THE KADAZAN/DUSUN LANGUAGE

John and Elizabeth Banker

O. INTRODUCTION

The group of people whose language is under discussion here are known by the general names Kadazan and Dusun. Various other ethnonyms also exist to distinguish subgroups or clan groupings within the larger group.¹

The name Dusun (also Dusan, Dusum, Dusur) literally means *orchard* and is said to give the connotation of *rural* (LeBar 1972). The name is said to be an exonym which was applied to the local people of Sabah by Malay and English voyagers (Appell and Harrison 1968).

The wide application of the term Dusun makes it difficult to distinguish the groups under discussion here from others in Sabah, especially in early writings. The term has been applied to many of the aboriginal peoples of Sabah and parts of Kalimantan and West Malaysia who have little in common linguistically and culturally.²

The term Kadazan (also Kadasan and Kadayan) appears to have originally referred only to the people of Penampang and Papar. The name is gaining popularity, however, so that many in other areas are using it as a general autonym (LeBar 1972, Whelan 1970).

This paper is concerned with only one of ten languages classified by Smith (in this volume) as Dusunic. Smith called the language under discussion here Kadazan/Dusun, and that language designation will be followed throughout this paper.

The origin of this group is uncertain, though it is generally agreed that Kadazan or Dusun peoples were among the first inhabitants of Sabah (cf. Whelan 1970; LeBar 1972; Chatfield 1972; Staal 1923). Glyn-Jones (1953:12-13) maintains that they were originally an inland people, although they are now also inhabiting coastal areas.

People speaking the Kadazan/Dusun language as it is delimited here live in parts of 13 of the 23 administrative districts of Sabah (Figure 1). There are heavy concentrations of Kadazan/Dusun in the districts of Ranau, Tambunan, Penampang, Papar, Tuaran, Kota Belud, and those parts of Kota Kinabalu outside the city. Speakers of the Kadazan/Dusun language also live in Beaufort, Kinabatangan, Labuk-Sugut, and Keningau districts, with some migrant villages in the districts of Tenom and Tawau.

Julie K. King and John Wayne King, eds Languages of Sabah: a survey report, 297-324. Pacific Linguistics, C-78, 1984. © John and Elizabeth Banker

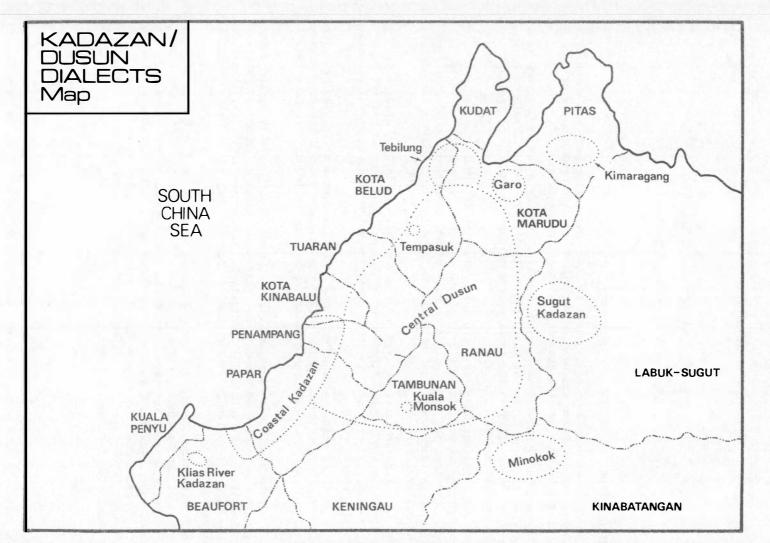


Figure 1: Kadazan/Dusun dialects map

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The 1970 Sabah census listed 183,454 Kadazans in Sabah. However, some groups considered in this paper may not be included in that figure, and other groups included in the Kadazan census figures may differ linguistically from the Kadazan/Dusun under discussion here. The Kadazan/Dusun language is the mother tongue of more people than any other indigenous language of Sabah.

A considerable amount of material has been written about Kadazan/Dusun, though much is in the form of unpublished manuscripts and much deals with only a part of the language group.

Appell (1968) discusses the languages of Sabah but pays particular attention to the Rungus language (→ Rungus). Asmah Haji Omar has made a detailed description of verbal affixation in Kadazan (1978) and also a description of the Kadazan language of Tambunan (1980). Clayre has written a number of articles dealing with part of the Kadazan/Dusun language and has included some other Dusunic languages in her dialect comparisons (1964; 1965). In addition to general grammatical descriptions (1965; 1970), she has written on Dusunic clause types (1967) and focus (1970).

Some of the earliest writings about this language were wordlists such as the Dusun wordlist from Kimanis PR, published by Luering (1897), and Swettenham's (1880) wordlist from Tempasuk KB.

Majusim (1949) has discussed morphology and syntax of Dusun, and Pekkanen (1981) has done a study of sound changes in the Kadazan language from three districts of Sabah.³

1. LEXICOSTATISTICAL CLASSIFICATION

In his lexicostatistical classification, Smith (in this volume) delimited the Kadazan/Dusun language as one of ten languages in the Dusunic language family. Figure 2 shows the percent of shared cognates (PSC) between representative samples of the ten Dusunic languages with the figures from Kogopon PR representing the Kadazan/Dusun language.

PR (Tinambak KP)

	66	BA	(Keru)	kan KI	?)			
	53	55	DS	(Pera	ncanga	an LS))	
	72	67	55	TT	(Bund	u KP)		
	55	62	59	61	DN	(Mengl	kaladoi TN)	
	55	63	68	58	67	RS	(Liyu PS)	
	51	54	69	56	62	71	KT (Lubang Buaya LS)	
	52	58	67	61	68	69	67 KU (Sungoi KU)	
	54	58	75	62	68	77	78 77 MK (Mananam KN)	
	56	66	64	73	72	73	70 77 77 KD (Kogopon PR)	,
- 1								

Figure 2: PSC relations between representative samples of ten Dusunic languages (adapted from Smith, in this volume) (PR = Papar; BA = Bisaya; DS = Dumpas; TT = Tatana; DN = "Dusun" representing Lotud; RS = Rungus; KT = Kadazan-Tambanua; KU = Kuijau; MK = "Mangkaak" representing Eastern Kadazan; KD = Kadazan/Dusun.)

