#### THE EFATE DIALECTS

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The dialects to be discussed here are spoken in central Vanuatu, on Efate and several smaller islands to the north. The total number of speakers is about 5,000. If all dialects were considered as belonging to a single language, this would be the largest indigenous speech community in Vanuatu (Tryon 1981). Efate dialects have been referred to in the literature on Oceanic languages under various names (Efate, Sesake, Nguna), but there has been no general discussion of the relations among them.

Figure 1 (p. 9) shows the location of these dialects and of the other three languages spoken in the region. The Efate dialects are spoken on the north-west side of Tongoa; in the villages of Sasake and Marae on the north side of Emae; on the islands of Lelepa, Moso, Nguna, Pele, and Emau off the north coast of Efate; and in the villages of Siviri, Emoa, Paunangisu, Epau, Pang-pang, Eton, Erakor, Eratap, and Pango on Efate itself. The other three languages are the Polynesian outliers Emae and Mele-Fila, and Namakura, which is apparently the closest relative of the Efate dialects, though quite distinct from them (Tryon 1976:92-3).

#### Previous work

The first published data on one of these dialects appears in the appendix to Inglis (1851). A table of word-lists includes a 'Papuan [i.e. non-Polynesian] dialect' of 'Fate', which is probably Erakor. Turner (1861) gives a similar but apparently independent Erakor list. From 1864 onward, various translations of scripture in this southern dialect were produced by the missionaries Morrison, Cosh, and Mackenzie. It was used as a mission language for all of southern Efate, as far as Mele and Eton, until fairly recent times, but its use has now declined in favour of English and Bislama. The only publication still in use is the hymnal Natus Nalag (reprinted 1971, Epworth Press, Sydney), in which the dialect is still identified simply as the 'language of Efate'.

A quite different 'language of Efate' was used by the

Rev. Daniel Macdonald, who was stationed at Havannah Harbour, on the north-west coast, from 1872 to 1906. In addition to translations, he wrote a number of linguistic studies, but, as Ray (1926) and others have noted, he used forms from several different dialects without distinguishing their origins. The usefulness of his data is further reduced by his attempts to demonstrate that the Efate dialects are related to Semitic. After Macdonald's departure, it appears that the mission community he had established at Havannah Harbour dispersed, so that this dialect has no modern descendant (cf. Capell 1954:219). Its position will be considered below.

The Rev. Peter Milne produced translations in the dialect of Nguna from 1873 onward, and the dialect of Sasake on Emae was studied by the polyglot Anglican bishop J. C. Patteson, who published a vocabulary and list of phrases in 1866.

The obvious similarities among these dialects led to at least three attempts to create a single written standard. A 'combined dialect' - an attempted compromise between Erakor and Havannah Harbour - was used for a New Testament published Another approach was used in the Old Testament of 1908, in which Mackenzie, Macdonald, and Milne translated individual books into their respective local dialects. The Erakor versions, however, proved to be scarcely intelligible to readers in the north, particularly on Tongoa. therefore turned his energies to collaboration with the Rev. Oscar Michelsen, who was stationed on Tongoa, and the two created the Nguna-Tongoa literary standard. This enterprise was much more successful, owing to the relatively minor differences within the northern area, and Nguna-Tongoa became the mission language for the north, including the Emae and Namakura speakers. It is still widely used in the church, and is the only Efate dialect in which a complete Bible translation exists.

The missionary linguists were the sources of data on the Efate dialects for the early Melanesian comparativists. Von der Gabelentz (1873) drew his 'Fate' language from Turner's Erakor list, and his 'Sesake' from Patteson. Codrington (1885) likewise used Patteson's Sesake material, but his 'Fate' is taken from Macdonald's Gospel of Luke. He also gives a brief annotated text in Nguna. (The 'Tonoa' language referred to on p.471 is Namakura.) Ray (1926) has a comparative study of all four missionary dialects (plus a few words from Pango and Livara), and a grammatical sketch of Nguna-Tongoa, based on the translations with supplementary information from both Milne and Michelsen. Capell (1954) gives a short but

quite accurate account of the relations among the dialects, based on local inquiries as well as published sources.

The first linguist of modern times to work on an Efate dialect was Albert J. Schütz, who spent several months on Nguna in 1967, and published a short grammar and a collection of texts (Schütz 1969a, b). Schütz 1969b remains the fullest descriptive account of any of these dialects. Pawley (1972), in his Eastern Oceanic subgrouping study, made use of Schütz's description along with the century-old Sesake material from Codrington. Not surprisingly, he found Nguna and Sesake 'obviously very closely related' (117).

In the early 1970s, D. T. Tryon collected word lists from a number of villages in the Efate area as part of his linguistic survey of the entire Condominium. In his first published report, he included all dialects in a single language, 'Efatese', grouped as follows:

North: 1. Tongoan

2. Emae (Sasake)

3. Nguna-Pele-Paunangisu-Emoa-Siviri-Moso

4. Emau

South: 5. Lelepa

6. Erakor-Eratap-Pango

7. Eton-Epau

(Tryon 1972:64)

In later verions, however, two languages are distinguished:

North Efate: Voraviu (Tongoa), Sasake, Nguna, Pele, Siviri

South Efate: Lelepa, Pango, Eratap, Eton

(Tryon 1976:92-3; 1981:16)

Tryon's classifications were primarily based on lexicostatistical computations, though, as will appear below, he seems to have allowed room for other factors in certain cases.

Introduction to the present study

In addition to the published material just reviewed, the present study makes use of my own data, gathered mainly in 1980, from Sasake, Emau, Epau, Pang-pang, Eton, Pango, and Lelepa, and of unpublished lexical material on Nguna collected by A. J. Schütz in 1967 and by Ellen Facey in 1978-80. Data are thus available from 13 villages throughout the Efate

area.

The upper part of Table 1 shows Tryon's lexicostatistical figures for the nine word lists published in Tryon 1976. In Tryon's system, a pair of lists on which 81 percent or more of the items are cognate are considered to represent dialects of a single language. Using this criterion, we can see that Woraviu, Sasake, Nguna, Pele, and Siviri form a single language, since they all share percentages of 86 or greater. Similarly Pango groups with both Eratap and Eton, though the Eratap-Eton percentage falls somewhat below the language limit. Percentages between the northern and the southern group are mainly below 70.

