the ongoing nature of the activity, but, alternatively, it could be that the verb doubling is simply a factor of the kind of repetition that occurs frequently in oral story telling. In (49b), the activity verb is in the reduplicated form signifying here ongoing (iterated) actions.

In another similar kind of use, *inog* seems to have a function as a marker of a completed stage in a narrative:

(50) go i-vrrarr-i arres soxa. *Ale*, i-vrrarr-i arres soxa **i-nog**. *Ale*, i-x-i
and 3SG-kill-TR person one OK 3SG-kill-TR person one 3SG-end OK 3SG-carry-TR

jinen arres ngo maxat vena i-gir vena.
innards person the high come 3SG-return come
'and he killed a man. OK, he killed a man off. OK, he carried the entrails of the man back from on high.' [SW.09]

Whereas in other cases that we have seen in (48) and (49) *inog* marks the end of a process, in (50) *vrrarri* 'kill' is an accomplishment predicate and it necessarily has its own end-point. For this reason, the use of *inog* in (50) is not required to provide an end-point to the action that is denoted and its use in this instance seems to be as a marker of the termination of an event as a step in the narrative. It is quite natural in narratives that the termination of an activity or event marks the completion of a stage in a story that will be followed by a subsequent stage.

It seems that the narrative stage completing function of *inog* has led to another use in which it serves as an adverbial introducing a next step in a narrative. In this adverbial function, *inog* occurs in one of two forms: either with the relative clause prefix as *m-i-nog* 'REL-3SG-end' or in the form *inog* followed by *go* 'and'.[14] Both of these forms have the function of marking a narrative stage and it is possible that the use of one or other of these forms in a speaker-dependent variable. The examples in (51) show instances of this use with the form *minog*:

(51)a. Ru-non i-xa go vindra dabago-n. **M-i-nog**, vindra i-vra-i ni motara,
3DU-stay 3SG-xa and old.woman belly-3SG REL-3SG-end old.woman 3SG-say-TR IO old.man
'They went on living there and the woman became pregnant.
Then, the woman said to the man,' [DT.05]

b. Rra-b-xa rre-b-ke-i teme xamru. **M-i-nog** re-xr-i nabbur,
1INC.PL-IRR-go 1INC.PL-IRR-see-TR father 2DU REL-3SG-end 3PL-dig-TR hole
'We will go and find your father." Then they dug a hole,' [DT.33]

c. *Ale* **m-i-nog** i-ri-gir-i go i-matur raron.
OK REL.3SG-end 3SG-turn-back-TR and 3SG-sleep LOC.inside
'OK then it turns back and goes to sleep inside. [NR.52]

In all of the examples in (51), *minog* occurs in a clause-initial position (preceded only by the discourse marker *ale* in (51c)).

In the following examples with *inog go* in (52) we see that this form also occurs clause-initially and that it has an interpretation that appears to be indistinguishable from the interpretation applying to *minog* in (51):

(52)a. Reken no-vra b-a-vase jirvaren bi-soxa, jirvaren bi-xeru, go b-e-tetebatin
today 1SG-want IRR-1SG-make story IRR-one story IRR-two and IRR-1SG-begin
ba bi-soxa, **i-nog go** b-o-sbo mu tuen.
ATTEN IRR-one 3SG-end and IRR-1SG-discuss again other
'Today I want to tell one story, two stories, but I'll start with one and, then I will go on with the other one.' [BD.04]

b. *Ale*, mor-xenxen. *Ale* **i-nog go** i-mre xemer se rrate, xemer se rrate
OK 1EXCL.DU-DUP-eat OK 3SG-end and 3SG-like xemer GEN 1INCLPL xemer GEN 1INCLPL
'OK, we ate together. OK, after that, it was as if it was our *xemer*' [PB.09]

[14] I have not as yet been able to find a good explanation as to why the relative clause prefix *m-* shows up in this use of *inog*.

c. Rraxum, rru-bo-sr-i ba xise xina, **b-i-nog** **go** rru-b-xa
crab 1INCL.DU-IRR-burn-TR ATTEN XGEN 1SG IRR-3SG-end and 1INCL.DU-IRR-go
rru-bo-sr-i xise xai.”
1INCL.DU-IRR-burn-TR XGEN 2SG
‘Crab, we will burn my place, and then we will go and burn yours.’ [XR.10]

d. Go Meri i-non navur xeter rroni Elisabet. **I-nog** **go** i-ber-xaxa gir
and Mary 3SG-stay month three with Elizabeth 3SG-end and 3SG-INCPT-walk back
vex ji-xi-n.
to DIR-*xi*-3SG
‘And Mary stayed three months with Elizabeth. Then she walked back to her place.’ [Luke 1:56]

In the absence of a clear pause or intonational break before or after an *inog go* sequence, it can be difficult to determine whether *inog* has the terminating function, the stage completing function or the introducing adverbial function (cf. (49c)). With (52a,c) my classification of *inog* as having the introducing adverbial function is based on my understanding of the sentence semantics in these examples. In example (52b) the Bislama borrowed discourse marker *ale* ‘OK’ (< French *allez*) coming before *inog go* marks the beginning of a new stage in the narrative sequencing. The example (52d) observes the punctuation of the original translation which thus places *inog go* at the beginning of a clause (in the introducing adverbial function therefore).

3.5 Summary

The preceding discussion has shown an array of markers encoding various kinds of distinctions to do with completion and termination. These markers have been seen to have characteristic locations in the structure of the clause. To summarize: (53) presents a schema showing the different markers and their relative position in the clause:

(53)

	Result	Perfective	Completive / Terminative / Perfect
Verb	*-toxni*	*ju / goj*	*… ikasi / inog / (i)goj (nu)*
	-xotvi		
	(-)bbuni		
	imej		
	iser		

As shown in (53) the Result markers immediately follow the verb root and the Verb+ Result is immediately followed by a Perfective marker. We have seen evidence in (35a,b), (36b) and (38b) that *(i-)goj (nu)* can follow a direct object and, in (49a,b,c), that terminative *inog* also follows a direct object. The ordering with respect to a direct object is thus the justification for showing, in the schema in (53), these Perfect and Terminative items as being located after Perfective *ju/goj* which occurs before a direct object. We have evidence for the occurrence of *ikasi* after a direct object in (32b) but, in this case *ikasi* introduces a locative phrase and thus does not occur independently. We have also seen that both *kasi* and *inog* may follow continuative *ixa, ixa, …* sequences. However we have no evidence for relative positions for the items in the Completive, Perfect and Terminative categories as we have no data showing cooccurrences with these items. Not shown in (53) is the *inog* with the stage

marking function (as in (50)), but it is possible that the position for stage marking *inog* is non-distinct from that of Terminative *inog.* In the further discussion that follows we will leave *inog* aside and we will focus on the Result markers, the Perfective, and the Perfect. Those are the markers for which we have the most clear cut evidence as to their location in the clause. We will see also that, from this perspective, they are interestingly comparable with markers with roughly corresponding functions in Mandarin Chinese.

4 Aspect marking: A cross-linguistic perspective

4.1 A comparison with Mandarin Chinese

The differentiated positioning of markers with aspectual kinds of functions brings to mind the case of the Mandarin Chinese particle *le*, which has distinct functions in the post-verbal position (verbal-*le*) and the clause-final position (sentential-*le*).[15] I think it is thus of interest to try and see if there is any parallelism in the uses of *le* in Chinese and in the uses of certain of the particle-like expressions that we have seen in Unua. As in Unua, the verb form in Chinese does not distinguish between present and past. A variety of aspectual markers can be used to signify aspectual and temporal properties of the clause relative to what Smith (1997) calls a 'viewpoint'. But we will focus here on the uses of the *le* particle.

With respect to the uses of the *le* particle in Mandarin, Soh (2009: 625) provides the following example illustrating the use of both verbal-*le* and sentential-*le*:[16]

(54) Tāmen dàodá-le shān-dīng le.
they reach-*le* mountain-top *le*
'They reached the top of the mountain (which they hadn't done before/contrary to what one may expect).' [Soh 2009: 625]

The expansions that Soh gives in the English translation for (54) spell out her analysis of what she interprets as two kinds of functions for sentential-*le* (and see also Soh and Gao 2008). Soh (2009: 628) proposes the following pair of examples to show the meaning distinctions for the verbal-*le* and sentential-*le* with an atelic predicate (a predicate without an inherent endpoint and thus an Activity).[17]

(55) a. Tā mà-le tā de háizi.
he scold-*le* he POSS child
'He scolded his child.'

b. Tā mà tā de háizi le.
he scold he POSS child *le*
'He is scolding his child
(which he was not doing before/contrary to expectations).' [Soh 2009: 628]

[15] There is some debate in the literature as to whether *le* should be treated as a single morpheme that is active in distinct syntactic environments or as two distinct, but homophonous, morphemes (for references on this issue, see Soh 2009: 629). For convenience, I here refer globally to the 'particle *le*', but, when distinguishing the uses of *le*, I refer to 'verbal-*le*' and 'sentential-*le*'.

[16] I have adapted Mandarin examples cited from different sources by adding in the tone markings to the pinyin forms.

[17] For comparable examples, see also Tai (1984: 292).

In (55a), the verbal-*le* is said to signal the end of the activity, whereas, in (55b), the activity may be ongoing and the presence of the sentential-*le* marks alternative viewpoints with respect to the activity.

However, whilst the most natural interpretation of verbal-*le* as in (55a) involves what we might understand as completion, it is in fact the case that verbal-*le* encodes termination rather than completion. The completion/termination distinction is shown in examples taken from Smith (1997: 68-69) which demonstrate the use of the *wán* 'finish' result predicate:

(56) a. Wǒ zuótiān xiě-wán-le yī-feng xìn, (#kěshì méi xiě-wán).
I yesterday write-finish-*le* one-CL letter but not write-finish
'Yesterday I wrote a letter (#but I didn't finish it).'

b. Wǒ zuótiān xiě-le yī-feng xìn, kěshì méi xiě-wán.
I yesterday write-*le* one-CL letter but not write-finish
'Yesterday I wrote a letter, but I didn't finish it.' [Smith 1997: 68-69]

Because result *wán* in (56a) entails completion, the extension in this example is a contradiction. The extension in (56b) is not contradictory and this example thus shows that post-verbal *le* encodes termination of the activity and not necessarily the completion of the activity to its endpoint.[18]

Smith (1997: 68) classes *wán* as a 'Resultative Verb Complement'. From the point of view both of the placement of *wán* with respect to the verb and of its classification as a resultative, *wán* appears to be semantically and syntactically comparable to the resultative morphemes that are found in Unua (e.g., Result *xotvi* 'break off/up' and Result *toxni* 'RSLT/end state' discussed in section 3.2.1). There is also an interesting parallellism in the use of verbal-*le* following a result predicate in Mandarin (56a) and the result predicate – *ju* sequencing in the Unua example given earlier as (43):

(43) ra-vrrarr-i **bbun-i** **ju** i-matur maxat.
3PL-kill-TR kill-TR already 3SG-sleep high
'they have already killed him dead he lies up there.' [NR.31]

In effect, there is a good correspondence between the interpretations applied respectively to the postverbal and the clause-final particles in the two languages. On the analysis that I have presented in section 3.3, postverbal *ju*/*goj* appear as perfective markers and clause-final *goj nu* as a perfect. Although Soh (2009) and Soh and Gao (2008) argue that, whilst sentential-*le* has the characteristics of the perfect, a finer-grained analysis brings out some additional characteristics,[19] for the accounts that we have seen here, this particle has at least the role of a marker of perfect aspect. In the case of the Mandarin verbal-*le*, a number of authors are in agreement that it is a perfective (Rohsenow 1976, Smith 1997, Tai 1984, Soh

[18] Smith (1997) notes that the judgments as shown in (56a,b) are not representative of all dialects of Mandarin: there is another dialect "in which the simple perfective indicates completion, if a specific object nominal appears in the appropriate verb constellation" (Smith 1997:281). In this other dialect (56b) is contradictory. (The dialect represented in (56b) is consonant with the dialect described in Soh 2009 and discussed also in Soh and Gao 2008.) My thanks to Yan Huang for alerting me to the existence of acceptability judgment differences in the case of constructions of the (56b) type.

[19] Thus, for Soh and Gao (2008:470): 'We show that sentential *-le* shares its assertive meaning with perfect and its presupposition with English *already*.'

and Gao 2008: 448, Soh 2009).[20] Thus, if my analysis of the Unua data is on the right track, the Mandarin result predicates and the two uses of *le* in Mandarin line up with the Unua markers in the following way:

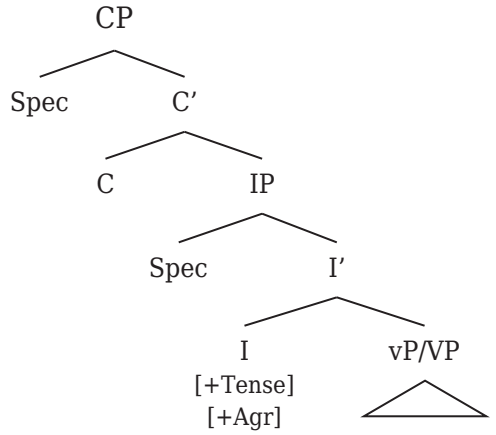
(57)		Result predicate	Perfective	Perfect
	Mandarin	V-*wán*, etc.	V-*le*	Sentential-*le*
	Unua	V-*toxni*, etc.	V *ju/goj*	*(i-)goj (nu)#*

The preceding sections of this paper have presented an account of a wider range of aspectual marking devices in Unua, but, given what has emerged in the present section as to the comparability of Mandarin and Unua for the markers discussed here, I propose in the section following to consider the implications of these findings for the kind of hierarchical structure that is put forward as being universal in the influential proposal of Cinque (1999).

4.2 A hierarchy of functional projections (Cinque 1999)

The syntactic literature has recently seen a number of proposals arguing for a universal underlying ordering of projections in components of the sentence. This work has developed out of earlier proposals from Emonds (1978) and Pollock (1989) on the positions of functional heads within the IP to extensions involving adverbial positions within the IP (Cinque 1999) and to the consideration of an array of dedicated positions in the CP domain at the left-periphery of the clause (Rizzi 1997).[21] Under these proposals, the conventional labels 'CP' and 'IP', as shown in (58), have come to be viewed as cover terms for an array of projections in a universally ordered hierarchical schema.

(58)



In what follows I will be concerned with considering the extent to which our findings for Unua (and for Mandarin Chinese) may be viewed as matching up with Cinque's (1999) proposed universal schema applying to aspectual projections in the domain of the IP.

Unua and Mandarin belong to different language families and these two languages are typologically different on a number of criteria. Most notably, Mandarin is a tone language

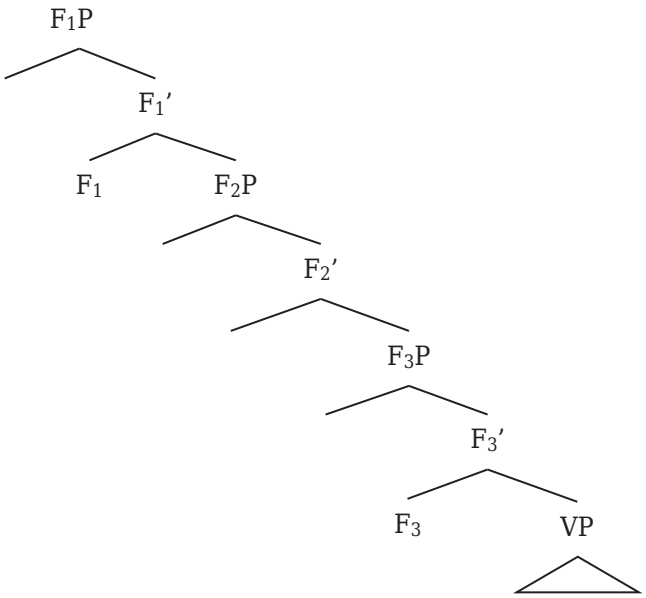
[20] For a brief overview of some alternative accounts, see Soh (2009: 629).

[21] For a more recent collection of papers exploring the make-up of both the IP and CP domains, see Rizzi (2004).

with a lack of inflectional morphology on the verb, whereas, Unua (not a tone language) has a rich system of verbal inflectional morphology. However, these two languages have in common that they encode aspectual distinctions but not [+/– past] tense and that they have a basic SVO constituent ordering. Nevertheless, given the typological differences between these two languages, it seems quite remarkable that we have found that they essentially employ comparable syntactic marking for result aspect and for perfective and perfect aspect. Given this comparability, it is of interest for us to consider the extent to which the syntax of aspect marking in Unua and Mandarin may be viewed when put against a hierarchy of functional projections such as that proposed in Cinque (1999).

Cinque (1999) adopts Kayne's (1994) right-branching view of clause structure under which different functional projections are organized in the following way:

(59)



In languages in which iterative raisings apply in the derivations of the surface forms, the outputs corresponding to structures like that in (59) can result in mirror-image linear orderings of the type:

(60) … V F_3 F_2 F_1 …

In such surface orderings the items following the verb and closest to it are lower in the base structure than are items appearing further to the right of the verb.

One difficulty in considering how the array of aspectual projections might match up with those proposed in Cinque (1999) concerns the exact nature of the interpretations that are applied to specific functions.[22] A partial view of Cinque's array of projections including functions that could be relevant to those considered here is as follows:

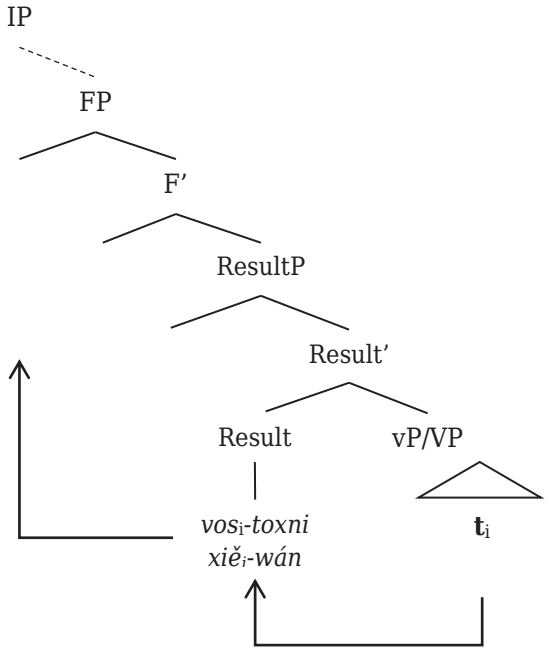
[22] For some further elaborations as to functions within the IP domain, see Cinque (2004, 2009).

(61) Clause structure (partial) showing representative adverbials:
adapted from Cinque (1999: 106 'second approximation')

… [*once* $\text{Tense}_{\text{Past}}$ [*then* $\text{Tense}_{\text{Future}}$ [*perhaps* $\text{Mood}_{\text{Irrealis}}$ … [*usually* $\text{Aspect}_{\text{Habitual}}$ … [*already* $\text{Tense}_{\text{Anterior}}$ [*no longer* $\text{Aspect}_{\text{Terminative}}$ [*still* $\text{Aspect}_{\text{Continuative}}$ [*always* $\text{Aspect}_{\text{Perfect(?)}}$ [*characteristically?* $\text{Aspect}_{\text{Generic/Progressive}}$ … [*completely* $\text{Aspect}_{\text{SG.CompletiveI}}$ [*tutto* $\text{Aspect}_{\text{PL.Completive}}$ … [*completely* $\text{Aspect}_{\text{SG.CompletiveII}}$ …

With the kind of linear ordering that is represented for Unua and Mandarin in (57), it would appear that both of these languages could instantiate a surface mirror-image sequencing of the IP-internal projections. First, on the assumption that Result aspect is housed in a projection above the vP/VP, the fact that the verb is followed by the Result marker and that it precedes all other aspectual markers suggests that the verb raises out of the vP/VP to a position above the location of the Result marker and that the compound so formed then raises to a higher position in the clause structure:

(62)



In his portrayal of the IP-internal projections of the Mandarin clause, Cinque (1999) shows the 'F' orderings in (63a) corresponding in part to the mirror-image surface ordering in (63b):

(63)a. [Modality [$\text{Aspect}_{\text{Perfect}}$ [$\text{Aspect}_{\text{Completive}}$ [V … [Cinque 1999: 157]

b. Wǒ zuótiān xiě-wán-le yī-feng xìn.
3SG yesterday write-COMPL-PERF one-CL letter
'Yesterday he wrote a letter (to the end).' [Cinque 1999: 55]

This mirror-image interpretation is consistent with the underlying ordering proposed in (61) in which the three types of Completives are lower in that ordering than the projection labelled as '$\text{Aspect}_{\text{Perfect(?)}}$'. However, in terms of our understanding of the roles of the two *le* in Mandarin, I believe that Cinque's labels for these functions need to be reconsidered. First, the label that is given as 'PERF(ect)' in (63a) corresponds to '$\text{Aspect}_{\text{Perfect(?)}}$' in (61), which Cinque (1999: 96) states as being understood as being in contrast with Imperfective. This

means that Cinque's 'Perfect(?)' therefore corresponds to our 'Perfective'. Second, Cinque's label '$\text{Tense}_{\text{Anterior}}$' corresponds to the English 'already' function which we have interpreted here as 'Perfect'. Spelling out these terminological differences, (64) shows the correspondences, with the terms used in Cinque (1999) in (64a) and those elaborated here in (64b):

(64) a. … [*already* $\text{Tense}_{\text{Anterior}}$ … [*always* $\text{Aspect}_{\text{Perfect(?)}}$
b. … [*already* $\text{Aspect}_{\text{Perfect}}$ … [*always* $\text{Aspect}_{\text{Perfective}}$

Finally, another terminological difference in the two labelling systems (ours and Cinque's) is that we have equated Mandarin *wán* with Unua Result marking, whereas Cinque uses the label 'Completive' for this morphology. Nevertheless, disregarding the labelling differences,[23] if we suppose that Cinque's ordering of projections is valid, we are led to assume that, in the terms of the definitions that we have developed here, for the aspectual markers in both Unua and Mandarin, their underlying ordering is the reverse of the surface ordering shown in (57) and should thus be as follows:

(65) Perfect > Perfective > Completive/Resultative

Although we have not been able to treat the data discussed here to the level of detail in the interpretations that is given witness to in even the partial schema shown in (61), the picture of the ordering of the aspectual functions in Unua and in Mandarin has been shown to approximate to the kind of arrangement of projections seen in the (61) schema. As it stands, the ordering of projections in (65) when viewed against the surface mirror-image ordering in (57) points to the application of iterative raisings of constituents in the derivations of the surface orderings in Unua and in Mandarin.

5 Concluding remarks

It is certainly no easy task to untangle the precise functions of aspectual marking in different languages and many questions remain. We have focused especially on the identification and the distribution of Result, Perfective and Perfect marking in Unua (as represented in (57)). We have also uncovered the roles of *inog* as a Terminative marker and in two kinds of narrative stage marking functions. We have considered the possible role of *ikasi* with a Completive function. All of these markers in different ways have the function of denoting boundedness. We have also seen that there is some comparability between Unua and Mandarin Chinese in the use of Result/Completive, Perfective and Perfect aspect marking. Our further examination of the data from these two languages has indicated that the common patterning that we have observed may be viewed as consistent with our understanding of the proposed hierarchy of functional projections that is proposed in Cinque (1999). For the further understanding of the syntax of the Unua clause, much more work needs to be done on the problem of how the full

[23] I am here taking the labelling distinctions as being essentially terminological. If it turns out they are in fact substantive, then it is another question as to the possible implications of our interpretation of the Perfective/Perfect distinction to applications in other languages.

array of aspectual markings are integrated with other constituents of the clause in the syntactic derivations.

However, I believe that, even at this stage of our understanding of the various devices marking aspect in Unua, it has been instructive to step back from the Unua data and to view it in terms of how it might align with findings about the syntax of aspectual functions in other languages. It will also be of interest to see to what extent the kinds of uses of aspectual markers that we have found in Unua have parallels in other Vanuatu languages. Our goal in the task of describing languages is that the descriptions produced, whilst naturally having due regard to the facts of language specific phenomena, should contribute ultimately to the broader goal of understanding human language and how it works.

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Move the *ka*
Valency and instrumental shift in Bierebo

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Abstract The Bierebo language of Epi island, Vanuatu has a multi-functional form *ka* which is held to reflect POC **akin[i]*. In Bierebo *ka* occurs as an instrument-marking preposition, as an applicative suffix, and as an oblique marker in so-called 'pseudo' or oblique transitive constructions whereby object arguments are introduced with formally intransitive verbs. Its distribution appears to reflect ongoing morphosyntactic instability in Bierebo, as is the case with cognate forms in other Vanuatu languages. In its instrument-marking function *ka* also occurs in a typologically unusual construction, dubbed 'Instrumental shift' by Crowley (2006b). This involves the fronting or ellipsis of an instrument NP and a movement of the preposition. The result in Bierebo is a post-verbal sequence of *ka* + direct object. I suggest that Instrumental shift is motivated by factors related to information structure and seems to occur when speakers wish to foreground the instrument in their discourse.

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1 Introduction

This paper describes the various functions of the form *ka* in Bierebo, a multi-dialectal language spoken by approximately 900 people on the island of Epi.[1] A reflex of POC **akin[i]*, the form *ka* occurs as a preposition that marks instrumental adjuncts, an applicative suffix, and as an oblique marker in so-called 'pseudo' or oblique transitive constructions whereby object arguments are introduced with formally intransitive verbs. I suggest here that its

[1] The data presented here were collected between 2005 and 2007 and are predominantly from the Bonkovio dialect, the variety with the largest speech community (approximately half of the total number of 900 speakers); the corpus comprises recorded narratives of various genres as well as grammaticality judgements and elicited data. Example sentences used here are either marked as elicited or have a source code/title indicating a recorded text; examples with no source are observed utterances. Leipzig glossing conventions are followed with a few exceptions: a single asterisk '*' denotes a proto-form; a double asterisk'**' denotes an ungrammatical structure; ABS, Absolute form; GCL, classifier of general possession; O, object; P, Possessor suffix R, Realis; S, Subject.

distribution reflects ongoing morphosyntactic instability in Bierebo, as is the case with cognate forms in other Vanuatu languages. The form *ka* also occurs in a typologically unusual construction, dubbed 'Instrumental shift' by Crowley (2006b), in which an instrument NP is either fronted or ellipted and a movement of the instrument-marking preposition takes place. In Bierebo this leaves a post-verbal sequence of *ka* + direct object. Crowley observed Instrumental shift in the Malakula languages Naman, Avava, and Neve'ei, as well as noting a calque of the structure in varieties of Bislama spoken on Malakula. He was unable to provide a full explanatory account of the construction, and was unaware of its occurence outside Malakula. For Bierebo, I suggest that Instrumental shift is motivated by factors related to information structure and it seems to occur when speakers wish to foreground the instrument in their discourse.

An important corollary to these points is my analysis of the sequence *–(n)ia* which attaches to verbs and prepositions in Bierebo. Formally, the (*n*)*i* element of this sequence resembles the transitivising suffix common to various Oceanic languages. However, it is demonstrated here that in Bierebo the sequence has no transitivising function and must in fact be analysed as an allomorph of the object pronoun.

The paper is structured as follows: an overview of Bierebo verbal clauses is given in 1.1, followed by some theoretical and terminological preliminaries regarding transitivity in 1.2. Section 2 then looks in some detail at the analysis of the third person object enclitic, which is crucial to understanding the remainder of the paper. Section 3 is concerned with the instrument marking preposition *ka*, and includes a description of the Instrumental shift construction. Finally, Section 4 examines the role of *ka* in the oblique transitive construction, making comparisons with several other Vanuatu languages where parallel structures have been reported.

The various occurrences of *ka* are summarised in Figure 1:

Figure 1: Bierebo *ka* constructions

(i) *Instrument marking preposition* ka
SUBJECT VERB[TRANS] DIRECT OBJECT *ka* INSTRUMENT NP

(ii) *Oblique marker* ka *in oblique transitive*
SUBJECT VERB[INTRANS] *ka* OBLIQUE OBJECT

(iii) *Applicative suffix* -ka
SUBJECT VERB[INTRANS] -*ka* OBLIQUE OBJECT

(iv) ka *in Instrumental shift*
(INSTRUMENT NP) SUBJECT VERB[INTRANS] *ka* DIRECT OBJECT

1.1 Overview of verbal clauses in Bierebo

Bierebo has SVO basic constituent order and the main TAM operator for verbs is a Realis/Irrealis distinction. Just over half of the verbs in Bierebo have two forms: an Irrealis root and a Realis stem, derived by a mutation of the root's initial consonant:

wu 'whistle' (Irrealis)
pu 'whistle' (Realis)

Around 15% of verbs have a Realis form marked by a prefix *m-* which attaches to the morphologically basic (i.e. Irrealis) root:

la 'do, make' (Irrealis)
m-la 'do, make' (Realis)

The remaining verbs, (approximately a third), are mainly comprised of *m-* initial and *s-* initial roots, and are invariant:

sar 'bite' (Realis/Irrealis)
mono 'lie (down)' (Realis/Irrealis)

A verbal clause minimally comprises a single verb root inflected for subject by a prefix. Along with subject marking, a Progressive marker and an object enclitic may attach to a root, forming a phonological unit that will be referred to as the verb complex, summarised in the following formula:

Figure 2: Bierebo Verb Complex

SUBJ MARKER-VERB1(-VERB2) (-PRG MARKER)(=OBJ ENCLITIC)

The verb's subject is obligatorally indexed by a prefix on the verb root indicating person-number category; third person singular subject is zero marked. Subject NPs, including independent pronoun forms, are frequently omitted in speech:

(1) (Nisa) ko-van be?
(2SG) 2SG:S-IRR.go where
'Where are you going?'

Progressive aspect is marked by a suffix *ka*, (which, confusingly, is homophonous with the other *ka* forms discussed in this paper).

(2) Ø-pe-ka kia-n yowa
3SG:S-R.weave-PRG GCL-3SG:P pandanus
'She is/was weaving her pandanus (mat).' (B2_07)

In contrast to this subject-indexing, there is no corresponding object marking on the verb: there is a third person object enclitic *a ~ ia ~ nia* (discussed in detail in Section 2), which can denote both singular and plural number; for all other person-number categories the full independent pronoun forms are used as objects. Crucially, the third person object enclitic is pronominal rather than coreferential; it is not an obligatory element and indeed it cannot co-occur with an object NP, except as a resumptive trace when an object NP is fronted (discussed in *Section* 2), or in relativisations. This distribution is illustrated in examples (3) to (6) below:

(3) Ne-de yato.
1SG:S-R.cut firewood
'I cut the firewood.'

(4) Ne-de =a.
1SG:S-R.cut =3O
'I cut it.'

(5) ***Ne-de =a yato.*
1SG:S-R.cut =3O firewood
'I cut it.'

(6) Wowana ne te-sa-ka=nia.
food REL 1INC.PL:S-eat-PRG=3O
'The food which we eat/are eating.'

This object pronominal is analysed as a clitic as it attaches to three word classes: verb roots, the Progressive marker and to prepositions.

Verb serialisation is another important feature of the language and occurs at two different syntactic junctures: the nuclear layer and the core layer of the clause (following the framework first proposed by Foley & Olson (1985)). Nuclear layer serialisation involves a tightly bound V-V unit with a single subject. In Core layer serialisations an object may occur between the verbs, functioning as the subject of the second verb.

(7) Ø-de-dul-ka=nia.
3SG:S-R.cut-pierce-PRG=3O
'S/he's cutting a hole in it'

(8) A-pwar kiniu ne-ban Vila.
3PL:S-R.carry 1SG 1SG:S-R.go Vila
'They took me to Vila' (MZ000022)

This introductory section continues with an overview of valency in Bierebo, and clarifies some of the terminology that will be used.

1.2 Bierebo valency overview

The term 'valency' is used here to refer to the number of core arguments selected by a verb. Bierebo verbs divide into two main subcategories: intransitive and transitive verbs, with transitivity understood here in a strict morphosyntactic sense: intransitive verbs take only a subject whilst transitive verbs require a subject and a direct object. There are no ditransitive verbs in Bierebo and only one ambitransitive verb (*chupolpo* 'lie, deceive s.o.') is attested in the corpus. The grammatical relations of subjects and direct objects are easily defined. Subjects are identified as the arguments formed by bare NPs, usually occurring pre-verbally, with agent-like roles and which trigger agreement-marking on the verb; direct objects occur post-verbally as bare NPs with patient-like semantic roles. Oblique arguments are introduced by the preposition *ka* as shown below (described further in Sections 3 and 4).

(9) A-pu
3PL:S-R.whistle
'They whistled.'

(10) A-pu ka kiniu.
3PL:S-R.whistle OBL 1SG
'They whistled at/for me.'

The terms S,A, and O will be used to refer to the overtly expressed arguments in verbal clauses. Following the approaches of Naess (2007) and Hopper and Thompson (1980), which diverge slightly from Dixon (1979), S refers to the single argument of an intransitive clause, whilst A and O refer to the arguments in a two-participant clause;[2] the term A refers to the

[2] Dixon (1979) limits the terms to the context of formally transitive clauses.

most agent-like participant and O to the second, non-agentive participant, regardless of structural encoding. In a two-participant clause this allows both a direct object and an oblique argument to be referred to as an O.

Distinguishing between an instrument adjunct and an oblique object is problematic. In terms of meaning, a variety of semantic roles are attested for the forms introduced by *ka*, including instrument, theme, recipient, addressee, product, and content, but it is not possible to state that all NPs expressing instruments are adjuncts and all others are oblique objects. That said, however, the semantic role of adjuncts does appear to be more independent of the semantics of the verb, whilst the semantic role of oblique arguments is determined by the lexical properties of the verb so that the verb and the preposition *ka* form a lexicalised collocation c.f. (11) and (12). Arguments denote distinct participants which are affected to some degree by the action of the verb and which are semantically restricted by the verb's meaning. Adjuncts on the other hand typically encode extra information related to manner and location, both spatial and temporal.

(11) A-m-la-ge tawaga ka sowa.
3PL:S-R-do-block canoe INST sap
'They seal the canoe with sap.' (elicited)

(12) Ko-valua ka tawaga.
2SG:S-IRR.paddle OBL canoe
'Paddle the canoe!'

A central point made in this paper is that the preposition *ka* has two functions: one is to mark instruments and the other to introduce other oblique arguments, and to reflect this distinction two different glosses are used as in the examples above: INST and OBL.

Some tentative formal criteria are presented in Section 4, where it is argued that the use of *ka* to introduce NPs produces a cline ranging from adjuncts and peripheral arguments to a morphological applicative. For in at least two cases it appears that the oblique preposition has undergone incorporation with the verb, such that it has effectively become an applicativising suffix, and in this instance the gloss APP has been used:

(13) Ø-pre-yal Ø-pre ka-pina.
3SG:S-R.say-find 3SG:S-R.say 2PL:S-R.steal
'He spoke out and said you stole / were stealing.'

(14) Ø-pina-ka pre=nga takra na.
3SG:S-R.steal-APP again=just one EMPH
'She stole another one.' (C2_05)

To assist the reader in analysing the Bierebo example sentences *Table 1* summarises these forms of *ka*, along with two other homophonous but unrelated forms.

Table 1: Bierebo ka *forms with glosses*

Form	Description	Gloss
ka	Instrument-marking preposition	INST
ka	Oblique preposition	OBL
-ka	Applicative suffix	APP
-ka	Progressive marking suffix	PRG
ka-	Second person plural subject prefix	2PL:S

Before looking in more detail at instrument-marking and oblique-marking functions of *ka*, the following section examines the third person object enclitic in order to justify the synchronic analysis that it does not contain a transitivising element.

2 Pronominal object enclitic

Bierebo has a pronominal 3rd person object enclitic with the allomorphs *ia ~ a ~ nia* with the following conditioning environments:

Table 2: Allomorphs of the 3rd person object enclitic

	Occurs following
=a	verb roots ending –i / –e
=nia	the Progressive marker –ka; the prepositions ka, da, pa
=ia	all other verb roots and prepositions

Each of the allomorphs is monosyllabic and the *i* in the spelling of two of its allomorphs represents an onglide [j].[3] As stated in the introduction, the analysis of the Bierebo sequence (*n)ia* as an object enclitic is at odds with data from other Vanuatu languages, where –(*n)i*– is held to reflect the POc transitiviser **-i* or **akin[i]* and retains a transitivising function. Bierebo's closely related neighbour Lewo illustrates this:

(Lewo)

(15) A-yagoga!
2PL:S-IRR.listen
'(Be quiet and) listen!'

(16) A-m-yagoga-ni-a.
2PL:S-R-listen-TR-3SG:O
'You listened to it.' (Early 1994:178)

In Bierebo a synchronic analysis of *ni* as a transitivising device does not hold up. There are no intransitive equivalents to the transitive roots that take the object enclitic, or, put differently, intranstive roots cannot accept the form *=a ~ =ia ~ =nia* to derive a transitive form.[4] Whilst Lewo, for example, allows *–ni* to attach to the intransitive root *pimi* 'come' to derive a transitive form, the equivalent would have to be expressed in Bierebo through an oblique strategy (described further in Section 4) in Bierebo:

(Lewo)

(17) A-pimi-ni-a.
3PL:S-R.come-TR-3SG:O
'They came for it.' (Early 1993:140)

---

[3] An alternative representation would be /*=a ~ ya ~ nya*/ but when orthography issues were discussed, local communities favoured /i/ over /y/ – which was also the case in similar environments such as /kiniu/ '1SG', as opposed /kinyu/. The use of /i/ also reflects the historical origin as POc transitiviser **i* or as an underlying root-final *i*.

[4] Just one exception has been found to this rule: the verb pair *vitali* 'laugh' is used intransitively whilst *vitalia* 'laugh at s.o./s.th.' is a transitive equivalent; Since this is a solitary example -a is not considered as a transitivising device in Bierebo.

(Bierebo)

(18) **a-pinimi=(ni)a

a-pinimi *ka*=nia
3PL:S-R.come OBL=3O
'They came for it.' (elicited)

Table 3 (adapted from Evans 2003: 106) shows examples of POc verb forms which either took the transitiviser *–i* followed by an object enclitic or which took the object enclitics directly to derive a transitive form.[5] In Bierebo the intransitive forms of these verbs simply do not exist and therefore there can be no transitivising function attributable to *=(n)ia*.

Table 3: Selected Bierebo reflexes of POc verbs

Proto Oceanic				
Intransitive forms		Transitive forms		
**puat*	'carry'	**puat-i*	'carry s.th.'	**puat-i-a* carry-TR-3SG:O
**inum*	'drink'	**inum-i*	'drink s.th.'	**inum-i-a* drink-TR-3SG:O
**kati*	'bite'	**kati-*	'bite s.th.'	**kati-a* bite-3SG:O
**poli*	'buy, barter'	**poli-*	'buy, barter s.th.'	**poli-a* buy-3SG:O
Bierebo				
	—	*war* / *pwar*	'carry s.th.'	*pwar=ia* R.carry=3O
	—	*mun*	'drink s.th.'	*mun=ia* drink=3O
	—	*sar* [6]	'bite s.th.'	*sar=ia* bite=3O
	—	*wul* / *pul*	'buy s.th.'	*pul=ia* R.buy=3O

The question of where to draw the morpheme boundaries in the Bierebo sequence of verb + object enclitic does require some clarification. When a verb such as *sar* 'bite' takes the third person object enclitic to produce a phonetic form [sar.ja], then an alternative to the gloss *sar=ia* 'bite=3O' is *sari=a*. This latter analysis would state that the verb root is underlyingly *sari*, with the historical final vowel only surfacing under the condition of the object enclitic attaching. This analysis has not been adopted, however, since native speakers would not accept i-final verb forms in the vast majority of cases,[7] and furthermore, there is

[5] Evans (ibid) argues that it was i-final roots such as *kati 'bite' which took the object enclitics directly.

[6] The POc-to-Bierebo sound changes *k >/s/, and *t > /r/ (intervocalically) are regular.

[7] The Bierebo wordlist elicited by Tryon (1976) and his subsequent papers on verb root-initial alternations in Epi languages including Bierebo (Tryon 1986, 1996) provide numerous verb forms (both transitive and intransitive) with final *–(n)i*: e.g. *dengi* 'cry', *pweli* 'buy', *sani* 'eat'. Unstressed final *–i* is indeed commonly deleted across wordclasses including verbs e.g. *pinim(i)* 'come', *gitit(i)* 'run' , but speakers of the Bonkovio variety of Bierebo rejected the presence of final *–(n)i* on other verb stems, including those cited from Tryon above.

not always historical evidence to support the analysis that there is an underlying final *-i*. Moreover, an analysis that treats the segment *-i-* as part of the verb stem, and *-a* as the object pronominal, does not always stand up on phonological grounds. For example, in utterances such as *ne-waia* 'I'll drag it', such an analysis would imply an underlying stem ending in a sequence of two vowels *-ai* etc, whose final *–i* is deleted in other environments. This would be a process that does not actually occur elsewhere: vowel sequences of /ai/, /ei/, /oi/ occur as diphthongs in Bierebo in words such as *wai* 'vein' and *suwei* 'coconut crab' but no deletion process occurs to reduce them to ***wa* or ***suwe*.

2.1 Object enclitic attaching to prepositions

The object enclitic also attaches to several prepositions to encode a third person complement of the preposition:

Preposition	Roles marked
da	source
pa	goal, beneficiary, recipient
ya	location
ka	instrument, location, oblique
chepcha	comitative

The comitative-marking preposition *chepcha* takes *=ia*, while for *da*, *pa*, and *ka* it is the *=nia* allomorph that attaches,[8] as illustrated for *da* below:

(19) Cha-te ø-joru ***da*** purpwa-te
branch-ABS 3SG:S-R.fall from trunk- ABS
'The branch fell from the trunk.'

(20) ø-joru ***da****=nia*.
3SG:S-R.fall from=3O
'It fell from it.' (elicited)

When the location-marking preposition *ya* occurs in a position where one would expect the object enclitic to attach (judging by the meaning of the utterance), it actually remains phonetically invariant as [ja]. However, I have interpreted the form as representing an underlying combination *ya* + *=ia* 'LOC+3O':[9]

(21) A-bwelu ya pa-te.
3PL:S-R..dance LOC root-ABS
'The branch fell from the trunk.'

---

[8] *Pa* and *da* presumably reflect POC **pani* and **tani* respectively, the verbal prepositions first reconstructed by Pawley (1973); as with the class of verbs in Bierebo it seems that some reanalysis has occurred whereby the *ni* segments only surface in the presence of the enclitic. Again this has led to the current analysis that *ni* can now be considered to be part of the object enclitic.

[9] This analysis is supported by speakers' Bislama translations as *long hem* 'on it' etc, as well as evidence from neighbouring Lewo in which the cognate preposition is *e*, which combines with the 3rd person singular object enclitic to form *e-a* 'LOC-3SG:O'; in fact it is quite likely that the Bierebo LOC preposition *ya* is itself historically a complex form, a combination of *ye* 'place' + *a* '3O'. This would explain why a form ***ya=ia* [jaja] does not occur as this would essentially be a duplication of the object enclitic.

Pa-te	na,	lala	a-de	na	a-bwelu	y=ia
root-ABS	TOP	3PL	3PL:S-R.cut	CONJ	3PL:S-R.dance	LOC=3O

'The roots, they cut (them) and dance on them' (*Purchesi lal ta*)

There are therefore three homophonous forms which the morpheme glosses and orthography seek to differentiate as follows:

Table 4: ya, =ia, and y=ia

Orthography	*Morpheme break(s)*	*Gloss*	*Meaning*
ya	ya	LOC	Locative preposition
ia	=ia	3O	Third person object enclitic
yia	y=ia	LOC=3O	Locative preposition + 3O enclitic

In the following example there is a locational term *mwawa* specifying the meaning expressed by the Locative preposition. Its position here confirms that we are not dealing with a transitivised verb form ***a-bwelu-ia* – which might have been one analysis of the previous example – since *mwawa* cannot host the object enclitic.

(22)

A-bwelu	mwawa	y=ia.
3PL:S-R.dance	above	LOC=3O

'They dance on top of them (the roots).'

Note also the following example, in which the verb *joru* 'fall' followed by the phonological word /daya/ is distinguished as a serial verb construction with a location argument from the mono-verbal clause with a source argument /danya/ shown above and repeated below:

(23)

Ø-joru	ø-da	y=ia.
3SG:S-R.fall	3SG:S-R.strike	LOC=3O

'It fell and struck it (the ground).'

(24)

Ø-joru	da=nia.
3SG:S-R.fall	SRC=3O

'It fell from it' (elicited)

2.2 Non-occurrence of =ia

Due to pervasive vowel deletion in the language the object enclitic is not actually realised when any other form immediately follows the verb complex within the boundaries of the clause or other prosodic unit.[10] What remains can therefore superficially resemble an intransitive clause:

(25)

No-mun	miok.
1SG:S-drink	kava

'I drank/drink/will drink kava.'

[10] Although not a completely regular phonological process, word-final unstressed vowels (including diphthongs) are generally lost in normal speech except when occurring at the very end of a string before a natural pause. A parallel to the deletion of the object enclitic is the loss of the final *–a* or *–ia* from the 3rd person possessive suffix *–na~-nia*.

(26) No-mun=ia.
1SG:S-drink=3O
'I drank/drink/will drink it.'

(27) No-mun rui
1SG:S-drink already
'I drank (it) already.'

(28) ***No-mun=ia rui.*
1SG:S -drink=3O already
'I drank/drink/will drink it already.' (elicited)

Note that the verb *mun* 'drink' cannot be analysed as an intransitive use of the verb since it cannot function intransitively:

***No-mun*
1SG:S-drink

There is no syntactic restriction on which elements that occur after transitive verbs result in the loss of the object enclitic. For example it is deleted before negative markers, prepositions, adverbs and topic/emphatic markers. Rather, it is held to be a wholly phonologically motivated phenomenon of vowel deletion.

Having gone to some length to justify this synchronic analysis of Bierebo –(*n)ia* as not comprising any transitivising element, we now turn to the functions of *ka* in the context of valency.

3 Instrument marking and Instrumental shift

The preposition *ka* is used to mark a participant in an event as an instrument. It occurs with transitive verbs as shown in (29), intransitive verbs (30), serial verb constructions (31), and also with borrowed verbs (32):

(29) A-sup puru-mol ka chesi.
3PL:S-pelt tree-citrus INST wood
'They pelted the orange tree with sticks (to knock down the fruit).'

(30) Ne-sina ka spun.
1SG:S-eat:INTR INST spoon
'I'll eat with a spoon.'[11]

(31) A-m-la-ge tawaga ka sowa.
3PL:S-R-do-block canoe INST sap
'They seal the canoe with sap.'

(32) Ø-pe ukum niada ta ka suta.
3SG:S-be hook fish ART INST octopus
'He caught a fish with the octopus (as bait).' (elicited)

[11] Note that Bierebo has distinct intransitive and transitive roots: sina 'eat; and *sa(n)* 'eat s.t.'

3.1 Instrumental shift

When three participant events featuring an instrument were elicited speakers invariably produced the structures seen above and below in (33):

	SUBJ-V	OBJ	OBL (instrument)	
(33)	Ko-sue-ge	niada	ka	parasut-net.
	2SG:S-throw-trap	fish	INST	parachute-net

'You catch the fish with the cast net.' (elicited)

However, this structure is actually much rarer in the collection of recorded narratives, in which alternative patterns are witnessed. For example, Bierebo speakers often topicalise the NP that refers to the instrument (the 'instrument phrase') through fronting.[12] In such cases only resumptive reference by the object enclitic remains as a trace element in the instrument's original position:

	OBL (topicalised instrument)				SUBJ-V	OBJ	OBL (*trace*)
(34)	[*Chumwa-te*	*ne*	*ø-meno*	*na*],	ko-m-yu-gar	sep	*ka=nia*.
	leaf-ABS	REL	3SG:S-dry	TOP	2SG:S-R-blow-hold	fire	INST=3O

'As for the dry leaves, you can light fires *with them*.' *(Purchesi lal ta)*

The two patterns are contrasted in the formulae below:

Figure 3: Instrument constructions

(i) verb DIRECT OBJ *ka* INSTRUMENT NP (pragmatically unmarked)

(ii) INSTRUMENT NP verb DIRECT OBJ *ka*=3O (topicalised instrument)

There is a variant of this fronted instrument construction, and it is structurally identical to the pattern labelled 'Instrumental shift' by Crowley (2006b) in his descriptions of the Malakula languages Naman and Avava. In Bierebo the instrument phrase is fronted, or even entirely absent from the clause, and the instrument-marking preposition *ka* 'moves' to a position *preceding* the verb's direct object. No trace element is left:

	[OBL (topicalised instrument)]			SUBJ-V	*ka*	OBJ
(35)	[Kulspe-na	chuwa	na]	ø-pit	ka	porotana.
	wing-3SG:P	two	TOP	3SG:S-R.dig	INST	ground

'As for its two wings, it uses them to dig the ground.' (*Man lal ta*)

The Instrumental shift's structure is schematised in (iii), with the instrument NP bracketed to show that it is optional in the clause:

Figure 4: Instrumental shift

(iii) (INSTRUMENT NP) verb *ka* DIRECT OBJ

Indeed, the majority of examples of the construction do not actually involve fronting of the instrument, but rather, ellipsis or 'instrument drop' when the referent of the instrument is

[12] Fronting of NPs is not limited to instrument arguments and the corpus includes examples of fonted direct objects as well as oblique arguments introduced by different prepositions with various semantic roles.

readily accessible from the preceding discourse. In the following examples there are two clauses in each and it is the direct object of the first clause which is understood as the instrument of the second:

(36) A-pwar chumwa-te a-julu ka niada.
3PL:S-R.carry leaf-ABS 3PL:S-wrap INST fish
'They take the leaves and wrap up fish with them (for cooking).' (*Purchesi lal ta*)

(37) Ø-pwar chesi, ø-din ka mablu-te.
3SG:S-R.carry wood 3SG:S-R.bury INST egg-ABS
'It (the incubator bird) brings brushwood and covers up its eggs with it.' (*Man lal ta*)

(38) Ø-mudi-nra kana-na palaiu.
3SG:S-take-remove GCL-3SG:P knife.
'He took out his knife.'

Ø-pre ø-te ka bao.
3SG:S-R.say 3SG:S-IRR.cut INST nambob
'He was about to cut the nambob[13] with it.' (C2_01)

It is not surprising to see no trace of the object enclitic =*nia* attached to *ka* in these examples, as it is recalled that this morpheme only surfaces in utterance final position (see 2.2). Since the verb's direct object always follows *ka* in these kinds of instrumental shift constructions, the enclitic =*nia* is thus always deleted.

These Bierebo cases directly parallel the Naman language examples that Crowley (2006b:211) includes in his description:

(*Naman*)

(39) Kë-vangan raru khën niëkh net.
2SG:IRR-feed 3DL INST fish DEM
'Feed them with that fish.'

(40) Kë-vangan khën raru.
2SG:IRR-feed INST 3DL
'Feed them with it.'

Crowley (2006b: 212) states that he was unaware of any description of instrumental shift other than his own Naman account but he suspected the phenomenon may be more widespread than its absence of overt description in existing grammars suggests. He notes for example an apparent instance in a description of another Malekula language, Neve'ei:

(*Neve'ei*)

(41) Abwit-wahan na'au tuan abwit-lakh bin en no.
2PL:IRR-look.for vine one 2PL:IRR-hang kill INST 1SG
'You will all look for a vine and you will all throttle me to death with it.'

Crowley (2006b: 211-212) also reports a Bislama parallel of this construction used by some speakers on Malakula. For example, the proposition 'he cut it with this knife' could be rendered in two ways:

[13] A *nambob* is a kind of wild root vegetable.

(*Bislama*)

(42) Naef ia hem i katem kokonas long hem.
knife this 3SG PRED.MKR PM-cut coconut PREP 3SG
'He cut the coconut with a knife.'

(43) Naef ia hem i katem long kokonas.
knife this 3SG PRED.MKR cut PREP coconut
'He cut the coconut with a knife.'

And he suggests that the second variant is in fact a calque of the vernacular languages' instrumental shift: "the construction appears to be sufficiently widely distributed on Malakula for a direct calque to have become well established in the Bislama of many speakers on the island involving the instrumental use of the oblique preposition *long*". To Crowley's account, some further information and examples can be added. The Bislama version of the construction is in fact not limited to Malakula, as Bierebo speakers on Epi use the same pattern. A recorded Bislama translation of the following narrative excerpt, mirrors the instrumental shift of the vernacular:

(44) Ø-biar-pla puruvar lal dupwa ningi. Ø-dun ka ti.
3SG:S-pick-remove stone PL ANA DEM. 3SG:S-R.scald INST sea
[Bisl.] *Hem i karemaot ston ia. Hem i bonem long solwota*.
('She picked out those stones there and scalded the sea with them') (B2_07)

It is quite possible that this pattern is used elsewhere on Epi too. Early's (1994) Lewo grammar does not mention instrumental constructions that deviate from the basic structures shown above as (i) and (ii). However, the following Lewo example resembles the Naman, Avava, and Bierebo examples of instrumental shift:

(*Lewo*)

(45) Ne-la suri tai ne-yagoga-n e-ko.
1SG:S-IRR.take thing ART 1SG:S-IRR.listen-TR LOC-2SG
'I will get something (the stethoscope) and listen to you with it.'
(Early (1994: 290); glosses amended)

In his analysis, Early (ibid:290) proposes that the preposition *e* is marking the location rather than the instrument of the listening i.e. 'I will listen to it (the stethoscope) on you', but the free translation he supplies, and the fact that instrument phrases are marked by *e* elsewhere,[14] suggests that this might be an example of an Instrumental shift construction in Lewo, too.

Outside Vanuatu, Evans (2003: 149) includes Bauan Fijian and Tongan data in her discussion of reflexes of POc **akin[i]*. She refers to the 'trace element' use of Bauan Fijian *kina* following Pawley (1975:6), describing it as 'an anaphoric element which is left as a trace when an oblique inanimate noun phrase is topicalised or relativised:

[14] The same preposition *e* is used to mark both location and instrument roles in Lewo. Early (1993:286) labels it as an oblique preposition in this description but the glosses are consistently LOC, even when it clearly marks instruments e.g. *ateroga e kokani playu* ' they cut it just with a small knife' (ibid:288).

(*Bauan Fijian*)

(46) Na kau oqo au moku-t-a kina na koli.
ART stick this I hit-TR-it with:it ART dog
'This is the stick with which I hit the dog.' (Pawley 1973:146)

The Tongan example, featuring *'aki* is also a direct equivalent:[15]

(47) Na'á ne to'o 'a e maea
PAST 3SG take ABS ART rope
'o ne ha'i 'aki hoku ongo nima.
CONJ 3SG bind with POSS:1SG DL hand
'He took the rope and tied my two hands with it.'
(Churchward 1953:148; glosses from Evans 2003:149)

Crowley (2006a:137; 2006b:211) suggested that for Avava and Naman this construction might have evolved as a strategy to avoid preposition stranding. This seems quite plausible for those languages, but in the case of Bierebo, preposition stranding is avoided by the resumptive use of the object enclitic =*nia*, as shown in (34) above, for example.

The occurrence of Instrumental shift in Bierebo is likely affected by factors related to information structure in discourse, in particular, topic continuity and foregrounding. The elipsis of the instrument certainly achieves economy in discourse but with the attendant risk of confusing the hearer. It must be significant that in the examples presented of ellipted instruments, identifying the referent is straightforward because the instrument is present in the immediately preceding clause. One might speculate then that the leftward movement of *ka* in the clause occurs in order to preserve a short discourse distance between it and (the antecedent of) its object. In other words both topic continuity and economy are achieved by the movement of *ka*. Alternatively, it is the closer proximity of *ka* to the verb which is the most significant aspect of the construction. Moving *ka* to the post-verbal, direct object position and simultaneously shifting the direct object towards the periphery could be understood in terms of an iconic rearrangement of the arguments to reflect their relative importance in the event. This is often the motivation for applicativisation strategies which promote a peripheral participant to the clause core where the higher ranked syntactic status reflects its semantic importance in the event. Instrumental shift might therefore be understood as a step in the direction of applicativisation, albeit limited to one specific clause type and without a full morphosyntactic rearrangement of argument structure. Systematic investigation of the phenomenon is clearly necessary in order to gain a clearer picture.The idea of incomplete applicativisation provides a link to the next section which describes the addition of O arguments to formally intransitive verbs.

4 Valence-increasing function of *ka*

The form *ka* introduces a second argument in certain clauses that express a two-participant event. A variety of semantic roles are attested, some of which are predicted by the behaviour of cognate forms in other Oceanic languages, based on Evans (2003:ch.5). A list of intransi-

[15] An anonymous reviewer pointed out that the related Samoan form *a'i* also behaves in the same way.

tive verbs which can be followed by *ka* plus an O argument is given in Table 5 below, grouped by the semantic role of the introduced NP;[16] some of the more frequent type occurrences are illustrated with examples.

Table 5: Intransitive roots taking ka *plus second participant*

Intransitive root	Root + *ka*	Semantic role of introduced participant
chele 'bathe'	*chele ka* 'dive for s.th.'	goal
krase 'look, search'	*krase ka* 'look for, search for'	goal
lotu 'pray, worship'	*lotu ka* 'pray for'	goal / beneficiary
vinimi 'come'	*vinimi ka* 'come for s.th. or s.o.'	goal
sina 'eat'	*sina ka* 'eat with e.g. fork'	instrument
yel 'walk'	*yel ka* 'walk with/on'	instrument?
chulua 'vomit'	*chulua ka* 'vomit s.th.'	theme
kulul 'shake'	*kulul ka* 'shake'	theme
moluwe 'exit'	*moluwe ka* 'pass s.th. out (excrete)'	theme
valua 'paddle'	*valua ka* 'paddle (a canoe)'	theme
vina 'steal'	*vina ka* 'steal s.th.'	theme
yos 'race, fly'	*yos ka* 'hurl s.th., fling o.s'	theme
sin 'be slippery'	*sin ka* 'slip'	patient
soora 'get married'	*soora ka* 'marry s.o.'	patient
yumwa 'work'	*yumwa ka* 'make, build s.th.'	creation/product
teng 'cry'	*teng ka* 'cry about, mourn s.th. or s.o.'	stimulus
tooluk 'hide'	*tooluk ka* 'hide from, evade'	source
magul 'call out'	*magul ka* 'call out for'	addressee
wu 'whistle'	*wu ka* 'whistle s.th., whistle for'	addressee
yo 'sing'	*yo ka* 'sing'	product
mon-bwe 'dream'	*mon-bwe ka* 'dream of/about'	content
vichang 'speak'	*vichang ka* 'speak in (a language)'	content/instrument?
vichang mum 'whisper, gossip'	*vichang mum ka* 'gossip about s.th. or s.o.'	content
vilu 'count'	*vilu ka* 'count s.th.'	content
vuche 'be full'	*vuche ka* 'be full of s.th.'	content

Despite the distinction drawn between the INST and OBL functions of *ka*, there are inevitably grey areas, such as the following examples where the instrument roles are debatable:

(48) Ko-yel ka marachi-cha-mwa
2SG:S-IRR.walk OBL/INST digit-leg-2SG:P
'Tiptoe! (lit. walk on/with your toes)'

(49) A-pichang-ka ka Pranis
3PL:S-R.speak-PRG OBL/INST French
'They're speaking French.'

[16] As this phenomenon was not investigated systematically it is suspected that there are likely more verbs that behave in this way.

There are many less ambiguous cases, however. For the verb *valua* ‘paddle’ *ka* introduces a theme, for example:

(50) Ko-valua
2SG:S-IRR.paddle
‘Paddle!’

(51) Ko-valua ka tawaga
2SG:S-IRR.paddle OBL canoe
‘Paddle the canoe!’

And with other verbs a purpose or goal role is added, as illustrated by the following pair:

(52) Ko-vitove ko-chele.
2SG:S-IRR.go.down 2SG:S-IRR.bathe
‘Go down (to the sea) and wash.’

(53) A-sidom a-chele ka marasumomu
3PL:S-think 3PL:S-IRR.bathe OBL trochus
‘They want to dive for trochus.’ (elicited)

The following pair illustrate that *ka* introduces an argument with the role of theme for verbs of secretion:

(54) Ne-julua
1SG:S-R.vomit
‘I vomited’

(55) Ø-julua ka purusa
3SG:S-R.vomit OBL blood
‘He vomited blood.’[17] (elicited)

There are few, if any, instances where the argument introduced by *ka* has a prototypical patient role i.e. where it is acted upon and undergoes a significant change of state. The introduced argument can certainly denote a participant semantically important to the meaning of the verb e.g. *soora ka* ‘marry s.o.’[18]

Three participant events will not be discussed at length here due to constraints on space, but the following examples illustrate the use of *ka* in this context, and Table 6 provides a summary of the semantic roles of the arguments introduced by *ka* in three participant events.

(56) A-pangan kirpui ka paravi
3PL:S-feed pig OBL banana
‘They fed banana to the pig/they fed the pig on/with bananas.’ (elicited)

---

[17] Secreted/excreted body products are roles commonly introduced by a reflex of POC **akin*[*i*] in Oceanic languages (Evans 2003:196). This is contrasted with the location of excretion/secretion which is marked by reflexes of POC *i. In Bierebo the location is either morphologically unmarked or expressed by a SVC with *-lele* 'spoil' in V2 position.

[18] Indeed in a parallel example from the Taba language with a verb meaning 'marry', Evans (2003:168) refers to the argument introduced by *ak* (the bride) as a 'patient'.

(57) Kiniu ne-m-la-pian lala ka yo
1SG 1SG:S-R-do-teach 3PL OBL song
'I taught them the song.' (elicited)

Table 6: Semantic roles of Os in Three Participant events involving ka

	Verb	Direct Object	Oblique Object (following ka)
Oblique *ka* strategy	VARIOUS	VARIOUS	instrument
	la-pian 'teach'	addressee	content
	ki-longlong 'show'	content	addressee
	vangan 'feed'	recipient	theme
	wudi 'take (photo)'	patient	depicted
	sa 'eat'	theme	accompaniment[19]
	yobio 'call,name'	recipient	theme

The examples above show that *ka* goes beyond marking just instruments to the broader function of introducing a wider range of arguments. The next subsection attempts to draw conclusions relating to the evolution of *ka*.

4.1 Analysis of *ka*

This section compares the semantic roles marked by Bierebo *ka* with those reconstructed for its POC antecedent **akin[i]* and then examines the apparent structural ambiguities of the oblique arguments marked by *ka*.

Evans (2003:ch5) looks at reflexes of POC **akin[i]* and **-i* in contemporary languages and posits a set of semantic roles for each, which are shown below in *Table 7* alongside the Bierebo findings. It can be seen that the roles denoted by *ka* align with those of **akin[i]* for some of the verb types (excretion/secretion, and process-action verbs most notably) but that for the other verb types Bierebo *ka* denotes roles that are a mixture of those associated with both **-i* and **akin[i]*.[20]

*Table 7: Comparison of roles denoted by Bierebo ka with *akin[i] (adapted from Evans 2003:235)*

Verb type	Roles denoted by O with **-i* and/or object enclitics	Roles denoted by **akin[i]*	Roles denoted by Bierebo *ka*
Motion verbs	Location / goal	concomitant	goal
Psychological and emotional states	stimulus	Cause/stimulus	stimulus
Speech and cognition	addressee	content	Addressee; content
Excretion/secretion	location	product	product
Process-action verbs		Instrument, beneficiary	Instrument, beneficiary

[19] This structure is used for e.g. 'I ate the chicken with rice', where 'rice' is the accompaniment expressed by the oblique

[20] Bierebo is perhaps not unusual in this regard: Thieberger (2006:218), for example, describes a similar situation for South Efate.

Evans (2003) concludes that POC **akin[i]* was a preposition and that modern reflexes of it as suffixes in some languages and prepositions in others can be explained in terms of a reanalysis of the sequence of morphemes following the verb: In structure (i) the original preposition forms a PP constituent but this sequence is easily reanalysed so that **akin-i* falls within the boundaries of the verb complex as a verb modifier:

*Figure 5: Two analyses of clauses with *akin[i] (Evans 2003:238)*

(i) [SUBJ=V]$_{VC}$ [*akin-i*=OBJ NP$_{X}$]$_{PP}$

(ii) [SUBJ=V *akin-i*=OBJ]$_{VC}$ [O$_{X}$]$_{NP}$

From there the modifier becomes a suffix in some cases, especially if the combination of verb plus **akin*[*i*] had developed a specialised meaning (Evans *ibid*). For contemporary Bierebo, I believe that this kind of process is ongoing. At one end of the spectrum is the example below:

(58) A-pichang-ka ka Pranis.
3PL:S-R.speak-PRG OBL/INST French
'They're speaking French.'

I have glossed the *ka* morphemes in the order of Progressive suffix followed by preposition since in the prosody of the utterance there is a perceptible pause between the two *ka* forms. Since no pause is permitted between the Progressive marker and the preceding elements in the verb complex it must be concluded that the *ka* following the root *pichang* is indeed the Progressive suffix and that the second *ka* is a preposition forming a phonological tie with its complement. At the opposite end of the scale is the applicativised *yumwa-ka* 'work (on), prepare s.t.' which is contrasted with its underived intransitive counterpart in the following examples:

(59) Miok ø-m-yumwa.
kava 3SG:S-R-work
'The kava has worked (taken effect).'

(60) A-m-yumwa-ka miok.
3PL:S-R-work-APP kava
'They prepared the kava'

(61) ***A-m-yumwa* *miok.*
3PL:S-R-work kava
(elicited)

(62) A-ban a-m-yumwa ya Kwinslan.
3PL:S-R.go 3PL:S-R.work LOC Queensland
'They went and worked in Queensland;

a-m-yumwa-ka plantesen na kon.
3PL:S-R-work-APP plantation of corn
… they worked the corn plantations'. (B1_13)

The addition of the Applicative *ka* results in a new phonological word since there is a shift in stress in the verb root: /'yu.mwa./ > /yu.'mwa.ka/, thus preserving the language's regular penultimate syllable stress. The Progressive aspect marker on the other hand does not affect

word stress. This point is significant because it allows the correct order of homophonous forms to be ascertained when there is co-occurrence of the Applicative suffix and the Progressive marker. For example, in the verb complex *amyumwakakania* shown below, primary stress falls on the /mwa/ syllable, demonstrating that it is the stem *yumwa-ka* 'work-APP' which is then suffixed by the Progressive *-ka*.

(63) Me-sidom me-vitove me-che ja…
1EXC.PL:S-want 1EXC.PL:S-IRR.go.down 1EXC.PL:S-IRR.see a.little

ya na *a-m-yumwa-ka-ka=nia*.
what TOP 3PL:S-R-work-APP-PRG=3O
'We wanted to go down and have a look at what they were building.' (MZ000010)

Besides this phonological integration of the suffix *ka* with the verb there is also the fact that it can co-occur with the preposition. This seems to put the issue of their discreteness beyond doubt:

(64) Yumwa pwo=nga na *a-m-yumwa-ka ka* chumwa-viara.
house all=just TOP 3PL:S-R-work-APP INST leaf-sago
'All houses, they make them with sago thatch' (*Purchesi lal ta*)

However, there is perhaps some midpoint between the totally unincorporated PP oblique argument and the fully integrated applicative suffix. This conclusion is based on a variety of formal clues presented below.[21] In examples where the NP introduced by *ka* is fronted or relativised, then crucially *ka* remains next to the verb. This would suggest that the *ka* does not form a unitary, moveable PP constituent with the NP:

(65) yo lal ne na a-yo ka ya 'childrens.day'
song PL REL TOP 3PL:S-IRR.sing OBL LOC children's.day
'the songs which they will sing on Children's Day'

The position of the negative marker *re* can be useful in identifying the limit of the verb nucleus since direct objects and peripheral arguments usually follow it:

(66) Ko-vin re mani da Tarmasuaia.
2SG:S-IRR.ask NEG2 money from NAME
'Don't ask for money from Tarmasuaia.' (elicited)

In the case of verbs which have arguments introduced by *ka* there are examples such as the following in which *ka* precedes *re*, suggesting that a degree of incorporation of the preposition has taken place:

(67) Ko-vichang-mum ka re taru ningi!
2SG:S-IRR.speak-soft OBL NEG2 man DEM
'Don't gossip about this man!' (elicited)

[21] Definitive evidence remains elusive in my corpus, and more systematic testing of the phenomenon is required before generalisations can be made.

Contrasting with the example above though, there are cases such as the following in which *ka* occurs outside *re*, even though the combination of verb + *ka* + O appears to be a lexicalised collocation:

(68) Ko-valua manene re ka tawaga!
2SG:S-IRR.paddle strong NEG2 OBL canoe
'Don't paddle the canoe (too) strongly!' (elicited)

This is consistent with the behaviour of goal PPs featuring *pa*:

(69) Ko-chogoo-manene re pa kiniu!
2SG:S-IRR.shout-strongly NEG2 at 1SG
'Don't shout at me!'