On the basis of 110 wordlists, Smith postulates 13 dialects of Kadazan/-Dusun: Central Dusun, Keningau Dusun, Pilantong (LS) Kadazan, Tempasuk (KB) Dusun, Tombovo (PG) Kadazan, Kota Kinabalu Kadazan, Kota Belud Dusun, Beaufort Kadazan, Sugut Kadazan, Paginatan (RU) Dusun, Kuala Monsok (TA) Dusun, Pemilaan (TM) Dusun, and Bungaraya (KU) Dusun. Figure 3 displays PSC figures between representative samples of the 13 dialects.

Sugut Kadazan (Melinsau LS)

76	Pil	antor	ng K	adaz	an (Pila	nton	J LS)	
75	78	Beau	ufor	t Ka	daza	n (T	ahak	BT)	
81	81	84	Cen	tral	Dus	un (Kogo	pon PR)	.)
77	75	75	84	Kot	a Ki	naba	lu K	adazan	(Natai KK)
76	75	74	82	74	Kot	a Be	lud	Dusun ((Rosok KB)
71	69	71	75	69	82	Tem	pasu	Dusun	n (Tempasuk KB)
74	80	79	80	75	74	69	Tom	ovo Ka	adazan (Tombovo PG)
72	75	74	80	76	76	69	73	Kening	gau Dusun (Marapok KU)
81	73	71	78	77	74	69	72	72 Pa	aginatan Dusun (Paginatan RU)
81	73	74	83	81	73	67	72	75 79	9 Kuala Monsok Dusun (Kuala Monsok TA)
79	72	72	80	80	75	70	70	75 75	5 79 Pemilaan Dusun (Pemilaan TM)
79	75	75	80	77	76	70	72	78 77	7 81 82 Bungaraya Dusun (Bungaraya KU)

Figure 3: PSC relations of 13 Kadazan/Dusun dialects (adapted from Smith, in this volume)

Smith proposes a Central Dusun dialect with a core of 14 villages (wordlists) and a periphery of 60 villages. He then postulates 12 smaller dialects. Three of these are rather large - Beaufort Kadazan, Kota Belud Dusun, and Sugut Kadazan.

2. TESTING PROCEDURES

Since the Kadazan/Dusun language comprises a large geographical area with many dialect distinctions, it was impossible to test every dialect with every other dialect. And at the onset it was unclear what distinctions would be the most important to test. In addition, since the test points and test sets were set up before Smith's 1980 classification, they are based on a preliminary 1979 classification in which Smith used a somewhat different method in determining dialects. This presents some problems in correlating the 1980 lexicostatistical classification with the intelligibility testing. Major patterns of dialect grouping had begun to emerge and it was on the basis of these patterns that the test points and test sets were determined. This means that some of the smaller dialects proposed in the 1980 classification were not tested. These include the Kota Kinabalu Kadazan dialect spoken at Natai KK and four migrant-village dialects: Keningau Dusun of Marapok KU, Pilantong (LS) Kadazan, Pemilaan (TM) Dusun, and Bungaraya (KU) Dusun. Residents of these migrant villages emigrated from their original language areas within the last 30 years. Apparently, residents of these villages have taken on some new vocabulary from speakers of other dialects and languages with which they now have contact. No intelligibility testing was done there because it was felt that speakers of these "migrant dialects" would still understand the speech of their original areas.

3. TEST RESULTS

Intelligibility testing results indicated the need to alter Smith's (in this volume) classification of the dialects of the Kadazan/Dusun language. The discussion below follows the revised classification system.

3.1 The Kadazan/Dusun language

Intelligibility testing disclosed the existence of at least four dialects of the Kadazan/Dusun language: Central Dusun, Coastal Kadazan, Sugut Kadazan, and Kuala Monsok Dusun (Figure 4).

3.1.1 Central Dusun

Eight Central Dusun reference tapes were tested in other Central Dusun villages (Figure 5). Results are displayed in Figure 6.

A number of villages classified by Smith (in this volume) as members of separate dialects were found to belong to the Central dialect. Paginatan RU demonstrated 95% and 87% understanding of Moyog PG and Piasau KB reference tapes, despite cognate relations of only 76 and 74 PSC. The Paginatan RU reference tape was understood at a level of 93-100% at eight other Central Dusun villages with which its PSC relations range only 69-77. Based on these high intelligibility scores it is now considered to be part of the Central Dusun dialect.

Tempasuk KB, also considered by Smith to represent a distinct dialect of Kadazan/Dusun, demonstrated a 96-100% range of intelligibility of three Central Dusun reference tapes, compared to 69-76 PSC with those same villages. It was thus reclassified as part of the Central Dusun dialect.

Three villages formerly classified as Kota Belud Dusun have been reclassified as Central Dusun. These villages, Tambulian Laut KB, Dudar KB, and Mandap KB demonstrated 93-100% intelligibility of three Central Dusun reference tapes, in contrast to PSC relations of only 73-84.

Figure 7 demonstrates the distinctiveness of Central Dusun from two other dialects of the Kadazan/Dusun language: Coastal Kadazan and Sugut Kadazan. A Kuala Monsok Dusun reference tape was not included in any test set. Results are mixed, but the average score of all Central Dusun test points on Coastal Kadazan reference tapes is 82%. This indicates that Central Dusun should be considered a separate dialect from Coastal Kadazan.

