

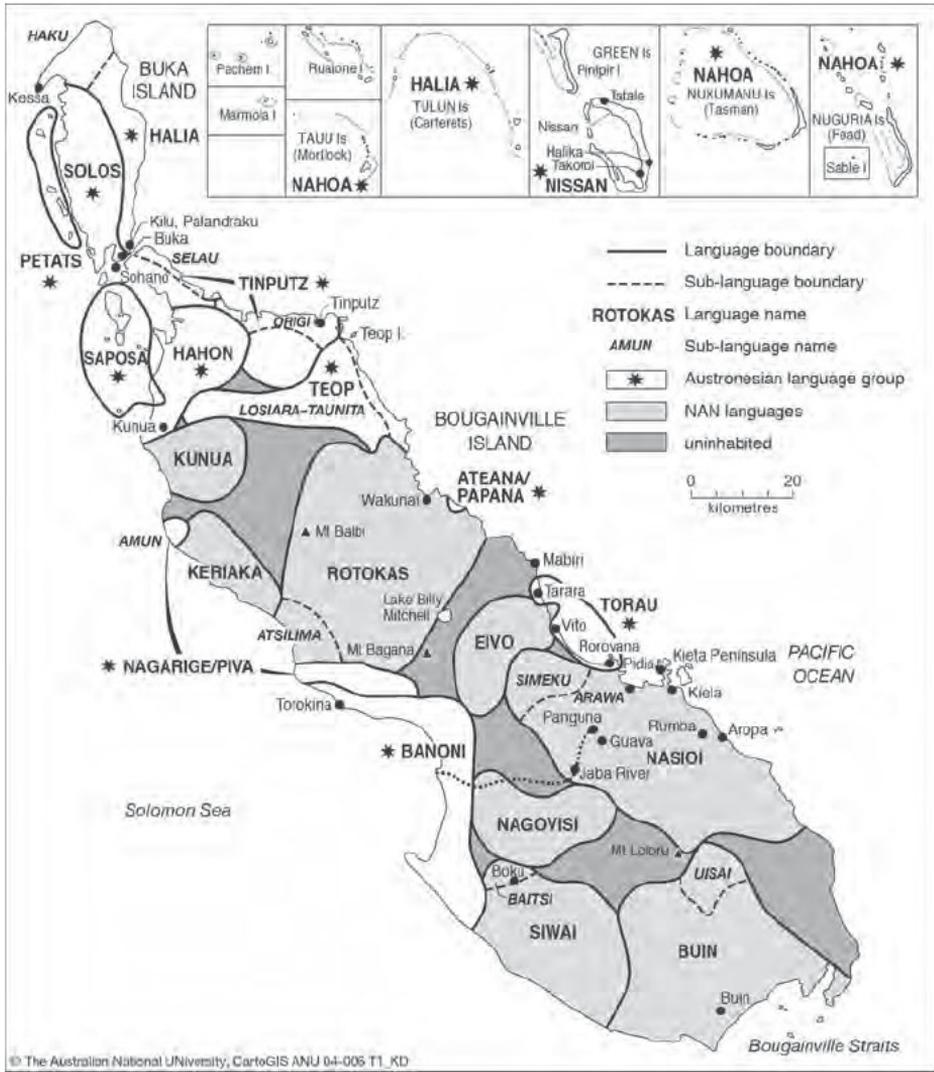
THE LANGUAGES OF BOUGAINVILLE

by Darrell Tryon

The Bougainville Province of Papua New Guinea consists of the following islands to the east of the Papua New Guinea mainland: Bougainville, Buka and adjacent islands, and the offshore island groups including the Nissan (Green Island), Nuguria (Fead), Takuu (Mortlock), Nukumanu (Tasman) and Tulun (Carteret) islands [Hanson et al. 2001: 282].

The languages of Bougainville belong to two major language families, the Austronesian Family and the Papuan, or non-Austronesian, language group. The Austronesian and Papuan languages are not genetically related, that is, they have different origins, and, as will be discussed below, very different chronologies. The Austronesian languages are located in the northern part of the Buka–Bougainville land mass, and in coastal pockets further south, as well as on the small islands to the north and east, [Map 1]. The Papuan languages form a geographical continuum covering the central and southern sections of Bougainville (minus the Austronesian enclaves).