Lelepa has no percentage higher than 79 with any other dialect. Hence on the strict application of Tryon's criterion, it ought to be considered a third language, distinct from both the northern and the southern group. Barring this, the range of percentages clearly points to a connection with the north (75-79) rather than the south (65-72). Tryon's decision to include Lelepa in South Efate, therefore, must rest on factors outside the lexicostatistical evidence.

Table II presents the independent personal pronouns in 13 dialects. The pronouns have not been treated in the lexical study, since I have not been able to determine in detail the proto-forms and the sequence of innovations. However, their clearly differentiated forms give a useful impression of which dialects are most similar to which.

These two tables provide a basis for grouping the 13 dialects into the following seven communalects, 6 which will be the main terms of comparison in what follows:

- 1. Tongoan (Tg) includes Woraviu (Wv) of Tongoa and Sasake (Ss) of Emae. These two share 91 percent cognates. There are some slight differences in pronoun forms, but in these cases the Wv list agrees with Nguna, and it is possible that the Nguna-Tongoa written standard has influenced the informant.
- 2. North Efate (NE) includes the dialects of Nguna (Ng), Pele (Pw), and Siviri (Sv), which share 93-94 percent cognates. The apparent small differences in pronoun forms may equally well be errors in transcription. (See the discussion of d below.) It seems likely that Moso, Emoa, and Paunangisu also form part of this communalect (Tryon 1972:64; Capell 1954:219).

<u>Table I</u>

<u>Cognate percentages among nine Efate dialects</u>
(from Tryon 1976:158, rounded to nearest 1 percent)

Worav 1u								
91	Sasake							
87	86	Nguna						
86	86	93	Pele					
88	87	93	94	Siviri				
75	75	78	79	78	Lelepa			
67	67	69	68	69	72	Pango		
60	61	63	64	65	65	86	Eratap	
67	67	69	71	70	71	82	76	Eton

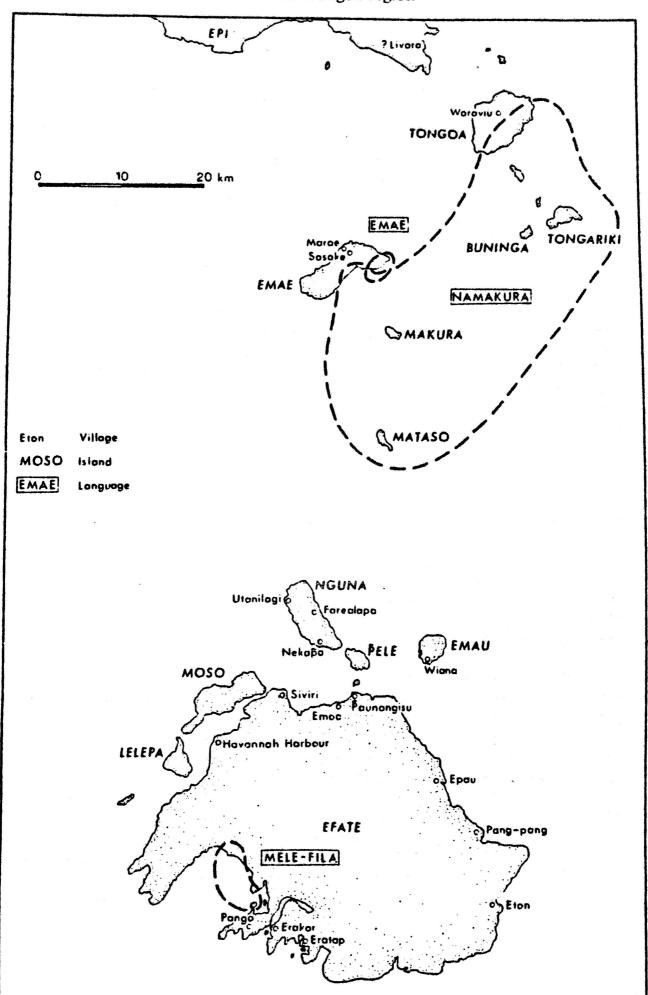
# Differential shared cognates among seven communalects (n = 53)

Tongoan						
49	North Efate					
37	40	Emau				
30	32	37	Epau			
16	21	23	31	Eton		
13	18	21	21	30	South Efate	
33	35	33	31	20	20 Lelepa	

Table II

		Independent per	sonal pronouns	personal pronouns in 13 Efate dialects	ec ts		
	18		3	1212.			
Woraviu	kinan	ntoo				2p1	3p1
Cacalas		00	nae	kinami	nigida	n tau	nara
os se ke		objiu	naae	niqami	nieida		ı İ
Nguna		niigo	naae				naara
Pele	kinau	niign	989				naara
Siviri	kinau	nilan					naara
		2011	וופע	Kinami	nigita		naara
Emau	kinon	neigo	naae	kigam	kigira	kimun	naara
Epau		888	ene	agam	egir	nge	ener
Pang-pang		kaag	nega	komam	kante	kamus	neger
Econ		kaag	nega	komam	kante	kanus	neger
Eratap	kinen	80 80	28	komam	akit	akam	gar
Erakor	kineu	88	ଷ୍ଟ	komam	akit	akam	gar
Pango	kineu	20	68	komam	akit	akam	ngar
Lelepa	konou	naago	пае	kinim	kinta	kumuu	naara

Figure 1
The Efate-Tongoa region



- 3. Emau (Em)
- 4. Epau (Eb)
- 5. Eton (Et) also includes the dialect of Pang-pang (PP). My data on the latter village are very limited, but of 63 items that could be compared with Eton, 61 were cognate, and most were identical in form.
- 6. South Efate (SE) includes the dialects of Pango (Pg), Erakor (Ek), and Eratap (Ep). Pango and Eratap share 86 percent cognates by Tryon's count, but this is probably too low, since the Eratap list seems to contain an unusually large number of errors.

### 7. Lelepa (Lp)

The lower part of Table I gives a somewhat different measure of lexical similarity among these seven communalects. It is based on Tryon's list, which was reduced from 292 to 210 items by discarding items which were unsuitable for comparison in various ways. Of these 210, 157 were cognate in all seven communalects. Numbers of shared cognates among the remaining 53 items are shown in the table, giving a somewhat sharper differentiation between the lowest and highest figures.

