

TOWARDS A CLASSIFICATION OF SOLOMON ISLANDS LANGUAGES

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1. INTRODUCTORY

The term 'Solomon Islands' has been used in anthropological and ethnological parlance with a variety of meanings, usually extending beyond the boundaries of the country formerly known as the British Solomon Islands Protectorate. The reason for such usages has its origin in the history of the former protectorate, parts of which were under German control until the end of the last century.

Britain declared a protectorate over the southern islands of the group (Guadalcanal, Savo, Malaita, San Cristobal and the New Georgia group) in 1893. In 1898 and 1899 the islands of the Santa Cruz group, including Utupua, Vanikoro, Tikopia and Anuta, as well as the Polynesian Outliers Sikaiana, Rennell and Bellona were added to the protectorate. In 1900, by a treaty with Germany, several islands in the north were transferred to British administration. These were Choiseul and Santa Ysabel, the Shortland Islands to the south of Bougainville (now part of Papua New Guinea), and the outlying atoll of Ontong Java. All of these islands make up the Solomon Islands, which gained its independence on July 7, 1978 (see also Map 1). The total land area of the Solomon Islands is 11,200 square miles (Census 1970:viii), while the population is currently estimated at a little over 200,000 people.

The languages of the Solomons are among the most imperfectly known in island Melanesia. Early writers such as Codrington (1885) and Ray (1926), together with that prolific student of island Melanesian languages, the Rev. W.G. Ivens, culled most of their material from gospel translations, and concentrated on grammatical sketches. Capell (1956 and 1962) gave a general account of the languages of the archipelago. It was not until 1968 (Hackman 1968) that any publications appeared which treated anything like the totality of the Solomon languages, followed in 1971 (Hackman 1971) by a short listing of the languages. In 1975 Hackman decided to join forces with the present writer, to undertake a survey of all of the languages of these islands and to present an internal classification of them, initially, (see Tryon and Hackman, forthcoming). There was a sociolinguistic account of the language situation in the Solomons published in 1979 (Tryon 1979), and the present paper represents a first attempt at an overall classification, to be expanded and amplified in the forthcoming study mentioned above. The preliminary classification presented here is based largely on lexicostatistics, the sound correspondences between the languages having been determined and taken into account. In the latter part of the paper, the phonological evidence for internal subgrouping is considered briefly, as a check on the subgroupings which emerged from the quantitative evidence.

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2. THE LANGUAGES

There are, according to the criteria followed in this study, some sixty-three languages and many more dialects spoken in the Solomon Islands at present, excluding Gilbertese and other languages imported into the Solomons over the last few years. The languages of the Solomons are basically Austronesian, fifty-six out of the sixty-three languages being so. Of the fifty-six Austronesian languages, fifty-one are Melanesian, the other five being Polynesian Outlier languages. Seven of the Solomons languages are considered to be Papuan or non-Austronesian, although the exact classification of some of these has been a matter for debate, see below. For purposes of this paper, however, the emphasis will be on the Austronesian languages.

2.1. The Papuan languages

The Papuan (non-Austronesian) languages of the Solomons number seven. No attempt has been made here to classify them. It is of interest, however, to note that nearly all of them have borrowed extensively from neighbouring Austronesian languages, this being particularly noticeable in the case of Savosavo and Baniata, borrowing from Guadalcanal and New Georgia languages respectively. The Papuan languages, with locations and approximate numbers of speakers are as follows:

LANGUAGE	LOCATION	SPEAKERS
Bilua	Vella Lavella	4,300
Baniata	Rendova	1,000
Lavukaleve	Russell Is	700
Savosavo	Savo I	950
Aiwo	Reef Is	3,500
Santa Cruz	Santa Cruz I	3,030
Nanggu	Santa Cruz I	200