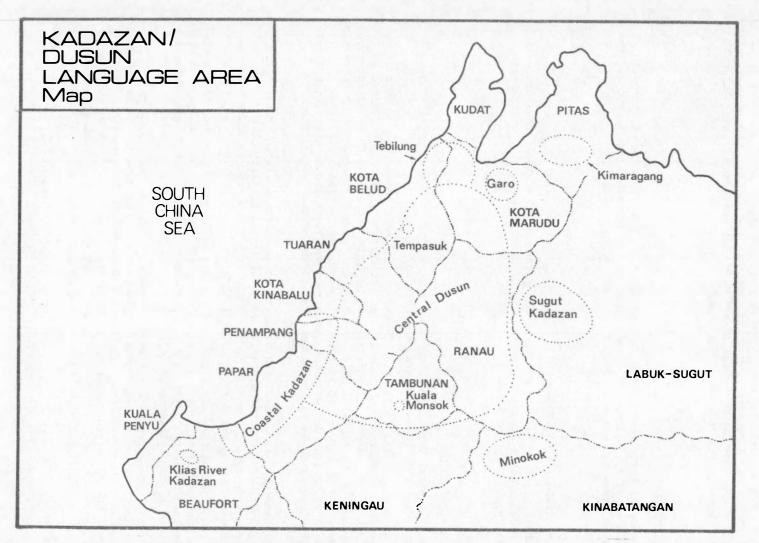


Figure 4: Kadazan/Dusun dialects and closely-related Dusunic languages

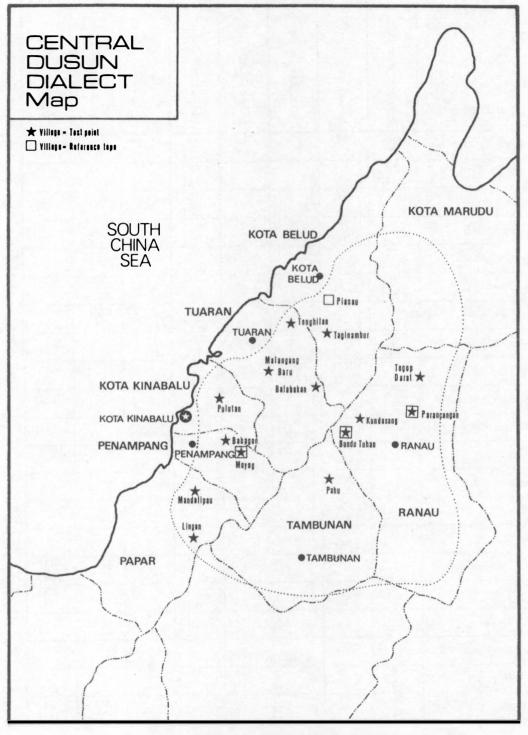


Figure 5: Central Dusun dialect

REFERENCE					1			
TAPES	RU		RU		2.1	~		
	4					R	RU	
	Lan		uen	RU		н		M
	uh.	Б	5u		9	nqı	an	g
	H		ICa	à		ал	at	ta
	qc	ő	an	ap	Sa	in	in	ai
TEST POINTS	Bundu Tuhan	моуод	Parancangan	Nalapak	Piasau	Taginambur	Paginatan	Panaitan KM
		94		93	94			
Bundu Tuhan RU	1	(84)		(87)	(82)			
	98				98		95	
Moyog PG	(84)				(79)		(76)	11
Demonstration Dil		92			88			
Parancangan RU		(81)		-	(79)			
Taginambur KP		95	96	3	100			
Taginambur KB		(84)	(83)		(85)			
Togop Darat RU	97	98		86	97			
TOYOP DATAL NO	(91)	(83)	1.1.1	(88)	(81)			-
Mandalipau PR	98				100		98	
Manaaripuu TK	(82)			1	(80)	1. S. 1.	(75)	_
Lingan PR	98			1.1	98		100	
bingui i k	(83)				(79)		(77)	
Babagon/Kibunut PG	100	17590-076 C	1000		99	1.	96	1000
	(82)				(80)		(76)	
Tenghilan TN		97	89	1.00	99			
-		(81)	(76)	-	(81)			
Melangang Baru TN		92	82		100			1.0
		(91) 88	(80) 86		(80)			-
Balabakan TN		(84)	(80)		(80)			
		97	(80)		95	-		
Pulutan KK	- · · · ·	(82)			(75)			2018
		98			100			
Kundasang RU	23	(81)			(77)	10		
		95		1	94			-
Pahu TA	1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 -	(81)			(76)			
		95			87			
Paginatan RU		(76)			(74)			
Tangkol KM								83
			1.0	K.K.				(85)
Taiwan KM	1.							85 (87)
	100			2012		96	96	,
Tempasuk KB	(75)				S S.	(76)	(69)	
Mambulian Laut VD	99						96	
Tambulian Laut KB	(82)						(73)	
Dudar KB	98			Con El Pri			98	
Duuai ND	(78)					1.	(76)	
Mandap KB	99						93	
	(84)						(74)	

Figure 6: Intelligibility testing results at 21 Central Dusun villages. (Results are given as percentages; PSC figures are in parentheses.)

REFERENCE	COAS	TAL KAD	AZAN	SUG	UT KADA	ZAN
TEST POINTS	Bunduon PG	Sabandil PR	Pinopok PR	Basai LS (1)	Basai LS (2)	Moiwod KN
Bundu Tuhan RU	66 (75)	72 (76)				
Moyog PG	100 (80)	87 (77)				
Parancangan RU	56 (75)		67 (74)			
Taginambur KB	88 (76)	80 (78)		90 (79)	50 (79)	
Togop Darat RU	61 (77)	71 (76)				
Mandalipau PR	89 (80)	99 (83)				
Lingan PR	91 (81)	99 (85)				
Babagon/Kibunut PG	96 (81)	86 (78)				
Tenghilan TN	87 (75)	77 (76)				
Melangang Baru TN	93 (77)	74 (78)				
Balabakan TN	85 (76)	75 (76)				
Pulutan KK		86 (79)	89 (76)	100 (78)	1.5	
Kundasang RU	73 (72)		100 (73)			
Pahu TA	75 (74)		70 (74)			
Paginatan RU	76 (73)		89 (70)			70
*(DN) Entilibon KN	70			-		79 (78)
Tempasuk KB	78 (68)				3.5	
Tambulian Laut KB	83 (73)		93 (74)			
Dudar KB	78 (76)		81 (74)			-
Mandap KB	77 (73)		77 (75)			

Figure 7: Intelligibility testing results at 20 Central Dusun villages. (Results are given as percentages; PSC figures are in parentheses; * represents 'Dusun' speakers from a mixedlanguage village.)

The high scores on the first Basai LS tape can be explained by the simplicity of the story. The second Basai LS reference tape and the Moiwod KN tape may be much better indicators of Central Dusun's understanding of Sugut Kadazan. Sugut Kadazan should perhaps be considered not merely a separate dialect but a separate language from Central Dusun. But until further testing can clarify the issue, a dialect-level distinction will be maintained between Central Dusun and Sugut Kadazan.

Figure 8 displays Central Dusun understanding of other languages formerly classified as Kadazan/Dusun (Smith, in this volume). All intelligibility test scores are below the 80% same-language threshold and so the languages are still considered distinct from Kadazan/Dusun.

REFERENCE	KIMARAGANG	GARO	TEBILUNG
TEST POINTS	Dandun PS	Talantang KM	Mengaris KM
Panaitan KM	47 (75)	63 (81)	72 (86)
Tangkol KM	59 (72)	57 (79)	59 (81)
Taiwan KM	69 (74)	73 (80)	65 (85)
Lotong KM	63 (75)	70 (79)	
Tempasuk KB	52 (71)		
Tambulian Laut KB	69 (70)		
Dudar KB	73 (80)		_
Mandap KB	51 (69)		

Figure 8: Intelligibility testing results at eight Central Dusun villages. (Results are given as percentages; PSC figures are in parentheses.)