Another form which is useful in delimiting the righthand edge of the verb complex is the Progressive marker *ka*, but its homophony with the oblique *ka* obviously causes ambiguity when no pauses are perceptible:

(70) A-pu ka ka yo ta.
3PL:S-R.whistle OBL/PRG OBL/PRG song ART
'They're whistling a song.'

The fact that the Completive aspect marker *pwo* occurs outside the oblique *ka* in the following instance suggests that in the sentences above it is the order of OBL, followed by PRG that is correct and again that some degree of incorporation of the preposition with the verb has occurred.

(71) Me-m-yo ka pwo yo dupwa ningi.
1EXC.PL:S-R.sing OBL CPLT song ANA DEM
'We finished singing the songs.' (B1_02)

Given this mixed evidence, and the fact that the phenomenon has not been systematically investigated it seems best to conclude that there are indeed different degrees of incorporation of *ka* which vary on a lexeme to lexeme basis and perhaps also from one speaker to another,[22] such that there is in fact a grey area between the two structures shown in Figure 6.

Figure 6: Analysis of Bierebo oblique arguments marked by ka

(i) [SUBJ-V]$_{VC}$ [*ka* NP]$_{PP}$ e.g. *vichang ka* 'speak in a language'
(ii) [SUBJ-V-*ka*]$_{VC}$ [O]$_{NP}$ e.g. *yumwa-ka* 'work on, prepare'

This instability would not be unusual in light of the evidence from other Vanuatu languages. For Naman, Crowley (2006b:37) describes the use of a transitiviser suffix *–an*. The term 'pseudo-transitivity' (2006b:160) is then used to describe how the preposition *khën* (which elsewhere marks a number of different semantic roles in PPs, including instrument), also

[22] Bierebo displays some variety even within the Bonkovio dialect, reflecting a history of population dispersal along clan lines followed by regrouping years later.

occurs to allow a formally intransitive verb to be followed by "a noun phrase referring to the entity directly affected by the action expressed by the verb for which there is no directly equivalent transitive form".

(*Naman*)

(72) Air tuen ø-isiëkh khën nense.
PL INDEF 3SG:R-climb TR Tahitian.chestnut
'One of them climbed the Tahitian chestnut.'

Crowley (2006b:125) cites a number of verbs which behave in this way which translate as 'look' vs 'look for'; 'work vs work on'; 'teach vs teach s.th.'.

Similarly, in Avava, Crowley (2006a:114) reports that the oblique preposition *i* marks instruments, but also introduces NP "complements" to different kinds of intransitive verbs:

(*Avava*)

(73) I-rar i momok te.
3SG:R-angry at wife POSS:3SG
'He was angry with his wife.' (Crowley 2006a:114)

He distinguishes a 'pseudo-transitivising' function of the preposition, in which a formally intransitive verb can be followed by a patient NP:

(74) I-sisih i vwala-m.
3SG:R-suck TR penis-2SG
'S/he sucked your penis.' (Crowley 2006a:114)

For Sye/Erromangan, Crowley (2001:139) reported that there is an ongoing reanalysis of oblique prepositions as suffixes: that is, intransitive verb roots have 'captured' the preposition as a suffix in some cases but not others, resulting in the presence of homophonous or near homophonous suffixes and prepositions with identical functions. The result is that for some Erromangan speakers both of the following sentences are acceptable:

(Sye / Erromangan)

(75) Yac-alwo-gi nacave
1SG:FUT-MR:vomit-TR kava
'I will disgorge the kava.'

(76) Yac-alwo ogi nacave.
1SG:FUT-MR:vomit OBL kava
'I will disgorge the kava.' (Crowley 2001 :139)

In South Efate, there is a close parallel to the Bierebo situation. Thieberger (2006:198) distinguishes two homophonous forms, a transitivising suffix *-ki* and a preposition *ki*. The preposition *ki* primarily introduces instrumental roles. Thieberger is able to formulate some morphosyntactic diagnostic criteria to distinguish the two but uses semantic evidence to distinguish them where the morphosyntactic evidence is ambiguous (ibid:202):

siwer	'to walk'	*siwer-ki*	'to walk on'	*siwer ki*	'to walk with (e.g. shoes)'
weswes	'to work'	*weswes-ki*	'to work at'	*weswes ki*	'to work with'

For Paamese, Crowley (1983:277-278) and (1992:viii) refers to the difficulties in distinguishing between the transitivising suffix *–ni* and the preposition *eni* which optionally attaches with the clitic form *=ni*; he again suggests that "reanalysis between cliticised prepositions and a transitive suffix seems to be in progress" (Crowley 1992:viii), citing a comment made in Crowley 1983).

Given Epi island's turbulent history of depopulation, immigration, and complex internal migrations it is not surprising to find areas of its languages' grammars to be somewhat messy and unstable.[23] What is more surprising is that two very closely related languages on the island – Bierebo and Lewo[24] - have followed such different grammatical pathways in the area of valency. Early (1993:321) writes that "nearly all intransitive verbs in Lewo can be transitivised with the particle *–ni*…and valence increasing with *–ni* seems to be preferred to incorporating participants into the clause as oblique arguments". Bierebo on the other hand uses the oblique argument strategy almost exclusively.

5 Conclusion

This paper has presented issues concerned with valency in Bierebo. It has been shown that a reanalysis of the post-verbal sequence *=nia* has taken place and that what superficially resembles a transitivising device common to many Oceanic languages in fact has no such function in Bierebo. The synchronic analysis given here treats this sequence as an allomorph of the object enclitic.

The discussion has also covered the widespread use of oblique arguments marked by *ka* to refer to participants that are directly involved in the event described by a verb. A description of events featuring instrument NPs in Bierebo included an account of the typologically unusual Instrumental shift construction, proving that the pattern does indeed occur beyond Malakula. I have suggested that this construction's movement is motivated by information structure factors and could be seen as a way of foregrounding the instrument in clauses. The remainder of the paper has examined details of the oblique marking function of *ka* and suggested that there is some structural ambiguity surrounding the status of the oblique arguments introduced. As well as a clear example of the preposition *ka* being incorporated as an applicative suffix the evidence of other verbs points to varying degrees of incorporation and perhaps an ongoing situation of instability in this area of the grammar.

[23] As well as the decimation of the Kuwae volcanic eruption in the 15th century and widespread labour recruitment in the nineteenth century the island was also plagued by introduced diseases and tribal feuds over the last two hundred years leading to acutely low population numbers. The readily'available' land was extensively cultivated by European planters in the 19th and 20th centuries who brought in workers from numerous islands to meet the labour shortages.

[24] Tryon (1976) found up to 70% lexical cognates between these two languages.

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The initial vowel copy in the Sakao dialect of Wanohe (Espiritu Santo)

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Abstract The aim of this paper is to analyse the *$-* prefix in the Sakao dialect of Wanohe (NE Santo). *$-* is a morpheme formed by an initial vowel which copies the quality of the first vowel nucleus of the word (e.g. *ra* 'pig' → ***a-ra***). This morpheme occurs with all common nouns and verbs beginning with a consonant, when they are not marked for TAM and/or person. After a short presentation of the morpho-phonemic features of the prefix (Section 2) I will show that common nouns, but not personal nouns, take this prefix. I will then discuss verbs exhibiting *$-* prefix (Section 3). In Section 4, I will explain the syntax of this morpheme and show that it enables common nouns and verbs to access the functions to which personal nouns have direct access.

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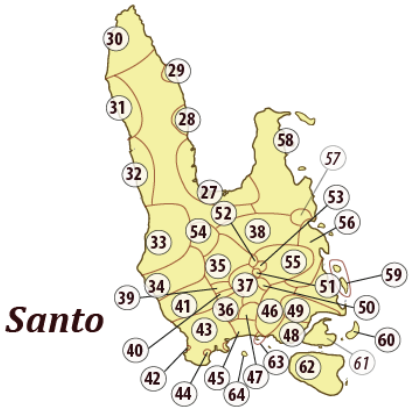
1 Presentation

The Wanohe language is an Oceanic language spoken by around 3,500 speakers on the north-eastern tip of the island of Espiritu Santo (#58 on the map). It is divided into two dialects: Sakao in the north (1500 speakers) and N'kep in the south (2000 speakers).



The language was described in 1974 by Jacques Guy. A new description of this language is currently being made by the author of this paper. The data cited in the present paper were collected by the author during three field surveys: August-October 2010, July-October 2011 and July-September 2012 in the village of Port Olry.

This paper focuses on the "vowel copy" prefix of Sakao, which Guy (1974) glosses as "*$-*". After describing the morphophonemics of *$-* (*Section 2)*, I will compare those verbs and nouns which take this prefix with those that do not take it (*Section 3*). Finally I will present the syntax of *$-* (*Section 4*).

2 Morphophonemics

A difference must be made between words beginning with a consonant and words beginning with a vowel.

2.1 Words beginning with a consonant

If a word begins with a consonant, the morpheme *$*- is an initial vowel which copies the vowel nucleus of the next syllable (V)[1]. For example, if V is /a/, then *$*- is [a], if V is /i/ then *$*- is [i] and so on:

(1) ʁ-a-m-te **a-maniɔk**.
NON.INCL-PL-REAL-plant $-manioc
'We plant manioc.'

There are some exceptions. If V is an open-mid vowel then *$*- is the corresponding close-mid vowel. This is because there is no opposition between open-mid and close-mid vowel in unstressed syllables:[2]

(2) Loɾoʁɔn a-m-tep **ø-nœð** ni-ŋ.
TOPON 1SG-REAL-plant $-coconut CLASS.POSS-POSS.1SG
'In Lororon, I plant my coconuts.'

If the first syllable of the word begins with the glide /w/ and V is a back rounded vowel, then *$*- is [u]. If the first syllable of the word begins with the glide /j/, then *$*- can be [i] or [y], depending on the speaker.

Finally, if the word begins with a consonant cluster, *$*- seems to be unstable. For example, with *-tnar* 'food', *$*- can be [a] or [e]. This alternation is in in free variation:

○ **$=*a***

(3) Ve-ʁ-a-jan l-iaɾ ʁ-a-m-ky-p l-**a-tnaɾ**
when-NON.INCL-PL-go LOC-garden NON.INCL-PL-REAL-take-CTRL LOC-$-food
ʁ-a-m-ky-an l-lɔm.[3]
NON.INCL-PL-REAL-take-go LOC-house
'When we go to the garden, we take food and bring it home.'

○ **$=*e***

(4) ʁ-a-m-ky **e-tnaʁ**-ʁam l-yaɾ ʁ-a-m-la-pɔɾ.
NON.INCL-PL-REAL-take $-food-PL.POSS LOC-garden NON.INCL-PL-REAL-come-with
'We take our food in the garden and we come back with it.'

2.2 Words beginning with a vowel

Monosyllabic words beginning with a vowel take a *n*- prefix which is an allomorph of *$*-. It is a reflex of the POc article **na*.

---

[1] This morpheme is probably a reflex of the Proto-Oceanic article **a*.

[2] In Sakao, the stressed syllable is the last syllable of the word.

[3] There is no *$* between *l* and *lɔm*. See fn. 10.

(5) n-ym-hœ-ʁ ʁ-a-vɔɾʁe.
$-work-CLASS.POSS-1SG NON.INCL-PL-plenty.REAL
'I have a lot of work.'

Only a few monosyllabic words begin with a vowel: *n-ɔn* 'sand', *n-ɔd* 'fowl', *n-ym* 'work', *n-εm* 'penis', *n-e* 'axe', *n-ε* 'Malay apple' and *n-aðl-* 'clan'.

Nouns with two or more syllables beginning with a vowel are not introduced by any morpheme:

(6) ʁ-a-m-teje iðεl.[4]
NON.INCL-PL-REAL-plant banana
'We plant bananas.'

(7) ule-n vwe.
leg-3SG.POSS hurt.3SG.REAL
'His leg hurts.'

Table 1 — Phonology of the $- prefix

Stem's first syllable	***Form taken by $-***	***Examples***
Ci	/i/	***i****-ʁini* tree
Cy	/y/	***y****-hy* flute
Ce	/e/	***e****-kenu* canoe
Cε	/e/	***e****-nεs* fish/bird
Cœ	/ø/	***ø****-tœr* birth
Ca	/a/	***a****-ra* pig, ***a****-kat* car
Cu	/u/	***u****-vu* hole
wɔ	/u/	***u****-wyð* bush,
Co	/o/	***o****-novɾað* one kind of sugar cane
Cɔ	/o/	***o****-ðɔn* hill, ***o****-lɔm* house
Cɒ	/ɒ/	***ɒ****-mɒrkar* kid, ***ɒ****-vɒt* origin
jV	/i/, /y/	***i****-jar/* ***y****-jar* garden
V	∅, /n-/	*iðεl* banana, *ulen* leg, ***n****-εm* penis

3 *$-* and parts of speech

$- is used to introduce common nouns, non-predicative verbs and some types of verbal phrase used as complement clauses.

3.1 Nouns

Sakao makes a distinction between common nouns, which can be preceded by *$-*, and personal nouns, which cannot. François (2007) mentions that in the Torres and Banks Islands, a distinction is made between common nouns, which take an *n-* article and personal nouns which take an *i-* article or no article. About personal nouns, François says:

[4] When Guy made his description (1974) he mentioned that *i-* of *i-ðεl* can be lost in some cases (incorporation, composition) depending on the speaker. This is not the case today since *i-* is always present.

> On the semantic level, a "personal" NP normally has a human specific referent. This is typically the case with proper names, kin-terms, pronouns or deictics with human reference. (François 2007:322)

This difference is also relevant in Sakao since personal nouns do not take *$-*. These personal nouns are listed below.

3.1.1 Address forms

Address forms designate nouns which can access directly the vocative function:

(8) tata!
'Daddy!'

When they are arguments, address forms do not take *$-*:

(9) tata-hœ-ʁ ma-jan l-iaɾ
daddy-CLASS.POSS-1SG 3SG.REAL-go LOC-garden
'My daddy goes to the garden.'

There are several forms of address in Sakao:

mama 'mum'	*tata* 'dad'	*kø* 'young girl'
vuvu 'grandfather/ uncle'	*kɒtɒl* 'young boy'	

3.1.2 Kin-terms

Unlike address forms, kin-terms cannot access the vocative function.

(10) ðiɔ-n ma-lam.
mother-3SG 3SG-come
'His mother comes.'

There are several kin-terms in Sakao:

watyɾ 'chief'	*waɾi* 'man/husband'	*wakœɾ* 'woman/wife'[5]
ðiɔn 'mother'	*ðanan* 'father'	*walðœn* 'child'
manan 'brother'	*utien* 'sister'	*taten* 'sister'

3.1.3 Proper nouns

(11) Sɛɾ ma-jan lykyn Halel.
PROPER.N 3SG.REAL-go PREP.LOC PROPER.N
'Ser goes to Halel's house.'

3.1.4 Names of personified animals in tales

In some tales, animals are personified. If so, they do not take *$-*:

(12) **ʁaɾ** mi-lliɾ a-ra mom l-a-strap-hɔ-n.
flying.fox 3SG.REAL-fasten $-pig DEM LOC-$-strap-CLASS.POSS-3SG
'Flying Fox fastened the pig to his strap.'

---

[5] Unlike in Torres-Banks languages, 'man' and 'woman' are never preceded by an article in Sakao.

3.1.5 Pronouns

Personal pronouns and demonstrative pronouns do not take *$*-:

(13) jœn a-m-jil-p ni.
1SG 1SG-REAL-hit-CTRL 3SG
'I hit him.'

(14) jyɾ[6] ʁ-a-m-jil-p wa.
3PL NON.INCL-PL-REAL-hit-CTRL PRO.DEM
'They hit him/it.'

3.2 Verbs

Verbs can also be preceded by *$*-.

(15) Benjamin ma-**ssaru** a-Wanohe.
B. 3SG-speak $-Sakao
'Benjamin speaks Sakao.'

(16) Arbore ʁ-ønør-hɔv-yn **a-ssaru** ɛnɛn mœrœŋ.
Arbore 3SG.IRR-talk-MED-APPL $-speak POSS before
'Arbore will talk with the language of before.'

(17) a-m-**rɛm-rɛm**.
1SG-REAL-REDUP-think
'I am thinking.'

(18) my-jym-pɔɾ-jyɾ mi:jan **ɛ-rɛm-rɛm** o-hɛð ma-lam.
3SG.REAL-work-with-3PL until:DUR $-RED-think PART-bad 3SG.REAL-come
'He works with them until a bad thought comes.'

Semantically, verbs preceded by *$*- denote an action, their agent is marked as genitive:

(19) ni mœ-**ʁœðhere** e-teɔt ʁ-a-vɔrʁe.
3SG 3SG.REAL-know $-thing NON.INCL-PL-many
'He knows many things.'

(20) **œ-ʁœðhere**-hɔ-n ∅-vriv-usssi.
$-know-CLASS-POSS.3SG 3SG.REAL-big-very
'His knowledge is great.'

$-Verbs cannot have their patient expressed except in a specific type of complement clause, which will be discussed in the following section.

3.3 *$*- verbal phrase used as a complement clause

$- prefixes a verbal phrase used as a complement clause when:

1) the complement clause is introduced by a modal verb such as *-nɔs* 'to want', *-sɒkɒl*: 'to not want', *-ʁœðhere 'to know'* or phase verb such as *-hœɾ* 'to finish' *-tnɛt* 'to start' or *-stat* 'to start';

[6] Compared to the genitive mark *ŋyɾ*, it appears that *j*- can be considered as a reflex of the POc personal article **i*. But this prefix does not appear with all persons (for example 2PL *ʁe*). This is why I did not choose to separate *j-yr* with a hyphen.

2) the subject of the complement clause is co-referent with the subject of the main clause. Therefore the complement clause cannot be TAM marked[7]:

(21) ʁa-m-nɔs **a**-jan l-iaɾ.
PL-REAL-want $-go LOC-garden
'We want to go to the garden.'

(22) a-m-tnet **e**-kelɛp e-repɛp te.
1SG-REAL-start $-write $-book ART.INDEF
'I start to write a book.'

$-marked complement clauses are objects, they cannot access the subject function. Thus (23) is ungrammatical:

(23) ****œ**-rœs* *o-lɔm* *vɔʁvɔʁ*.
$-make $-house good.3SG.REAL
'It is good to make houses.'

This kind of complement clause does not have the same distribution as a *$-noun* or another *$-verb*. For example this construction cannot have an indefinite article. Therefore a sentence like (24a) cannot be interpreted as (24b) but only as (24c):

(24a) a-m-nɔs **e**-kelɛp e-repɛp te.
1SG-REAL-want $-write $-book ART.INDEF
'I want to write a book.'

(24b) *a-m-nɔs [*e-kelɛp* e-repɛp *te*]

(24c) a-m-nɔs e-kelɛp [*e-repɛp te*]

Indeed, a *$*-Verb used as a head of a complement clause is still a predicate and in Sakao, predicate phrases cannot have modifiers such as indefinite articles[8]. On the other hand, other *$*-Verbs have the same distribution as *$*-noun (attributive, article, possessor and so on) because they are not predicates:

(25) my-jym-pɔɾ-jyɾ mi:jan **ɛ-rɛm-rɛm** o-hɛð ma-lam.
3SG.REAL-work-with-3PL until $-RED-think PART-bad 3SG.REAL-come
'He works with them until a bad thought comes.'

Looking at the restriction of the distribution of *$*-verbal phrases used as complement clauses, it appears that *$*- cannot be analysed as a nominalizing morpheme.

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[7] Other kinds of complement clauses are introduced by *ve* 'to say' which is employed as a V2 in a core-layer serial verb construction:

ʁuru vɔʁ t°-m-nɔs t-**ve** ʁa-jil-p ʁuɾu?
2DU too PAUC-REAL-want PAUC-SAY PL-kill-CTRL 2DU
'You too, you want to be killed by us?'

[8] It is more economical to consider that, if a *$*-verb phrase used as a complement clause does not have the same distribution as *$*- non predicative verbs, it is because the verb is still a predicate, i.e. it is not due to *$*-. Indeed, if one would consider that it is due to it, one would have to say that there are two *$*- morphemes: one for nouns and non predicative verbs and one for predicative verbs.

3.4 Synthesis

Two types of nouns can be distinguished in Sakao: personal nouns, which refer to humans, and common nouns, which refer to non-humans. Personal nouns are always employed in their bare form, whereas common nouns need to be introduced by a prefix. This prefix has two allomorphs: *$-* if it begins with a consonant and *n-* if it is a monosyllabic word beginning with a vowel. Vowel-initial polysyllabic words are employed in their bare form (*table 2*). Therefore, one could say that the syntactic opposition between personal and common nouns is neutralised with vowel-initial polysyllabic words.

Table 2 – Distribution of prefixes

Kind of noun	*C- nouns*	*V- monosyllabic nouns*	*V- polysyllabic nouns*	*Personal nouns*
Prefix	***$-***	**n-**	∅	∅
Example	*a-ra:* pig	*n-ym:* work	*iðɛl:* banana	*ðiɔ-n:* mother

This morpheme is also used to introduce non-predicative verbs and some types of complement clauses. Non-predicative verbs have the same distribution as nouns. However this morpheme cannot be considered as a nominaliser since *$-* complement clauses do not have the distribution of nouns.

4 The syntax of *$-*

To understand the use of *$-*, one must compare the functions where *$-* is needed and the functions where it is not.

4.1 Functions where *$-* is needed

$-* is used to introduce nouns in different functions: subject, (applicative) object, and complement of preposition. For each function where *$- is required, examples of noun and verb will be given (if it is relevant), and compared with some examples of personal nouns. It will be shown that each time a verb or a common noun must be preceded by *$-*, personal nouns do not need to be preceded by any morpheme:

4.1.1 Subject

Sakao is a SVO language, subjects occur before predicates. (26) shows an example of a *$-noun* and (27) shows an example of a *$-verb*:

(26) **a-ra** mø-ʁœn-p jyɾ.
$-pig 3SG.REAL-eat-CTRL 3PL
'The pig eats them.'

(27) **a-ha** mam vɔʁvɔʁ.
$-dance DEM good.3SG.REAL
'This dance is beautiful.'

Personal nouns can also access the subject function:

(28) ðiɔ-n ma-lam.
mother-3SG 3SG.REAL-come
'His mother is coming/has come.'

4.1.2 Object

Objects occur after predicates:

(29) ti-m-jilp **a-ra** ana-n vɔʁ.
PAUC-REAL-kill $-pig PREP-3SG too
'We also kill a pig for that.'

(30) a-m-ʁœð **a-ha** te l-e-ɾɛpɛp.
1SG-REAL-see $-dance ART.INDEF LOC-$-book
'I see a dance in the book.'

Personal nouns can also access the object function:

(31) jɒɾu tɛ-m-ðyr ðiɔ-ŋaɾu.
3.DL PAUC-REAL-bury mother-3DL.POSS
'They bury their mother.'

4.1.3 Object introduced by the applicative morpheme -yn

The applicative suffix *-yn* is used to add another object to the verb. A transitive verb becomes a ditransitive verb (with two objects) and an intransitive verb becomes a transitive verb. If the new object is a common noun (32) or a verb (33), it is preceded by *$-*:

(32) l-ohe mam te-vœl-**yn** wakœɾ **a-ra**.
LOC-village DEM PAUC-pay.REAL-APPL woman $-pig
'We paid women with pigs.'

(33) nnɔna jœn a-m-jym-**yn** **a-ssaɾu** wanohe
now 1SG 1SG-REAL-work-APPL $-speak Wanohe
'Now I am working speaking Wanohe.'

Personal nouns can also access this function. (34a) shows an intransitive verb and (34b) the same verb with an applicative morpheme:

(34a) ʁ-a-m-lakaɾ.
non1INCL-PL-REAL-angry
'We are angry.'

(34b) ʁ-a-m-lakaɾ-**yn** ðɛnɛ-ʁam.
non1INCL-PL-REAL-angry-APPL father-PL.POSS
'We are angry at our father.'

4.1.4 Complement of preposition

There are few prepositions in Sakao. With some prepositions, common nouns require the presence of the *$-* prefix.

4.1.4.1 After hyɾ

Hyɾ marks the source of an event. When the source is expressed by means of an SV(O) clause, no *$-* prefix is needed:

(35) m-ɾɔʁ mɒ-ðɒm-ni ve ɒ-lɒð me-tekyl
2SG-hear 3SG-like-3SG SAY.3SG.REAL $-ground 3SG.REAL-shake

hyɾ ʁ-a-m-tœl-ɾɛʁɾɛʁ-yn ɒ-lɒð.
CAUS non1INCL-PL-REAL-kick-strong-APPL $-ground
'You hear that the ground shakes because they are kicking the ground strongly.'

This source can also be a noun phrase alone. If so, it is preceded by *$-*:

(36) jœn a-m-lam **hyɾ** **a-wanohe**.
1SG 1SG-REAL-come CAUS $-Sakao
'I came because of the Sakao [language].'

4.1.4.2 *After* møhœn

Møhœn introduces a benefactive phrase. It comes from a former form *mø-hœ-n*: 3SG-CLASS.POSS-3SG.POSS which is no longer productive:

(37) a-m-ɾos-p i-jar **møhœn** **u-tuɾis**.
1SG-faire-CTRL $-jardin PREP $-tourist
'I am making a garden for the tourists'

4.1.4.3 After l-

The preposition *l-* is always followed by *$-*. It can introduce the local complement of a motion verb:

(38) a-m-jan **l-e-lɛkɔl**.
1SG-REAL-go LOC-$-school
'I go to school.'

It can also mark the temporal or spatial reference of the situation:

(39) lakɾɛn[9] **l-e-sɛʁlɛn**-usi t-a-jan t-a-jil-p.
tomorrow LOC-$-morning-very 1.INCL-PL-go 1.INCL-PL-hit-CTRL
'Tomorrow in the early morning we will hit (him).'

Personal nouns can also be the complement of a preposition:

(40) wakœɾ te ve-ʁ-wop ni **hyɾ** waɾi hɔ-n…
woman one if-3SG.IRR-hang 3SG CAUS man CLASS.POSS-3SG.POSS
'If a woman hangs herself because of her husband…'

Curiously, these prepositions cannot precede *$*-verbs. Indeed, when a non predicate verb is introduced by a preposition, it appears in its bare form:

(41) mas-jan hɔɾ-p a-kalsɔn hyɾ ssɔn-r
must-go pick-up-CTRL $-pants CAUS dress-ATTEMPTIVE
'One must pick up some clothes to dress up.'

4.1.5 Predicate in equational constructions:

Finally *$-* is needed to allow common nouns and verbs to be the predicate of an equational construction:

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[9] One could separate *l-* and *-akren* by a hyphen. But since *akren* has no independent meaning in Sakao, I choose not to separate them.

(42) I **a-ra**.
2SG $-pig
'You are a pig.'

(43) a-ssaru mam, **a-ssaru** enɛn mørœŋ.
$-speak DEM $-speak POSS before
'This word is a word from before.'

Personal nouns can also be predicates in equational constructions:

(44) aðŋœn mom no, ðana-n.
man DEM1 DEM2 father-3SG.POSS
'This man is his father.'

4.2 When is *$-* excluded?

Some syntactic contexts require common nouns or verbs in their bare form. In their bare form, nouns and verbs do not access the same functions. This is why they must be considered as two different parts of speech. In this section, I will first show the functions nouns can only access in their bare form. Then I will show the functions both verbs and nouns access in their bare form and then functions that only verbs access in their bare form. Personal nouns, except when they are introduced by a preposition, do not seem to access the functions verbs and common nouns can access in their bare form.

4.2.1 When nouns appear in their bare form

The bare form modifies a *word phrase* prefixed by *$-*:

- when the bare form is a common noun.[10] It indicates the content of the heading *$-word* (N1):

(45) a-m-sym **y-vyɾ**.
1SG-REAL-drink $-kava
'I drink kava.'

(46) a-plastik-**vyɾ**.
$-bottle-kava
'a bottle of kava'

- when the bare form is a common noun and N1 a locational noun, the bare form indicates the use of N1:

(47) a-m-sym **e-medisin** te.
1SG-REAL-drink $-medicine ART.INDEF
'I drink a medicine.'

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[10] If the modifying morpheme is a verb, it is introduced with the participial prefix *o-*:

my-jym=pɔɾ-jyɾ mi:jan ɛ-rɛmrɛm **o**-hɛð ma-lam.
3SG.REAL-work=with-3PL until $-think PART-bad 3SG.REAL-come
'He works with them, until bad thoughts come.'

(48) o-lɔm- **medisin**.
$-house- medicine
'The hospital'

4.2.1.1 Incorporation

Common nouns can be incorporated to the verb. In this case, the noun is employed without *$-*:

(49) ʁ-a-m-jan ʁ-a-m-hɔɾ-**nœð**.
non1INCL-PL-REAL-go non1INCL-PL-REAL-pick.up-coconut
'We go pick up coconuts.'

4.2.1.2 Genitive noun

The bare form is a common noun and N1 is possessed by it. If N1 is not an obligatory possessed noun, the noun in its bare form is preceded by a classifier:

(50) a-baloŋ hœ **pœs**.
$-ball CLASS.POSS dog
'The ball of the dog.'

To access the genitive function, personal nouns are also introduced by a classifier. But, unlike other nouns, the classifier is followed by a *3SG.POSS* morpheme referring to the possessor:

(51) a-baloŋ hœ-n walðœ-n.
$-ball CLASS.POSS-POSS.3SG child-3SG.POSS
'The ball of his child.'

4.2.2 When nouns and verbs appear in their bare form

4.2.2.1 After the interrogative hi:

The interrogative *hi ('*who/which'*)* is in a complementary distribution with *$-*. It can be prefixed to a noun (52) or a verb (53):

(52) a-ra → hi-ra?
$-pig INTERR-pig
'the pig' 'Which pig?'

(53) a-ssaru → hi-ssaru?
$-speak INTERR-speak
'the speech' 'Which speech?'

4.2.2.2 TAM and person-marked predicate

Predicative nouns and verbs can be TAM- and person-marked predicates:

(54) Aðgœn ʁ-a-m-taksi.
man non1INCL-PL-REAL-taxi
'People work as taxis'

(55) jœn a-m-lam ðað.
1SG 1SG-REAL-come here
'I come here.'

4.2.3 When verbs appear in their bare form

4.2.3.1 V2 of a nuclear serial verb construction:

In a nuclear-layer serial verb construction, the second verb of the construction is not marked with TAM or person and it does not take *$-*. Generally V2 is a motion verb and it denotes a directional or an adverbial meaning:

(56) mo-ðɔl-hu jœn l-lɔm[11] medsin
3SG.REAL-carry-to.the.north 1SG LOC-house medicine
'They carry me north, to the dispensary.'

4.2.3.2 Non predicate verb preceded by a preposition

As we saw in 4.1.4, a non predicate verb preceded by a preposition appears in its bare form.

4.2.4 What is the function of $-?

Except for the genitive function, *$-* disappears in cases similar to the *nV-* article in Mwotlap. Here is what François (2007:325) says about the latter:

> Typically the noun appears unprefixed when it constitutes a phrase internal modifier, pointing semantically to a generic notion or a quality rather than designating a referential entity.

He concludes stating that the article is used to introduce referential noun phrases. This explanation seems to clarify most uses of *$-* and it explains why personal nouns do not need any *$-*: they are intrinsically referential. However, that explanation is not convenient because two points remain to be explained: 1) why common nouns can access the genitive function in their bare form, even if they are referential as in (50); and 2) why *$-* can be used to introduce complement clauses?

In short, parts of speech must be divided following the functions they can directly access, i.e. without affixes. In Sakao personal nouns directly access the functions of argument (subject or object), complement of a preposition and predicate of an equational construction. On the other side, common nouns and verbs cannot access a function of an argument and they cannot be complement of a preposition or predicate of an equational construction. As one can see, common nouns and verbs do not access directly the functions personal nouns access directly; to access these functions, they need the *$-* morpheme. Following the framework developed by Lemaréchal (1989), one could analyse *$-* as a "transferrer" ("translateur" in French). It "transfers" nouns and verbs into personal nouns, i.e. it allows common nouns and verbs to access a function personal nouns can access directly, without any morphological marking[12].

This framework explains why *$-* is needed to introduce a complement clause. Indeed, not only does *$-* allow a noun phrase or a non-predicative verb to access a function that personal

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[11] This is an exception to what was described earlier (§ 4.1), as *l-* is normally compatible with *$-* (thus it should be *l-$-lɔm)*. There is, to my knowledge, only one other similar exception, which is *lɒð* 'ground'. These exceptions are non-phonological, but their semantics, and the very large use that is made of theses phrases ('home/at home', 'on the ground') could point to a phonetic simplification.

[12] Insofar as common nouns can access directly the genitive function, one could propose to analyse the possessive morpheme, which allows personal nouns to access the genitive function, as a *transferrer* which transfers personal nouns into common nouns.

nouns can access directly, but it also allows predicative-verbal phrases to access this function, if the dependent clause has no subject. Such a possibility can occur only in a complement clause. Indeed, in such a case, the verbal phrase of the complement clause is considered as the object of the main clause. Accordingly, it is introduced by *$*-. If the subject is expressed, the verbal phrase of the complement clause is no longer seen as the object of the main clause but as predicate + object of the subordinate clause, hence the predicate is conjugated.

5 Synthesis

In Sakao, a difference must be made between two types of nouns: common nouns and personal nouns. A common noun can appear with the prefix *$*- whereas a personal noun cannot. A verb can also occur with this prefix:

- If the verb is not a predicate, then it can be prefixed by *$*- and have the same distribution as *$-nouns*;
- If the verb is the predicate of a complement clause, it takes the *$*- prefix but it does not have the same distribution as *$-nouns*, showing that *$*- cannot be interpreted as a nominalizing morpheme: it retains its object and it cannot be possessed. Its agent cannot occur in the clause.

$*- is prefixed to common nouns and verbs to allow them to access different functions: argument, complement of some prepositions, or predicate of an equational construction. However *$- is not prefixed to them when they access non-referential and genitive functions. On the other hand, personal nouns do not need a prefix when they are arguments, complements of prepositions or predicate in equational constructions. When personal nouns access the genitive function, the classifier needs to be suffixed by a possessive morpheme; there is no example of personal nouns in non-referential functions. In fact, non predicate verbs are prefixed by *$*- to access all the functions personal nouns access directly, i.e. without affixes. This is the same with verbal head clauses but some interferences come from the fact that *$*- is prefixed to a predicate verb. I propose to consider *$*- as a “transferrer” (“translateur” in French): a morpheme that allows some parts of speech to access functions of other parts of speech.

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7 Abbreviations

$	initial vowel copy
1.INCL	first person plural inclusive
1SG	1st person singular
2SG	2nd person singular
2PL	2nd plural
3DU	3rd dual
3SG	3rd singular
APPL	applicative
ART	article
CAUS	causal
CLASS	classifier
CTRL	controller
DEM	demonstrative
DUR	durative
INDEF	indefinite
IRR	irrealis
INTERR	interrogative
LOC	locative
MED	medial
non1INCL	plural pronoun other than 1st inclusive
PART	participle
PAUC	paucal
PL	plural
POSS	possessive
PREP	preposition
PRO	pronoun
PROPER.N	proper noun
REAL	realis
RED	reduplication
SAY	verb of saying used as *complementiser*
TOPON	toponym

The construct suffix in North Ambrym

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Abstract This paper argues that the cross referencing strategy used in possessive constructions to cross reference the possessor on the bound noun head or possessive classifier is a construct suffix as it does not agree in the person, number or animacy feature of the possessor noun phrase. The construct suffix is not solely a genitive marking strategy but has developed to mark prepositional and verbal objects. I will look at the diachronic development of the construct suffix and show the construct suffix spread out of possessive constructions and moved in to verbal and prepositional constructions due to a gap in the object marking strategies left by the loss of verbal object marking.

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1 Introduction

The construct suffix in Oceanic languages is a genitive marking strategy. In the language of North Ambrym the construct suffix, *-n*, occurs not only in possessive constructions but also marks the head of prepositional and verbal constructions. I will show that the construct suffix in North Ambrym developed from Proto Oceanic (POc) **-ña*, the 3sg possessor suffix. I will also show that the construct suffix in North Ambrym is not an agreement marker and neither agrees with the number, person nor animacy feature of the argument noun phrase but instead marks different syntactic relations. I will argue that the construct suffix spread from possessive constructions into prepositional and verbal constructions. I will offer a historical and functional explanation for the development of this suffix.

In the rest of this section I will introduce the morpho-syntactic environments where the construct suffix occurs in North Ambrym.

In North Ambrym the construct suffix (CST) occurs in three main construction types. Firstly in possessive constructions, when the possessor is realised as a noun phrase and the suffix occurs on the possessed noun head (1a). Secondly, it also attaches to prepositions in prepositional phrases, (1b). Finally, it occurs suffixed to some verbs, such as *homne* 'to find', as shown in (1c). In all construction types the construct suffix is *-n*.

(1a) **ye-n** [to]
leg-CST fowl
'the fowl's leg'

(1b) Masing rrù tataa **ra-n** [verr].
M. CONT RED.sit on-CST rock
'Masing is sitting on the rock.'

(1c) Tùlù **homne-n** [bu te hu] ge ba ktu.
NEG[3sg] find-CST castrated.pig NSP IND SUB IRR[3sg] take
'He did not find a castrated pig to take' *North Ambrym*

There are also many examples where no construct suffix occurs in the aforementioned morpho-syntactic slot. This motivates the question - are the parameters constraining the appearance of the construct suffix in these three construction types identical or different? And are they the same suffix or are they homonyms? Furthermore, if they share the same properties, did they all originate from one progenitor suffix? The examples in (2) are parallel to those in (1) and show the absence of the construct suffix.

(2a) **ye** [John]
leg John
'John's leg'

(2b) Awa ge a te rrù rri nge **ra** [li byang].
Vine SUB PROX NREC.PST[3sg] CONT unwind 3SGP on tree banyan
'This vine unwound itself on the banyan tree'

(2c) Me **homne** [mwenan yamarr]
come find CL.3sg wife
'(They) came and found his wife' *North Ambrym*

As the construct suffix is predominantly found in possessive constructions in other Oceanic languages in Vanuatu, section 2 gives a typology of the different possessive construction types and argument cross-referencing strategies. This will help contextualise the situation in North Ambrym. Section 3 gives a diachronic and synchronic analysis of the construct suffix found in possessive constructions in North Ambrym and argue that the suffix is a modern reflex of POc *-*ña*, the 3sg possessor suffix, but now marks a syntactic relation and does not agree with any features of the possessor noun phrase. Section 4 looks at the spread of the construct suffix into verbal and prepositional constructions and looks at how the occurrence of the construct suffix in these different construction types is affected by different argument types. Finally, section 5 draws the findings together and offers some conclusions about the spread of the construct suffix to the other construction types.

2 Possessive constructions

Possessive constructions in North Ambrym, as in other Oceanic languages, exhibit a split between direct and indirect possession. Some nouns must take obligatory possessive marking and this normally occurs as a pronominal possessor suffix that directly attaches to a bound noun stem as shown in (3).

(3) boto**-m**
head-2sg
'your head' *North Ambrym*

Indirectly possessed nouns are unable to take a pronominal possessor suffix directly and when occurring in a possessive construction the possessor pronominal attaches to an indirect possessive host or a possessive classifier as shown in (4). All possessive classifiers are glossed as CL in the following examples. The semantics of these classifiers does not have any affect on the construct suffix and will not be looked at in this paper[1].

(4) ma**-m** we
CL-2sg water
'your water' *North Ambrym*

The set of pronominal possessor suffixes that attach to bound nouns and classifiers are listed in table 1. There are two different forms for the 3sg; the suffix *-n* marks human animates and *-te* marks non-human animates and inanimates, though the boundaries are blurred and *-n* can also mark non-human animates.

Table 1 – Pronominal possessor suffixes.

	Singular	*Dual*	*Paucal*	*Plural*
1.inc		*-ngrùng*	*-ngsul*	*-ngken*
1.exc	*-ng*	*-marù*	*-masul*	*-ma*
2	*-m*	*-mrù*	*-msul*	*-mi*
3	*-n, -te*	*-rù*	*-sul*	*-r*

In a typology of possessive constructions in Oceanic languages, Lichtenberk (1985) distinguishes between simplex and complex possessive constructions. Simplex constructions are those that have a pronominal possessor suffix as in (3) and (4). Complex constructions occur when the possessor is realised as a noun phrase. Complex constructions will be the focus of this paper as it is in this type of construction that the construct suffix occurs.

Lichtenberk makes a further distinction within complex constructions that cross reference the possessor argument in another part of the possessive construction, that is either on the bound noun in a direct possessive construction or on the possessive classifier in indirect possessive constructions.

i. Complete cross-referencing (person and number marked)
ii. Partial cross-referencing (person marked)
iii. Construct cross-referencing (special construct suffix different to 3sg and 3pl markers) Lichtenberk (1985:98)

[1] The number of possessive classifiers in a given language varies. North Ambrym has five different classifiers. The *a* classifier is used when the possessed item refers to something edible or associated with food, some tools, some trees, and with some kinship terms; the *ma* classifier is used with possessed items that refer to liquids, cups, holes, and houses and their parts; the *bo* classifier is used with fire and flammable items and the *to* classifier is used with baskets; finally, the *mwena* classifier is the general classifier and is used with items that do not fall into the other semantic categories. For an in-depth look into the semantics of these classifiers, see Franjieh (2012).

To Lichtenberk's list we can also add a fourth subtype, which is also found in the languages of Vanuatu: the absence of any cross-referencing between the possessed and possessor or possessive classifier.

iv. No-cross-referencing

Lichtenberk's definitions above can be re-analysed in terms of agreement. In complete cross-referencing, the possessor noun phrase controls agreement of both its person and number features on the either the possessed noun head or the possessive classifier. This type of cross-referencing can be found in direct possessive constructions in Sye (Erromango island, South Efate – Southern Melanesian linkage), as shown in (5). Simplex constructions are shown in (5a) and (5b) and complex constructions in examples (5c) and (5d), where the possessive pronominal suffix on the possessed noun head reflects the person and number values of the possessor noun phrase.

(5a) noru**-n**
hand-3sg
'his hand'

(5b) noru**-d**
hand-3pl
'their hands'

(5c) noru**-n** neteme
hand-3sg man
'the man's hand'

(5d) ov-noru**-d** ovateme
PL-hand-3pl PL.man
'the men's hands' Sye, Lynch (1983:43-44)

In partial cross-referencing, the bound noun in a direct possessive construction or the possessive classifier in indirect possessive constructions agree only with the person and not the number feature of the possessor nominal. Lewo (Epi Island, Central Vanuatu linkage) is a language which has partial cross-referencing. As Early (1994:218) states, when a possessor is realised as an NP "the possessor suffix that occurs is not sensitive to the number of the possessor, but is always singular". In Lewo the 3sg possessive pronominal suffix is *-na*, as shown in the simplex indirect possessive construction in example (6a). The 3pl possessive suffix is *-la* and is exemplified in the simple indirect possessive construction in (6b). When the possessor is realised as a noun phrase with the feature 3sg then the 3sg possessive pronominal occurs on the possessive classifier, as shown on the complex indirect possessive construction in example (6c). Finally, when the possessor is a nominal that is modified by the plural morpheme *lala* then the possessive pronominal suffixed to the possessive classifier is the 3sg and not the 3pl form, as shown in (6d).

(6a) sa**-na** tawagka
CL-3sg canoe
'his canoe'

(6b) sa**-la** yali-ena
CL-3pl walk-NMLZ
'their walk'

(6c) [lokuli [sa**-na** Elta Toto]]
dog CL-3sg elder Toto
'Elder Toto's dog'

(6d) [protano [sa**-na** [mo-ma mratava lala]]]
ground CL-3sg CL-2sg door(=family) PL
'your family's ground' Lewo, Early (1994:213-218)

The partial cross referencing suffix in (6d) could be reanalysed as bearing the third person feature and be simply glossed as 3 instead, as it no longer agrees with the number feature of the possessor noun phrase but just the person feature.

What Lichtenberk terms construct cross-referencing can not be considered a form of agreement as there is no agreement between the person or number feature of the possessor nominal. This suffix is often morphologically distinct from the 3sg possessive suffix. In Lolovoli (North-East Ambae, Northern Vanuatu linkage), the 3sg possessive suffix is either *-na* or *-ne* and the 3nsg possessive suffix is *-ra* or *-re*,[2] whereas the construct suffix is *(n)i*.

(7a) lima**-na**
hand-3sg
'his/her/its arm/hand'

(7b) mwagoni**-re**
nest-3nsg
'their nest'

(7c) netu**-i** Margaret
child-CST Margaret
'Margaret's child'

(7d) tue**-i** re maresu
same.sex.sib-CST PL child
'the (female) children's sister(s)/the (male) children's brother(s)/
the children's brother(s) and sister(s)' Lolovoli, Hyslop (2001:166-173)

When the construct suffix occurs there is no agreement between the suffix and the possessor noun phrase, and instead only the syntactic relation of possession is marked.

The identification of a construct suffix in (7) is straight forward as its form differs from both the 3sg and 3nsg possessive suffix. The identification of the construct suffix in North Ambrym is much more difficult as it has the same morphological form as the 3sg possessive suffix – both being *-n*. Therefore it is not immediately obvious if North Ambrym has partial agreement, where only the person feature of the possessor nominal is cross referenced, or that no agreement occurs and North Ambrym has a construct suffix.

The next section will show that North Ambrym has a construct suffix and not a partial cross-referencing suffix. Both diachronic and synchronic evidence will be considered.

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[2] The allomorphs *-ne* and *-re* are used when the preceding syllable ends in a high vowel (Hyslop 2001:166, fn.1).

3 The North Ambrym construct suffix

North Ambrym's cross-referencing strategy employs the suffix *-n* onto bound nouns (direct possessive constructions) and onto possessive classifiers (indirect possessive constructions).

The following set of examples contrasts the simplex possessive constructions with complex possessive constructions. The direct simplex construction is shown in (8a) and the indirect simplex construction in (8b). The direct complex construction is shown in (8c) and the indirect complex construction in (8d). The cross-referencing suffix has been glossed as CST as I will show throughout this section that it is indeed a construct suffix.

(8a) ye**-n**
leg-3sg
'his/her leg'

(b) a**-n** [meyee]
CL-3sg food
'his/her food'

(c) ye**-n** [vanten]
leg-CST person
'a/the person's leg'

(d) meyee a**-n** [vanten]
food CL-CST person
'a/the person's food' *North Ambrym*

Synchronically the cross-referencing suffix appears to be the same as the 3sg possessive pronominal suffix *-n* which occurs in simplex possessive constructions. Section 3.1 looks at a synchronic analysis of the construct suffix and shows that the suffix does not agree with any of the features of the possessor noun phrase. Section 3.2 will look at the diachronic development of the construct suffix in North Ambrym and show that the construct suffix developed from the Proto Oceanic (POc) 3sg possessor pronominal suffix *-*ña*.

3.1 Syntactic analysis

In this section I argue that synchronically the *-n* suffix that occurs in complex possessive constructions is a construct suffix which is semantically distinct from the modern 3sg possessor suffix in North Ambrym, though identical in form. The 3sg possessor suffix in North Ambrym reflects three features of the possessor's referent - person, number and animacy. These three features will be investigated in the following sections where I will show that the construct suffix does not agree with any of these features of the possessor nominal in complex possessive constructions.

3.1.1 Number

The first feature that the possessor pronominal suffix encodes is number. However, the following examples show that the construct suffix that occurs in complex bound noun constructions does not encode number.

The number value of nouns is often not morphologically marked and can be left underspecified. It can be inferred from either context or, if the noun in question occupies the subject position, from agreement with a subject indexing particle. When number is specified,

this is achieved by a quantifier immediately following the head noun (9a) or possessor, if present, in (9b).

(9a) teere nyer
child PL
'children'

(9b) taala-n nyer
brother-3sg PL
'his brothers' *North Ambrym*

In complex indirect possessive constructions, quantification of the possessed noun occurs immediately after the head and before the possessive classifier (10a). The quantifier of a possessor nominal also occurs immediately after, as shown in (10b).

(10a) John te tnu [[atyuntyun wor hu] mwena**-n** vanten hu].
John NREC.PST[3sg] light torch some IND CL-CST person IND
'John lit a few of someone's torches.'

(10b) wobung mwena**-n** [yafu nyer]
day CL-CST chief PL
'chiefs' day (a national holiday)' *North Ambrym*

In (10b) the possessor is a plural noun phrase, yet the construct suffix is still *-n* and therefore does not inflect number.

In complex direct possesive constructions, quantification always follows the possessor, either following the possessor pronominal suffix or a possessor nominal. Modification is not allowed between the bound noun or classifier and the possessor nominal.

Quantifiers immediately follow a bound noun and possessive pronominal suffix (11a). When the possessor is realised as a noun phrase the quantifier cannot intervene between possessed and possessor and must follow the possessor noun phrase. In this position, the quantifier has an ambiguous interpretation and either modifies the possessed noun, the possessor noun or both, as shown by the translation in (11b). Finally, two modifiers may be present following the possessor nominal and this can help disambiguate the meaning, as shown in (11c).

(11a) taala**-n** nyer
brother-3sg PL
'his brothers'

(11b) taala**-n** vanten nyer
brother-CST person PL
'the person's brothers/the people's brother/the people's brothers'

(11c) [taala**-n** [vanten ge a] wor hu]
brother-CST person SUB PROX some IND
'some brothers of this man' *North Ambrym*

What the above examples show is that regardless as to the number value of the possessor the construct suffix always stays as *-n*, showing that it does not reflect the number value of the possessor nominal. These ambiguous structures can be disambiguated by paraphrasing, where the possessor phrase is fronted, as shown in (12).

(12a) iunyo**-n** vanten wa te ru
sister-CST person DL PFV two
'a/the person's two sisters/two people's sister/two people's two sisters[3]'

(12b) vanten hu, iunyo-n wa te ru
person IND sister-3sg DL PFV two
'a person's two sisters (lit. a person, his two sisters)' *North Ambrym*

Example (12a) is ambiguous as to whether the numeral phrase modifies the possessor, possessed or both. In example (12b) the possessor is fronted and only the possessed noun is modified by the numeral phrase.

Of interest to the discussion is that nominals in North Ambrym can also refer to plural entities without requiring an explicit quantifier. For example, (13) shows that the head noun in the complex direct possessive construction has plural reference despite there being no explicit quantifier. The only plural marking in (13) is found in the pluractional intransitive verb *ho* 'stay.PL', which occurs in a relative clause construction introduced by the general subordinate clause marker *ge*. The relative clause modifies the possessor nominal *vanten* 'person'. Again the number value of the possessor nominal is not reflected in the cross-referencing suffix.

(13) Te vya kuru [boto**-n** [vanten **ge** **te** **ngenean** **ho**]]
NREC.PST[3sg] go collect head-CST person SUB NREC.PST[3sg] eat.PASS stay.PL
'He went and collected the heads of the people who had been eaten.' *North Ambrym*

Speakers of North Ambrym tend not to modify both the possessor and possessed noun in a complex bound noun construction. If the possessor is modified, for example by a relative clause in (14), and the possessed noun has plural reference then it is easier for the plurality to be manifested in the subject indexing particle of the verbal complex.

(14) [Taala**-n** [vanten ge a]] **err** vya lon makerr.
brother-CST person SUB PROX 3pl.NREC.PST go in market
'This man's brothers went to the market' *North Ambrym*

Thus, in (14) the possessed head *taala-* 'brother of' has plural reference, but appears with no quantifier, instead the subject indexing particle *err* '3pl.NREC.PST' reflects the plurality of the possessed noun head.

Further evidence that the number of the posessor does not affect the morphological shape of the construct suffix comes from multiple possessor phrases comprising of two bound nouns which have a single referent such as (15).

(15a) bu**-n** ye-n
joint-CST leg-3sg
'his knee (lit. the joint of his leg)'

(15b) bu**-n** ye-r
joint-CST leg-3pl
'their knees (lit. the joints of their legs)' *North Ambrym*

[3] The particle *wa* marks the numeral phrase as referring to specifically two participants, without it the numeral phrase would mean `a few'.

The evidence from (15) shows that regardless as to the number feature of the possessor, either 3sg in (15a) or 3pl in (15b) the construct suffix is always *-n*.

3.1.2 Animacy

The second feature that the pronominal possessor suffix encodes is animacy. The 3sg possessor pronominal suffix, *-n* also encodes the feature of humanness. The 3sg non-human possessor pronominal suffix is *-te*. The following examples show this distinction in humanness.

(16a) rahe**-n**
mother-3sg.H
'his/her mother'

(16b) rahe**-te**
mother-3sg.NH
'its mother' *North Ambrym*

When the possessor is a noun phrase and the possessor's referent is non-human animate then the bound noun is inflected with the construct suffix, which neutralises the animacy distinction.

(17) rahe**-n** barrbarr
mother-CST pig
'the pig's mother' *North Ambrym*

Multiple possessor phrases were previously looked at in example (15) and were used as evidence to show that the construct suffix does not reflect the number value of the possessor nominal. Similary, multiple possessor phrases can be used to show that the construct suffix does not reflect the animacy feature of the possessor nominal. Multiple possessor phrases can refer to body parts, such as fingers, as in (18), where bound noun head is inflected with the construct suffix when the possessor is a bound noun phrase (18a). However, when the possessor noun phrase is fronted, the inanimate pronominal possessor *-te* attaches to the possessed noun head (32b).

(18a) [[boko**-n** [vera-ng]
digit-CST hand-1sg
'my finger'

(18b) vera-ng, boko**-te** hu rrù chen
hand-1sg digit-3sg.NH IND CONT sore
'my hand, one of its fingers is sore' *North Ambrym*

What (18) shows is that the construct suffix does not reflect the animacy feature of the referent of the possessor.

3.1.3 Person

The third feature that the pronominal possessor encodes is person. However, the homophonous construct suffix does not encode person.

The construct suffix only occurs in possessive constructions when the possessor nominal is a common animate noun (19a). The construct suffix does not occur on bound nouns in

attributive constructions (19b). The attribute is still a required argument of the bound noun and it is ungrammatical for it to occur without an attribute (19c).

(19a) ti**-n** to
child-CST fowl
'the fowl's child'

(19b) ti to
child fowl
'chick'

(19c) *ti
'INTENDED: offspring' *North Ambrym*

What these examples show is that though the third person feature is evident in both the possessor noun phrase in (19a) and in the attributive phrase in (19b) no suffix occurs in the latter construction. Thus when the construct suffix occurs it does not agree with the person feature of the possessor noun phrase but actually encodes a possessive relationship. As bound nouns that occur in attributive constructions are not in a possessive relationship they are not inflected by the construct suffix. What this means is that the construct suffix is not an agreement marker but a marker of the syntactic relation of possession between two noun phrases.

3.1.4 Summary

I have shown that the suffix that attaches to the bound noun or possessive classifier in a possessive construction is the construct suffix as synchronically it does not agree with the features of person, number or animacy of the possessor nominal.

In the section 3.2 I will look at the diachronic development of the construct suffix in North Ambrym.

3.2 The construct suffix: a diachronic analysis

Proto Oceanic possessive constructions are categorised according to two different parameters (Ross 2001). Firstly, whether the possessed noun occurred in a direct possessive construction or in an indirect possessive construction. Secondly, whether the possessor noun was semantically specific or non-specific, with non-specific possessors not actual being possessors, but being an attribute of the possessed noun (Ross 2001). Table 2, modified from Ross (2001:261), shows the proto Oceanic reconstructions of the different markers used in possessive constructions which are all possible origins of the construct suffix. Following the table is an explanation of the forms contrasted with the forms found in North Ambrym.

Table 2 — Proto Oceanic possessive marking

Possessor		**Possessed**	
		DIRECT	INDIRECT
Specific	Personal	*-i	*-i
	Common	*-ña	*-ña
Non-specific	Common	*qi	*ni

3.2.1 Personal noun possessors

Hooper (1985) found that in complex possessive constructions in Oceanic the marker *i*, a reflex of POc personal article **i*, precedes a personal noun possessor (PNP). The notion of a PNP differs in the different languages surveyed by Hooper (1985) but generally includes proper nouns, quasi-proper nouns such as kinship terms and sometimes second or third person pronouns. The following examples contrast the POc construction with the North Ambrym construction.

Direct possessive construction:

(20a) *a qaqe-**i** X
ART leg-ART X
'X's leg' POc, Ross (2001:261)

(20b) ye X
leg X
'X's leg' *North Ambrym*

Indirect possessive construction:

(21a) *a Rumaq na-**i** X
ART house CL-ART X
'X's house' POc, Ross (2001:261)

(21b) im ma X
house CL X
'X's house' *North Ambrym*

In both the direct and indirect examples above, the POc constructions are marked with a reflex of the POc personal article, whereas North Ambrym has lost the POc article.

According to Hooper (1985) and Ross (2001) an alternative POc construction could have occurred where the personal direct and indirect possessive constructions were marked both by the 3sg possessor suffix and the personal article, as shown in (22).

(22) *a qaqe-ña i X
ART leg-3sg ART X
'X's leg' POc, Ross (2001:262)

This dual system is found in Vurës (Banks Islands), which has two identical suffixes. The first is a 3sg pronominal possessive suffix realised as *-n* from POc **-ña*, as shown in (23a); the second is a relational suffix, also realised as *-n*, though related to a pre-Vurës marker **ni*, as shown in (23b). The pre-Vurës marker **ni* is a merging of the POc genitive marker **i* which occurred with proper names and POc **-ña*, the 3sg possessive marker.

(23a) na mata-**n** (<*mata-na)
ART eye-3sg
'his eyes'

(23b) na mɛtɛ-**n** i Wemal (<*mata-ni)
ART eye-CST PN Wemal
'Wemal's eyes' Vurës, François (2005:487)

At some point in the history of Vurës, these suffixes lost their final vowels, and are now both identical. However, despite having the same surface form, they still behave differently morphophonologically. The difference between the two suffixes can be seen by their morphophonological affects on the bound stems they attach to, where the final vowel of the construct suffix has affected the height of the stem vowels.

The evidence used for Vurës above is unavailable in North Ambrym as no vowel raising occurs, as shown in the following example shows.

(24a) met**a**-n
eye-3sg
'his/her eye'

(24b) met**a** Masing (*mete Masing)
eye Masing
'Masing's eye'

(24c) met**a**-n vanten hu (*mete-n vanten hu)
eye-CST person IND
'a person's eye' *North Ambrym*

Bound nouns in North Ambrym do not have allomorphic variants with raised vowels in complex possessive constructions. What this shows is that the zero marking in PNP constructions in North Ambrym are not related to either POc **-ña* or *i* and that the zero marking represents a loss of these markers with no change in the bound noun stems**.**

3.2.2 Common noun possessors

When the possessor was a common noun in POc the bound noun or possessive classifier is suffixed by the 3sg possessive suffix **-ña*. In North Ambrym, the construct suffix attaches to the bound noun or possessive classifier when the possessor is a common noun.

Direct possessive construction

(25a) *a qaqe**-ña** tam^{w}ata
ART leg-3sg man
'the man's leg' POc, Ross (2001:261)

(25b) ye**-n** vanten
leg-CST person
'the person's leg' *North Ambrym*

Indirect possessive construction

(26a) *a na**-ña** Rumaq tam^{w}ata
ART CL-3sg house man
'the man's house' POc, Ross (2001:261)

(26b) im ma**-n** vanten
house CL-CST person
'the person's house' *North Ambrym*

The construct suffix in North Ambrym is therefore likely to be a modern reflex of the POc 3sg suffix. At some point in North Ambrym's development the POc 3sg suffix split and on the one hand maintained its the 3sg interpretation in simplex constructions, albeit with the addition

of the animacy feature agreement. On the other hand, the construct suffix developed in complex constructions and lost its ability to agree with the features of the possessor nominal.

3.2.3 Non-specific common noun attributes

Attributive constructions occur when the 'possessor' noun refers to a class of entities and not to a particular class member (Ross 2001:260). In POc direct constructions, the particle *qi* follows the bound noun and precedes the attributive noun. In North Ambrym the bound noun and attributive noun occur juxtaposed and no interceding particle occurs.

Direct attributive construction:

(27a) *a natu **qi** boRok
ART child QI pig
'a piglet (lit. child of pig)' POc, Ross (2001:261)

(27b) ti barrbarr
child pig
'a piglet' *North Ambrym*

In indirect constructions in POc, the particle *ni* occurs following the free noun and precedes the attributive noun. In North Ambrym the associative preposition *ne*, a reflex of *ni*, is in the same position as the POc particle.

Indirect attributive construction:

(28a) *a polo **ni** niuR
ART liquid NI coconut
'coconut water' POc, Ross (2001:2620

(28b) we **ne** ùl
water ASS coconut
'coconut water' *North Ambrym*

What examples (27) and (28) show is that North Ambrym has lost POc **qi*, but has retained a reflex of POc **ni*.

3.2.4 Summary

In summary, there were four different POc cross-referencing options for complex possessive constructions, **i* marked PNPs,**-ña* marked specific CNPs, **qi* marked non-specific attributive constructions whose head nouns were bound nouns, and finally **ni* marked non-specific attributive constructions whose head nouns were free nouns.

For North Ambrym, the evidence points to a loss of POc **qi* and **i* and that there is no modern reflex of these genitive markers. The only genitive markers in North Ambrym are a reflex of POc **-ña*, which in North Ambrym is the construct suffix *-n* occurring in CNP constructions, and the *ne* associative marker, a reflex of POc **ni*.

Table 3 contrasts the POc possessive marking forms with North Ambrym's. The next section will look at the construct suffix in verbal and prepositional constructions, where I argue that it spread from the possessive constructions into these other constructions.

Table 3 — Proto Oceanic and North Ambrym possessive marking

Possessor		**Possessed**			
		DIRECT		INDIRECT	
		POc	N. Ambrym	POc	N. Ambrym
Specific	Personal	*-i	*Ø*	*-i	*Ø*
	Common	*-ña	*-n*	*-ña	*-n*
Non-specific	Common	*qi	*Ø*	*ni	*ne*

4 The construct suffix in verbal and prepositional constructions

The construct suffix, described in the previous section, is not solely found in possessive constructions but is also found in verbal and prepositional constructions. In the following sections I will compare the construct suffix's occurrence in possessive, prepositional and verbal constructions and show that the construct suffix has spread from possessive constructions to these other two construction types.

Section 4.1 will look at the manifestation of the construct suffix in verbal constructions and section 4.2 will look at the construct suffix in different prepositional constructions.

4.1 The construct suffix in verbal constructions

Object marking on verbs in North Ambrym is non-productive. There is no object marking on verbs in North Ambrym, except for on three verbs, *homne* 'to find', *ye* 'be similar/like' and *kirine* 'be with'.

The following sections will look into the synchronic evidence to show that the suffix that occurs on these three verbs when there is an object noun phrase present is a construct suffix (section 4.1.1) as it does not reflect the person and number features of the object noun phrase. Furthermore I will argue that North Ambrym lost all object marking on verbs and that this gap allowed the 3sg pronominal possessor suffix and the construct suffix to move in and fill the gap via a process of analogical extension.

4.1.1 Syntactic analysis of verbal object marking in North Ambrym

The only pronominal object marker that can occur on these three verbs is the 3sg pronominal suffix *-n*. There is no animacy distinction for verbal objects and the *-te* non-human suffix never occurs. Thus the 3sg marker *-n* does not mark animacy, but only person and number.

(29a) Tesu nga teter keya a teter keya, tesu tlùn nga **homne-n**.
NREC.PST.3PC IMM look.for try CONJ look.for try NREC.PST.3PC NEG IMM find-3sg
'They tried to look for (it) and tried to look for (it), but they did not find it.`

(29b) Whe ge lo te fwer mùl mùn ne mwe **ye-n**.
water SUB MED NREC.PST[3sg] full back again as REC.PST[3sg] like-3sg
'That water was full again like it (was before).'

(29c) Te me te rru mo rru te mwenan ofisa te **kirine-n** rru.
NREC.PST[3sg] come CONJ stay CONJ stay CONJ CL.3sg officer NREC.PST[3sg] with-3sg stay
'He came and stayed and his officers were with him.'

According to lynch et al. (2002:46), in Oceanic languages that mark pronominal objects with only a partial set of pronominal forms, it is often third person rather than non third person forms that occur and for singular rather than non-singular forms to occur. In North Ambrym we have a combination of both, in that only the 3sg pronominal suffix occurs.

Other pronominal arguments are realised by using a free pronoun:

(30a) Em bya em **homhomne** [nyer le].
3pl.REC.PST go 3pl.REC.PST RED.find 3plP MED
'They went and they found them there'

(30b) Tùlù bwereù bwe **ye** [neng].
NEG[3sg] tall IRR like 2SGP
'He is not tall like you.'

However, the construct suffix appears to be optionally present when a pronominal object occurs, as shown by its presence in (31).

(31) Lowo-n mwe nga rriu me mwe **ye-n** [ken], vanten ten.
tooth-3sg REC.PST[3sg] IMM grow come REC.PST[3sg] like-CST 1pl.INP person real
'Her teeth just grew like ours, like real people.'

What (31) also shows is that the construct suffix does not reflect either the person or number value of the object pronominal and therefore is not a 3sg agreement suffix. Further evidence for this comes from the following example where the verbal construct suffix occurs when the object noun phrase is marked for dual number, as shown in (32).

(32) Mi won! Mwe **ye-n** [mweneng teere nyerù],
2pl[IRR] quiet REC.PST[3sg] like-CST CL.1sg child 3DL.P
nge mùrù rrù se me le.
TOP 3DL.REC.PST CONT SING COME MED
'You lot be quiet! It's like my two children, they are singing and coming this way.'

The evidence points to *-n* being a construct suffix as it does neither agrees with the person feature of the possessor nominal in (31) nor the number feature of the possessor noun phrase in example (32).

This set of verbs pattern the same as complex possessive constructions when their object is a PNP, in that no construct suffix attaches to the verb, as shown in (33)

(33a) Nam **homne** [George] to hal. (*elicited*)
1sg.REC.PST find George along road
'I found George along the road.'

(33b) Skul kaunsil nyer efe nga rrù teeto nyer a ge m-**ye** [Lan]...
school council 3plP 3pl.IRR IMM CONT investigate 3plP PROX SUB REC.PST-like Lan
'The school council, they will be investigating them, those like Lan...'

When the object of one of these verbs is a kinship term, the construct suffix does not occur (34). This is again similar to possessive constructions that treat kinship terms and proper nouns as PNPs.

(34a) Ma me **homne** [rahe-n ne ge ùrr te Tegar rru].
REC.PST[3sg] come find mother-3sg ASS SUB place CONJ Tegar live
'He came and found his mother in the place where Tegar lived.'

(34b) Nge tùlù bwereù bwe **ye** [rahe-ng]. (*elicited*)
3sg NEG[3sg] tall IRR[3sg] like mother-1sg
'She is not as tall as my mother.'

When the object of the verb is a CNP then the construct suffix predominantly occurs, though occasionally it may be absent, as shown in (35).

(35a) Vya **homne-n** [bwela-n bwete-n teere hu].
go find-CST skull-CST head-CST child IND
'(He) went and found a child's skull.'

(35b) Tegarman ma me **homne** [fwerran hu].
Tegarman REC.PST[3sg] come find sleep.NMLZ IND
'Tegarman came and found a dream.'

This set of verbs do not occur that frequently, and together with common noun objects a total of only 22 times. The construct suffix occurred 19 times when the object was a CNP and did not occur 3 times when the object was a CNP. Also the varying use of the construct suffix was only found with instances of the verb *homne* 'to find' and not with the other verbs. This variation in the use of the construct suffix is quite small, though now only a generalisation can be posited rather than an absolute rule that CNP objects are marked by the construct suffix.

Table 4 – Construct suffix in possessive, prepositional and verbal constructions

	POSSESSIVE CONSTRUCTIONS	VERBAL CONSTRUCTIONS
Pronominal Suffixes	full set	3sg only
Free Pronoun Possessor/Object	N/A	full set
PNP Possessor/Object	Ø	Ø
CNP Possessor/Object	-n	-n[4]

What the above table shows is that the same parameters for the occurrence of the construct suffix occur for both possessive and for verbal constructions. The occurrence of the construct suffix is the same for both construction types. It occurs when the possessor or object is a CNP but does not occur when the possessor is a PNP.

4.1.2 Diachronic analysis of verbal object marking in North Ambrym

In POc the 3sg object marker has been reconstructed as the enclitic *=*a* (Evans 2003:17). In most canonical Oceanic languages the object marker is retained when there is an overt object noun phrase (Ross 2004:499). However, the 3sg object marker in North Ambrym is *-n* rather than a reflex of POc *=*a*. This is due to the fact that North Ambrym lost all object marking on verbs and that this gap was filled by a reflex of 3sg possessive suffix **-ña*, but only remains on the set of verbs described in 4.1.1.