#### Comparative phonology: consonants

Table III shows consonant correspondences among the seven communalects, and the reconstructed consonants of Proto-Efate (PEf). The PEf consonants \*t, \*k, \*s, \*m,  $*\tilde{m}$ , \*n, \*g, \*r, \*l are essentially unchanged in all dialects. The rest require some discussion.

The labial and labiovelar stops, \*p and \* $\tilde{p}$ , have voiceless reflexes everywhere except in Tongoan. In Tongoan, the voiced prenasalized stops, [mb] and [ $\tilde{m}\tilde{b}$ ], occur morphemeinitially in nouns following the common noun prefix na-, and [ $\tilde{m}\tilde{b}$ ] also occurs initially in some other words. Both Tryon's data and mine contain exceptions to this general statement, and it is possible that a phonemic split has taken place in this dialect. Historically, however, there appears to be no basis for reconstructing more than one stop in each position. PEf \*p and \* $\tilde{p}$  were probably voiced and prenasalized in at least some environments, but a progressive devoicing process has eventually reached completion in all dialects

Table III

Consonant correspondences

Tg	NEE	Em	Eb	Et	SEf	· Lp	PEf
p,b	P	P	p	<b>p</b>	P	P	*p
р́,Б	p	p	$\widetilde{\mathbf{p}}$	p	p	p	*ř
t	t	t	t	t	t	t	*t
k	k	k	k	k	k	k	*k
d	d	r	r	t	t	t	*d
d	đ	r	r	t	nr	ŗ	*nr
q	g	g	g	g	k	g	*q
v	v	f	£	f	f	f	*v
s	s	s	8	s	s	S	*s
m	m	m	m	m	m	m.	*m
ñ	ñ	ñ	ñ	ñ	ñ	ñ	<b>★</b> m
	n	n	n	'n	n	n	*n
n		g	g	g	g	g	*g
g	g	r	r	r	r	r	*r
r	r	1	Ĩ.	2	1	1	*1
1	1			~ w,Ø	w,Ø	w,Ø	*w
W	W	w,Ø	w, Ø			Ø,s	*y
Ø,s	Ø,s	Ø,s	Ø,s	S	S	Ψ, S	<b>y</b>

Table IV

Evidence for reconstruction of PRf \*d and \*nr

			71 200	<u>.</u>	
	Tongoan	South Efate	Lelena	926	1
EAR		•	<b>)</b>	13.1	2
	וומ - חשר וימם	n-talge-	na-taliga-	*na-daliga-	*talina
WE (INC)	nf-gida	a-kit	kinta (<*ki-gita)	*-qida	*kinta
Three 1	doolu	tol	toolu	*dolu	*tolu
STAND <sup>2</sup>	duleana	tuleg	tulean	*duleana	*t uqud
BL00D	na-daa	nra- (<*n-nra-)	n-ra-	*nu-nraa	≉daRaq
TWO	d uua	nın	ruua	*nrua	*dua
HEAR	ogop	nrog	rogo	*nrogo	*donoR
THINK	midodoa	mro (<*mnro)	morroa	*minronroa	mopop*
BANANA	naadi	nanr	naati	*naaDí	*puti
COLD	malaadi	mlanr	mlati	*malaaDi	*mand ind if

initial consonant (Schütz 1969b:21-22). All forms cited here are in the 'realis' (what Schütz <sup>1</sup>Many Efate verbs (including numerals) undergo a grammatically conditional alternation of their calls 'secondary') form.

The shift of n to g in The latter part of PEf \*duleana appears to be from \*leana 'straight'. SE is unexplained.

but Tongoan. This view of the history of voicing in \*p and \* $\tilde{p}$  is supported by the corresponding consonants in Namakura, Efate's closest relative, which are fully voiced and prenasalized in all environments.

PEf \*d and \*nr, as Table III shows, have merged everywhere except in South Efate and Lelepa. The contrast is reconstructed for Proto-Efate, however, since it cannot be accounted for as a local development, and in fact corresponds quite well to a Proto-Oceanic distinction. Table IV shows that SEf t, Lp t reflect PO \*(n)t, whereas SE nr, Lp r reflect PO \*(n)d. There is a small set of items which appear to represent a special development before final \*-i. In this environment we find SEf nr and Lelepa t, whether the form derives from PO \*(n)t or \*(n)d. This is illustrated by the words for 'banana' and 'cold' at the end of Table IV. Since in these words we have no basis for identifying the consonant as PEf \*d or \*nr, I represent the indeterminate segment as PEf \*D.

The prenasalized voiced velar stop, PEf \*q, remains distinct only in Tongoan. In South Efate it merges with \*k, and in the other dialects with \*g. The forms in Table V illustrate.

No dialect has a contrast between f and v. PEf \*v is reconstructed as voiced since the corresponding consonant in Namakura (and most other central Vanuatu languages) is voiced. The pattern of voicing here is similar to that of \*p and  $*\tilde{p}$ , with the devoicing tendency stronger in the south than the north. Tongoan v is voiced everywhere. The Nguna labial fricative is written v, but Schütz (1969b:16) states that it is more often voiceless than voiced. In recorded narrative texts it seems to be voiceless initially and voiced medially. In the other dialects it is voiceless.

Table VI shows a small set of words which exhibit a rather different correspondence, which can nevertheless be reconstructed as PEf \*v in a special environment. Before final \*-u, we find Tg, NE, Lp  $\emptyset$ , Em, Eb f, and Et, SE m. Emau and Epau have the expected reflex of PEf \*v. The loss of \*v in the northern dialects simply generalizes a known trend: most other cases of expected \*v before \*u had been lost by the Proto-Efate stage. The m in the southern dialects is phonetically the least expected. Additional support for the reconstruction of PEf \*v in three of these items can be found in Namakura: batav 'breadfruit', barov 'pandanus sp.', birerev 'long'.