3.1.2 Coastal Kadazan

Intelligibility testing indicated that several villages which Smith (in this volume) had classified as representing separate dialects should be regrouped as a Coastal Kadazan dialect. Bunduon PG, Sabandil PR, and Terawi PG had been classified as Central Dusun; Pinopok BT, as Beaufort Kadazan; and Tombovo/Potuki PG, as a third distinct dialect (Figure 9). A large group of Kadazan villages in Penampang, Papar and Beaufort districts have distinct phonemic differences from Central Dusun, along with some differences in pronouns (Pekkanen 1981).

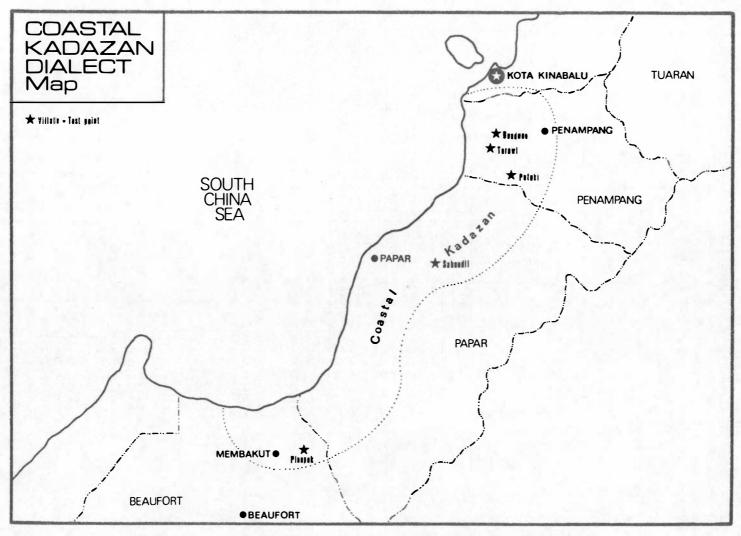


Figure 9: Coastal Kadazan dialect of the Kadazan/Dusun language

Figure 10 displays the results of intelligibility testing at five Coastal Kadazan villages. Coastal Kadazan intelligibility of other Coastal Kadazan reference tapes was at or above the 85% same-dialect threshold in every case. Coastal Kadazan understanding of Central Dusun was also quite high, considering the lower PSC relations. However, Central Dusun understanding of Coastal Kadazan was not as high (cf. Figure 7), indicating that intelligibility between the two dialects is not mutual.

REFERENCE			1	KADAZAI	N/DUSU	N			KLIAS	
TAPES	COASTAL				CEN	FRAL		SUGUT	RIVER KADAZAN	
TEST POINTS	Bunduon PG	Sabandil PR	Pinopok BT	Bundu Tuhan RU	Моуод РС	Piasau KB	Taginambur KB	Basai LS (1)	Takuli BT	
Bunduon PG		96 (82)	100 (78)	100 (75)		98 (74)		100 (74)		
Sabandil PR			99 (84)		93 (77)	91 (75)		95 (74)		
Terawi PG	97 (93)	87 (83)		82 (76)	93 (80)	83 (74)				
Tombovo/Potuki PG	100 (89)	94 (81)		99 (75)	98 (78)	93 (73)				
Pinopok BT	85 (78)	85 (84)					85 (77)		80 (85)	

Figure 10: Intelligibility testing results at five Coastal Kadazan villages. (Results are given as percentages; PSC figures are in parentheses.)

Coastal Kadazan understanding of the simple Basai LS tape, representing the Sugut Kadazan dialect, was very high. Pinopok BT intelligibility of the geographically close Klias River Kadazan language of Takuli BT was 80%, lower than their PSC relation of 85.

3.1.3 Sugut Kadazan dialect

The Sugut Kadazan dialect of the Kadazan/Dusun language corresponds to Smith's (in this volume) Inner Sugut subdialect. Figure 11 displays the results of intelligibility testing at three Sugut Kadazan villages: Kaingaran LS, Moiwod KN and Entilibon KN. The latter two villages employ the ethnonym 'Minokok' and are geographically distant from Kaingaran LS (Figure 12). Entilibon KN is a mixed-language village, with speakers of both Central Dusun and 'Minokok' Sugut Kadazan living there. The high score obtained in that village is the only example of high intelligibility of Central Dusun found among the Sugut Kadazan villages tested. At all other test points, Sugut Kadazan understanding of Central Dusun and Coastal Kadazan was below the 80% same-language threshold. Central Dusun and Coastal Kadazan test scores on one Sugut Kadazan story from Basai LS (cf. Figures 7 and 9), however, were very high, ranging 90-100%. Further testing must be done in order to determine Sugut Kadazan's true relationship to Central Dusun and Coastal Kadazan. Until such time, Sugut Kadazan will continue to be classified as a dialect of the Kadazan/Dusun language, following Smith (in this volume).

REFERENCE		KADA	ZAN/DU	ISUN				
TAPES	SUGUT CENTRAL				COASTAL	KIMARAGANG	GARO	
TEST POINTS	Basai LS (1)	Taginambur KB	DN*Entilibon KN	Pahu TA	Bunduon PG	Dandun PS	Parong KM	Talantang KM
Kaingaran LS		72 (79)			58 (74)	69 (81)	85 (85)	80 (83)
Moiwod KN	96 (81)		50 (78)	73 (79)	47 (75)			
Entilibon KN			98 (79)					

Figure 11: Intelligibility testing results at three Sugut Kadazan villages. (Results are given as percentages; PSC figures are in parentheses.)

Further testing should also be done among the Sugut Kadazan villages to determine the degree of intelligibility between Sugut Kadazan as spoken in Kaingaran LS and as spoken in the 'Minokok' villages of Moiwod KN and Entilibon KN.

Test subjects from Kaingaran LS scored 80% and 85% on Garo reference tapes from Talantang KM and Parong KM, classified as "Outer Sugut" by Smith (in this volume). Test subjects at Talantang KM, however, scored only 74% on a reference tape from Moiwod KN (cf. Figure 21). Test results are inconclusive thus far in determining the relationship between Sugut Kadazan and Garo, since there appears to be only a dialect-level difference between Talantang KM and Kaingaran LS, but a language-level difference between Talantang KM and Moiwod KN.

The 69% intelligibility scored on the Kimaragang reference tape from Dandun PS (Figure 11) does indicate clearly that the Sugut Kadazan of Kaingaran LS is a different language from Kimaragang.