If we look at some of North Ambrym's sister languages from Central Vanuatu this will help to chart the development of North Ambrym's verbal construct suffix.

[4] There is of course minor variation in the use of the construct suffix and this is a generalisation that the construct suffix occurs with CNP objects.

Firstly, Lonwolwol and Dakaaka, North Ambrym's closest relatives, do not have object marking on verbs (Paton 1971, Von Prince 2012[5]). Secondly, South-east Ambrym's verbs are divided into five different classes, dependent upon the different 3sg object suffix they take. The different forms are *-Ø*, *-i*, *-e*, *-a-* and *-ni* (Crowley 2002:662-5). Thirdly, Paamese, the island just off of South-east Ambrym to which the language of South-east Ambrym is most closely related too, can take singular pronominal object suffixes on verbs. There are two sets of object suffixes, with the 3sg pronominal objects being either *-e* or *-ie* (Crowley 1982:142). Both of these 3sg suffixes also occur when there is a proper noun object or a pronominal object, but only when the verbs which do not end in *-Ci* (where C is a consonant). What is interesting is that these suffixes no longer agree with the person feature of the object as shown by the following:

(36) A-dehe**-ie** [kaiko][6]
3pl.R-cut-CST 2SGP
'Are you circumcised?' Paamese, Crowley (1982:143)

In this respect, we can say that when a pronominal or proper noun object occurs in Paamese, the verbal construct suffix occurs, which is diachronically related to the Paamese 3sg pronominal object suffixes, but now no longer cross references the person feature of the object.

With common noun objects the cross-referencing suffix appears as *-nV*, where V is an unknown underlying vowel. This cross referencing suffix again occurs on all verbs that do not end in *-Ci*, but here the C must not be an alveolar.

This common noun object suffix is identical in form to the construct suffix that occurs in complex possessive constructions in Paamese, itself identical in form to the 3sg possessive pronominal suffix (Crowley 1982:104). It is thus clear that the construct suffix in Paamese historically derived from Poc **-ña*, which marked common noun possessors, and has spread into marking common noun objects on verbs. Thus there are now two verbal construct suffixes in Paamese, *-nV* which marks common noun objects and *-e* or *-ie* which mark proper noun objects.

Further afield, Lewo, another Central Vanuatu language spoken on Epi island, also allows the verbal object pronominals to occur when an object noun is present as shown in (37).

(37a) A-kla-ruru**-ia** [suri lala] Ø-su-su-mo.
3plS-make-do.well-3SGO thing 3SGS-red-be.at-front
'Get everything ready first. ' Lewo, Early (1994:330)

What is clear from the above example is that the 3sg object suffix does not agree with the features of the object noun phrase, which is marked as plural. Early does say that the 3sg object marker does not necessarily need to occur, and may be a discourse marker and is sometimes used for dramatic effect and that occasionally the 3pl object marker can occur as an agreement marker when the 3pl free pronoun is in the object position (Early 1994:330).

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[5] A few compound verbs in Dakaaka do have object marking, but as these are compounds made up of verb plus bound preposition, where the compounded preposition takes the object marking, I disregard them in this study (Von Prince 2012:47).

[6] I have adapted Crowley's example and used only his underlying form level. I have also glossed *-ie* as a construct suffix.

In summary, Lewo has retained a reflex of POc *=*a* as a partial cross-referencing suffix, whereas Paamese has retained reflex of POc *=*a* in all contexts as a construct suffix when the object is a proper noun or pronominal, but when the object is a common noun POc *=*a* has been replaced by a reflex of POc *-*ña*. This was possible as POc *-*ña* marked common noun possessors and now marks common noun objects as well. A similar process has happened in North Ambrym, which lost all object suffixes, including POc *=*a*, just like Lonwolwol and Dakaaka. The construct suffix was able to move in to the gap left by the loss of POc *=*a* because of the similarity of argument types in both constructions – common noun phrases. The spread of POc *-*ña* onto verbs is now only retained as a relic on the few verbs described in section 4.1.1.

4.2 The construct suffix in prepositional constructions

The cross-referencing suffix occurs in two types of prepositional phrases. Firstly, verbal prepositional phrases will be looked at in 4.1.1 and secondly, bound prepositional phrases in 4.1.2.

4.2.1 Verbal prepositional constructions

A set of prepositions exist in North Ambrym that were historically derived from verbs, shown below.

Table 5 – Verbal prepositions

VERBAL PREPOSITION	GLOSS	VERBAL PREPOSITION	GLOSS
byane	‘to (away from deictic centre)’	*mene*	‘to (towards deictic centre)’
kirine	‘with’	*fyaasine*	‘close to’
metene	‘from, away from’	*besare*	‘next to’

First, I will explain briefly how these prepositions retain verbal properties before explaining how they interact with the construct suffix.

All the verbal prepositions above are fused with the verbal transitive suffix *-(n)e*[7]. Secondly, the verbal prepositions *byane* and *mene* have intransitive verbal counterparts *bya* 'go' and *me* 'come' and retain the deicitic semantics of the original verbs. Thirdly, the verbal preposition *kirine* 'be with' has a verbal counterpart which occurs with the preverbal subject indexing particle, whereas the prepositional form can either link two NPs together or add an oblique argument to a verb without the addition preverbal subject indexing marker. The verb *kirine* was investigated in section 4.1 as it also occurs with the verbal construct suffix.

One further preposition patterns with this set of verbal prepositions. *Tebya* 'because, for' is related to the adverbial clause introducer *tebyan* 'because'. I believe that the final /n/ of *tebyan* has been reanalysed as a 3sg suffix and is now patterns the same as the set of verbal prepositions. I therefore include *tebya* in this section.

[7] The transitive suffix occurs as *-e* on verbs which end in either /l/ and /r/.

Historically, POc had a set of verbal prepositions that linked a verb with its grammatical argument and which marked the object by the set of pronominal object suffixes (Pawley 1973:142). North Ambrym's *byane* is cognate with POc **pani-* 'movement to (a person?)', *metene* with POc **tani-* 'movement away from' and *kirine* with **kini-* 'by, with (instrumental) (Pawley *ibid*.). It is plausible to assume that the other verbal prepositions in North Ambrym are later innovations. Durie (1988) argues that these verbal prepositions originated within serial verb constructions but have since been reanalysed as prepositions.

Similar to the verbs discussed in section 4.1, verbal prepositions are unable to be marked with the full set of pronominal suffixes, but they can be inflected by with the 3sg pronominal suffix *-n*, as shown on the preposition *byane* `to' in (38).

(38) Mwe la **byane-n**.
REC.PST[3sg] walk to-3sg
'He walked towards him.'

Synchronically, the 3sg pronominal marker is the only suffix that can be added to these prepositions to mark the object. All other pronominal suffixes are disallowed, instead pronominal arguments must be realised from the set of free pronouns rather than the set of possessor pronominal suffixes, as shown in (39).

(39a) Eb sene rrem ge tlam **byane** [neng].
PROS.IRR[3sg] give yam SUB PFV.big to 2SGP
'It will give you big yams.'

(39b) Barrbarr rrù lele en te vya rrù fwerrfwerr **kirine** [nyerù].
pig CONT RED.pass at.place CONJ go CONT RED.sleep with 3DLP
'The pig was going to that place and was sleeping with the two of them.'

When the object of a verbal preposition is a noun phrase, it is the construct suffix that can occur, and not the 3sg suffix as evidenced from the following two examples.

(40a) Mweneng siba mùl mùn **byane-n** [yafu ne ùrr rin nyerù].
CL.1sg thanks again again to-CST chief ASS place here 3DL
'My thanks again to the two chiefs of this place here.'

(40b) Mùrù ser bu bwe, tamù **kirine-n** [ken tate].
3DL.IRR spear pig yet first.one with-CST 1pl.INP last.one
'The two of them will kill a pig yet, the first one with us last ones'

Example (40a) shows that the object of the preposition has the person feature dual, which is not reflected by the construct suffix, showing that no agreement is taking place. Similarly in (40b) the object of the preposition is the 1pl.IN pronoun and the construct suffix shows no agreement with the person or number feature of the pronoun.

When the argument of the preposition is a proper noun or kinship term then the construct suffix does not occur, as shown in (41).

(41a) Ùm chene siba **byane** [Eli] tebyan ge mwe sene sur mene neng.
2sg.REC.PST call.TR thanks to Eli because SUB REC.PST[3sg] give honour to 2SGP
'You said *thank you* to Eli because he gave a nambas decoration to you.'

(41b) Fù a fe **mene** [tema-m] a ba me
2sg.IRR go say to father-2sg CONJ IRR[3sg] come
'Go and say to your father to come'

When the prepositions have common noun phrase arguments, the construct suffix predominantly occurs. Two examples are shown in (42).

(42a) Na rrù suuto tolo Yafu **mene-n** [vanten nyer].
1sg CONT preach voice God to-CST person
'I will be preaching to the people.'

(42b) Em rrù guburrne **kirine-n** [tabu].
3pl.REC.PST cont cover.TR with-CST cabbage
'They are covering (it) with cabbage.'

However, there are a few instances of the construct suffix not occurring when the argument is a common noun phrase, as shown in (43).

(43a) Masum rrù pleipleine vyuu totoù liye **kirine** [bau li blabo].
1ex:PC.REC.PST CONT RED.play.TR bow RED.strike stick with flute tree bamboo
'We are playing the wooden strike bow with the bamboo flute.'

(43b) Be mù, long mwe cheene na sur **kirine** [mweneng tili atingting].
COP first in.1sg IPFV[3sg] want 1sg[IRR] talk with CL.1sg sound slit.drum
'First, I want to talk with the sound of my drum.'

From my corpus there are 40 instances of the construct suffix attaching to the verbal preposition when the object is a CNP, but only 6 instances of the construct suffix not occurring. The results of the corpus count are similar to the count done for verbal constructions in that they show that the construct suffix predominantly occurs when the object is a CNP and thus we can make a generalisation rather than a strict rule here.

In summary, the occurrence of the construct suffix with the set of verbal prepositions matches the occurrence of the construct suffix on the set of verbs that allow the construct suffix. The following table shows this similarity.

Table 6 – Construct suffix in possessive, verbal and verbal prepositional constructions

	POSSESSIVE CONSTRUCTIONS	VERBAL CONSTRUCTIONS	VERBAL PREPOSITIONAL CONSTRUCTIONS
Pronominal Suffixes	full set	3sg only	3sg only
Free Pronoun Possessor/Object	N/A	full set	full set
PNP Possessor/Object	Ø	Ø	Ø
CNP Possessor/Object	*-n*	*-n*	*-n* [8]

4.2.2 Bound prepositional constructions

There are eight different bound prepositions in North Ambrym and all of them describe a spatial relation centred on the object of the preposition.

[8] This is a generalisation.

Table 7 – Bound prepositions

BOUND PREPOSITION	GLOSS	BOUND PREPOSITION	GLOSS
fo-	'above, for, after'	*tù-*	'behind'
fya-	'under'	*ra-*	'on, up'
bo-	'close'	*biiri-*	'close'
lo-	'in, inside'	*taahi-*	'at the side of'

This closed set of prepositions are termed bound prepositions as they can be affixed by the set of pronominal possessor suffixes which attach to bound nouns in simplex possessive constructions and thus differentiate them from verbal prepositions, which cannot take possessor pronominal suffixing. The following shows the affixation of the possessor pronominal suffixes to the bound prepositions:

(44a) Ma mtùmtù ra**-ng**
R[3sg] old.RED on-1sg
'He is older than me (lit. he is older on me).'

(44b) Mwenam yamarr eb rru tù**-m**
CL.2sg wife PROS.IRR stay behind-2sg
'Your wife will follow you.' *North Ambrym*

However, there is no distinction in animacy in the third person and the 3sg non human pronominal suffix does not occur in these constructions.

An independent personal pronoun can also be the the object of a bound preposition as in example (45) thus differentiating bound prepositions from bound nouns.

(45) Mam rrù me lon liyal, ùrr rrù renren faara ùrr **ra gema**.
1pl.IN.REC.PST CONT come in.3sg sun place CONT RED.dawn clear place on 1pl.EXP
'We are coming into the light, clarity is dawning on us.'

POc had one bound preposition, **ta-*, which could be suffixed by the set of pronominal possessive suffixes, unless the object of the preposition was a personal noun phrase (Ross 1988:103). This preposition encoded location and possession. North Ambrym's modern reflex *ta* encodes a relationship of belonging to a place, such as *ta Linbul* 'from Linbul (village)'. However, North Ambrym's reflex never occurs with pronominal possessive suffixes. The set of bound prepositions in North Ambrym are thus later innovations, though related schematically to POc **ta-*.

Bound prepositions are found in other languages in Vanuatu. Both Lolovoli (North-East Ambae, Hyslop 2001) and Tape (Malakula, Crowley 2006), both from the Northern Vanuatu linkage, differentiate between nominal prepositions and verbal prepositions. Verbal prepositions are able to be inflected by verbal object suffixes, whereas nominal prepositions are able to be inflected by the set of possessor pronominal suffixes. The following example contrasts examples from North-East Ambae, where (46a) shows a verbal preposition with a verbal object enclitic and (46b) shows a nominal preposition with a pronominal possessor suffix:

(46a) Mo mule **dene=a**
R go.home ABL=3SGO
'He went home from it'

(46b) Ale, tubui **to-na** vagabui-ne ra=ru mo raha na ga-ra loko
CONJ woman COM-3sg grandchild-3sg 3nsg=DL R grate ACC CL-3nsg pudding
'Well, an old woman and/with her grandchild were making their laplap pudding.'
North-East Ambae (Hyslop: 2001:137-140)

Both North-East Ambae and Tape are similar to North Ambrym as they all make a distinction between verbal and nominal prepositions, except that in North Ambrym the set of verbal prepositions are unable to occur with any pronominal suffixing bar 3sg *-n*.

Synchronically in North Ambrym when the complement of a bound preposition is a noun phrase the construct suffix can occur, dependent upon the complement type, thus making it an analogous construction to complex possessive constructions. When the complement of a bound preposition is a personal noun, such as a proper noun or kinship term, then the bound preposition is unmarked (47a) and (47b). This corresponds to the constraints on possessive constructions where no construct suffix occurs with personal noun possessors.

(47a) Mi ling barite nga **ra** [Velvel].
REC.PST[3sg] put start.3sg.NH just on Velvel
'It started with Velvel.'

(47b) Rruan ne wunu te ma nga rru **ra** [amasul taata] bwe.
stay.NMLZ ASS fool CONJ REC.PST[3sg] IMM stay on CL.1PC.IN father still
'The way of the fools was still on our father.'

The construct suffix also occurs when the referent of the complement noun phrase is a common noun phrase (CNP), as shown in 48.

(48a) Te me rrù fifine **ra-n** [metahal nyer].
PST come CONT RED.share.TR on-3sg sister
'He came and shared it with the sisters.'

(48b) Lisieseu ma me rrù kil rru **tù-n** [tomo].
Lisepsep REC.PST.[3sg] come CONT dig stay behind-3sg rat
'Lisepsep came and was digging behind the rat.'

(48c) Tesu ho bya nge le rru rrù teter **fo-n** [tan ne asul mama].
PST.3PC stay. go TOP MED stay CONT RED.look above-3sg ground ASS CL.3PC mother
'They were staying there and were looking after their mother's grave.'

There is one exception with common noun complements of bound prepositional phrases, when the bound noun *li* 'tree of' occurs as the head noun in an attributive construction in a bound preposition's complement, the construct suffix is in free variation. *Li* can be qualified by the type of tree it is as in *li bolva* 'beach hibiscus tree' or the special non attributive suffix, *-ye*, can attach to it, as in *liye* 'tree'.[9] The following examples contrast the occurrence of the construct suffix on bound prepositions when the object refers to a tree.

[9] This suffix also attaches to parts of trees too - *woye* 'fruit', *raye* 'leaf', *rreye* 'sap', etc.

(49a) Rrù lelhe nùnùn Kitamùl bya **ra-n** [li unu].
CONT see.RED shadow.CST Kitamùl go on-CST tree navenu
'She was seeing Kitamùl's shadow going onto the navenu tree.'

(49b) Awa hu nga mu rru **ra** [li byang le].
vine IND just REC.PST[3sg] stay on tree banyan MED
'A vine was living on the banyan tree there.'

When the special non attributive suffix *-ye* attaches to *li* 'tree', free variation of the construct suffix also occurs.

(50a) Te me te rrù flie **ra-n** [liye hu].
NREC.PST[3sg] come NREC.PST[3sg] CONT climb on-CST tree IND
'He came and was climbing on a tree.'

(50b) Te flie **ra** [liye hu].
NREC.PST[3sg] climb on tree IND
'He climbed on a tree.'

All other common nouns, including those referring to other parts of trees, when occurring as the argument of a bound preposition must trigger the occurrence of the construct suffix.

Table 8 summarises the differences in the occurrence of the construct suffix between bound prepositional constructions and the other construction types reviewed in this paper.

Possessive constructions and bound prepositional constructions are similar as they both can occur with the full set of possessor pronominal suffixes, yet differ as possessive constructions are unable to have a free pronominal possessor. Verbal and verbal prepositional constructions are similar in that they both can only be suffixed by the 3sg possessor pronominal suffix, which now marks a 3sg pronominal object. Verbal and verbal prepositional constructions are similar to bound prepositional constructions in that they can all have a free pronominal object, which differentiates them from the possessive constructions.

The parameters on the hierarchy are the same for all construction types. All construction types disallow the construct suffix when the possessor or object is a personal noun phrase, but allow the construct suffix when the possessor or object is a common noun phrase, albeit with some minor variation.

Table 8 – Construct suffix in possessive, verbal and prepositional constructions

	POSSESSIVE CONSTRUCTIONS	BOUND POSSESSIVE CONSTRUCTIONS	VERBAL CONSTRUCTIONS	VERBAL PREPOSITIONAL CONSTRUCTIONS
Pronominal suffixes	full set	full set	3sg only	3sg only
Free pronoun Possessor/Object	N/A	full set	full set	full set
PNP Possessor/Object	Ø	Ø	Ø	Ø
CNP Possessor/Object	*-n*	*-n*[10]	*-n*	*-n*

[10] Variation only when the object NP is headed by *li* 'tree'. Therefore this is a generalisation.

5 Conclusion

This paper has looked at four different construction types – possessive, bound prepositional, verbal prepositional and verbal constructions – and has shown that the construct suffix occurs in all four construction types under similar constraints.

I have shown through diachronic evidence that the construct suffix in North Ambrym is related to POc *-*ña*, the 3sg possessive pronominal suffix, and not from the special genitive markers **i* or **qi*. In fact, North Ambrym lost these latter two genitive markers.

I have also argued that synchronically the construct suffix is not a marker of agreement between the possessed noun or classifier and the possessor nominal in that it does not agree with the different semantic features of the referent of the possessor, being person, number and animacy. Similarly the construct suffix in verbal and prepositional constructions does not occur with the person or number feature of the object. Functionally, the construct suffix marks common noun phrase objects/possessors and occurs in possessive, prepositional and verbal constructions.

Bound nouns, possessive classifiers and bound prepositions are all able to be affixed by the full set of possessor pronominal suffixes. Though no POc reconstructions are available for the construct suffix that occurs in bound prepositional constructions, it is conceivable that it developed from the 3sg possessor suffix in North Ambrym and that due to homophony with the construct suffix in complex possessive constructions, it acquired the same constraints of occurrence.

The set of object suffixes that are affixed to verbs and which are reconstructible in POc have been lost in modern North Ambrym. What is left on a handful of verbs is the 3sg object marker -*n*, which is not what we should expect for a relic construction. The 3sg POc object enclitic was *=*a*, but instead we find the a reflex of the POc 3sg pronominal possessor suffix. What this shows is that at some point all object marking was lost from North Ambrym's verbs and that later the construct suffix moved into the gap that was left when a common noun object occurred. This was able to happen due to the fact that the construct suffix marks common noun phrase arguments.

The set of verbal prepositions, which in other languages can take object pronominal suffixes/enclitics, lost the object suffixes in North Ambrym, in the same way as it did for verbs. Again, the construct suffix took the place of the lost POc *=*a* when the a common noun phrase argument occurs.

Finally, the set of bound prepositions also occur with the construct suffix marking CNPs. historically the bound preposition **ta*- was left unsuffixed when the object was a PNP, which mirrors the modern bound prepositions in North Ambrym. Not much has been written about this POc preposition and it is unknown if a construct suffix attached to it when a CNP object occurred or if the possessive pronominal agreement suffixes occurred. However, the bound prepositions in North Ambrym follow the pattern of the other construction types where the construct suffix marks a CNP argument.

6 Abbreviations

The following are abbreviations not found in the Leipzig glossing rules.

ASS	Associative preposition
CL	Classifier
CONJ	Conjunction
CONT	Continuous
CST	Construct suffix
DL	Dual
EX	Exclusive
H	Human
INC	Inclusive
IND	Indefinite
MED	Medial
NH	Non human
NREC	Non recent
NSG	Non singular
NSP	Non specific
O	Object
P	Pronoun
PC	Paucal
PL	Plural
PROS	Prospective
PROX	Proximal
RED	Reduplication
S	Subject
SG	Singular
SUB	Subordinator

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Numerals in Sa

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Abstract

The numeral systems of the Sa language from the southern part of Pentecost Island show considerable dialectal variation. This variation is partly influenced by the division between those villages where Christianity is well established and a cluster of about 12 villages on the south-east where people adhere to a traditionalist ideology known as *kastom* (in Bislama). In addition to an imperfect decimal counting system, speakers of Sa in *kastom* villages still retain relictual knowledge about a decimal counting system which is believed to have been replaced by the current imperfect decimal system. In addition, Sa speakers in *kastom* villages also use an object specific counting system for money. Other relictual decimal counting systems in neighbouring languages are also discussed. Adherence to *kastom* ideology appears to have played a role in the retention of old counting systems and the development of a new system used for currency.

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1 Introduction

It has been observed that numeral systems are typical lexical domains much relied on in cross-cultural interaction, especially in the domains of commerce, education and religious proselytisation (Comrie 2005). As a result, numeral systems and other similar inter-cultural lexical domains are possibly more susceptible to change and borrowing than others. For the languages of Vanuatu in recent times, this usually means loss or substitution of indigenous numeral forms for English or Bislama equivalents. This loss, in some cases of cross-cultural contact, has occurred quite rapidly. For the numeral system of Anejom̃, for example, Lynch & Spriggs (1995) established that by 1880, after some thirty years of contact with European mission education, the numeral system included several English loans and that today only the first three indigenous numbers remain in use, with all numerals above three being Bislama or English loans.

The purpose of this chapter is to describe numeration in the Sa language of South Pentecost, from both a grammatical perspective and also from the perspective of social and cultural aspects of everyday use. In doing so I show that the vitality of indigenous numeral systems used by Sa speakers in the *kastom* villages of south-east Pentecost is influenced by

kastom ideology, resulting in a very different outcome to the typical lexical shift scenario described above.

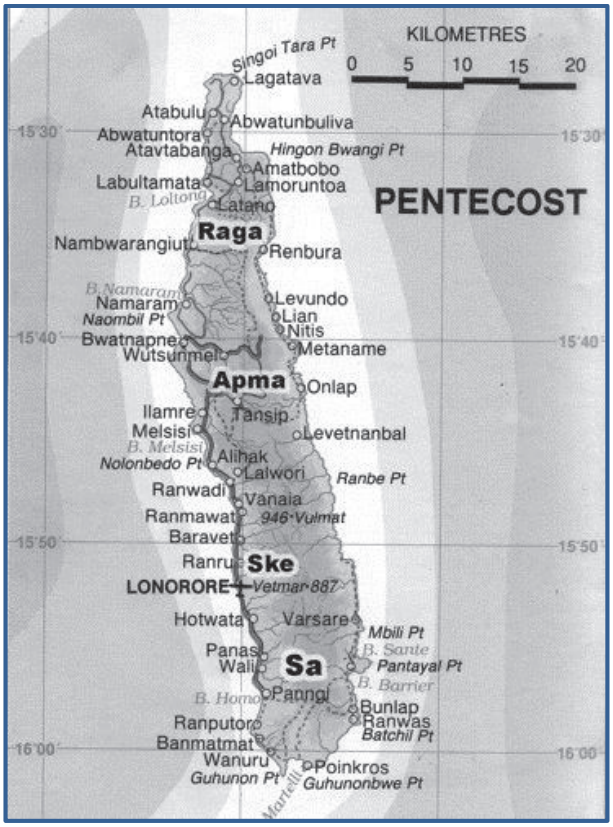

Figure 1 - Contemporary language distribution, Pentecost Island.

There are today 12 *kastom* villages clustered in the south-east corner of Pentecost Island, where there exists an ideological commitment to a certain interpretation of tradition which sets these communities apart from those aligned with Western education and Christianity or *skulan* as it is known in Sa[1]. Although it has been little documented, *kastom* has a significant effect on some aspects of language use. One example is the continuity and change in Sa numeral systems. Sa speakers from the *kastom* villages of the south-east employ a 'many strategies' approach whereby a variety of numeral systems are available for a variety of purposes. A basic 'imperfect decimal system' is the default for numeration in most contexts. An object specific counting system for money borrows colonial currency terms with equivalents in the contemporary currency, the vatu. And finally, in competition with the 'imperfect decimal system', there is also a relictual decimal numeral system, said by speakers to be of some antiquity, that is retained for heritage purposes in line with the idea that in addition to other types of tradition, linguistic continuity with the past is also considered part of *kastom* ideology.

[1] *Skulan,* from Bislama *skul* and English 'school', plus a nominalising *–an* suffix, refers to the combined culture of Western education and Christianity.

2 The Sa language

As for all languages in Vanuatu, Sa is located within the Austronesian family and the Oceanic subgroup. Within this classification Sa is a member of the Central Vanuatu group of languages although the central and southern areas of Pentecost are a transitional zone between the North and Central Vanuatu division (Clark 1985: 221).

Sa is spoken by about 2500 people throughout the southernmost part of Pentecost Island on both the east and west coasts, as well as the central highlands. The language comprises various dialects, displaying much greater dialectal diversity than the other larger language groups to the north, namely Apma and Raga. Along linguistic lines, all regional village clusters identify with a variety of lexical, grammatical or phonological (and allophonic) shibboleths which distinguish one dialectal speech community from another. Along cultural or religious lines, the *kastom* (or in Sa, *lon duan*) versus *skulan* dichotomy is also an important cultural axis for marking identity. *Kastom* villages are predominantly found in the Sa speaking region of South Pentecost— a region referred to in Sa by the name *Wawan.* Just to the north of the region where Sa is spoken on the south-west coast are a number of communities speaking the small language Ske, with about 300 speakers. Further north of here towards Melsisi on the west coast, the Sowa language is now considered extinct although there are a number of people who have knowledge about the language (see Schneider & Gray, this volume).

Sa speakers share cultural and linguistic links with the people of North Ambrym. The 12 km journey across the Selwyn Strait which separates South Pentecost from North Ambrym is still regularly undertaken in small motor boats and canoes, continuing the exchange of 'objects and ideas' (Jolly 1994:17) as well as kinship ties through marriage exchange. This close contact has resulted in a number of lexical innovations shared by South Pentecost and North Ambrym languages (Clark 1985:217) but a more precise description of the relationship between the two languages has not yet been undertaken.

Table 1 – Consonants

	labiovelar	*labial*	*alveolar*	*velar*	*glottal*
voiceless stop	pw	p	t	k	
voiced stop	bw	b	d	g	
nasal	mw	m	n	ŋ	
fricative		f [northern dial.]	s[2]		h
rhotic			ɾ		
glide	w		y		
lateral			l		

[2] The northern Sa dialect has a voiceless palato-alveolar variant of this sibilant realised as [ʃ] – e.g. *ʃuf* 'one'.

Table 2 - Vowels, short and long

i					u				i:						u:
	ɪ					ʊ					ɪ:					ʊ:
		ɛ		ɔ								ɛ:		ɔ:		
			a										a:			

Table 3 - Practical orthography (vowels)

PHONETIC	i	ɪ	ɛ	a	ɔ	ʊ	u	i:	ɪ:	ɛ:	a:	ɔ:	ʊ:	u:
ORTHOGRAPHIC	i	ē	e	a	o	ô	u	ii	ēē	ee	aa	oo	ôô	uu

Sa is relatively uncomplicated morphologically. Unlike certain other Central Vanuatu languages it has no root initial mutation of verbs associated with mood variation (Crowley 1991). Also unlike many other Oceanic languages, negation is not usually marked discontinuously except in some exceptional circumstances. The typical Oceanic distinction between direct and indirect possession is also present in Sa, including a dual system that has separate marking for food class items and a general class for everything else. In contrast to all other Pentecost languages, Sa has no reflex of the North Vanuatu possessive classifier **bulu-* 'valued object' (Lynch, Ross & Crowley 2002:79).

3 Features of Sa numerals

3.1 Grammatical status

Certain Sa numerals are formative in trial/paucal pronouns (see table 4). The numerals *tēl* 'three' in some dialects (Lonbwe and Bwilaôt villages) and a fossilised form for 'four' *pat* (PNCV **vati*, Clark 2009: 219) in other dialects, are cliticised to both independent and possessor pronouns marking either trial or paucal.

Table 4 – Numerals 3 and 4 in paucal pronouns.

	Lonbwe, Bwilaôt	*other dialects*
1 paucal	mapat	matēl
2 paucal	pat	tēl
3 paucal	ērpat	ērtēl

Sa numerals function as postnominal modifiers and can have a predicative function when they appear with the copula *be* before the number. As it is also present in counting, it may be that the copula is developing an additional function as a numeral marker or article. Only *su* 'one' occurs without the copula (although it is optional in counting) which in addition to the cardinal function of quantity also marks indefinite specific reference:

(1) Tēlongis ēsēn **su** m-pasu watloji be ru.
long.ago woman one RE-give.birth child COP two
'Long ago, a woman gave birth to two children.'

Predicative functions are illustrated in (2) and (3):

(2) Mapat be **tēl**.
1pauc COP three
'We were three (there were three of us).'

(3) Sela-n be **ēt** aē wainē-n be **ru** nga.
brother-3SG COP four CONJ sister.of.male-3SG COP two just
'He has four brothers and two sisters.'
(lit: His brothers are four and his sisters are only two)

The cardinal sense of *su* is made explicit with the addition of the modifier *nga* 'just, only':

(4) Arman ma-ksei is su, bwa-tē su **nga**, aē bari rutbwil.
male RE-break.off banana one fruit-AN one only CONJ cook daytime
'The boy broke off a banana, just one [fruit], and cooked it in the daytime.'

Sa numerals can also combine with preverbal elements such as the irrealis particle *te* which when combining with numerals can also indicate indefinite non-specific reference:[3]

(5) O te-lngi bôtôa **te** ru ran môn.
2sg IMP-put wood IR two on again.
'Put two more pieces of wood on the top of it.'

(6) A-k **te** su!
FOOD.CL.POSS-1sg IR one
'Give one to me [to eat].'

When counting, the numbers one to nine are all preceded by the copula *be* (7). At ten the copula is dropped and the 1-9 series without *be* is used repeatedly in between each decade. Effectively this means counting 1-10 between each decade and then explicitly stating the factor of ten as in— one, two, three, four, five, six, seven, eight, nine, ten; one, two, three, four, five, six, seven, eight, nine, twenty; and so on.

(7) Counting

1	be su / hu / ʃuf	11	[infer 10+] su	21	[infer 20+] su
2	be ru	12	[infer 10+] ru	22	[infer 20+] ru
3	be tēl	13	[infer 10+] tēl	23	[infer 20+] tēl
4	be ēt	14	[infer 10+] ēt	etc.	
5	be lim	15	[infer 10+] lim	30	nul be tēl
6	be lijia / lesu	16	[infer 10+] lijia / lesu	100	nul sangul su
7	be lêôru	17	[infer 10+] lêôru		
8	be lētēl	18	[infer 10+] lētēl		
9	be liapat	19	[infer 10+] liapat		
10	sangul[4]	20	[infer 10+] nul be ru		

The higher numerals 100 and 1000 are more subject to inconsistency and replacement with Bislama loans— *andred* and *taosen* which are more popular with speakers who have spent longer amounts of time outside of the *kastom* villages of south-east Pentecost.

[3] As (5) illustrates, the range of non-real events marked by *te* includes the imperative (cf. languages of Malakula e.g. Crowley 2006b:99). *Te* is also a partitive marker as well as a postverbal particle in the bipartite negative construction *tawo-lsi te* (NEG-see at.all 'nothing at all'). The progression of a partitive to grammaticalisation as a second element in negative constructions has been discussed elsewhere in the languages of Vanuatu (François 2003: 317).

[4] Dialectal variants for 'ten': *sangul*, *sungul*, *sangful*, *hungêl/hongil*.

Another method of counting is to state a figure and then ‘add on top’ - a system referred to by the expression in (8). In this method of counting, the decades are stated as in (10) but units between all decades are treated in the same way as in (9):

(8) O m-bwili ba ran
2sg RE-count go on
‘Counting on top of it’

(9) Su mô-wen ran, be ru mô-wen ran, be tēl mô-wen ran
one CONTR-add on COP two CONTR-add on COP three CONTR-add on
‘Add on one, add on two, add on three, etc.’

In (9) the last decade is the previous topic and is no longer mentioned but pragmatically inferred. The number added on is marked with *mô-* a verbal prefix that can index both subject switch reference and contrasts in event. It is most likely derived from the free form adverb *môn* ‘again’. It is glossed here as having a contrastive function which places the previous decade as subject in contrast with the numeral 1-9 which is then added to the antecedent factor of ten.

3.2 Basic versus compounding forms for 10

Cardinal numbers at ten and decades above make use of a compounding form of ‘ten’ *nul* followed by the copula and a numeral 1-9. Note that *nul su* ‘ten’ has a cardinal function (denoting quantity) and is not usually the form used when counting in units as in (5) where the counting form *sangul* (or dialectal variant) is used.

(10)

10	nul su	60	nul be lijia / lesu
20	nul be ru	70	nul be lēôru
30	nul be tēl	80	nul be lētēl
40	nul be ēt	90	nul be liapat
50	nul be lim	100	nul sangul su

Cardinal numbers above ten, but between decades, are in the following form:

compound form of 10 *nul* + (1-9) postmodifier [+ conjunction *aē* + (COPULA 1-9)]

(11)

10	nul su	17	nul su aē be lēôru
11	nul su aē su	18	nul su aē be lētēl
12	nul su aē be ru	19	nul su aē be liapat
13	nul su aē be tēl	20	nul be ru
14	nul su aē be ēt	21	nul be ru aē su

Table 5 – Basic form of ten vs decadal form in Pentecost languages

	Basic	*Decadal*
Sa	sangul	nul / nuul
Ske	sebrenok	mavwul
Sowa	sebrenok	mawul
Apma	sangwul	ngawul
Raga	hangvulu	ngavul

All the languages of Pentecost have a similar compounding/decadal form of ten in addition to the more basic form (*Table* 5).

Both the basic and compounding forms derive from *PNCV *sagavulu* (Clark 2009:172) the proto-Oceanic form being **sa-[ŋa]-puluq* 'one-linker-10' (Lynch, Ross & Crowley 2002:72). In contemporary forms the pattern is usually for the decadal term to be a reduced form of the basic term, the reduction often involving the loss of the initial syllable (or a segment of the initial syllable). A likely interpretation is that the basic term was literally of the form 'one-ten' (although the 'one' sense may have been lost) which might explain why this formative is deleted when used as a multiplicative numeral. Another pressure for reduction in compounds is the cumbersome length of numeral compounds for numbers above ten in many Vanuatu languages. Any reduction of the form to meaning ratio would help alleviate this.

Table 6: basic and decadal forms of ten in other Vanuatu languages

LANGUAGE	LOCATION	BASIC	DECADAL
Naman	Malakula	*saŋavəl*	*(na) ŋavəl*
Tape	Malakula	*isŋel*	*iŋel-*
Avava	Malakula	*laŋal*	*ŋal*
Nese	Malakula	*saŋav'il*	*ŋovul*
V'ënen Taut	Malakula	*(sə)nal*	*nel*
Unua	Malakula	*saŋavur*	*ŋavür*
Banam Bay	Malakula	*seŋavür*	*ŋavür*
Uripiv	Malakula	*esŋavöl, seŋavöl*	*ŋavöl*
Northeast Ambae	Ambae	*haŋavulu*	*ŋavulu*
Merei	Espiritu Santo	*saŋavul*	*ŋavul*
Araki	Espiritu Santo	*saŋavulu*	*ŋavul*
North Ambrym	Ambrym	*saŋul*	*wiŋil*

In Sa, the basic term for 'ten' *saŋul* is usually only used in counting or in compounds with the reduced form *nul* to form numbers in the hundreds:

(12) **nul** su
ten one
'ten'

(13) **nul** sangul su
ten ten one
'one hundred'

The quantification of nouns for numbers above ten is achieved by discontinuous modification of the head noun. The numbers *nul* 'ten' or *nul sangul* 'hundred' are the initial elements. The qualified noun follows which can be further modified by a basic numeral in post position which effectively operates as a multiplier of the initial ten or hundred.

(14) *nul* *ôl* *be* *ru*
ten coconut COP two
'twenty coconuts [two groups of 10 coconuts]'

(15) nul sangul antôn be lim
ten ten person COP five
'five hundred people [five groups of a hundred people]'

A reviewer has asked if this construction is possible with the numeral *be lim* 'five' modifying a *nul* compound to mean 'five groups of fifty people'. This would have to be achieved with an additional multiplicative modifier *ba* (lt: 'to go') as in (16):

(16) **nul** antôn be lim **ba** be lim
ten person COP five go COP five
'five groups of fifty people'

Nul can also form compounds with ordinals:

(17) **nul** ru-an na-tē m-be sanga
ten two-NOM POSS-3sg RE-COP bad
'the second group of ten are bad' (Elliott 1976:60)

Ordinals are formed with a nominalising suffix *–an* for the first five and *–anan* for numbers above five and up to ten (for the south-east dialect). Whilst the numerals 2-10 are the base for suffixiation for these ordinals, the base for 'first' is not the numeral 1 but rather *kērēnē* 'ahead, initial'.

(18)

kērēnēan	first	*lijianan / lesuanan*	sixth
ruan	second	*lēôruanan*	seventh
tēlan	third	*lētēlanan*	eighth
ētan	fourth	*liapatanan*	ninth
liman	fifth	*sungulanan*	tenth

4 Imperfect decimal systems of Pentecost

Numeral systems in the languages of Vanuatu have been organised into four types (Lynch 2009): decimal, imperfect decimal, quinary and mixed. Both decimal and imperfect decimal sytems are represented in the languages of Pentecost Island. Raga in the north has a decimal system and the other languages (Apma, Ske, Sowa and Sa) have imperfect decimal systems (although the *kastom* dialect of Sa also retains a relictual decimal system). The term 'imperfect decimal' was first established by Codrington (1885:223, 235) and its use is now standard (Ray 1907:464, Capell 1933, Wolfers 1971, Charpentier 1987, Lynch 2009), although an alternative term 'modified quinary system' has also been used (Blust 2005:552). Lynch's definitions (2009, 392) of these two types are as follows:

> DECIMAL refers to systems in which the numerals 1-10 are monomorphemic (or have monomorphemic roots with a synchronic or fossilized prefix), and where 20 is represented by a compound involving 2 or 10.
>
> IMPERFECT DECIMAL refers to systems which differ from decimal systems only in that numerals 6-9 are compounds generally involving the numerals 1-4 in some way. In these systems 10 and 20 are constructed in the same way as for decimal systems.

Numbers in the imperfect decimal systems of Pentecost languages take the following form: 1, 2, 3, 4, 5, LIG-1 (=6), LIG-2 (=7), LIG-3 (=8), LIG-4 (=9), 10, where LIG- is a formative ligature

which binds to a reflex of the terms for 1-4 to form compounds ('ligature' being the term used by Lynch 2009). The formative ligature in Sa, as for a large number of other languages in Vanuatu, consists of a transitive verb with an object suffix. A recent reconstruction proposal by Lynch (2009: 403) for this common ligature is **lave-a* based on the verb 'to carry/take', which in turn is most likely related to Clark's two PNCV reconstructions for **lavi* 'carry, take' and **la-i* 'take, give'. Likewise, in Sa the formative ligature is based on the verb *li-* 'to take'. In the more conservative northern dialect, there is still a reflex of the PNCV labial consonant **v* in the form of /f/ retained in the ligature but not in the ordinary verb (see table 7).

(19) Saru ba lon tan ere aē ma **li** dal.
speak go LOC thing DEM CONJ RE take speech
'You speak into that thing and it records (lit: 'takes') your speech.'

(20) Si ma **li** trak?
who RE take vehicle
'Who is driving the vehicle?'

Numbers 6-9 and the verb 'to take' in the various languages of Pentecost are listed in table 7 (See Schneider & Gray in this volume for more detail on the varieties of Apma referred to here).

Table 7 - Pentecost formative ligatures 6-9 and verb to take.

Language	verb to take'	six (LIG+1)	seven (LIG+2)	eight (LIG+3)	nine (LIG+4)
Sa	-li	**li**jia / **le**su	**lē**ôru	**lē**tēl	**li**apat
Sa (north)	-li	**lef**shuf	**lef**ru	**lef**jil	**li**apat
Ske	-lvi	**lav**wal	**liv**ru	**lip**tʊl	**li**apet
Sowa	-lvi	**lu**wal	**liw**ru	**lip**tul	**lak**pat
Apma 1	li	**lap**waleh	**lavi**ru	**lap**tsil	**la**pet
Apma 2	livi				
Apma 3	lap		**lav**iri	**lap**til	**la**vas

5 Decimal counting system

Some speakers of Sa in *kastom* villages still use a decimal counting system alongside the more common imperfect decimal system. I have only ever recorded the use of these numerals in the *kastom* villages of the south-east. They are not known widely by Sa speakers outside of this area, as far as I can determine. The numbers are still used by all age groups in the large *kastom* village of Bunlap and its surrounding highland outstation villages. Most people in non-*kastom* villages on the south-west coast are mostly unaware of the existence of these numbers.

The Sa decimal numbers are similar in some respects to the numerals of the Raga language to the north, suggesting that decimal systems were possibly once common to all of Pentecost's languages. The first syllables on the numerals for 'one' and 'ten' however look suspiciously like English or Bislama loan accretions, but otherwise, the set displays familiar Raga-Sa sound correspondences and changes resulting from other common Sa historical processes such as syllable deletion e.g. Raga *vasi*, Sa *fa* 'four', and metathesis e.g. Raga *tolu*, Sa *teul* 'three'.

Table 8 - Decimal and imperfect decimal sytems in Sa

#	PNCV	Raga	Sa, decimal	Sa, imperfect decimal
1	*zikai	*tea*	*wantua*	*su*
2	*rua	*rua*	*urua*	*ru*
3	*tolu	*tolu*	*teul*	*tēl*
4	*vati	*vasi*	*fa*	*ēt*
5	*lima	*lima*	*lima ~ nima*	*lim*
6	*ono	*ono*	*ondo*	*lijia, lesu*
7	*bitu	*bitu*	*fiti ~ piji*	*leôru*
8	*walu	*vwelu*	*walo*	*lētēl*
9	*sivwa	*sivo*	*suan*	*liapat*
10	*sagavulu	*hangvulu*	*tendu*	*sungul*

The Sa decimal system numerals are said to be 'language from the distant past' used more frequently by previous generations. They are now used in restricted contexts as follows:

(1) to count people present,
(2) to count parcels of food or meals to be distributed,
(3) for heritage purposes, for their inherent historical value as part of the *kastom* ideology.

Another feature of the Sa decimal numerals is that in the terms for 'four' and 'seven', most speakers still preserve an unvoiced labial fricative /f/ phoneme, otherwise no longer present except for the variety spoken in four northern villages, Fonop, Pasari, Retepor and Rangusuksu. Further, in all Sa dialects except for that spoken at Baie Martelli on the southern tip, the alveolar stop [t] is palatalised as [c] when followed by either of the high vowels /i/ and /u/. It is however retained by most speaker in the numeral *fiti* 'seven' which is a rare exception to this rule. Some speakers do apply the usual sound changes of /f/ > /p/,ø and /t/ > [c] / _V (high), to give [pici].

5.1 Usage

Counting people in Sa *kastom* villages is often considered a special case of enumeration. In certain public and more formal contexts, such counting is marked by the use of the decimal number system. The purpose of the following discussion is to document perceptions about the use of these numerals today. The examples that follow are not illustrating the use of the decimal numeral system in everyday interaction but rather elicited information provided in response to my own questions.

(21) Aē antôn ēr tane ēr ba re be ôt su ēr bwili antôn ēr re wantua.
CONJ person 3pl if 3pl go PREP COP place one 3pl count person 3pl PREP one
'When people are going to a particular place, they count how many [are going] using the '*wantua…*' [decimal numerals].'

A similar formal public context is the distribution of food portions during ceremonial feasts. The comments in (22) indicate a decline in the use of the system.

(22) Ēr ma-kēlē nga ape tawo pwilpwil ran ronga liēp.
3pl RE-know just but NEG count on CONT much

Ulin	nga	ane	tane	gēgēnē	aniēn	aē		
because	only	COMP	if	share	food	CONJ		
antôn	ga	ēr	pwilpwil	ran	wantua	ronga	môn.	
person	some	3pl	count	on	'one'	CONT	again.	

'They still count with these numerals but they are no longer used often. For example, when some people share out food then they also use them [to count the portions].'

For the *kastom* speakers of south-east Pentecost, the decimal numeral system is considered a unique dialectal feature that sets their way of speaking apart from Christian or *skulan* villages where the maintenance of certain forms of traditional knowledge does not have the same kind of prestige as it does in the *kastom* villages. As already mentioned, there is a realisation that the decimal numeral system is endangered but its loss is considered undesirable. Another context for the use of these numbers is as a form of language maintenance as an end in itself. Encouraged by adults, children sometimes chant the decimal system numerals from one to ten to demonstrate to visitors and each other, their knowledge of this set of alternative numerals. I first encountered the Sa decimal numerals when eliciting information about the more commonly used imperfect decimal set. Once my language consultants were satisfied that I had recorded them correctly, I was informed of the existence of the alternative decimal set and a group of children listening to the elicitation session launched into a spontaneous group recitation of *wantua, urua, teul, lima ondo, fiti* etc. The discussion in (23) explores the extent to which younger Sa speakers are aware of the decimal numerals and the idea that for adherents of *kastom* ideology, maintaining use of them has inherent heritage value.

(23) MG:

Aē	watloji	ēr	ēr	ma-kēlē?
CONJ	children	3pl	3pl	RE-know

'Do children know [these numbers]?'

BS:

Watloji	ēr	ma-kēlē.	Ngan	m-be	dal	su	ene
children	3pl	RE-know	COMP	RE-COP	language	one	REL

dal	tigmatē	aē	ēr	ma-kēlē,	taet	en	(te)	te	hlal.
language	long.ago	CONJ	3pl	RE-know	NEG.FUT	REL	IR	IR	not.exist

Antôn	ēr	bonga	ēr	ma-kēlē.
person	3pl	all	3pl	RE-know

'Children know them. This is one kind of language which was used a very long time ago and people still know it. It is something that should never disappear. Everyone, they all know [these words].'

MG:

Aē	nagmare	ēr	bwili?
CONJ	today	3pl	count

'And they still count with them today?'

BS:

Ēr	bwili	ronga.
3pl	count	CONT

'They still count [using these numerals].'

Faced with the contemporary use of two systems, questions arise as to whether or not the two systems have been in use side by side for some time. Sa speakers also have very clear

perceptions of the relative ages of the two systems. The general impression is that all Sa speakers once used a decimal numeral system more widely than is the case today. The conversational data presented here is significant because it details speaker impressions of change in relation to an innovation which is common to many languages of Central Vanuatu—imperfect decimal numeral systems. What is missing in this account is of course are examples of 'naturally occurring' usage. However, attempting to record spontaneous use of a relictual number system is always going to be extremely difficult. On the other hand, the characterisation of metalinguistic discussions between native speakers and linguists as somehow 'unnatural' doesn't seem completely satisfactory either, although the phenomenon of the (participant) observer's paradox is noted. Comparative linguists might make more use of these kind of observations than I do here, but the point of departure is to record those social, cultural and demographic factors which may have a bearing on the rise and spread of innovations.

The conversation transcribed in (24) is in the form of a discussion I directed after hearing someone use the old decimal numerals in the *mal* 'men's house' in the *kastom* village of Bunlap during an evening of food preparation and kava drinking before a grade-taking ceremony. The decimal numerals are described as the older set used by past generations (line 3), but they are now being supplanted by the more recently adopted imperfect decimal system (line 7).

(24) 1 MG: Tigma tē aē ēr pea "wantua *etc*…" ?
long.ago PERF CONJ 3sg say one…
'Did they use those [decimal system] numerals *wantua* etc in the past?'

2 BA: Nganre tigma tē.
DEM long.ago PERF
'Those [numerals] are from long ago.'

3 BA: nganre ngamômô ngamômô tehre, tehre.
DEM distant.past distant.past INT INT
'They are from a very very long long time ago.'

4 MG: Na ôt lo?
POSS place LOC
'From this place here?'

5 BA: Na ôt lo ei!
POSS place LOC INTERJ
'Of course, this place here!'

6 BA: Gone ēr nene en marmat, aē mô bwili.
PROP 3pl DEM REL REDUP.die CONJ CNTR count.
'When those previous generations passed away, then we counted [differently].'

7 BA: Gema ma tabtôn ngan pe "*su ru tēl ēt lim lijia*" i re…
1pl.ex RE start COMP say one two three four five six 3sg DEM
'We started saying "*su, ru, tēl, ēt, lim, lijia*", like that.'

5.2 Spirit-being numerals

Decimal counting systems can also be fossilised in other corners of traditional narrative and verbal art. A number of languages in the Central Vanuatu region retain archaic numerals said to be spoken by spirit beings or mythological characters in narratives. Gray (2013:92) refers to a set of 'devils' numbers' in Apma which appear to be a decimal system with reflexes of PNCV numerals 2-5 whilst numbers 6-10 appear to be innovative:

(25)	1	gonaleha	6	lowaŋga
	2	gonarua	7	dulambana
	3	gonatsila	8	rorombosisa
	4	gonaveta	9	seselua
	5	gonalima	10	bwalu

In North Ambrym, Paton (1971: 19) recorded 'a tale about a spirit' who gathers chestnuts and then sits down to count them. The same story was also recorded by Richards (2010) in the dialect spoken at Fanbak, East Ambrym. These numbers are listed in table 9.

Table 9 - North Ambrym spirit numbers

	PNCV	East Ambrym spirit numbers (Richards 2010)	North Ambrym spirit numbers (Paton 1971)	North Ambrym imperfect decimal
1	*zikai	*sokae*	*soŋae*	*hu*
2	*rua	*benalua*	*naloe*	*ru*
3	*tolu	*benatelu*	*natolu*	*sul*
4	*vati	*telunimba*	*tolunɛmba*	*virr, yirr*
5	*lima	*nimbaŋgaŋga*	*nimbaŋeŋe*	*lim*
6	*ono	*naoreŋga*	*naorŋeŋe*	*liuse, liisa*
7	*bitu	*naorbisi*	*naorbisi*	*liuru*
8	*walu	*bisinia*	*bisiniŋge*	*liusul, liisul*
9	**sivwa*	*taŋaŋae*	*taŋaŋae*	*yaferr, laferr*
10	*sagavulu	*taŋoŋolo*	*taŋoŋolo*	*sangul, sangil*

These numerals retain various reflexes of historical forms e.g. *sokae* 'one' with some also appearing in what appear to be innovative compounds. For example, reflexes of PNCV **tolu* 'three' appear in words for both 'three' (*bena<u>telu</u>*) and 'four' (*<u>telu</u>nimba*) whilst reflexes of PNCV **bitu* 'seven' appear in words for both 'seven' (*naor<u>bisi</u>*) and 'eight' (*<u>bisi</u>nia*). Certain compounding formatives appear in pairs – *bena-/na-* (for 'two' and 'three'), *naor-* (for 'six' and 'seven') and *taŋV-* (for 'nine' and 'ten'). Further, the second half of the form becomes the first half in the following numbers – *bena<u>telu</u>* > *<u>telu</u>nimba*; *naor<u>bisi</u>* > *<u>bisi</u>nia*. These are innovations of a different type to those numerals in the imperfect decimal system but their origin is not clear.

In some cases it is plausible to explain numerals now described as the reserve of spirit beings as relics which are still remembered, but because they have no contemporary function, they are attributed to the other worlds of spirit beings. A good example are the spirit being numbers of Lewo, a language of Epi (Early 1994: 213) where the numerals 1-9 are clearly a relictual decimal system— *taka, luaka, telka, verka, limka, kona, isi, varo, siwe*—

which reflect proto Oceanic numerals (with an added *ka-* ligature for 1-5), as has been noted by Lynch (2009: 405). The contemporary Lewo numerals are described as a 'mixed system' (imperfect decimal and quinary, again Lynch (2009: 405)). However, the spirit numbers of Ambrym seem to involve innovations in the form of extensive compounding which may be an intentional design strategy to mark what is believed to be the aberrant language of spirit beings in comparison to the familiar norms of human speech.

6 Numerals and money

Sa speakers in *kastom* villages have a distinct system for money which is based on borrowings from the colonial currency of shillings and pounds. Whilst some other Sa speakers from non-*kastom* villages sometimes use a few of these terms e.g. *nul selen su* or *ten selen* '100 vatu', the Sa *kastom* system includes terms for all currency amounts. It effectively has transposed the colonial system of pounds and shillings across to equivalents in vatu (the contemporary national currency), most likely based on the notional exchange rate at independence in 1980 of VT 200 being equated with one English pound or in Sa *pon su.*

(26)

VT 10	selen	su		VT 100	nul	selen	su			
	shilling	one			ten	shilling	one			
VT 20	selen	be	ru	VT 120	nul	selen	su	aē	be	ru
	shilling	COP	two		ten	shilling	one	CONJ	COP	two
VT 30	selen	be	tēl	VT 150	nul	selen	su	aē	be	lim
	shilling	COP	three		ten	shilling	one	CONJ	COP	five
	etc.									

Currency amounts are then counted as multiples of the 200 vatu base. 1000 vatu is therefore *pon be lim* 'five pounds' and 2000 vatu *nul pon su* 'ten pounds [×1]'.

(27)

VT 200	pon su	VT 800	pon be ēt
VT 300	pon su aē nul selen su ~ pon su aē ten selen	VT 1000 VT 1100	pon be lim pon be lim aē nul selen su
VT 400	pon be ru	VT 1200	pon be lijia
VT 500	pon be ru aē nul selen su ~ pon be ru aē ten selen	VT 1300 etc.	pon be lijia aē nul selen su
VT 600	pon be tēl	VT 2000	nul pon su

Amounts in the thousands of vatu are then counted in multiples of 2000 vatu or *nul pon be N* (where N is a number 1-9).

(28)

VT 2000	nul pon su (ten ×1 pound)
VT 3000	nul pon su aē pon be lim (ten ×1 pound and 5 pounds)
VT 4000	nul pon be ru (10 ×2 pounds)

VT 5000	nul pon be ru aē pon be lim (ten ×2 pounds and 5 pounds)
VT 6000	nul pon be tēl (10 ×3 pounds)
VT 8000	nul pon be ēt (10 ×4 pounds)
VT 10,000	nul pon be lim (10 ×5 pounds)
VT 11,000	nul pon be lim aē pon be lim (10 ×5 pounds and 5 pounds)
VT 12,000	nul pon be lijia (10 ×6 pounds)
VT 13,000	nul pon be lijia aē pon be lim (10 ×6 pounds and 5 pounds)
	etc.

Arriving at VT 20,000, there is either a loan from Bislama *andred su* 'one hundred' or the verb *ma-mrôp su* (or *môrôban su* in some dialects). Literally these terms both mean 'one hundred', but in the context of money, it is the equivalent of saying 'one hundred pounds' or 'one hundred times VT 200' where the 'pound' base is pragmatically given. Following this logic, VT 200,000 is *taosen su* or *ma-mtar su,* 'one thousand × VT 200', *ma-mtar* being the word for 'one thousand', a reflex of **tari* which has been reconstructed for Northern Vanuatu (François 2005: 500, see also Pawley 1972: 55 for Proto Eastern Oceanic).

(29)

VT 20,000	andred su ~ nul sangul su ma-mrôp ba su 'one hundred' (i.e. 100 × VT 200)
VT 30,000	andred su aē nul pon be lim 'one hundred and 10 × 5 pounds'
VT 40,000	andred be ru / ma-mrôp ba be ru 'two hundred' (i.e. 200 × VT 200)
VT 50,000	andred be ru aē nul pon be lim 'two hundred and 10 × 5 pounds'
VT 60,000	andred be tēl 'three hundred' (i.e. 300 × VT 200)
VT 100,000	andred be lim 'one thousand'

If we think of 200 vatu (which admittedly is really *pon su* 'one pound') as a kind of base in the *kastom* Sa money system, Comrie's hypothesis (1997:3) relating to the size of arithmetic bases in numeral systems is therefore largely supported by the Sa system.

> Hypothesis: Arithmetic bases of numeral systems have either a somatic (i.e. based on human anatomy) or a commercial (transactional) origin; lower bases are typically somatic, higher bases commercial, …

A similar situation to Sa currency numerals, to some extent, exists in the etymology of Balinese numerals although here, borrowed Chinese currency has resulted in a more generalised lexification of numerals:

Balinese (from Comrie 1997:4)

25	*se-lae*	'one thread (of Chinese coins)'
45	*se-timan*	'one opium packet (costing 45 Chinese coins)'
50	*se-ket*	'one tie (i.e. two threads of 25 Chinese coins)'
75	*telung benang*	'three threads (of Chinese coins)'
200	*s-atak*	'one bundle of 200 Chinese coins'
400	*s-aman*	'one gold (coin worth 400 Chinese coins)'

In the late 1990s I recall accompanying a group of young people from a *kastom* village in South Pentecost, who went to visit the trade store at a neighbouring Roman Catholic (i.e. non-*kastom*) village. On arriving, none of the *kastom* shoppers seemed to understand the prices quoted to them in Bislama numerals until they were translated into the system described above (by the older youths). Prior to this experience I thought perhaps that the *kastom* village money terms were perhaps a relic from colonial times but the system is still in daily use. Whilst many young people in *kastom* villages might not be familiar with Bislama and English numerals, older speakers do eventually learn them and use them when outside of their own speech communities. As children in *kastom* villages do not usually attend school, there is less exposure to Bislama numerals and less pressure for them to predominate.

7 Higher numerals and other number expressions

In many descriptive grammars of Vanuatu languages, discussions about numerals often point out that higher numerals were rarely used in traditional contexts and that when they are used in a contemporary context, there is often confusion as to their exact meaning (e.g. Thieberger 2006:78). Large numbers today are a reality of commerce, especially in relation to the monetary value of expensive things such as vehicles, whose value is measured in the millions of vatu. For such things, even speakers of the *kastom* dialects of Sa use Bislama numbers. However, it was pointed out to me that if they wanted to, they could easily construct such large numerals without having to resort to Bislama or English loan words.

(30) tar na-tē ma mrôp
thousand CL.POSS-AN RE- be.hundred
'one hundred thousand'

(31) tar na-tē m-ba tar
thousand CL.POSS-AN RE-go thousand
'one million'

The main reason that higher numbers are given in Bislama is the unwieldy nature of such figures in traditional languages. However, this doesn't seem to stop *kastom* Sa speakers from using lengthy compounds such as that in (32) instead of the more economical Bislama equivalent *faef taosen* (which is also used). In one-off statements of monetary quantity, a lengthy compound can be tolerated. Such compounds however become unacceptably clumsy when counting and this is one entrance point for Bislama and English loan words.

(32) nul pon be ru aē pon be lim
ten pound COP two CONJ pound COP five
'five thousand (vatu)' i.e. 10 times 2 pounds (10 times 400 =4000 vatu) plus 5 pounds (5 times 200 vatu= 1000 vatu).

There have also been other external pressures for the adoption of Bislama/English or French numerals. Early missionaries in Vanuatu were involved in this kind of linguistic *Ausbau*.

> The same method of counting by 'men' is shown by Von der Gabelentz in two parts of New Caledonia. In the southernmost island of the New Hebrides something of the same system was found, and there, as in the Loyalty Islands, has been made away with by the missionaries who have substituted the less cumbrous English numerals (Codrington 1885:226).

Another area where some *kastom* Sa speakers maintain use of traditional numerals as opposed to Bislama equivalents is in relation to telling the time. Most Sa speakers in telling the time effectively code switch and use Bislama expressions.

(33) faef minit i stap ronem wan klok
'five minutes to one o'clock'

(34) ten minit i lusum wan klok
'ten minutes past one o'clock'

However, it is mostly in *kastom* Sa speaking communities where the Sa equivalent can sometimes be heard (where hand watches are considered a desirable accessory).

(35) minit be lim korkor banē su
minute COP five run go.to one
'five minutes to one'

(36) minit nul su pi jingi su
minute ten one depart come.out one
'ten minutes past one'

Some speakers in non-*kastom* Sa communities regard such constructions as the quaint creations of uneducated heathen ('heathen' being a term that some Christians on Pentecost Island use to describe their *kastom* neighbours). The *kastom* ideology however deflects such low prestige associations allowing certain ways of speaking to develop and spread in one community whilst they are shunned in another.

8 Conclusions

The distinct social and cultural identity to which *kastom* Sa speakers adhere has some influence over various aspects of language use. In the lexical domain of numerals, *kastom* Sa speakers have consciously maintained historical forms that have been lost elsewhere (the decimal numerals) and invented novel forms for currency that most likely would not have developed under the influence of external cultural pressures of church and an education system that until recently has made no place for vernacular language in the curriculum. As a result *kastom* villages in south-east Pentecost maintain a number of numeral systems:

- the imperfect decimal default system
- a relictual but now object-specific decimal system
- a unique system for expressing monetary amounts
- the Bislama/English numerals for use outside of their own speech communities

Whilst terms for larger numerals are present in many languages of Vanuatu, the unwieldy length of such compound constructions usually means that Bislama numerals are preferred. Whilst this may be the case in a limited number of contexts, *kastom* Sa speakers continue to use their own numeral systems in a range of domains such as commerce and time telling. However, as vernacular language programs are now gaining official recognition in schools throughout Vanuatu, the study of traditional numeral systems would be a worthy addition to any curriculum and may have profound implications for the maintenance of the diverse range of numeral systems in the languages of Vanuatu.

9 Abbreviations

AN	anaphoric	COMP	complementiser
RE	realis	CONT	continuous
IR	irrealis	REL	relative pronoun
COP	copula	FUT	future
POSS	possessive	PERF	perfective
CONJ	conjunction	INT	intensifier
CL.POSS	possession class	INTERJ	interjection
CONTR	contrastive	REDUP	reduplication
NOM	nominaliser	B	brother
LOC	locative	Z	sister
DEM	demonstrative	lt	literal
PREP	preposition		

10 Appendix: Sources of data

Material on languages of Pentecost is from my own fieldwork.
Further data on Apma is from Schneider 2010, Gray 2013; Sowa— Walsh, Bule Sese and Gray 1969/2008; Raga— Crowley 2002, Yoshioka & Tevimule 1987/1966; Avava, Naman, Nese, Tape— Crowley 2006a, 2006b, 2006c, 2006d respectively.
Data for V'ënen Taut, Unua, Banam Bay and Uripiv was kindly provided, along with other helpful comments, by John Lynch; Northeast Ambae— Hyslop 2001; Merei— Chung 2005; Araki— François 2002; North Ambrym data was kindly provided by Mike Franjieh and Houghton Richards. Map by South Pacific Maps 1993 (with language overlay by the author).

11 Speakers

BS: Bongmen Sali

BA: Bong Aia

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The ins and outs of *up* and *down*

Disentangling the nine geocentric space systems of Torres and Banks languages

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Abstract The 17 languages spoken in the Torres and Banks Islands of northern Vanuatu commonly encode spatial relations by means of geocentric (absolute) systems of directionals. These systems all have in common a single cardinal axis oriented northwest–southeast, and at least a second topographical axis, contrasting inland–seawards. While this general profile is typical of Oceanic, a detailed comparison of the 17 languages reveals their internal diversity, with as many as nine distinct geocentric systems represented in this small region. The aim of this study is to describe and analyse these nine systems, by examining the semantic connections between the space directionals that encode them. Adopting a canonical approach to cross-linguistic comparison, I show that each system is a variation between two equally simple canons, namely Gaua and Mwotlap. Finally, I reconstruct the historical development of these systems since Proto Oceanic: this reveals that Gaua is the most conservative of all systems, and Hiw the one which has been most affected by the accumulation of innovations.

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1 The geocentric use of directionals

1.1 Space strategies across languages

All known languages make use of spatial expressions in one form or another – that is, linguistic devices whose main function is to encode a direction or a location in the three-dimensional space. However, typological studies have revealed substantial cross-linguistic variation regarding the parameters that govern the internal organisation of spatial systems.

Figure 1 summarises the typology of linguistic space strategies as outlined by Levinson (1996b:359).[1]

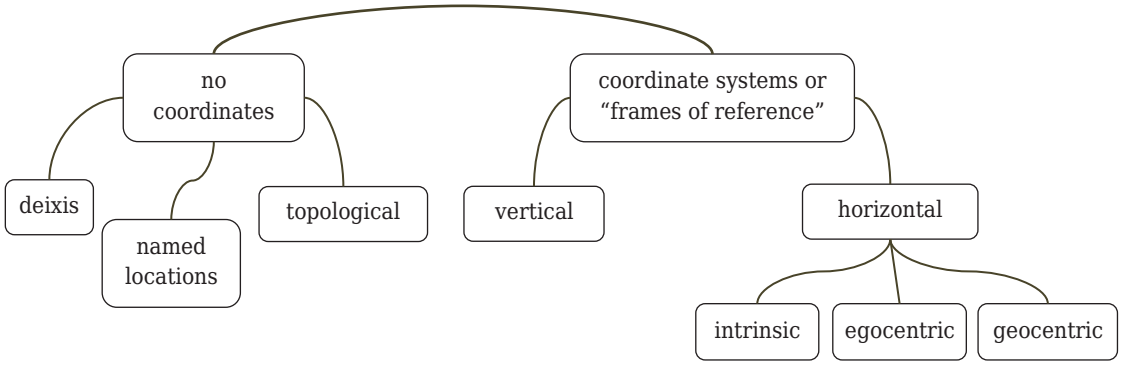

Figure 1 — A typology of space strategies (after Levinson 1996b:359)

While deictic or topological strategies (e.g. *in this house*; *close to the tree*), as well as vertical coordinates, appear to be encoded in all languages, cross-linguistic variation concerns mostly the strategies used on the horizontal plane. As Levinson (1996b, 2003) shows, languages can encode horizontal vectors by potentially resorting to three frames of reference:

- the INTRINSIC frame bases coordinates upon the spatial orientation of a ground object taken as reference: e.g. *the ball is in FRONT of the house* (where the ground object *house* is itself provided with a certain intrinsic orientation)
- the EGOCENTRIC (or "relative") frame defines coordinates relative to a ground object in its relationship to a human observer: e.g. *the ball is in FRONT of the tree* (where the 'front' of the tree is only defined by its position with respect to an observer)
- the GEOCENTRIC (or "absolute") frame of reference encodes directions based on a system of fixed coordinates which are defined externally, and do not depend on any particular anchor in the speech situation. In a sentence such as *my house is SOUTH of the river*, the direction of the 'south' vector is defined irrespective of the intrinsic orientation of the house, or of the location of an observer.

Crucially, several studies (Brown & Levinson 1992, 1993; Haviland 1993; Levinson 1996a-b, 2003; Pederson *et al.* 1998) have pointed out that these different frames of reference are diversely represented in the world's languages. English knows the three strategies, but uses the geocentric frame only for larger scales (e.g. *northern England*, *western suburbs*); for shorter distances, it can only employ the intrinsic and egocentric frames. By contrast, a language like Mopan Maya relies heavily on the intrinsic strategy (Pederson *et al.* 1998:572; Danziger 2011); and Tenejapan Tzeltal in Mexico (Brown & Levinson 1992) use a combination of intrinsic and geocentric reference, including for short distances.

[1] In this paper – starting with Figure 1 – I adopt Levinson's Frames of Reference approach, yet follow the now widespread habit of using more transparent labels than the ones he initially used. Thus, the frame he called *relative* is here labelled *EGOCENTRIC* (after Le Guen 2011a:274); and Levinson's *absolute* frame will be called *GEOCENTRIC* (Le Guen 2011a:275, 2011b:932 – see also Haviland 1993:5; de León 1994; Dasen & Mishra 2010).

1.2 Geocentric space reference in northern Vanuatu languages

The present study will describe and analyse the different systems of space reference found in the 17 Oceanic languages of the Torres and Banks Islands, in the northernmost part of the Vanuatu archipelago.