The term ‘language’ is used in a number of different ways. Commonly it is used as a marker of political identity — in this sense each social unit has its own language or dialect in Bougainville Province, approximately 50 in all. In technical terms, there are currently 16 Austronesian languages and nine Papuan languages spoken in the Bougainville Province today. What distinguishes a ‘language’ from a ‘dialect’? Linguists say that if two modes of speech are mutually intelligible, then they are said to constitute dialects of a single language. If they are not mutually intelligible, then they are considered to constitute separate languages. To a certain extent, then, these distinctions are subjective. What follows is a brief introduction to Austronesian and Papuan languages and language families, its purpose being to situate the languages of the Bougainville Province within these parameters.



Map 1: *The languages of Bougainville*

DISTINGUISHING AUSTRONESIAN AND PAPUAN LANGUAGES

What is meant by the terms ‘Papuan’ and ‘non-Austronesian’? First, the term ‘non-Austronesian’ was coined to describe those languages which are found mainly in greater New Guinea, but which are not members of the Austronesian language family, which is easily distinguished by its relatively uniform basic grammatical

features and lexicon [for further details see Tryon, ed. 1995]. The so-called Papuan, or ‘non-Austronesian’ languages are generally considered to be much more complex, morphologically and syntactically, (and difficult to learn for speakers of Austronesian languages) and are immediately recognisable as not being Austronesian [Foley 1986]. However, the term ‘non-Austronesian’ is totally inadequate, as all of the languages of the world outside the Austronesian family could have this label applied to them. The term ‘Papuan’ is not much better, in that there is a geographical area in Papua New Guinea called Papua. This area is home to both Austronesian and ‘non-Austronesian’ languages. However, as no better term has been devised until now, the term Papuan has become the preferred label for those ‘non-Austronesian’ languages found in greater New Guinea and environs.

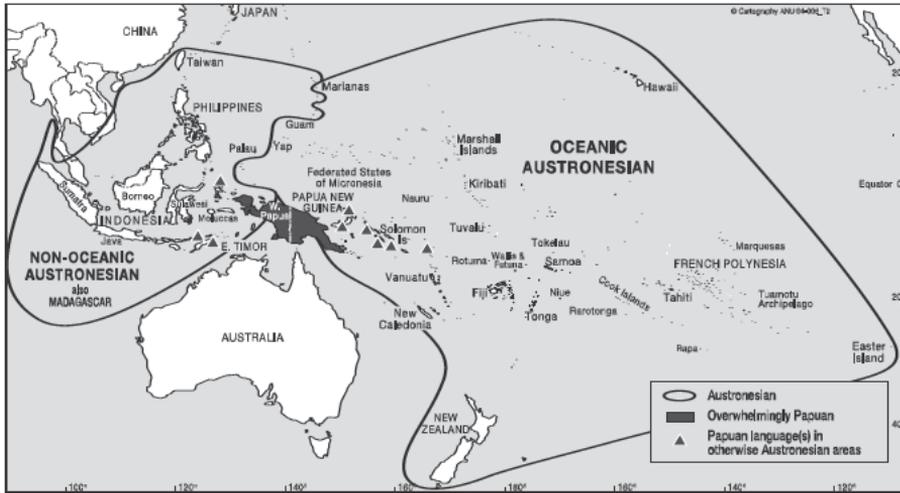
THE AUSTRONESIAN LANGUAGES

The Austronesian languages present on Bougainville are all members of the great Oceanic subgroup of Austronesian [Map 2], represented in family tree form in Figure 1 below. In fact, the Austronesian languages are believed to have originated in southern China about 6,000 years ago and from there, migrating first to Taiwan and later moving to the Philippines, Indonesia, Madagascar, Singapore, Malaysia and parts of mainland South-East Asia (Vietnam and Cambodia) [Tryon, ed. 1995]. From island South-East Asia they moved along the north coast of the island of New Guinea and settled in the New Britain/New Ireland area about 4,000 years ago [Spriggs 1997]. This was the cradle of the famous Lapita culture from where the Austronesian peopling of Island Melanesia began some 500 years later. The archaeological evidence indicates that the first Austronesian language speakers would have reached the Bougainville area roughly 3,000 years ago [see Spriggs, this volume].

This is considerably later than the first Papuan language speaking communities, which have been present in the Buka–Bougainville area for almost 30,000 years.¹ It is self-evident that there was major and intensive contact between the Austronesian newcomers and the older established Papuans (see below).

So where do the Austronesian languages of the Bougainville area fit into the Melanesian scheme of things? We have seen that they are all members of the Oceanic subgroup, a huge subgroup which has as its members almost half of the Austronesian family [Map 2]. Within Oceanic, the Bougainville area languages are members of the Western Oceanic subgroup, which comprises all the Austronesian languages of Papua New Guinea and the Western Solomons [Figure 1].