Table V

Evidence for Proto-Efate \*q

	Tongoan	North Efate	Eton	South Efate	PEf
MAN'S SISTER FISH HOOK MY (SUFFIX)	qore-	gore-	gore-	kore-	*qore-
	taqau	tagau	togou	tkau	*taqau
	-qu	-gu	-g	-k	*-qu

Table VI

Evidence for Proto-Efate \*-vu

	Tongoan	Epau	South Efate	Proto-Efate
BREADFRUIT	na-batau	petaf	na-ptam	*na-patavu
PANDANUS SP.	na-barou	parof	n-parom	*na-parovu
LONG	parau	peraf	pram	*paravu
GRASS	na-menau	menaf	na-m̃nam̃	*na-menavu

Table VII

Evidence for Proto-Efate \*yu

	North Efate	Emau	Eton	South Efate	Lelepa	Proto-Efate
TREE	na-kau	na-kou	ne-kas	n-kas	na-kasu	*na-kayu
YOU (PL.)	nimu	kimun	kamus	-mus <sup>1</sup>	kumuu	*-muyu
COCONUT CRAB	een	aasu	888	888	aasn	*aayu
WILD CANE	naau	naan	naus	naus	snou	*na-uyu
HOUSE	na-suma	na-suma	na-sum	na-sum	na-suma	*na-sum̃a
STRONG	kasua	Kasua Kasua	8	1	ı	*kasua

The SE independent form is akam, in which the final two syllables have been completely lost. Possessive suffix. All other cognates cited are independent pronouns.

All dialects except Tongoan and North Efate show some instances of loss of \*w before \*o (e.g. Tg, NE na-wose, Em na-ose, Eb, Et na-os, Ep na-wes, Pg na-os, Lp na-ose, 'paddle'). However, I do not have adequate data to determine the exact conditions

The reconstruction of PEf \*y is rather unexpected. correspondences shown in Table III for this consonant occur only before PEf \*u. The forms in question are the first four in Table VII. Eton and South Efate have s in all four, Lelepa in three of them, and Emau in one (Epau agrees with Emau in this respect). To simplify matters, I will assume that the anomalous forms in Emau, Epau and Lelepa are the result of borrowing, so that the essential correspondence is Et, SE, Lp s, Tg, NE, Em, Eb Ø. A comparison of, for example, 'fish hook' (Table V) with 'tree' (Table VII) will show that one cannot postulate a process of s-insertion in this environment to account for these forms. s-deletion work, as shown by such forms as PEf \*naasu 'bow' (Tg, NE, Em, Lp naasu, Eb, Et, SE naas). The only solution is to reconstruct some consonant other than \*s in the position The hypothesis of \*y for this consonant is supin question. ported by two well-established Proto-Oceanic reconstructions, PO \*kayu 'tree', and \*ayuyu 'crab sp.'. Pawley (1974:9) has also suggested \*kamuyu as a possible PO form for the second person plural pronoun.

The words for 'house' and 'strong' have s in all attested forms, and hence are reconstructed with PEf \*s. some evidence to suggest, however, that \*s in these items may be from earlier \*y. The Proto-Oceanic reconstruction for 'house' is \* $Ru\eta maq$ . PO \*R > Ø in this item in north and central Vanuatu, so that the expected Efate reflex would be \*wma. In many languages of this group, however, including phonologically conservative ones, the vowel in the first syllable is i rather than u (e.g. Mota  $i\tilde{m}a$ , Nduindui ingwa, Raga imwa). The fronting of this vowel might be accounted for by a postulated PNCV \*yuma. One might even speculate that the \*y was an incorporated reflex of the PO location The case for earlier \*y in 'strong' equally involves marker \*:. a series of conjectures. Probable cognate words for 'strong' are Standard Fijian kaukauwa and Wayan (Western Fijian) kaikai. The variation in the high vowels parallels that in the words for 'tree, wood' (SF kau, Wayan kai). A hypothetical PO \*kayua can thus be explained as derived from \*kayu 'tree, wood' by means of the suffix \*-a which derives stative verbs from nouns (Pawley 1972:83).

With due allowance made for the number of speculative steps involved, and the small number of examples, we may account for these six forms as follows. At a pre-PEf stage, \*y before \*u in penultimate position became \*s, as seen in 'house' and 'strong'. Subsequently, in Eton, South Efate, and Lelepa, this rule extended to final syllables, as in the other four items. In the remaining dialects, \*y was lost, though it may have been responsible for the shift of \*a to e in the northern dialects in 'coconut crab'.

PEF \*y may perhaps be reconstructed in one other environment, where it has no overt reflex in any modern dialect. Table VIII shows the evidence for this. First, the word for 'casuarina' has -ea- in all dialects except Eton and South Efate, which have -aa-. The examples of 'straight' and 'hand' show that neither PEF \*-ea- nor \*-aa- will account for this correspondence. The proposed reconstruction, PEF \*na-yaru, is supported by PO \*yaRu 'casuarina'.

Similarly, the words for 'thunder', 'eel', and 'he' have -a(a) in Eton and South Efate, and -ae (or -ai) elsewhere. As the forms for 'excrement' and 'whale' show, neither PEf \*-ae nor \*-aa will account for this correspondence, and by similar reasoning I propose PEf \*-aya in these three forms. In this group, however, there is much less clear external support. One may compare Mota marea 'eel', where -ea seems to be the expected reflex of PO \*-aya (cf. PO \*mpaya, Mota pea 'bait'). In the case of the third person singular pronoun \*-ya is not unlikely as a reflex of PO \*ia. On the other hand, the best-known example of PO \*-aya-, the word for 'sail' (PO \*layaR), becomes PEf \*na-lae and gives -ae in all dialects.

Once again, allowing for these difficulties, it appears that PEf \*y in the environment a...a was lost in all dialects, but in all dialects other than Eton and South Efate, previous to this loss an adjacent \*a was raised to e.