Even though these languages do have words for *right* and *left*, or *in front* and *behind*, these refer to sides of the body, and are never used to project coordinates so as to encode spatial location. Torres–Banks languages are in fact typologically quite extreme in making virtually no use either of the INTRINSIC frame of reference (as in **behind the house*), or the EGOCENTRIC one (as in **behind the tree*). Just like for most other Oceanic or Austronesian languages (Senft 1997, Palmer 2002),[2] the only acceptable strategy in northern Vanuatu, in order to locate a referent, is to employ GEOCENTRIC coordinates. This yields sentences such as (1), in Mwotlap (François 2003:420):[3]

(MTP.1) Kē mi-tig lō-tōti beg, ba lok ***hōw***.
3sg PFT-stand LOC-trunk breadfruit but side (west)
(liter.) 'She's standing at the breadfruit tree, on the western side.'
[situational equivalent of *She's standing behind the tree*.]

Unlike European languages, Oceanic languages employ their geocentric systems for any distance, and it is common to hear sentences such as this one, also in Mwotlap:

(MTP.2) na-bankēn mey hag tō lok ***hag***
ART-mug REL sit PRSTV side (east)
'the mug *on the east side* (of the table)'

Geocentric strategies in the world are often based on a simple system of four fixed cardinal quadrants such as *North–West–South–East* (see Haviland 1993 for Guugu Yimithirr), usually based on the path of the sun. By contrast, those found in Oceanic languages have only one cardinal axis oriented NW–SE; the latter is combined with a topographic axis *land–sea*, whose absolute orientation in compass terms varies with the shape of the shoreline (Palmer 2002, François 2004). Within the Oceanic family, we'll see that Torres and Banks languages can show even more complex mechanisms, involving paradigms of 3, 4, 5 or 6 geocentric directionals.

I will focus on one syntactic category that is found in all the languages under study, namely *space directionals*. As we will see in §2.3, these morphemes are pervasive in discourse. The vectors encoded by these directional paradigms are of three types:

- PARTICIPANT-oriented coordinates, glossed 'hither'–'thither' [→§2.4.1];
- TOPOLOGICAL coordinates, e.g. 'in'–'out', 'up'–'down' [→§2.4.2];
- GEOCENTRIC coordinates, e.g. 'uphill'–'downhill', 'southeast'–'northwest'… [→§2.4.3]

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[2] Various publications have described the space systems of Oceanic languages: see papers in Senft (1997) or Bennardo (2002), as well as Ozanne-Rivierre (1999), François (2004), Cablitz (2006), Palmer (2007). Descriptions of space systems in languages of Vanuatu have been few so far, but include Hyslop (2002) on Northeast Ambae; François (2003) on Mwotlap; Paviour-Smith (2009) on Aulua; Johnson (2014) on Ske.

[3] All forms in this study are transcribed using the languages' practical orthographies, which are spelled out in an appendix (§7.2).

Crucially for this study, the directional particles that encode geocentric space reference always have other, non-geocentric meanings in the same language. The typical case is that a given directional encodes topological coordinates as well as geocentric ones, following non-trivial patterns of correspondences. For example, all languages express *northwest* as *down*; some languages encode *seawards* as *down*, others as *out*; and so on. Even though all northern Vanuatu systems share a number of general properties, the attested combinations define quite distinct systems of directionals.

In order to get a sense of this local diversity of geocentric systems, the paradigm of directionals in Dorig (Table 1) can be compared with the one in Hiw (Table 2).[4]

Table 1 — The directional system of Dorig (Gaua island)

Directional	*Participant-oriented*	*Topological*	*Geocentric*
ma	hither	—	—
āt	thither	—	—
vak	—	across	parallel to shore in any direction, for short distances
sag	—	up; in	landwards, inland, uphill; (long-distance) parallel to shore towards SE
ror	—	down; out	seawards, downhill; parallel to shore towards NW

Table 2 — The directional system of Hiw (Torres islands)

Directional	*Participant-oriented*	*Topological*	*Geocentric*
me	hither	—	—
vën	thither	—	(on land) parallel to shore towards SE
ag	—	—	landwards, inland; (navigational) towards SE
iy	—	in	—
r̄ōw	—	out	seawards
vēn	—	up	uphill
uw	—	down	downhill; (any distance) towards NW

The geocentric directions can be plotted on a figure representing an island. In order to make systems comparable, I choose to represent all systems based on a single representation of the typical island landscape (see §2.1, 2.4.3). Figure 2 maps the geocentric directionals of Dorig, which also corresponds to that of other languages on Gaua island (Table 1); Figure 3 those of Hiw (Table 2). The geocentric meaning of each vector (last column of the tables) is symbolised by an arrow, and is therefore not repeated there; instead, each arrow is tagged with a gloss representing the *non-geocentric* meaning associated with the same term.[5] For example, the geocentric direction "*along the shore towards southeast, on land, for long distances*" is encoded in Dorig by a term that also means 'up', and in Hiw by a word that is otherwise best glossed 'thither'.

[4] Throughout this study, forms will be given using the local orthographies. The appendices provide a key to spelling and pronunciation (§7.2), as well as notes on the etymology of directionals (§7.3).

[5] The only case when this is not possible is with the form *ag* in Hiw and Lo-Toga, which is only used geocentrically (see §4.6, 4.7.1).

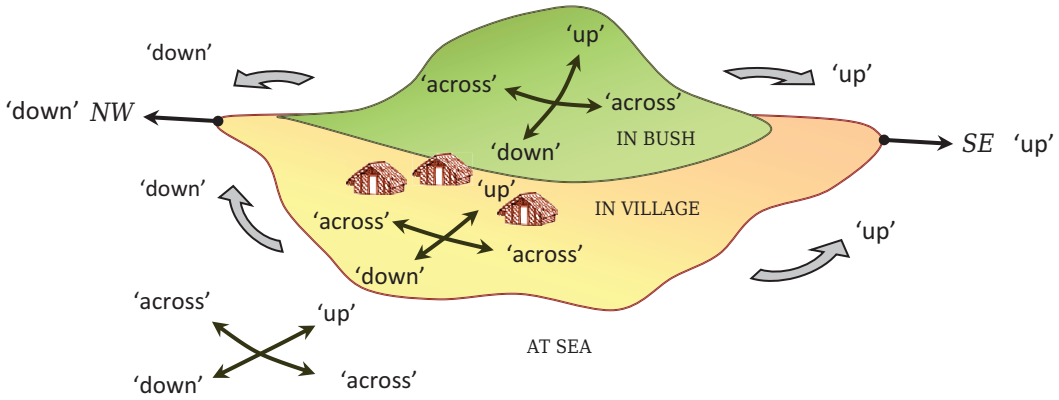


Figure 2 – The system of geocentric directionals in Dorig and other Gaua languages

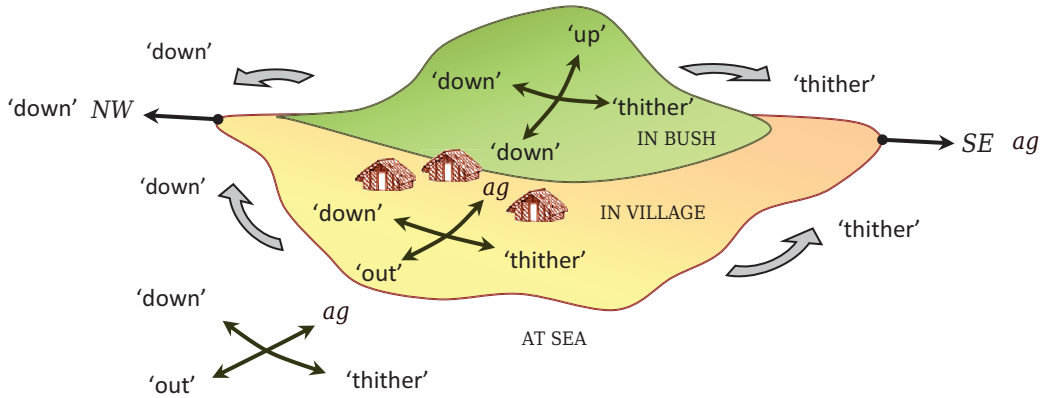


Figure 3 – The system of geocentric directionals in Hiw

These figures set the scene for the main point of this study, which is to analyse and understand the various patterns of correspondence found in these languages between geocentric and non-geocentric vectors.

1.3 Making sense of the diversity: synchrony and diachrony

Insofar as geocentric and non-geocentric meanings are mapped differently in Dorig and in Hiw, these two languages can be said to represent two structurally distinct systems. Out of seventeen languages spoken in the area, I have found that the various configurations of space directionals define a total of nine systems. In comparison with the stability of spatial systems found across entire regions like Europe, the diversity found in northern Vanuatu is impressive; it confirms a marked tendency towards linguistic divergence that can be otherwise observed in this language mosaic (François 2011, 2012). Of these nine systems, some – like the one used on Gaua – are relatively straightforward and easy to explain; others – like Hiw – can only be understood based on a complex investigation.

This article will unfold as follows. Section 2 will present the Torres and Banks Islands and introduce their systems of space directionals, by situating them in their social and linguistic context. The core of the study will consist in a description of directional paradigms in the area's 17 languages, which are all (except Mwotlap) documented here for the first time. The systematic comparison of these languages will highlight some properties which are shared throughout the region: in particular, section 3 will focus on the *northwest–southeast* cardinal

axis, and show that it is handled in similar ways, for long-distance reference, by all languages. Section 4, in turn, will uncover greater cross-linguistic diversity as it describes how directionals are used on the local scale, for shorter distances. I will show that the apparent profusion of modern space systems is better handled through a "canonical" approach in which the systems of Gaua and Mwotlap constitute two equally simple yet opposite canons, and all other systems form structural hybrids between these two poles.

While section 4 is to describe and compare geocentric systems from a synchronic point of view, the final discussion (Section 5) will recapitulate our findings from a historical perspective, and propose a unified scenario to account for the diversity attested today. The system of Gaua – one of our two canons – will be shown to be the most conservative of the ancestral system; as for other northern Vanuatu languages, they reflect the accumulation of several local innovations, which have diffused to various parts of the linguistic area. After reconstructing the individual innovations that led to modern systems, their projection on a map will reveal that they define coherent areas of linguistic diffusion, much in line with what we know of the region's historical dialectology.

2 Paradigms of directionals in Torres and Banks Islands

2.1 Northern Vanuatu landscapes

The Torres and Banks Islands are two small archipelagoes located in the northernmost part of Vanuatu, with a total land surface of 882 km² (see Map 1). Most islands are of volcanic origin,[6] with active volcanoes on Vanua Lava and Gaua. Their steep relief, covered in thick bush, rises up to relatively high cone-shaped summits, both in the Banks Islands – Vanua Lava (921 m), Merelava (833), Gaua (767), Ureparapara (764), Mota (411), Motalava (243) – and in the Torres Islands – Hiw (366), Tegua (300), Toga (240), Lo (115). Several of these mountainous islands are surrounded by a more or less broad band of coral reef. Due to a geological process of uplift (Ballu *et al.* 2011), some islands even include accreted coral as their terrain for a fair portion of their surface. The flat, horizontal shape of these coral-based areas contrasts with the steep slopes of the central mountains. This landscape can be represented in a stylised fashion, similar to the one given in Figures 2 and 3 above; throughout this study, this diagram will constitute a useful background for the comparison of geocentric systems.[7]

The 9400 inhabitants of the Torres–Banks islands (VNSO 2009) are distributed across twelve of these islands, and approximately fifty villages. Some villages, especially on the higher islands, are located inland, on the slopes of the mountains where the soil is most fertile. But the majority of the population reserves the uphill areas for their subsistence

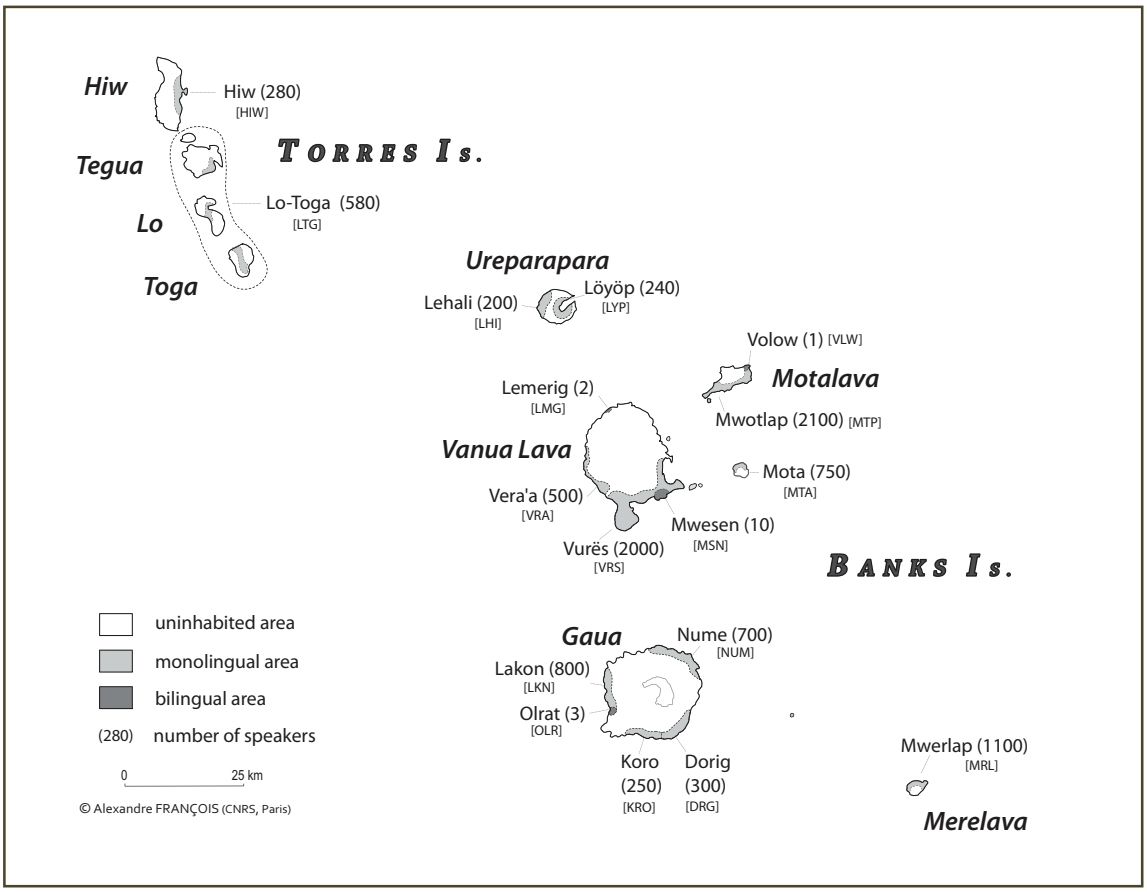
[6] The only non-volcanic islands of the area are a group of low coral atolls known as Roua, or Reef islands. Though once inhabited, they were abandoned by their population in the middle of the 20th century (François 2012:97). The absence of any modern population there – apart from occasional fishermen from the neighbouring islands – makes it difficult to study the way geocentric directionals would be (or used to be) employed on these atolls, despite the obvious interest of such questions (Palmer 2007).

[7] I will discuss these diagrams again in §2.4.3, and in fn.14 p.168.

gardens, and dwells in coastal areas – a convenient location where marine and land resources can easily be accessed. The last 150 years have seen a trend for the population to abandon inland hamlets, and settle in larger coastal villages (Vienne 1984:23; François 2012:96-99).

2.2 The languages of the Torres and Banks Islands

The Torres and Banks Islands are home to 17 different languages. The present study rests on primary data which I collected during a number of field trips in northern Vanuatu (since 1997 for the languages Mwotlap, Mwesen, Vurës; since 2003 for other languages).[8] Map 1 shows the territory covered by the various language communities; clearly, coastal villages are the dominant form of settlement. Each language is given an approximate number of speakers, as well as a three-letter abbreviation.



Map 1 – The 17 languages of northern Vanuatu (Torres and Banks Is)

These 17 languages are all Oceanic (Austronesian), and thus descend from Proto Oceanic. Together, these languages form the Torres–Banks "linkage" – that is, they are the modern descendants of what initially developed as a dialect continuum (François 2014; cf. Ross

[8] Throughout this study, I will indicate the source of my examples using simple conventions. Sentences taken from my 263 recorded texts will note the language, the story and the sentence number – e.g. [Hiw.Meravtit.051]. Sentences obtained through elicitation refer to my field questionnaires – e.g. [Lhi.d12:12]. Spontaneous speech heard during language immersion has a reference to my notebooks – e.g. [FP3-28b]. (My field notes are archived online, at http://www.odsas.net.)

1988). During the three millennia of their *in situ* development, the communalects have diverged so much as to lose mutual intelligibility. However, these processes of diversification have always gone along a tradition of egalitarian multilingualism and social contact (François 2012), in ways which favoured various forms of cultural and linguistic diffusion. This dialectic between divergence and convergence will be central to the historical discussion of this study, when I reconstruct a number of structural innovations related to geocentric systems, and map their patterns of diffusion across the area (see §5.4).

2.3 A special paradigm of space directionals

Oceanic languages in general vary as to whether they express directional meanings using motion verbs (e.g. 'go up', 'go down') or directional particles ('up', 'down'). Ross (2004, 2007: 269) suggests Proto Oceanic may have had lexemes with dual membership, e.g. **sipo* was both a verb 'go down' and a particle 'down'.

The languages of northern Vanuatu distinguish lexically between three word classes: they have directional verbs (e.g. Mwotlap *hēw* 'descend, go down'); directional adverbs (Mwotlap *tēqēl* 'downwards'); and a separate word class of directional particles (Mwotlap ***hōw*** 'down'). Although the three categories can perfectly combine in the same clause (e.g. *hēw tēqēl* ***hōw*** 'go down'), the default strategy is to encode vectors using just the directional particle (e.g. *van* ***hōw*** 'go down', with *van* 'go'). This study will occasionally mention directional adverbs (§2.4.2, 4.1.2), but its main focus will be the systems of directional particles – or "DIRECTIONALS" for short – as they have properties of their own.

Space directionals are pervasive in discourse, both in daily conversation and in narratives. To take the example of Mwotlap, a selection of 52 narratives from my transcribed corpus has 9936 clauses, and 89,386 words. In that corpus, I numbered the tokens of space directionals to be 7187 in total:[9] this may be interpreted by saying that 72.3 percent of clauses include a space directional; or that on average, a directional is present once every 12.4 words in connected speech.

Grammatically, directionals form a subset of the larger class of *locatives*. As such, the syntactic functions of Torres–Banks directionals may include that of locative predicate (of the type *She's* DOWN *in the cellar*), of verb modifier (*he walked* DOWN *to the lake* – see (3) below), and of NP modifier (*the people* DOWN *there* – see (4) below). While the morphosyntactic profile of directionals is generally parallel in all languages in the region, there are also some language-specific peculiarities which will be mentioned here when relevant.[10]

Semantically speaking, the primary function of directionals is to construct a spatial path or vector. Sometimes, this vector reflects the direction followed by (a participant in) the reported event itself – as is the case in (3), from the language Lehali:

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[9] Broken down to individual morphemes, the results are: *me* 'hither' 2136; *van* 'thither' 2583; *hag* 'up…' 719; *hōw* 'down…' 724; *hay* 'in…' 491; *yow* 'out…' 534. Note that these statistics do not distinguish between the geocentric and the non-geocentric uses of these space directionals when they are encoded by the same lexical form. Telling them apart in such a large corpus would be possible, yet would require a time-consuming analysis, carried out sentence by sentence.

[10] For example, the intricate morphology of directionals in Mwerlap will be described in an Appendix (§7.4).

(LHI.3) Koyo m-kal ***ila*** ***ma*** l-eñ ti m-en ***how***, ti m-mutuy.
3du PFT-cross **in** **hither** in-house then PFT-lie **down** then PFT-sleep
'They came (**in**) into the house, lay **down**, and fell asleep.' [LHI.Stepmother.63]

In (3), the direction of the first motion event *kal* 'cross [threshold]' is encoded as 'inwards' (vector defined in topological, non-deictic terms) as well as 'hither' (vector defined in deictic terms). The second event *en* 'lie' is vectorised as a 'downward' movement.

These same directionals are also used to refer to static locations, in which case their role is to define a vector between the deictic centre ('origo') and that target location:

(LHI.4) Qösö lē-vno ***how*** e tev lavēt.
HUM:PL in-village **down** DX IPFV celebrate
'People in the village **down** there are celebrating.' [LHI.d12:12]

In (4), the directional *how* 'down' does not encode the direction of a motion event, but the orientation of the abstract vector that leads from the origo ('here') to the location referred to.

Whether directionals encode a motion path as in (3), or serve to identify a static location as in (4), their function is always to delineate a vector in a three-dimensional space.

2.4 The three semantic types of space directionals

Directional systems in northern Vanuatu are best divided into three types of coordinates: participant-oriented vs. topological vs. geocentric coordinates. I will describe them successively in this section, before I zoom in on the geocentric type.

2.4.1 Participant-oriented directionals

All 17 languages have a pair of directionals that can be conveniently glossed 'hither' and 'thither'. The forms are given in Table 3, with languages ranked geographically from northwest (Hiw) to southeast (Mwerlap).[11]

Table 3 — Pairs of participant-oriented directionals in Torres–Banks languages

	HIW	LTG	LHI	LYP	VLW	MTP	LMG	VRA	VRS	MSN	MTA	NUM	DRG	KRO	OLR	LKN	MRL
'hither'	**me**	**me**	**ma**	**me**	**me**	**me**	**me**	**ma**	**me**	**me**	**ma**	**ma**	**ma**	**ma**	**ma**	**ma**	**mē**
'thither'	**vën**	**vēn**	**van**	**van**	**va**	**van**	**wël**	**suwō**	**net**	**nat**	**at**	**at**	**āt**	**ät**	**at**	**at**	**ot**

The glosses 'hither' and 'thither' are but a convenient shortcut. To be more specific, the definition of these two directionals normally includes the reference to a *participant*, typically animate, which provides the target of the spatial vector. The pairs operate along a deictic divide that contrasts two general orientations, which may be labelled *egotropic*[12] vs. *allotropic*:

- gloss 'hither' = 'towards speaker': an *egotropic* direction, targeted towards the speaker, or a participant to which the speaker morally associates him- or herself.
- gloss 'thither' = 'towards non-speaker': an *allotropic* direction, targeted towards any participant that does not belong to the speaker's sphere.

[11] I thank Stefan Schnell (pers. com.) for confirming the Vera'a form for 'thither'.

[12] The term *egotropic* I am coining here ('motion directed towards *ego*') is distinct from the term *egocentric* we saw in §1.1 ('a set of spatial coordinates calculated on the basis of *ego*'s own position').

Ross (2007:269) reconstructs Proto Oceanic as a system with four distinct deictic verbs: 'come, towards speaker' (**mai*); 'go towards addressee' (**watu*); 'go to; away from speaker' (**lako*), and 'go away' (**pano*). Some of these etyma are reflected in the modern languages[13] (§4.7.2, §7.3.2), but the former four-member paradigm has been reduced to a binary contrast.

Participant-oriented vectors typically encode the directionality of a social event – e.g. transfer events like *give*, *show*, *speak*. They often translate in English as a dative, whether it is egotropic ('to me', 'to us') or allotropic ('to you', 'to her', 'to it'…). These words entail the instruction to retrieve a specific participant from the context, often without making it more explicit in the clause. Here are examples from Hiw and Dorig:

(HIW.5) Ṙōñ te ***me*** ne!
hear SUGG hither PROX
'Listen (to me)!' [LITER. Listen *hither*!] [HIW.d12:01]

(DRG.6) Vu! Na s-aqtē ***āt*** i tsi-k nēk s-gān ni?
god 1sg IRR-throw thither PERS same.sex.sibling-1sg 2sg IRR-eat 3sg
'Spirit! Shall I throw (you) my sister, so you can eat her?'
[LITER. Shall I throw my sister *thither*…?] [DRG.Daughters.30]

An important property of these participant-oriented directionals is that they come in complementary distribution with other types of directionals. François (2003) showed that Mwotlap has a consistent preference for the participant-oriented strategy whenever it is contextually available, i.e. whenever a given vector can be construed as oriented towards a specific participant: see *van* in (7). As for purely spatial directionals (either topological or geocentric), they are reserved for those vectors that are not directed towards any specific participant – like *hay* in (7').

(MTP.7) Hayveg ***van***.
enter thither
PARTICIPANT-ORIENTED STRATEGY:
'Go in! (towards him/her/them)' [suggests someone is inside]

(MTP.7') Hayveg ***hay***.
enter in
TOPOLOGICAL STRATEGY:
'Go in!' [suggests nobody is inside]

Participant-oriented directionals do not normally take up any geocentric meaning. One exception is Hiw (Table 2 p.140), in which *vën* means both 'thither' and 'southeast on land': I will explain this polysemy later in this paper (§4.7.2, 5.2.2). Otherwise, these participant-oriented directionals will not be discussed any further: they were presented here because they form part of the same closed set of directionals, and contrast paradigmatically with the purely spatial ones. The vast majority of geocentric directionals find their source in the *topological* domain.

[13] The entire area has kept reflexes of **mai* for 'hither'. As for 'thither', the first six languages (HIW to MTP) reflect **pano*; the last nine (VRS to MRL) reflect **watu*.

2.4.2 Topological directionals

The category of TOPOLOGICAL directionals deserves to be presented for itself, before we examine how they have also developed GEOCENTRIC uses.

As far as northern Vanuatu is concerned, the domain of topological directionals includes two pairs of vectors. The pair *in—out* is defined by reference to a closed shape interpreted as a container or enclosure: house, canoe, basket, pocket, etc. The second pair *up—down* is defined with reference to the vertical axis.[14] Table 4 provides the forms of the topological directionals for the 17 Torres–Banks languages.

Table 4 — Topological directionals in Torres–Banks languages

	HIW	LTG	LHI	LYP	VLW	MTP	LMG	VRA	VRS	MSN	MTA	NUM	DRG	KRO	OLR	LKN	MRL
'in'	**iy**	**il**	**ila**	**say**	**ha**	**hay**	**sar**	**sar**	**sar**	**sar**	**sage**	**sa**	**sag**	**sa**	**saa**	**hag**/ roka	**sar**
'up'	**vēn**	**vin**	**vēn**	**sa**		**hag**	**sag**	**sag**	**siag**	**sag**							**seag**
'down'	**uw**	**iw**	**how**	**sōw**	**hō**	**hōw**	**sōw**	**suwō**	**sōw**	**sōw**	**swo**	**ror**	**ror**	**ror**	**roy**	**hōw**/ rōkōw	**sōw**
'out'	**rōw**	**rōw**	**yow**	**yow**	**yo**	**yow**	**row**	**rōw**	**rōw**	**row**	**rowo**						**row**

Most of the systems have four topological directionals. Mwesen is such a language:

(MSN.8) E Qet ni le o gepen no, mop *kal* ***sag*** le ak.
PERS (hero) 3s:AO take ART sail DEF put upwards **up** LOC canoe
'Kpwet took the sail and put it **up** on the canoe.' [MSN.Qet.031]

(MSN.9) Me rov~rov o parpar, qēs ***sōw*** le qiti ak no.
PFT IPFV~raise ART axe smash **down** LOC head canoe DEF
'He raised his axe, and smashed it **down** onto the canoe's prow.' [MSN.Qet.085]

(MSN.10) Kal *telñor* ***sar*** le gemel, nē ni on le tenepa-n.
cross inwards **in** LOC dwelling 3sg 3s:AO lie LOC bed-3sg
'He walked **in**to his dwelling, and lay down on his bed.' [MSN.Varvang.50]

(MSN.11) Ni o—o~on le lo gemel, ni row *lō* ***row*** le sar.
3s:AO DUR~lie LOC inside dwelling 3s:AO rush outwards **out** LOC clearing
'He remained in his home for a while,
but suddenly rushed **out** to the frontyard.' [MSN.Varvang.47]

While this study focuses on the paradigm of directionals proper, these examples also give us the opportunity to notice, in passing, the optional presence of *verb-modifying adverbs* with similar semantics: *KAL sag* in (8); *TELÑOR sar* in (10); *LŌ row* in (11). The function of these adverbs is only to specify the path of a motion event, never to define a static location – contrary to directionals which can have both functions (§2.3). These verb modifiers are not

[14] In the terminology used by Levinson (1996b) and illustrated in Figure 1 above, the term "topological" only refers to the first of these pairs (*in—out*), whereas the vertical dimension is treated separately. However, the languages of northern Vanuatu treat the two pairs of directionals as members of a single subparadigm, and it is therefore legitimate to group them under a single category, for which the label 'topological' is well adapted. Levinson himself (1996b:360) acknowledges that "the VERTICAL dimension is special in various ways and is an angular specification that creeps into essentially nonangular TOPOLOGICAL specifications" (my emphasis).

attached to any spatial strategy in particular: for example, the one glossed ‘upwards’ (*kal* in Mwesen) can be used with a vertical meaning, but also with the geocentric functions attached to ‘up’, such as the cardinal ‘up’ pointing to southeast (§3.3). When adverbs and directionals are used in the same clause, the normal situation is for them to semantically align (‘outwards’ with ‘out’, ‘upwards’ with ‘up’…) with only a few exceptions (François 2003: 426). This observation will be useful later in this study, when directional adverbs meaning ‘crosswise’ help us confirm the semantics of the directional glossed ‘across’ in the languages of Gaua (§4.1.2).

As Table 4 shows, some languages have fewer than four topological directionals. In the case of Volow, a language variety very close to Mwotlap, the collapse between ‘in’ and ‘up’ seems to be due to a more general pattern of morphological truncation which has deleted the final consonants of all the directionals (**hōw* → *hō*; **yow* → *yo*; **van* → *va*). This has resulted in the loss of distinction between ‘in’ (**hay* → *ha*) and ‘up’ (**hag* → *ha*) – see also §4.4.1.

This accident of historical morphology in Volow contrasts with the situation in the five languages of Gaua, for which the colexification[15] is systematic, on the one hand, between ‘in’ and ‘up’; and on the other hand, between ‘out’ and ‘down’. Only the context makes it clear which of the two coordinate axes is being meant in a particular utterance. To take an example from Olrat, the directional *saa* corresponds to a vertical ‘upwards’ movement in (12) (cf. ‘lift’, ‘lintel’); but in (13), it means ‘(look) inwards’:

(OLR.12) Ni mō sēj rakat ni ***saa*** lē mataalol.
3sg PFT hang lift 3sg **up**/in LOC lintel
‘He hanged (the ogress) **up** above the doorway.’ [OLR.Ogress.082]

(OLR.13) Nōrō tē pipira ti nōtam, nōrō mō pipleñ ***saa*** lē vuvuy.
3du IPFV1 play IPFV2 outside 3du PFT peer up/**in** LOC house
‘As the two boys were playing outside, they looked **in**to the house.’ [OLR.Eel.36]

In a similar way, the reverse polysemy characterises the Lakon directional *hōw* ‘down/out’: in (14), it is used vertically to mean ‘down’, but in (15) it refers to an outward movement:

(LKN.14) Ni tē tärä rägä neñ tē sēv ***hōw*** lē tanē.
3sg SEQ chop tree DEF SEQ fall **down**/out LOC ground
‘He chopped the tree, which fell **down** on the ground.’ [LKN.d07:03]

(LKN.15) Ni ’n sapläg tōpō-n ni tē rowol ***hōw*** matum̄ä.
3sg PFT carry.child grandchild-3sg 3sg SEQ cross.door down/**out** frontyard
‘She took her grandchild in her arms and walked **out** to her frontyard.’ [LKN.d02:28]

This pattern of polysemy is also found in a number of other languages in the Oceanic family. For example, Ozanne-Rivierre (1997:86; 1999:79) reports that in languages of New Caledonia, “the up/down oriented axis is used to express (…) *inside the house* vs. *outside the house* and, when one is inside the house, *towards the interior of the house* vs. *towards the door*.” Historically, it is likely that these colexifications ‘up/in’ and ‘down/out’ were characte-

[15] The concept of *colexification* refers to the case when a language lexifies two or more senses with the same form (François 2008): for example, Olrat colexifies ‘up’ and ‘in’ using a single form *saa*. I will comment on this concept again in §2.4.5 below.

ristic of Proto Oceanic itself. Indeed, Ross (2007) does not reconstruct any form for '(go) in' or '(go) out', and states "It is reasonably clear that the 'inside'/'outside' opposition found in European languages did not occur in POc" (2007:255). I would reword this idea by saying that the contrast *inside—outside* did in fact exist for Proto Oceanic speakers (as witnessed with other parts of speech, e.g. **lalom* 'inside', **lua* 'outside': Ross 2007:235, 240), yet within the paradigm of *directionals*, the contrast was lexified using the same directionals as *up—down*, respectively ****sake*** '(go) up' and ****sipo*** '(go) down'.

As for the etyma **saro* 'in' and **rowo* 'out' which can be reconstructed for the Torres–Banks area (see §7.3), they do not seem to be attested anywhere else in Oceanic languages. All this suggests that the languages of Gaua, with their two-term system 'up/in' vs. 'down/out', may in fact be conservative of the system of Proto Oceanic – at least with respect to the topological subsystem of directionals.[16] The four-term systems showing separate lexification of 'in' and 'out', in turn, reflect a local innovation, which must have diffused across the whole Torres and Banks area, leaving Gaua untouched (§5.3.1).

Finally, Mota presents a hybrid and unusual situation. It shares with other Banks languages the innovative directional *rowo* 'out', yet it behaves like Gaua in lacking a specific directional for 'in', which it still colexifies with 'up':

(MTA.16)	Tamate	ilon	ni	me	sarovag	pata	***sage***	lele	iṁa.
	ghost	DEF	3sg	PFT	enter	inwards	up/**in**	inside	house

'The ghost came into the house.' [MTA.GhostSister.28]

This asymmetry in the topological domain will be reflected in the structure of Mota's geocentric system (§4.5.2).

More generally, the polysemies found in the topological system had some impact upon the semantics of the geocentric directionals from which they are derived. As we will see later, the lexical innovation whereby *in–out* directions came to be distinguished from *up–down*, was to be later harnessed in processes of relexification in the geocentric paradigm, as new distinctions were made possible (§4.2, §5.3.1).

2.4.3 Geocentric directionals

Northern Vanuatu languages resort to the geocentric strategy to encode horizontal vectors when the two other strategies (participant-oriented, or topological) are not contextually available. The principal axes found to operate in their geocentric domain include:

- a fixed cardinal axis oriented southeast–northwest
- a land–sea axis running orthogonal to the shore, employed on land or at sea
- an axis running parallel to the shore, whose general orientation (±90°) is either SE or NW
- an axis oriented *uphill* vs. *downhill*, and used in the higher areas of certain islands

On top of these geometric distinctions, some systems introduce lexical contrasts based on scale: for example, some have different directionals for 'towards SE' depending on distance.

These different vectors are not all encoded with separate forms, but show patterns of colexification, i.e. are grouped together under a single form. For example, we saw in §1.2 that

[16] Interestingly, we will see later that Gaua languages are also perfectly conservative when it comes to the geocentric subsystem of directionals (§5.1).

Dorig [Table 1] uses the same directional *sag* for 'in', 'inland' and 'parallel to shore, towards SE'; as for Hiw [Table 2], it lexifies differently 'in' (*iy*) from 'inland' (*ag*), but conflates lexically 'parallel to shore towards SE' with 'thither' (*vën*). In order to make these complex systems cross-linguistically comparable, I will follow a structural approach to polysemy (such as the one exposed in François 2008), and represent each potential vector as an atomic sense in an "etic grid"; this will enable us to observe how these senses are being grouped by each language, i.e. what are the *emic categories* created by each spatial system in this region.

Table 5 provides a synchronic overview of all directional systems in Torres and Banks Islands.[17] It contains the results of my empirical research, and the core of the present study.

All three domains of use are mentioned in the table: the rows numbered #1 and 2 reproduce the PARTICIPANT-ORIENTED directionals we saw above (see Table 3); those with shaded headings (#3, 7, 14, 18) correspond to the TOPOLOGICAL directions (§2.4.2); and all other rows correspond to the various GEOCENTRIC vectors which are lexified in these languages.[18] The rows are organised in such a manner that all the senses colexified in a given language should be adjacent in the table.[19]

For future reference, Figure 4 shows the correspondences between the different rows of Table 5 (number codes, marked with '#') and the vectors used on the graphic representation of directional systems (see Figures 2–3 p.141). Its objective is to facilitate the reading of Table 5, and associate each vector with the corresponding forms. For example, vector #5, "*inland (as used typically in the context of a coastal village)*", is lexified as shown in row #5 of Table 5: ***ag*** in Hiw, ***il*** in Lo-Toga, ***ila*** or ***la*** in Lehali, ***say*** in Löyöp, etc.

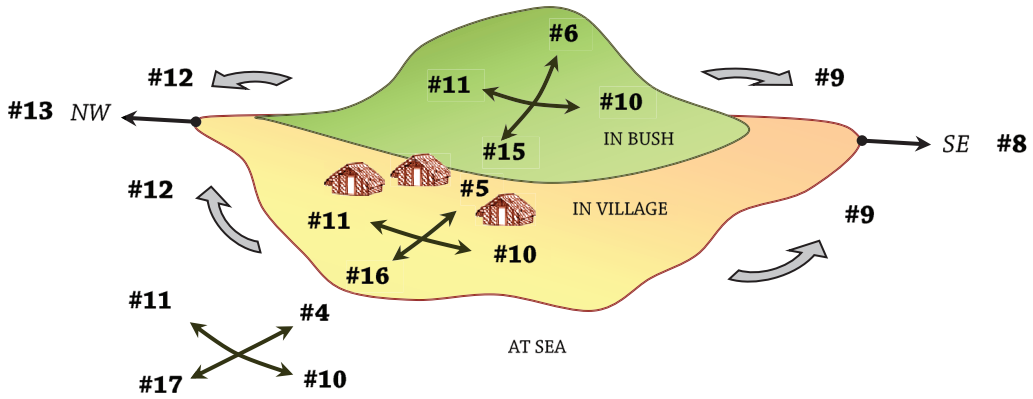

Figure 4 – An etic grid of spatial vectors relevant to the description of Torres–Banks geocentric systems (Number codes match the rows of Table 5).

[17] The first column indicates the system of Proto Oceanic, the common ancestor of the modern languages; it will be discussed later (§3.2, §5.1).

[18] The abbreviation "*// shore*" means 'parallel to the shore'.

[19] The only exceptions to this principle are: the row for 'thither', which shows certain polysemies in some languages (see §4.7.2); and the Hiw form *ag*, which is indeed idiosyncratic in its meaning (§4.7.3).

Table 5 – Systems of space directionals of Torres and Banks languages: the synchronic data
(Languages are ranked geographically from northwest to southeast)

	Proto Oceanic	*Hiw*	*Lo, Toga*	*Ureparapara*		*Motalava*		*Vanua Lava*				*Mota*	*Gaua*					*Mere-lava*
#	POc	HIW	LTG	LHI	LYP	VLW	MTP	LMG	VRA	VRS	MSN	MTA	NUM	DRG	KRO	OLR	LKN	MRL
1. *HITHER*	**mai*	me	me	ma	me	me	me	me	ma	me	me	ma	ma	ma	ma	ma	ma	mē
2. *THITHER*	(…)	vën	vēn	van	van	va	van	wël	suwō	net	nat	at	at	āt	ät	at	at	ot
3. ***IN***	**sake*	**iy**																
4. *landwards (from sea)*		**ag**	**il**	(i)**la**	**say**		**hay**	**sar**	**sar**	**sar**	**sar**							**sar**
5. *inland (village)*																		
6. *uphill (bush)*		**vēn**	**vin**	**vēn**		**ha**						**sage**	**sa**	**sag**	**sa ~ sag**	**saa**	**hag ~** roka	
7. ***UP***																		
8. *towards SE (navig)*		**ag**			**sa**		**hag**	**sag**	**sag**	**siag**	**sag**							**seag**
9. *// shore to SE (far)*		**vën**	(i)**ag**	**ha**														
10. *// shore to SE (close)*	**pano*							**wël**	**wōl**	**wōl**	**wol**	**vano**	**van**	**vak**	**vak**	**vak**	**päh**	**van**
11. *// shore to NW (close)*									*mul*									
12. *// shore to NW (far)*																		
13. *towards NW (navig)*		**uw**	**iw**	**how**	**sōw**	**hō**	**hōw**	**sōw**	**suwō**	**sōw**	**sōw**	**swo**						**sōw**
14. ***DOWN***																		
15. *downhill (bush)*	**sipo*												**ror**	**ror**	**ror**	**roy**	**hōw ~** rōkōw	
16. *seawards (village)*																		
17. *to ocean (from sea)*		**r̄ōw**	**rōw**	**yow**	**yow**	**yo**	**yow**	**row**	**rōw**	**rōw**	**row**	**rowo**						**row**
18. ***OUT***																		

2.4.4 Unity and diversity

It is not the case that these 17 languages define 17 different systems. The five languages of Gaua, for example, operate the same structural contrasts, regardless of whether the forms of their directionals are cognate or not. If one decides to distinguish directional systems on the basis of their structural contrasts rather than on the actual forms of their words, then one must conclude that the 17 languages of the Torres–Banks islands define a total of nine different systems of geocentric space reference.[1]

The present study intends to highlight and explain the structural diversity found in the region. The Torres and Banks languages alone constitute a microcosm of the diverse space systems that have been reported for the Oceanic family as a whole (Palmer 2002, François 2004). More cross-linguistic surveys would be welcome to assess whether any other area in the Pacific, or elsewhere, can be found to have so many distinct space configurations for such a small population.

That said, the various systems displayed in Table 5 also show a family resemblance, and one may be sensitive to the amount of characteristics that are shared by all these languages. This basic similarity is made clear by the possibility to chart all the systems on a single *etic grid* (the leftmost column of Table 5), and to represent them on the same background diagram (Figure 4). The profound unity of geocentric reference in the region will be particularly obvious in Section 3, as we examine the way geocentric reference works on the navigational scale.

2.4.5 On glossing and polysemy

In terms of glossing, these uninflected, usually monosyllabic directionals are appropriately rendered by English particles such as *up*, *down*, *in*, *out* – at least for their topological meanings.

Throughout this paper, interlinear glosses in example sentences will usually indicate a directional's "literal" or non-geocentric sense (e.g. 'up', 'out', 'across'…), even in those cases when it is used with a geocentric value. As for the geocentric meaning, it will be clarified in the free translation that follows. Here are examples from Dorig and Mwotlap:

(DRG.24) Nēk so sō *swēl* lala mlē ***ror*** le lam ni.
2sg POT1 paddle downwards POT2 also **down** LOC deep.sea INSTR
'You can even paddle it further *down* (=*oceanwards*)
towards the deep sea.' [DRG.d07:14]

(MTP.28) No m-et nō-mōmō ni-sey ***hay***, ni-sey ***yow***.
1sg PFT-see ART-fish 3sg-move.in.shoal **in** 3sg-move.in.shoal **out**
'I saw a shoal of fish moving *in (=landwards)*,
and suddenly moving *out (=oceanwards)*.' [BP5-34a]

This choice of presentation is partly motivated by the mere convenience of short glosses, to avoid cluttering the gloss line with such long strings as 'down/oceanwards' or 'in/land-

[1] If one includes the directional *mul* which has been reported for the language Vera'a, the number of distinct geocentric systems might even rise to ten – see §4.4.2.2.

wards'. But the main motivation is the very point of this study, which is to observe the connections that languages draw between geocentric and non-geocentric meanings; the combination of literal glosses and free translations should help the reader see the patterns more readily than if each line of translation used only geocentric glosses.

This choice does not mean, however, that I believe ***yow*** in Mwotlap synchronically only means 'out', as though modern speakers just had to derive spontaneously its geocentric meaning 'oceanwards' from its literal, topological meaning. As the contrast between Dorig and Mwotlap shows, the link between a geocentric sense and a specific directional is conventionalised differently in each language, and non-predictable. Directionals like *ror* or *yow* form cases of POLYSEMY rather than monosemy: their geocentric and non-geocentric meanings are both language-specific, and are stored independently in the lexicon. Were it not for the purpose of this study, it would otherwise be legitimate to gloss *ror* in (24), and *yow* in (28), with the geocentric meaning they have in that context, namely 'oceanwards'.

The precise nature of the psychological link between topological and geocentric meanings is not a simple matter. Sometimes it is self-evident: for example, when Hiw uses *up* and *down* for *uphill* and *downhill* on the island's slopes (Figure 3 p.141), one could question whether it even makes sense here to distinguish topological (*up* on the vertical axis) from geocentric (*up* supposedly defined on the "horizontal" plane), since in this case they simply coincide. Such a configuration could be analysed as a case of monosemy.

But we'll also meet the reverse case, where the connection between the two meanings has clearly been lost in the minds of speakers. Thus, when Mwotlap speakers employ *up* on the horizontal plane for southeast directions parallel to the coast, they are evidently unable to draw any semantic link with their vertical *up*; for all purposes, they treat this case as they would mere homophones. That certain patterns of correspondences have become psychologically arbitrary can become manifest in speakers' errors or hesitations (§3.4.2), or in historical processes of lexical splits (§4.6, 5.3.2).

In sum, when the same directional encodes both geocentric and non-geocentric uses, it is sometimes difficult, not to say purely speculative, to decide whether we are dealing with a case of monosemy, polysemy or homophony. To avoid this problem – which is not essential to our investigation anyway – I prefer using the neutral concept of *colexification*, which is precisely agnostic in this respect (François 2008:166). Throughout this study, I will for example observe that a given directional form in a certain language "colexifies" (i.e. can correspond to) a number of different meanings, without needing to take sides on the cognitive relationship between these meanings.

3 The navigational scale and the NW–SE cardinal axis

3.1 Local scale vs. navigational scale

In accordance with earlier studies of similar Oceanic systems (Ozanne-Rivierre 1997; Hyslop 2002; Palmer 2002:128; François 2004; Ross 2007:229), it is necessary to draw a preliminary distinction between two scales of geocentric reference, as they typically involve distinct directional subsystems.

On the one hand, the LOCAL SCALE corresponds to those vectors, locations and directions, that belong within a radius of about 200 meters around the origo – most often in the setting

of the village. On the other hand, the NAVIGATIONAL SCALE corresponds to long-distance vectors, prototypically those defined at sea, or across islands.

This section focuses on the navigational scale, and in particular the use of the cardinal axis oriented NW–SE. The local scale will be the focus of section 4. As for the INTERMEDIATE SCALE – the one that involves, for example, the distances between two villages on the same island – it essentially pertains to the navigational domain, yet its anchoring on land entails some specific characteristics distinct from its use across islands; Section §3.4 will examine how languages adapt the cardinal axis to the shape of islands.

3.2 The navigational scale in Oceanic languages

Based on earlier scholarly work, François (2004) proposed a systematic comparison of sixteen Austronesian languages (including Mwotlap) and their space systems, and outlined their commonalities and differences; these will be summarised here.

Oceanic languages show remarkable consistency regarding the navigational scale. Virtually every Oceanic language employs a single cardinal axis that is oriented *northwest — southeast*. Everywhere, this single cardinal axis is lexified *up* (southeast) vs. *down* (northwest), using the terms used for vertical coordinates. Modern speakers are unable to explain the reason for such a pattern. Some scholars have suggested a possible connection with the rising and setting of the sun; however, both the orientation of the axis (SE–NW rather than E–W) and the semantics of the *up–down* contrast argue in favour of an alternate analysis in terms of winds (Ozanne-Rivierre 1997:85; François 2004:11). In the terminology of ancient Oceanic navigators, the difficulty of sailing against the southeast trade winds was assimilated to travelling 'upwards', as opposed to the easy 'downward' navigation that was done towards northwest, following the wind.[2] In other words, the vertical terms *up* and *down* in Oceanic languages were given the same semantic extension as the one found with English *upwind* and *downwind*. In the remainder of this paper, I will occasionally refer to the terms *up* and *down* of this cardinal axis using their English glosses *upwind* and *downwind* – even though the original connection with seafaring terminology has been forgotten by modern speakers.

Based on this observation of modern Oceanic languages, François (2004) reconstructed the space system of Proto Oceanic. As far as the navigational scale is concerned,[3] a single cardinal axis oriented NW–SE was lexified using the vertical terms **sipo* '(go) down' and **sake* '(go) up' – see Figure 5. In such a navigational system, the world is divided in two halves: with respect to any point in the South Pacific, all islands located in the northwest half will be located 'down', and those located southeast will be 'up'. This pair was possibly supple-

[2] The archaeologist Geoffrey Irwin has highlighted the key role played by the *upwind—downwind* contrast in the sailing strategies of the Lapita navigators who peopled the Pacific islands. In his view, they consistently favoured an "upwind trajectory" by sailing southeast, following the "northwesterly winds of the summer monsoon" (NW→SE); in case they became lost in the ocean, they always had the option of letting the prevailing trade winds (SE→NW) push them back to their point of origin, "downwind". "Evidently, the migration trajectory was against the trade winds. […] Lapita migrants did not know what land was to be found to the southeast; however, they would have known that, by searching in that direction using monsoonal westerlies, they would maximise their chances of returning safely with the trade winds" (Irwin 2006:72-73).

[3] The system of Proto Oceanic on land will be discussed in §5.1.

mented by the verb **pano* ‘move in a transverse direction’ (Ross 2007:279) for directions that were neither ‘up’ nor ‘down’.

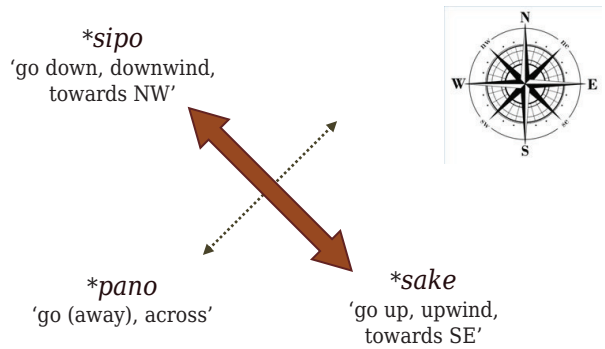

Figure 5 — The unique cardinal axis of Proto Oceanic (after François 2004:20)

3.3 The cardinal axis in northern Vanuatu

The 17 Torres and Banks languages have preserved the cardinal axis of their ancestors. Everywhere, it takes the form of a single axis oriented NW–SE, and lexified using the vertical directionals ‘down’ and ‘up’.[4]

In order to limit the impact of a particular island’s local topography, the best way to observe this cardinal axis is done by locating oneself on one island, and pointing towards other islands. Figure 6 illustrates the situation that obtains for a speaker of Löyöp on Ureparapara, with its pair of directionals *sa* ‘up’ vs. *sōw* ‘down’.[5] The directional *sa* ‘up’ is used when pointing to any island located in the southeast half of the world; *sōw* ‘down’ when pointing northwest.

Occasionally, this NW–SE orientation of the cardinal axis shows up in the toponymy. Thus in the Hiw language (Torres Islands), the traditional name given to the Banks group is *Sag*, etymologically from POc **sake* ‘up’:

(HIW.17) Ne ya-ne pe “ne tapego te ***Sag***”.
ART name-3sg FOC ART mat from Banks
‘It is called the *mat from the Banks Islands*.’ [HIW.Hades.48]

The very name of the island *Hiw* etymologically means ‘down’ (**hiw* < POc **sipo*). Indeed, from the perspective of the other islands with which Hiw people commonly interact, travelling to Hiw always means heading ‘northwest’, i.e. *down* on the cardinal axis.[6]

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[4] In one case, the semantic connection between ‘up’ and ‘southeast’ is only etymological: see §4.6, 5.3.2 for Lehali, Lo-Toga and Hiw.

[5] See similar maps in Hyslop (2002:49) for Ambae, François (2003:433) for Mwotlap.

[6] The languages of Vanikoro, an island of the Solomons located just north of Hiw, use their cardinal axis in much the same way as Torres–Banks languages (François 2009:117). In the main language Teanu, the term *Iura* – literally ‘upwards’ – designates the Torres–Banks group and the rest of Vanuatu further south. The capital Honiara, as well as other places located NW from Vanikoro, are located ‘down’ (*tev’ tawo*).

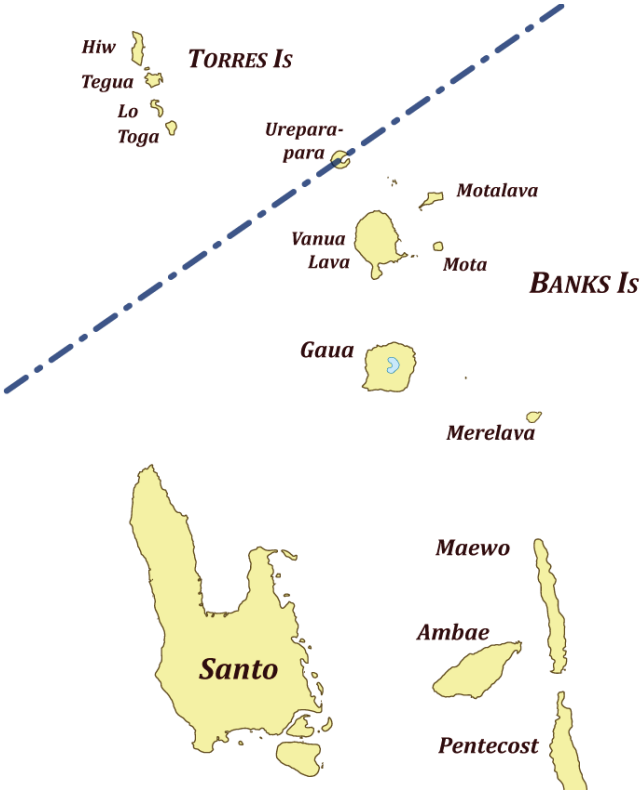


Figure 6 — The cardinal axis for referring across islands: 'up' and 'down' directions for a speaker located on the island of Ureparapara

One occasion when these cardinal directionals are mentioned is in traditional narratives. For example, the famous mythological hero Qat (cf. François 2013:220) left his home on Vanua Lava, and sailed *down* to Vava – the ancient name of the Torres Islands – where he bought the Night; then he sailed back *up* to his island. Likewise, the origin myth of the yam as it is told in the Torres Islands tells how it grew in Hiw, and how its creeper vine went *up* to the Banks, all the way *up* to Pentecost and Malakula in the south.

These narratives, combined with everyday conversation about people's travels, constitute the context in which knowledge of the *up–down* cardinal axis is transmitted from one generation to the next. Indeed, while scientific investigation can demonstrate the historical link between this axis and the main trade winds that used to be so significant to ancestral navigators, this association of directionals with winds has today been lost virtually everywhere in north Vanuatu, where long-distance voyaging practices have long gone out of use. Speakers on Motalava grow up in a social environment where the island of Gaua is always associated with the directional 'up' (***hag*** *Alkon*), and Ureparapara always with 'down' (***hōw*** *Nōybaybay*), following patterns of lexical collocation which are entrenched in discourse, and repeated as such. Knowledge of the most frequent collocations allows them to abstract away a general orientation of the *up—down* axis, without ever having to refer to the direction of the wind, the sun or any other bearing other than actual islands and places.

Like the European cardinal directions, the cardinal axis is unbounded. On the 'up' side are all the other islands to the south, including the towns of Santo and the capital Vila. Western countries – France, Britain, Australia, Japan… – are all located 'up' (Mwotlap *van* ***hag*** *Japan* 'travel *up* to Japan'), even when their actual location is northwest from Vanuatu. While this is

a paradox if one looks at a map, the explanation simply has to be sought in the geography as it is *perceived* by social actors. Indeed, the common experience of Torres–Banks people is that the only way to go to or come from these foreign countries involves a trip via the capital Port Vila, which is located south: anyone leaving the island in order to go abroad will first have to head south, i.e. 'up'. By contrast, the Solomon Islands – the only foreign country which can notoriously be reached by sea travel, heading northwest – will be located 'down' (e.g. Hiw *Take-siw-**uw*** 'the Solomons, LITER. the side that goes *down*'; Mwotlap *van **hōw** Bekyepnō* 'travel *down* to the Solomons').

3.4 Adapting the cardinal axis on land

The use of the cardinal axis at sea, or across different islands, is straightforward: everywhere, the axis is oriented NW–SE. Things become more intricate on land. Section 4 below will examine the different systems on the *local* scale, i.e. the directionals used for short distances (e.g. within a single village); as we'll see, some languages make use of the cardinal axis in that context, while others do not. But first I propose to discuss not the local scale, but the "*intermediate*" scale: namely, those directions that still involve long distances, yet take place within the same island.

Long-distance navigation within one island is expressed essentially using two axes. The most salient axis on land is the *land–sea* axis, a variable direction that radiates from the centre of the island, in all directions, towards the sea. If I am standing in an inland hamlet and I refer to a village down on the coast, chances are I will be using the directional for 'seawards' – either *out* or *down*, depending on the language – and vice versa. But villages on one island tend to be typically located on the same altitude, whether along the coast or on a plateau. In this case, the type of vectors needed to encode the direction from one village to another will involve vectors *parallel to the shore*, on what may be called the COASTAL AXIS. All Torres–Banks languages express these directions using the cardinal axis *up–down*. The corresponding forms can be seen in Table 5 (p.151), on rows #9 and #12. These can be compared, respectively, with rows #8 and #13: in almost all languages, the cardinal terms used for long distances on land are identical – not too surprisingly – to the ones used at sea.[7]

3.4.1 Skewing of cardinal directions on land

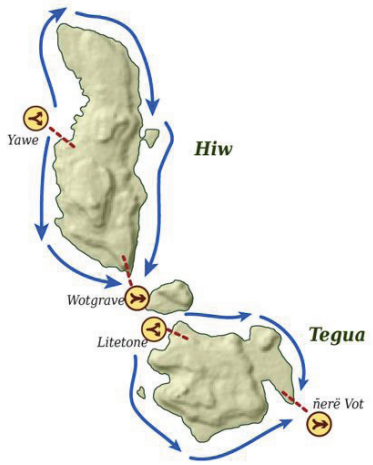
In principle, the cardinal axis on land should have the same orientation, in compass terms, as the NW–SE axis that is used *across* different islands (§3.3). However, one major difference is that, on land, spatial orientation is preempted by the contrast between *land* and *sea*: due to its high perceptual salience (Palmer 2002:114), the *land–sea* axis is always the primary axis of the orientation system. As for the cardinal axis, it only receives a secondary status on land (François 2004:12-14): its orientation is always redefined so as to run orthogonal to the main land–sea axis. For long distances, the *coastal axis* thus follows the definition in (18).

[7] The only exception is Hiw, which has *ag* for cardinal SE across islands, but *vën* (lit. 'thither') for cardinal SE on land (see also Figure 3 p.4). I will come back to this complex system in §4.7.

(18) The COASTAL AXIS aligns with the cardinal axis NW–SE,
± the amount of skewing (≤90°) needed for it to run orthogonal to the land–sea axis,
i.e., parallel to the shore.

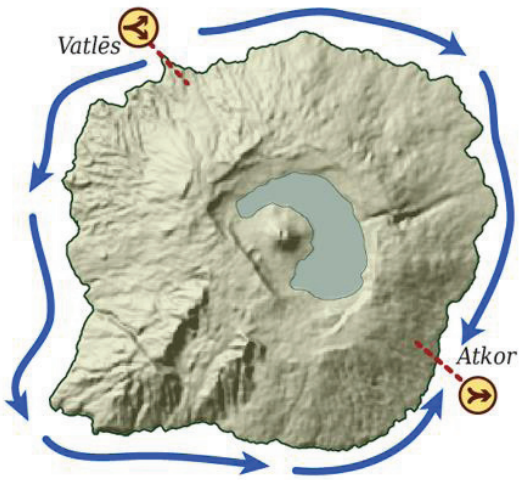
The necessary skewing explains why the directional 'up' can point due South in some points, due East in others, or even ENE or SWS elsewhere. The following maps indicate the orientation of the cardinal axis *up–down* on the eight main inhabited islands of the Torres and Banks area. All arrows point towards cardinal *up*; cardinal *down* is not indicated, as it simply corresponds to the reverse direction along the same arrows. The other symbols I use will be explained below.

Collecting this sort of navigational data often involved walking along the paths of each island, asking my companions for the directions of different villages from various points. I would also pay attention, in daily conversation, to the way people described their journeys or mentioned other villages, as in examples (4), (30), (35).



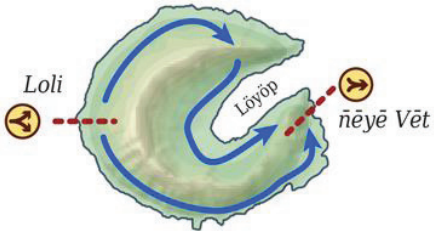
Map 2 – UP[wind] directions in **northern Torres Is**

Map 3 – UP[wind] directions in **southern Torres Is**

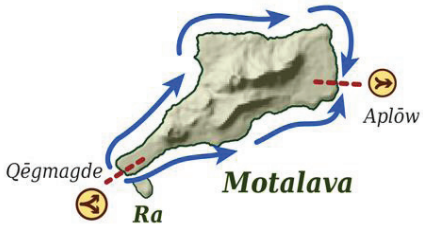


Map 4 – UP[wind] directions on **Gaua**

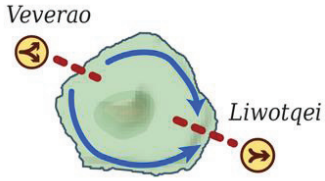
Map 5 – UP[wind] directions on **Vanua Lava**



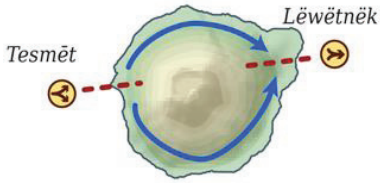
Map 6 – UP[wind] directions on **Ureparapara**



Map 7 – UP[wind] directions on **Motalava**



Map 8 – UP[wind] directions on **Mota**



Map 9 – UP[wind] directions on **Merelava**

3.4.2 The paradox of cardinal convergence and divergence

The maps above make use of two adhoc symbols:[8]

focus of convergence of two DOWN cardinal directions;
= focus of **divergence** of two UP directions

focus of **convergence** of two UP cardinal directions;
= focus of divergence of two DOWN directions

Figure 7 shows what a *focus of convergence* looks like on the ground: two directionals referring to the same cardinal coordinate (here *up* for 'southeast'), yet adapted so as to fit onto two different portions of the coast, converge at a particular point. Atkor on the island of Gaua, for example, is a place where two *up* directions converge; by the same token, it is also a place where two *down* directions diverge.

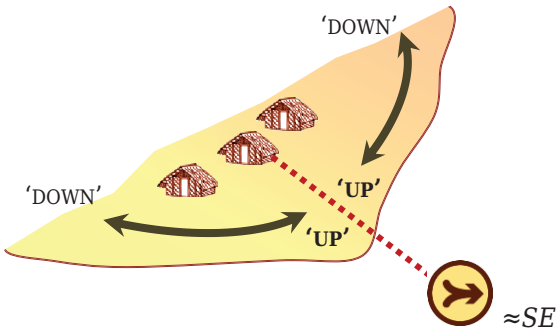


Figure 7 – A focus of cardinal convergence

[8] For the sake of consistency, I follow everywhere the arbitrary convention of choosing the UP direction as the reference. This is why the first of these two icons represents *divergence*, and the second one represents *convergence*.

The geographical nature of these foci of cardinal convergence is diverse: some refer to capes and promontories (e.g. *Wotgrave*, *Ñerë Vot*, *Ñēyē Vēt*, *Ñus Ñereqō*…), others to hamlets or villages (e.g. *Liwotqei*, *Tesmēt*, *Loli*, *Qēgmagde*, *Päk*…). As for their location, it follows a rule which is apparently simple, yet is often far from obvious for people on the ground. The default locations of the *down* focus and the *up* focus are, respectively, at the *northwest* and *southeast* tips of an island. This is typically true of round islands (Mota, Gaua, etc.), whose circular shape favours the default case. But if the geography of the island displays a prominent feature (cape, promontory) that is not exactly located on the NW–SE axis, then this feature tends to attract the focus of convergence, resulting in its apparent skewing with respect to compass terms. This is visible on Merelava, where the eastern cape of Lëwëtnëk skews the axis towards ENE; on Ureparapara, where the southeastern cape of Ñēyē Vēt has locally forced the cardinal axis almost into a NE direction; on Motalava, which is oriented WSW–ENE instead of NW–SE; and so on. The language Lo-Toga, which is spoken on two different islands, is well-behaved on the island of Lo, yet quite skewed on neighbouring Toga. In spite of the rotation observed, it can always be shown that the system's cardinal axis remains underlyingly NW–SE, even when it is oriented otherwise in the community's main territory (see François 2003:426-434 for Mwotlap). As a rule, the rotation of the axis never shifts more than 90° away from the underlying SW–NE cardinal axis.

The mechanism of these foci of convergence results logically from the combination of two elements: a single cardinal axis with a binary contrast *up–down*; and a principle specific to its use on land, whereby this axis must be redesigned so as to always run parallel to the shore. However, from the perspective of an individual walking along the coast, these points of cardinal convergence constitute paradoxes, as they entail that two opposite directions will make use of the very same cardinal directional. This is a paradox not only for outsiders, but also for the islanders themselves, who are sometimes confused, or amused, by these tipping points where both directions along the coast are 'up', instead of the normal situation in which one way is 'up' and the other way 'down'. The configuration would not be so unusual if we were dealing with VERTICAL *up* and *down*: indeed, someone on the top of a hill crest will have no difficulty realising that all directions radiating from that point are located 'down'. But in the case of CARDINAL *up* and *down*, it appears that modern speakers never draw any connection, even metaphorically, with verticality – as they would do if the island were somehow assigned a "conceptual slope" (Levinson 1996b:371) with a cardinally "highest" and "lowest" points. The connection that existed in the past – the metaphor behind *upwind* and *downwind* as used by ancestral sailors – has long fallen into oblivion. Moreover, some islands impose a cognitive dissociation between the abstract NW–SE cardinal axis of the navigational scale, and the direction of the cardinal axis when mapped onto the shoreline: for example, if Mwotlap speakers are asked to show the direction of *up* (*hag*), they will not point in the same direction if the question means 'on Motalava island' or 'between separate islands'.[9]

[9] Hyslop (2002:64) reports a similar mismatch for the island of Ambae further south (see Figure 6): "the absolute distinction made when describing motion within the island [is essentially SW vs. NE]. Note that the distinction made for travel between islands is on a different axis, with islands to the south and east distinguished from those in the north and west." While she describes this mismatch as "a curious variation in the division of absolute direction", I believe it reflects a situation very similar to the case

This double dissociation (coastal ≠ cardinal ≠ vertical) means that modern speakers are often left with no clues for inferring how exactly they are supposed to use their coastal axis – in particular, where on the coast they are supposed to reverse the coastal directionals. Today, the mapping of cardinal *up* and *down* on flat terrain is perceived as an arbitrary convention which has lost any natural motivation, an arcane aspect of the language that is often commented upon, as it needs to be learnt on a case-by-case basis. Witness to this arbitrary nature are the many discussions I heard, during my surveys, among speakers who were disagreeing on which directional should be used on certain segments of the shoreline – typically, those located in unfamiliar areas of an island, where directions have to be extrapolated from more familiar settings. For instance, speakers of Vera'a or Vurës, who are used to locations on the west coast of Vanua Lava, are often puzzled when they have to adapt their systems to the east coast, upon visiting the administrative center of Sola. Younger speakers, accustomed to using 'up' (*siag*, *sag*) as they walk along the south coast in a counterclockwise direction (Map 5 p.158), spontaneously extend it to the eastern coast, until a more experienced speaker corrects them, and explains where the directions must be reversed.[10] I once heard a Mwesen speaker comment, with amusement, on the "strange" way in which some of his Vurës neighbours employed directionals on the east coast:

(MSN.19)	I	rate	ta	Vures	nēr	ga	tul~tul	ga	mēnē	sasa.
	ART	PL	from	Vurës	3pl	STAT	orientate~HAB	STAT	DIMIN	strange

'Vurës people have a rather weird way of orientating themselves.'
(= of using their geocentric directionals) [EP1-23a]

The locations indicated on Maps 2 to 9 reflect my informants' conclusions after they would reach a consensus.

4 The local scale: Two canonical systems and their variations

Section 3 was concerned with the way in which the 17 Torres–Banks languages encode geocentric directions on the *navigational scale*, i.e. for space reference involving longer distances (rows #8–9, #12–13 in Table 5 p.151). In spite of apparent or superficial differences, the general observation was one of a profound homogeneity, as far as that scale is concerned, among all languages of the area. As we shall see now, the domain of the *local scale* presents much more cross-linguistic diversity, and defines nine different systems.