Within the Western Oceanic subgroup, the Austronesian languages of Bougainville are members of a group known as the Meso–Melanesian cluster [Map 3].



Map 2: Papuan and Austronesian language areas

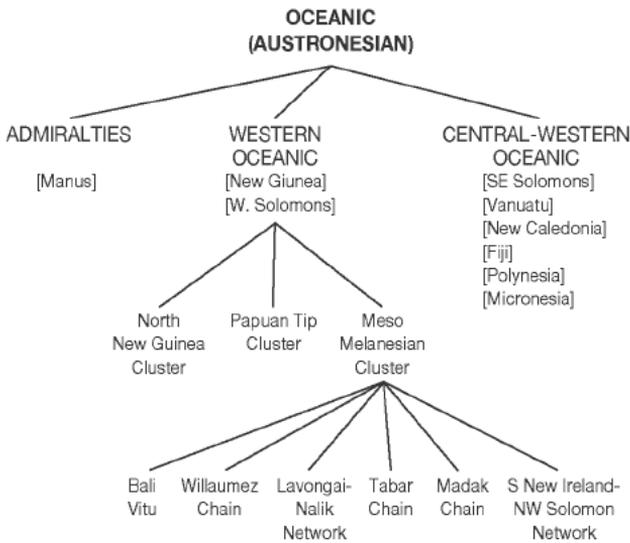
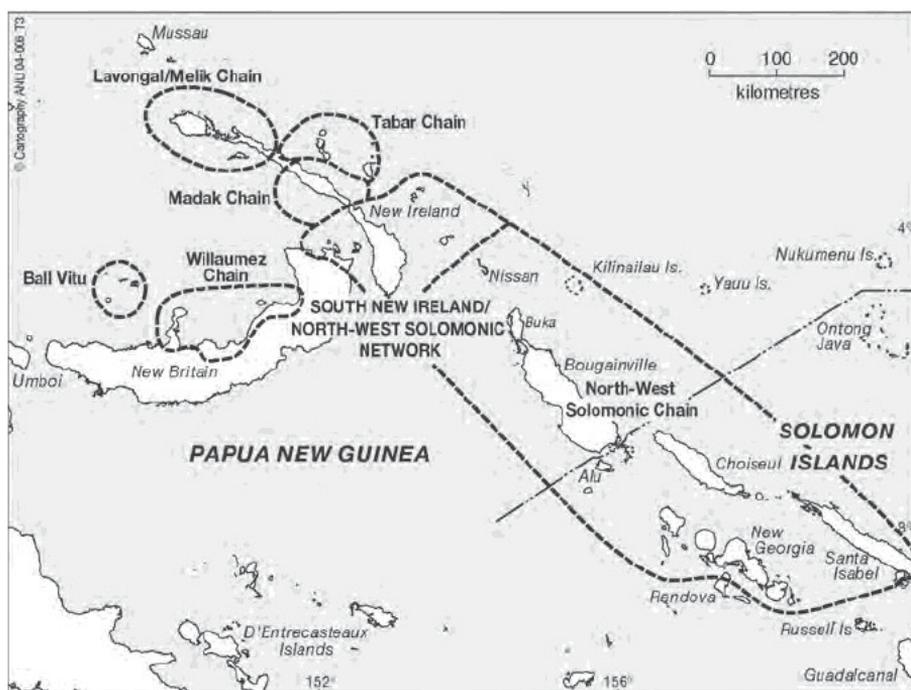