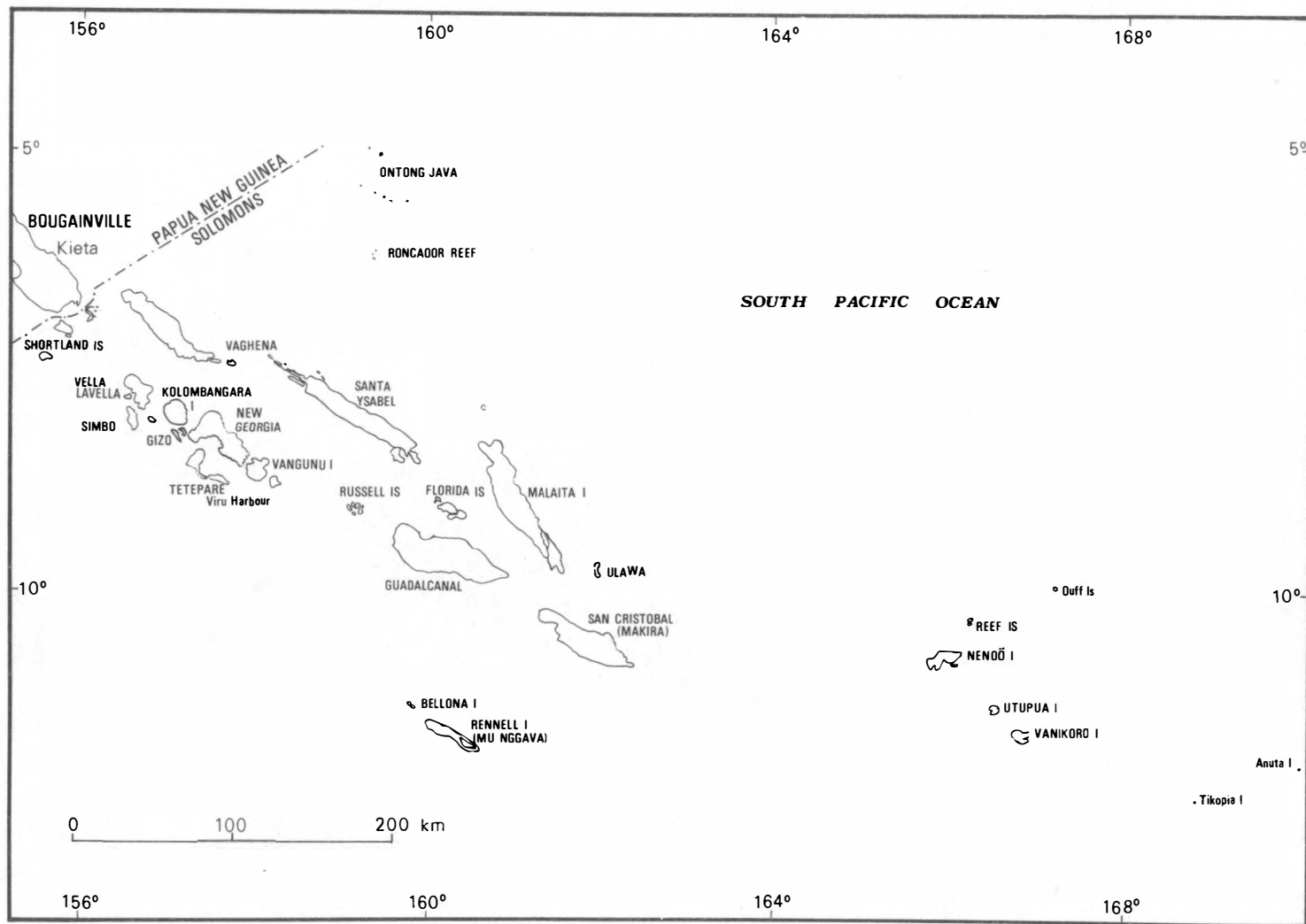
Formerly there were three Papuan languages/dialects spoken on the island of New Georgia:

1. Kazukuru
2. Doriri
3. Guliguli

Very little is known of these languages, although a wordlist of roughly one hundred words is available for Kazukuru (Capell 1969).