3.1.4 Kuala Monsok Dusun dialect

Intelligibility testing at Kuala Monsok TA confirms Smith's (in this volume) lexicostatistical classification of Kuala Monsok Dusun as a distinct dialect of the Kadazan/Dusun language. Kuala Monsok TA test subjects scored 80% and 77% on reference tapes from the Central Dusun villages of Moyog PG and Piasau KB (Figure 13). On Coastal Kadazan tapes from Bunduon PG and Pinopok BT, however,

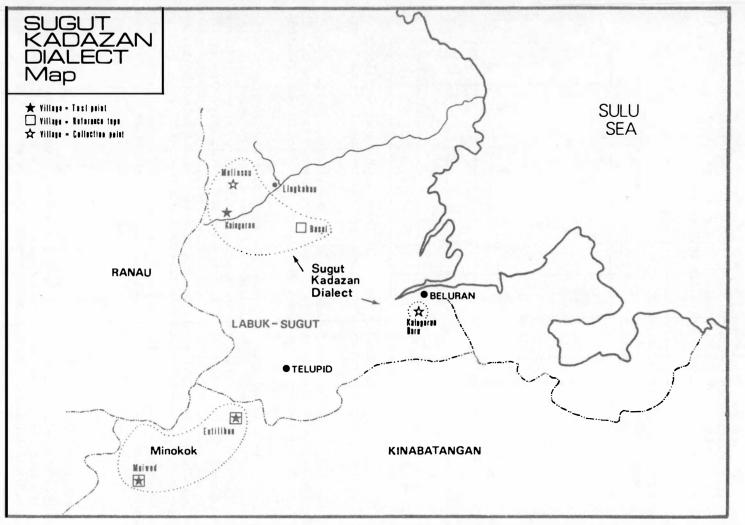


Figure 12: Sugut Kadazan dialect of the Kadazan/Dusun language

Kuala Monsok Dusun speakers scored only 61% and 66%. No cross-testing of a Kuala Monsok reference tape was done.

REFERENCE		KADAZAN/DUSUN						
TAPES	CEN	FRAL	COAS	KUIJAU				
TEST POINT	моуод РС	Piasau KB	Bunduon PG	Pinopok BT	Liau Darat KU			
Kuala Monsok TA	80 (79)	77 (72)	61 (75)	66 (73)	62 (82)			

Figure 13: Intelligibility testing results at Kuala Monsok TA. (Results are given as percentages; PSC figures are in parentheses.)

Kuala Monsok Dusun has a relationship of 82 PSC with the Kuijau language of Liau Darat KU - higher than its cognate relationship to any of the four Kadazan/Dusun reference tapes with which it was tested. The low 62% intelligibility of the Liau Darat KU reference tape, however, indicates that, despite their higher PSC relation, Kuijau and Kuala Monsok Dusun are different languages.

3.1.5 Kadazan/Dusun language in relation to other Dusunic languages

Reference tapes from five other Dusunic languages were played in six Kadazan/Dusun villages representing the Central Dusun dialect (Figure 14). Results are displayed in Figure 15.

Kadazan/Dusun speakers scored only 19-50% intelligibility of a Rungus language tape from Lodung KT. Similar low scores were repeated when Rungus speakers were tested for their understanding of taped stories from the Central and Coastal dialects of Kadazan/Dusun (Figure 16). Intelligibility testing thus confirms that Rungus and Kadazan/Dusun are separate languages.

The relationship of Kadazan/Dusun and Lotud is not as clear-cut. The Central Dusun villages of Kogopon PR, Kionsom KK and Lumpoho/Pukak TN scored 81-89% intelligibility of the Lotud reference tape from Marabahai TN (Figure 15). These scores are above the same-language threshold, 80%. Toboh TA, Tangaban TA and Sunsuron TA also representing Central Dusun, scored 52-77%, below the same-language threshold. Lotud intelligibility of Central Dusun and Coastal Kadazan reference tapes was 80% or higher in each of the three Lotud villages tested (Figure 16). However, since the average level of intelligibility of Lotud demonstrated by the six Kadazan/Dusun villages tested was only 73%, Lotud is still considered a separate language.

The status of Kuijau, Eastern Kadazan and Tatana as separate languages from Kadazan/Dusun is clearly affirmed by intelligibility testing results (Figures 15 and 16).



Figure 14: Central Dusun dialect area showing villages where other Dusunic languages were tested

Central Dusun intelligibility of a Kuijau story from Tuntumulod KU ranged only 57-75%. Although four of the five Kuijau villages tested scored 82-96% on the Central Dusun reference tape from Bundu Tuhan RU, Tuntumulod KU test subjects scored only 62%. On the Coastal Kadazan tape from Bunduon PG, all Kuijau villages scored significantly lower than 80%, indicating that Kuijau and Coastal Kadazan are different languages.

Central Dusun understanding of Eastern Kadazan ranged 51-71%. In crosstesting, Eastern Kadazan understanding of both Central Dusun and Coastal Kadazan ranged 34-56%. Such low scores confirm that Kadazan/Dusun and Eastern Kadazan are separate languages

Intelligibility test results were similarly low between the Kadazan/Dusun and Tatana villages tested. Central Dusun scores on a Tatana story from Bundu KP ranged 36-58%, and Tatana scores on the two dialects of Kadazan/Dusun tested ranged 55-67%. Kadazan/Dusun and Tatana are clearly demonstrated to be separate languages.

	REFERENCE TAPES TEST POINTS	RUNGUS Lodung KT	LOTUD Marabahai TN	KULJAU Tuntumulod KU	EASTERN KADAZAN Buis LS	TATANA Bundu KP
	Toboh TA	19	77	62	52	42
- 0	TODON TR	(70)	(69)	(74)	(71)	(64)
-	Tangaban TA	40	52	71	51	41
NU SUG		(73)	(70)	(76)	(73)	(66)
l B	Sunsuron TA	39	56	67	51	37
	Sunsuron IA	(71)	(72)	(75)	(71)	(67)
MI	Kogopon PR	48	89	75	62	58
CENTRAL	Kogopon PK	(74)	(70)	(77)	(75)	(73)
6	Kionsom KK	50	81	64	71	36
		(70)	(70)	(73)	(70)	(64)
	Lumpoho/Pukak TN	45	89	57	61	40
	Dumpono/Fukak IN	(72)	(71)	(73)	(70)	(65)

Figure 15: Intelligibility testing results at six Central Dusun villages with reference tapes from other Dusunic languages. (Results are given as percentages; PSC figures are in parentheses.)