Figure 1: The Oceanic subgroup of Austronesian languages

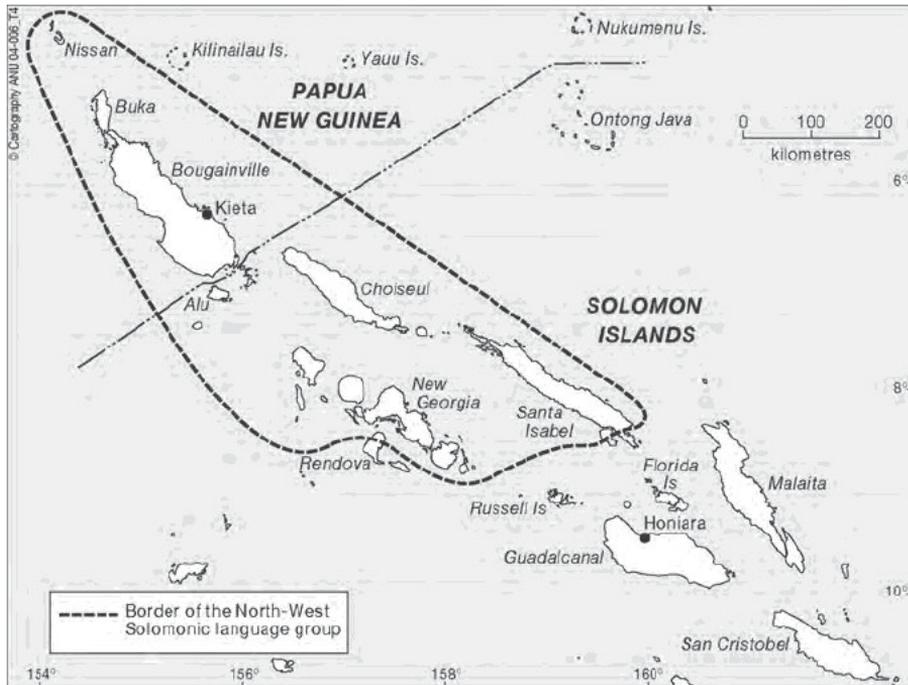


Map 3: Location of the Meso-Melanesian cluster and its subgroups

This grouping includes most of the Austronesian languages of New Ireland (the Lavongai–Nalik Chain, Tabar Chain, Madak Chain), and the north coast of New Britain (Bali–Vitu, Willaumez Chain), as well as the languages of the South New Ireland–North-West Solomonian Network.

In terms of the languages of Bougainville, it is the South New Ireland–North-West Solomonian Network which is the defining subgroup. Within this, the most closely related languages are members of the North-West Solomonian group (see Map 4). It can be seen from this map that this group takes in all of the Austronesian languages of Buka and Bougainville and Nissan to the north-west, as well as the languages of the Western Solomons (the Shortland Islands, Choiseul, New Georgia and Santa Isabel, with the exception of Bughotu, on the eastern extremity of Santa Isabel).²

The inter-relationships of the Austronesian languages of Bougainville, and their further links to the languages of the North-West Solomonian chain, are set out in Figure 2. This figure shows that Petats and Halia (and its dialects) are closely related, as are Saposia (and the Taiof dialect) and Hahon, Tinputz and Teop. Piva is most closely related to its neighbour Banoni. On East Bougainville there is a strong link between Torau and Uruava (now extinct),³ and Mono–Alu in the Shortlands [Ross 1988: 217].



Map 4: Location of the North-West Solomonic group of Oceanic languages

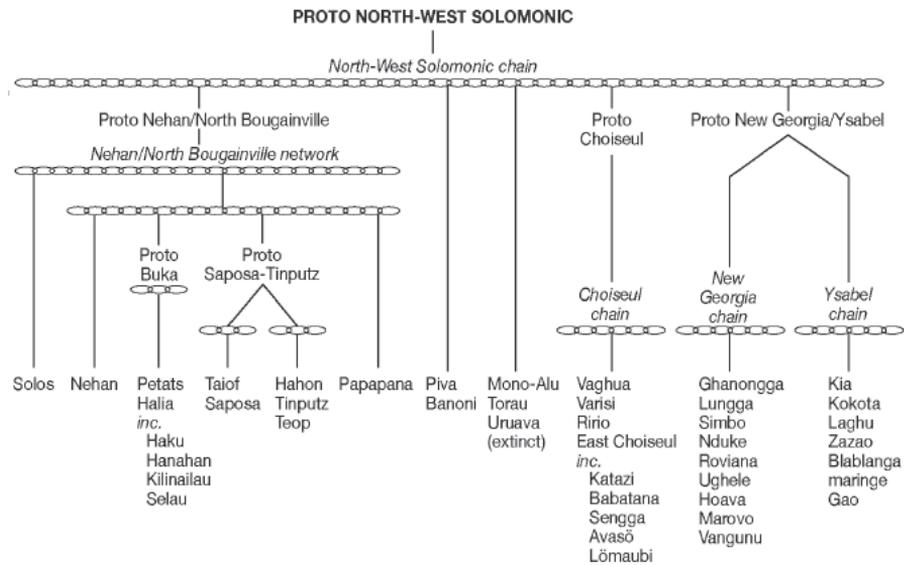


Figure 2: The North-West Solomonic language group: genetic tree

In terms of linguistics, then, there are 16 extant Austronesian languages spoken in Bougainville Province. These include Nehan (Green Island–Nissan), together with three Polynesian Outlier languages, namely Takuu (Mortlock Island), Nuguria (Fead), and Nukumanu (Tasman Island). The languages, locations and approximate numbers of speakers are as follows:

	Language	Location	No. of Speakers ⁴
1.	Halia	Kilinailau (Carteret Is), NE Buka, NE Bougainville	20,000 [1994] ⁵
2.	Haku	NE Buka	5,000 [1982]
3.	Solos	C & SW Buka	3,200 [1977]
4.	Petats	Petats, Pororan, Hitau, Matsungan Is (off W Buka)	2,000 [1975]
5.	Saposa (Taiof)	Saposa and Taiof I (SW of Buka)	1,400 [1998]
6.	Hahon (Hanon)	NW Bougainville	1,300 [1977]
7.	Piva	W Bougainville	550 [1977]
8.	Banoni	SW Bougainville	1,000 [1977]
9.	Tinputz (Vadoo)	NE Bougainville	3,900 [1991]
10.	Teop	NE Bougainville	5,000 [1991]
11.	Papapana	E Bougainville	150 [1977]
12.	Torau (Rorovana)	SE Bougainville	605 [1963]
13.	Uruava	SE Bougainville	EXTINCT
14.	Nehan (Green Is–Nissan)	N Bougainville	7,000 [1995]
15.	Takuu	Mortlock Islands	250 [1981]
16.	Nukumanu	Tasman Islands	200 [1981]
17.	Nuguria	Nukuria Atoll	200 [1981]

Previous Classifications

There have been a number of surveys of the languages of Bougainville carried out over the past forty years, principally Allen and Hurd [1963], Wurm and Hattori [1981–83], Wassmann [1995]⁶ and *Ethnologue* (Grimes ed.) [2000]. The listing above takes previous surveys into account, but is also based on native speakers' evaluations of differences between the surveys, especially with regard to variant names and the differentiation of 'language' versus 'dialect'. Before discussing these, it is useful to tabulate the results of previous surveys as follows:

	<i>Language</i>	<i>Variant Name</i>	<i>Dialects</i>	<i>Sub-dialects</i>	<i>Sub-language</i> ⁷
AH ⁸	Halia	Hanahan, Tulon,	Halia, Haku, Hangan Tasi		Selau
WH	Halia		Haku, Hanahan, Selau, Carteret		
ET ⁹	Halia	Tasi	Hanahan, Hangan, Touloun, Selau		
DT	Halia				
ET	Hakö		Lontes		
DT	Haku ¹⁰				
AH	Solos				
WH	Solos				
ET	Solos				
DT	Solos				
AH	Petats		Petats, Hitau–Pororan, Matsungan		
WH	Petats				
ET	Petats		Hitau–Pororan, Matsungan, Sumuon		
DT	Petats				
AH	Saposa		Saposa, Taiof		
WH	Saposa		Saposa, Taiof		
ET	Saposa		Saposa, Taiof		
DT	Saposa	Taiof			
AH	Hahon		Hahon, Kurur, Ratsua, Aravia		
WH	Hahon				
ET	Hahon		Kurur, Ratsua, Aravia		
DT	Hahon				
AH	Tinputz	Wasoi	Tinputz, Pokpapa	Dios (Tsibatabai), Chundawan	Orig
WH	Tinputz				
ET	Tinputz	Vasuii, Vasui, Wasoi, Timputs	Vasui, Vavouhpoa', Vaene', Vado–Vaene', Vapopeo', Vapopeo'- Rausaura, Vado		
DT	Tinputz	Vaadoo			
AH	Teop		Teop, Wainanana	Losiara, Taunita, Melilup, Petspets	Losiara– Taunita
WH	Teop				
ET	Teop		Wainanana, Losiara (Raosiara), Koopei (Kopei)		
DT	Teop				
AH	Papapana				

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	<i>Language</i>	<i>Variant Name</i>	<i>Dialects</i>	<i>Sub-dialects</i>	<i>Sub-language</i> ⁷
WH	Papapa				
ET	Papapana				
DT	Papapana				
AH	Nagarige	Piva	Nagarige	Amun	
WH	Piva				
ET	Piva	Nagarige	Amun		
DT	Piva				
AH	Banoni	Tsonari			
WH	Banoni				
ET	Banoni	Tsunari			
DT	Banoni				
AH	Torau				
WH	Torau				
ET	Torau	Rorovana			
DT	Torau	Rorovana			
WH	Uruava				
ET	Uruava				
DT	Uruava ¹¹				
AH	Nissan		Nissan, Pinipel		
WH	Nehan	Nissan			
ET	Nehan	Nissan, Nihan	Nehan, Pinipel		
DT	Nehan	Nissan			
AH	Nahoa ¹²	Taku	Mortlock, Tasman, Nuguria–Fead		
WH	Takuu				
ET	Takuu	Tauu, Taku, Tau, Mortlock			
DT	Takuu				
AH	Nahoa	Taku	Mortlock, Tasman, Nuguria–Fead		
WH	Nukumanu				
ET	Nukumanu	Tasman			
DT	Nukumanu				
AH	Nahoa	Taku	Mortlock, Tasman, Nuguria–Fead		
WH	Nuguria				
ET	Nuguria	Nukuria, Nahoa, Fead			
DT	Nuguria				