# Comparative phonology: vowels

All dialects have the five vowels /i e a o u/, which are for the most part unchanged from dialect to dialect. (See the Tables for examples.) Vowel length is contrastive in Nguna (Schütz 1969b:18-21), and probably in other dialects, though this is not yet clearly confirmed from my data. Counting long vowels as two, word stress in Nguna falls on the third last vowel; <sup>12</sup> again, evidence on the other dialects is not

Table VIII

Evidence for Proto-Efate \*aya

	North Efate	Eton	South Efate	Proto-Efate
CASUARINA	nearu	naar	naar	*nayaru
STRAIGHT	leana	len	len	*leana
HAND	naaru	aru-	naar	*naaru
THUNDER	na-tovae	tefa	tfaa	*(na-)tavaya
EEL	marae	mera	mraa	*maraya
HE	naae	nega	ga	*naga ya
EXCR EMENT	natae	-	ntae	*natae
WHALE	tavuraa	tafra	tafra	*tavuraa

Table IX

\*ai, \*au > ei, ou

	PEf	NE	Em	Eb	Et	SE
YEAR	*na-tau	na-tau	n-tou	n-tou	n-tou	n-tau
LIVE	*mauri	mauri	mouri	mour	mour	, <b>-</b>
COME	*(u)mai	uma1		mei	mei	mai
FISH	*na-ika	na-ika	ne-ika	ne-ik	ne-ik	na-ik

so clear.

In Emau, Epau, and Eton, PEf \*a immediately before a high vowel is raised to the corresponding mid vowel (Table IX). There are a few cases of such assimilation in South Efate and Lelepa, but the data are not adequate to determine whether it is regular.

In Epau. Eton, and South Efate, PEf \*a before consonant followed by another \*a dissimilated to e (Table X). Epau and Eton dialects undergo both assimilation and dissimilation, and it ought to be possible to determine their order by examining their interaction. That is, given an original sequence \*aCau, if assimilation had applied first (giving \*aCou), it would have removed the environment for dissimilation, giving \*aCou as the final result. If, on the other hand, dissimilation had applied first (giving \*eCau), the conditions for assimilation would remain, and the final form would be In fact, in almost all cases in my data, the first vowel is either deleted (PEf \*na-tau > Eb, Et n-tou 'year') or appears as o (PEf \*malau > Eb, Et molou 'megapode'), the latter resulting from a further assimilation. seem to me to support the conclusion that dissimilation was the earlier rule, for two reasons. First, medial a seems to be resistant to deletion in all these dialects, whereas e is readily deleted (see below). Second, the word for 'hermit crab', PEf \*katou, becomes Eb, Et katou - that is. \*a does not appear to assimilate to ou in a following syllable. Therefore, in order to explain items such as 'megapode', we must assume PEf \*malau > \*melau (dissimilation) > \*melou (assimilation) > molou (further assimilation).

Vowel deletion produces some of the most conspicuous differences among the Efate dialects. Although Schütz (1969b: 17-8) notes a number of instances of devoicing and loss of vowels in Nguna, in careful speech speakers of both Tongoan and North Efate pronounce all orthographic vowels. In all other dialects, at least some vowels appear to be categorically lost. Full details of these processes remain to be worked out, but I will describe two of them here.

In Ebau, Eton, and South Efate, final short vowels are lost unless immediately preceded by a lower vowel (i.e. part of a rising diphthong). Thus short vowels following a consonant are lost (see 'red', 'outrigger', and 'heavy', in Table X), as are those following a higher vowel (PEf \*pakoa > Eb, Et, SE pako 'shark'). But long vowels remain (PEf \*tavuraa 'whale' > Eb, Et, SE tafra(a)), and so do those immediately

preceded by a lower vowel (see 'rough mat' in Table X, 'year'

Each of these dialects also loses many non-final vowels. 13 The rule applying in South Efate may be stated as follows:

8

This rule is to be understood as applying after the final vowel deletion rule described in the previous paragraph. It has three essential conditions: (i) the V in the environment means that the final vowel in a word will not be deleted, nor will a vowel preceding a consonant cluster; on the assumption that the rule applies successively to each vowel from right to left, this means that the rule will not produce clusters of more than two consonants; (ii) the C...C in the environment means that vowels in sequence will not be deleted; (thus PEf \*aleati > SEf aliat 'daylight'); (iii) the specification [-low] means that a is never deleted.

A few examples will illustrate the operation of this rule and its interaction with the a > e dissimilation.

- PEf \*nasuma > SEf nasum 'house'. Here both vowels are immune from deletion, the a because a is never deleted, and the u because (after final vowel deletion) it is the last vowel in the word. Compare:
- PEf \*nasama > SEf nsem 'outrigger'. This form shows that a > e dissimilation must precede both deletion rules. Before the final a is deleted, dissimilation applies to both the preceding vowels (\*nasama > \*nesema). After final-vowel deletion (> \*nesem), the second e is immune, having become the last vowel in the word, but the first e is subject to the non-final deletion rule.
- PEf \*napati-qu > SEf npati-k 'my tooth'. The vowel in the first syllable dissimilates to e, and is then subject to non-final deletion. Compare:
- PEf \*nakini-qu > SEf nakni-k 'my finger'. The critical difference is that the vowel in the second syllable is i rather than a. This means that it is subject to deletion, but also that it does not cause dissimilation of the vowel in the first syllable, which therefore persists.

Table X

Dissimilation (a > e / Ca)

	PEf	NE	Eb	Et	SE
RED	*miala	miala	miel	miel	miel
ROUGH MAT	*tavakau	tokovau	tefkou	tef kou	tef kau
OUTRIGGER	*na-sama	na-sama	n-sem	n-sem	n-sem
FLOW	*sara	sara	ser	ser	ser

Table XI
Sound changes reflected in more than one communalect

	Tg	NEf	Em	Eb	Et	SEf	Lp
	-6						
1) Complete devoicing of * $p$ , * $\tilde{p}$		+	+	+	+	+	+
2) Merger of * $nr > *d$	+	+	+	+	+		
3) $*d > r$ (follows (2))			+	+			
4) $*d > t$ (follows (2))					+	+	+,
5) Merger of $*q > *g$	+	+	+	+	+		+
6) Devoicing of initial $*v$		-\$-	+	+	+	+	+
7) *v > m / u#		*			+	+	
8) * $y > s / u$					+	+	+
9) * $a > e$ adjacent to * $y$	+	+	+	+			+
10) *ai, *au > ei, ou			+	+	+		
11) *a > e / _ Ca				+	, +	+	
12) Final vowel deletion				+	+	+	
Total number of innovations	3	5	7	9	10	7	6

## Summary of sound changes

Table XI summarizes those sound changes discussed in the previous sections which apply to more than one communalect. Two observations may be made. First, the picture is complex, and no obvious large-scale boundaries emerge. In no case do more than two sound changes cover exactly the same domain. In map form, this would appear as a complex set of intersecting observers, there is a clear gradient of change from north to south, Tongoan being the most conservative dialect and Eton the most innovative.