/	REFERENCE TAPES		CEN	TRAL DU	ISUN		COASTAL KADAZAN
Т	THE DEST POINTS	Pahu TA	Bundu Tuhan RU	Melangang Baru TN	Tenghilan TN	Taginambur KB	Bunduon PG
RUNGUS	Kimihang KT	39 (71)					45 (72)
RUN	Buanog KT	44 ()					43 ()
0	Marabahai TN		95 (71)		90 (67)	_	86 (70)
LOTUD	Kauluan TN		98 (75)		97 (75)		89 (75)
	Sumagit KK		98 (70)	80 (70)			92 (71)
	Tuntumulod KU		62 (73)				65 (74)
Ŋ	Sungoi KU		92 (71)				70 (73)
KULJAU	Liau Darat KU		82 (74)				68 (74)
×	Senagang KU		89 (72)				70 (72)
	Linsosod KU		96 (69)				72 (68)
EASTERN KADAZAN	Mananam KN	56 (72)					46 (71)
KAD	Batu Putih KN	49 (60)					44 (61)
TERN	Malapi LS					35 (70)	37 (68)
EAS	Buis LS				34 (70)		41 (70)
TATANA	Bundu KP					59 (65)	67 (68)
TAT	Kiaru KP					56 ()	55 ()

Figure 16: Intelligibility testing results at selected Rungus, Lotud, Kuijau, Eastern Kadazan and Tatana villages with Central Dusun and Coastal Kadazan reference tapes. (Results are given as percentages; PSC figures are in parentheses.)

3.2 Klias River Kadazan language

Intelligibility testing at Takuli BT reveals surprisingly different results from those indicated by lexicostatistical findings. Takuli BT is classified as part of the Beaufort Kadazan dialect of Kadazan/Dusun by Smith (in this volume). However, intelligibility testing results seem to indicate that Smith's Beaufort Kadazan dialect should be considered part of the Coastal Kadazan dialect. But when Takuli BT was tested for its understanding of three Coastal Kadazan and one Central Dusun reference tapes (Figure 17), intelligibility scores were too low to consider Takuli BT part of the Kadazan/Dusun language. Cross-testing a Takuli BT tape at the Coastal Kadazan village of Pinopok BT (Figure 10) yields an intelligibility score of 80%, lower than the corresponding PSC figure of 85. Though this score in isolation would indicate that Takuli BT and Pinopok BT are different dialects of the same language, the low intelligibility of other Coastal Kadazan tapes at Takuli BT warrants classifying the Klias River Kadazan spoken at Takuli BT and neighbouring Kinamam BT (Figure 18) as a separate language from Kadazan/Dusun.

REFERENCE	1.2	KADAZAN/DUSUN						
TAPES		CENTRAL						
TEST POINT	Bunduon PG	Inobong PG	Sabandil PR	Taginambur KB				
Takuli BT	53 (78)	46 (79)	71 (83)	64 (77)				

Figure 17: Intelligibility testing results at Takuli BT. (Results are given as percentages; PSC figures are in parentheses.)

The Takuli BT tape was also tested in two Tatana villages, Bundu KP and Kiaru KP. Although each of these villages has only 77 PSC with Takuli BT, Bundu KP scored 92% and Kiaru KP 91% on the Takuli BT story. Further testing needs to be done in Takuli BT and/or Kinamam BT to see how well these villages understand Tatana, and to establish the relationship between them and Tatana (+ Tatana).

3.3 Kimaragang language

Smith (in this volume) included Dandun PS as part of his "Outer Sugut subdialect" of the Kadazan/Dusun language, along with the villages of Parong KM and Talantang KM (Figure 19). Intelligibility testing indicates that the people of Dandun PS speak Kimaragang, a different language from the Garo spoken in Parong KM and Talantang KM. Test subjects in Dandun PS scored only 76% intelligibility of a reference tape from Talantang KM (Figure 20). Cross-testing of a Dandun PS reference tape at Talantang KM yielded an even lower score, 71% (Figure 21). Clearly, Dandun PS and Talantang KM represent separate languages. A Tebilung tape from Mengaris KM and a Rungus tape from Tinangol KT were also tested at

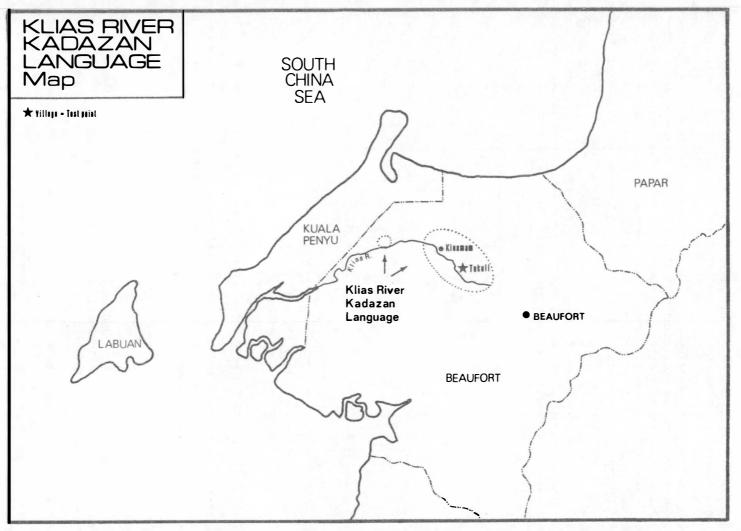


Figure 18: Klias River Kadazan language map

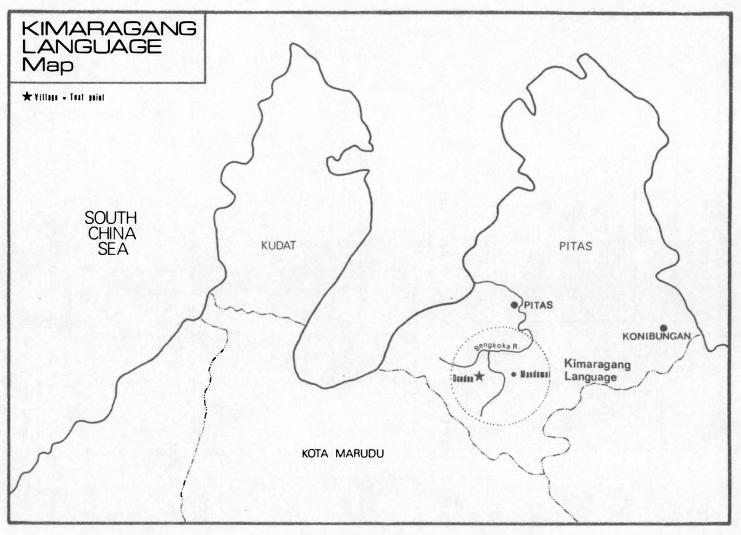


Figure 19: Kimaragang language area

Dandun PS. Scores on both tapes were below 80%, indicating that they too, are different languages from Kimaragang. The Kimaragang reference tape was tested at eight Central Dusun villages (cf. Figure 8), one Sugut Kadazan village (cf. Figure 11) and two Tebilung villages (Figure 24), in addition the Garo village of Talantang KM, mentioned above (Figure 21). In every case, intelligibility scores were lower than 80%, confirming Kimaragang's place as a distinct language within the Dusunic family.