THE PAPUAN LANGUAGES

The Papuan or non-Austronesian languages, which number some 750, are mainly spoken across the mountainous interior of the great island of New Guinea. In Map 2, they are indicated in solid black. Austronesian languages are spoken mainly in the coastal regions. Papuan languages are also spoken to the west of

New Guinea in the northern half of Halmahera, on Pantar and Alor, and in parts of Timor. To the east of New Guinea, Papuan languages are spoken in parts of New Britain and New Ireland, Bougainville, and in parts of the Solomon Islands as far south-east as the Santa Cruz group.

It has not been demonstrated that all of the Papuan languages are genetically related. However, thanks to the pioneering work of Wurm and his team during the 1960s [Wurm, ed. 1975], and since that time through the work of an increasing number of scholars, especially Ross [1996] and Pawley [1998], it has been demonstrated that a large number of the Papuan languages, up to 500, are in all likelihood members of a single language group, best known as the Trans New Guinea Phylum, or Trans New Guinea Family. Pawley sums up the situation as follows:

It now seems certain that there is a valid genetic group which includes many of the groups of Papuan languages assigned by Wurm, Voorhoeve and McElhanon [1975] to the TNG Phylum. The core of this group consists of many small subgroups spoken in the central mountain ranges of New Guinea, starting east of the Bird's Head and extending to Southeast Papua, together with the Asmat–Kamoro and Awyu–Dumut groups of the southwest lowlands and two large groups of northeast New Guinea: the Madang group (with about 100 languages), and the Finisterre–Huon group (about 70 languages) — some 400 languages in all [Pawley 1998: 683].

While this is a major grouping, the remainder of the Papuan languages have been classified into a number of small phyla, up to 50, each with a membership of 20 to 30 languages. None of these phyla have been demonstrated to be related to one another, and none have been shown to belong to the very extensive Trans New Guinea Phylum. Given the extreme antiquity of the populations speaking the languages in these phyla, this situation is not really surprising.¹³

There are eight Papuan or non-Austronesian languages spoken on Bougainville as follows:

	Language	Location	No. of Speakers
1.	Kunua (Konua)	W Bougainville	3,500 [1998]
2.	Rotokas	C Bougainville	4,320 [1981]
3.	Keriaka	W Bougainville	1,000 [1981]
4.	Eivo	C Bougainville	1,200 [1981]
5.	Nasioi (Kieta)	SE Bougainville	10,000 [1990]
6.	Nagovisi	SW Bougainville	5,000 [1975]
7.	Siwai (Motuna)	SW Bougainville	6,600 [1981]
8.	Buin (Telei)	S Bougainville	30,500 [1998]

Variant language and dialect names recorded in previous surveys [Allen and Hurd 1963; Wurm and Hattori 1981–83; *Ethnologue* 2000] include the following:

	<i>Language</i>	<i>Variant Name</i>	<i>Dialects</i>	<i>Sub-dialects</i>	<i>Sub-language</i>
AH	Kunua				
WH	Konua				
ET	Rapoisi	Kunua, Konua			
DT	Kunua	Konua			
AH	Keriaka				
WH	Keriaka				
ET	Kereaka	Keriaka			
DT	Keriaka				
AH	Rotokas		Rotokas,	Atsilima	
			Pipipaia, Aita,		
WH	Rotokas		Atsilima		
ET	Rotokas		Pipipaia, Aita,		
			Atsilima		
DT	Rotokas				
AH	Eivo				
WH	Eivo				
ET	Eivo				
DT	Eivo				
AH	Nasioi		Nasioi, Pakia–	Mainoki	Simeku
			Sieronji, Koromira,	Korpei	
			Lantanai,		
			Oune, Orami		
WH	Nasioi		Simek		
ET	Naasioi	Nasioi,	Naasioi, Kongara,		
		Kieta,	Orami (Guava),		
		Kieta Talk,	Pakia–Sideronsi		
		Aunge			
DT	Nasioi	Kieta			
AH	Nagovisi	Sibbe			
WH	Nagovisi				
ET	Nagovisi	Nagovis,			
		Sibbe			
DT	Nagovisi				
AH	Siwai	Motuna	Siwai		Baitsi (Sigisigero)
WH	Siwai	Motuna	Baitsi		
ET	Siwai	Motuna	Baitsi (Sigisigero)		
DT	Siwai	Motuna			
AH	Buin	Telei,	Buin		Uitai
		Rugara			
WH	Buin	Uisai			
ET	Buin	Telei, Terei,			
		Rugara			
DT	Buin Telei				