#### Lexical comparison

Table XII shows 27 lexical innovations shared by two or more An innovation may be either an irregular Efate communalects. formal change (indicated by <<) or the replacement of one word in a given meaning by an unrelated word (indicated by 'for'). The innovations meet two criteria. First, all dialects can be classified into those that have undergone the change and those that have not. The innovative forms are listed, and the remaining dialects show regular reflexes of the Proto-Efate form given. Second, the direction of innovation can be established. For most items, I give higher-level reconstructions in support, either Proto-Oceanic (PO) or Proto-North and Central Vanuatu (PNCV). (Most of these reconstructions are from Wurm and Wilson 1975 or from Clark ms.) cases the evidence is simply a Namakura cognate, and in one case (the word for 'dugong'), the reconstruction of PEf \*t rather than \*r provides a natural etymology.

The arrangement of the innovations in Table XII is based on a north-south division of the communalects. If we note the number of innovations in which each communalect participates (Tongoan 5, North Efate 8, Emau 7, Epau 13, Eton 16, South Efate 15, Lelepa 13), there is a clear division into a conservative north (Tg, NE, Em) and an innovative south (Eb, Et, SE, Lp). Those areas of innovation which fall within the northern or southern area are designated by N or S followed by a number thus N1 consists of Tongoan, North Efate, and Emau. The remaining innovative areas (those which include both northern and southern communalects) are considered extensions of the first group, and accordingly marked with an x. Thus N1x consists of the N1 group plus the southern dialects Epau and Lelepa. Two of the innovating areas consist of just one

#### Table XII

## Lexical innovations

N1 (Tongoan, North Efate, Emau)

COCONUT LEAF MAT: Tg katavau, NEf tokovau, Em tokfou << PEf \*tavakau < PNCV \*tavakau

N2 (Tongoan, North Efate)

SKIN: Tg, NE nawili- << PEf \*na-kuli- < PO \*kulit

BODY HAIR: Tg, NE namau, for PEf \*na-lulu << PO \*pulu

N3 (North Efate, Emau)

SPIDER: NE kalao, Em kalau, for PEf \*kalume, cf. NMK kalum

Nlx (Tongoan, North Efate, Emau, Epau, Lelepa)

TURTLE: Tg, NE voonu, Em, Lp foonu, Eb foon, for PEf \*avusake << PNCV \*avua

SWEAT: Tg, NE tooro, Em rorotoro, Em nator, Lp tortor, for PEf \*maono < PNCV \*maono

N3x (North Efate, Emau and Epau)

DUGONG: NE pokasirasi, Em, Eb pokarasras << PEf \*pokasi-tasi ('sea-pig')

N4x (North Efate, Lelepa)

FLOWER: NE napuma, Lp napma- << PEf \*na-vuma << PO \*puna

WING: NE naalivaru, Lp nalfaru- << PEf \*na-avaru, cf.
NMK ?ovari

S1 (Epau, Eton, South Efate, Lelepa)

NAME: Eb gie-, Et ge-, SE nagie-, Lp nagia- << PEf \*na-gisa- << PNCV \*kisa-

HOW MANY?: Eb, Et, SE pii, Lp piia << PEf \*piisa < PO \*pinsa

MAT: Eb m̃ir, Et m̃it, SE nm̃it, Lp nam̃it, for PEf \*na-p̃anu << PNCV \*b̃anu

STAR: Eb mase, Et, Se, Lp masei << PEf \*masoe < PNCV \*mazoe

S2 (Epau, Eton, South Efate)

CHESTNUT: Eb, Et nemak, SE nmak << PEF \*na-mape < PNCV \*mabe

S3 (Eton, South Efate, Lelepa)

EAT: Et, Se fam, Lp faami, for PEf \*kanikani < PO \*kani

DEFECATE: Et, SE suer, Lp suur, for PEf \*tatau < PNCV \*tatavu

#### Table XII (contd.)

S4 (Epau, Eton)

NECK: Eb lakanoo-, Et lakeno- << PEf \*na-noa < PNCV \*no?a

OVEN: Eb oof, Et om << Ef \*uvu << PNCV \*?umu

S5 (Eton, South Efate)

WHO?: Et fe, SE fei, for PEf \*sei << PO \*nsai

MULLET: Et polfei, SE polfai, for PEf \*kanasi << PO \*kanase

MUD: Et nele, SE nlel << PEf \*na-lepa < PNCV \*leba

LIGHTNING: Et, SE napil << PEf \*na-vila < PNCV \*vila

THIN (OBJECT): Et, SE mrara, for PEf \*manivenive < PO \*manipis

ROPE: Et matte, SE nmarit, for PEf \*na-tali < PO \*tali

S6 (South Efate, Lelepa)

LIVE: SE mol, Lp mooli, for PEf \*mauri < PO \*maqudip

SIBLING OF SAME SEX: SE, Lp \*palu-, for PEf \*tai- < PO \*tansi

Slx (Emau, Epau, Eton, South Efate, Lelepa)

DAY AFTER TOMORROW: Em aasa, Eb, Et, SE, Lp aas << PEf \*waasa < PO \*waRinsa

S4x (Emau, Epau, Eton)

PUSH: Em rogof, Eb rogofi, Et tgofi << PEf \*toovi, cf.

NMK do?ov

S7x (Emau, Epau)

WHAT?: Em, Eb naa, for PEf \*na-sava < PO \*nsapa

northern and one southern dialect, and in these cases a somewhat arbitrary assignment has been made: North Efate and Lelepa to the north (N4x) and Emau and Epau to the south (S7x).

In addition to the innovations shown in Table XII, there are about as many items again for which the dialects fall clearly into two groups, but the direction of innovation is not clear. Table XIII summarizes the lexical and phonological evidence, and these additional isoglosses are given in the second column. They may turn out to be either innovations or retentions of the area in question. (The figures in parentheses are those which are listed twice, since the areas in question [Nlx/S5, Nl/S1] define the same boundary.)