REFERENCE TAPES	GARO	TEBILUNG	RUNGUS
TEST POINT	Talantang KM	Mengaris KM	Tinangol KT
Dandun PS	76 (80)	67 (78)	71 (79)

Figure 20: Intelligibility testing results at the Kimaragang village of Dandun PS. (Results are given as percentages; PSC figures are in parentheses.)

REFERENCE	KADAZAN/DUSUN			KIMARAGANG	TEBILUNG	RUNGUS	
TAPES	CENTRAL	RAL COASTAL SUGUT					
TEST POINT	Pahu TÀ	Bunduon PG	Moiwod KN	Dandun PS	Mengaris KM	Tinangol KT	
Talantang KM	61 (81)	64 (76)	74 (82)	71 (80)	70 (84)	68 (78)	

Figure 21: Intelligibility testing results at the Garo village of Talantang KM. (Results are given as percentages; PSC figures are in parentheses.)

3.4 Garo language

The distinct nature of the Kimaragang language in relation to the Garo language has been established by mutual intelligibility scores below 80% (Section 3.3). Earlier, lexicostatistical analysis (Smith, in this volume) had grouped these as a single language.

Six reference tapes representing Central Dusun, Coastal Kadazan, Sugut Kadazan, Kimaragang, Tebilung and Rungus were tested at the Garo village

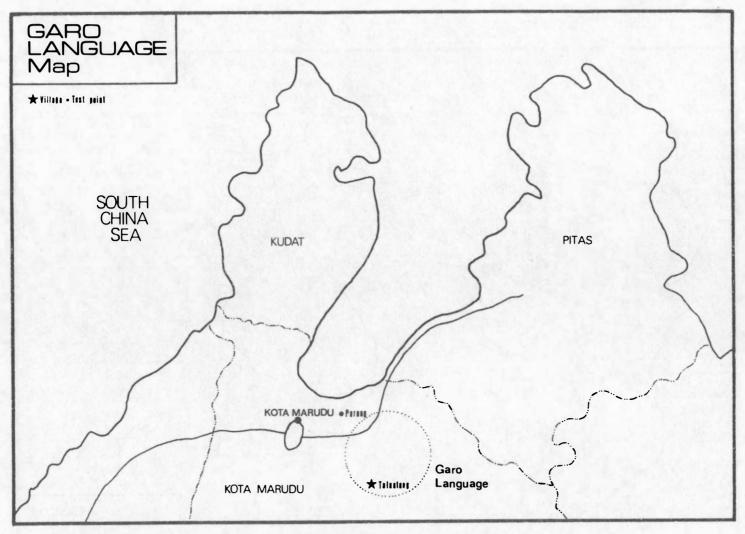


Figure 22: Garo language area

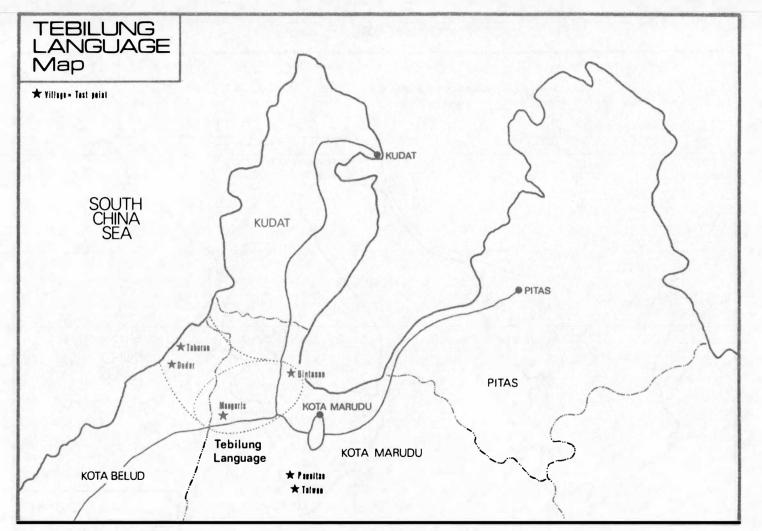


Figure 23: Tebilung language area

of Talantang KM (Figures 21 and 22). In every case, intelligibility scores were below the 80% level established as the same-language threshold. When a Garo reference tape was cross-tested at four Central Dusun villages (cf. Figure 8), one Kimaragang village (cf. Figure 20) and two Tebilung villages (Figure 24), results were similarly low. However, when Sugut Kadazan speakers (Figure 11) were tested on their ability to understand Garo reference tapes from Parong KM and Talantang KM, scores were 85% and 80%. Further testing is needed to clarify the relationship between Garo and the Sugut Kadazan dialect of Kadazan/Dusun.

The position of Parong KM as a member of the Garo language needs verification. It is possible that Parong KM relates more closely to Dandun PS (Kimaragang) or forms a link in a dialect/language chain between Sugut Kadazan, Garo and Kimaragang.

3.5 Tebilung language

Reference tapes representing Central Dusun, Kimaragang and Garo were tested at the Tebilung villages of Bintasan KM and Mengaris KM (Figure 23), previously classified as Kota Belud Dusun (Smith, in this volume). In addition, a Mengaris KM tape was also tested in Bintasan KM. Results of the Central Dusun, Kimaragang and Garo tapes were lower than 80% in every case, indicating that they are indeed separate languages from Tebilung (Figure 24). Crosstesting a Tebilung reference tape in three Central Dusun villages (cf. Figure 8), one Kimaragang village (cf. Figure 20) and one Garo village (cf. Figure 21) yielded similar findings and confirms the assertion that Tebilung is a separate language.

The Tebilung village of Bintasan KM scored only 82% intelligibility of the tape from Mengaris KM, compared to a PSC relation of 92. Further testing is needed to determine the number of dialects within the Tebilung language.