Early writers did not recognise the Papuan languages as such, but simply regarded them as aberrant or difficult Melanesian languages (see Codrington 1885 and Ray 1926). Wurm (1975) assigns the first four languages listed above (Bilua, Baniata, Lavukaleve and Savosavo) to the Yele-Solomons Stock of his East Papuan Phylum, seeing a genetic relationship between them and the Yele languages of Rossel Island (Papua New Guinea). He also tentatively assigns Kazukuru, Doriri and Guliguli to the same stock, although the material available for these languages is extremely scanty. Todd (1975) agrees with Wurm in grouping Bilua, Baniata, Lavukaleve and Savosavo into a 'Solomons Language Family', noting that Bilua and Savosavo are more closely related to each other than to the remainder.

The Papuan languages of the Eastern Outer Islands of the Solomons have been something of a problem in terms of language classification. A number of scholars have written about Aiwo, Santa Cruz and Nanggu, including Davenport (1962), Wurm (1969, 1975 et passim), Lincoln (1975, 1978), Green (1976) and Simons (1977). There has been some debate concerning the status of these three languages, particularly Santa Cruz. Wurm (1975:796) maintains that they are indeed Papuan and that they have been heavily influenced by Austronesian languages. He assigns them to the East Papuan Phylum, although as a subphylum-level family some distance from the



Map 1: The Solomon Islands

Papuan languages in the north of the Solomons archipelago. On the other hand, Lincoln maintains that the languages in question are indeed Austronesian, pointing to a number of lexical and morphosyntactic features in support of his claim. The affiliation of these three languages is not clear-cut, for while a number of features in them are plainly Austronesian, the basic morphological system appears quite unlike anything else in island Melanesia, and in fact quite similar to that encountered in the Papuan languages to the north of the Solomons. The morphological complexity of the verb phrase in Aiwo, Santa Cruz and Nanggu is in distinct contrast to the relatively simple system found in the four Papuan languages of the northern Solomons. Until further detailed studies are undertaken it is unlikely that the debate will advance much further. The present writer considers that in view of the central role of the verb and verb morphology in these languages and their obvious dissimilarity with other island Melanesia languages, it is preferable, for the present at least, to consider Aiwo, Santa Cruz and Nanggu to be Papuan. The final word has certainly not been said on the subject and the multiple influences that have been at work on these languages will be difficult to unravel, for the languages of this area have, in addition to what has been discussed above, also been subject to considerable Micronesian and Polynesian influence.

2.2. The Austronesian languages

There are fifty-six Austronesian languages spoken in the Solomon Islands, including five Polynesian Outliers. They are as follows:

LANGUAGE	LOCATION	SPEAKERS
Alu	Shortland Is	1,700
Vaghua	Choiseul	1,000
Varisi	Choiseul	1,900
Ririo	Choiseul	18
C.E. Choiseul	Choiseul	5,000
Ghanongga	Ranongga	1,320
Lungga	Ranongga	700
Simbo	Simbo	950
Nduke	Kolombangara	1,500
Roviana	New Georgia	4,100
Ughele	Rendova	650
Kusaghe	New Georgia	950
Hoava	New Georgia	600
Marovo	New Georgia	2,900
Vangunu	New Georgia	900
Zabana	Santa Ysabel	1,000
Laghu	Santa Ysabel	5
Kokota	Santa Ysabel	170
Zazao	Santa Ysabel	100
Blablanga	Santa Ysabel	550
Maringe	Santa Ysabel	5,000
Gao	Santa Ysabel	500
Bugotu	Santa Ysabel	1,900
Gela	Florida	5,300
Lengo	Guadalcanal	5,200
W. Guadalcanal	Guadalcanal	5,000
Talise	Guadalcanal	4,500
Malango	Guadalcanal	1,800
Birao	Guadalcanal	3,200
Longgu	Guadalcanal	750