Languages differ in the way they lexify the land–sea axis (some use a contrast *up–down*, others a pair of directionals *in–out*), but also how they treat the coastal axis (some use the cardinal axis, others have a separate directional reserved for the local scale). Also, some

of Motalava, with ultimately the same underlying NW–SE cardinal orientation. This is confirmed by the existence – apparent from her map of Ambae (2002:62) – of a focus of cardinal *up* convergence towards Lolosangga, on the middle of the eastern coast of the island.

[10] A handful of Austronesian languages have been reported to work around a "circular system", where directionals encode a *clockwise–counterclockwise* contrast (see Lichtenberk 1983 for Manam, Dixon 1988 for Boumaa Fijian). Such systems, which are rare (François 2004:15-16), are not found in northern Vanuatu.

languages have developed different subsystems depending on distance contrasts, or on location within the island – in the village vs. in the bush.

These systems will be described one after the other, in order of increasing complexity. The present section will start with Gaua (§4.1) and Mwotlap (§4.2), two equally simple yet quite distinct systems of the region. I will propose (§4.3) that Gaua and Mwotlap can be taken as two opposite "canons", with respect to which the more intricate space systems of northern Vanuatu can be described. Among these, Section 4.4 will examine Volow, southeast Vanua Lava, and Vera'a, three systems which are non-canonical mostly on their *coastal axis*. Section 4.5 will describe Löyöp, Mota and Mwerlap, three systems whose peculiarities lie mostly on the *land–sea axis*. Section 4.6 will describe the more complex system shared by Lehali and Lo-Toga, before Section 4.7 finally attempts to unravel the quirkiest of all languages in the region: Hiw.

The description will first adopt a synchronic point of view. It will be up to the final discussion of this study (Section 5) to propose a unifying diachronic hypothesis, so as to explain how such a diversity can have arisen historically.

4.1 Gaua languages: two *up–down* axes and a traverse

One of the two simplest systems of geocentric reference found in the Torres–Banks group is the one used on the island of Gaua – already mentioned briefly for Dorig (§1.3). As Table 5 showed, exactly the same structural organisation is found in the five indigenous[11] languages of this island: Nume, Dorig, Koro, Olrat, Lakon. The reader is referred to Figure 2 p.141 for a preliminary representation of the Gaua system, before I refine it below.

4.1.1 Two distinct up–down axes

An analysis of Figure 2 shows that Gaua languages use vertical directionals *up–down* for geocentric reference with two very different meanings.

First, these define the cardinal axis used on the navigational scale (§3.4), whether across islands (cf. rows #8, 13 in Table 5) or across distant villages spoken on the same island (rows #9, 12); this *up–down* pair originates historically in a contrast *upwind* vs. *downwind*. The same languages also use the vertical directionals on the local scale, both in the bush (rows #6, 15) or on the coastal area where most villages are (rows #5, 16); but this time, this encodes the land–sea axis. Here are some examples from Lakon and Nume:

(LKN.20) We gēē tē van *ajew* ***hag*** le vanō.
and 3pl SEQ go upwards up LOC village
'(They landed on the shore) and began to walk *up* towards the village.' [LKN.Qat:060]

(NUM.21) Bas nen, ni tov rev *tēqēl* wak ***ror*** le won.
end TOP 3sg SEQ pull downwards canoe down LOC sand
'Then he dragged the canoe *down* to the beach.' [NUM.d07:13]

In the language Lakon, the directionals *hag* vs. *hōw* have a free variant, respectively *roka* 'up' and *rōkōw* 'down':

[11] The community of about 400 Mwerlap speakers who have settled on Gaua use a different system, adapted from the one used on their home island: see §4.5.3.

(LKN.22) Nē ’n gih nē tē ol mē lē um̄ä ***rōkōw*** rek.
3sg PFT seize 3sg SEQ enter with.it LOC house down DIST
‘He grabbed (the knife) and brought it in that house *down* there.’ [LKN.d05:20]

(LKN.23) Magte neñ ēn hag suu *hōw*, ***roka*** neñ a Liwsal.
old.woman MED PFT sit downwards down up MED LOC Liwsal
‘The woman sat down in the river, *up* there[12] in Liwsal.’ [LKN.Origin.Lake.16]

The *up–down* pair not only encodes the direction from the hinterland to the coast (*uphill* vs. *downhill*), but also extends at sea along the same axis, to contrast ‘towards the island’ with ‘towards the open sea’ (rows #4, 17). Here is an example from Dorig:

(DRG.24) Nēk so sō *swēl* lala mlē ***ror*** le lam ni.
2sg POT1 paddle downwards POT2 also down LOC ocean INSTR
‘You can even paddle it further *down* (*oceanwards*) towards the deep sea.’ [DRG.d07:14]

Even though the latter vectors are necessarily horizontal, the use of vertical terms here is due to an extension of the declivity contrast to the flat plane of the lagoon, reflecting the overall continuity of the axis {heights→lowlands→shore→lagoon→ocean}. In fact, the whole Torres–Banks area behaves the same in this respect. In all languages, the directionals used in a coastal village can also function at sea: for someone on a canoe, paddling ‘up’ or ‘in’ involves coming closer to land, whereas paddling ‘down’ or ‘out’ means going further away towards the ocean. This pattern is visible from Table 5 p.151: in all languages, the directionals for ‘landwards’ and ‘oceanwards’ at sea (rows #4 and 17) are identical with those contrasting ‘inland’ and ‘seawards’ on land (rows #5 and 16).

The two *up–down* axes of Gaua languages run orthogonal to each other, and are obviously distinct. Occasionally, the polysemy may trigger some confusion: for example, *sō ror* ‘paddle down’ can mean ‘go out towards the ocean’ as in (24), but it can also mean ‘travel on a canoe towards northwest’ (cf. Figure 6 p.156).[13] The risk of confusion is somewhat limited by the fact that, in principle, the two *up–down* axes never really cross: the wind-based contrast belongs to the navigational scale, whereas the axis based on the declivity of the ground pertains to the local scale. For directions parallel to the shore involving short distances, Gaua languages never use their cardinal coordinates, but resort to an undifferentiated traverse axis.

4.1.2 The undifferentiated traverse axis

On Gaua, the coastal axis uses the same directional on both sides. This is visible from Table 5, which shows that Gaua languages use the same form for #10 ‘*parallel to the shore towards SE (close)*’ and #11 ‘*parallel to the shore towards NW (close)*’. I describe the axis as “undifferentiated”, using the term proposed by Palmer (2002:127): “a derived axis for which a language does not lexically distinguish the opposing directions”. In a way, this configura-

[12] Notice, in (23), the rare combination of two opposite directionals in the same clause: *hōw* referring to the motion of the event (‘sit down’), and is here used topologically; *roka* locates that event in the geography of the island (‘up there inland’), and is here used geocentrically.

[13] Systems involving two distinct *up–down* axes have been reported for other Oceanic languages (Hyslop 2002; Palmer 2002:128). This is in fact the system reconstructed for Proto Oceanic (§5.1).

tion whereby two opposite directions along the coast use the same directional is reminiscent of the cases of *cardinal convergence* we saw in §3.4.2. The difference is that foci of convergence constituted isolated exceptions within a more general rule of differentiation *up–down* on the navigational scale; whereas it is an inherent property of the traverse axis to be undifferentiated, wherever it is used on the island.

A convenient gloss for this directional is 'across', as it crosses the primary axis. Etymologically, some of these forms (Nume *van*, but also Mota *vano* or Mwerlap *van*) reflect a POc verb **pano* 'move in transverse direction' (cf. Figure 5 p.155); other forms (*vak*, *päh*) reflect local innovations (§7.3.3).

(DRG.25) Dār s-van *barbar* ***vak*** seg dār s-ñor ***vak*** sa?
1inc:du IRR-go crosswise across here 1inc:du IRR-sleep across there
'Why don't we walk (*across*) over there and have a nap?' [DRG.Heron.17]

(LKN.26) Miini neñ, tē van *päätäg* gēn ***päh***.
child that PRSTV go crosswise FOC:there across
'That child, there he is, heading over there (*along the beach*).' [LKN.d05:34]

Interestingly, the transverse directional is sometimes preceded by a spatial adverb (§2.4.2) which also has the meaning 'crosswise, orthogonally' (as in 'lie across the bed') – e.g. Dorig *barbar*, Lakon *päätäg*. This confirms the choice of glossing the directional 'across'.

The undifferentiated traverse axis is only used on the local scale, for distances shorter than about 100 or 200 m. For longer distances on land, directions parallel to the shore make use of the cardinal axis, as we saw in §3.4. At this scale, the coordinates on each side become differentiated again, in the form of another contrast *up–down*. This cardinal axis is typically used for distances across villages, out of sight, along the coast.

4.1.3 An emic view of the Gaua system

Figure 2 above represented the various vectors used in the languages of Gaua. The discussion has established that some of these vectors follow a single logic: for example, the use of *down* at sea ('towards deep sea') is merely an extension, on the horizontal plane, of the underlying meaning *down(hill)*. In other words, the vectors #15-16-17 of Figure 4, which are lexified separately in some other languages (§4.5), are colexified in the languages of Gaua, and treated as three instances of a single emic category. Put together, the various emic categories of Gaua directionals make up the system represented on Figure 8.[14]

[14] In order to facilitate comparison across systems, the figure will follow the arbitrary convention of always representing NW on the left and SE on the right: that is, it will always represent an island seen from its western coast, regardless of the actual location of the speech community under discussion. For example, Figure 8 gives a realistic account of the system used in the language of Lakon, because Lakon happens to be spoken on the western coast of Gaua (Map 1 p.4). As for Nume, which is primarily spoken on the northeast coast of the island, a realistic representation of the way in which it is used in its native area would normally require reversing Figure 8, with SE ('up') pointing left and NW ('down') pointing right. However, this increase in realistic accuracy may result in confusion for the comparison of similarities and differences across languages. I prefer to adopt everywhere a standardised view of a fictional island seen from its western coast, for all languages – even when their community is actually located on an eastern coast. One reason for considering this decision legitimate is the fact that language speakers are geographically mobile, and regularly adapt their own space

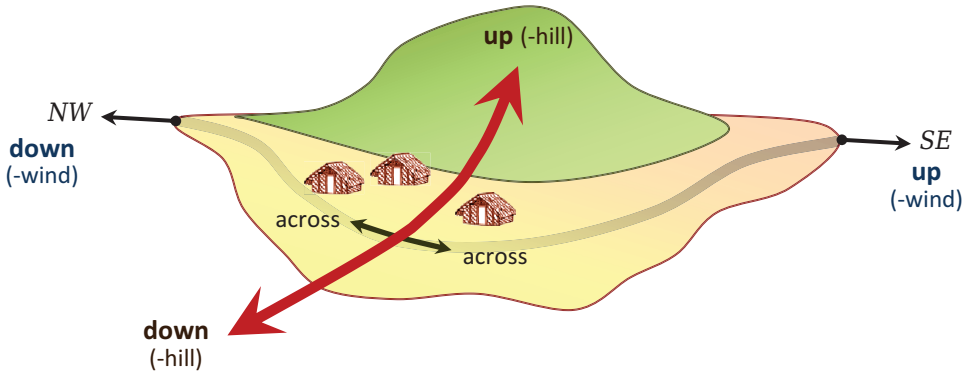


Figure 8 – The system of geocentric directionals in Gaua languages (emic representation)

In sum, the system used on Gaua involves only three axes: one cardinal axis *up(wind)–down(wind)*; one topographical axis *up(hill)–down(hill)*; and one undifferentiated traverse *across*.

4.2 Mwotlap: two axes, *up–down* vs. *in–out*

Compared to Gaua, Mwotlap shows quite a different configuration.[15] The only agreement between them – as well as all other languages of the region, for that matter – is the use of the *up–down* cardinal axis on the navigational scale (§3). But all other features are different.

First, the way Mwotlap encodes its coastal axis is not done with an undifferentiated traverse as on Gaua; it uses the cardinal axis *up–down* everywhere on land, not only for long distances across villages (§3.4), but even for short distances. Sentences like (1)-(2) above would be impossible in Gaua languages, yet are perfectly common in Mwotlap.

The second major difference between Mwotlap and Gaua is that the land–sea axis is never encoded by the vertical directionals *up–down*, but by a contrast between *in* and *out*, for which Mwotlap has separate forms (cf. Table 4 in §2.4.2). Sentence (27), from a traditional story, takes place as the main character Venventey, who lives on a coastal village, comes down to the beach to welcome his brother who's arriving on a canoe. Out of the six directionals used here, three encode the land–sea axis: first as Venventey walks down to the beach, second as they both carry the canoe to the beach, before finally walking up to the village:

(MTP.27) Kē ni-van ***yow*** tō ni-tēy *van* ni-siok nonon tō,
3sg AO-go **out** then AO-hold thither ART-canoe his then

kōyō hah kal ***hay*** tō, leveteg *van* lē-vēthiyle.
3du lift upwards **in** then put.down thither LOC-sand

Kōyō hatig *hag* tō, van ***hay*** l-ēm̄ ēgēn.
3du rise up then go **in** LOC-house now

'So he walked down to the shore [LITER. went ***out***], took hold of his canoe; they both carried it up ***in****(land)*, and put it down on the sand. Finally, they left the place and walked ***in****(land)* towards their house.' [MTP.Venventey.WS.072]

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system to other environments, even outside their home village (cf. François 2003:428). In this sense, a representation such as Figure 8 portrays accurately any language, not just those that are typically spoken on a western coast.

[15] For a detailed description of Mwotlap's space system, see François (2003).

Contrary to Gaua languages, Mwotlap cannot use ‘up’ and ‘down’ here, but resorts to ***hay*** ‘in’ and ***yow*** ‘out’. In encoding the land–sea axis with a contrast *in—out*, Mwotlap represents the whole island as an enclosure: walking away from the sea into the more bushy areas of the island is going ‘in’ (cf. Eng. ***in****land*) whereas walking away from the bush and towards the sea is equivalent to going ‘out’ (cf. Eng. ***out*** *to sea*). Mwotlap keeps the same contrast at sea. As long as a landmass is salient to the observer, the land–sea contrast will be encoded as *in—out* – even when referring to a shoal of fish in the water:

(MTP.28)	No	m-et	nō-mōmō	ni-sey	***hay***,	ni-sey	***yow***.
	1sg	PFT-see	ART-fish	3sg-move.in.shoal	**in**	3sg-move.in.shoal	**out**

‘I saw a shoal of fish moving *in* (=*landwards*),
and suddenly moving *out* (=*oceanwards*).’ [BP5-34a]

By comparison with the two *up–down* axes and the third traverse found in Gaua languages, a system like Mwotlap ultimately involves only two axes: one cardinal axis lexified *up—down*, employed everywhere on land for the coastal axis (see Map 7 p.159); one land–sea axis running orthogonal to it, lexified *in—out*. The Mwotlap system is represented in Figure 9. It is, arguably, the simplest system of all northern Vanuatu languages.

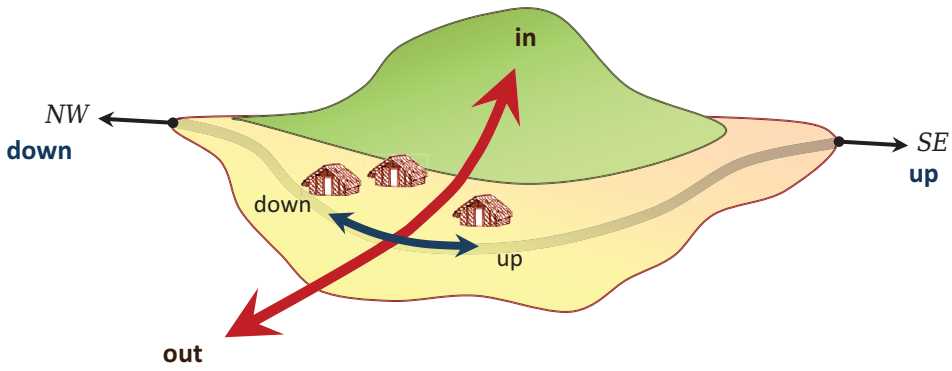

Figure 9 – The system of geocentric directionals in Mwotlap

4.3 Two canonical systems and a number of hybrids

I propose that the space systems of northern Vanuatu can be described by positing Gaua and Mwotlap as two opposite “canons”,[16] each of which displays a coherent set of space-related properties. By comparison with these two canons, the other languages of the region present hybrid systems, i.e. systems which are closer to one of the two canons, yet deviate from it in ways that make it resemble the other canon.

For example, we will see that Mota has almost the same system as Gaua, except that it uses a directional ‘out’ when pointing seawards, in a way similar to Mwotlap. Symmetrically, Löyöp is almost like Mwotlap, except that it uses the *up—down* contrast (like Gaua) in the steeper areas of the island. Because the comparison between systems involves several

[16] While the term *canon* is ultimately inspired by Corbett’s (2007) *canonical typology*, the sort of typology defined in this section does not claim universal scope, but is rather a case of (micro-) *areal typology*.

parameters, it is not possible to rank them using a unidimensional scale, whereby languages would simply placed in a linear order between the two poles Gaua and Mwotlap. Instead, each language deviates from the canons following a number of dimensions.

Derived from the data in Table 5 p.151, Table 6 lays out the relevant parameters whereby languages differ in their directional systems.

Table 6 — The systems of Gaua and Mwotlap constitute two canons; all other northern Vanuatu systems can be analysed as hybrid between these two.

System	COASTAL AXIS					LAND–SEA AXIS			
	navigational		local up–down		traverse	up–down		in–out	
	'up'	'down'	'up'	'down'	'across'	'up'	'down'	'in'	'out'
Gaua lgs	+	+	—	—	+	+	+	—	—
Mota	+	+	—	—	+	+	(+)	—	(+)
Mwerlap	+	+	—	—	+	(+)	(+)	(+)	(+)
Vera'a	+	+	—	—	—	—	—	+	+
Vanua Lava lgs	+	+	—	+	(+)	—	—	+	+
Hiw	—	+	—	+	(+)	(+)	(+)	—	(+)
Lehali, Lo-Toga	—	+	—	+	—	(+)	(+)	(+)	(+)
Löyöp	+	+	+	+	—	(+)	(+)	(+)	(+)
Volow	+	+	+	+	—	(+)	—	(+)	+
Mwotlap	+	+	+	+	—	—	—	+	+

From the first to the last column, the relevant parameters can be defined as follows:

1. for directions PARALLEL TO THE SHORELINE:
   - whether the navigational subsystem used for long distances on land (§3.4) employs the cardinal directionals 'up' [#9] and 'down' [#12];
   - whether the local subsystem used for short distances [#10, #11] employs those same cardinal directionals 'up'–'down', or an undifferentiated traverse;
2. for directions ORTHOGONAL TO THE SHORELINE:
   - whether the land–sea axis [#4–5–6] employs the vertical directionals *up–down* or *in–out*.

White cells refer to features closer to the Gaua canon; cells with darker shading refer to features closer to the Mwotlap canon. Cells with lighter shading, and with a sign "(+)" in brackets, indicate when the answer to these questions is not straightforward, or depends on certain conditions. For example, we'll see that Mota uses sometimes *down* when pointing to the sea, and sometimes *out*, depending on how steep the slope is. Likewise, the languages of Ureparapara and the Torres Islands encode the land–sea axis as *up–down* in the bush, but as *in–out* in the lower parts of the island. Other examples of hybrid configurations will be detailed below. In almost all cases – except for some peculiarities of Hiw – the languages of north Vanuatu can be shown to pattern partly like Gaua, and partly like Mwotlap.

4.4 Variations on the coastal axis

4.4.1 Volow: Accidental homophony

Volow is a communalect spoken on the eastern side of Motalava island, where Mwotlap is also spoken. Even though it is now quasi extinct, some valuable narratives were recorded in

1969 by the anthropologist Bernard Vienne with the late Wanhan, the last fluent speaker of the language; I transcribed them in 2003 with the help of Wanhan's son.

The data from Volow in Table 5 p.151 show a threefold organisation of geocentric directionals: the two forms ***hō*** 'down; northwest along the coast' and ***yo*** 'out; seawards' stand in contrast to a single polysemous directional ***ha*** 'up, southeast; in, inland'. The ambiguity of the latter form can be represented with a gloss 'up/in'. This pattern of colexification 'up/in' is also found in the Volow system of topological directionals (§2.4.2), and is therefore imported into the geocentric system. Figure 10 lays out the system of Volow.

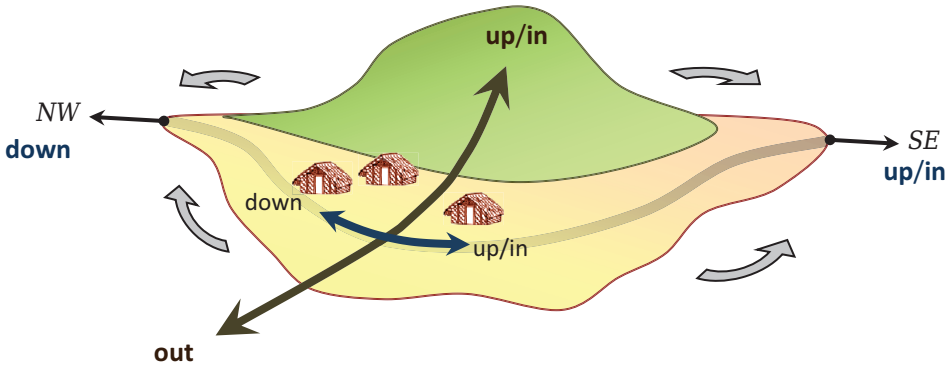

Figure 10 – The system of geocentric directionals in Volow

Those who can understand the Volow recordings today point out systematic correspondences between their ancestors' space system and that of the dominant language Mwotlap, which they have now shifted to, and which we used as our contact language. Thus, in spite of the apparent ambiguity of the two ***ha*** directionals in (29), these speakers can associate each token with the corresponding directional of Mwotlap. The first *ha* is here glossed 'in, inland' (MTP *hay*), and the second one is 'up, southeast' (MTP *hag*):

(VLW.29) N-tēq̄ē mine yiwes ***ha*** q̄e gēs, taval tō, teyeg ***ha***.
ART-garden my close ~~up~~/**in** FOC here beyond hill side **up**/~~in~~
'My garden is close this way (*inland*), it's on the other side of the hill, towards *southeast*.' [VLW.d01:16]

Considering how close Volow is from Mwotlap in all other respects (François 2014:182), it is likely that Volow once had the same four-member system as Mwotlap (see Figure 9 p.166). Simply, its directionals underwent the deletion of their last consonant (**hōw* → *hō*; **yow* → *yo*; **van* → *va*), which resulted in the accidental homophony of two directionals ***ha***, one meaning 'up, southeast' (< **hag*), the other meaning 'in, inland' (< **hay*).[17] Today, it is difficult to observe how modern Volow would have dealt with such a homophony. Due to its moribund status, the semi-speakers of Volow tend to simply map the distinctions made by Mwotlap onto their own system of directionals.

[17] The colexification of 'up' and 'in' in Volow was already mentioned as we examined the topological directionals (§2.4.2).

4.4.2 The languages of Vanua Lava

Vanua Lava is the largest and the highest of the Torres and Banks islands (§2.1). If one sets apart the relatively recent colonisation by Mwotlap speakers on its northeastern coast, the island is home to four distinct languages: Vurës, Vera'a, Mwesen and Lemerig. These share an identical system of space reference – with perhaps an extra twist for Vera'a (§4.4.2.2).

4.4.2.1 An asymmetry on the transversal axis

The system of Vanua Lava is identical to that of Mwotlap (Figure 9 p.166), except for a single vector: the one that points southeast for directions parallel to the shore, on the local scale. Long distances along that vector are encoded with cardinal 'up' (*siag* in Vurës, *sag* in other languages). However, unlike the canonical Mwotlap system which generalises this use of 'up[wind]' to all distances on land, Vanua Lava languages reserve it for long distances, and make use of a distinct directional for distances shorter than about 200 meters – see the forms in Table 5 p.151 (row #10).

The two following sentences, taken from narratives in Lemerig, illustrate the contrast between the two directionals pointing southeast along the coast: *sag* for long distances, *wël* for nearby locations.

(LMG.30) Ē Qet tär e 'og~'og ***sag*** sā Lēseper ow.
PERS (hero) 3pl DEF IPFV~stay up/SE:far FOC1 L. FOC2
'Kpwet was living over there (*southeast*) in Leseper.' [LMG.Qet.003]
[*story told in Lalñetak village on Vanua Lava, about 10 km north of Leseper*]

(LMG.31) Ti m-'är pa' ***wël*** kē ge mäläglag.
3sg PFT-stand hidden (SE:near) place STAT dark
'He stood hiding over there (*southeast*) in the dark.' [LMG.Rock.048]

Oddly enough, three languages (Lemerig, Vurës and Mwesen – see below for Vera'a) display this distance-based contrast only in one direction. As for the opposite direction, it employs the directional 'down' whatever the distance – just like Mwotlap. As an illustration, the following excerpt mentions the four directionals that constitute the local-scale subsystem of Lemerig: *wël*[18] 'parallel to the shore, SE side' – *sōw* 'down; parallel to the shore, NW side' – *sar* 'in; inland'; *row* 'out; seawards'. Notice here the absence of *sag* 'up'.

(LMG.32) Ti m-sëk. Sëk lu ***wël*** nē, sëk lu ***sōw*** nē,
3sg PFT-seek seek around (**SE:near**) there seek around (**down**/NW) there
sëk lu ***row*** nē, sëk lu ***sar*** nē — ti 'esgö' qäl'ä.
seek around **out** there seek around **in** there — 3sg find NEG
'So he began to search. He searched *southeast*, he searched *northwest*,
he searched *seawards*, he searched *inland* — but he couldn't find it.' [LMG.Qet.072]

The coastal axis of Lemerig is thus asymmetrical, because a pair of distinct terms used in one

[18] One peculiarity of Lemerig is that the directional *wël*, which here encodes a geocentric direction pointing southeast, is also used as a participant-based allotropic directional 'thither, towards non-speaker' (§2.4.1): the latter contrasts with *me* 'hither', and can point to any direction. By contrast, the cognate forms in the three other languages of Vanua Lava (*wōl*, *wol*) are restricted to their geocentric use.

direction (*wël* vs. *sag*) contrasts with a single term (*sōw*) on the opposite direction.

The system of Vanua Lava directionals is shown on Figure 11. The gloss 'across' given for the short-distance vector pointing southeast (#10) will be explained in §5.2.1.

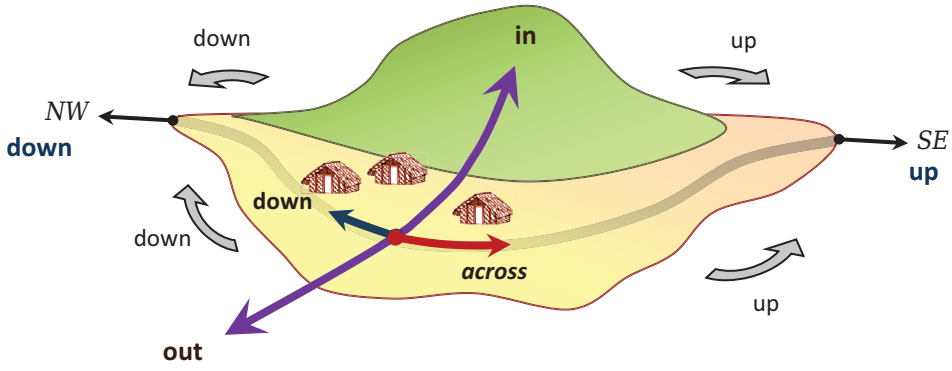

Figure 11 – The system of geocentric directionals in Vanua Lava languages

If we compare Figure 11 with Figures 8 and 9 above, it becomes clear that Vanua Lava can be described as a hybrid between the canonical systems of Gaua and Mwotlap.

4.4.2.2 The special case of Vera'a

I personally recorded the same system (Figure 11) for the four languages of Vanua Lava island, including Vera'a. My colleague Stefan Schnell (pers. com.) later told me that he noticed an extra directional for Vera'a, formally ***mul***, corresponding apparently to vector #11 '*parallel to the shore towards NW (close distances)*'. If this is the case, then Vera'a constitutes another geocentric configuration again, bringing the total number of space systems in northern Vanuatu to *ten* rather than nine – see Table 5 p.151.

The resulting system is shown in Figure 12. Following the principle of other figures, I propose to gloss each vector with the directional's original meaning in the same language: in this case, the vector #10 is glossed 'across' (*wōl*), and #11 is glossed 'back' (*mul*). Indeed, the form *mul* originates in the motion verb *mul(ō)* 'go back, return'.

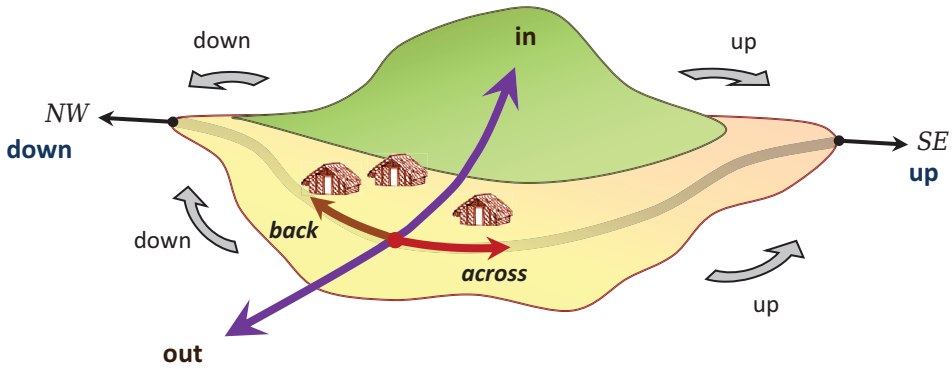

Figure 12 – The system of geocentric directionals in Vera'a (after Schnell, pers. com.)

Unfortunately, I have no example of this *mul* directional in my Vera'a corpus. A search through the 86-page collection of Vera'a texts published by Vorēs & Schnell (2012) found 73 instances of *suw(ō)* 'down, NW (remote)', 66 of *sag* 'up, SE (remote)'; 68 of *sar* 'in, inland', 44 of *rōw* 'out, seawards'; as well as 8 instances of *wōl* 'SE:near <*across*'. However, I found

zero instance of any directional of the form *mul* ('NW:near <*back*'). Based on the evidence available to me, I am thus unable to confirm the existence of a distinct geocentric system for Vera'a.

4.5 Variations on the land-sea axis

4.5.1 Löyöp: Depending on the slope

Löyöp, the language spoken on the eastern side of Ureparapara, shares with its neighbour Mwotlap the extension of the cardinal axis *up–down* on the coastal axis. Löyöp also aligns with Mwotlap – and with Vanua Lava languages – in using the two directionals *in–out* to encode the land–sea axis:

(LYP.33) Yege oñ e m-van me, m-van me, m-van me; m-ol kal
PL ship DEF PFT-go hither PFT-go hither PFT-go hither PFT-land upwards

say me, lilwon, m-qēt me. Kyeyjöl m-van ***yow***.
in hither on.beach PFT-complete hither 3trial PFT-go **out**
'The ships kept coming closer, closer, closer, until they landed [*in*] on the beach,
one after the other. The three boys walked [*out*] (towards them).' [LYP.Pig.117]

However, contrary to its neighbours, Löyöp reserves these directionals *in–out* to the flatter parts of its island, namely the coastal villages and the sea. By contrast, it employs the vertical directionals *up–down* in the forest and steeper parts of the island, where the declivity of the ground is more salient. The following sentence, taken from a traditional narrative, shows how Löyöp can use its vertical directionals to lexify the *land–sea* axis. The story mentions a hamlet located in the mountain:

(LYP.34) Kyeyō m-yēm kal n-wutwut, van van van en:
3du PFT-climb upward ART-hill go go go TOP

kalō ***sa*** lipnō yo-yō.
arrive up in.village POSS-3du
'They climbed the hill all the way up,
until they reached [*up*] their hamlet.' [LYP.Ogres.18]

Löyöp has thus preserved the possibility to use its vertical directionals on the land–sea axis, as soon as the declivity of the slope warrants it. This system is hybrid between the two canonical systems of Mwotlap and Gaua (§4.3): it resembles Mwotlap in the island's lower areas, yet is closer to Gaua in the heights. The system of Löyöp is represented on Figure 13.

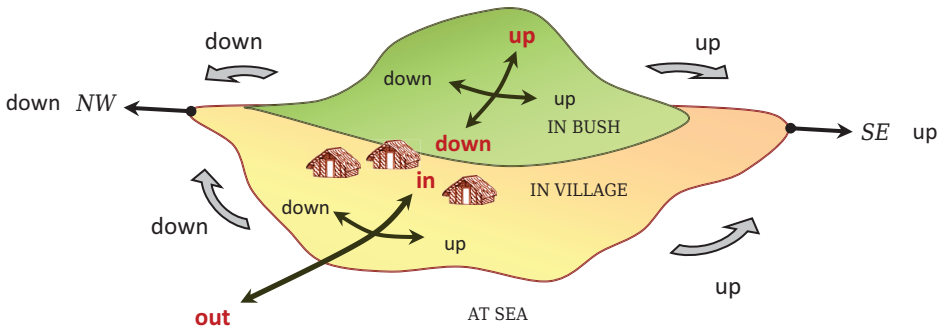

Figure 13 – The system of geocentric directionals in Löyöp

The other systems that remain to be presented in this section all form, in turn, variations of the Löyöp case. Whether it is Mota, Mwerlap, Lehali, Lo-Toga or Hiw, all the languages yet to be examined show a similar lexical split within the land–sea axis, where they employ sometimes the vertical directionals *up–down*, and sometimes the topological *in–out*.

4.5.2 Mota: An asymmetrical system

The small island of Mota, located east of Vanua Lava (see Map 1), uses a directional system that is essentially similar to the Gaua languages. Mota uses two *up–down* axes: one corresponding to the land–sea axis (but see below), and one for cardinal directions mapped onto the shoreline (§3.4). Sentence (35) illustrates a dialogue that would take place in a western village of the island, such as Veverao, pointing towards the southeastern hamlet Liwotqei (see Map 1 p.3):

(MTA.35)	Ka	va~va	i	vea?	—	Na	va~va	iake	***sage***	a	Liwotqei.
	2s:AO	IPFV~go	ALL	where		1s:AO	IPFV~go	here	up	LOC	(village)

'Where are you going? — I'm going *up* (southeast) to Liwotqei.' [FP1-40b]

On the local scale, the land–sea axis is crosscut by an undifferentiated transverse axis lexified *vano* 'across':

(MTA.36)	Na	va	gap	iake	***vano***.
	1s:AO	go	just	here	across

'I'm just going this way (level, parallel to shore).' [FP1-41b]

Mota shares with Löyöp a lexical split of the land–sea axis. In the higher parts of the island, the vertical directionals *up–down* are used; but the lower areas, namely the coastal village and the sea, employ different terms. One notable difference with Löyöp, though, is the asymmetry of Mota directionals. The lexical split concerns only the *seaward* direction, the one that runs from the island's top towards the ocean: it is encoded ***swo*** 'down' in the bush, and ***rowo*** 'out' elsewhere. Similarly, the directional used at sea, when pointing towards the ocean (#17), is never 'down' like in Gaua, but always *rowo* 'out'. As for the opposite direction *inland*, it is consistently lexified ***sage*** 'up' regardless of the slope, or of the location on the island. The system of Mota is represented in Figure 14.

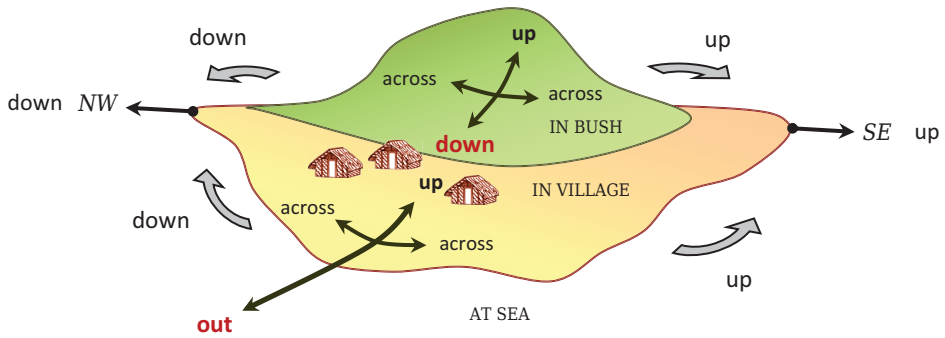

Figure 14 – The system of geocentric directionals in Mota

Example (37), taken from a narrative, illustrates the lexical split of the land–sea axis. After they finished carving their wooden canoe in the bush, the characters brought it *down* (#15) all the way to the beach; at which point they took it *out* (#16–17) to the ocean:

(MTA.37) Rave sur o nati aka ***swo***, me vega kalo
pull downwards ART small canoe down PFT climb upwards
i vawo nati aka, neira me va ***rowo*** ilo lama.
ALL top small canoe 3pl PFT go out ALL open.sea
'So they dragged their small canoe (*down*) to the shore, climbed upon it,
and *out* they went into the ocean.' [MTA.Snake.34]

Keeping in mind the canonical analysis exposed in §4.3, one could say that Mota patterns everywhere like the canon Gaua, except for seawards directions on flat terrain (#16–17 vectors in Table 5 p.151), for which Mota follows the same strategy as the other canon Mwotlap.

One would expect that the directional 'out' should contrast with its antonym 'in', like in the symmetrical systems of Löyöp or Mwotlap; however, this is not what we find in Mota, where *sage* 'up' is used in all cases. The following examples, based on the kinetic presentative *veta* (+directional),[19] illustrate the asymmetry:[20]

(MTA.38) Nea ilunia veta ***sage***.
3sg there PRSTV up
a) ‹COASTAL› 'There he is, walking towards southeast (along the shore).'
b) ‹LAND–SEA› 'There he is, walking uphill (on a slope).'
c) ‹LAND–SEA› 'There he is, walking inland (on flat terrain).' [FP1-41b]

(MTA.38') Nea ilunia veta ***swo***.
3sg there PRSTV down
a) ‹COASTAL› 'There he is, walking towards northwest (along the shore).'
b) ‹LAND–SEA› 'There he is, walking seawards (on a slope).'

(MTA.38") Nea ilunia veta ***rowo***.
3sg there PRSTV out
‹LAND–SEA› 'There he is, walking seawards (on flat terrain).'

This asymmetry of geocentric directionals simply mirrors the same asymmetry in the *topological* domain: as we saw in §2.4.2 (Table 4), Mota has innovated a lexical contrast between 'down' (*swo*) and 'out' (*rowo*), but has kept the original polysemy of *sage* (<**sake*), which means both 'in' and 'up' – see (16) p.149.

4.5.3 Mwerlap: A distance-based lexical split

Mwerlap, the language spoken on Merelava island, can also be described as a hybrid between the two canons of Gaua and Mwotlap. Like Gaua, Mwerlap uses an undifferentiated traverse ('across') on the local scale, and sometimes encodes the land–sea axis as *up–down* (***seag-sōw***); however it shares with Mwotlap, at least in some cases, the lexification of that same land–sea axis as *in–out* (***sar–row***).

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[19] The *kinetic presentative* is a presentative particle that points to an individual in motion (e.g. person walking, ship sailing, etc.); it is always followed by a directional encoding the path of the motion. For a description in the neighbouring language Mwotlap, see François (2003:156-162).

[20] The asymmetry is reminiscent of the one we saw for Vanua Lava languages in §4.4.2.1; for the latter, it was a property of the coastal axis (Figure 11 p.4), whereas Mota is asymmetrical on the land–sea axis.

Based on these preliminary observations, one could propose to see Mwerlap simply as a variant of Löyöp. But such an analogy would fail to take into account an ingredient specific to Mwerlap: namely, that the variation is not based on the slope, but on physical distance. The pair of directionals *in–out* must be used for very local reference, within a radius of about 20 metres on each side; whereas *up–down* remain the relevant directionals for farther distances. The resulting system is represented in Figure 15.

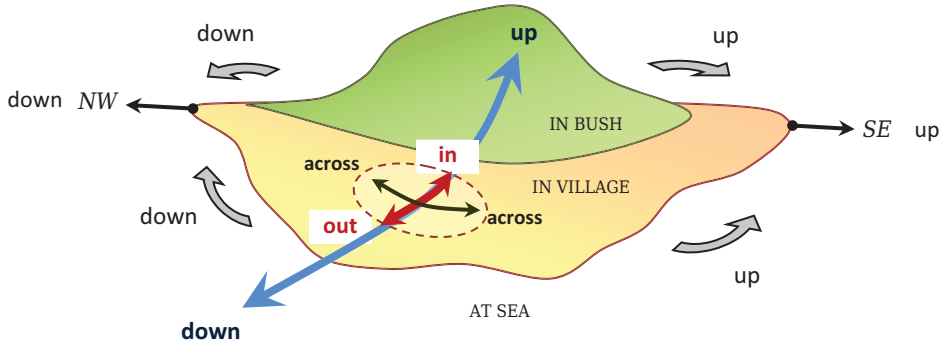

Figure 15 – The two nested subsystems of geocentric directionals in Mwerlap

Mwerlap thus involves two nested subsystems. On the one hand, long distances employ two distinct *up–down* axes (as in Gaua languages); on the other hand, short distances in the local setting resort to a different set of axes: *in–out* for the land–sea axis, and *across* for the traverse that crosscuts it. In terms of actual distances, estimates by my consultants mentioned a radius of about 20 m for *in–out*, but a longer array of perhaps 200 m each side for the use of *across*. In other words, the "local" subsystem is less of a circle than an ellipse or strip parallel to the shoreline.

Table 7 — The distance-based lexical split of Mwerlap directionals on the land–sea axis

SHORTER DISTANCES (<20 m)	LONGER DISTANCES (>20 m)
(MRL.39a) Pas ***ser=lēg*** ! pass **in**=thither 'Pass (him) the ball inland!' [BP3-21a]	(MRL.39b) Pas ***sege=lēg*** ! pass **up**=thither 'Pass (him) the ball inland!'
(MRL.40a) Pas ***ru=mē*** ! pass **out**=hither 'Pass (me) the ball seawards!'	(MRL.40b) Pas ***su=mē*** ! pass **down**=hither 'Pass (me) the ball seawards!'

Sentences (39-40) in Table 7 exemplify the spatial configuration of Mwerlap. Such utterances can be heard during popular ball games such as soccer or volleyball. The forms of the morphemes themselves are explained in a separate Appendix (§7.4) on the morphology of Mwerlap directionals. What matters here is to illustrate the idiosyncratic organisation of Mwerlap geocentric directionals on the land–sea axis.

Despite its differences with Löyöp and Mota (compare Figure 15 with Figures 13 and 14), overall the system of Mwerlap can also be said to ultimately revolve around declivity, in its own particular way. Indeed, the island of Merelava is a very steep, conical volcano, so

relatively flat areas will always be narrow strips of gentle slope within a general shape of strong declivity.[21] In this regard, the *distance*-based system of Mwerlap bears some similarity with a *declivity*-based system such as that of Löyöp.

The manner in which Mwerlap structures its directionals based on distance is not found anywhere else in the area. While physical distance commonly results in different terms on the coastal axis (see §3.1), Mwerlap is the only language for which distance also governs the choice of directionals on the land–sea axis.

4.6 Lehali, Lo-Toga: a partial asymmetry

Even though they are spoken on three different islands, Lehali and Lo-Toga share the same geocentric system (henceforth the "LLT system"). At first glance, it can be seen as a variant of Löyöp (Figure 13 p.171): like Löyöp, the cardinal axis is used everywhere on land, for directions parallel to the coast; like Löyöp, the land–sea axis shows a lexical split between two strategies depending on the location on the island: *in–out* directionals are used on lower areas of the island, and *up–down* in the steeper parts.

However, compared with Löyöp, the LLT system has a peculiarity: its directional 'southeast' has lost any formal connection with the vertical axis. The vertical *up* of the topological domain (#7: LHI *vēn*, LTG *vin*) can only be used geocentrically to encode 'uphill' when one is in the bush [#6]. While all other Banks languages also use *up* for 'southeast' on the cardinal axis, the modern LLT system makes use of a separate directional, for all distances, on all scales [#8, 9, 10]. Considered in a purely synchronic perspective, this directional (LHI ***ha***, LTG ***ag*** ~ *iag*) has no other meaning than this geocentric one, and can only be glossed 'southeast'. Among all Torres–Banks languages, this is the only case of a directional that is purely geocentric, and doesn't also have a non-geocentric meaning in synchrony (cf. fn.5 p.140). Oddly enough, this lexical dissociation of the cardinal axis with verticality has only disrupted the link between 'southeast' and 'up'; in the other direction, the form for 'down' (#14: LHI ***how***, LTG ***iw*** ~ *w'*) still colexifies today 'downhill' [#15] and 'northwest' on all scales [#11, 12, 13]. The asymmetrical configuration of the modern LLT system is represented in Figure 16.

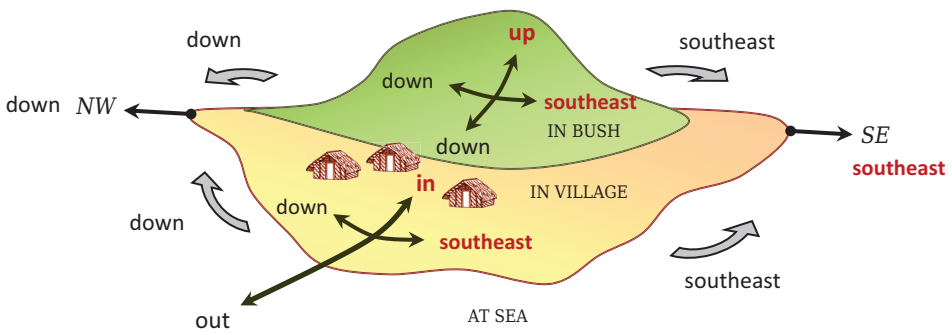

Figure 16 – The system of geocentric directionals in Lehali and Lo-Toga

[21] The colony of Mwerlap speakers who have established themselves on the east coast of Gaua island use the same system as on their home island of Merelava.

The following Lo-Toga examples illustrate the LLT system. Pointing ‘inland’ from a location at sea, or on the flatter parts of the island, involves the directional ***il*** ‘in’. When it has its geocentric meaning, the directional is often better translated using adverbial locative phrases in English (such as ‘on the beach’, ‘ashore’, etc.):

(LTG.41) Pahwëne nihe ge= vēn ***il*** *me*, Merawehih v=***il*** hag.
then 3pl AO:pl= go **in** hither (hero) IPFV=**in** sit

Ni= itë nihe ge= rōw ***il*** *me*, nie ni= vē ***rōw*** *me*
AO:3s= see 3pl AO:pl= rush **in** hither 3sg AO:3s= go **out** hither

ni= ere teletale n=ēke.
AO:3s= smash:SG in.pieces ART=boat

‘As they were *coming* ***in*** (= paddling closer to the island), Merawehih was waiting ***in*** (= on the beach). As soon as he saw them landing ***in*** (= ashore), he *came* ***out*** (= walked down towards them), and suddenly smashed their boat into pieces.’
[LTG.Merawehih.053]

But the *inland* direction is encoded with ***vin*** ‘up’ if it points to the bushy areas of the island:

(LTG.42) Ne=lete mi kemor na in revtë, vet ne ***vin*** in.
ART=garden POSS 1ex:du STAT lie close place REL **up** lie
‘Our garden is very close, this way *up*(*hill*).’ [LTG.d01:15]

In this context, the opposite term is not *rōw* (‘out’) any more, but ***iw*** ‘down’:

(LTG.43) Kemë ve=toge deh=***vin***, pa heqere ha ve=toge dih=***iw***.
1ex:pl IPFV=stay side=**up** but HUM:PL other IPFV=stay side=**down**
‘We live *uphill*, but there are other people who live *downhill*.’ [FP1-13a]

When the directional ***iw*** ‘down’ means ‘downhill’ (*land–sea* axis) it contrasts with ***vin*** ‘up, uphill’, as in (43). Yet when it takes its cardinal meaning ‘northwest < downwind’, it contrasts with *(i)**ag*** ‘southeast’, whose meaning is purely geocentric:

(LTG.44) N=ēñwe mēhe ve=tu vet ne v=***ag*** in,
ART=house their IPFV=stand place REL IPFV=**southeast** lie

si vet ne ***w***’ in?
or place REL **down** lie

‘Is their house located on the southeast side, or the northwest side?’ [FP1-13a]

The same situation, *mutatis mutandis*, prevails for the language Lehali.

This asymmetrical configuration of the LLT system needs to be accounted for. In the historical discussion below, I will explain it as a lexical split among vectors formerly lexified as ‘up’ – itself the result of a lexical innovation affecting the verb ‘go up’ (§5.3.2). A similar process took place in the neighbouring language Hiw, yet with further intricacies again.

4.7 The puzzle of Hiw

4.7.1 A quirky system

The most intricate of all geocentric systems found in Torres–Banks languages is no doubt the one used on Hiw, the northernmost island of Vanuatu. It stands out, to begin with, if one considers its organisation in Table 5 p.151. Hiw is the only language of the whole area that has a directional ‘in’ distinct from ‘up’, yet never uses it for any geocentric vector. It is the

only language in which the cardinal directional for 'southeast' used on land for long distances (#9 *vën*, originally 'thither') differs from the one used across islands (*ag* #8). Besides, this directional ***ag***, which is only used geocentrically, shows an odd pattern of colexification between #8 'southeast (across islands)' and #4–5 'inland (on flat terrain)' which is found nowhere else, and can hardly be given a simple gloss. All these oddities constitute puzzles that need to be solved.

The geocentric system of Hiw is represented in Figure 17, reproduced from Figure 3 p.141. Notice that the directional ***ag*** appears twice, and has no label: it can neither be associated with a non-geocentric function, nor can it receive any simple gloss.

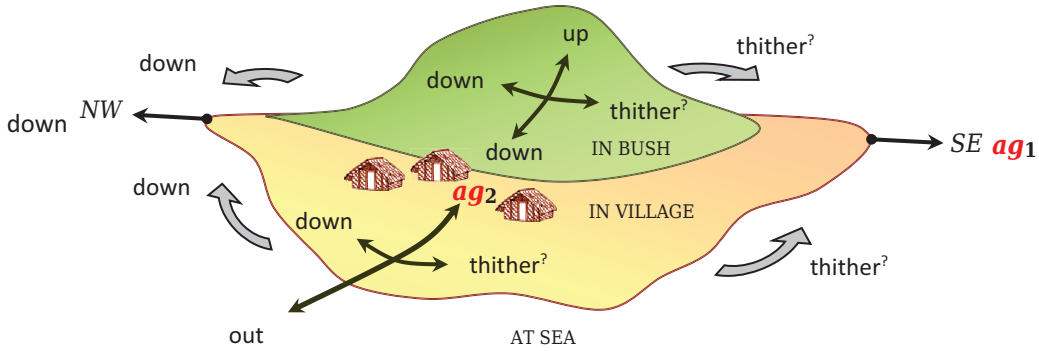

Figure 17 – The system of geocentric directionals in Hiw

The impression of oddity left by the Hiw system depends, of course, on the point of comparison. For example, Hiw has very little in common with the languages of Gaua (§1.2, 4.1): except for the use of *down* for 'northwest' and 'downhill', everything else is different. The difference becomes less extreme if Hiw is compared with its immediate neighbours, such as Lo-Toga or Löyöp. In the historical discussion (§5), I will argue that the system of Hiw, aberrant as it is in synchrony, can be accounted for by reconstructing a number of innovations, most of which also took place in other northern Vanuatu languages.

4.7.2 Colexification between 'thither' and 'southeast'

Figure 17 tentatively assigned to vectors #9–10 a label 'thither'. This is justified by the principle underlying these representations (§1.2), which consists in linking a geocentric directional with the non-geocentric meaning it also has in the same language, considered in synchrony. That said, the semantic connection is far from clear, and still needs to be explained. The present section will first establish that polysemy of ***vën***, based on evidence from my corpus; the explanation will be given in the historical discussion (§5.2.2).

4.7.2.1 /Vën/ as a participant-oriented directional

Vën exists in Hiw as a participant-oriented directional (§2.4.1; row #2 in Table 5). Its meaning is allotropic, i.e. it is semantically directed at a participant outside the speaker's sphere, and typically translates 'to you/him/them…'. In (45), *vën* gives the instruction to retrieve a participant from the context, namely the mother. Had nobody been in the pit, the speaker would have resorted to a non-personal strategy such as *uw* 'down' (see also the pair of sentences (7)-(7') above):

(HIW.45) Sörō giy ne=qerōn̄ tën, giy tëvëkqö, rē= surī i rākn̄a-se
3du dig ART=hole ground dig deep AO:du= install DOM mother-3NSG

uw yōne. Viye nön rākn̄a-se yite, ne= gengon,
down inside take:PL POSS mother-3NSG firewood ART= food

viye ***vën*** eyö qerōn̄ tën.
take:PL **thither** LOC hole ground
'The [brothers] dug a pit in the ground, a deep pit, and installed their mother [*down*] inside. They gathered firewood for her as well as food, and brought it all *to her* [LITER. took it *thither*] in the pit.' [HIW.Brothers.07]

In this deictic use, *vën* 'thither' contrasts with *me* 'hither':

(HIW.46) Viye që ***me*** ti noke! Noke viye ***vën*** ti ne= sōgë =kye on gon.
take:PL SUGG hither DAT 1sg 1sg take:PL thither DAT ART= pig =my SBJN eat
'Give [the scraps] to me! I'll give them to my pig for food.' [HIW.d09:41]

Despite their phonetic similarity, *vën* [βen] 'thither' and *vēn* [βɪn] 'up' are two distinct directionals. Both are found in (47), where a motion is first described in topological terms ('climb up') and then explicitly anchored to a participant ('climb towards him'):

(HIW.47) Nine yō ne=megoye kkë in ***vēn*** sag.
3sg see ART=child small DEF **up** sit

Nine vēn ***vēn***, vēn wate ***vën***.
3sg climb **up** climb reach **thither**
'He saw the small boy sitting *up* (in the tree).
So he climbed *up*, he climbed all the way (*to him*).' [HIW.Music.19]

This allotropic use of *vën* may correspond to any vector in spatial terms.

4.7.2.2 /Vën/ on the coastal axis

The same form ***vën*** is also found with a geocentric meaning, in which case it constructs a vector parallel to the coast, specifically oriented southeast (#9-10 in Figure 4 p.150).

(HIW.48) N=ēn̄we =ma owëte ***vën*** taqe.
ART=house =1ex:pl PRSTV (southeast) stoop
'Our house is over there *this way* (southeast).' [EP2-17b]

(HIW.49) Sörō tō *vēn* n̄wë ne, rē= tō wōywōy vaviyi ***vën***.
3du go:NPL up like this AO:du= go:NPL crosswise side (southeast)
'They walked uphill like this, and then veered towards southeast.' [FG2-14b]

In this geocentric sense, *vën* contrasts with *uw* 'down; northwest':

(HIW.50) Ike tati sesö ***uw***! Ike sö ***vën*** ti ne= Yugemëne.
2sg NEG paddle:RED down 2sg paddle (southeast) DAT ART= (village)
'Don't paddle NW! You should paddle SE, towards Yugemëne.' [FG2-14b]

Note that *vën* is used for any southeast vector on the local scale, whether in the village (48), in the higher areas of the island (49) or on the sea along the coast (50).

Considering the contrast with *uw* 'down', and the observation that southeast is encoded as 'up' in all other northern Vanuatu languages, the Hiw strategy is puzzling. The phonetic closeness of this [βen] with the vertical 'up' [βɪn], which some younger speakers initially

described as mere homophones, confused the picture even more in the earlier phases of my exploration. However, elder speakers confirmed that the directional used for southeast on land was distinct from 'up', and instead homophonous with 'thither'.

The only way to interpret this synchronic configuration, in my view, is by analysing it as an *etymological doublet*. This will be the object of the historical discussion in §5.2.2.

4.7.3 Colexification between 'southeast' and 'inland'

The second puzzle of modern Hiw is its directional ***ag***. It does not come with a gloss in Figure 17, because the term is only ever used with a geocentric meaning, and is found nowhere else in the language. Admittedly, the same could be said of the homophonous directional *ag* in the language Lo-Toga (or *ha* in Lehali); yet the latter was provided with a specific gloss 'southeast' in Figure 16, because its synchronic semantics were clear enough.

The reason why Hiw *ag* cannot be given any consistent glossing is because it colexifies two directions which have nothing in common: on the one hand, *ag* encodes 'southeast' for long-distance navigation across islands (vector #8 in Figure 4 p.150); on the other hand, it is the directional used on the land–sea axis on flat terrain, i.e. #4 'landwards' at sea, or #5 'inland' in a village. There is no reason why these two directions should be merged, as their underlying definition is quite distinct, and they seldom align. From a strictly synchronic point of view, the only reasonable decision is to posit two homophones: ***ag***$_1$ 'southeast on the navigational axis' (#8), and ***ag***$_2$ 'inland, on flat terrain' (#4–5).

The navigational ***ag***$_1$ contrasts with *uw* 'down > downwind, northwest'; it is illustrated in (51). Even though this *ag* differs in synchrony from the directional *vēn* 'up', it follows the logics of the 'up(wind)' directional described for other languages (Figure 6 p.156):

(HIW.51) Kema peon vën vaviyi ***ag*** Gawe.
1ex:pl FUT go side (navig:SE) Gaua
'We'll be travelling southeast, to Gaua.' [FG3-39b]

The second directional ***ag***$_2$ 'inland' is illustrated in (52).[22]

(HIW.52) Vë—n vën, se= vën ***ag*** net-venyö kkë.
go:DUR go 3pl:AO= go:PL (**inland**) DIMIN-island small

Se= yë ***ag***: ne=tayö ñot v= ***ag*** tu.
3pl:AO= look (**inland**) ART=person INDF IPFV= (**inland**) stand

"Tekñwa, pa yē v= ***ag*** tu rë?"
people but who IPFV= (**inland**) stand DIST
'After a while, they came closer (*landwards*) to a small islet.
They looked (*inland*): someone was standing there (*on the shore*).
"Hey guys, who's that standing over there (*inland*)?"' [HIW.Meravtit.111]

The opposite of this *ag*$_2$ is ***rōw*** 'out':

(HIW.53) Sise vën se=rav ne=wake kkë =sa, on rav wate ***rōw*** yö pēgone.
3pl go:PL 3pl:AO=drag ART=boat small =their SBJN drag reach **out** LOC sea
'They dragged their canoe all the way *down* [LITER. *out*] to the sea.' [HIW.Meravtit.051]

[22] The sentence is taken from the Hiw version of a story which I also recorded in other languages. It may be compared with the parallel passage in Lo-Toga, (LTG.41) above.

In the steeper areas of the bush, ‘inland’ is encoded ***vēn***, which also means ‘up’:

(HIW.54)	Ne=	sov	=en	ye	***vēn***	es~os	rë?
	ART=	smoke	=POSS	who	**up**	IPFV~smoke	DISTAL

‘Whose smoke is smoking over there *inland* [LITER. *up*]?’ [FP3-28b]

This is parallel to the use of Lo-Toga *vin* in examples (42) and (43) above.

A strictly synchronic approach to Hiw would have a hard time explaining why the same directional ***ag*** is used for these two very different geocentric functions – respectively ***ag***$_1$ #8 ‘southeast (across islands)’ and ***ag***$_2$ #4–5 ‘landwards (at sea) ~ inland (on flat terrain)’. This puzzle will be solved in the next section, where I will show we are dealing here, again, with an etymological doublet (§5.3.2).

5 Historical interpretation: A layering of innovations

The central section of this study detailed the nine systems of geocentric directionals found in the 17 Torres and Banks languages, considered synchronically. While their general architecture is similar across languages, the various configurations attested also reveal a degree of diversity which still needs to be accounted for.

Knowing that these languages descend from a common ancestor, how can we explain this amount of historical divergence in such a small area? Previous publications have already reported on the extreme linguistic diversification of this language group, whether in the phonological, lexical or grammatical domains (François 2005, 2011, 2012). What these studies showed was that the modern diversity reflects the accumulation of individual innovations which can often be identified using the Comparative Method. Each of these innovations emerged locally and diffused to a different portion of the Torres–Banks archipelago, with isoglosses often forming intersecting patterns (François 2014).

As far as space directionals are concerned, the question that arises is whether the attested array of geocentric systems can be broken down to individual innovations, that could be identified in the modern languages. Can the canonical approach adopted in §4.3 help reconstruct the history of these nine systems? Could a diachronic analysis shed light on unsolved problems, such as the puzzling system of Hiw? This is the object of this final section.

5.1 Identifying the point of departure

Faced with the mosaic of modern systems, there is no obvious way of identifying which system is innovative or conservative. Luckily, this becomes possible if we complement our northern Vanuatu data with our knowledge of Oceanic languages outside the area, and what can be reconstructed of their common ancestor, Proto Oceanic (François 2004).

POc’s geocentric system was reconstructed not only for the navigational scale (§3.2), but also for the *local scale*. The etymological forms for the directionals are the same as the ones given earlier (Figure 5 p.155): **sake* ‘up’, **sipo* ‘down’, **pano* ‘across, in transverse direction’. Their spatial configuration is given in Figure 18.

Structurally speaking, the system reconstructed for POc is identical with the one that is still employed today in the languages of Gaua (Figure 8 p.165): two *up—down* axes (*upwind–downwind*, *uphill–downhill*) plus an undifferentiated traverse. The system of Gaua, which served as one of two “canons” in our synchronic analysis, has preserved the same structural

contrasts as its remote ancestor: it is thus the most conservative of the whole Torres–Banks area, in the GEOCENTRIC as much as the TOPOLOGICAL domain (§2.4.2).[23] In comparison with the conservative languages of Gaua, the remaining geocentric systems of Torres and Banks Islands result from an accumulation of innovations, which can now be unravelled successively.

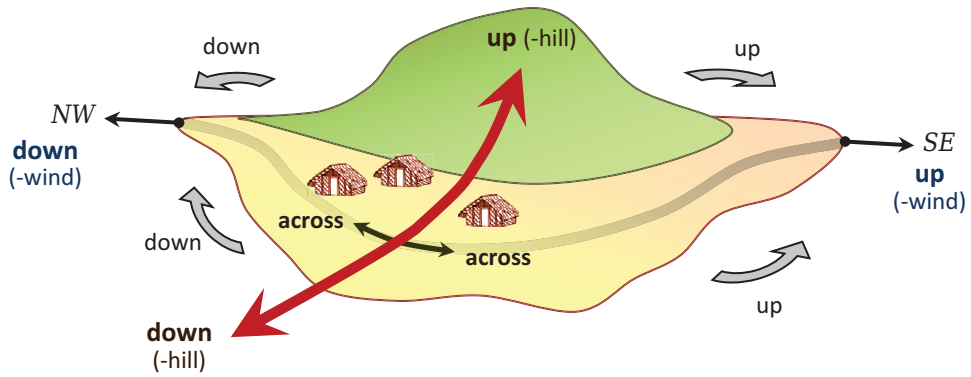

Figure 18 – The system of geocentric directionals reconstructed for Proto Oceanic, the ancestor of all Torres–Banks languages (after François 2004)

5.2 Innovations affecting the coastal axis

A fair part of the differences found across northern Vanuatu systems revolve around one important innovation: the loss of the undifferentiated traverse axis ('across' – see §4.1.2), and its replacement by the cardinal axis.

As was made clear in the canonical approach (Table 6 p.167), the generalisation of the cardinal axis *up—down* to all distances on land was complete in some languages, but only partial in others. One language which brought this innovation to its logical completion is Mwotlap (§4.2): the undifferentiated traverse was lost there leaving no trace, and cardinal *up* and *down* are now used everywhere on land, whatever the distance. Other languages in the same case are Volow, Löyöp, Lehali and Lo-Toga.[24] The rationale for this innovation was the functional advantage of the cardinal axis. Indeed, the inherited traverse axis had one communicative weakness: that of being undifferentiated, and thus prone to ambiguities. Every time the sole use of 'across' on the local scale would have been ambiguous, it was tempting to make the most of the cardinal axis – already used for larger distances anyway – for the sake

[23] The only notable innovations of Gaua languages took place in the *lexification* of these categories. While all languages reflect **sake* 'up' (> *sa*, *saa*, *hag*…), four languages of Gaua went through the relexification of their word for 'down': **sipo* was replaced by another lexeme **roro* (> NUM/DRG/KRO *ror*, OLR *roy*), whose original meaning can be reconstructed as 'go deep, sink; be deep, be low' (François 2010:139). This is one example where languages can prove conservative in their structures, even though the lexical material used to lexify them may itself have gone through local innovations (François 2010, 2011:226). See also the Appendix (§7.3).

[24] In Table 5 p.151, this innovation is manifest by the colexification of vectors #8–9–10 for *up*, and of #11–12–13 for *down*. Lehali and Lo-Toga historically took part in that expansion of cardinal *up* on land, but the connection with *up* was later blurred by a lexical innovation (see §5.3.2).

of disambiguation (François 2004:25). This is how the cardinal axis came to be generalised on land to all scales.

Crucially, this innovation didn't need to happen on both sides: any change that would result in the differentiation of the two sides would have been sufficient for this purpose. And indeed, some languages – those of Vanua Lava on the one hand, and Hiw on the other hand – went through a similar process of extending the cardinal axis on land, yet for some reason, only did so on the *northwest* (*down*) side; as for short distances in the *southeast* direction, they kept a trace of the former traverse axis.

5.2.1 The memory of the lost traverse in Vanua Lava

This is how, in my view, one can explain the asymmetry of the Vanua Lava system (Figure 11 p.170), which shows a distance-based contrast between short and long distances, only on the southeast side of the local scale: e.g. Lemerig has *wël* for #10 but *sag* for #9.

This historical hypothesis can even be refined through the etymology of the #10 directional (Vurës/Vera'a *wōl*, Mwesen *wol*, Lemerig *wël*). Knowledge of regular sound correspondences points towards a protoform ***volo**, whose meaning can be reconstructed as 'crosswise, across' (§7.3.3).[25] A plausible scenario would propose that the ancestor of Vanua Lava languages, at a time when the undifferentiated traverse was still used like in Proto Oceanic, first went through a simple process of relexification by replacing **pano* with **volo*, a form with a similar meaning 'across'. For a while, this **volo* must have been used for encoding both SE and NW, as in Gaua. Later on, cardinal *down* was extended from the navigational scale onto the local scale, and replaced **volo* for its NW direction [#11], while **volo* became restricted to the SE side. The lexical replacement resulted in the differentiation of the local traverse between NW (originally 'down') and SE (**volo*, originally 'across').[26] This reconstruction explains the labels I have used in Figure 11 p.170, to represent the non-geocentric meanings of directionals.

5.2.2 The memory of the lost traverse in Hiw

This scenario may also be the key to one of the oddities of Hiw. Section 4.7.2 established that the directional ***vën*** of Hiw colexifies two quite different meanings, namely 'southeast (on land)' and 'thither' (participant-oriented directional, allotropic) – see Figure 17 p.177.

My hypothesis is that the two directionals *vën* form an etymological doublet rooted in the original polysemy of its etymon **pano*, of which *vën* [βen] is the regular reflex. Proto Oceanic **pano* can be reconstructed as a directional verb, whose meanings included 'go away; move in a transverse direction' (Ross 2007:279); it was used on the navigational scale (Figure 5 p.155) as well as the local scale, to encode the undifferentiated traverse (§5.1). The ancestor of Hiw used **pano* to lexify both sides of the traverse axis (#10, #11), just as it still does in Mota (*vano*) or Nume (*van*). Later on, Hiw went through the same innovation as Vanua Lava languages, namely the extension of the *down* (*NW*) directional to all distances on land,

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[25] Cognates with **volo* include Hiw *wōywōy* 'crosswise' in ex.(49), as well as Mota *wolowolo* '[ADV] crosswise; [N] a cross' and Vurës *wōlōwōl* '[N] a cross; a crossbeam' (François 2013:195).

[26] In addition, it appears that Vera'a may have replaced *down* on the local scale with an innovative directional *mul*, from *mul(ō)* 'go back': see the discussion in §4.4.2.2.

resulting in the lexical differentiation of the traverse axis. The use of *vën* for #10 is thus merely conservative of **pano*, the original directional for the former traverse axis.[27]

The second part of the scenario is the observation that while POc **pano* evidently had the meaning 'move in a transverse direction', it can also be reconstructed with a sense 'leave, go away (from speaker)' (Ross 2007:279). The deictic component of this meaning ('away from speaker') explains why the six northernmost languages of the Torres–Banks area have grammaticalised **pano* into a participant-oriented directional 'towards non-speaker' – as shown in Table 3 p.145. This is the source of the allotropic directional in Mwotlap (*van*), Lo-Toga (*vēn*) as well as Hiw (*vën*).[28]

In sum, the two modern senses of Hiw *vën* originate in the polysemy of its etymon **pano*. This situation is summarised in Table 8. Glosses for POc reconstructions come from Ross (2007). I compare Hiw with two other languages, Mota and Mwotlap.