Ethnologue [2000] also lists the following Papuan languages not listed elsewhere:

	Language	Location	No. of Speakers
ET	Uisai	Buin District	2,500 speakers [SIL 1991]
ET	Lantanai	Kieta District	300 speakers [SIL 1990]
ET	Koromira	Kieta District	1,562 speakers [SIL 1990]
ET	Oune	Kieta District	1,900 speakers [SIL 1990]
ET	Simeku	Kieta District	1,898 speakers [SIL 1980]

Uisai is considered to be a dialect of Buin, while Lantanai, Koromira, Oune and Simeku are perhaps best considered to constitute dialects of Nasioi.

PAPUAN LANGUAGES OF BOUGAINVILLE

In terms of the Bougainville area, what is the position of the relationships of the Papuan languages spoken there? Wurm [1975] posited the existence of an East Papuan Phylum, extending from New Britain and Rossel Island in the Louisiade Archipelago eastwards across the Solomon Islands chain to the Reef Islands and Santa Cruz group in the far south-east of the Solomons. The groupings posited by Wurm are as follows:

a. Yele–Solomons–New Britain Super-Stock:

Central Solomons Family	Bilua (Vella Lavella)
	Baniata (Rendova)
	Lavukaleve (Russell Is)
	Savosavo (Savo)
Kazukuru Family ¹⁴	Kazukuru (New Georgia)
	Guliluli (New Gerogia)
	Doriri (New Georgia)
Yele Isolate	Yele (Rossel Island)
Baining–Taulil Family	Baining (New Britain)
	Taulil (New Britain)
	Butam (New Britain, extinct)
	Sulka (New Britain)
	Kol (New Britain)
	Wasi (New Britain)
	Anem (New Britain)
	Kuot (New Ireland)

b. Bougainville Sub-Phylum Level Superstock:

East Bougainville Stock	Nasioi Nagovisi Buin Siwai
West Bougainville Stock	Rotokas Eivo Konua Keriaka
Reef Islands–Santa Cruz	Reefs Löndäi Nea Nanggu

While the existence of an East Papuan Phylum, based on quite fragmentary evidence, has never found formal acceptance, the groupings of the Papuan languages spoken on Bougainville proposed by Wurm [1975] are very much in agreement with the groupings reached by Ross [2000], based on a historical study of Bougainville pronominal systems, as follows:

North Bougainville	Rotokas Kunua (Keriaka) ¹⁵ (Eivo)
South Bougainville	Nasioi Nagovisi Buin (Telei) Motuna (Siwai)

Ross [2000] considers that these two Papuan language groups are unrelated,¹⁶ even though today they are geographically contiguous. Spriggs [1997] reports that in traditional times, however, the two groups were separated by a large area of volcanic activity.

Pronouns are usually reliable indicators of relationships between two languages, as they are not normally subject to borrowing. They have been used, in fact, to demonstrate the existence of the Trans New Guinea Phylum. When this test was applied to the putative East New Guinea Phylum, as many as eight distinct groups emerged. While this may appear strange, perhaps it suggests that if these groupings are genetically related, then the relationship may be of much

greater antiquity than the Trans New Guinea Phylum case, which is associated with the development of agriculture in the New Guinea Highlands about 6,000 years ago [Pawley 1998].

While it is known that the Austronesians came to Bougainville about 3,000 BP, much less is known about the Papuan speakers, except that there has been human occupation on the island for approximately 30,000 years. As far as the spread of the Papuan-speaking population is concerned, we know that New Britain, New Ireland and 'Greater Bougainville' [Spriggs, this volume] were separate islands right through the Pleistocene period, which indicates that the 'East Papuans' did not reach their destinations on foot. Prior to the arrival of the Austronesians, we can assume that, based on present-day Papuan language distributions, the area as far east as the central Solomons was peopled by Papuan-speaking populations. These Papuan languages were later displaced by Austronesian speakers.