LANGUAGE	LOCATION	SPEAKERS
Lau	Malaita	6,500
N. Malaita	Malaita	13,500
Kwara'ae	Malaita	12,500
Langalanga	Malaita	2,000
Kwaio	Malaita	7,000
Dori'o	Malaita	900
'Are'are	Malaita	10,000
Oroha	Malaita	100
S. Malaita	Malaita	6,500
Arosi	San Cristobal	2,800
Fagani	San Cristobal	300
Bauro	San Cristobal	2,800
Kahua	San Cristobal	4,000
Nemba	Utupua	150
Asumboa	Utupua	20
Tanambile	Utupua	50
Buma	Vanikoro	50
Vano	Vanikoro	5
Tanema	Vanikoro	5
Rennellese	Rennell/Bellona	1,800
Luangiua	Ontong Java	1,100
Sikaiana	Sikaiana	220
Pileni	Reef Is	800
Tikopian	Tikopia/Anuta	1,800

The Austronesian languages of the Solomon Islands have been classified, tentatively at this stage, using the following criteria quantitatively:

Approximately 81% - 100%	Dialects of same Language
Approximately 50% - 80%	Different Language, same Subgroup
Approximately 30% - 49%	Different Subgroup, same Group
Approximately 20% - 29%	Different Group, same Family

These percentages of shared cognates largely follow Wurm (1971:542), with the modifications made in Tryon (1976) in his classification of the languages of Vanuatu (formerly New Hebrides). The reasons for the selection of these percentages as critical need not detain us here, in a preliminary classification of this nature. Two other points are, however, relevant to the classification:

- i) At least two hundred comparisons were made between all test lists, which included the Swadesh 200 list, as modified by Samarin (1967:220).
- ii) The sound correspondences for all lists were worked out and used to determine cognancy or otherwise (and will be reproduced in full in the final classification, Tryon and Hackman (forthcoming)).

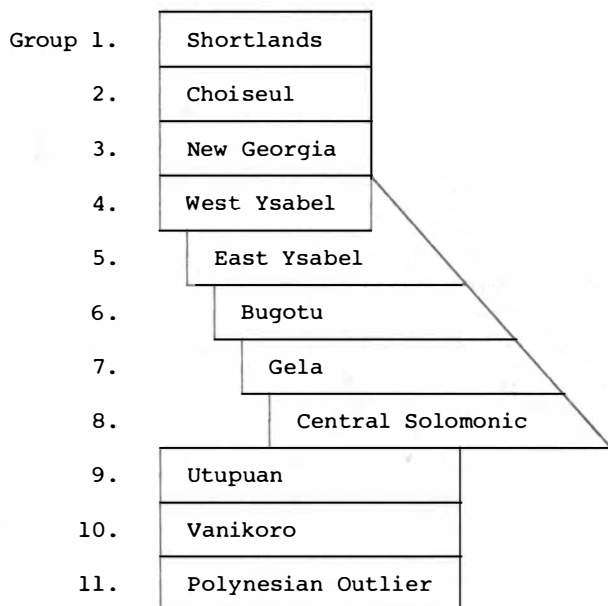
In this paper, as in previous classifications of the languages of Vanuatu (Tryon 1976 and 1977), the problem of non-discrete boundaries and subgroups has manifested itself again in some instances. For example, a 'dialect chain' would be a series of speech communities such that the speech of Community A is mutually intelligible with that of Community B, that of B with C, but not A with C, setting up an intelligibility chain. The dialect chaining principle is well known from the work of Wurm and Laycock (1961), Voegelin et al. (1963) and Wurm (1972). What is of interest here, and throughout island Melanesia at least, is the extension of the chaining principle to language subgrouping at higher levels, thereby circumventing the problem of sharp cut-offs between one category or subgroup and the next.

Thus in Chart I it will be seen that the languages of the Solomons fall into a number of Groups, Subgroups, Languages and Dialects, the percentile criteria for which have been given above. It will be noted that all of the subgrouping levels

lie within rectangles, a number of which overlap. This overlapping represents non-discrete subgroups brought about by the chaining phenomenon discussed above, the principle being applied at all levels.