REFERENCE TAPES	TEBILUNG	CENTRAL DUSUN	KIMARAGANG	GARO
TEST POINTS	Mengaris KM	Panaitan KM	Dandun PS	Talantang KM
Bintasan KM	82 (92)	65 (83)	68 (75)	67 (83)
Mengaris KM		70 (86)	63 (78)	70 (84)

Figure 24: Intelligibility testing results at two Tebilung villages. (Results are given as percentages; PSC figures are in parentheses.)

4. NATIONAL LANGUAGE INTELLIGIBILITY

National language intelligibility testing was carried out in 43 Kadazan/-Dusun villages in 12 of Sabah's districts. Results of that testing are displayed in Figure 25. This testing included villages located in developing areas as well as areas already well-developed.

DISTRICT	SEX	AGE RANGE	EDUCATION		AVERAGE INTELLIGIBILITY PERCENTAGE AND AVERAGE AGE					
M/I		AGE RANGE	ED.	A.E.R.	Educated		Uneducated		All	
Beaufort	10/9	16-63	13	5	94	(32)	58	(43)	83	(36)
Kinabatangan	12/8	18-53	10	5	72	(24)	58	(35)	65	(30)
Kota Belud	27/21	13-70	41	8	99	(25)	68	(47)	94	(29)
Kota Kinabalu	14/6	16-78	12	8	96	(31)	63	(55)	83	(41)
Kota Marudu	47/21	13-70	27	7	75	(25)	40	(39)	54	(33)
Labuk-Sugut	5/5	17-67	4	5	95	(24)	53	(42)	70	(35)
Papar	22/15	15-67	30	6	95	(28)	57	(59)	88	(34)
Penampang	28/13	17-70	26	7	98	(34)	71	(49)	88	(39)
Pitas	5/5	13-52	4	5	80	(27)	58	(43)	67	(36)
Ranau	27/12	14-82	25	7	97	(31)	49	(40)	80	(34)
Tambunan	30/17	15-71	25	6	83	(31)	38	(46)	62	(38)
Tuaran	18/14	19-63	25	8	98	(30)	84	(47)	95	(34)

Figure 25: Kadazan/Dusun understanding of the national language tape by district. (Under Education ED. = the number of persons who had received some formal education; A.E.R. = the average number of years of education those subjects had received; numbers in parentheses represent the average age of each specified group.)

Thirty-six of the villages were tested with a story that represented standard Bahasa Malaysia as spoken in Sabah. The other seven villages were tested earlier with a story given by a native speaker of Bahasa Malaysia as spoken in West Malaysia. Therefore, results from both stories are considered valid. Three hundred and ninety-one persons were tested. Their comprehension of the Bahasa Malaysia story ranged 0-100%. The average intelligibility was 77%.

Two factors were found to have a significant effect on test results. One was the educational background of the test subjects and the other was the amount of development in the area.⁴ Figure 26 displays the results of the national language intelligibility testing divided according to the educational level of the test subjects and whether the test subjects were from developing areas or areas considered to be well-developed.

	DEVELC	PING AREAS	WELL-DEVELOPED AREAS		
LEVEL OF EDUCATION	AVG. SCORE	NO. TESTED	AVG. SCORE	NO. TESTED	
Adult Education (3 mths3 years)			88	7	
Primary l	58	2	70	1	
Primary 2	68	3	88	7	
Primary 3	63	4	91	10	
Primary 4	85	3	100	7	
Primary 5	80	6	97	7	
Primary 6	74	28	96	54	
Form 1 and above	89	20	100	83	

Figure 26: Comparison of national language intelligibility test results of educated test subjects in developing areas and in welldeveloped areas

Two hundred and forty-two test subjects had received some formal education. The educational level ranged from three months of adult education to graduation from Mara Institute of Technology.

The Bahasa Malaysia scores of the group with some formal education ranged 30-100%, with the 30% being scored by a Primary 6 student from an isolated village in Kota Marudu District. Within this group, the intelligibility of Bahasa Malaysia of those living in developing areas was significantly lower than the test results of those with a comparable amount of education living in well-developed areas.

5. CONCLUSION

In comparing the intelligibility testing results with the lexicostatistic classification of Smith (in this volume) the following dialects of the Kadazan/-Dusun language are indicated:

- 1. Central Dusun
- 2. Coastal Kadazan
- 3. Sugut Kadazan
- 4. Kuala Monsok (TA) Dusun

The following languages separate from Kadazan/Dusun (and from any other language) are postulated:

- 1. Klias River Kadazan
- 2. Kimaragang
- 3. Garo
- 4. Tebilung

There are valid reasons lexicostatistically and from native reaction for considering Tempasuk (KB) Dusun a separate dialect of Kadazan/Dusun, but so far this has not been demonstrated by intelligibility testing.

The position of Minokok (as represented by Moiwod KN) has not yet been verified as to whether it is a part of the Sugut Kadazan dialect or distinct from it. Further testing is also necessary to determine whether Sugut Kadazan should be considered a dialect of Kadazan/Dusun or a distinct language.

The intelligibility testing between Kadazan/Dusun and the Rungus, Lotud, Kuijau, Eastern Kadazan and Tatana languages verifies the findings of lexicostatistics, viz. that Kadazan/Dusun is a distinct language from any of these.

NOTES

- 1. Where it is appropriate and helpful, the various ethnonyms applied to this language group will be presented in the discussion of intelligibility testing (Section 3). Dunn (1980) has an extensive listing of ethnonyms in her article. LeBar (1972), Appell (1968), Clayre (1966), Prentice (1970), and others have also done classifications of the languages and peoples under discussion here, giving the various ethnonyms applied to this group. Since these classifications tend to vary, even when it appears that the same group or locality is under discussion, the present writers will confine themselves to using Smith (in this volume) as their starting point and will attempt to define designations which are used here.
- 2. G.N. Appell (1968) has given considerable attention to the matters relating to the use of the term Dusun, tracing the term to nineteenth century sources.
- 3. This list is not meant to be exhaustive, but rather mentions the works known by the authors to be relevant to the language under consideration here.
- 4. The 28 villages visited in Beaufort, Kota Belud, Kota Kinabalu, Labuk-Sugut, Papar, Penampang, Ranau and Tuaran were considered well-developed areas. The 15 villages visited in Kinabatangan, Kota Marudu, Pitas, and Tambunan were considered developing areas. Kaingaran LS was included in the first category because it is situated in a well-developed community and the Bahasa Malaysia scores were comparable or better than those of the other villages located in well-developed areas.