A rather special isogloss noted in Table XIII distinguishes Epau and Eton from the other communalects. The common noun prefix \*na- before a noun of three syllables or more does not appear in these dialects. Thus while Epau and Eton have malok 'kava', all other dialects reflect PEf \*na-maloku. Although clear outside evidence is lacking, this is almost certainly an innovation of Epau and Eton.

#### Conclusions

An examination of the data summarized in Table XIII will show that no obvious isogloss bundle divides the Efate dialects There is, however, an ummistakable area into two groups. of innovation in the south, of which the Eton and South Efate communalects are the core. Epan and Lelepa share roughly half of these innovations (and Emau fewer still), and can thus be considered the periphery of the innovative area. This presumably accounts for Tryon's 1972 grouping, shown above, and for his decision to group Lelepa with the south in the face of lexicostatistical figures to the contrary. Lelepa's high cognate percentages with the north then result in part from common conservatism (relative to South Efate) and in part from the smaller number of innovations shared with North Efate.

It is well known that the distribution of population on Efate was radically altered during the first decades after European contact. In particular, many interior settlements were abandoned as a result of depopulation by disease, the desire for access to coastal trade, and mission pressure for Christians to concentrate in large coastal villages. (See for example Capell 1954:218-221, Guiart 1973, McArthur

Table XIII

Summary of lexical and phonological evidence

			TAGIICE
Area	Lexical Innovations	Other Lexical	Sound Changes
N1 (Tg, NE, Em)	1	(2)	
N2 (Tg, NE)	2	7	
N3 (NE, Em)	1	-	
Nlx (N1+Eb,Lp)	2	(4)	a > e in env. of $y$
Nly (N1+Eb,Et)	-	-	nr > d
N3x (N3+Eb)	1	1	•
N4x (NE, Lp)	2	-	
S1 (Eb, Et, SE, Lp)	4	(2)	
S2 (Eb, Et, SE)	1	2	a > e / _Ca
			V > Ø / C_#
S3 (Et, SE, Lp)	2	7	d > t
			y > s / _u
S4 (Eb, Et)	2	3 (+ na- deletion)	
S5 (Et, SE)	6	(4)	v > m / _u#
S6 (SE,Lp)	2	2	
S1x (S1+Em)	1	-	
S4x (S4+Em)	1	1	ai,au > ei,ou
S7x (Eb, Em)	1	1	d > r
All but SE, Tg	-		q > g
All but Tg		₹	Devoicing of $p, \tilde{p}, v$ -

and Yaxley 1968.) In view of this rapid disruption, one might have expected a very confused dialect picture. The relative coherence of the relations among the dialects, and the clarity of distribution of sound changes and lexical replacements belie these expectations. It is likely that in many cases the interior settlements were socially and hence linguistically simply a hinterland of the coastal areas (as one would predict from the rugged interior topography of Efate), so that the speech of the newcomers would not have been very different from that of the original coastal dwellers. If more significant differences did exist, it seems that the more numerous coastal people succeeded very well in linguistically absorbing the immigrants.

The dialect differences between north and south Efate are, as we have seen, quite substantial, enough to impair mutual intelligibility fairly seriously. By contrast, between the North Efate and Tongoan communalects, over a greater distance, there is remarkable uniformity. This is partly a matter of common conservatism, but Tg and NE do share some innovations apart from the more southerly dialects. All this suggests a relatively recent dispersal of speakers of these dialects. This possibility is confirmed by local tradition (Schütz 1969a: 171-195) and now confirmed by archaeological and geological evidence (Espirat et al. 1973, Garanger 1972) of a devastating volcanic eruption a few centuries ago which shattered the former island of Kuwae into the fragments now known as Tongoa, Ewose, Valea, and Tongariki. Assuming that the cataclysm either killed or drove out the population of the Shepherd Group (including Emae), and that the islands were re-settled some time later largely from North Efate, this dialect uniformity is just what one would expect to find.

Appendix: two extinct dialects

Having established the outlines of dialect relationships in the Efate region, we may now consider two dialects which are known only from documentary sources: Livara and Havannah Harbour.

Codrington (1885:459) states that 'in a part of Tasiko [Epi] the language is identical, or almost, with that of Sesake'. Ray (1926:198, 230) refers to a dialect of Livara or Liara, 'an enclave in the Tasiko district of South-east Epi Island', which 'does not belong to the Epi group, but is related to the Sesake of Three Hills [Emae] and the Nguna'.

This dialect apparently no longer exists, and I am unable to find the name 'Li(v)ara' on modern maps. Ray gives about a dozen words in his tables, which in all cases agree with both Tongoan and North Efate. The dialect is phonologically conservative, and items such as punusi 'see' and elo 'sun' associate it specifically with the northern rather than the southern group. The only peculiarity of any real interest is koroi 'woman', compared with PEf \*na-qoro(n)i, suggesting that Livara, like South Efate, may have merged \*q with \*k.

A more difficult problem is the placing of the dialect used by Macdonald at Havannah Harbour (HH). As noted earlier, the dictionary (Macdonald 1907) mixes unsourced forms from several dialect areas. A somewhat clearer picture can be drawn from the earlier descriptive study (Macdonald 1889) and the translations. Not surprisingly, this dialect agrees with Lelepa better than any of the other modern dialects. Compare, for example, the HH second person pronouns nago (singular) and kumu (plural) with those shown in Table II HH agrees with Lelepa on most of the phonological and lexical divisions discussed in this paper. In a number of basic items, however, Macdonald's vocabulary gives two forms, one conservative and the other innovative, e.g. mauri, moli 'alive'; tai, balu 'sibling of same sex'; kani, bami The first item in each pair reflects Proto-Efate, while the second is a southern innovation (see Table XII). It is not impossible, of course, that this much variation in basic vocabulary could exist even in a single village. But it appears that the Havannah Harbour settlement may have been linguistically heterogeneous to this degree from its beginning. The following account is attributed to 'Captain Rason, until quite recently British commissioner in the New Hebrides':

> When the missionaries established themselves on Efaté he [Macdonald] was in Havannah Harbour, and natives who first became Christians left their villages and came to the mission station for protection. Thus the language of the mission station became a medley of all the dialects This gradually coalesced into a special dialect which became a lingua franca with the natives and was partly understood by a11.