So under the heading 'Dialect', names enclosed in rectangular configurations are dialects, mostly all chains, of the 'Languages' to their left. So, for example, the language named Central East Choiseul is in fact a dialect chain with six major constituents or links. At a higher level it will be seen that Ririo is a member of both the North West Choiseul and Central East Subgroups, Vaghua, Varisi and Ririo meeting the criteria for membership of a single subgroup, while Ririo and Central East Choiseul form a separate subgroup. At a higher level again, the Group level, it will be seen that both of these subgroups are subsumed under a single Group, the Choiseul Group. An examination of the Chart will show, then, that the chaining phenomenon is apparent at all levels.

So it is that the languages of the Solomon Islands fall into eleven highest-order (for purposes of this paper) subgroups, here called 'Groups', based on a standard basic wordlist. Some of the groups so distinguished will be seen to represent discrete entities, while others will be seen to overlap; the Chart appearing below should be self-explanatory. For the sake of added clarity, however, the highest-order groups and their overlaps will be set out separately as follows:



The above diagram is meant to illustrate what has been included in Chart I, namely that the languages of the Solomon Islands fall into eleven higher-order subgroups according to lexicostatistical criteria, that Groups 1 to 3 and 9 to 11 constitute discrete subgroups, while Groups 4 to 8 are overlapping groups, such that for example West Ysabel partially overlaps with East Ysabel which partially overlaps with Bugotu and so on until the Central Solomonian Group.

The total Solomon Islands classification, distinguishing four levels, is put forward, tentatively at this stage, in the chart as follows:

Group	Subgroup	Language	Dialect
SHORTLANDS	Shortlands	Alu	Mono Alu Fauro
CHOISEUL	N.W. Choiseul	Vaghua	Vaghua
		Varisi	Ghone Varisi
	C.E. Choiseul	Ririo	Ririo
		C.E. Choiseul	Babatana Katazi Sengga Lōmaumbi Avasō
NEW GEORGIA	Roviana	Ghanongga	Ghanongga
		Lungga	Lungga
		Simbo	Simbo
		Nduke	Nduke
		Roviana	Roviana
		Ughele	Ughele
		Kusaghe	Kusaghe
	Hoava	Hoava	
	Marovo	Marovo	Marovo
		Vangunu	Vangunu Mbareke
WEST YSABEL	Kia	Zabana	Zabana
	Laghu	Laghu	Samasodu
EAST YSABEL	Ysabel	Kokota	Kokota
		Zazao	Kilokaka
		Blablanga	Blablanga
		Maringe	Ghove Kmagha Leleghia Tataba
BUGOTU	Bugotu	Bugotu	Poro
GELA	Gela	Gela	Bugotu
		Lengo	Gela Lengo Paripao Ghaimuta
	Guadalcanal	West Guadalcanal	
Talise			Poleo Koo Malageti Talise Tolo Moli
Malango Birao			Malango Birao
CENTRAL SOLOMONIC			

Group	Subgroup	Language	Dialect
CENTRAL SOLOMONIC (continued)	Malaita	Longgu	Longgu
		Lau	Lau Walade
		North Malaita	To'abaita Baelelea Baegu Fataleka
		Kwara'ae	Kwara'ae
		Langalanga	Langalanga
		Kwaio	Kwaio
		Dori'o	Dori'o
		'Are'are	'Are'are
		Oroha	Oroha
		South Malaita	Sa'a Ulawa Uki Ni Masi
	San Cristobal	Arosi	Arosi
		Fagani	Fagani Rihu'a Agufi
		Bauro	Bauro Haununu Rawo
		Kahua	Kahua Tawaroga Mami Santa Ana S. Catalina
UTUPUA	Nembaio	Nembaio	Nembaio
	Asumboa	Asumboa	Asumboa
	Tanimbili	Tanimbili	Tanimbili
VANIKORO	Vanikoro	Buma	Buma
		Vano	Vano
		Tanema	Tanema
POLYNESIAN OUTLIER	Polynesian Outlier	Rennellese	Rennell Bellona
		Luangiua	Ontong Java
		Sikaiana	Sikaiana
		Pileni	Pileni
		Tikopian	Tikopia Anuta

va

SOLOMON ISLANDS NON-AUSTRONESIAN LANGUAGES

1. Bilua (Vella Lavella)
2. Baniata (Rendova)
3. Kazukuru (New Georgia, extinct)
4. Lavukaleve (Russell Is)
5. Savosavo (Savo I)
6. Aiwo (Reef Is)
7. Santa Cruz (Santa Cruz I)
8. Nanggu (Santa Cruz I)

3. THE PHONOLOGICAL EVIDENCE

The subgroupings based on quantitative criteria, tentative though they are, appear to be well supported by qualitative evidence. The phonological evidence for each of the lexicostatistically based subgroups will be examined briefly, highlighting only the major phonological innovations which may be used to distinguish them.