Evidence from the 20th century includes the three extinct Papuan languages spoken on New Georgia (Kazukuru, Guliguli, Doriri), evidently displaced by Austronesian languages, for which we have linguistic evidence.¹⁷ In New Britain and New Ireland we have other evidence of intense Papuan/Austronesian contact. There are high numbers of roots in the Austronesian languages of this area today, which are not of Austronesian origin. Ross [1994] suggests that Madak, an Austronesian language of New Ireland adjacent to Kuot, a Papuan language, shows evidence that it may be the result of an incomplete shift by its speakers from a Papuan language to an Austronesian one. On the other hand, the Reefs–Santa Cruz languages of the south-east Solomon Islands look as if they are Papuan-type languages possibly carried to their present location by Austronesian speakers [see Wurm 1978; Lincoln 1978].

At present we have no idea whether the present-day Papuan speakers on Bougainville descend directly from an original Papuan settlement, perhaps around 29,000 years ago. Most of the Papuan languages seem to have been in contact with one another, however, as evidenced by the presence of gender systems.¹⁸

CONCLUSION

Bougainville's linguistic composition is a complex one, in that it has about equal numbers of speakers of Austronesian and Papuan languages. However, based on the current classification, there are approximately twice as many Austronesian as opposed to Papuan languages spoken in the province. The linguistic evidence leads us to the conclusion that there has been considerable contact and interaction between the two language groups over a long period, throughout the whole New Britain–New Ireland–Bougainville–Western Solomons area.

In terms of reconstructing the early history and prehistory of the region, the picture is complicated by the fact that populations may change languages over time. Papuan speakers may for various sociological and technological reasons adopt an Austronesian language, as in the case of Madak in New Ireland, mentioned above. Or the shift may be in the opposite direction, as in the case of the Reefs–Santa Cruz area. In fact there are a few languages on the mainland of Papua New Guinea, for example Maisin, in the Oro Province, where contact and interaction has been so intense that it is practically impossible to determine whether the present language is Austronesian or Papuan.

The whole Bougainville region is typical of the symbiotic relationship which exists between Papuan and Austronesian languages, particularly in Papua New Guinea. The intensity and varying nature of these interactions have produced an areal linguistic diversity without parallel. For what characterises the region is not just the great number of different languages and societies, but the extraordinary diversity within that number, due primarily to intensive contact over a very long period [Lynch 1981; Pawley 1981].

Endnotes

1. Wickler and Spriggs [1988] record a date of nearly 29,000 for the Kilu Cave on Buka.
2. With the exception of the Polynesian Outlier languages, see below.
3. Uruava was formerly spoken on south-east Bougainville, between Rorovana and Kieta.
4. See Grimes, Barbara ed. [2000] *Ethnologue*. Dallas: SIL International.
5. Because of the ‘crisis’ in Bougainville, up to date census figures for individual languages are not as yet available.
6. The information in this publication, while valuable historically, is covered by Allen and Hurd [1963], so is not reproduced here.
7. The term ‘sub-language’ is used by Allen and Hurd ‘to classify a speech which is more distant than a dialect and yet not far enough removed to be considered a separate language’ [1963: 2].
8. AH [Allen and Hurd 1963]; WH [Wurm and Hattori 1981–83]; ET [*Ethnologue* 2000]; DT [Darrell Tryon].
9. See Grimes, Barbara ed. [2000] *Ethnologue*. Dallas: SIL International.
10. Both *Ethnologue* [2000] and the present writer consider that Haku constitutes a separate language from Halia. Ruth Spriggs (personal communication) confirms this assessment, based on mutual intelligibility.
11. See endnote 1.
12. Allen and Hurd [1963] classify Takuu, Nukumanu and Nuguria as dialects of Nahoa. All other commentators treat them as separate languages. All three are Polynesian Outlier languages. Polynesian Outlier languages are Polynesian languages situated outside Triangle Polynesia (in Melanesia and Micronesia), mainly as a result of drift voyaging from central Polynesia, and therefore much later than the original Austronesian colonisation of Island Melanesia.
13. Spriggs [1997: 39, 47] gives the following archaeological dates: Papua New Guinea Highlands (55,000 BP), New Britain and New Ireland (35,000), Buka (29,000), Guadalcanal (22,000).
14. All of these languages became extinct early in the 20th century
15. Square brackets indicate a tentative assignment to this group.
16. That is, they cannot be demonstrated to be related to any other language group. They are certainly not Austronesian, but may ultimately be shown to be genetically related to some other Papuan language group.
17. Waterhouse [1931].
18. Nouns in these languages are classified as either masculine or feminine, indicated by suffixation.