Table 8 — Explaining the homophony of 'thither' and 'southeast along the coast' in Hiw

POc etymon	Mota	Hiw	Mwotlap	DIRECTIONAL GLOSS
**pano* 'move in transverse direction'	***vano***		(CARDINAL)	'across, along the coast'
		vën		'along the coast, SE side'
**pano* 'go away (from speaker)'				
	at	**vën**	**van**	'thither, to non-speaker'
**watu* 'go to addressee'				

Hiw is the only language that has kept reflexes of **pano* both for the coastal axis (like Mota) and for the allotropic directional (like Mwotlap). Hiw is partly conservative like Mota regarding #10 'along the coast, SE side', and partly innovative like Mwotlap regarding #2 'thither': this explains the presence of this etymological doublet in the system of Hiw.

5.3 Innovations affecting the *land–sea* axis

5.3.1 The relexification of the land–sea axis

In sum, all the changes affecting the coastal axis revolve around one major innovation: the extension (complete in five languages, partial in five others) of the cardinal *up–down* axis from the navigational scale to the local scale, presumably as a functional reaction to the ambiguity of the original undifferentiated traverse.

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[27] An extra twist in Hiw was the expansion of *vën* to all southeast vectors on land, including on the "intermediate scale" of long distances on a single island. As a result, Hiw is the only northern Vanuatu language that encodes southeast for long distances on land (*vën* <**pano*) differently from southeast across islands (*ag* <**sake* 'up, upwind'): compare the rows #8 and 9 in Table 5 p.4.

[28] For the same meaning, the nine southernmost languages of the Banks from Vurës down to Mwerlap (Table 3) reflect another deictic directional verb of POc, namely **watu* 'go towards addressee' (Ross 2007:275) – e.g. Lakon *at*, Vurës *net*, etc.; in doing so, they broadened its semantic scope not just to the addressee (**watu* 'towards you') but to any participant outside the speaker's sphere ('towards you/him/her/them'…).

This extension had an important impact on the whole system. As the cardinal *up–down* axis (originally *upwind–downwind*) came to be used onto the local scale, it started a competition with a different *up–down* axis, this time coding 'inland' vs. 'seawards' (i.e. *uphill–downhill*). As long as the two homophonous pairs of directionals were being used on different scales, as they still do on Gaua, the homophony was not a major problem (§4.1.1); but the overlap of two separate *up–down* axes within the same local scale was likely to create a functional conflict, with a high risk for misunderstanding.[29] This conflict was solved by a second innovation: the creation of a new pair of topological directionals *in–out*.[30]

In all Torres–Banks languages outside Gaua, this new contrast *in–out* was harnessed in the lexification of the land–sea axis, and competed with the inherited pair *up–down*. In Mwotlap and Vanua Lava, this resulted in the wholesale redesign of the system, and the complete replacement of *up–down* by *in–out* along the entire axis. In other languages, the replacement was only partial: several languages preserved the *up–down* contrast in those parts of the island where verticality was cognitively salient (typically, in the higher slopes of volcanic islands) while they relexified the axis to *in–out* in the flatter parts of the island, or the land/sea interface. What resulted were hybrid systems, in which the land–sea axis is sometimes lexified *in–out*, and sometimes *up–down* (Mota, Mwerlap, the languages of Ureparapara and the Torres Is).

5.3.2 The lexical split of up*, and resulting asymmetries*

The system of Hiw presented two main puzzles. One was the colexification of #2 'thither' and #10 'southeast (close)' with the same form *vën*: I showed this constitutes an etymological doublet, ultimately due to the polysemy of its etymon **pano*. I now turn to the second puzzle of Hiw, namely the colexification of #8 'southeast (across islands)' with #4–5 'landwards (at sea) ~ inland (on flat terrain)'. As we saw in §4.7.3, these two vectors are both encoded with a form ***ag***, which in modern Hiw only has these two geocentric meanings. I propose that this unexpected colexification is, again, a case of etymological doublet.

The configuration of Hiw is partly reminiscent of the case of Lehali (*ha*) and Lo-Toga (*iag*), presented in §4.6. In all three languages, the modern form is a regular reflex of POc ****sake***, originally '(go) up' (POc **sake* > **saɣ* > **haɣ* > LHI [ha], LTG/HIW [aʉ]). The semantic link between vertical *up* and the vectors mentioned (*uphill*, *upwind*) dates back to POc, and is unproblematic. The only difference with other Oceanic languages is that Lehali, Lo-Toga and Hiw have lost **sake* for the vertical direction, and replaced it with a local verb ****vene*** 'climb > go up > upwards, up' (**vene* > LHI/HIW [βɪn], LTG [βin]).[31] This lexical replacement in the topological domain resulted in a lexical split in the geocentric domain. The form taken by this split is highly instructive, because it reflects a cognitive contrast, I believe, between a geocentric subdomain in which verticality is still salient, and another one where it has lost any relevance for modern speakers. On the one hand, the vector #6 'uphill (in the island's heights)',

[29] See François (2004:22-26) for a similar reasoning regarding other Oceanic languages.

[30] Remember that Proto Oceanic (like the conservative languages of Gaua) did not seem to have any separate directional for 'in' and 'out', which were originally colexified with 'up' and 'down' (§2.4.2).

[31] The verbal use of **vene* 'climb, ascend' was illustrated in (47) for Hiw.

formerly associated with **sake*, underwent replacement to **vene*,[32] because this is the vector most obviously associated with verticality. On the other hand, reflexes of **sake*, while losing any synchronic connection with 'up', remained attached to two vectors which are less obviously tied to verticality: (1) the cardinal axis, and (2) the *inland* vector on flat terrain.

Lehali and Lo-Toga only preserved reflexes of **sake* for the cardinal axis, with the meaning 'southeast' (Figure 16 p.175). By contrast, the originality of Hiw is that it has preserved its directional ***ag*** (<**sake*) in two separate corners of its geocentric system. The navigational ***ag***$_1$ originates in the cardinal sense of **sake* 'up > upwind > southeast'. As for ***ag***$_2$, its origin lies in the ancient connection of 'inland' with **sake* 'up', which is still preserved in Gaua. While such a connection 'up'/'inland' is to be expected in the general context of Oceanic languages, it is nevertheless surprising in the local Torres–Banks context. Indeed, we saw that the ten northernmost languages of Vanuatu have consistently lost their directional 'up' when referring to 'inland' in a village context, and instead they have all shifted to a contrast '**in**'–'out'.[33] The fact that Hiw uses ***rōw*** 'out' for the 'seawards' direction – as in (53) above – reinforces the expectation that the 'inland' vector should have been encoded as ****iy*** 'in' – just like in Hiw's neighbour, Lo-Toga. Instead, what we observe is the unexpected retention of **sake* at a point in the system where – judging by what happened for all of Hiw's neighbours – it should have long disappeared.

What results is another etymological doublet – on top of the one exposed in §5.2.2 – involving two vestigial directionals ***ag***. The situation is summarised in Table 9, which displays modern reflexes of POc **sake* in a selection of five languages: Mota, Mwotlap, Löyöp, Lo-Toga and Hiw. Forms not cognate with **sake* are given in brackets. The two traces left by **sake* in Hiw are semantically discontiguous, and constitute a doublet.

Table 9 — Reflexes of POc *sake *'go up' in a subset of northern Vanuatu languages*

POc etymon	DIRECTIONAL GLOSS	MTA	MTP	LYP	LTG	HIW
**sake* 'go up' → 'upwind'	#8 'upwind = SE (inter-island)'	***sage***	***hag***	***sa***	***ag***	***ag***$_1$
	#9 'upwind = SE (on land)'	***sage***	***hag***	***sa***	***ag***	(***vën***)
**sake* 'go up' (vertical)	#7 'up (vertical)'	***sage***	***hag***	***sa***	(***vin***)	(***vēn***)
**sake* 'go up' → 'uphill'	#6 'uphill = inland (mountain)'	***sage***	(***hay***)	***sa***	(***vin***)	(***vēn***)
	#4-5 'uphill = inland (sea, village)'	***sage***	(***hay***)	(***hay***)	(***il***)	***ag***$_2$

Considered for itself, the system of geocentric directionals in Hiw (Figure 17 p.177) seems idiosyncratic, with asymmetries and cases of homophony which a language-internal analysis might have found difficult to explain. However, its quirkiness can be unravelled by comparing Hiw to its neighbours, and by reconstructing the various innovations that transformed the original POc system of space reference into the modern systems attested today.

[32] See ex. (42)–(43) for Lo-Toga, and (54) for Hiw.

[33] This was visible in Table 5 (p.4), which shows that all languages that have a specific directional for 'in' (row #3) also use it for 'inland', at least in the lower areas of their island (row #5).

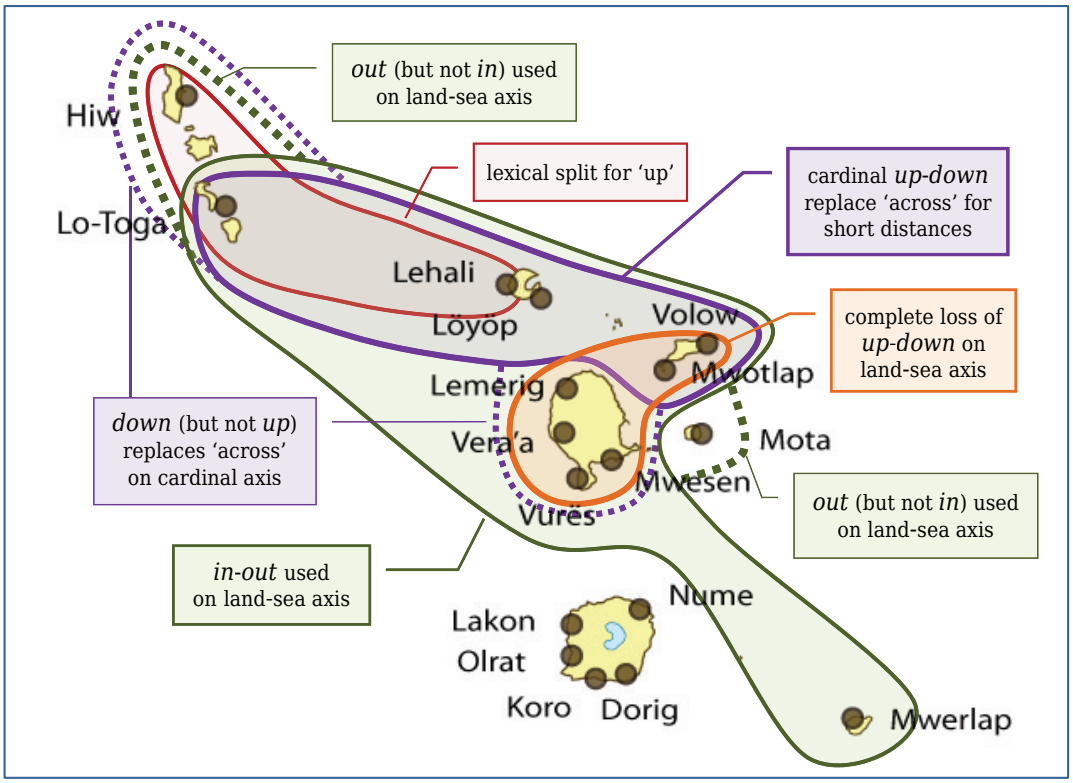
5.4 The dialectological perspective: Entangled isoglosses

While Table 6 p.167 had adopted a synchronic approach, Table 10 organises the north Vanuatu data following a historical perspective: it lists the six principal innovations involved in the make-up of modern systems, from the very conservative languages of Gaua (zero structural innovation from Proto Oceanic) to the more innovative languages in the north.

Table 10 — Main historical innovations involved in the development of modern geocentric systems in Torres–Banks languages.

	COASTAL AXIS		LAND–SEA AXIS			
	DOWN replaces *across* (NW)	UP replaces across (SE)	IN used for 'inland'	OUT used for 'seawards'	total loss of UP-/DOWN-hill	lexical split of UP
5 Gaua lgs	—	—	—	—	—	—
Mota	—	—	—	+	—	—
Mwerlap	—	—	+	+	—	—
4 Vanua Lava lgs	+	—	+	+	+	—
Mwotlap	+	+	+	+	+	—
Volow	+	+	+	+	+	—
Löyöp	+	+	+	+	—	—
Lehali, Lo-Toga	+	+	+	+	—	+
Hiw	+	—	—	+	—	+

Map 10 – The modern diversity of Torres–Banks geocentric systems results from the accumulation of post-POc innovations that diffused across neighbouring languages



Evidently, innovations were shared across neighbouring languages. The resulting isoglosses are represented in Map 10. Dotted lines reflect those cases when a new structure was adopted only partially, resulting in asymmetry. For example, while the solid purple line refers to the adoption of both cardinal *up* and *down* on the local scale, the dotted purple lines set apart those languages (Vanua Lava, Hiw) which generalised *down* but not *up*.

The isoglosses intersect – a common situation in the northern Vanuatu linkage (François 2011, 2014; Kalyan & François f/c). This can only be explained by processes of diffusion, whereby speech patterns – in this case, the internal structure of paradigms of space directionals – spread from community to community, via social and linguistic contact. Sometimes, neighbouring languages aligned their systems perfectly, whether they were spoken on the same island (Vanua Lava) or on different islands (Lehali and Lo-Toga). In other cases, the alignment was partial, as only some aspects of one system ended up leaking from one language to the other.

In sum, the history of space systems in the archipelago follows a pattern similar to what can be observed in the historical dialectology of these languages (François 2011:201). The modern linguistic fragmentation, which today takes the form of *divergence*, ultimately reflects the layering of multiple innovations, each of which diffused – via a process of *convergence* – to a certain portion of the social network. Each community shared its innovations sometimes with one neighbour, sometimes with the other, ultimately resulting in the language mosaic that prevails today.

6 Conclusion

Considered in each modern language separately, the mechanism of geocentric space reference is stable: speakers agree on a set of forms, which they use consistently within their community, with relatively little variation. However, systematic cross-linguistic comparison changes radically the perspective, as it casts light on the fluidity and internal dynamics, on the long term, of these spatial systems.

The comparative approach proves particularly helpful when attempting to interpret languages whose synchronic description unveils asymmetries and paradoxes. They ultimately appear for what they are: mere moments in a history of constantly evolving configurations, as though each language community kept searching for the right compromise between two contradictory canons. These adjustments all constitute possible answers to the various pressures that weigh upon the success of communication when referring to space: the avoidance of confusion, the need to adapt to new landscapes, the tendency for analogical levelling, or the entrenched cross-linguistic diffusion of innovations. Sometimes, along with their innovative trends, modern languages also exhibit vestigial memories of earlier systems, which have been preserved against the odds of history.

Besides their intrinsic interest for a typology of space strategies, the geocentric systems of northern Vanuatu also provide an excellent vantage point for observing how languages are constantly reshaped by the populations who use them.

7 Appendices

7.1 Abbreviations

7.1.1 Languages

The abbreviations for language names appear on *Map 1*, and are repeated below.

Drg	Dorig	Lmg	Lemerig	Mtp	Mwotlap	Vra	Vera'a
Hiw	Hiw	Ltg	Lo-Toga	Msn	Mwesen	Vrs	Vurës
Kro	Koro	Lyp	Löyöp	Num	Nume	POc	Proto Oceanic
Lhi	Lehali	Mrl	Mwerlap	Olr	Olrat	Ptb	Proto Torres-Banks
Lkn	Lakon	Mta	Mota	Vlw	Volow		

7.1.2 Interlinear glosses

Example sentences are glossed according to the Leipzig rules. More specific abbreviations are listed below.

ALL	allative case
AO	Aorist (≈narrative) aspect
ART	article
DEF	definite
DIMIN	diminutive
DIST	distal demonstrative
DOM	differential object marker (human object)
DX	deictic
EXIST	existential predicate
FOC	focus marker
HAB	habitual aspect
HUM	human article
INDF	indefinite
INSTR	instrumental
IPFV	imperfective
IRR	irrealis
LOC	locative case
MED	medial demonstrative
NEG	negation
NPL	non-plural
NSG	non-singular
PERS	personal article
PFT	perfect
POSS	possessive classifier or linker
POT	potential
PROH	prohibitive
PROX	proximal demonstrative
PRSTV	Presentative aspect
RED	reduplication
REL	relativiser
SBJN	Subjunctive mood
SEQ	Sequential aspect
STAT	Stative aspect
SUGG	suggestive (polite) imperative
TOP	topicaliser

7.2 Orthography and pronunciation

Forms in this study are given using the practical orthographies adopted for northern Vanuatu languages. Many conventions are unproblematic, and reflect their expected phonetic value: this is the case of *p*, *t*, *k*, *l*, *r*, *m*, *n*, *s*, *h*, *w*, as well as *a*, *i*, *u*, etc.

Several conventions are shared throughout the region:

- *g* is a voiced velar fricative [ɣ], realised as approximant [ɥ] syllable-finally
- *n̄* is [ŋ]; *m̄* is [ŋ͡mʷ]; *j* is [ʤ]; *y* is [j]

Some conventions are specific to some languages:

- *b*, *d*, *ḡ* represent prenasalised stops [ᵐb], [ⁿd], [ᵑg];
  but *d* is a voiceless laminal stop [t̪] in Lo-Toga

- *q* is [kʷ] in Hiw, Lo-Toga, Lehali and Mwerlap; [k͡pʷ] elsewhere
- *q̄* in Volow is [ᵑg͡bʷ]; *r̄* in Hiw is [g͡ɹ]
- *v* is [v]~[f] in Vera'a, Mota, Mwerlap; [β]~[v] elsewhere
- in the Banks, *e* is [ɛ]; *ë* is [œ]
- in the Torres, *e* is [ə]; *ë* is [ɛ] in Lo-Toga, [e] in Hiw
- *ē* is [e] in Lo-Toga, [ɪ] everywhere else
- *ō* [ʊ] contrasts everywhere with *o* [ɔ]
- *ö* is [ɒ] in Lehali, [ø] elsewhere
- *ā* is [ɒ] in Lemerig, [aː] in Dorig
- *ä* is [ɛ͡a] in Koro, [æ] elsewhere

These rules can be illustrated with some of the directionals given in Table 5 p.151. Thus *ma* is [ma]; *me* is [mə] in Hiw and Lo-Toga, but [mɛ] elsewhere; *mē* is [mɪ]. Lo-Toga *vēn* is [βen]; in Hiw, *vēn* is [βɪn] 'up' and contrasts with *vën* [βen] 'thither'. Likewise, *how* is [hɔw], *hōw* [hʊw], *sōw* [sʊw], *suwō* [suwʊ]; *sag* [saɯ], *seag* [sɛ͡aɯ], *hag* [haɯ], *ag* [aɯ]; *vēn* [βɪn]; *wël* [wœl], *wōl* [wʊl]; *row* [rɔw], *r̄ōw* [g͡ɹʊw]; *päh* [pæh].

7.3 Etymological notes

Even though this study intends to describe the paradigms of space directionals following a synchronic approach, reference is occasionally made to etymologies. This appendix recapitulates what is known of the origin of modern directionals, based on the knowledge of regular correspondences in the area (François 2005, 2013). All the forms mentioned here were presented in Table 5 p.151; their phonetic transcription was given in §7.2.

7.3.1 Hither

All northern Vanuatu languages encode 'hither' using a regular reflex of POc **mai*:

(I) POc ***mai*** 'come; hither': HIW *me*; LTG *me*; LHI *ma*; LYP *me*; VLW *me*; MTP *me*; LMG *me*; VRA *ma*; VRS *me*; MSN *me*; MTA *ma*; NUM *ma*; DRG *ma*; KRO *ma*; OLR *ma*; LKN *ma*; MRL *mē*.

7.3.2 Thither

What I gloss 'thither' for a shortcut is the allotropic participant-oriented directional (§2.4.1); a longer gloss would be 'towards non-speaker', i.e. 'towards you ~ him ~ her ~ it ~ them'.

Several modern forms reflect POc **watu* '(go) towards addressee' (Ross 2003:279):

(II) POc ***watu*** 'go towards addressee' → PTB **atu* 'towards non-speaker, *thither*': VRS *n\et*; MSN *n\at*; MTA *at*; NUM *at*; DRG *āt*; KRO *ät*; OLR *at*; LKN *at*; MRL *ot*.

Other northern languages reflect POc **pano* 'go away (from speaker)' (Ross 2007:279):

(III) POc ***pano*** 'go away (from speaker)' → PTB **vano* 'towards non-speaker, *thither*': HIW *vën*; LTG *vēn*; LHI *van*; LYP *van*; VLW *va*; MTP *van*.

See the discussion in §5.2.2.

For the same meaning 'thither, towards non-speaker', Lemerig uses its directional *wël* (also 'across'), and Vera'a its directional *suwō* (also 'down').

7.3.3 Across

As discussed in §4.1.2 and §4.7.2, the same POc verb **pano* is not only the source of the allotropic participant-oriented directional ('thither') in some languages, but also of the directional 'across' used on the transverse axis in the local scale (§4.1.2). While this meaning can be reconstructed as far back as Proto Oceanic (§5.1), it is only reflected in four languages of the Torres–Banks area:

(IV) POc ***pano*** 'move in transverse direction'
→ 'following a direction parallel to the shoreline':
HIW *vën*; MTA *vano*; NUM *van*; MRL *van*.

The languages of Gaua have non-cognate directionals *vak* and *päh*, of unknown origin.

Finally, the languages of Vanua Lava show evidence of a lexical replacement of **pano* with a local etymon **volo* 'crosswise, across' (François 2013:195):

(V) ***volo*** 'crosswise, across' → 'following a direction parallel to the shoreline':
LMG *wël*; VRA *wōl*; VRS *wōl*; MSN *wol*.

The latter etymon later underwent semantic narrowing to 'parallel to shoreline towards southeast (for short distances on land)' – see the discussion in §5.2.1.

7.3.4 Up

The following forms reflect Proto Oceanic **sake* 'go up; up' (and related meanings):

(VI) POc ***sake*** 'go up; up': HIW *ag*; LTG *ag* ~ *iag*; LHI *ha*; LYP *sa*; VLW *ha*; MTP *hag*;
LMG *sag*; VRA *sag*; VRS *siag*; MSN *sag*; MTA *sage*; NUM *sa*; DRG *sag*;
KRO *sa* ~ *sag*; OLR *saa*; LKN *hag*, *rok\a*; MRL *seag*.

Three languages have created a new directional for 'up', from a verb 'climb' which can be reconstructed as **vene*:

(VII) ***vene*** 'climb' → 'up': HIW *vēn*; LTG *vin*; LHI *vēn*.

This process of lexical replacement, and its impact, are explained in §4.6 and 4.7.3.

7.3.5 Down

The counterpart of **sake* in POc was **sipo*. However, only two north Vanuatu languages show unproblematic reflexes of **sipo* in their form for 'down', namely Lo-Toga and Mota:

(VIII) POc ***sipo*** 'go down; down': LTG *iw*; MTA *swo* ~ *siwo*.

Other Torres–Banks languages reflect **sipo* as a verb, but not as a directional. Their directionals for 'down' point to a protoform that would can be reconstructed as ***suwo*** at the level of Proto Torres-Banks (PTB). This form is of unclear origin: it might be an irregular reflex of POc **sipo* (> **siwo* > **suwo*, showing rounding of /i/ before /w/), unless it reflects another lexeme.

(IX) PTB ***suwo*** 'down': HIW *uw*; LHI *how*; LYP *sōw*; VLW *hō*; MTP *hōw*; LMG *sōw*; VRA *suwō*;
VRS *sōw*; MSN *sōw*; LKN *hōw*, (*rōk*)*ōw*; MRL *sōw*.

Four Gaua languages have innovated a new directional 'down' from an etymon ***roro***, demonstrably a stative verb meaning originally 'go deep, sink; be deep, be low' (François 2010:139):

(X) PTB ***roro*** 'sink, be deep, be low' → 'down': NUM *ror*; DRG *ror*; KRO *ror*; OLR *roy*.

This case of total relexification is mentioned in fn.23 p.181.

7.3.6 In

Following the discussion in §2.4.2, it seems that Proto Oceanic did not have any lexemes for 'in' and 'out'. These two directionals are thus local innovations only found in northern Vanuatu; they are absent from the conservative languages of Gaua.

Most Torres–Banks languages with a directional for 'in' reflect a local protoform ***saro***:[1]

(XI) PTB ***saro*** 'enter, go in' → 'in': LYP *say*; VLW *ha*; MTP *hay*; LMG *sar*; VRA *sar*; VRS *sar*; MSN *sar*; NUM *sar*; MRL *sar*.

This form **saro* must have been originally a verb meaning 'enter, go in'. Its suffixed form **sarovaχi* (reflecting the POc applicative **-akin*) is reflected in Mota and Mwotlap as a verb with the same meaning [cf. examples (MTP.7), (MTA .16)]:

(XI') PTB **sarovaχi* 'enter, go in': MTP *hayveg*; MTA *sarovag*.

Three northern languages have innovated a different directional for 'in'; these reflect an etymon **ila*, of unknown origin:

(XII) PTB ****ila*** '??' → 'in': HIW *iy*; LTG *il*; LHI *ila* ~ *la*.

7.3.7 Out

All northern Vanuatu languages unanimously reflect a protoform ***rowo*** for 'out'. This directional is most probably cognate with the verb **rowo* in the same languages, meaning 'dash, move swiftly, escape', itself a regular reflex of POc **Ropok* 'dash, fly'.

(XIII) POc **Ropok* 'dash, fly' → PTB ***rowo*** 'dash, move swiftly, escape' → 'out': HIW *r̄ōw*; LTG *rōw*; LHI *yow*; LYP *yow*; VLW *yo*; MTP *yow*; LMG *row*; VRA *rōw*; VRS *rōw*; MSN *row*; MTA *rowo*; MRL *row*.

This lexical innovation is not reflected in Gaua languages, which preserve the colexification of 'out' with 'down' inherited from Proto Oceanic (§2.4.2).

7.4 Morphology of directionals in Mwerlap

Section §4.5.3 presented how the geocentric system of Mwerlap is organised. Another intricacy of Mwerlap is the actual form taken by the directionals themselves; due to its complexity, this morphological excursus was better placed in an Appendix.

Most languages of northern Vanuatu have a single set of directionals, usually monosyllables, which are all formally invariant; these are the forms given in Table 2 p.18. By contrast, Mwerlap directionals vary morphologically depending on whether they define a

[1] In several languages (Löyöp, Vurës, Mwesen, Mwerlap), this directional 'in' is homophonous with the noun meaning 'village clearing, dancing area in the centre of the village'. This similarity is purely accidental: the directional reflects **saro*, whereas the noun reflects an etymon **zara* 'sweep, broom' (Clark 2009:238).

static location or a motion path (cf. §2.3), and also on their combination with deictics (Table 11).

Table 11 — Morphology of directionals in Mwerlap

	topological meaning	*directional + deictic*	Kinetic use		Static use	
			EGOTROPIC	ALLOTROPIC	EGOTROPIC	ALLOTROPIC
'inland' (<20 m)	'in'	ki **ser** (*kē*)	**ser**=mē	**ser**=lēg	kere= **ser**=mē	ka(ra)= **sar**
'seawards' (<20 m)	'out'	**kor** (*kē*)	**ru**=mē	**ru**=lēg	kere= **ru**=mē	ka(ra)= **row**
'// shore' (<200 m)	'across'	ki **vel** (*kē*)	mē	**vel**=lēg	kere= mē	ka(ra)= **van**
'inland' (>20 m)	'up'	ki **sea**(g) (*ñē*)	**sea**(g)=mē	**sege**=lēg	kere= **sea**(g)=mē	ka(ra)= **seag**
'seawards' (>20 m)	'down'	**kos** (*ñē*)	**su**=mē	**su**=lēg	kere= **su**=mē	ka(ra)= **sōw**
'to SE' (>200 m)	'up'	—	**sea**(g)=mē	**sege**=lēg	**sea**(g)=mē	**seag**
'to NW' (>200 m)	'down'	—	**su**=mē	**su**=lēg	**su**=mē	**sōw**

7.4.1 Static locations

The forms given in Table 2 for Mwerlap (namely ***sar*** 'in', ***row*** 'out', ***seag*** 'up', ***sōw*** 'down', ***van*** 'across') are the same as the rightmost column of Table 11; however, the basic forms are seldom used alone, and normally combine with other particles.

When preceded by the particle *ka* or *kara*, the directional defines a vector pointing to a static location, and deictically oriented away from the speaker ("allotropic") — e.g. *ka(ra) seag* 'up there', *ka(ra) van* 'over there [parallel to shore]', etc.

(MRL.77) Gil *kara* ***row***!
dig STATIC out
(*digging a hole*) 'Dig further away [from me], towards the sea.' [BP3-20b]

When the vector defined by the static location is deictically oriented towards the speaker (Eng. 'up here, up this way'), the phrase is followed by the enclitic ***=mē*** 'hither'. This use is not problematic *per se*, and simply corresponds to the "egotropic" use of the deictic directional 'hither' that was presented in §2.4.1 above. But the peculiarity of Mwerlap is that this clitic *=mē* triggers leftward *vowel harmony* upon its host phrase, resulting in allomorphic forms of the directionals with raised vowels. Thus *kara* ***sar*** [kara'sar] 'over there inland' becomes *kere* ***ser***=*mē* [kɛrɛsɛr'mɪ] 'over here inland'; *kara* ***row*** [kara'rɔw] 'over there seawards' becomes *kere* ***ru***=*mē* [kɛrɛrʉ'mɪ], etc.

(MRL.77') Gil *kere* ***ru*** ***=mē***!
dig STATIC out =hither
'Dig a bit more this way, towards the sea.' [BP3-20b]

Because the directional 'across, parallel to shore' is lexified with ***van*** 'thither' which is originally allotropic (§2.4.1), its egotropic counterpart is not **kere ven=mē*, but simply *kere* ***mē*** 'this way'.

7.4.2 Motion paths

When the directional vector defines a motion path followed by a participant, the directionals combine with the enclitic *=mē* for egotropic orientation (*su=mē* 'down this way') and *=lēg* when allotropic (*su=lēg* 'down that way'). The forms for 'up' are unpredictable, respectively

sea=*mē* and ***sege***=*lēg*. The ones for 'across, parallel to shore' are ***vel***=*lēg* ('thither') if allotropic, and simply *mē* ('hither') if egotropic.

This kinetic use of directionals was illustrated in sentences (39-40) above, in which the motion path outlined by the directionals was the one followed by the ball.

7.4.3 Combination with deictics

Finally, Mwerlap directionals show special forms when combined with a demonstrative. The rich system of Mwerlap demonstratives include ***kē*** 'PROXIMAL' (with variants *kēkē*, *kēlē*…) as opposed to ***ñē*** 'DISTAL' (with variants *ñēñē*, *ñea* …). Vowel harmony in the locative phrase sometimes triggers the raising of the directional's vowel (e.g. *ki* ***ser*** *kē* 'inland here'). As Table 11 above shows, some forms are unpredictable, such as {*ki*+*row*=} ***kor*** 'out' and {*ki*+*sōw*=} ***kos*** 'down'.

The following examples illustrate the directionals when they are combined with a demonstrative.

(MRL.78) i Edga *ki* ***vel*** ***kēlē***.
PERS Edgar LOC across PROX
'Edgar is over there this way (parallel to shore).' [BP3-20b]

(MRL.79) i Edga ***kor*** ***kē*** verē.
PERS Edgar LOC:out PROX outside
'Edgar is (out) here outside.' [BP3-20b]

(MRL.80) Sean mē-lē *sar* lē eañ ***kos*** *ñē*.
3sg PFT-take in LOC house LOC:down DIST
'He took it [the knife] into that house *down* over there (seawards).' [MRL.d05:20]

(MRL.81) Ne-tedun irō se-velvelēlē ***vel*** *ñē* lē sar.
ART-person two IPFV-argue across DIST LOC clearing
'Two people are arguing over there in the middle of the village.' [MRL.d08:02]

The rich system of Mwerlap would certainly deserve further investigation.

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Is it worth documenting "just a dialect"? Making the case for Suru Kavian (Pentecost Island)

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Abstract Apma, with approximately 8,000 speakers, has three main dialects: Suru Mwerani (SM), Suru Rabwanga (SR), and Suru Kavian (SK). Despite high cognacy rates between SM, SR, and SK, preliminary fieldwork has revealed phonotactic, lexical, and morpho-syntactic differences between SK on the one hand, and SM/SR on the other. SK speakers view their variety as unique, and have expressed a desire to maintain and develop it as distinct from other Apma varieties. This paper explores the unique linguistic features of SK, describes preliminary social and language development questions that have arisen at the outset of the dialect documentation process, reviews how others have incorporated language variation into their grammars, and argues that dialect documentation is worthwhile and important for not only the community of speakers, but also for increasing our understanding of areal language ecology

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1 Introduction

Apma, with 8,000 speakers, is one of the four main languages spoken on Pentecost Island in Vanuatu.[1] A grammar, an orthography, a dictionary, and literacy materials have been developed for the Suru Mwerani dialect of Apma (Schneider 2008a, 2008b, 2010, 2011, 2013a, 2013b, 2013c, 2013d, 2013e; Tabi and Gray 2008; Temwakon and Gray 2010). In recent years, several primary school classrooms have introduced Suru Mwerani literacy into the curriculum.

[1] Schneider, in her description of the language (Schneider 2010), spells its name 'Abma', which she views as a more accurate reflection of the language's phonological system. However, the community prefers the 'Apma' spelling.

The current paper, however, focuses on another of Apma's dialects: Suru Kavian. An overview of the languages and dialects of Pentecost Island is provided in section 2. The linguistic features of Suru Kavian are described in section 3, and contrasted with the other Apma dialects. In light of recent efforts made to document these features, section 4 discusses some social and language developmental issues that have arisen during the early stages, and section 5 reviews several other studies of language variation in minority languages. Finally, section 6 argues that this type of work can make a valuable and practical research contribution to linguists' understanding of areal ecology.

2 Linguistic varieties of Pentecost Island

Pentecost Island is linguistically diverse, but its linguistic situation used to be much more complex than it is today. The languages of Pentecost Island are explored in section 2.1; then 2.2 introduces the dialects of Apma, including Suru Kavian.

2.1 Languages past and present

Alongside Apma, the other three languages still spoken on Pentecost are Raga with approximately 6,500 speakers, Ske with about 300, and Sa with about 2,500.[2] These four main language communities are indicated in largest typeface in Map 2 below.

Map 2 shows that Apma occupies the central part of Pentecost Island. If we compare Map 2 with Map 1, which gives a historical perspective on what the approximate language boundaries may have been before the arrival of Europeans, it becomes clear that Apma's domain and scope of influence has grown, taking over the smaller, more vulnerable language varieties. For example, Wolwolan, a variety once spoken in the northernmost part of the Apma-speaking area, has now all but disappeared. In 2010, it was remembered only vaguely by 70-year-old Chief Luke Bulekuli, who resides in Singmwel, a Raga-speaking village. In a similar vein, Asuk, thought to be a dialect of Apma, has disappeared completely, having been replaced by the Suru Mwerani dialect (Gray 2012: 30).

The southern language boundary of Apma was formerly located near Melsisii; now it runs as far south as Ranmawot. The Sowa language that used to be spoken around Ranmawot, Ranwadi, and Vanuu has been completely lost, with the last native speaker passing away in the year 2000 (Gray 2012: 20). Inhabitants of this area have shifted to Apma. Apma now shares its southern boundary with Ske, and is encroaching upon that language too. The 300-odd Ske speakers, vastly outnumbered and in close interaction with their northern neighbour, are bilingual in the Suru Mwerani dialect of Apma. This linguistic accommodation, combined with intermarriage between language groups, suggests that Ske is in danger of also being lost in the next couple of generations.

The only substantial research on cognacy rates between language varieties in the region is published by Tryon (1976), who collected wordlists from 330 villages across Vanuatu between 1969 and 1974 (Tryon 1976: 75). At the dialect level, cognacy figures for Pentecost's

[2] Raga and Sa estimates are from Crowley (2000); actual figures are probably higher due to recent population growth. The Ske estimate is from Kay Johnson (personal communication, 23rd March 2012). Maps 1 and 2 reproduced from Gray (2012:38).

language varieties come from Gray (2012), based on an adapted version of Tryon's word list. Apma has been found to share varying rates of cognacy with other Pentecost languages, as shown in Table 1.

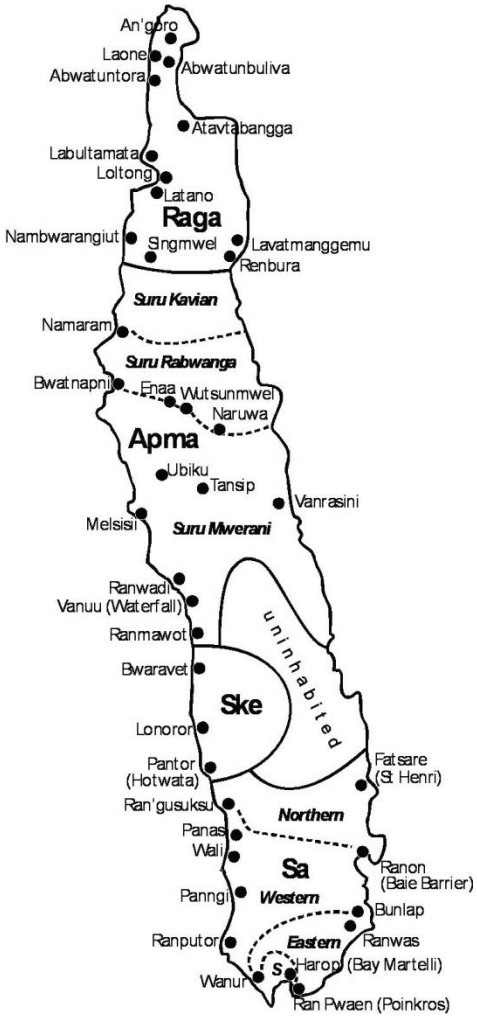

Figure 19 — Pentecost languages – historical *Figure 2 — Pentecost languages – modern*

Table 12 — Cognacy rates between Apma and other Pentecost languages. Main figures based on computations by Tryon (1976: 74) from a wordlist of 258 items. Alternative figures in brackets from Gray (2012: 13); a range of figures indicates multiple dialects.

	Raga	*Apma*	*Sowa*	*Ske*
Apma	52% (60%)			
Sowa	51% (53%)	65% (65-73%)		
Ske	46% (49%)	60% (60-65%)	77% (82%)	
Sa	42% (43-46%)	53% (49-64%)	60% (54-56%)	61% (55-57%)

The percentages given in Table 1 indicate that Pentecost languages have higher cognacy with nearby languages, and lower cognacy with languages spoken further away on the island. Focusing on Apma in particular we see that it shares, at most, 60% cognacy with Raga, going by Gray's figures. Given this fact, and the fact that Raga's speaker population is also large,

and that Raga has its own commercial centre and airport in the north of the island, it is perhaps not surprising that the viability of Raga has not been whittled away by Apma in the same way that Apma's southern neighbours have been.

In contrast, Apma had a relatively higher (65-73%) cognacy rate with Sowa, a now extinct language. The loss of Sowa in the 20th century was due primarily to the dramatic reduction of its speaker population following the arrival of European diseases on Pentecost (Gray 2012: 20). As Map 2 shows, parts of the former Sowa area remain depopulated. Sowa also shared a relatively high rates of cognacy with Ske (82%).[3] It seems clear that those Sowa speakers who did not die of disease were absorbed into the Apma and Ske speaking communities.

With low speaker numbers relative to its northern neighbour, Ske, in turn, now appears to be threatened by Apma. Many of the women who marry into the Ske area are Apma-speaking, and currently Bwaravet is the only place where Ske is heard most of the time (personal communication, Kay Johnson, 26th March 2012).

2.2 The dialects of Apma

The Apma language is conventionally said to have three main dialects, which are Suru Mwerani (SM), Suru Rabwanga (SR), and Suru Kavian (SK). The SM dialect is the largest of the three, being spoken in the widest area, and having thousands of speakers. The SR dialect is smaller than SM, and linguistically very similar.[4] By contrast, SK, with approximately 250 speakers (a conservative estimate; Emil Tawal, personal communication, January 2010), is markedly different from SM and SR. Preliminary fieldwork has revealed phonetic, lexical, and morphosyntactic differences between SK and the other varieties, and mutual intelligibility is reportedly low. Many Apma speakers of whatever dialect even claim that SK is not a dialect, but instead a closely related and unique language in its own right.

2.2.1 Impact of dialect size on language ecology

Schneider studied the SM dialect for her doctoral research, beginning in 2003. She chose SM because firstly, it had the most speakers, which made it easier to find suitable language consultants. This was an important factor, as she was obliged to complete a grammatical description within the three-year timeframe allowed under her funding scheme. Another practical consideration was proximity to transport: SM speakers live closest to the airport. Finally, she preferred to work with speakers of the largest dialect because she suspected (correctly, as it turns out) that speakers of the smaller dialects would be 'corrupted' by dialect shift to the larger ones, and she did not want this added complication in her grammatical study. Finally, the SM dialect self-selected, in a sense, because Denison Siaban, a native speaker of SM who was attached to the Vanuatu Cultural Centre, was a very capable

[3] Applying the 80% cut-off point used by Tryon (1976: 78), Sowa and Ske are arguably dialects of a single language. In a similar vein, Lynch & Crowley (2001: 67) do not recognise Sowa as a language on the basis of Tryon's 77% cognacy estimate "given the margin of error that we have encountered with such figures". Nevertheless, locally Sowa is regarded very much as being distinct (Gray 2012: 21), just as Suru Kavian is.

[4] In this paper, unless SM and SR are explicitly distinguished from each other, they are grouped together as 'SM/SR', in contrast to SK.

language consultant. It is worth pointing out that it would be much more likely that a cultural centre fieldworker or language enthusiast would come from the SM/SR area rather than from the SK area simply by virtue of the sheer numerical imbalance between SM/SR and SK speakers.

The language documentation work done by Gray on Pentecost also focused primarily on SM, for similar reasons: the school at which he was based was located in an SM-speaking area; he was able to build on the work already done by Schneider in this dialect; and once again the dialect self-selected because Pascal Temwakon, the local historian who sought Gray's collaboration in the production of a dictionary, was an SM speaker.

While language description in and of itself is probably of little value to community members who are not likely to be interested in a descriptive grammar, any associated documentation such as storybooks, dictionaries, educational materials, and so forth, are usually valued. Moreover, attention from linguists and other researchers generally provides a powerful psychological boost to the community concerned. Perhaps, then, the description and documentation of SM has come at a price, because as this dialect's profile has been raised, the profile of the other two dialects has conversely been lowered. Thus, researchers (such as the authors) who work on larger varieties may be perpetuating the cycle of endangerment. (Note, however, that Gray has recently published *The Languages of Pentecost Island*, which does in fact present sketch grammars of all language varieties on the island.)

2.2.2 Cognacy rates across the three dialects

As already noted, two of Apma's dialects, SM and SR, have only minor differences in pronunciation and lexicon that distinguish one from the other. On the other hand, SK is relatively unique. This is reflected in the cognacy rates across dialects, which are shown in Table 2.

Table 2 — Cognacy rates between Apma dialects (Gray 2012: 13)

	SM	*SR*
SR	>99%	
SK	90%	90%

Tryon (1976: 78) considers varieties with more than 80% cognacy to be dialects of the same language, while those below this cut-off point are different languages. Based on this assessment, SK is simply a dialect of Apma. However, in contrast to SM and SR's close relationship with each other, SK is comparatively different from the other two dialects. Its cognacy rate with SM and SR is not just a couple of percentage points below 99%, but nine percentage points lower in cognacy, at just 90%. Specific examples are provided in section 3; at this point we merely state that the SK words that deviate from SM/SR words are common lexical items that speakers use every day (cf. Table 3). So although SK is still very similar to SM/SR in absolute terms, it is relatively different from an intra-language perspective.

3 Linguistic differences between SK and other dialects

Preliminary fieldwork has revealed differences between SK and the other Apma varieties in nouns and verbs (3.1); pronouns (3.2); morphosyntax (3.3); and phonotactics (3.4). The differences between Apma dialects attest to a degree of lexical, phonological and morphosyntactic convergence with neighbouring languages: between SK and Raga on one side, and SM and Sowa/Ske on the other. Joseph (2000) also found structural similarities across disparate languages in the Balkans due to language diffusion resulting from contact between speech communities. In Apma's case, lexical and structural convergence with neighbouring languages may be a contributing factor to dialectal divergence within the language.

Phonetic transcriptions are provided in Tables 3 through 11 to enable maximum comparability between the varieties. Information on Raga (the large language spoken just to the north of SK) and the Proto-North/Central Vanuatu (PNCV) forms reconstructed by Clark (2009) are included for the sake of comparison. Although the validity of postulating a single North/Central Vanuatu proto-language has been questioned (e.g. François 2011:188-191), these hypothetical proto-forms nevertheless provide a useful basis for distinguishing conservative from innovative forms in the modern dialects.

The 'Tokens' column indicates the number of times the SK item is heard in the corpus. The current corpus consists of twenty-four texts thus far recorded, transcribed, and translated. It totals 103 minutes and covers a modest range of genres including explanatory/procedural narratives, *kastom* stories, interviews, prayers, and personal accounts. Despite the small size and range of the existing corpus, the token count is useful in that it can at least provide a rough indication of how common a word is.[5,6]

3.1 Differences in content words

The six most frequently-occurring words in Table 3 are either completely different from both SM/SR and Raga ('pig', 'meeting house', 'here', 'today') or they are cognate with Raga forms as opposed to SM/SR forms ('thing', 'lie down'). Indeed, it appears that about a dozen of the listed words share cognacy with Raga rather than with the other Apma dialects. On the other hand, Raga would appear to share half as many words with SM/SR. In some cases ('pig', 'meeting house', 'woman', 'night'), SK appears to have innovated away from the ancestral forms, which are retained in both SM/SR and Raga, whereas for other items ('bed'), SM/SR is innovative. In some cases there are plausible origins for these innovations within Apma: for example, SM/SR *leut* 'thing' comes from *le ut* 'in the place'. In other cases there may have been borrowing from languages to the south: some forms found in SM/SR but not in SK, such as *temwa* 'rat', have cognates in the Sowa, Ske and Sa languages (Tryon 1976; Gray 2012). There also appear to be items ('bathe', 'lie down') for which SM/SR and SK reflect different PNCV roots.

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[5] However, the potential for skewed results still exists. For example, there are six instances of the word for 'banyan tree' in Table 3 simply because one of the speakers talked about falling out of a banyan tree and therefore mentioned the word multiple times in his story.

[6] Zero counts indicate that a word does not occur in the corpus, but has been noted down elsewhere as an example of everyday usage.

Table 3 — Non-cognate lexical items (PNCV reconstructions from Clark 2009)

People / Relationships

English	*SM*	*SR*	*SK*	*Raga*	*PNCV*	*tokens*
man	*dalm^{w}a*	*dalm^{w}a*	*kuhnu^{m}bu*	*atamani*	*ata-mwaʔane	7
woman	*haβin*	*haβin*	*βa:mat*	*vavine*	*vavine	4
mother	*datsi-*	*datsi-*	*badi-*	*ratahi-*	*tina	1
child	*ha:βak*	*ha:βak*	*biribirik*	*naturixi*	*mwara, *mwera, *natu	3

Animals

English	*SM*	*SR*	*SK*	*Raga*	*PNCV*	*tokens*
pig	*bo*	*bo*	*kaβi*	*boe*	*boe	19
rat	*temwa*	*temwa*	*ko:p*	*xarivi*	*karivi	0
crayfish	*simo:*	*simo:*	*mwasak*	*xarote*	*ʔura	0

Body parts

English	*SM*	*SR*	*SK*	*Raga*	*PNCV*	*tokens*
chest	*mwa:sa-*	*mwa:sa-*	*bwabwa-*	*bwabwa-*		0
throat	*βadale-*	*βa^{n}dale*	*mwakore-*	*halan xa-*	*daleʔo	0
neck	*kauwa-*	*kauwa-*	*βa^{n}dale-*	*mwaxoro-*	*daleʔo, *uʔa	0
hand, arm	*ŋa-*	*ŋa-*	*lima-*	*lima-*	*lima, *vara	0

Plants

English	*SM*	*SR*	*SK*	*Raga*	*PNCV*	*tokens*
coconut	*kul*	*kul*	*ni*	*niu*	*niu	1
banyan tree	*baga*	*wale*	*wale*	*ramute*	*baqa	6

Things

English	*SM*	*SR*	*SK*	*Raga*	*PNCV*	*tokens*
axe	*tela*	*tela*	*mut*	*b^{w}ati-talai*	*zavi (*talai)	0
bed	*kab^{w}al*	*kab^{w}al*	*kab^{w}al, bat*	*bata*	*bata	0
hole	*mu:*	*mu:*	*mu:, lil*	*lulu*	*bulu, *moru, *walu	0
thing	*leut*	*leut*	*kina*	*xinau*		32
war	*kuran*	*kuran*	*asŋan*	*atuŋana* (arch.)		0

Activities / Events

English	*SM*	*SR*	*SK*	*Raga*	*PNCV*	*tokens*
to bathe	*leleh*	*leleh*	*kaka:*	*xaxaru*	*karu, *loso-vi	3
to forget	*maluni*	*maluni*	*kilβak*	*vinihi malioi*		2
to look for	*doŋβi*	*doŋβi*	*os*	*hi^{ŋ}ge*	*vake	3
to tell lies	*get*	*ket*	*siki*	*av dentene*	*lolo	0

States

English	*SM*	*SR*	*SK*	*Raga*	*PNCV*	*tokens*
to lie down	*-tpo*	*dobo*	*en*	*eno*	*eno, *tabwa	33
to be bad	*gapm^{w}a*	*kapm^{w}a*	*sa:bek*	*hantai*	*saʔa-ti	2
to be cold	*mamamdidi*	*mamamdi^{n}di*	*m^{w}=ilili*	*masisi*	*madidi, *malaso	0
to be thanked	*βiah*	*βiβah*	*mudak*			4
to be many	*ses*	*ses*	*βiro*	*vusi*	*laba	3

Locational / Deictic

English	*SM*	*SR*	*SK*	*Raga*	*PNCV*	*tokens*
meeting house	*kamel*	*kamel*	*wunis*	*xamali*	*kamali	22
here	*dokah*	*dokah*	*i^{n}da*	*teti*		10
there	*dokih*	*dokih*	*i^{n}daŋi*	*aia*		5

Temporal

English	*SM*	*SR*	*SK*	*Raga*	*PNCV*	*tokens*
night	*buŋ*	*buŋ*	*mwa^{ŋ}gap*	*boŋi*	*bogi	5
morning	*tsu:buŋ*	*tsu:buŋ*	*mwa^{ŋ}gap$^{[ŋ]}$gol*	*ma^{m}boŋi*	*marani	2
today	*m^{w}erani*	*rab^{w}aŋa*	*na^{m}b^{w}erik*	*xarixi*		18
tomorrow	*βaŋren*	*βaŋaren*	*ma:wuk*	*vaixouxo*	*marani, *vuko	0
day before	*lileleh*	*loklo^{ŋ}goih*	*ililoklo^{ŋ}goih*			0

Thus the data in Table 3 provide some evidence of lexical replacement across the varieties of northern and central Pentecost, whereby one form or another came to be used by speakers of the different varieties. François (2011:204-205) also notes this pattern in the structurally similar languages of northern Vanuatu. He argues that lexical replacement has been driven by semantic shift, whereby for various reasons (stylistic effect, semantic nuance, connotation) one synonymic form wins out over alternatives. He gives examples that include words for common lexical items such as ‘person’, ‘woman’, and ‘water’ to demonstrate this phenomenon. Clearly, lexical replacement provides an obvious strategy for speakers from Community X to differentiate themselves from neighbouring Community Y.

3.2 Differences in pronouns/person indexation

3.2.1 Independent pronouns

Table 4 presents the independent pronouns as they manifest in Apma’s three dialects. Raga and PNCV pronouns are included as a point of comparison.

There are discernible patterns that occur across the data. In the case of the dual pronouns it appears that SK innovated through mutation from /u/ > /i/, where /u/ reflects PNCV **rua* ‘two’. Thus all of the SK dual forms end in *i*, in contrast to the other two dialects. However, the occurrence of /u/ and /i/ in the roots of the second-person pronouns does not follow such a pattern.

Table 4: Independent pronouns (PNCV reconstructions from Clark 2009)

gloss	SM	SR	SK	Raga	PNCV	tokens
1sg	*nana*	*nana*	*ina*	*inau*	*nau	10
2sg	*kik*	*ᵑgi*	*kuᵑgu ~ ᵑgu*	*xiᵑgo*	*iqo	18
3sg	*ni*	*ni*	*ini*	*kea*	*n(a)ia	17
1du.inc	*kuduru*	*kuⁿduru*	*kiⁿdiri*	*xidaru*	*(k)ida (+ *rua 'two')	4
1du.exc	*gemaru*	*ᵑgemaru*	*iᵑgari*	*kamaru*	*qama(m)i (+ *rua 'two')	4
2du	*gumru*	*ᵑgimiru*	*ᵑgumiri*	*kimiru*	*qamuyu (+ *rua 'two')	0
3du	*nu:ru*	*nu:ru*	*ini:ri*	*kera*	*n(a)-ira (+ *rua 'two')	21
1pl.inc	*kidi*	*kiⁿdi*	*kiⁿdi*	*xida*	*(k)ida	8
1pl.exc	*gema*	*ᵑgema*	*iᵑga*	*kamai*	*qama(m)i	24
2pl	*gimi*	*ᵑgimi*	*ᵑgumi*	*kimiu*	*qamuyu	1
3pl	*ni:*	*ni:*	*ini:*	*kera*	*n(a)-ira	36

In first person singular, SK *ina* is very similar to Raga *inau*. In SM/SR, the *i-* apparently dropped off to form **na* (this form survives in SM/SR compounds such as *va-na mʷetak* 'selfish person', lit. 'to-me again'), which then most likely reduplicated to form *nana*. (Reduplication disambiguates *nana* from two other *na* morphemes having different grammatical functions. Perhaps more importantly, reduplication increases the phonological 'bulk' of this morpheme, which has a salient function in the discourse (expressing 'me' or 'I').)

3.2.2 Possessive indexation

Possessive indexation in Apma's three dialects are shown in Table 5.[7] Again, PNCV **rua* 'two' manifests as *ri* in SK, in contrast to the others.

Table 5: Possessive indexation in SM, SR, SK, and Raga

gloss	SM	SR	SK	Raga
1sg.poss	*-k*	*-ᵑgV*	*-ᵑgV*	*-ku ~ -ᵑgu*
2sg.poss	*-m*	*-m*	*-m*	*-mʷa*
3sg.poss	*-n*	*-n*	*-n*	*-na*
1du.inc.poss	*-daru*	*-ⁿdVru*	*-ⁿdVri*	*-daru*
1du.exc.poss	*-maru*	*-maru*	*-mari*	*-maru*
2du.poss	*-mru*	*-muru*	*-miri*	*-miru*
3du.poss	*-ru*	*-ru*	*-ri*	*-raru*
1pl.inc.poss	*-da*	*-ⁿdV*	*-ⁿdV*	*-da*
1pl.exc.poss	*-ma*	*-ma*	*-ma*	*-mai*
2pl.poss	*-mi*	*-mi*	*-mi*	*-miu*
3pl.poss	*-V*	*-V*	*-V*	*-ra*

V = vowel quality echoes that of vowel in the root

Noteworthy in Table 5 is the first person singular *-k* in SM, compared to *-ᵑgV* in SK and SR; it is reasonable to assume that the final vowel dropped off in SM, resulting in devoiced *-k* (a regular process).

[7] Following Haspelmath (2013), we incorporate the term *index* here to refer to bound person forms that can optionally cooccur with a coreferential nominal (as is the case for the 3rd person).

3.3 Morphosyntax

3.3.1 Third person singular imperfective

Compared with SM/SR (and Raga, shown for comparison), SK shows reduction in the morpheme that is coded onto verbs in the third person singular imperfective. Whereas in SM/SR this usually takes the form *m[w]V-* with allomorphs conditioned by the verb root (Schneider 2010: 48-49), in SK this morpheme is reduced to *m[w]-* before verb roots beginning with a vowel, and is absent completely when the verb root begins with a consonant other than /r/. This is illustrated in Table 6.

Table 6: Third singular imperfective in SM/SR, SK and Raga[8]

gloss	*SM/SR*	*SK*	*Raga*	*tokens**
he/she/it goes up	*m^{w}e=sak*	*Ø=**sak***	*m^{w}a hae*	43
he/she/it goes down	*m^{w}i=sip*	*Ø=**sip***	*m^{w}a hivo*	45
he/she/it runs	*m^{w}o=rop*	*m^{w}o=**rop***	*m^{w}a rovo*	1
he/she/it shouts	*mu=uh*	*m[^{w}]=**uh***	*m^{w}a ulo*	6
he/she/it falls	*m^{w}a=iah*	*m^w=**iah***	*m^{w}a hovi*	1
he/she/it comes	*m^{w}a=pma*	*Ø=**bama***	*m^{w}a mai*	59
he/she/it goes	*Ø=ban*	*Ø=**ban***	*m^{w}a ^{m}bano*	47

**Frequency of the SK verb root (bolded above), not the larger phrase that contains it.*

A partial explanation for such differences may be found in the fact that verb markers in SM/SR need to accommodate verbs whose roots begin with consonant clusters, one of which is realised as part of the preceding syllable (cf. 3.4). Unlike in SM/SR, initial consonant clusters in the root are not found in SK.

The third person imperfective is very common in Apma speech. The imperfective form of the verb is used not only to express unbounded events and habitual action, but also as the unmarked form in narratives, once the temporal reference has been established (Schneider 2010: 172). It is the preferred form for moving the story along, as long as the identity of referents in the discourse is clear. Similar usages for unmarked 'narrative' forms have been noted for other Vanuatu languages such as Lolovoli (Hyslop 2001: 237-238).

3.3.2 Consonant mutation for imperfective

In Apma and some neighbouring languages, a change in aspect from (underlying) perfective to (fortited) imperfective is partially encoded by initial consonant mutation. Verbs beginning with the sounds shown in Table 7 are all subject to this morphophonemic process.

Table 7: Initial consonant mutation in SM, SR, SK and Raga

SM	*SR*	*SK*	*Raga*
β > b	*β > b*	*β > b*	*v > b*
w > b^w	*w > b^w*	*w > b^w*	*v^w > b^w*
Ø	*k > ^{ŋ}g*	*k > ^{ŋ}g*	*x > ^{ŋ}g*
Ø	*Ø*	*t > ^{n}d*	*t > d*

[8] Person for the third person singular form of the verb (in both SM/SR and SK) is zero-marked; see Schneider (2010).

Table 7 demonstrates how the initial consonant mutations for coding perfective > imperfective aspect in SM/SR verbs have degraded from the SK (and Raga) series. In SM, almost no verb roots begin with *k*, but many begin with *g*. However there is no regular perfective > imperfective mutation from *k* > *g* that parallels *k* > ^{ŋ}g as exists in SR and SK. Similarly, SM has almost no verbs beginning with *t*, and many verbs beginning with *d*, yet no consonant mutation from perfective *t* > imperfective *d* has been observed in SM. Therefore, half the consonant mutations that persist in SK appear to have been lost in SM (assuming that it is the unmarked imperfective form, and not the marked perfective, that has been retained in SM). Similar degradation in verb-initial consonant mutation is also seen in the Sowa and Ske languages bordering SM (Gray 2012: 79).[9]

An additional difference is that verbs beginning *di* or *du* in SM/SR typically begin with *si* or *su* in SK, as illustrated in Table 8. This includes *di* / *si* 'stand, exist', which is one of the most common verbs in the language and has lexical as well as grammatical functions (for example, being used in series with other verbs to indicate habitual action).

Table 8 — Some verbs in SM, SR, SK and Raga showing d / s correspondences

English	*SM*	*SR*	*SK*	*Raga*	*tokens*
stand, exist	*di*	*^{n}di*	*si*	*to ~ do*	41
touch	*dibwiri*	*^{n}dibwiri*	*sibwiri*	*sibweri*	0
block	*digoro*	*^{n}di^{ŋ}gore*	*si^{ŋ}gore*	*tu^{ŋ}goro ~ du^{ŋ}goro*	0
swell up	*ditsibi*	*^{n}ditsibi*	*sisibi*	*sisibo*	0
release	*duksuru*	*^{n}duksuru*	*suksu:*	*tuxu ~ duxu*	0
follow	*duhkuru*	*^{n}duhuri*	*sukuri*	*huri*	0
get up	*dumre*	*^{n}dumre*	*sumwere*	*tomare ~ domare*	2
roast	*-tni*	*^{n}dini*	*sin*	*tunu ~ dunu*	2

It is likely that the initial consonant of these verbs was once *t* in perfective forms, mutating to *d* in imperfective forms. In SM/SR, *t* has an allophone *ts* which occurs before high vowels. SK lacks this allophone, instead reflecting PNCV **t* as *s* where the sound historically occurred before high vowels, as illustrated in Table 9.[10] In this respect SK partially resembles neighbouring Raga, which also reflects historical **t* as *s* when followed by *i* (though not when followed by by *u*) (Clark 2009; see also Table 11).

*Table 9 – Some SM, SR, SK and Raga words, and reconstructed PNCV forms (Clark 2009), showing the differing fates of historical *t. SK changes *t > s where the PNCV form had a following high vowel but retains unmodified t in other environments.*

English	*SM*	*SR*	*SK*	*Raga*	**PNCV*	*tokens*
child	*nu**ts**u-*	*ni**ts**u-*	*ne**s**u-*	*ni**t**u-*	*na**t**u	2
intestines	***ts**ine-*	***ts**ine-*	***s**ine-*	***s**ine-*	***t**inaʔe	0
three	*ka**ts**il*	*ka**ts**il*	*kai**t**il*	*xai-**t**olu*	***t**olu	4
sugarcane	***ts**i*	***ts**i*	***t**i*	***t**oi*	***t**ovu	0
stone	*βe**t***	*βe**t***	*βa**s***	*va**t**u*	*va**t**u	14
taro	*b^{w}e**t***	*b^{w}e**t***	*b^{w}e**t***	*b^{w}e**t**a*	*b^{w}e**t**a	8

[9] Crowley (1991) discusses similar verb-consonant mutations in a variety of other Central Vanuatu languages, suggesting that this system in present-day languages may reflect a feature which was present in a regional proto-language.

[10] The alternations *t* and *s* are not allophones in modern SK.

Where the change from **t* to *s* in SK (and Raga) affected the initial consonant of a verb such as *si* 'stand, exist', the pattern of mutation to *d* was lost; such verbs now begin with *s* in all environments. Meanwhile SM/SR also lost the perfective > imperfective mutation from *t* > *d*, retaining only the *d* forms. This has resulted in verbs that begin with *d* in SM/SR and with *s* in SK.

3.3.3 Directly-possessed noun roots

In directly possessed SK nouns, certain suffixes trigger vowel changes in the noun root. In the first-person plural inclusive and third person forms, noun roots whose final vowel is *o* or *u* instead take *e* or *i*, respectively. (The forms of the suffixes themselves do not change.) There appear to be two alternative accounts to explain the alternation. The first possibility is that the underlying form of the SK noun root in Table 10 is *βil**u***, and the root vowel changes to *i* in the first-person plural inclusive and third person forms. Alternatively, assuming the underlying form to be *βil**i***, then the root vowel changes to *u* in the first person singular, first person plural exclusive, and second person forms. More study of SK and the direction of language change is required to provide a definitive explanation for this type of stem alternation.

Table 10: Possessed forms of a noun showing vowel changes in SK (with SM and Raga for comparison)

gloss	*SM*	*SK*	*Raga*
1sg.poss 'my hair'	*ili-k*	*βil**u**-ᵑgu*	*ilu-ku*
2sg.poss 'your hair'	*ili-m*	*βil**u**-m*	*ilu-mʷa*
3sg.poss 'his/her hair'	*ili-n*	*βil**i**-n*	*ilu-na*
1pl.incl.poss 'our hair'	*ili-da*	*βil**i**-ⁿdi*	*ilu-da*
1pl.excl.poss 'our hair'	*ili-ma*	*βil**u**-ma*	*ilu-mai*
2pl.poss 'your hair'	*ili-mi*	*βil**u**-mi*	*ilu-miu*
3pl.poss 'their hair'	*ili-:*	*βil**i**-:*	*ilu-ra*

This phenomenon is not known to exist in any other Pentecost language or dialect (Gray 2012: 60), though a similar stem alternation occurs in the northern Vanuatu languages of Torres and Banks Islands (François 2005:484-485). However, it seems that in Torres and Banks languages the alternation is usually between a higher vowel and a lower vowel, whereas in SK the alternation occurs between front and back vowels, with the vowel height preserved.

3.4 Phonotactic structure

SM and – to a lesser extent – SR have shown greater tendency towards vowel loss than SK, particularly in verb roots. This has led to innovations away from Proto Oceanic's ancestral (C)V syllable structure. In other words, verb roots containing erstwhile consecutive CV.CV syllables, where an initial vowel has been lost (i.e., CV.CV > C~~V~~.CV), has led to a realignment of syllable structures and word boundaries. This is because a *CCV syllable structure (resulting from vowel loss in the above example) is not allowed in Apma. The morphosyntax of SM/SR has therefore had to compensate by procliticising erstwhile separate words to the verb root. This is demonstrated in Table 11. Since vowel loss has not occurred nearly as much in SK syllables, SK's verb roots largely retain the traditional (C)V phonotactic structure of

Proto Oceanic, along with a straightforward correspondence between syllable and morpheme boundaries.

Table 11: Morpheme and syllable boundaries in SM, SR, SK and Raga
([-] = morpheme boundary; [.] = syllable boundary)

English	*SM*	*SR*	*SK*	*Raga*	*tokens**
it hangs	*m^{w}a=t.ka*	*m^{w}e=^{n}de.ka*	*Ø=**^{n}da.ka***	*m^{w}a ^{n}du.le*	7
he sleeps	*m^{w}a=m.tsu:*	*m^{w}a=m.tsu:*	*Ø=**me.su**:*	*m^{w}a ma.tu.ru*	7
he changed it	*te=l.hi*	*te li.hi*	*te **li.hi***	*nu le.a.hi.ni.a*	0
he drank it	*te=m.ni*	*te mi.ni*	*te **min***	*nu m^{w}i.nu.a*	5
he sent it	*te=s.ro*	*te so.ro*	*te **so**:*	*nu ho.ra.e*	4

**Frequency of the SK verb root (bolded above), not the larger phrase that contains it*

The vowel loss in SM and SR verb roots may reflect the influence of neighbouring languages spoken to the south of SM, in which this pattern is common. Table 12, which gives estimates of the proportion of common verbs with a C.CV shape (based on the same dataset used to compute Table 2) shows a trend of greater vowel reduction in more southerly languages and dialects.

Table 12: Estimated proportion of verb roots with C.CV- shape in Apma dialects and neighbouring languages

Raga	*SK*	*SR*	*SM*	*Sowa*	*Ske*
0%	0%	12%	21%	32%	40%

4 Sociolinguistic aspects of language documentation

While the differences described above imply clear-cut categorical distinctions between varieties, we know that, in reality, SK speakers move fluidly across dialects in their usage of lexical, phonotactic, and morphosyntactic features. We hypothesise two motivations for this: (1) speakers change dialects to accommodate other Apma speakers who apparently cannot understand SK; (2) younger speakers move across codes without awareness – a manifestation of dialect shift in progress.

The challenge is in faithfully documenting (4.1) and developing (4.2) the more conservative dialect now spoken only by a limited and shrinking number of older people, while also supporting the language needs of the younger SK speaking majority who do not speak the 'pure' form of the dialect.

4.1 Phonotactic structure

Stanford & Preston (2009: 8) point out that many indigenous languages lack a 'standard'; there are simply a number of co-existing varieties. The notion that one form of a language should serve as a role model for variant forms is typically a construct of societies that have a history of writing. Within the Apma language, despite the apparent ongoing shift of SK speakers to SR/SM, no one dialect would appear to have greater prestige than the others (a question which warrants further investigation). But within the SK dialect, there seems to be a hierarchy of authority amongst speakers.

There is a general tendency amongst speakers of whatever age to claim that those of the generation below them do not speak 'proper' SK. One man with a high status in the SK community claims that only he and his four brothers, plus one other relative, really 'know' traditional SK (Emil Tawal, pers. comm., 16/07/2013). A brother of the aforementioned is more liberal in his appraisal, including a larger cohort of chiefs from villages scattered around the SK area. In our assessment, male and female speakers over the age of forty who grew up in the SK area, with both parents speaking SK, have been observed to speak the more conservative form of the dialect.