A Shortlands subgroup appears to be supported by (1) the fact that POC *ŋ → ∅ [Alu boi 'night', lao'au 'fly'] intervocalically; (2) POC *k → ? intervocalically also [Alu ba'oi 'shark']; (3) POC *s and *ns appear to merge as ∅, with the sole exception of Alu hose 'paddle', thus: [aha-na 'what', ale 'float']. (4) Phonetically POC *p is reflected as h in Alu, and in none of the languages north of Malaita, while POC *d and *nd merge as l. While the quantity of lexical data from which this phonological evidence has been adduced is rather limited, nevertheless it appears that none of the other language groups within the Solomon Islands share the combination of sound changes listed above.

Choiseul appears to be supported as a subgroup by a small number of phonological developments not found elsewhere in the Solomons. The most common of these is a v accretion before u, and a z accretion before i after the loss of initial k generally. Thus, we have: Babatana vutu 'louse', zita 'we pl incl'. In West Choiseul the accretion does not occur regularly, thus Vaghua eta 'we pl incl'. All of the languages of Choiseul share an r accretion to reflexes of the cardinal pronoun forms *koe 'you sg', *kami 'we pl excl' and *kamu 'you pl'. Thus, for example: Vaghua oram, Varisi ramu, Ririo ram, Babatana, Katazi, Sengga, Lōmaumbi, Avasō ramu, 'you pl'. In Choiseul POC *w → ∅, a change shared by a number of other languages in the area, and POC *ns → ∅ word initially, except when reflecting *nsaqat 'bad'. Thus, for example, Sengga z-ia 'nine'.

The New Georgia subgroup can perhaps be best defined negatively, for these languages share none of the innovations which distinguish the Shortlands and Choiseul subgroups. They do, of course share such widespread developments as POC *w → ∅, and the merger of POC *ŋm and *m as m.

Phonologically, Santa Ysabel, with the exception of the Bugotu area in eastern Ysabel, appears to form a subgroup distinct from all other Solomon Islands groups. The phonological history of these languages is obviously complex, with the development of a set of aspirated stops not encountered elsewhere, together with preconsantal glottal occlusions whose origins are not evident as yet. Apart from these phonetic oddities, a number of the POC phonemes have reflexes not shared beyond Santa Ysabel. For example, POC *m → ∅ with cardinal pronouns. Thus: Kilokaka yai 'we pl excl', yau 'you pl'. Initial POC *m is sometimes reflected as n. Thus, Kilokaka nat^ha, Blablanga nat^ha, Gho ve nat^ha 'eye'; Blablanga nanafa, Samasodu nanafa 'heart'. This sound change could be the result of the merging of some kind of article, perhaps *na, with the first consonant of the noun. Articles are not generally used in the languages of Santa Ysabel, however. It is interesting to note also that POC *n is reflected as ñ in the languages preserving the Proto-Oceanic *n/*ñ distinction, but only reflecting POC *manawa 'heart', thus Leleghia nañafa, Poro ñañafa 'heart'. It is possible, of course, that the POC reconstructed form may be more properly *mañawa.

Santa Ysabel (excepting Bugotu) is alone, too, in reflecting POC *p as f or h, *mp as b, but *ŋp as p^h. The phonological evidence, then, even after a preliminary study, would indicate the existence of a Santa Ysabel subgroup.

The lexicostatistically established subgroups, Bugotu, Gela, Guadalcanal, Malaita and San Cristobal, and the Central Solomonic group share the merger of POC *l and *R. This merger (see also Pawley 1972:30) is not shared by other language groups in the Solomons. This large subgroup also shares a number of other sound changes occurring over a wide area, and not of great diagnostic value.