(Churchill 1911:11n.)

Capell (1954:219) identifies the basic HH dialect with the inland district of Utaone, but it seems likely that Macdonald drew converts from both sides of a number of lexical isoglosses and never really succeeded in 'coalescing' them into a uniform standard. The community appears to have dispersed not long after Macdonald's departure, and by the 1950s only two old men could be found who were familiar with the written dialect (Capell, loc.cit.).

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#### NOTES

There are also a number of smaller settlements of recent origin, and a substantial number of Efate speakers resident in the town of Vila. Prepresents a voiceless labiovelar stop. Standardization of place-name spellings is a messy problem in Vanuatu, and this paper does nothing to clear it up. The proposed standard spellings in Tryon and Gély (1979) differ from mine in a few minor but real respects (Sesake, Emao, Emua, Paonangisu, Epao, Pang-pang), and in the addition of a large number of quite pointless acute accents. Any map will show still further variants, but there should be no difficulty in identifying the places.

<sup>2</sup>See O'Reilly (1958:159-162, 174-177) for details of all Efate scripture translations.

<sup>3</sup>The reduced list of dialects here represents just those for which word lists are published in Tryon 1976.

"Village' must be qualified in three cases, where the dialect names actually refer to islands. Available material from Nguna has almost all been collected in the cluster of villages at the south end of the island, though Schütz 1969a has a few texts from the inland village of Farealapa. Nguna informants say that a more divergent dialect is, or was, spoken at Utanilagi on the northwest coast, but I have no data to support this. My data on Emau comes mainly from Wiana village, but informants did not suggest there were any linguistic differences in other parts of this small island. On Lelepa there is a single village, Natapao.

The following transcription conventions are used throughout. As in Fijian, b, d and q represent voiced prenasalized stops (labial, dental and velar respectively), and g is the velar nasal.  $n\mathbf{r}$  is a prenasalized trill (Fijian  $d\mathbf{r}$ ). The consonants marked with a tilde  $(\tilde{p}, \tilde{b}, \tilde{m})$  are labiovelars – that is, they differ from their unmarked counterparts in having simultaneous velar closure or approximation (sometimes heard as 'labialization'). Long vowels are indicated by doubling the letter.

<sup>6</sup>I use this convenient term for the speech of an area which, for overall comparative purposes, may be regarded as uniform. See Geraghty (1983:17-19) for further discussion.

Tryon's Eratap list often shows voicing and position assimilation in nasal + stop clusters, but I assume this is sub-phonemic, e.g. Ep bamu-k 'shoulder', ndas 'sea', nkap 'fire', from PEf \*na-pavu-qu, \*na-tasi, \*na-kapu.

<sup>8</sup>PEf \*na- occurs with a large number of common nouns in all Phonologically it is part of the word, and citation forms are never given without it. Its occurrence or nonoccurrence with a particular noun is quite consistent from dialect to dialect (with the exception mentioned below). Considerable evidence indicates, however, that \*na- is a prefix rather than simply part of the noun: (1) some morphemes occur as nouns with \*na- and in other contexts without it (Schütz 1969b:42-43); (2) \*na- is productively used, along with the suffix \*-ana, to nominalize verbs (Schütz 1969b:70); (3) the Polynesian languages Mele-Fila and Emae have borrowed hundreds of Efate nouns, but almost never with \*na- incorporated. If \*na- is segmentable for Polynesian speakers, it ought to be the more so for Efate speakers. (4) Epau and Eton have lost \*na- before bases of three syllables or more. is simple and natural if \*na- is a separate morpheme, but would be peculiarly restricted if considered in purely phonological terms (e.g. initial \*ma-, \*ta- etc. are not lost).

The interpretation of North Efate d is problematic. Tongoan d is clearly voiced and prenasalized, and its distribution agrees with the presence of d in written Nguna-Tongoa. Capell (1954:220) says that the reflex of \*d is a voiceless retroflex stop in Nguna and an 'untrilled r' in Pele. My own impression from recorded Nguna speech is that t and d are distinct: t is dental or alveolar and consistently voiceless, while d is slightly retroflex and often voiced, and could be confused with r. In Tryon's lists, items with Tongoan d invariably show d in Nguna, but may have t, r, or d in Pele and Siviri (e.g. Ng madana, p marana, p marana 'heavy').

It is not clear whether this disparity results from some pattern of d > t and d > r mergers in these dialects, from the investigator's difficulty in hearing a variably voiced retroflex stop, or both. Schütz (1969b:14-15) states that both (dental) [t] and [d] occur in Nguna, but that they represent In initial position in verbs, they alternate a single phoneme. In analysis as do such phonemically according to grammatical conditions, just as do such phonemically distinct pairs of consonants as v and p. Elsewhere, they are in 'free fluctuation', though [d] is more likely to occur after long vowels, in syllables adjacent to liquids, and in reduplicated forms. (All Schütz's examples with Nguna [d] correspond to d in Tongoan.) The conditions here seem so complex and heterogeneous (and the resulting statement of occurrence is in part only probabilistic) that it seems more plausible to postulate two phonemes, even if they are in largely complementary distribution and overlap phonetically to some extent.

 $^{10}$ Actually only in the Sasake dialect. Tryon's Woraviu regularly has  $\eta$  for Sasake q.

11E.g. PO \*puaq > PNCV \*vua > \*ua > PEF \*na-waa 'fruit'. Where v does occur before u in Efate, then, it is to be explained by borrowing or analogy. An example of the former is PEF \*tavuraa 'whale', from Polynesian. As for the latter, a large majority of the cases of vu in Nguna occur initially in verbs, where the regular alternation of p with v would have provided a basis for analogical restoration of v after it had been deleted by regular sound change.

<sup>12</sup>Schütz (1969b:10-11) agrees on the position of the accent, though he prefers to describe it as a terminal intonation fall.

<sup>13</sup>The rule should probably be restricted to short vowels, but long vowels other than aa are relatively rare, and no critical examples could be found.

<sup>14</sup>The environment as stated also prevents initial vowels from being deleted, but, as in the previous statement, the only examples I have are with initial a, which is immune from deletion in any case.

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