The more conservative speakers set the standard and function as linguistic 'gatekeepers' in the community. Yet the standard can sometimes be so high that the gatekeepers themselves invariably fail to measure up. For example, one speaker corrects others when he hears SK speakers use the SM/SR borrowed term for 'pawpaw', which is *bʷarus*. The traditional SK term is *barurit*. Yet Schneider has overheard this same person using *bʷarus* on many occasions. Clearly, this is a sign that the enduring presence of SM/SR is eroding SK, despite the vigilance and best intentions of its most conservative speakers.

Indeed, there is a general sense that only a special few are considered to be knowledgeable enough to pass along information to outsiders, despite linguistic evidence suggesting otherwise. For example, a young SK woman noted that in SK, one says [an ki idan] 'Who is she?' and [an ki amah] 'What is that?'. She was promptly corrected by her husband, who then proceeded to give exactly the same information. Although this woman grew up in the SK area, her mother is an SM speaker. Therefore her husband and father-in-law consider her language not to be 'proper' SK – even if, in instances like the one described here, her usage does actually conform to traditional SK standards.[11]

One of the strongest advocates of traditional SK also maintains that the SK word for 'pray' is *awiawi*, a word that Schneider had never heard anyone use, despite the strong church-going ethic in the community, and Schneider's regular participation in Sunday activities. When she suggested the common word *daŋro* as a more regular alternative, the speaker acknowledged that although *daŋro* is used all the time, it is not "an SK word". Therefore he felt that *daŋro* should not be included in the SK dictionary.

Examples like the above suggest that, to some extent, traditional SK is an idealisation in the minds of speakers which can, but does not necessarily, manifest in actual speech. If language gatekeepers in the SK community had their way (and the rest of the community acquiesced), only the most conservative forms – even forms of language that people do not appear to actually use – would be documented as 'true' SK. Everyday, non-traditional language used by self-identifying SK speakers would be excluded.

We can certainly record the most traditional language forms as provided by conservative speakers. However, we also feel compelled to balance these with more recent innovations – including those symptomatic of dialect shift – even if some speakers may not support this aspect of our work.

[11] One of the most conservative speakers of SK claims that the SK word for 'who' is actually [edan], not [idan], but we have not heard this pronunciation used in natural contexts.

4.2 Orthography development

In order to highlight the unique character of SK, language guardians strongly support an SK orthography that is maximally different from the one used by SM/SR speakers. At an introductory orthography development workshop in September 2013, participants wanted to write the trigraph 'ngg' ([ᵑg]), and the digraphs 'mb' ([ᵐb]) and 'nd' ([ⁿd]) at the beginnings of words. These sounds do exist as underlying forms, and prenasalisation emerges word-initially under certain conditions in older varieties of SK. However, these sounds are not normally heard word-initially, and writing them in this way does not represent the speech of most SK children (and many adults). It reflects an older pronunciation, used in more conservative SK speech. Nevertheless, workshop participants argued that reading and writing the conservative pronunciation of words could help to teach children how to speak 'proper' SK.

Of course, it is highly unlikely that this strategy will work. The other problem with reading and writing abstractions of sounds is that it is difficult for young learners and even for their teachers to internalise and replicate. Phonetic writing systems are typically thought to be easier for beginning readers because spelling represents actual pronunciation. Where Apma literacy is introduced into schools at all, it is taught for only a very brief period of time, and at a rudimentary level. It is viewed as a stepping stone to further literacy in either English or French. Therefore from a pedagogical perspective, at this introductory level a simple phonetic orthography would more usefully serve the population, rather than one which postulates underlying forms.

The word-initial digraphs and trigraph are also incompatible with SM spelling conventions. SM reflexes of SK [ᵑg], [ᵐb] and [ⁿd] are non-prenasalised, and so the SM orthography does not include digraphs or trigraphs. The spelling differences between SM and SK therefore make it more difficult to share literacy resources across the larger Apma community. However, since the aim of SK speakers is to develop a writing system that is maximally distinctive, then this is an obstacle that the SK community is obviously prepared to live with and work around by, for example, adapting and revising existing SM materials to suit the SK writing system. Since conservative speakers of SK are socially dominant in the community, a preoccupation with language preservation supercedes concerns about pedagogical usefulness and other practical matters.

5 Existing studies in language variation

Our current research project on variation and decline in SK is only just beginning. While a good deal has been published in the past fifty years about language variation and change in dominant 'first world' languages (for starters, cf. Labov (1994, 2001, 2010) for an examination of internal (structural), social, and cognitive and cultural factors), much less attention has been paid to smaller languages. This section reviews some published studies of variation in minority language contexts to give an idea of the range of topics (5.1) and methodologies (5.2) covered.

5.1 Topics

Previous research has demonstrated that language variation can be explained by social factors, in additional to structural ones. In her areal study of the Kalkaringi community

(Northern Territory, Australia), Meakins (2008) unpacks the usages of Gurindji, Gurindji Kriol, Warlpiri, English, and Kriol. Language mixing is the norm within this community, as it is in many communities in northern Australia, and also in the SK community. She describes domains of usage for each language; patterns emerge through the complexity: code mixing is not random, but can be explained. Within the single mixed language, Gurindji Kriol, Meakins (2011) then explores variation in case-marking strategies. She concludes that the choice of case marker is influenced by a range of sociolinguistic (age) and structural factors. In other words, speakers' linguistic selections are meaningfully distributed, and mostly predictable. Earlier research along similar lines has also been published about variation and change in minority languages, but it is relatively uncommon: see Dorian (2010) on East Sutherland Gaelic; Haddican (2003) on Basque; Sankoff (1980) in Papua New Guinea; Eckert (1980) on Gascon; and Foley (1980) on Cherokee.

Dorian's original (1981) study of language obsolescence in East Sutherland Gaelic (ESG) offers a variety of insights which in many respects, thirty years later and on the other side of the world, has many parallels with the SK community in Vanuatu. She observes, for example, that the presence of a single English-speaking monolingual would almost always prompt a group of Gaelic-English bilinguals to switch to English. In a similar vein, SK speakers, in the presence of visitors from outside the area, have been observed to modify their speech to accommodate their neighbours. Of course, unlike English and Gaelic, SK and other Apma varieties are closely related. Yet SK speakers switch because, as mentioned in section 4, they say that speakers of other varieties cannot understand them.

Dorian acknowledges the widely-circulated belief that intelligibility is influenced by interlocutors' attitudes (Wolff 1959; Haugen 1966, cited in Dorian (1981: 92)). However, she suggests that there may instead be other important factors that can affect intelligibility: degree of exposure to or lack of experience with a variety; the expectation that the interlocutor will not understand; and genuine structural differences. These factors require further investigation in the Apma context.

In *Language Contact in Amazonia*, Aikhenvald (2002) summarises the features of obsolescence-induced change, including variability in phonology and allomorphy. All of these are features of SK speech. She notes that there are differences between types of changes that are noticed ('on-going') or no longer noticed ('completed'). This then ties in with speakers' language awareness which is what, she claims, helps people to decide what is 'correct' or 'incorrect' speech (page 213). She observes that the speech of older generations serves as a model for younger speakers. This 'generational awareness' is also a source of insecurity (page 258): younger speakers feel limited in their ability to speak Tariana. All of these observations mesh with our own observations of SK. The problem is, when younger speakers feel self-conscious about their speech, they are less likely to speak it (particularly in front of older speakers), which then perpetuates the cycle of language shift.

5.2 Methodology and presentation

Clarke (2009: 110) notes how variationist models of language change are Eurocentric, and not relevant to many indigenous language contexts. Variables which are investigated in classic sociolinguistic studies – particularly socioeconomic status – often have little traction in communities that operate within a subsistence economy, where few people are in any sort of

paid employment. On the other hand, it can be difficult to figure out just which variables are indeed significant in indigenous communities. In the introduction to their edited volume on variation in indigenous minority languages, Stanford & Preston (2009: 6ff) summarise other, possibly more useful, variables, including territorial groups or leadership status. Preliminary research in central Pentecost suggests that important social factors may be: age; whether the speaker has lived on other islands for significant periods of time; education level; status (chief or religious leader); ancestry.

Clarke tried to use a social network approach but found that it was too difficult to implement systematically in the Sheshatshiu community (Labrador, Candada), as the ties are incredibly multiplex, with every individual bearing a relationship with everyone else in the community, and also very dense, with people interacting with one another in a variety of social contexts. In SK, the situation is similar: because everyone is involved with everyone else in a myriad of ways, the concepts of 'density' and 'complexity' lose their currency in relative terms, therefore rendering the entire exercise essentially meaningless.

Nagy (2009) collected an impressive amount of data for her Faetar grammar, recording 80 out of the 500 residents of Faeto (one of two towns in southern Italy where Faetar is spoken). She argues that all variant forms of a language must be presented in as an egalitarian a manner as possible. She presents speaker data in tabular format in an appendix, including information about speaker age, sex, occupation, text type, and other information. *The Languages of Pentecost Island* is also somewhat egalitarian in its presentation, though with limitations. Gray (2012) presents a structural overview of all five of Pentecost's languages, in which tables of words and phrases are presented for each language at the dialect level. However, to keep the book manageable and due to occasional lack of information, discussions of grammar and usage focus primarily on the most common dialect of each language, with the introduction noting that "all the Apma cited in this book is in Suru Mwerani unless otherwise stated".

Electronic presentation of grammars and dictionaries (as discussed in *Language Documentation and Conservation Special Publications No. 4* (2012)) offers new possibilities for documentation of language variation. In printed dictionaries of SM, both Schneider (2008b) and Temwakon & Gray (2010) included SR variants of common words, but did not include SK words partly because the degree of variation between SM/SR and SK would have made the work unmanageable. In the case of Apma, grammatical differences between dialects such as in verb-initial consonant mutation (section 3.3.2) present a particular challenge in lexicography. For example the root of the verb 'cut' in SK is *tas*, with *das* as the imperfective variant form, but in SM/SR this consonant mutation has been lost, leaving *das* as the root form (though, to complicate matters further, from older SM/SR speakers the nominal derivation *tastasan* 'cutting' retains the old consonant). In a dictionary catering for multiple dialects, does this headword belong under 'D' or 'T'? Electronic presentation can help overcome these problems by hyperlinking between different forms, or by allowing material on screen to be filtered according to a user's dialect to avoid clutter.

6 Analysing and documenting variation: Still a worthwhile endeavour

It is legitimate to question whether it is wise to use one's time concentrating on language variation within a small geographic area when there are so many languages have not been described at all. But Mühlhäusler (1996: 279-280) argues that we are not in a position to decide which variety should be 'saved' at the expense of others: "The problem with privileging of species is that no one has a clear idea to what extent strong languages depend for their continued survival on weak ones." We must therefore challenge any assumption that intra-language variation is any less important than inter-language variation. Hornberger (2010: 275-276) also stresses that a 'language ecology' approach must take steps not only to describe linguistic ecology, but to take steps to counteract loss of diversity. Admittedly, this is a tall order, but attention to dialect variation is at least one small step in the right direction.

Of course, a considerable investment of time and resources is required to do this type of documentation work. It is unrealistic to assume that any one person would be able to carry out a basic documentation which includes a study of language variation within the typical three-year time allotment allowed for PhD study, for example. However, a variation study may be a sensible choice for postdoctoral research. Investigating the same language area in a greater degree of detail is one way for linguists to maximise the returns on language-specific knowledge. Alternatively, a pair or group of researchers working together can be effective, as Newman (2013) recently proposed. In fact, this sort of areal work is already being undertaken on the Baining languages of East New Britain Province (Papua New Guinea) and also on the languages of southern New Guinea.

Unfortunately, funding bodies with a specific focus on language documentation and preservation typically favour projects that cover language families that are less well-known. So if one dialect of a language is already well documented, it is unlikely that another dialect of that language will also receive funding support. When there is a limit to how much time, money, and resources can be expended on any given language variety, and with thousands of languages undescribed or barely described, it is unsurprising that the focus is on trying to cover all the main areas, to fill in large gaps in our knowledge. Dialects of well documented languages are then a lower priority. This issue is a very real one, and was also discussed at Newman's seminar.

In spite of the challenges discussed herein, we still feel that dialect documentation is a fascinating, valuable, and worthwhile endeavour. It opens up avenues for research in any number of other interesting areas including – but not limited to – language variation and change; dialect contact, dialect endangerment, maintenance, and shift; language ecology; language pedagogy, and other applied topics. We must learn from our mistakes. The endangered Sowa language had a high shared cognacy with Ske, but this does not mean that it was any less worthy of being documented. Unfortunately, Sowa is now gone forever. Along the same lines, SK's high cognacy with the other Apma dialects does not make the need for its documentation any less urgent or significant. Our own preliminary research has provided valuable information not only about this small and endangered dialect; we are also learning more about the larger linguistic ecosystem that SK belongs to on Pentecost Island. We are certain that a larger, dedicated language variation project will help us to discover even more.

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Not just ‘stories’
The rules and roles of oral narratives in Tamambo

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Abstract

This paper describes the different kinds of oral narratives that are told in Tamambo, on the island of Malo in northern Vanuatu. Some comparison is made between these narratives and those of other societies, and the terms that various scholars have used to describe various narrative structures are outlined. The four main ‘story’ genres in Tamambo are analysed through differentiating between their event structure, themes, characterisation and other parameters, and reference is made to particular discourse strategies that the storytellers use. Examples are given of each genre, with a description of the ‘rules’ that govern each. The paper suggests that certain cultural core beliefs are embodied in these local stories—not only do they reflect attitudes and understandings of past and present societal mores, but they have an important ‘role’ in maintaining a Tamambo identity for Malo people.

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1 Introduction

Tamambo is the first language of approximately 4000 speakers living on the island of Malo, and of those who have moved to the neighbouring big island of Santo or to Vila. As an orality-based culture, as is common in many parts of the world, speaking has been the only way that knowledge of the past is conveyed and that traditional customs are known.

So in Tamambo, as elsewhere, speakers have conversations, give instructions, make explanations, recount experiences, tell jokes, describe how to do things, and so on. But they also tell a lot of stories, and these stories are a powerful part of the culture. They provide the history of the people, of families, of how geographical landmarks became as they are on Malo, of the animals and birds, and of the world of spirits. They teach, they reinforce knowledge, they frighten, and they entertain. As Johnston so eloquently says (2009:xiii), in reference to Papua New Guinea,

> *The ancient oral traditions, rooted in a pre-scientific age, illuminate many aspects of traditional life. They tell of beliefs in good and evil spirits controlling people lives; of the origins of natural features such as rocks, mountains, rivers and lakes; of the powers of witches and sorcerers; of cannibalism and revenge. They teach the young about the exploits of their ancestor-heroes and about the wholeness of a universe in which boundaries are blurred between the spiritual, the natural, animal and human worlds.*

For the Tamambo data, my analysis differentiates between the distinct kinds of oral narratives that people relate and listen to. This paper explores those main types, looks at the kinds of themes that are embodied in the stories, the particular rules to do with event structure, the characterisation, the lexical and discourse characteristics, and the cultural core values and beliefs encapsulated in the tales.

In Part 2, I give some background on this island community and its people. Then in Part 3, I discuss the different terms that have been used elsewhere to describe oral narratives, give an explanation of the descriptive terms I use in this analysis, and introduce the Tamambo genres. Next, in Part 4, I look at the 'rules' of each of the different types in detail with a text example of each. Lastly I summarise the commonalities and differences between them, and comment about the roles of such oral narratives past and present.

2 Background

Malo is an uplifted coral island just south of the big island of Santo in the northern part of Vanuatu and the people are predominantly subsistence farmers—the population as of the 2009 census was 4273, a growth of 21% since the previous census numbers (3532) of 1999 (Vanuatu National Statistics Office 2009:4). The people on the east and south of the island are mainly Bislama speakers, as there has been considerable movement from Malakula over the years and even from Ambrym. As a result, the original eastern dialect, Tamapo, is known by only a handful of older speakers. The west of the island is more heavily populated and so most Malo dwellers use Tamambo, the western and predominant dialect, in their everyday lives, and most children are first language Tamambo speakers.

At the time when the first Scots missionary arrived on Malo in 1887, the island was a hub for trading in the northern part of the archipelago, particularly back and forth from Ambae, Santo, and Malakula. Trade was in stringed shell money, mats, and especially pigs, and wives were also bought from these islands (see Huffman 1996). The political power structure that existed was known on Malo as *sumbwea*, a ritualised grade taking process, where men achieved rank by the number of male and intersex pigs they could afford to sacrifice on the *vwota*, a pig-killing platform. The higher the rank that a man achieved, the more respect, *ololoa,* he was afforded. Men of the same rank ate at the same eating hearth, never with women or with men of lower rank, and the one or two men at the very highest level were not only respected but feared. As Rubinstein has noted (1981:139), these men were not only physically strong, but if they went far enough through the fifteen level Malo system, they "approached the status of a living ancestor". Such *sumbwe* or chiefs had immense power to control access to labour, to women, and to increasing wealth. Their sons could be helped along the *sumbwe* ladder, as opportunity and knowledge was passed down from father to sons. Additionally, the *vwota* was regarded as having absorbed spiritual powers, and it was

believed that a force emanated from it which could be used for revenge as necessary.[1]

Such was the power structure of Malo society when the first Presbyterian church was set up in the west at Avunatari. While a Marist mission was founded in the north-east within another two years, the Avunatari church quickly became the dominant mission on Malo. The *sumbwe* system, along with its ceremonies with ritualised songs and dances, was actively discouraged by the strict Scots Presbyterians as not being any part of Christian belief. Over time, a different power structure emerged, and by the 1980s the *sumbwea* became completely obsolete.[2] In its place, a hierarchy has emerged where men of influence, highly respected, are those who have risen through the ranks of the church to become 'elders', or are those with additional education or economic wealth who have moved into the political sphere at local or national level. That is, the "ordered hierarchy" of the earlier *sumbwea*, as described by Rubinstein (1981:142) where older men had "a monopoly on necessary esoteric knowledge" and the "value of the knowledge was related to the status of the individual" still holds, but the opportunities for a rather different kind of grade-taking have arisen through church or politics or economic and educational expertise.[3]

As well as the gradual demise of the grade-taking system of the *sumbwea,* there was a sharp drop in population in the 1920s and 1930s. From the island population estimated at about 3000 at the time of the first missionaries, numbers dropped sharply to a low of 426 in 1926 as recorded by various missionaries (Miller 1990:39). This decimation of the population was not unique to Malo—the earliest official statistics as cited in Simunek (1980:247–249) show that the entire population of Vanuatu (then the New Hebrides) was "well and truly in danger of dying" decimated primarily by contagious diseases, to a low of around 45,000 in 1935. Given the social and cultural devastation that such depopulation must have caused, and on Malo, the opposition of the dominant church to some aspects of customary life, it is difficult to know how much knowledge of earlier stories and songs and dances was lost over that hundred or so years. As one indication, the lexicon of songs that accompany some stories is referred to as 'old language' and is not translatable by present-day Tamambo speakers. While there has been a revival of interest in this music and dance in the 1990s to 2000s, some churchgoers in the Avunatari area have been hesitant still about participating in such activities.

Today, Christianity continues to be strong on Malo, and is preached in a growing number of more fundamental Pentecostal Christian churches. The adherence to Christianity sits alongside animistic beliefs and some fear of 'black magic', a situation not uncommon in the Pacific. Christian marriages are held in church, but couples will have a custom wedding as well, and birth and burial rituals are carried out according to custom. People who are sick will go to the government-funded local clinic for injuries, but are more likely to visit

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[1] Some Malo people pointed out rocks to me on the high plateau that they believed had a kind of magic inherent in them.

[2] The 243 items in the words and phrases list in Rubinstein (1978) include around twenty to twenty-five terms that are directly concerned with the *sumbwea*. At the time of my first fieldwork on Malo in 1994–6, people of around forty years of age or less whom I questioned did not know any of these *sumbwe* terms.

[3] See also Bonnemaison (1996:208) re how graded society in parts of northern Vanuatu is now more a competition of an economic nature.

practitioners of traditional 'leaf medicine' *rohaina* for illness of most kinds. Such knowledge is revered, as is knowledge of other 'magic', such as *mwania*, an ability to foretell the future or 'see' the past, and *samburu*, a kind of custom medicine with specialised procedures that allow its practitioners to exorcise bad spirits, and cure strange ailments. The few holders of magic knowledge keep it secret, and this engenders them with considerable power. If they wish, they can choose to pass it on to a select few, usually but not always a family member, but payment in some form is required for the right to acquire such secret knowledge.

So the adherence to many customary beliefs is strong even if some of the earlier language of tradition undoubtedly has gone. Malo people are cognisant of the stories of origins of people and places, particularly as many have implications for land ownership, they are believers in good and evil spirits, and certainly they are respectful of such commonly held beliefs.

Literacy amongst adults is not yet common, and children attend school, with instruction primarily in English (though there a couple of French schools) until Year 8 only. There is very little written material in the local language, except a recent hymnbook (*Vuete Tamambo* 2000), and a Land Rights document approved by all the chiefs (with translations in Bislama and English), completed in early 2001. Personal letters, and more recently emails, are written in Tamambo by some Malo people resident in Santo or Vila, but writing is not seen as a particularly important or necessary skill in the everyday life of the island's people. All the information that one has needed to survive has previously been passed down verbally and learnt through listening, observation and practice.

However, Malo is an island that is in a state of transition in many ways; many younger people seek employment off the island, and many families depend on a family member with a job in town to bolster the family economy. With greater access to other islands, the language situation is also in a state of some flux—while the local language is strong, intermarriage with other language speakers and jobs off the island mean that Bislama use is growing. In town, on nearby Santo, it is a prerequisite for communication in stores and banks, and even on Malo, Bislama is necessary to be able to participate in some activities such as church gatherings and political meetings. Malo is a prime example of an island previously dependent on subsistence farming, and now moving toward an increasingly cash-based economy where the *sumbwea* grade-taking system is completely gone, other traditional chiefs no longer have the same amount of control or influence that they once had, and the brightest children leave the island to go to high school elsewhere and then on to jobs in town or overseas. Video nights powered by generators are popular, and mobile phones are cheap, accessible, and commonly used on the island. But in the same way that Cruikshank (1998:xii) describes for another society, the narratives that have been passed on orally for generations still provide "a framework for experiencing the material world and … intersect with larger social, historical, and political processes".

In my time on Malo from 1994 to most recently, 2011, I have collected approximately 95 texts. These encompass expository texts describing methods of cooking, fishing, and gardening, autobiographical recounts, a couple of informal 'interviews', and lots of stories. It is these 'stories' on which this paper is based.

3 Describing oral narratives

What then are these 'stories'? Many scholars have used a variety of terms to describe narratives. One of the most influential classifications of prose narratives was posited by Bascom almost fifty years ago (1965:4–5) in which he classifies

3) 'MYTH' as occurring in the remote past in a different or earlier world with non-human characters, regarded as sacred, and as fact
4) 'LEGEND' as occurring in the recent past in today's world with human characters, regarded as sacred or secular, and as fact
5) 'FOLKTALE' as occurring anytime, any place, with human or non-human characters, regarded as secular, and fictional.

While his definitions point to some features that are often pertinent to each, the reality is that often the boundaries are blurred, or overlap, or do not apply at all. As Finnegan notes (1992:47) "it is easy, but dangerous, to assume that all these features automatically go together, for in practice this is not so". And of course, there are other terms that have been used to describe different types of narratives, such as saga, fairy tale, fable, personal narrative, and so on. So if narratives from a particular culture are to be bundled into classifications and labeled, then the commonly-held assumptions about those English labels need to give way to definitions that are pertinent and appropriate for that description.

First, some comments about the classification or groupings of 'types' of narratives that have been done for various cultures. More than 120 years ago, Codrington (1891) divided the Melanesian folk tales that he collected from various islands into three classes: "I. Animal Stories, concerned mostly with birds and fishes, as is natural in islands where mammals are very few; II. Stories concerning Myths and Tales concerning the origin of things; III. Wonder Tales". In studies designated as being specifically about folklore in orality based cultures, Ben-Amos was one of the first to recognise and use local names for genre differentiation. With regard to two West African cultures, he says that the Dahomean people "identify two broad categories of narrative, traditional history *hwenono*, and the 'tale' *heho*" (1976:227). And similarly the "Yoruba recognise two classes of stories", the history *itan*, and the folktale *alo* (ibid:231).

More recently, in the Pacific, Huntsman (1995:125) notes that the Tokelau of the coral atolls north-west of Samoa, differentiate between a *kakai*, "a fictitious narrative told to entertain", and a *tala,* which "tells of something that reputedly did happen at some time". *Tala anamua* are those accounts of the past that have been transmitted "from one generation to the next, as true and accurate". For Anuta, a Polynesian outlier in the Solomon Islands, Feinberg (1998:8) says that the people "differentiate between *araarapanga*, stories about relatively recent events that are taken to be true, *tangikakai*, which are viewed as fantasy and told for entertainment value, and *taratupua,* spirit tales". He further notes that the three categories can overlap to some extent. In discussing oral narratives in the Hagen area of Papua New Guinea, Stewart & Strathern (2002:9) say that a kind of distinction is made between "stories that present themselves primarily as imaginative creations and stories that are seen as anecdotes or histories of events, the first being called *kang* or *kanga* and second *ik teman*, accounts".

A similar differentiation to some of the above occurs in Tamambo. Local speakers group three kinds of stories: *sorae sulasula* ancestor histories, *tandono* stories of the supernatural,

of demons and ogres, trickery, or evil people, and *Kastom stori,* all other stories told about animals, mythical creatures, and origins. These are all discussed in Part 4.

As far as labels for the internal structure of oral narratives are concerned, researchers who have worked in other societies have used some of the following: Kay Bauman (1998) lists different 'motifs' as reoccurring in Malaita folktales, including origins of people or plants, transformations, heroes, treacherous relatives; McGregor (1987, 1989) in discussing Gooniyandi narratives, uses 'states' and 'events', where "a succession of events … are denoted by a temporal sequence of linguistic units, which we may assume are normally clauses, or perhaps clause complexes" (McGregor 1987:158). Additionally, Klapproth (2004) discusses stories as a series of 'episodes' in Pitjantjatjara and Yankunytjatjara narratives.

Much earlier, Propp talks about 'functions of characters' rather than about motifs or elements. He defines the term thus: "Function is understood as an act of a character, defined from the point of view of its significance for the course of the action" and goes on to say that "definition of a function will most often be given in the form of a noun expressing an action" (interdiction, interrogation, flight, etc.) (1968:21).

For this paper, I use the term 'theme' in grouping stories as to 'what they are about', but in the actual analysis of the structure of each type, I use the term 'event' as per McGregor (1987, 1989). In then breaking narratives into their event structure, the 'function' of each as per Propp, "given in the form of a noun" sits comfortably within that framework. Additionally for each narrative, I list characters as A, B, or C, there being no necessity for additional characters to be listed.[4] For my purposes, this combination of 'event' and 'function', as carried out by character A, B, or C, clarifies the structure of the narrative and allows an easy comparison between the different types. This is shown in the text examples in Part 4.

4 Oral narratives in Tamambo

As mentioned in the previous section, Tamambo people have names for three main kinds of oral narratives. These are as follows:

1) ***Sorae sulasula*** (*sora-e sula-sula* = word-NOM RED-grow) histories (lit. 'words/stories continuing to grow'): These are the stories of family heroes, of ancestors long ago, and are regarded as true by family members. Some of these are secret stories, *sorae sohi,* and should not be divulged outside of family.

2) ***Tandono*** (*tandono* is a synonym for *tanume* 'spirit person'): These stories are of evil people, or supernatural characters such as devils or spirits, and inevitably end in death for one or more of the characters.

3) ***Kastom***[5] ***stori***: This is a Bislama term for 'custom story'. It seems that this is now the default term in Tamambo for other stories that may have once had a traditional Tamambo

[4] Occasionally, where there are two characters who more or less act together, such as two parents, or two sisters, or a cross-sibling pair, as in one of the Kastom stories here, I use A1 and A2, or B1 and B2. The only narratives where this would need to be extended are ones where there are, for example, five brothers, who act together and then separately. In this case I would use the characterisation as A1, A2, A3, etc., when they are acting as individuals, and A when they are functioning as a group.

[5] *Kastom* is a Bislama term referring to all things to do with traditional customs, laws, and customary ways of living. It is commonly used on Malo in lieu of the Tamambo word *vaivaia* 'customs, ways of

name,[6] but now are referred to primarily by this Bislama label. Older speakers might still use the word *sorae*[7] when introducing their story, as in two of the texts included here e.g. *Sorae niani matai…* 'this story is about…'. But if asked what kind of story it is, for example, *Sorae nian nia tandono?* 'Is this story a tandono?' they would say *Motete, nian nia sorae tinambu matai kastom* 'No, this is a different story about traditional custom' or in Bislama *Hemia wan kastom stori nomo* 'This one is just a custom story'. Other speakers, especially younger ones, use the Bislama term *stori* as a noun in place of *sorae*; as an intransitive verb 'to tell a story', it can also be transitivised with *-hi* as in *storihi*, as a synonym of *sorahi* 'talk about, relate'.

In analysing these stories, it seems to me that are there two different subtypes, as I describe below, but Tamambo people do not differentiate between them by actual name or label, unlike *sorae sulasula* or *tandono*. But the storyteller always states what they are about in the introduction, such as 'This story is about three fish', or 'I'm going to tell a story about two flying fox' or 'This story that I'm going to tell you is about people long ago' or I'm going to talk about an old custom on Malo'. So I justify my use of subcategorising these *kastom stori* in that the speaker, straight away, is telling the listener what kind of custom story to expect—either about animals or birds or fish, or alternately about some person or event *ana bongi tuai* ' in times long ago'. Depending on the main character, stated upfront in the first or second sentence, there will be differences in performance from the speaker, and consequently different expectations from the listener. Thus I refer to them here as Kastom stori 1 and Kastom stori 2.

- *Kastom stori 1:* These are highly allegorical stories of animals, birds, fish, never people. They are what traditionally could be termed a 'fable' in the sense of "a short story, typically with animals as characters conveying a moral" (Oxford Dictionary of English 2010).
- *Kastom stori 2:* These are stories of mythical people on Malo or people of the long ago who were different from today. Such stories tell of old customs, of origins of people and places. They are myth-like, in the sense of a myth being "a traditional story, especially one concerning the early history of a people, or explaining a natural or social phenomenon, and typically involving supernatural beings or events" (Oxford Dictionary of English 2010).

Each story type is described in turn.

4.1 *Sorae sulasula* 'Histories'

Sorae sulasula, literally the 'stories that continue to grow' are told to family by older family members to carry on the traditions and knowledge of family. Such stories are usually told in the evening, when the work of the day and the evening meal are both finished.

These are the histories of ancestors, and tell of exploits where variously the ancestor hero, always in my data a man, is a great chief, perhaps a *sumbwe* of high rank, who has killed many pigs, and can eat them raw and swallow the bones; or the ancestor is a *hambulevua*, a

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doing things'.

[6] See comments in Part 2 about the loss of population and loss of some traditional knowledge.

[7] *sora* is an intransitive verb 'talk'. When nominalised to *sorae*, it can mean 'words', 'language', 'story'. When transitivised to *sorahi* , it means 'talk about' or 'relate' (something).

man who can change at will into a shark, and so families of that person still respect sharks and do not harm them. Some *sorae sulasula* are secret to a particular family, although they might have other history that is more public. For example, one that I was allowed to hear alone, told of a child who had strayed away from the house, and inadvertently witnessed a secret ceremony that his father had the responsibility of keeping secret. Because of this, the child had to be killed, with his mother finding the body, thereby punishing not only the child but also the mother. It was regarded that it was her fault for not watching over the child safely at home. Even the narrator who told me this story in secret commented that it was a 'very hard' custom in the past. But any family member who would have heard this as a child, would almost certainly be wary of trespassing in places that were 'out of bounds', and women of the family would be reminded that it is seen as their responsibility to know where their children are and to keep them away from ceremonies or places that were just for men. The power structure was such that women would not dare to question the right of the father to make such a choice about his child's life. Though such a thing would not happen nowadays, men are still deferred to in almost all situations, and make all the important decisions at family or societal level. So such a story would reinforce the acceptance of male-dominated control in this patrilineal society.[8]

Other *sorae sulasula* tell of an ancestor who makes a promise to himself that he will not leave, unto death, an area until he catches some fish,[9] or where his walking stick, which has trapped him between two rocks, comes loose of its own accord. Often these ancestor heroes are martyrs, sometimes they live, but they never break a commitment that they have given. The brief text example given here, *Uluvou mai votahisana* 'The young man and his girlfriend' is of that type. Note that it is the last of four stories told by a family member about the people of his traditional place referred to here as 'B'.[10] I had previously accompanied members of the family up to their gardens at this place where their ancestors had lived in the past, and we were having a discussion a day or two afterwards about it. The speaker then introduced the series of stories as follows:

(82) *Iau kumbo sorahi na vaivaia nona tamalohi marasaku, mara B.*
'I'm going to talk about the customs of the people of my traditional place, men of B.'

(83) *Nira tamalohi ureuretahi.*[11] *Sorae talom kumbo sorahi …*
'They were very committed men. The first story I shall relate…'

The first story he told me at that time finishes with a description of the grave of his early ancestor, Avuri, and how it can still be sighted up there on the high plateau of Malo; the third story describes a strong *beru* 'housepost' that was installed by the family ancestors, and how it

[8] As more educated women, often from other islands, become wives of Malo men, they also can contribute to the economy of the family through paid work. It is my impression that as the economic input increases from some of these women, they are taking on positions of greater leadership within the community.

[9] This is the second in the series of four mentioned here, the last of which is the example shown in this paper.

[10] I have not included the actual Malo name, for privacy reasons.

[11] The term *uretahi* also means 'striving' 'endeavouring', 'not giving up', and with the reduplication to *ureuretahi*, particularly emphasises this characteristic of a person.

has now turned to stone, and still stands as a landmark for all to see. Thus for the fourth story, given here, the speaker did not again go into details as to the fact that this was family history.

Sorae sulasula	***Uluvou mai votahisana***	***The young man and his girlfriend***
Formula introduction	1. Sorae niani matai mara B. tinambu atea.	1. This story is about a different man from B.
State/setting 1, for man (A) and girl (B)	2. Nia uluvou. 3. Mole ovi, mo ovi mo iso votahisana atea.	2. He was a young man. 3. He was living [there], he lived there and then he had a girlfriend.
Event 1. A&B: Conversation & plan	4. Mo boi a sora telei votahisana. 5. Mo sora votahisana, ro na sorasora nira arua, na vit' na bongi tinambu, matan nambo ta sorasora nira arua.	4. He wanted to talk to his girlfriend. 5. He talked to his girlfriend, and so they chatted the two of them, they set a different time, so that the two of them would chat again.
Event 2. A: Memory strong B: No recall	6. Mo iso, bong rindi tovon mo mai, votahisana mo tinomaliohi na bong rindi. 7. Ne tamalohi rindi mo domdomia.	6. Then, when that day came, his girlfriend forgot the day. 7. But the man thought about it.
Event 3. A: Commitment	8. Mo iso, mo vanovano mo vano, mole turu vatarahi votahisana matan a mai nambo ro sorasora. 9. Ne votahisana mo tinomalio. 10. Tamalohi rindi, mo ate vatarahi votahisana, ne votahisana mote mai.	8. After that, he kept on walking, and was standing waiting for his girlfriend to come so they'd chat. 9. But his girlfriend forgot. 10. As for that man, he stayed waiting for his girlfriend, but she didn't come.
Event 4. A: Promise to self	11. Mo re, "Are votahisaku ate mai, ku turu aien a his ku mate".	11. He said, "If my girlfriend doesn't come, I'll stand here until I die".
Event 5. A: Death	12. Nona sorae mo masoso, mo turu mo his votahisana mote mai, mo turu aie mo his mo mate.	12. His words happened [as he said], he stood [waiting] for his girlfriend who didn't come, and so he stood there until he died.
Event 6a. People (C): Search	13. Bongi mo vano, wik mo vano, tamalohi rindi nate soaria. 14. Tamalohi na tahunju na saia.	13. The days passed, the week passed, and people didn't see that man. 14. People began to search for him.
Parallel event Event 6b. B: Recollection	15. Ne tovon nale saia, votahisana mo tineran. 16. Mo domdom na bong ri tovon tahisana mole vitia, mo re nambo vano, mo boi ambo sorasora teleia ana jara atea.	15. But while they were searching, his girlfriend remembered. 16. She thought of the time when her boyfriend had spoken to her, he'd said that they would go, he wanted to chat to her somewhere.
Event 7. B: Discovery	17. Matan sohena, vavine rindi, mo domdomia mo walau mo vano ana jara rindi. 18. Ne tovon mo kakau ana jara rindi, tahisana mo mate mo iso, suina manihi le eno.	17. Because it was so, that girl thought about it and ran away to that place. 18. But when she reached the place, her boyfriend was already dead, and only his bones were lying there.
Final state for A: Martyrdom	19. Tamalohi rindi mo mate matan votahisana. 20. Nona sorae tauhia, mo sorasora tauhi telei votahisana, mote boi ambo	19. That man died because of his girlfriend. 20 His words were a promise, he had promised his girlfriend, and he didn't

	kamue nona sorae, matan sohena, mo mate.	want to break his word, and because it was so, he died.
Formula conclusion	21. Evuinai stori.	21. [That's] the end of the story.

First there is a short formulaic introduction (Sentence 1). This minimalistic introduction is similar to what Huntsman describes for Tokelau: "Raconteurs normally preface a narrative by declaring 'I shall relate the *kakai/tala* of …' "(1995:124).

Next the state or setting of the characters is briefly given. The main characters are restricted to two, A and B, with C 'the people' only peripheral to the narrative. Scheub (1977:62) notes that "in its simplest form, patterning consists of a central character and a conflict". In this story, and also common to many of the same type, the central character A is in conflict primarily with himself, though the relationship A/B determines the outcome of the conflict. Each event lists the 'function' of the character, given as a noun (as per Propp). But the characters per se are not described. The listener knows that they are young and that they are from a particular area, but no other details area given—no description of appearance, no inkling of what kind of person they are, other than through their actions. This complete lack of description is the norm in Tamambo stories.

This *sorae* has seven 'events'. The events must be ordered sequentially in time, unless there is some overlapping, or occasionally, two events running parallel in time, for example, events marked 6a and 6b occur not sequentially, but parallel in time. Sometimes, the speaker will mark a transition in the event structure with a lexicalised clausal conjunction, *moiso* (see Events 2 and 3). This derives from

(84) mo= iso
3sg.REALIS finish
'it finishes'/'it is finished.'

While this still can be used in its literal meaning, its most common usage is in the function discussed here, as a temporal sequencer of realised events, such as 'then', after that'.[12]

After the 'events', a different state holds, and then a minimal ending, once again similar to a Tokelau tale where the narrator ends it "by saying 'The *kakai/tala* is finished' " (Huntsman 1995:124).

It can be seen that the events in this *sorae* depend primarily on A's decision. This is common to most *sorae sulasula*, in that they are primarily about a particular male ancestor and his relationship with others or his environment. In this case, he makes a promise to another, and whatever the circumstance, will not break his promise. This is a thread that runs through many *sorae sulasula*, and similarly, the theme of the broken promise and its consequences runs strongly in the highlands of Papua New Guinea (Stewart & Strathern 2002:100). In this type of Tamambo story, the factual events move on inexorably but no emotions are expressed. A brief explanation of A's actions is given in sentence 20, in the 'final state'. This is fairly unusual, in that explanations are rarely given. But as is the usual pattern,

[12] This can also be used as an aspectual denoting 'completive' aspect. As an aspectual it is usually clause final, while in conjunctive use, it can only be clause initial, as here. For more detail, see Jauncey (2011).

listeners are left to draw their own conclusions as to the reaction of B and C, or to guess at what might happen afterwards. This seems similar to what Klapproth describes for traditional Pitjantjantjara and Yankunytjatjara (2004:325), that their "storytelling tradition has higher tolerance for particular aspects of a story to remain ambiguous at the end of the storytelling". But importantly, there is an underlying cultural core value in this Tamambo *sorae*: it is heroic to not break one's word, even if one dies a martyr, and that to forget a promise to another is unforgivable.

As noted above, this story is one of a series of four about this particular family, and the earlier stories detailed particular landmarks. Since Malo people "conceive much of their history to be reflected on the ground and thus to be represented in features on the land" (Rubinstein 1978:155), so the landmark rocks or particular trees are the physically evident markers of ancestors, and reference to them reinforces one's right to particular land areas. To be familiar with these landmarks—their location and their history—is of immense importance in providing proof of land ownership, and disputes over land are common and time-consuming on Malo. Rubinstein (1978:33) notes that in his time on Malo "violence, formal discussion, confrontation" were all part of the course of events in land disputes. That has not changed, and in the late 1990s I witnessed the deliberate and complete vandalisation of a house on the shoreline by a neighbour who believed that it had been built overlapping his boundary. Ownership of land denotes power. Land allows space for all the sons of the family to have houses on that land, and in the gardens, sufficient land allows positive economic opportunities in growing cash crops such as vanilla or cacao.[13] Without land, a man is nothing.

Moreover, the names of the ancestors are also given in these family histories of the *sorae sulasula*, and these names are then bestowed again to sons of later generations in the family. Many of these names are particular to certain families, and these can also be used as evidence in establishing land claims in case of dispute (see Rubinstein 1978).

Thus *sorae sulasula* are a most powerful way of establishing and maintaining one's identity and sense of place in the world, through a continuing respectful knowledge of revered ancestors and the way they lived their lives. And the social and political power inherent in 'knowing' these *sorae sulasula* can assist in ensuring that one's land passes down from father to sons.

4.2 Tandono

Tandono are stories that can *only* be told at night. Similarly, the Marshallese fairy tale *inon* "must only be told at night" (Ben-Amos 1976:227, f.n. 45). On Malo, there is no restriction on the age or gender of the narrator, although the skill with which the *tandono* is told will vary from speaker to speaker.

They are stories of supernatural characters, devils or demons or evil people who trick or chase and harm others. These characters can vary in the extent of their villainy, but they are always in villain role, and such stories inevitably end in their death. Sometimes the death is also of the person who has been tricked, but there is always punishment of the villain for the

[13] When copra prices have slumped over the years, other more economically attractive crops have been planted.

wrongdoing. Similarly to the themes of Tamambo *tandono*, there is a story from Shefa province, further south in Vanuatu, which is given in the anthology *Nabanga* (coll. Gardissat 2005) about a devil that takes his victims through a series of opening doors into caves. The victims later escape while he is asleep, with retribution following for the devil—an almost identical tale to a *tandono* from Avunavae in western Malo. This notion of 'retributive logic' manifests itself throughout Melanesia, according to Trompf (1994:24). He claims that "in each culture area one finds sanctions for revenge …" and "the avowed motives behind payback and reciprocity are inextricably linked to normative explanations for significant events". Stewart & Strathern, too, note that in PNG narratives, "an overarching retributive structure tends to show through the story sequences" (2002:100). The Tamambo *tandono* is reflected in reality to some extent, in that when there is a sudden unexpected death on Malo, black magic is usually blamed. And then the purveyors of magic knowledge as described in Part 2 can be in demand to 'see' what caused the death, or to formulate retribution of some kind.

In any *tandono*, the same brief formula introduction is required as is already noted for the *sorae sulasula*. Then in the following *tandono*, the family setting is introduced of the initial characters, A, the parents, marked here as A1 as father, and A2 as mother. Where the parents are acting together, A is used; where an individual parent is part of an individual event, then A1 or A2 is used in the analysis. Similarly the children are listed as B, but as indicated as B1 or B2 as appropriate. The setting in time is also briefly introduced; there is no description of the people, no description of the setting— indeed, with no further preamble, the action begins. Four events here occur before the *tanume*,[14] the devil, is introduced, here shown as C. Once again, note that there is no description of the physical characteristics of this particular devil. In fact, in many *tandono*, the ogre or devil appears to have the appearance and initial behaviours of a man, not because he is described as such, but because he is mistaken for a man. In other *tandono*, the 'evil' character can be a wicked grandmother, or a *vonjavi*, a long-haired woman believed to live in the 'olden days'.

Tandono	***Lei mana tanume tawera***	***Lei and the big devil***
Formula introduction	1. Kumbo stori atea matai tamalohi atea.	1. I'm going to tell a story about a man.
Setting of family: man (A1), wife (A2), boy(B1), girl (B2)	2. Mo lai votambaluhina, na vasusu, na-natura arua—atea vavine, atea muera. 3. Muera rindi hisana Lei, vavine rindi kute rongovosai hisana.	2. He took a wife, and they gave birth to two children—one girl, one boy. 3. The boy was called Lei, and as for the girl I don't know her name.
Setting in time and place	4. Mo iso ro, nale ov mo vano na bong atea bong tano.	4. So then, they continued to live there until one day it was time for clearing the land.
Event 1. A: Instruction	5. Mo iso ro, tinara mai tamara na vitia na re "Nole ov, kamam ka sahe aulu".	5. So then, their mother and father told them "You're staying, we're going up to

[14] One's own personal spirit is *tanume-na* (spirit-POSS:3SG) 'his/her spirit or soul', but the word *tanume* without a possessive marker is used for an external evil spirit or devil. These 'external' spirits are always to be feared, as their motives are usually to harm or frighten, and they are never far away. Cf. *bukere*, *duli*, in 4.3.2.

	6. “Nole ate, nole ate wanju aimo note vano avareo, matan tanume tawera atea le ovi ana wamba niani le hani vauranji.”	the gardens”. 6. “You stay, stay quietly at home and don’t go outside because a big devil lives in this cave and he eats children.”
Event 2. A: Departure	7. Mo iso ro vauranji arua nale ate, tamara mai tinara na sahe aulu.	7. So the two children stayed there, and their father and mother went up to the gardens.
Event 3. B1/B2: Conflict	8. Mo iso, na ate mo vano turu hitahuna, muera Lei, mo re “Hinda ka sahe avareo, ka ate mo vano ku rongo ku taiti, ka sahe avareo ka lai lang”. 9. Votasina mo re, “Atete, matan Voi mai Mama na horonda nare kate sahe—are ka sahe tanume tawera ambo haninda”. 10. Mo re, “Aaa, ka sahe,” mo ngara, mo ngara mo vano le vai a mate.	8. Then, they stayed there and time went on until the last born, the boy Lei, said “Let’s go outside, we’ve stayed on and on here and I feel bored, let’s go outside and get some air”. 9. His little sister[15] said, “No, because Mum and Dad blocked us [from doing that] they said we’re not to go outside—if we go outside the big devil will eat us”. 10. He said, “Aaa, let’s go out”, and he wailed, and kept on wailing until he was close to dying.
Event 4. B: Violation of instruction	11. Mo iso vonjohona mo turu mo laia na sahe avareo. 12. Na sahe, na soari nanatui toa wariri hi.	11. Then his big sister took him and they went outside. 12. They went out, and saw some little chickens.
Event 5. B1: Meeting devil (C)	13. Mo turu na vano nale dingi toa, na ding toa mo vano sohotina Lei mo walau mo mahere mo vano ana wambai tanume muende, tanume mo turu mo laia mo jivo aimo, ana wambana.	13. That being so they ran and were chasing the chickens, and they chased the chickens until her brother Lei ran straight into that devil’s cave, [and] the devil then took him down into his home, into his cave.
Event 6. B2: Search / awareness of situation	14. Mo iso ro, vojohona mole saia, mole saia mo vano, mo vano ana wambai tanume muende, mo tovtovi, uranji rindi mo vai 15. Mo re, “O sivahi o mai niae?’ 16. Mo re “Tanume mo laiau”. 17. Mo re “Bole Mama mo vitia te? 18. Mo re kate vano avareo. 19. O soari tovona tanume mo laiho, kumbo sivaniho!”	14. So then, his older sister was searching for him, she kept on searching and got to that devil’s cave, called out, and the child answered. 15. She said, “What did you do to get over there?” 16. “The devil got me”, he said. 17. She said, “Well what did Dad say eh? 18. He said we weren’t to go outside. 19. See now the devil’s taken you, what am I going to do about you!”
Event 7. A: Awareness	20. Mo iso ro vavine mo tangtang, mole tangtang tamana mai tinana nale turu aulu na rongoa, mo iso tinana mo re “Ku rong sohen leoni vonatuku”. 21. Tamana mo re, “Motete, vuiaru bulan Taharo le roro”.	20. Then the girl sobbed, she was sobbing and her father and mother up in the gardens heard her, then her mother said. “I hear my daughter’s voice”. 21. Her father said, “No, it’s Taharo’s[16] she-oak tree making the noise”.

[15] Probably a mistake by the narrator, as elsewhere later in the *tandono*, she refers always to an older (and presumably more sensible) sister.

[16] Taharo is a neighbour.

	22. Mo re “Motete, ku rongo leoni vo-natuku, le viti sohotina, mo re tanume tawera mo hania”. 23. Mota tangtang vaharuana na rongoa.	22. She said “No, I hear my daughter’s voice, she’s speaking of her brother, she says the devil has eaten him”. 23. She [the daughter] sobbed again for the second time and they heard her.
Event 8. B1/B2: Interrogation	24. Mo iso ro, mo dam sohotina mo re, “Balosuro, tanume mo donomiho mo tau ana savam?” 25. “Mo tau ana bungeku.”	24. So then she [the girl] asked her brother, “Right now, the devil has swallowed you up to where?” 25. “He’s got me up to my knee.”
Event 9 A: Return B2: Interrogation (parallel events)	26. Mo turu, mole tangtang, muende arua na rongoa, na turu na toro na hara hanhan mana simba na mo eno, na turu na mule; na mai na mai na mai ana livuhai sala, mo iso ro vonjohona mo damia, mo re, “Balosuro, mo donomiho mo tau ana savam?” 27. “Ana bungeku.” 28. Mo iso mo tangtang mole sorahia sohena mo re, “Mo hani mo tau ana bungena”. 29. Na mai, na mai maravitu ana tahasi rindi ro, mota damia, vonjohona mo damia. 30. Mo re “Aaaa motete, balosuro mo sahe ana domiku”. 31. Na walau na mai na mai, na kakau aimo asara ana wamba rindi.	26. That being so, she was sobbing, and the two of them heard her, so they left their food and bush knives there, and came on home; they kept on coming as far as the middle of the big road, and then his sister asked him, “So now, he’s swallowed you up to where?” 27. “To my stomach.” 28. Then she sobbed as she was repeating “He’s eaten him up to his stomach”. 29. They came, they came close to the stone [of the cave entrance], and again the sister questioned him. 30. He said, “Aaaa no, now he’s up to my neck”. 31. They ran coming coming, and reached their place in the cave.
Event 10. B1: Death	32. Mo tere ata sora hina uranji muende.	32. No more talking again from that child.
Event 11. A1 → B2: Chastisement	33. Mo iso ro tamana mo re, “Ku vitia ku re nole ate aimo, motete, ka sora no oloi kamam”. 34. “Sava mo komo natuku?” 35. Mo re “Tanume mo hania”.	33. Then his father said, “I told you to say home, but no, when we speak you must respect us”. 34. “What has destroyed my son?” 35. She said, “The devil ate him”.
Event 12. A1: Preparation for retribution	36. Tamana mo walau mo jivo aimo, mo lai na rimba, mo lai na baka, mo mai mo turu mo vit na tahasi, mo re “Wamba o sau langa! Wamba o sau langa!”	36. Her father ran down home, took the axe, the bow, he came then and he spoke to the stone, and said “Cave open up! Cave open up!”
Event 13. A1/C: Interrogation & argument	37. Mo jivo aimo mo soari na tanume tawera le ate. 38. Tanume mo re “Niho o mai!” 39. Mo re, “Iau ku mai”. 40. “Kule sai natuku, natuku mo mai nian.” 41. Mo re “Motete, mote mai, bole o saia”. 42. Tamana mo turu mo saia mo saia, mote soaria. 43. Mo re, “Bole o tovia!” 44. Mo re “Lei!” 45. Mo re “Mmmm …”	37. Down he went and saw the big devil there. 38. “Come in!” said the devil. 39. “I’m coming” he said. 40. “I am looking for my son, my son came here.” 41. “No, he hasn’t come, well you have a look for him.” 42. His father then looked and looked for him, but didn’t see him. 43. He [the devil] said, “Well call him!” 44. “Lei!” he said. 45. He [the devil] said “Mmmm…”.

	46. Mo re "Ku tovia le vai teleiho, aiso niho o hani natuku". 47. Mo re "Motete, bole o juhati". 48. Mo re, "Iau, kute sa ku juhati, iau kule ate aien manihi." 49. Mo re "Bole o sivan o mai?" 50. Mo re "Ku haraha ku mai". 51. "Bole o haraha." 52. Mo haraha mote rongo. 53. Mo re "Bole o sivan o mai nian?" 54. Mo re "Ku jurete". 55. Mo re "Bole o jurete". 56. Mo jurete mote rong.	46. "I called out close up to you, perhaps you ate my son." 47. "No" he said, "that would be you moving along". 48. "Me, I didn't get up and move along, I'm just sitting here". 49. "Well, what are you making happen to get here?" 50. "I'm crawling forward." 51. "Well then, crawl." 52. He crawled along but he [the devil] didn't hear him. 53. He [the devil] said, "Well what did you do to get here?" 54. "I wriggled across." 55. "Well then wriggle across". 56. He [the father] wriggled across but the devil didn't hear him.
Event 14. A→C: Retribution	57. Mo re, "Niho o hani natuku", le vitia sohena mo kolo na nona rimba, mo tai tusi na batuna mo dare uai na bungena, mo lai takai natuna.	57. [Then] he [the father] said, "You ate my son", and as he was speaking like that he pulled out his axe, cut across his [the devil's] head and slit open his belly, and removed his son.'
Final state. B2: Sung lament	58. Mo iso ro, vuete non vosohotina non Lei sohen muende nian—vuete nian mo re: *Lei-o tambum ambea* *Lei-o tambum maringo* *Lei-o, Lei-o, rio Lei,* *Sohotiku Lei-o.*	58. So then, Lei's sister's song was like this—this song says: *Lei-o your grave is where* *Lei-o your grave is in the west* *Lei-o, Lei-o, little person Lei,* *My little brother Lei-o.*
Formula conclusion	59. Evuinai noku stori.	59. [That's] the end of my story.

There is only a two-way interaction in many *tandono,* that is, A/B, such as protagonist versus villain. In others, as in the preceding example, there is a three-way interaction, that is, A/B, B/C, A/C. Here, the initial interaction is only between various combinations A/B for the first four events for this *tandono* where the functions are respectively described as instruction, departure, conflict, violation of instruction. While C, the devil, is briefly introduced in event 5, all events then until event 13 are various interactions between A/B or B1/B2, the functions being search, awareness, interrogation, return, death, chastisement, preparation for retribution. Then a third set of relationships A/C occurs in events 13 and 14.

The event patterns, and the differentiation between events, as well as being shown by the different functions, is also marked by many Tamambo narrators by the use of verb phrases operating with a conjunctive use. These are typically of the following:

- *moiso* = *mo-iso* 'then', or 'after that', already described in 4.1
- *moisoro* = *mo-iso-ro* 'lit. it is finished thus', which can mean 'so then', 'so after that', 'thus'
- *mo turu (aie)* lit. 'it stands (there)'. As a sentence initial clause, this has been

lexicalised as the equivalent of a discourse linker with a meaning approximating 'that being so'.

The narrator of the *tandono* shown here uses these to indicate almost every new event.

The lexicon used in *tandono,* and in other kinds of stories, does not differ from the usual day-to-day lexicon of speakers. But in *tandono* there is almost always a song or lament,[17] often repeated, and such songs often have 'old' words that are sung but not known in meaning.[18] Repetition is also a particular discourse characteristic of this *tandono,* where questions and answers with slight differences each time to either the question or answer are repeated. This narrative device creates an expectation in the listener as to 'what happens next', carrying them along with the story. This is shown in events 8, 9 and again in 13.

In the long direct speech segment in event 13, note that there is *mo re* 'he says', before every utterance. It is often difficult in the written text to track just who is supposed to be speaking, but in the oral performance, there is usually no question of which character is which, as the speaker, as skilled performer, will often assume a different 'voice' for each. Other storytelling devices that Tamambo people use include the narrator's "use of intonation and other prosodic features, the use of gestures and facial expressions to create a vivid rendering of the story", just as Klapproth describes (2004:387) for narratives in another orality-based culture.

The inevitable retribution occurs quickly as the last event of the *tandono*, and after the lament, the narrator ends it with a brief conclusion (as seen in the *sorae sulasula*). This seems very similar to what McGregor (1989:84) describes for Gooniyandi narratives: "The last words of the narrative bring us back full circle to the first words: the narrator initially said here is his story, and finishes with a statement to the effect that that's the end of the story".

There are no happy endings in *tandono*. In the classic Anglo-Western fairy tale all is finally resolved and there is no final ambiguity because the over-arching principle is the "emphasis on closure, harmony… and a well-ordered world" (Zipes 1994:147). But the notion of 'they all lived happily every after' does not occur in Tamambo stories. It is more usual for the house to burn down, the chickens to fly away, and at least one person to die.

The narrator of the story does not give any explanation of what might happen afterwards, nor overtly suggest that the story carries any message such as 'obey your parents' or 'if you harm others, punishment will come your way', although to a western listener, this would seem what is being conveyed. Indeed, similar tales come from other Vanuatu islands. For instance, the anthology of ni-Vanuatu stories, *Nabanga*, recounts a story from Malakula (2005:114–15) where children also disobey parents with disastrous results. In that story too, an older sister tries to dissuade her little brother from his behaviours. And as Dundes says (2005), the constants in different stories in different cultures "are human relationships"… "there are parent-child struggles in folklore around the world".

But other *tandono* that I have recorded tell of characters that are tricked by an evil demon, but by their ingenuity, escape from harm, unlike the boy Lei in the story here. Such

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[17] The *tandono* example here has only one lament at the end.

[18] See comments about 'old language' in Part 2.

stories suggest that children do often disobey their parents, but can be resourceful enough to come out unscathed, a very different kind of message. However, it may be that for some listeners to be at once frightened and entertained may be enough, and the 'lesson', if any, is of less import. But in all *tandono*, the evil-doer dies, a satisfactory and reassuring conclusion for the audience that retribution does occur.

Tandono are the only kind of stories that can be told at *dondo asua*, the ninth night of the mourning ceremonies following a death, before the ritualised 'giving out'[19] to relatives on the tenth and last day. Perhaps this is because death is always an inevitable part of a *tandono*. When a person dies, it used to be custom for a close relation (usually a man) to arrange with someone who is in a grandson/grandfather relationship with the deceased to organise the *tandono* session.[20] If enough story tellers can be found, and enough *vatu* for their payment (no longer tobacco), these people come together and proceed to the grave with food, yams, etc. It is important that enough story-tellers with enough *tandono* can be found to be able to continue all night. The story-tellers form into two groups, and as a narrator from one group finishes their story, a verbal challenge is thrown out to the other group to continue with another. This continues until daybreak.

The skill of the 'hired' storytellers in the actual performance arena of the *tandono* session mirrors their own self-confidence, reinforces their self-identity and their claim to respect in the community. A skilful raconteur can ground the story in present time and space by reference to familiar places and activities. In the *tandono* example here, the story revolves around going to up to the gardens for *bong tano*, a particular time of the year when the old gardens are cleared, and it refers to familiar places such as *sala* 'the big road' where people walk along everyday, and it mentions chickens and bush knives and caves and she-oak trees. All those references make it relevant to the actual life and place of the listener, even more so as the victim Lei is buried *maringo*, in 'the west', as this story was told in the west of Malo to an audience of *namaringo* 'people of the west'.

Malo people tell me that the *dondo asua* is to pay final respects. So it reflects on the family who are in mourning. A successful *tandono* session on the ninth night means that kin who have arranged it have carried out their obligations well, and fulfilling obligations is all-important. In this way it is a kind of social insurance, in that noone can accuse them of not doing the right thing.

But although such ceremonies still exist in the west of the island,[21] they are lessening in number or changing in content. First, there are less people now who know lots of *tandono*; second, finding payment for the storytellers is difficult for some families; thirdly, there is some concern that such a ceremony is contrary to Christian teachings. As a result, there have recently (in 2011–12) been 'respect' sessions on the ninth night, where *tandono* have been replaced by a long session of hymn-singing by the grave. It is yet to be seen if whatever

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[19] After a death, family and friends bring offerings to the family in the way of yams, meat, money, etc. At the end of mourning on the 10th day, there is *havuhavu* a 'giving out', where these offerings are then distributed back to those attending according to the extent of their relationship to the deceased.

[20] One may not ask one's brother-in-law, who is in a particular 'respect' relationship.

[21] I have been told that the last one in the 'east' was in 1977, and that many children in the south-east area have never heard *kastom stori* or *tandono* (Nelly Caleb p.c.).

cultural core values are embedded in some of the *tandono*, that parents are to be obeyed, tricksters to be feared, that children must be cared for, that deceit and harm are always punished, are equally reinforced through this change in performance and content.

4.3 Kastom stori

4.3.1 Kastom stori 1

In my experience, these stories can be told by any age, gender, and at any time, although in the evening after the meal is usually the preferred time for sharing stories.

The characters are always non-human, with a leaning towards fish, birds, reptiles, as there are only introduced mammals on the island. This kind of *Kastom stori* can explain how certain fish came to be the shape that they are, how the flying fox learnt to hang upside down, why certain birds hide in the bush and others not, and so on. Such tales inform and describe in some detail the nature of the local birds or fish and topography—and there is often great hilarity at such a storytelling, a clever storyteller getting as much enjoyment from performing as the audience does listening.

As has been seen with other Tamambo genres, the *kastom stori* here, *Toa mana mala*, 'The hen and the hawk' has the usual very brief introduction. It has only two bird characters, A, the hen, and B, the hawk, and so the interaction is only A/B.

Tandono	***Toa mana mala***	***The hen and the hawk***
Formula intro.	1. Sorae atea nian matai toa.	1. This story is about a hen.
Event 1. A (Hen): Nesting	2. Toa atea mo tao ana marahamba, aulu.	2. A hen made a nest in the white grass, up in the bush.
Event 2. B (Hawk): Attack	3. Le eno, mo iso mala atea nia le avu lalihi. 4. Mo avu, mo av, mo av, mo av, mo vano mo soar na toa le eno ana toluna. 5. Mo av, mo mai, mo mai, mo mai, mo mai, mo mai maravitu, mo av mo sa aulu mo ji mo jivo, mo turu matana mo tai na toa muende. 6. Mala mo taia, Toa mo avu, Toa mo av Mala mo lai na toluna mo va mo hania.	3. There she was, and then a hawk was flying all about. 4. He kept on flying, flying, flying and flying and saw the hen there on her egg. 5. He flew, and came on and on and on, he came closeby, then soared up and came down down, and then struck that hen. 6. Hawk struck at her, and Hen flew off, she flew away and Hawk took her egg away and ate it.
Event 3. A: Flight and song	7. Toa mo avu, Toa mo lailai vuete: *Ku tao ambea* *Mala mo soari na toluku ro* *Ku tao ana marahamba,* *Mala mo soari na toluku ro* *Kute tao aiente jara duhu* *Sekohai, sekohai-hai.*	7. Hen flew away, and Hen sang: *I nested where* *Hawk saw my egg* *I nested in the white grass* *Hawk saw my egg* *I didn't nest in a good place* *Sekohai, sekohai-hai.*
First repeat of Event 1 in different location	8. Ai-eee … Toa mo avu. 9. Toa mo avu mo avu mo avu mo avu mo mai mo tao ana vumbaka atea. 10. Mo jivo mo ate aie.	8. Oh dear … Hen flew off. 9. Hen flew and flew and flew and flew and came and made a nest in the banyan tree. 10. Down she went and sat

		there.
First repeat of Event 2	11. Mala nia le saia mo vano mo han na toluna mo iso le saia, mo saia mo saia mo saia mo va mo soaria. 12. Mo va mo tao ana vumbaka aulu. 13. Mo turu, mo avu mo va mo va mo va mo sahe aulu, mo hilo mo jivo mo soari le eno. 14. Mo turu vahatea mo av' mo jivo mo tai, Toa mo avu. 15. Toa mo avu, Mala mo lai na toluna mo vano mo hania.	11. Hawk was searching for her, time went on and he'd already eaten her egg and so he was searching, keeping on searching and then he saw her. 12. She'd gone and nested up high in a banyan tree. 13. Then, he kept on flying on and on and on up high, and looked down and saw her there. 14. That being so he flew down in one go, and struck at her, (but) Hen flew off. 15. Hen flew off, Hawk took her egg away and ate it.
First repeat of Event 3 with reference to different location	16. Toa mo avu, Toa mole lai vuete: *Ku tao ambea* *Mala mo soari na toluk' ro* *Ku tao ana vumbaka,* *Mala mo soari na toluku ro* *Kute tao aiente jara duhu* *Sekohai, sekohai-hai.*	16. Hen flew off, and she was singing: *I nested where* *Hawk saw my egg* *I nested in the banyan tree* *Hawk saw my egg* *I didn't nest in a good place* *Sekohai, sekohai-hai.*
Second repeat of Event 1 in different location	17. Ale, Toa mo avu. 18. Mo av, mo av, mo av mo mai mo tao ana vurara atea. .	17. Okay then, Hen flew off. 18. She kept on flying and flying and came and nested in a coral tree.
Second repeat of Event 2	19. Mo tao ana vurara le eno, Mala le saia. 20. Mo saia mo saia mo saia mo saia mo vano mo soaria, mo av mo sa aulu mota jivo, mo turu matana mo jivo mo taia vahatea mo vano, Toa mo avu.	19. She nested in the coral tree there, while Hawk was searching for her. 20. He kept on searching and searching for her, and then saw her, (so) he flew up high and again came down, came down and struck at her in one go, and Hen flew off.
Second repeat of Event 3 with reference to different location	21. Toa mo av, mo av mo av, mo av, mo av mo av mo mai aulu tawera. 22. Mole av mole lailai wete: *Ku tao ambea* *Mala mo soari na toluk' ro* *Ku tao ana vurara,* *Mala mo soari na toluku ro* *Kute tao aiente jara duhu* *Sekohai, sekohai-hai.*	21. Hen flew, she flew and flew and flew and flew and flew towards the big hill. 22. While she was flying she was singing: *I nested where* *Hawk saw my egg* *I nested in the coral tree,* *Hawk saw my egg* *I didn't nest in a good place* *Sekohai, sekohai-hai.*
Third repeat of Event 1 in different location	23. Mo iso mo turu, Mala mo ji mo laia, Toa mo av mo mai mo tao aulu vorivori. 24. Mo tao aul vorivori.	23. That being so, Hawk went down and pecked at her, so Hen flew towards the little hill and nested. 24. She nested on the little hill.
Third repeat of Event 2	25. Mo iso Mala ni mo vano, mo han na toluna mo iso, mole saia, more, "Kumbo ta han na toluna, ale a vano kumbo han na avatina". 26. Mo turu vahatea, Mala mo mai, mo av mo av mo av, mo … mo soaria aulu vorvori le ate, le ate ana toluna. 27. Mo av mo mai mo ji mo taia vahatea, Toa mo avu.	25. Then that Hawk went on, he had already eaten her egg, and was searching for her, and said "I'll eat her egg again, if she's goes I'll eat the fourth one". 26. Then all at once, Hawk came, and flew and flew and flew, and then he … he saw her there on the little hill, sitting on her egg. 27. He flew down

		and struck at her all in one go, and Hen flew off.
Third repeat of Event 3 with reference to different location	28. Toa mo avu, mo lailai vuete: *Ku tao ambea* *Mala mo soari na toluk' ro* *Ku tao aulu vorivori,* *Mala mo soari na toluku ro* *Kute tao aiente jara duhu* *Sekohai, sekohai-hai*	28. Hen flew off, and sang: *I nested where* *Hawk saw my egg* *I nested on the little hill,* *Hawk saw my egg* *I didn't nest in a good place* *Sekohai, sekohai-hai.*
Fourth repeat of Event 1 in different location	29. Mo av mo mai mo tao ana vu-mbahura, ana barambara.	29. She flew and came and nested in the nambakura tree, on the shoreline.
Fourth repeat of Event 2	30. Mo tao aie, Mala mo lai na toluna mo hania mo iso, le saia mo re, "Kumbo ta han na tolui toa rindi, le vano ne kumbo hania". 31. Mo turu mo av, mole saia mole saia mole saia mo va mo soaria. 32. Mo soari na vumbahura, mo av mo ji mo taia vahatea toa mo avu.	30. She nested there, Hawk had taken her egg and already eaten it, so as he searched he said, "I'm going to eat the that hen's egg again, she's going but I'll eat it". 31. Then he flew off, and he was keeping on searching and searching and searching and then he saw her. 32. He saw the nambakura tree and flew down and pecked the hen once and she flew off.
Fourth repeat of Event 3 with reference to different location	32. Mo lailai vuete hin Toa: *Ku tao ambea* *Mala mo soari na toluk' ro* *Ku tao ana vumbahura,* *Mala mo soari na toluku ro* *Kute tao aiente jara duhu* *Sekohai, sekohai-hai.*	32. She sang the Hen song: *I nested where* *Hawk saw my egg* *I nested in the nambakura,* *Hawk saw my egg* *I didn't nest in a good place* *Sekohai, sekohai-hai.*
Fifth repeat of Event 1 in different location	33. Toa mo avu mo jiv, mo tao ana lingling atea le sale ana tarusa.	33. Hen flew down, and made a nest on a piece of driftwood floating in the sea.
Fifth repeat of Event 2	34. Mo iso, le eno aie, Mala nia mo lai na toluna mo vano mo hani na toluna mo iso mole saia, mo re, "Kumbo ta han na toluna." 35. Mole av mole av mole av mo va mo soaria le ate ana linglingi le ate, mo av mo sahe mo jivo mo ta mai, mo jivo mo taia. 36. Mo ji mo taia, mo tai suvu, mo jiv' ana tarusa.	34. Then, while she was there, Hawk took her egg away (from the nambakura tree) and ate it, and he was searching for her, and said, 'I'll eat her egg again'. 35. He kept on flying flying flying and saw her sitting there on the driftwood, (so) he flew up and then came down again, down and struck at her. 36. He came down and struck at her, he swooped, and down he went into the sea.
Event 4. B: Punishment	37. Mo donomi na tarusa, mo mate.	37. He swallowed the saltwater, and died.
Formula conclusion	38. Le iso ro, evuinai stori balosuro.	38. It finishes thus, it's the end of the story now.