Within the Central Solomonian group, a subgroup including the languages of Malaita (together with Longgu and Marau on Guadalcanal) and San Cristobal appears to be strongly indicated by the phonological evidence. All of these languages share the following innovations:

- (1) POC *t → ø. Thus: To'abaita mā-na, Bauro mā-na 'his eye'; Kwaio ū, Kahua ŷū 'louse'.
- (2) POC *s and *ns are reflected as s before high vowels, and t elsewhere. Thus: Fataleka fote, Ulawa hote 'paddle', but sikwa and siwa 'nine', respectively.
- (3) There is an s- accretion before a in a number of words. Thus: Oroha sae, Fataleka saeθau 'liver', Fataleka sato, Ulawa sato 'sun'. This accretion appears to be restricted to Malaita and the languages within the immediate Malaitan subgroup, where the *s- has a number of regular reflexes.

The languages of Guadalcanal, Florida (Gela) and Bugotu may be subgrouped negatively, in that while they all share the POC *l and *R merger, they do not share the innovations just discussed for Malaita and San Cristobal. Positively, POC *m and *ŋm merge as m in Bugotu, Gela and Guadalcanal, traces of the labiovelar being found as reflexes of *ŋmata 'snake', in some of the dialects of Guadalcanal, but not for other etymons. Thus: Gela mane, Gae mane, Malango mane 'man', but Moli mata, Gari muata, Lengo umata 'snake'. The merger of POC *ŋm and *m is fairly widespread, but is not shared by the Malaita-San Cristobal languages, where we find, for example: Baelelea ŋwane, Sa'a mwane 'man', Kwaio wā, Ulawa mwā 'snake'. In addition, POC *w → u in Florida and Guadalcanal, and ø in Bugotu, while it is retained in Malaita-San Cristobal. Thus: Ndi siu, Talise siu 'nine', but Baelelea sikwa, Arosi siwa 'nine'. The phonological evidence for two subgroups of Central Solomonian is strong, then, even though only the major features have been discussed here.

As far as the two putative subgroups in the Eastern Outer Islands, Utupua and Vanikoro, are concerned, the picture is not so clear, for the dearth of cognates and low percentages lexicostatistically make it difficult to establish many phonological rules which are useful as subgrouping evidence. As more extensive vocabularies become available and the complex borrowing patterns clarified, detailed phonological evidence will undoubtedly be adduced. At this stage, the picture is not very clear. It appears that Utupua and Vanikoro share none of the phonological innovations which constituted the principal evidence for the subgroups discussed above, and so may be excluded from them. Utupua appears to have lost reflexes of POC *R, while Vanikoro appears to have retained them. Thus: Nembao nie, Tanimbili nowio 'water', but Buma ero, Vano wire, Tanema wira 'water', Nembao nanö, Tanimbili noñio 'coconut', but Buma luro 'coconut'. POC *d is also reflected as y in two of the three Utupuan languages, while it is reflected as l in Vanikoro. Although these pieces of evidence are fragmentary, they suggest that the languages of Utupua and Vanikoro have undergone a perhaps lengthy period of separate development. The lexicostatistical evidence would certainly lead one to believe this, although morphosyntactic features suggest much closer links.

4. CONCLUSIONS

While both the quantitative and qualitative evidence is of a preliminary and necessarily tentative nature, it appears that the major subgroups established on lexicostatistical criteria are largely corroborated by a preliminary consideration of the broad lines of the phonological evidence. The only significant modification which the qualitative evidence would suggest, at this stage, is a single subgroup for Santa Ysabel (with the exception of Bugotu) rather than the two overlapping subgroups for that island set up in the first part of the paper. What is known of the morphosyntax of the Solomon Islands languages suggests that a similar more definitive subgrouping will be reached as that evidence is considered. Of course

the external relationships of these languages remain to be determined. Such an exercise was beyond the scope of a preliminary study such as this.

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