The event structure of this story is very simple; basically there are only three events for the main part of the story, with the functions of those events shown as nesting, attack, flight. But this simple event structure keeps listeners entertained by the repeats of each function, but each time in a different location. In Anglo-American culture, there is an avoidance of certain kinds of repetition as Toelken notes (1975:275). This is completely different from the Tamambo repetition of these songs, or the question/answer sequences that were in the *tandono* in the previous section. In such repetitions, there is a kind of compelling insistence conveyed by the repeating pattern, or there can be slight subtle differences to each following repetition, as here with a different place named in each repeat. In fact, in this story the events repeat another four times, until in the fifth repeat, there is a different event outcome, and B gets his punishment. Similar to all Tamambo stories, of whatever type, there is then no further explanation; events are what count, and the story is over, with the usual formulaic conclusion.

The particular charm of this *kastom stori* is the repeating song, which is only an occasional feature of this type of tale. I listened to it as told by an old man, a highly respected elder of the church who was also very knowledgeable about long-forgotten musical instruments and custom dances. He chuckled as he told it, revelling in the patterning of the story and the song, and the humour underscoring the silliness of character A, and the inevitable demise of character B. Perhaps more of these stories had songs originally, and it may be that only older people who are practised performers are those who still know the songs associated with the tales. It draws in the audience in that as Scheub says (1977:63), "this patterning cultivates in the audience a sense of expectation, a predictability… there are certain modifications in each of the repetitions, images change slightly, locales shift … but what does not change in the set of central relationships".

One of the discourse strategies that this storyteller uses is the repetition of verb phrases to signify action continuing for a long time. So in Sentence 4, we see *mo avu* 'he flew' repeated three times, and in sentence 5, a repeat of *mo mai* 'he came' four times to indicate that the action went on for some time. Similar repeating verb phrase occur in sentences 9, 18, 20, 21, 26, 35 to show A's long searches for a nesting place, and B's relentless long pursuits. Another strategy to show continuing action is the use of *mo vano* lit. 'he/she/it goes', often shortened to *mo va*, used as a 'continuative aspectual'[22] after another verb phrase to indicate that the action of the previous verb kept on, as for example in Sentences 13, 31, 35.

Although this story is 'fable-like' in the traditional sense of an Anglo-Western fable, there is no 'moral'[23] actually spelt out. It is a tale of two birds. As Edmonson says (1971:139) of similar kinds of stories, "the animal protagonists of such stories are not moral beings … entrapped in their several natures, they behave as they inevitably must …", but while no 'morals' are stated in such tales, he suggests that "… they are strongly implied". So while such stories certainly entertain the listener, at the same time they evoke a response to the behaviour of the story characters. While the audience might laugh at the song and shake

[22] See Jauncey (2011) for more discussion on aspectuals.

[23] The term 'moral' is used here the sense of "a lesson that can be learned from a story or experience" (Oxford Dictionary of English 2010) and is used in reference to the dictionary definition of a traditional 'fable' (Part 4).

their heads at the unfortunate, predictable choices of the hen in this story, they are also likely to feel some sympathy towards this not-very-bright bird as she repeatedly loses her eggs to the hawk. And then the listeners can also admire her persistence in always trying to find another safe place, and they can feel a sense of satisfaction that the villain, hawk, finally gets his come-uppance. So there is a social dimension in this for the audience—the weaker can prevail if they keep on trying, and the perpetrator of the relentless cruel pursuit is dealt the ultimate penalty. Justice has been served.

In this particular *Kastom stori*, there is reference to six different locales—the *marahamba* 'long white grass', *vumbaka* 'banyan tree', *vurara* 'coral tree', *aulu tawera* ' the big hill', *aulu vorivori,* 'little hill', *vumbahura,* the huge shoreline tree 'tamanu of the sea'. As with the local references in the *tandono* in 4.2, these ground the narrative in the immediate locality—listeners know just what the *marahamba* looks like and where it is growing, they know the trees, and they know the particular areas known as *aulu tawera* and *aulu vorivori*, where they walk most days on the way up and down to the gardens. They can identify with those familiar local places—this is part of their environment and their life—so the story is one of many that contributes to a validation of who they are and their world. It provides one of the variety of ways, as Cruikshank describes (1998:2) that "continuity, locality, and a sense of belonging are culturally constituted".

4.3.2 Kastom stori 2

These stories are told by older people who are regarded as having knowledge of what happened *ana bongi tuai* 'in the olden days/ long ago'. They are not stories that most young people would relate. Although they may be familiar with the theme or have heard the story, a younger person would not feel they have the authority to tell of such things and it would not be respectful to do so. The people who have acquired the stories have had them passed on to them by the previous generation, and these people are often chiefs or those of high stature in the community because of their personal qualities, and who are afforded a considerable level of respect.

Such stories tell of how the first ancestors came to be on Malo, as with the story given here. There are also particular stories associated with the small dwarf-like people, *duli*,[24] who are supposed to have lived on Malo long ago, who sometimes helped in the gardens, but sometimes stole food. They also tell of how the island people learnt to use the different *manja* 'fighting sticks' as weapons and as protection, of how *bisuroi*,[25] regarded on the island as the 'king' of yams, suddenly appeared on Malo.

So these stories are of what could be regarded as a history of place, unlike the *sorae sulasula* that is restricted to histories of one's ancestors. In the *Nabanga* anthology (2005) there are many stories from different places in Vanuatu about how rocks, mountains, and rivers came into being. How much of these stories, on Malo and elsewhere, is regarded as true, is difficult to know and perhaps not relevant to determine. As Stewart & Strathern

[24] These 'little people', *duli*, lived in the past, whereas *bukere*—naughty little gnome-like creatures—are still thought to be about, causing mischief, such as upsetting a wood pile or taking washing off the line.

[25] *Bisuroi* are soft yams up to 50cm in length that are regarded highly, often being presented in special ceremonies.

(2002:91) point out in discussing Hagen oral narratives, "whether or not they literally happened is not one [an issue] that people raise". But it seems to me that most Tamambo stories of this kind are regarded as 'true' by many people; for example, people do seem to believe in *duli* from long ago, and a similar Malakula story appears in *Nabanga* (2005:124–25) about dwarves that help in the garden. As with the Hagen community, "the spirit world … is also felt to impinge on, and to be the hidden background to people's everyday lives, so there is not distinct boundary between the everyday world and the spirit world" (ibid: 23). It is part of their world at home, in the gardens, at the shore, and on the high plateau, and certain places are avoided because of these beliefs. Some people dislike *vovombo* 'fireflies' because they regard them as little 'devils', and some children will not play near the big banyan trees because they have been told that bad spirits live within. The beliefs act "as a kind of background or 'landscape' of thought, experience, and sensation, against which everyday action takes place" (ibid: 94).

The 'kastom stori' here reflects what Poignant says (1985:85), that "most Melanesians do conceive of a time in the beginning, when mythical people dwelt on earth". She also describes various beliefs held by Melanesian people about people's origins as coming from the sky fully grown, "or from underground or released from a tree". Indeed, the pattern of two ancestors emerging from an origin place is a common one throughout northern Vanuatu. This story follows the last scenario and tells of the particular 'origin place' on Malo.

Kastom stori 2	***Asanda***	***Our traditional place***
Formula introduction	1. Stori atea niani matan kumbo sorahia nia tamalohi mo tahunju asanda mo re sava asanda bongi tuai. 2. Kastom stori nian nia mo walau sohen muende nian.	1. This story that I'm going to tell is about people who began in our traditional place it is said long ago in our place. 2. This custom story goes along like this.
Setting in time and place	3. Tuai Natamambo, mo tete tamalohi a ovi aien. 4. Ne ana jara atea Malo asanda na hisana Suleha. 5. Kastom stori mo re tamalohi mo tahunju ana jara niaro.	3. Long ago on Malo, there were not people living here. 4. But in one place on Malo our traditional place is called Suleha. 5. The custom story says that people began in that particular place.
Event 1. A: Fruiting	6. Burusi atea mo hao ana vuhatombola atea mo sahe mo vira, mo vira mo vano mo iso ro mo turu mo loa, mo loa mo vano mo mahere matan nona bong' jovia.	6. A fruiting vine[26] climbed up into a dragon plum tree, it grew and fruited, it fruited until it ripened, it kept on ripening until it was time for it to fall.
Event 2. A: Division	7. Mo iso mo jov mo jivo, mo vinjahia ana lambiti vuhatambola rindi mo vuai arua.	7. Then it dropped down, and struck itself hard on the buttressed roots of the dragon plum tree and split into two.
Event 3. A: Growth	8. Atea mo vano mo ovi ana tavalui vuhatambola, lambiti vuhatambola, atea mo vano ana lambiti vuhatambola. 9.	8. One [half] stayed on one side of the plum tree, the buttressed roots of the tree, and the other [also] went in the

[26] The *burusi* grows on trees in the bush, and has fruit that ripens from green to orange-red, edible but usually cooked first.

	Mo iso ro na ovi aie, atea le ovi ana tavalui lambiti, atea ana tavalui lambiti.	buttressed roots of the tree. 9. So then they stayed there, one living on one side of the buttressed roots, and one on the [other] side of the buttressed roots.
Event 4. A>B: Transform-ation	10. Mo vano, nale watitina wanju, na mai nira tamalohi. 11. Muende ana tavalu vavine mole tawera, muera mole tawera.	10. Time went on, and they were quietly growing big, and then they became people. 11. The girl on one side was getting big and the boy was getting big.
Event 5. B1< >B2: Awareness	12. Mo van mo van mo van na mai ana bongira mo mahere mo turu aie na vanotiu na lambiti vuhatambola na sahe avareo. 13. Atea mo soari atea, mo iso ro atea mo soaria.	12. Time went on and on and on and they came to the time that was right for them and then they left the buttressed roots of the dragon plum tree and went outside. 13. One saw the other, and then the other saw the first.
Event 6. B1< >B2: Interrogation	14. Mo iso ro muera rindi mo dami na vavine rindi hinia mo vitia mo re, "Niho ole ov ambea?" 15. Mo re "Iau kule ovi ana lambiti vuhatambola ri tauvano-la." 16. Mo iso, vavine rindi 'too' mo dam na muera rindi mo re, "Niho ole ov ambea?" 17. Mo re "Iau kule ovi ana tavalu".	14. After that, the boy asked the girl about it, and said "Where do you live?" 15. "I live in the roots of the dragon plum tree just over there", she said. 16. Then, the girl also asked the boy "And you, where are you living?" 17. "I'm living at the side ", he said.
Event 7. B: Decision making	18. Mo iso na teterahi, namboi na lol vanua. 19. Na turu na jivo na mo ate ana tavalui reu rindi, reu rindi nale vitia na re 'Suleha', mo iso ro na turu na soari na raniuniu lovumbora, mo iso ro tari rorohai, muende nale turu ana bahisai reu.	18. Then they got up, and they wanted to build a house. 19. That being so they went down and were there at the side of the water, that water we call 'Suleha', then after than they saw the palm leaves, the wild pandanus trees, and then so many different kinds of leaves, the ones there at the edge of the water.
Event 8. B: Choice	20. Mo iso ro na vitia na re, "Mo duhu, ka lai na lovumbora, nira ava ka lol vanua hinia".	20. Then they said, "Good, let's get the wild pandanus, that will allow us to make a house with it".
Event 9. C: Rejection of choices	21. Bahuri atea mo ate ana vumbambalo atea, mole takataka. 22. Mole viti na bora, mo re "takatakataka". 23. Mo iso ro mo viti na vuniuniu, mo re "takatakataka". 24. Mo iso na vano ana rohai tinambu, mo re 'takatakataka'.	21. A lizard was there in a bambalo tree, and was making a 'takataka' sound. 22. He [the young man] was speaking about the wild pandanus, and he [the lizard] said "takatakataka". 23 Then he [man] spoke of the palm trees, and he [lizard] said "takatakataka". 24. Then they went to different leaves, and he [lizard] said "takatakataka".
Event 10. C: Acceptance of choice	25. Mo vano mo vitia mo mai mo hisi na vutalaua, mo iso mote 'takataka'.	25. Time went on and [the man] spoke of it and came and touched the sago palm tree, and then there was no 'takataka'.
Event 11. B: Resolution & construction	26. Tamalohi ri niaro, nira mai tambaluhina na jivo na lai na ratalaua, mo iso ro na turu na mai, na turu na loli vanua hinia.	26. As for that particular man, he and his wife went down and got the sago palm leaves, and that being so, they came and built a house with it.

Continuing state	27. Mo iso na turu, mo sohea, mo sahe mo sahe, mo sahe ro barindi, hinda muende Natamambo kale lol' vanua hinia. 28. Kale lai na ratalaua kale loli na vanua hinia le hisi barindi, hinda kaisonduhu vahatea kale lol vanua hinia.	27. So then, generations went past, on and on, and on until today, we who are Malo people we build houses with it. 28. We take the sago palm leaves and we build houses with it up until today, all of us we just make houses with it.
Formula conclusion	29. Ro stori ri niaro, nia le iso aie ro. 30. Evuinana.	29. So that particular story, it's finishing there like that. 30. [It's] the end of it.

There is a formula introduction, a little longer than is usual, in that the storyteller also briefly outlines the setting in time and place, which is expanded in sentences 3 and 4. The 'characters' here also include a fruiting vine (A), given character status in my analysis in that A later transforms into people, listed here as B when acting in unison, and as B1 and B2 as individuals. The only other character is C, the lizard. So the interaction is a fairly simple one in that A→ B, B1/B2, B/C.

The events focus primarily on A, until it transforms in event 4 (sentence10) to B1 and B2. Events move along quietly between B1 and B2 with an awareness of each other, some questioning, and then some decision-making. The lizard, C, does not appear until Event 9, but which time the pair (B) are well into finding the supplies for their house. Tentative choices are made, rejections are made, until C finally approves of the choice of materials. In sentences 27 and 28, the storyteller emphasises the continuing reality of the use of this particular kind of material for house building. I describe this as a 'continuing state', which precedes the usual formulaic ending.

The use of repetition as described in the *tandono* (4.2) and in the previous kind of *kastom stori* (4.3.1) also can be seen to a lesser extent in this story. Here, B's action of choosing particular leaves is met with the same response by C, making the noise *takatakataka*. The variation each time in this story is not a repeating action in a different location, as in the story about the hen and the hawk, nor the repetition of a question from the big sister, as in the *tandono*, but to getting the same repeated response to making different 'wrong' choices of materials, until the 'right' choice is made.

A different aspect to this story is that it encompasses an extended time span. So while all stories are temporally ordered, it is interesting to note here the particular lexical items and discourse devices that are used to indicate this particularly long period of time. First of all in sentences 1 and 3, the term *tuai* 'long ago' or *bongi tuai* 'in days long ago/ in the olden days' is used to set the time frame of the initial event. There is use of *mo vano* lit. 'he /she/ it goes', as a continuative aspectual, in sentence 6, to indicate that the previous verb kept on 'verbing' (as described in 4.3.1). Sentences 10, 12, 25, all use *mo vano* sentence initially; in this use, it has been lexicalised to mean 'time went on'. In fact for Event 5, sentence 12, it shows a very long period of time, *mo van, mo van, mo van*, when B1 and B2 were growing up.

Additionally, the conjunctive use of *moiso* and *moisoro*, as described in 4.1 and 4.2 are also employed throughout, for example in sentences 14, 18, 20, where they indicate the start of a new event for the B characters. Lexically, the storyteller's use of *mo sohea* 'a generation went past' (lit. 'it pushed up'), to which he adds *mo sahe mo sahe* lit. 'it goes up' to indicate

that generations went on and on past that time (sentence 27), brings the story up to the present. So the story has travelled from *bongi tuai* 'the olden days' in sentence 1, to *barindi* 'today' in sentence 28, with these various devices.

This *kastom stori* makes reference to many different trees, and people growing up on Malo need to be able to recognise the many hundreds of trees, name them, know where to find them, and know their uses. Children at an early age would see the *ratalaua,* the leaves of the sago palm, being collected, stitched, and dried in the sun for roofing, and be expected to help in the first process of cutting, collecting, and bringing the bundles of leaves to their village. So stories of this kind reinforce important knowledge of customs that are still used and valued, and of the different areas where different plants and trees grow on the island.

Perhaps more importantly, the story gives the listener a link to the remote past, a continuing connection to the very beginnings of their society. The place of origin, known as Suleha, is regarded as a very sacred place, and many people avoid it because they fear its power. As well, the role of the lizard in the story is all-important, and people are wary of, indeed fear, all kinds of lizards on Malo, and this might reflect the power that the lizard had in this origin story. Those who listen to its retelling can reflect on how life today is part of an inevitable and eternal continuance from the past. They give today's *natamambo*, Malo people, their sense of place and help to anchor their own identity in the present.

5 Conclusion

In this section, I list in table form the commonalities in the different kinds of stories, and also list the differences between them. *Table 1* below briefly summarises the 'rules' that pertain to each, as far as theme, characterisation, lexicon and discourse, and setting are concerned. Note that the table lists features of the *sorae sulasula, tandono,* and different *kastom stori* as representative from all of my data, not just from the four text examples given here. Following the table, I make some further comment on the 'roles' of such stories.

At a societal level, I would argue that there are several main points to be made about the role of oral narratives in this island society. First, all of the kinds of stories described here are told in Tamambo. This is a validation of the local language and identity in a most powerful way—*sorae sulasula, tandono* and the other different *kastom stori* are not told in Bislama or English or French, in spite of the fact that business, church, and parliament are conducted in the former, and children are given their lessons in school in the two latter. The storytelling session on occasional evenings after the meal has been the entertainment for extended families, a social focus after hard work in the gardens during the day. Scheub (1977:62) maintains that children who "are the audiences for such … performances, are at an early age experiencing and thereby mastering the central patterning concepts as well as building a repertory of images". This is certainly true on west Malo. In my time on the island, some children from four years of age could relate various *kastom stori* with the formulaic introduction and conclusion, a sequential event structure, and tied the events with conjunctive markers. The basic rules of performing oral narratives were already well-established for these children.

Next, the listeners to the performances are hearing the narratives not as individuals, but together as a group. As Honeyman (2010) points out, a reader interacts with written

narratives on a one to one basis, but oral tales are shared in a communal environment and reciprocally shared—all the listeners have heard the same message at the same time and in the same way. They all are sitting together, they listen together, they experience the performance together. So while there may be individual reactions to individual stories, the very act of sharing the experience contributes to cohesion and a sense of belonging within that community. Thus as Klapproth (2004:76) maintains for a Central Australian language group, "in the very practice of the oral storytelling tradition, which is always dependent on the person-to-person contact, the traditional kinship and community values are lived, re-experienced and strengthened".

Lastly, the knowledge and core beliefs that are important to this society are embedded in the narratives. The multitude of stories, as Bartle says (2005:165) in talking about Melanesian world beliefs, "are basic to a people's knowledge of who they are, how they live, and how they relate to the world around them". So all those tales that being true to one's word is honourable, that parents are to be obeyed, that stealing, deceit, laziness, and others is always punished—and that the punishment is deserved and inevitable—are strong messages. But inherent also in the stories is the societal acceptance that men own the land, and thus the power to make the decisions about work and families and money. Also inherent in the stories is that some people hold secret knowledge, and that there are spirits and supernatural powers over which people have little control.

So the story-telling sessions are not impact-neutral. Within this island society, these oral narratives are so much more than just stories. The performer gains prestige for his/her knowledge, and admiration for the actual skills of performance. People will know them and recognise their abilities. For the listeners, while the stories may have different levels of significance for different people, they pass on the 'rules' and 'roles' of how to live as *natamambo*, a person belonging to Malo. They provide the knowledge of island customs and family traditions, of the power of land ownership in a patrilineal kinship system, and the overarching presence of a spirit world. They also suggest the cultural values that are seen as important to the people of Malo—those of obligation, respect, honour, punishment and retribution—all embodied in a rather fatalistic approach to life. Malinowski said, almost a century ago (1926:19), in talking about myth, that it "expresses, enhances, and codifies belief; it safeguards and enforces morality…". I would suggest that Tamambo oral narratives are still able to do this today for the people of west Malo.

But the inroads of modern-day life—texting on mobile phones, DVDs, work on Santo for many rather than in the gardens on Malo, church activities, intermarriage with people from other language areas, high school children at schools only on other islands—have all meant that some children nowadays do not hear such stories, and the *tandono* sessions of storytelling as described in 4.2 are giving way to other forms of communal mourning. So while the 'rules' of the actual storytelling are likely to persist, the number of storytellers will perhaps decrease over the next generation. Whether the 'role' provided by the stories is found in a renewed interest in *kastom* or found elsewhere, is a question for the future.

Table 1 — Synthesis: Types of oral folk narratives on Malo

	Themes	***Characters***	***Lexicon and discourse***	***Setting, time, audience***	***Cultural core values/beliefs***
Sorae sulasula	Personal challenges, martyrdom, broken promises, ancestral landmarks	Male ancestors	‣ No songs ‣ Some reported speech	‣ Usually in evening to family, to learn about and instill pride in family history and beliefs.	‣ land belongs to family (sons) ‣ promises must be honoured ‣ respect the deeds of ancestors ‣ some knowledge is restricted
Tandono	Trickery, theft, chase, conflict, retribution, death	Evil ogres or spirits, devils, people	‣ Song /lament, often repeated. ‣ ‘Old’ words in songs ‣ Frequent direct speech	‣ Only told at night. ‣ Told also at *dondo asua*, (9th night in mourning ceremonies) to fulfil obligations to kin.	‣ supernatural powers exist ‣ evil deeds are ultimately punished ‣ resourcefulness is rewarded ‣ defer to husbands ‣ obey parents
Kastom stori 1	Habitual behaviours, appearances, competition	Birds, fish, reptiles, some other animals	‣ Some songs ‣ Repetition ‣ Varying voice pitch ‣ Frequent direct speech	‣ No restrictions on place, time, age of storyteller, and told often for entertainment. ‣ Popular with children	‣ pursuit of a weaker is punished ‣ laziness is punished ‣ indecision gains nothing ‣ perseverance can prevail
Kastom stori 2	Origins: of people, places, plants, and of certain customs	People of olden days, or mythical people and creatures	No songs	‣ Told usually in evenings by older people with knowledge of Kastom to inform and imbue lives with a spiritual connection.	‣ origin place is sacred ‣ respect for custom knowledge ‣ spirit world is part of life ‣ present practices continue from past traditions
Rules common to all types	‣ Brief formulaic introduction and conclusion ‣ No special lexicon, except in songs, laments ‣ No descriptions of place or people, except for size, age ‣ Two-way or three-way character relationships: A/B, B/C, A/C ‣ Temporally ordered; occasional overlapping or parallel events			Verb phrases: ‣ used as conjunctive markers of events ‣ used as aspectuals Repetitions: ‣ of question and answer sequences ‣ of same action in different location Explanations for events rarely given Happy endings rare	

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Walking to Erro
Stories of travel, origins, or affection

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Abstract

In this chapter I discuss several stories, mostly recorded at Erakor village in Vanuatu, which have as a theme the relationship between the islands of Erromango and Efate in Vanuatu. They reinforce the observation that the water between islands is a pathway rather than an obstruction to communication, recalling the notion of the Pacific as an interconnected 'Sea of Islands' in Hau'ofa's (2008) terms. Together with this perceived connection between these two islands, linguistic features shared between Erromango and South Efate could be an indication of contact sufficient to lead to innovations in South Efate not found in neighbouring languages to the north. Lynch (2000a:337) concludes that the nature of the relationship between South Efate and its neighbours to the south requires further detailed research and this chapter is offered as a step toward understanding the type of contact there was between Erromango and Efate. I will also be concerned to show that the traditional stories on which this chapter is based are still part of Erakor life, in contrast to our expectation from the literature or from the fact that Erakor is the closest village to the capital city of Vanuatu, Port Vila.

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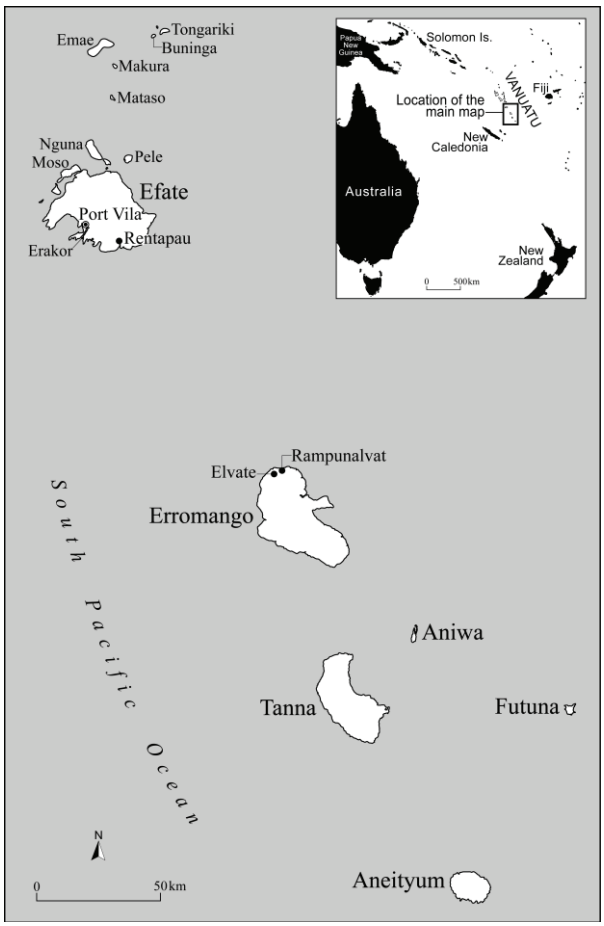
1 Introduction

Efate is an island in the chain that makes up the western Pacific nation of Vanuatu. The distance between Efate and Erromango, the next island to the south in the chain, as we see on *Map 1*, is some 100 kilometres. Efate is visible from northern Erromango. In his 1926 volume *The Southern New Hebrides*, Humphreys noted:

> [Erromango is] "more akin to Efate in its culture and characteristics. The physical measurements tend to confirm this, and the language of the north point of the island, by its construction and native name, so much more like that of Efate than like Southern Eromanga and

> the islands of the south, suggests that perhaps we are wrong in including Eromanga, other than geographically, in the group of five southern islands of the New Hebrides" (Humphreys 1926:203).

Unfortunately, no more information is given, and there is nothing more said about the language of the northern point of the island, which Humphreys calls *Elvate* (discussed further below). Spriggs and Wickler (1989:84) include a map with one of the northern traditional chiefdoms of Erromango listed as *Ralefati* (and they note that the boundaries of the Ura language and of that chiefdom seem to have been the same), and this name appears in a story in Ura in Crowley[1] (1999:92). A placename (in fact the only placename listed by GoogleMaps) in the north of Erromango is *Rampunalvat*. These terms—*Elvate*, *Ralefati*, and *Rampunalvat*—each containing *fat* / *vat* are suggestive of some connection to Vate[2] or Efate to the north.



Map 1. The southern islands of Vanuatu

[1] Crowley (1999: 42) notes that *ra* is a locative preposition, which, if interpreted as a prefix in the placename may explain the variation between *Ralefati* and *Ilfate*. It should be noted, however, that the same source (ibid: 131) gives *u-* as a prefix for locational nouns, of which there is no example resembling the word Efate.

[2] The term *faat* in South Efate means 'rock', but is also the name used for the island of Efate (as seen in the sixth sentence of text 1, below).

The observation that Erromango shows cultural or linguistic similarities with Efate resonates to some extent with my experience of fieldwork in Erakor village recording the South Efate language. Erromango featured in a number of stories told to me by a range of villagers, sometimes it was magically linked to Rentapau, a place in south-eastern Efate that is known as a source of spiritual power on Efate (see Text 3 below). At the same time, only one of those stories mentioned any other island (Nguna, an island to the north of Efate). I also noted some linguistic features of South Efate that were shared with Erromangan languages, but not with other languages of Efate or to its north (Lelepa, Nguna, Namakira). These features, discussed below, have been articulated by Lynch (2000a, 2000b, 2001) far better than by my grammar of South Efate (Thieberger 2006) which was mainly concerned to present a description of the language rather than a comparison with Erromangan languages. In this chapter I will use oral accounts as evidence to support comparative linguistic work that shows there are shared features between the two islands.

2 Linguistic similarities between Efate and Erromango

According to the established classification of languages of Vanuatu, Efate is the southern-most language of the North-Central Vanuatu subgroup. To the south, all Erromangan languages are classified as part of the southern Vanuatu subgroup, based on a number of features that need not be discussed here. However, it is interesting that there are linguistic features shared by South Efate and Erromango that are suggestive either of shared inheritance or of contact between speakers of these languages in the past.

Lynch (2000b) observes that Southern Melanesian (a subgroup that includes Southern Vanuatu and New Caledonia) languages are most closely related to the languages of Central Vanuatu and, "specifically, that their closest relative is the South Efate language" (ibid:155). He concludes that there is an Efate-Southern Melanesian linkage (ibid:181) wherein "the original chains of dialects (presumably spoken in the south of Efate) became more and more distant from one another, linguistically as well as geographically, until a point was reached where contact was lost." It is unclear if contact between Efate and the south was ever lost, or if another possible scenario involves a wave of influence from languages of the Southern Vanuatu group back to Efate after the initial settlement of the archipelago.

Lynch (2000a) has suggested that the phonology of South Efate forms "a transition between the phonologically more conservative central Vanuatu languages… and the more aberrant languages of Southern Vanuatu" (ibid:320). He goes on to speculate on phonological grounds that South Efate may in fact be part of the Southern Vanuatu group. He observes that a regular process of final-vowel deletion is common to the languages of Southern Vanuatu, and notes that it also occurs in the history of South Efate, but not in the neighbouring language to the north, Nakanamanga or Ngunese. "If this is correct, then it would imply that final vowel deletion was a quite ancient process, since the southern islands were settled (presumably from South Efate) about three thousand years ago, after the South Efate language had separated from Nakanamanga. It is vowel deletion particularly which marks South Efate communalects off from those of northern Efate and the Shepherd Islands: see Table 1.

Table 1 — Cognate lexemes in Proto-Oceanic, South Efate and Nakanamanga (Lynch 2000a:333)

POc	*English*	*South Efate*	*Nakanamanga*
*tuRi	'sew'	*tur*	*turi-a, tutuuri*
*mate	'die'	*mat*	*mate*
*kapika	'Malay apple'	*n/kafik*	*na/kavika*
*patu	'stone'	*n/faat*	*vaatu*
*punut	'husk'	*na/un*	*na/vunuvunu*
*matakut	'afraid'	*mtak*	*mataku*
*taŋis	'cry'	*tag*	*tagi-si*

Lynch (2001:189) identifies an innovation shared by South Efate and Southern Vanuatu languages—low vowel dissimilation to a mid-vowel when followed by *Ca (e.g. *na-saman 'outrigger' > South Efate *n-sem*). South Efate and Southern Vanuatu both share an ordered sequence of phonological changes which suggests a close relationship between these language groups (ibid). A further feature shared between Efate and Erromango is a preposed 1sg possessive, *nakte* in South Efate (Thieberger 2006:106) and *nagku* in Sye (Crowley 1998: 162). In each case this is a unique form of marking only first person possession in the language and contrasts with the more general pattern of postposed possessive marking. An echo subject marker occurs as *kai-* in South Efate (Thieberger 2006:111) and as *m-* in both Sye (Crowley 1998:114) and Ura (Crowley 1999:215), and again this is a feature that is not shared by languages to the north of Efate.

François (2009) discusses structural correspondences in Vanikoro which he refers to as examples of structural isomorphism with divergent forms. He gives two accounts for how these divergent forms could arise: phonological change and lexical replacement. In the case he describes, he observes that the languages (which he has good grounds for analyzing as descending from a common ancestor) have diverged drastically at the phonological and lexical level but have retained structural isomorphism. In the case of Efate it is unlikely that the features discussed are a result of (recent) borrowing as they represent different forms in the source and recipient languages. If the features (preposed 1SG possessor and echo-subject) were borrowed, the forms could then have changed over time, an argument that could possibly be made for *nakte*/*nagku* but is less likely for the echo-subject markers whose forms are quite divergent (*m-*/ *kai-*). Alternatively, the forms could have arisen independently from a single original source which could provide evidence of shared ancestry of South Efate and Erromangan languages.

Shared linguistic features are one type of evidence of contact, and oral accounts, discussed in §3.3 below, also have value in aiding our understanding of potential contact.

3 Evidence of contact between Erromango and Efate

What little is recorded of the history of these two islands, and what is known from their prehistory, suggests a continual contact between them[3]. Speiser (1923/1990:180) quotes an

[3] My host in Erakor, the late William Wayane, was brought up in Erromango because his father was a Protestant missionary there and it is possible that this missionary connection built on earlier networks,

earlier (undated) report by Lawrie that *tapa* (beaten bark cloth) was produced at Nguna, Tongoa and Emae, but then also notes (ibid:240) it was "encountered only in Efate and to the south" (presumably taking in smaller neighbouring islands). He attributes this distribution to Polynesian influence in Efate, Aniwa and Futuna. This also accords with a note in the missionary Joseph Annand's diary of 1876[4] which discusses the use of bark cloth by Fila people. Whatever its source, the distribution of *tapa* production is significant in connecting Efate to the south.

Humphreys (1926:ix) notes that "Eromanga certainly has more affinity with the Efatese culture to the north than with that of Tanna and the other southern islands". He mentions the name 'Elevate' as referring to "the north part of the island, that in sight of the distant island of Efate on a clear day." (ibid:191) and goes on to note that "[it] would be interesting to know if there is any affinity between the dialect spoken by the *Elevate* people on the north coast and that of the island of Efate to the northward, but no knowledge of this was gathered by the writer during his stay on the island." (ibid:191–192—and note a slight contradiction with what Humphreys said in the quote on p.203, cited in the introduction). There is no more information about the group named as *Elevate* here. The name Mount Ilfate, which is probably the same as *Elevate*, occurs in the story written by Pastor Sope and presented as Text 5 below but its apparent cognacy with 'Efate' is intriguing and suggestive of possible connections across the water (as noted in the Introduction above). Terry Crowley (*pers. comm*. 2000), who worked with Erromangan languages, says there is no particular awareness of Efate evident from stories he has recorded, but he notes that the northernmost language of Erromango, Ura, has few remaining speakers and little textual material could be recorded in that language.

Wilson (1999) in her discussion of Erromangan trade only mentions the islands of Tafea (that is, the southern islands of Vanuatu), Fiji, New Caledonia and not Efate as a trading partner of Erromango, but Tryon (1996:178) observes that the trading relationships we know about in Vanuatu bear a close resemblance to the language/ dialect distribution. He discusses the multiple contacts between communities and suggests that this helps to explain what he calls the 'interlocking and criss-crossing language and dialect subgrouping patterns' found in Vanuatu. However, the discussion of trading relationships in the same volume (Bonnemaison 1996:175) shows a line linking Erromango and Efate, which Tryon notes was a trading route for pigs, while the language map points to a linguistic separation of the two islands (no doubt based on the little that was known about them at the time). It is more likely that the language relationships are not as clear-cut as represented in this map, and that the language distribution could, to some extent, reflect the trading relationships, as suggested by Tryon. The fieldworkers of the Vanuatu Cultural Centre also note that "Oral tradition links South Efate and Erromango. Traditional Erromangan stone money was discovered at Teouma, supposedly brought by Erromangan women who floated from Erromanga [sic] to Efate." (Tryon, 2010:28).

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however I currently have no further information to support this theory.

[4] Annand's (2004) diary entry for Februrary 7th 1876 notes, "The Fila people came in force today to our island [Iririki], building houses for cloth making".

Finally, according to Chris Ballard (*pers. comm.*) at least 12 chiefly traditions in Shefa identify Erromango as a source and every single oral tradition from Emae, Tongoa and Mataso that nominates a location prior to Efate identifies it as Erromango (and some point to Tanna before that). An example is Tarilu of Panita (Guiart 1973:219), who voyaged from Cook's Bay in Erromango to Maniura the first time (possibly with others, as Maniura is the most common but not sole landing point) and then returned to Erromango before setting out once more for Pango.

3.1 Modernity and *kastom* in Erakor

Several narratives in circulation in Erakor village discuss a connection between Efate and Erromango. As little has been published representing oral tradition in Erakor, it is necessary to place on record that there is still today a circulation of traditional stories in Erakor. The work presented here is based mainly on fieldwork and the resulting body of textual material collected since 1995. The only anthropological work in Erakor has been by Philibert whose 1976 PhD thesis was concerned with the impact of modernity and in opposing Erakor with the fundamentalist *kastom*[5] of the cargo cult John Frum on Tanna (Philibert 1976:6) He says these represent the two poles of New Hebridean reaction to cultural contact, with Erakor being very receptive to outside ideas:

> "The inhabitants of Erakor cut themselves off from their past, now forgotten, to turn completely towards the future (…) to embrace the 'world of the light', they abandoned their wars, their festivals, and the dances between villages; they also left behind them their traditional religion, ancestor cults, and the men's house" (ibid:7).

Erakor, he argues in later writings, exhibits 'conspicuous consumption' (Philibert 1990, 1992) implying that consumption, and the prerequisite entry into the cash economy, is an end in itself, rather than a means to an end. Further, this consumption is equated to an increase in focus on individual achievement in contrast to a supposed collective past. Philibert (Philibert & Jourdan 1996:65) says, "The ideal of the 'good life' in Erakor is, in fact, one of excessive consumption or over–consumption of [manufactured] goods". In his article Philibert notes that there were forty refrigerators in a village of several hundred households at the time he is reporting on. I would argue that this is hardly excessive consumption, but rather an attempt to enjoy cool water and preserve food. It is quite possible that there was more consumption of manufactured goods than was found in villages on other islands, but this does not constitute the complete acceptance of cargo to the exclusion of *kastom* that Philibert suggests.

At the time of national independence in 1980, Philibert reports that Erakor villagers sent a recorded message to Radio Vanuatu saying that Erakor had sacrificed traditional culture so that the new world could come about. "Ni-Vanuatu from other islands now working and living in Port Vila were the beneficiaries of this sacrifice and they should not forget it" (Philibert 1992:128). Thus Erakor is known through the little literature in which it features as being the home of people who have abandoned *kastom* and embraced consumerism, in an essentialist all-or-nothing approach. This, together with Erakor's proximity to Vila, the capital of the

[5] *Kastom* is the Bislama term for customary knowledge and ways of behaving.

country, may lead one to expect little in the way of survival of *kastom* or traditional knowledge. But oral tradition is still imparted by Erakor villagers, and that tradition incorporates stories about Erromango that indicate a long association between Efate and Erromango.

3.2 The continuity of *kastom* in Erakor

A great deal of customary knowledge still circulates in Erakor. There is no doubt a breakdown in the intergenerational transmission of *kastom* stories that is common to many parts of Vanuatu, but Christianity and schooling over the past 170 years have not been entirely successful in eradicating *kastom* in Erakor. Spirits are widely known about and feared as the cause of mischief or worse. These spirits vary from *sputan*, small hairy creatures who eat unattended food, through to the major *natopu,* spirits who inhabit particular locations and who can appear in various forms, sometimes as people, to enforce their will. A few *kastom* ceremonies continue, notably weddings, which typically include both a *kastom* and a church event. Totemic sites, places where offerings can be made to particular local spirits, are still known, but I do not know if the rituals required to maintain them, such as making offerings of mats or food, are still widely observed. Erakor people avoid places known to be inhabited by dangerous spirits, and accord respect by way of offerings to those spirits if required. Individuals know their totemic matrilineal clan affiliation (or *naflak*) although the practice of marrying out of one's clan is not as strong as it used to be (Kalsarap *pers*. *comm*., Philibert 1992). Swidden agriculture is still responsible for a large part of the food consumed in Erakor, and the labour of gardening is still seen by many as the proper way to live a healthy life.

3.3 Oral tradition in South Efate

Stories can tell us about history, for example, Rivierre (1996:433) talks of oral accounts of a volcano in Vanuatu that we know must be the Kuwae eruption that occurred in the 15th century. On Efate there is the story of Roi Mata, a Polynesian ruler whose grave was located from the oral accounts (Garanger 1997, Rivierre 1996:431), and subsequently found to be between four and five hundred years old. These are historical events passed down via oral tradition, but, as Rivierre notes, "historical facts carried by 'oral tradition' only come to us via quite variable and circumstantial versions, tied in to contemporary issues and debates" (1996:433). While this mediation of oral tradition by present-day ideology may be a factor in the frequency of mention of Erromango in the oral accounts presented in this chapter, it is not clear what purpose it is serving beyond recalling some kind of historical connection.

There is a core set of stories that Erakor people regard as being part of their canon and I would be asked by them if I had recorded particular stories, known usually by the name of the main character, *Katapel*, *Langtatalof*, *Adanman*, *Asaraf* and so on. Some of these were produced in a monolingual book in 1983 (Wai *et al.* 1983). These *kastom* stories provide explanations of the origin of the lagoon, the splitting apart of small islands, and the spirits that still inhabit specific places. It is striking that Erromango features in a number of these stories, in a way in which the islands to the north, or even the north of the same island, Efate, do not. The stories I am referring to I will call *Asaraf*; *Mantu (the story of the flying fox)*; *The vine from Erromango*; *Angels and Erromango;* and *Wota ni Manu (Adanman).*

The first of the stories I want to present, and the one from which the title of the chapter is drawn, is *Asaraf* (Text 1) in which the theme is the closeness of the two islands before the giant Asaraf walked between them with the sea not reaching even to his knees, moving the islands apart and then making the sea rise. Part of the discussion following the recounting of this story included the fact that Asaraf's burial had been found at some point and that his long skeleton was clearly identifiable.[6]

In *Mantu, the story of the flying fox* (Text 2) a flying fox from Efate left two eggs at Erromango and then returned to live at Ewor, near Rentapau. This gift of two offspring implies an ongoing connection between the members of the families on the two islands. Rentapau is featured in several stories as the point of connection with Erromango, and is known by local people as a source of magical power for Efate people.

In the next story, *The vine from Erromango* (Text 3), there is a vine that grows at Rentapau which has its roots in Erromango, and, if you want anything (which could either be real or supernatural) then you just ask the Erromangan 'tabu man' who will oblige and it will be given via the vine in Rentapau. This vine with its unseen roots in Erromango is part of the reason for Rentapau being the most tabu place on Efate. In this story it is claimed that the spirit of the place uses this connection to abduct people from Rentapau and to punish them. The tree root is used as a symbol of connection between Efate and Erromango.[7]

In *Angels and Erromango* (Text 4) a group of young Efate women used to fly to Erromango to wash in a particular river. A local man watched them there, and hid the wings of one of the women, forcing her to stay and become his wife. She stayed and bore two children who then find her wings and she is able to fly back to Efate.[8]

The next story, *Wota ni Manu* (Text 5) was written in a manuscript collection apparently by Pastor Sope[9] in the 1950s, that concerns Monument Rock or *Wota ni Manu*. Wota is a magician from Erromango who lives in Mount Ilfate in north Erromango. He decides to walk to Efate and does this by "putting down his spears on the sand and stand on them and praying saying if its true that Eromaga is one Tabu Island I will walk on my two spears across to that Island. When he finished his prayer he find himself stand on shore of Erontapau" (Sope c.1955:13). Tabulaba, the chief of the village allows his daughter to marry Wota, but Wota's powers threaten his father-in-law and Wota is cast out of Efate. He then breaks the

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[6] Discussions with archaeologists who have worked in Efate have not clarified the location of this find, but have raised the possibility that it discusses a burial method that includes placing the body in a crouching position.

[7] The theme of the tree root connecting distant locations recurs in other stories from Erakor, and in Schütz's (1969:34-62) collection of stories from Nguna, in which Text 4 is about some brothers who chase a bird from Nguna to neighbouring Emau, then paddle to Erromango and find the way back by following the root of a tree from their village in Nguna The same theme is also found in a story from south Malakula in which the roots of a banyan tree take the heroes of the story back to their nakamal (men's house) on a neighbouring island (Boulay 2004:17).

[8] A reviewer has pointed out that there are also similarities to 'The voyage of Atafru' in *Nabanga* (Vanuatu Cultural Council 2005), in that there is movement between Efate (Bufa village) and Erromango. A woman with wings is involved who has two sons that ultimately get left with the father.

[9] This story is rendered here directly as written. These papers were kindly given to me by the late Shirley McRae and a scanned copy is available in the PARADISEC repository. See link: *http://catalog.paradisec.org.au/collections/NT3/items/sope*

landscape as he goes, smashing Nguna and Pele islands apart, then swims north to stand between Mataso and Makura (see Map 1 for locations of these islands). A similar story is known by villagers today and concerns a stone or spirit, called Wataneman,[10] who flew to Efate from 'somewhere towards Erromanga' and settled around Erkau (just beyond Eratap). The stone/spirit came at the invitation of a local called Atap in order to marry Atap's daughter. But Wataneman then acquired too much land and Atap became jealous. A story of the same name was recorded by John Layard in around 1915 (Layard n.d.). Facey (1988:110) records the story of Wotanimanu and a story of the same name (this time spelled *Adanman*), but quite different content appears in a collection of South Efate stories by Wai *et al.* (1983) published by the University of the South Pacific. In this last version there is no mention of Erromango.

4 Conclusion

Rather than looking to the north, to the land-based neighbours with whom we know (from a number of oral accounts) conflict was a constant threat, the stories presented here show instead that Erakor people focus over the water to a neighbouring island. As Friedlander *et al* (2008:14) point out, recalling Hau'ofa's quote from the introduction to this chapter, "Inter-island water crossings in the central Pacific were often no more of an impediment to travel than the (already occupied) rugged terrain of the larger island interiors in the western Pacific. In many areas, the ocean was transformed from a formidable barrier into a highway."

In this chapter I have presented accounts of the relationship between Erromango and Efate to show that they are not so much a history of the time when people walked between these islands,[11] but rather, that they record an ongoing assertion of connection between Erromango and Efate that is reinforced with each retelling. The contact over time, recorded also in origins of chiefly titles, may have resulted in shared linguistic features which have since diverged in form, or they may have been inherited from the same source, suggesting the permeability of the subgrouping currently hypothesized for this part of Vanuatu. Unfortunately we know too little of Ura, the language of the north of Erromango, to be able to investigate its potential relationship to South Efate any further. Perhaps archaeology will give us more insight into relationships across the water that are suggested by the stories presented here.

[10] A variant of *Wota ni Manu*, as also is the more common modern version *Adanman*.

[11] Which, it should be noted, is impossible, both because the human occupation of this part of the world dates to about 3,000 years ago, well after sea-level rises, and because the sea-floor between the two islands is over 1,500 metres deep.

5 Appendix 1. Texts from South Efate

Note that all texts are available in Thieberger (2011) and a link to a playable version is given after each title below.

Text 1. Asaraf (Speaker: John Maklen)
http://www.eopas.org/transcripts/69

Asaraf ga ipi natam̃ol ni teetwei
'Asaraf, he is a man from long ago.'

Go komam unrogo kin apu me ati nigmam ruto nigmam trausi na ipi natam̃ol nen ipram, ipram kotkot.
'We have heard our grandfather and grandmother tell us that he was tall, really tall.'

Malnen ina kefak, itu sa imur na kefak Ermag.
'When he wanted to go, he was there and he wanted to go to Erromango.'

Malnen isiwer ur ntas kin ipak Ermag, go ntas ipam̃or napũtwen.
'When he crossed the sea to Erromango, the sea came to his knee.'

Esan mana ruta lom mau.
'Here (indicating his chest) wasn't wet.'

Me ina ipak Ermag pan kaimer ler mai go naliati iskei welkia Ermag, ipi, kutae to Efat go kuto lek Ermag.
'He went to Erromango and he came back, and one day, well, Erromango it was-, you could be on Efate and you could see Erromango.'

Em̃eltig m̃as.
'Just close.'

Me, teni, teni Ermag, teni Efat rupregi imaet
'But those from Efate made him angry.'

Go itrau to nrus ki Ermag ipak inrus pa, me welkia ina ilao ki nm̃aun pak ntas tefla.
'And he went to Erromango, he went, and, well, he put his head into the water like this.'

Me ipregi teflan ki nana go ntas ipo puk.
'He did that with (his head) and the sea rose.'

Welkia, ipreg na p̃aun pak ntas tefla me ipul ki nm̃aun tefla, nen kin ntas ina ifuk.
'Well, he put his head in the water and he twisted his head like this so that the water rose.'

Go, kupo kano lek Ermag.
'And then you couldn't see Erromango.'

Go malnen kin itu san to, itu Efat toto panpan malnen kin imat, go tiawi ni esan rupo tan ki.
'And now that he stayed there, he stayed on Efate until the time that he died, and the old people of that place buried him.'

Me nlaken ipram top go rupo p̃elkin itol wes.
'But because he was so tall, they bent him in three.'

Text 2. Mantu, the story of the flying fox (Speaker: John Maklen)
http://www.eopas.org/transcripts/84

Natrauswen ni mantu, kafo traus mantu nen kin ito.
'The story of the flying fox, I will tell about the flying fox that is there.'

Ore mantu nen ito Erontp̃au teetwei ga ito pan, ito pak Ermag.
'Yes the flying fox that was at Rentapau long ago, it went to Erromango.'

Ito esan to, pan pan imur kefak Ermag, kemer pak Ermag pa, go naliati iskei ipan.
'It was there until it wanted to go to Erromango, to go back to Erromango, and one day it went.'

Go kipiatlak na, atol, ipiatlak atol me,
'And it had this egg, but'

ga, mantu nen, imai, ipsol ki atol,
'that flying fox, it came, it layed an egg,'

atol inru ipsol ki atol inru.
'two eggs, it layed two eggs.'

Go gar atol nra nen rapato Ermag.
'And those two eggs stayed at Erromango.'

Go nam̃er ni Ermag runa rukwatgi. Runa rukwatgi.

'And people from Erromango wanted to hit him.'

Go kitli na, "Kafo gamus tao atol keto rakto san tok. Akam kofo teleekor atol, me kineu kafo mer ler pak naur ni Efat."

'And he said, "I will leave you the eggs. You will look after them and I will return to Efate."'

Go mees imai to Efat.

'And today he came to Efate.'

Go mantu nen ito esan rusoso ki Ewor, ito mees ne.

'And that flying fox is still at the place they call Ewor today.'

Text 3. The vine from Erromango (Speaker: †Kalsarap Namaf)

http://www.eopas.org/transcripts/124

[Switches between Bislama and South Efate are indicated in the English version below]

Kafo gaag traus naor sees a?

'I'll tell you about a small place eh?'

Ermag. Ag kutae Erontp̃au?

'Erromango. Do you know Rentapau?'

Erontp̃au ipiatlak natiel iskei itok. Aleka ki namtak.

'Rentapau has a vine there. I have seen it with my own eyes.'

Natiel wan rop mifala i talem natiel

'A vine ([Bislama] a vine that we call 'natiel').'

Me natiel nen ito, esan kin na fei kia, Thanh

'[South Efate] This vine is there, at the place where, who now, Thanh,'

Kutae ana katraus natiel nen kin, me

'You know, I want to talk about this vine, but'

kafo psa ki etog, me akam kin kofo ona, konrog sokso ki teplan ato traus me go kofo welu wou wes.

'I will talk about a foreign place, and you will listen carefully as I talk, and you will help me with it.'

I kat wan ples we hu ia, Thanh i putum haos long hem long Erontp̃au.

'[Bislama] There is this place where Than put his house at Rentapau.'

Hemia oli kolem Blue Hole.

'This one they call Blue Hole.'

I kat wan ol olfala. Mi wantem talem se natrauswen ni Ermag

'There's one-, all the old people. I want to tell a [South Efate] story from Erromango.'

Sernale nen kin rumai tu wes to, olgeta samting we oli kam stap long Erontp̃au oli blong Erromango.

'Everything that came came there to [Bislama] Rentapau came from Erromango'

Long taem bifo ol olfala blong Erontp̃au oli, taem oli wantem wan samting oli mas askem we,

'In the olden days the old people from Rentapau, when they wanted something they had to ask'

ol tapu man blong Ermag. Sapos yumi wantem wan samting bambae yu mas askem olgeta blong Erromango.

'the tabu men from Erromango. If we want something then you have to ask those from Erromango.'

Rupaoski, rupaos ki Ermag, Ermag ituer sernale.

'[South Efate] They ask Erromango, Erromango will give them everything.'

Kumur tenamrun Ermag kefo.

'If you want something, Erromango will.'

Ipiatlak natiel iskei ito san kin aa,

'There is a vine at the place which,'

Thanh ipreg nasum̃ wes mees ne.

'Thanh has made his hotel there today [Blue water resort].'

Ipiatlak natiel iskei, natiel p̃ur aleka ki namtak.

'There is a vine, a big vine, I've seen it with my own eyes.'

Ito pau pag ito pau elag nana, natog.

'It climbs up the mangrove.'

Me natiel ne hem i no gat stampa blong hem.

'And this vine [Bislama] hasn't got a trunk.'

Be yu ko yu luk we hem i stap antap long, long ol natongtong.
'You go and look at it where it climbs up the mangroves.'

Long ples ia. Yu luk we i defren, yu luk we yu no save faenem stampa blong hem.
'At this place. It is different, you can't find its trunk.'

Kutap lek na nlaken mau.
'[South Efate] You don't see its trunk.'

Ipi nmaagwen, me ipiatlak afsak iskei itok, naik, afsak. Rusoso ki afsak.
'It is unbelievable, but there was a turtle there, fish, a turtle. They call it a turtle.'

Ito na eluk sees nen kin Thanh ipo preg ptaki. Naik rupo tu wes to.
'It lived in the small pool which Thanh would make (into the Blue Hole resort). Fish would be in it.'

Itototo panpanpan malnen rustat klin ki Erontpãu.
'It stayed and stayed until they started to clean Rentapau.'

Go namrun nen rusef ler pan pak Ermag pa.
'And these things ran away back to Erromango.'

Ruto Ermag panpan tuk mees ne.
'They are at Erromango until today.'

Natiel ipuel. Afsak ipuel.
'The vine has gone. The turtle has gone.'

Tepũr knen nen amurin kanriki ki kin mees ne, natam̃ol kin ruto pan puel Erontpãu.
'The most important of this that I want to tell you about today, people go missing at Rentapau.'

Ipiatlak natlaken, ito watgir.
'There is its owner who hurts them.'

Akit tuf laap pa, akit iskei kefo puel.
'If many of us go there, one will go missing.'

Go Erontpãu ipiatlak nlaken.
'And Rentapau has the trunk (of the vine).'

Nam̃er ni Ermag rutae, teflan sernale gar ruto mai pak, Erakor.
'Erromangans know, this is how all their things come to Erakor'

Erontpãu. Erontpãu itpãu ser naor naor ilfek ki Efat,
'[corrected to] Rentapau. Rentapau is the head place of all places around Efate.'

Ipi naor nen kin itap top.
'It is the most tabu place.'

Text 4. Angels and Erromango (Speaker: †Metu Josef)
http://www.eopas.org/transcripts/128

In the prelude to telling this story, Metu Josef referred to the twelve winged women who flew to Erromango from Efate. She used the term 'angel' to describe the flying women, but makes the point that they are just mortal humans with wings.

Ruto los ena, ruto pan los Ermag me gar,
'They washed there, they would go and wash at Erromango, but they,'

rupi nana, rupi nafet nmatu m̃as.
'they were a group of women.'

Nmatuerik. Me kin rulao ki nafarur runrir. Runrir mai pak e
'Young girls. They would put on their wings and fly. They flew to,'

rupak Ermag pan rupan los.
'they flew to Erromango to wash.'

Me ruto pregi ser nrak.
'And they do this every time.'

Rupan los panpan inom tefla. Kin, p̃ata preg tenen mau.
'They went and washed until it was enough. You don't do that.'

Me katraus teflan tukpe pei nrogo.
'And I'll tell it how we first heard it.'

Ina rupa, rupan me
'He said, they go, they go, but they'

ruto elag sanpe e ilakor pi
'they are far up there, it might be,'

rupato, rupato e Ep̃uf me,
'they are far up there, it might be, they were there, at Bufa, and'

rumur na rukfak, e, rufan los sanpe.

'they wanted to go and wash over there.'

Rutrau stat nrir trau pa. Rupa.

'They just started to fly and went. They went.'

Malen kin runa rukfa, rutmer, rutmer, runa runa rutmer …

'When they wanted to go, they …'

mai p̃onkir panpan inom tefla, rutmer fer panpan inom. Rutm̃alu.

'they closed their wings until they were ready, they counted each other. They left.'

Rutm̃alu, kainrir panpanpan rupan lao Ermag.

'They left, they flew until they landed at Erromango.'

Rupan lao Ermag, rulao tete nai nen kin, nai itop Ermag, me ata tae sef nai kin rupakes mau.

'They stood up on Erromango, at a river. There's lots of rivers on Erromango, but I don't know which river they got to.'

Ale rupan na, rulos, rulos teflan pan inom.

'Then, they went in order to wash, they washed until they finished.'

Me, kano iskei ga ikus to, ikus to leker.

'But this man hid, he hid and he looked at them.'

Me rulos panpan inom teflan rumai

'They washed and washed then came'

pak euut teflan, kutae rujenj panpan panpan go go inom.

'to shore like this, you know they changed.'

Tefla. Rupreg na,

'Like that. They did that,'

rulao ki nafarur tefla, me runrir, runa ruknrir.

'they put their wings on like that, and they flew, they wanted to fly.'

Me iskei me iskei nafarun ipuel.

'But one was missing her wings.'

Go inrogtesa wes. Ruileles panpan me rukano wes.

'And she felt bad because of it. They looked and looked but they couldn't find them there.'

Me kano nen kin ikus to israkor na nafarun na teesa nmatu ne.

'But the man who was hiding hid the girl's wing.'

Go mal tefla nen kin al ipak etan teflan, me tenen ruipa.

'And that time, the sun was going down, and these ones all went.'

Me nmatu, teesa nmatu nen nmatu nen ito kait nafarun.

'But this girl cried for her wings.'

Ikaiten panpan.

'She cried for them.'

Ruito, runa, "Ag p̃ato me mam kofan me."

'They were there, they said, "You stay, but we will go."'

Runa ruto kaipa me, ga ito.

'They left, but she stayed.'

Ito panpan go natam̃ol nen israkoro ipo mai.

'She stayed and stayed until the man who was hiding came.'

Imai na ina, ipo psir na, "Ag kuto lel nafte?" Go ipo tli,

'He came to say, he was going to lie, "Are you looking for something?" And he said,'

"E, Me nafarum ga ilakor to, ko naat ifla wesi."

'"Hey, but your wings might be here, or someone might have taken them."'

Me ga iwesi.

'But he had taken them.'

Ipregkoro ito panpan mal skei mau nen kin.

'He covered them up for all this time.'

Gar rukui mai go ina, "E, naat ilakor srakor, nana nafarum. Akit talakor pan nru pan matur.

'They all came and he said, "I think someone hid your wings. You and me should go to sleep."'

Go kiplake pa, kiplake pan, ranru matur.

'And he took her and went, he took her and they both slept.'

Iplake pan ramatur panpan panpan, kipi nmatu ni kano nen to.

'He took her and went, they slept until she became that man's wife.'

Panpan go, ita p̃okoro ki puur lisan ito.

'On and on and he still covers it (the wings) with a giant clam shell.'

Me israkor wi ki, me ito panpan go ipitlak teesa inru, teesa nanwei inru.

'But he hid it well, and she stayed on until she had two children, two sons.'

Teesa ni kano ne. Kano nen ina ito pan go ina, "Koto me kamer pak talm̃at pa."

‘Children of this man. The man stayed on, then he said, “You stay, and I will go to the garden again.”’

Malnen kin ipak talm̃at pa, ipato panpan imalik, mai ki nmatu nen ito.

‘When he went to the garden, he stayed there until dark, he came back to the woman who was there.’

Me ruta pam̃or namrun nen mau, me ito pan kaipe pi nmatu ga to, me

‘But they didn’t find this thing (the wings), and she stayed until she became his wife, but’

ito mro ki nam̃er ga nen kin ruipe pa.

‘she still thought about her people who had gone.’

Ruto mai traem panrogo me, ina, “Nafaruk ita puel. Kapei to.”

‘They came and tried to go but, she said, “My wings are still missing. I will stay here.”’

Ito pan panpan nrak iskei go

‘She stayed and stayed until one time, and’

teesa sees nra nen, rato pan me ratili na rukgar preg nas a?

‘the two children said they wanted them to make them a bow.’

Go rata tup̃, go ratup̃ na. Go nas a go

‘And they kept shooting, they shot. And the bow.’

teem̃ol seserik nen kin ruto sil sil na, e, panpan …

‘And they shot small animals that go inside…’

Teem̃ol iskei ina, kutae ofag?

‘This animal, you know geckos?’

Ina isef pan trau sil puur lisan ne.

‘It wanted to escape and it ran inside this clam shell.’

Malen kin kaaru ipo na inrea teflan trau pam̃or tenamrun p̃ur ni Mama ga.

‘When the other one turned like this he just found this big thing of his mother’s.’

Me maarik nen ga kipe pak talm̃at pa.

‘But the husband had gone to the garden.’

Ipak talm̃at pan pato talm̃at tu me,

‘He had gone and stayed at the garden, but’

teesa ne ipam̃ori me itrau slati pan.

‘the child discovered it and just took it and went.’

Inrik iak ga ki na, “He, e.”

‘He told his mother, “Hey.”’

Iak ga ki na, “Apam̃or namrun iskei me itrau wipewi.”

‘His mother, he told her, “I found these things and it is really beautiful.”’

Ale ipeikin kin teflan go itrau mur me ina, “O atrau semsem lek namrun go.”

‘So he showed her and she laughed and said, “Oh I am glad to see this.”’

Go itrau na, malfanen kaigar preg nafnag ki, me kafo traem wes. Ilakor ta wi to ki.”

‘And she said, “Now I’ll make their food, but I’ll see if these (wings) work. Maybe they still work.”’

Igar preg nafnag panpan, nen kin ketaor ki.

‘She made food for them, that she would leave for them.’

Igar preg nafnag panpanpan rato fam.

‘She made food for them, and they ate.’

Isol kutae tenamrun ni tiawi nen kin ruto- runa ntae a?

‘She took, you know this thing the old people had that they call ‘shit’?’

Ilofir kin panpan rawi to.

‘She rubbed them with it until they were good.’

Ipregi ralos panpan inom me rapo ipo gar pregi.

‘She made them wash until they finished, she did it for them.’

Pan inom ina, “Raknrokof nafnag gamus to, me

‘When they finished she said, “You finish your food, but’

kineu katraem nana, namrun ne, katraem wes. Ilakor ta wi to ko?”

‘I will try these things (wings). Are they still good?”’

Malen kin ipo traem teflan itrau tae nrir a?

‘When she tried them, she could fly.’

Isemsem wes, me, ina imai kaimer mai

‘She was happy about it, and she came’

imai sog nam̃er nran ne, inakin, “Kafo tao mus ki.

‘and kissed the boys and she said, “I will leave you.’

Me raktorek ki apap gamus to.”

‘But you wait for your father”’

Me maarik nen ipato me inrogo teflan kin
'But the man was there and he heard how'

al ito pam̃as, me iwelkia tfa ito kat.
'the sun was shining but there was the sound of thunder.'

Go ina, "Mes nen tfa kin ito kat neu me al ito pa."
'And he said, "Today there is thunder, but the sun is shining."'

Me mtulep ga ito p̃or na, ntali p̃ur iskei ito em̃au ga a?
'But his wife was breaking the branches of the big natapoa (tropical almond tree) that was in her yard.'

Me ito krakp̃orp̃or namrun ne, nen kin kenrogo me kemai.
'She broke them so he would hear it and come,'

Pregi panpanpan inom tefla, na nra ntali ien
'So that when she finished, the branches of the natapoa lay around.'

Me mtulep kipe pa, a? Maarik nen imai mai mro ki na ipo taos ser na, mal
'And the woman was gone. The husband came and he thought it would be like every other time.'

Po na imai ki tenran rato, ina
'He came to the two boys,'

ilek, ileka teflan kin rapi na, ntae ito a?
'he saw that there was 'shit' there.'

Rupam̃or namrun nen, mtulep nen ipan kipak nam̃len pa.
'They found this 'shit'. This woman had gone back to her place.'

Malen kin imai,
'And when he came,'

imai na inrikin ki tefla, go ranrikin kin na na, "O Mama nigmam kipe pa."
'they told him, "Oh, our mother has gone."'

Kipe pak nam̃len pa.
'She has gone back to her place.'

"Me fei kin ipam̃ori?" Go rana, "Komam, komam rapam̃ori."
'"But who found them (the wings)?" And they said, "We found them."'

Go itraem laokin kia kunrog na, nra ntali nen ien kia ruto m̃altelit. Go ina
'And she was trying to put them on and you could hear her breaking all the natapoa branches. And he said,'

"O anrogo me amro ki nana tfa ito kat, me al ito pa."
'"O, I heard it, but I thought it was thunder, but the sun was shining."'

"E ga kia ipregi." Panpan kipa. Ipan pan tuk mees ne.
'"She did it." Until she went. She went and is gone until today.'

Kipe pak nam̃len pa.
'She went back to her place.'

Text 5. The story of Monument Rock or Wota ni Manu stand between Mataso and Makura. (Written by Pastor Sope—see fn.9 p.248)

Wota is the native of Eromaga. He lives in a village in mount Ilfate in the north of Eromaga. One day when sea calm he think he look one island so he walk down to the seas, putting down his spears on the sands and stand on them and praying saying if it is true that Eromaga is one Tabu island I will walk on my two spears across to that island. When he finish his prayer he find himself stand on shore at Erontapau, near South Bay. He went up and stay with a chief named Tabulaba in his village near Mount MacKenzie in Erontapau in east of Efate. Chief's daughter like Wota to be her husband, so chief gives his daughter to be Wota's wife. Wota is a good fisherman.

So Wota and his wife they live on fish every day. Chiefs daughter always bring fish to her father. One day her father ask her is any other food they live on, she say no. We only live on fish.

Chief cross and scold Wota saying If I know you are lazy man I may not give my girl to marry you.

So Wota told his wife he will make one garden for them.

One day he goes out and start it. Next day he find the garden finish cleared. When the garden is ripe he asked his wife to take his father and mother to their garden and gave them half of their garden. Wota have a paddock of pigs. He have hundreds and hundreds of pigs so when they came back from the garden he take them to his paddock and gave them half of his pigs.

So when the people of the village hear that they say good for Wota to be chief in the place of old Tabulaba.

When old chief hear this talk he put out Wota from Erontapau and Wota say to his father in law you are one high mountain of Efate but I will go way from you. You will fall down and no more mountain

But his father in law said you are a stranger and you can't make me fall. When Wota started to go away Tabulaba began to break down.

Tabulaba said he does not want to see Wota in somewhere of Efate so Wota walk around Efate to Emua near Undine Bay in Sama down to Faleararo he leaves his wifes there and swims across to Guna and break Nguna into two island as Nguna and Pele and leaves the channel between two islands he swims toward northeast and stand between Mataso and Makura he said to his wifes I break Nguna into two island and leave the channel to be the way you all standing here in Efate and look through the channel and find me standing there every morning

That is why from Erontabau to Eton theres no mountain because Mount Tabulaba is all breaking down by the morning away of Wotanimanu a Tapu man or wizard of Eromaga.

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